

# ***NAEP 1994 TRENDS IN ACADEMIC PROGRESS***

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## Science



# NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors

	1970	1973	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>			100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N LQ
	225.0(1.2)*	220.0(1.2)†*	219.9(1.2)†*	220.8(1.8)*	224.3(1.2)*	228.7(0.8)	230.6(1.0)†	231.0(1.2)‡	
<b>GENDER</b>									
Male			50.6(0.4)	50.5(1.5)	50.0(0.6)	49.4(0.6)	48.6(0.6)†	48.7(0.8)‡	L
	228.0(1.3)	223.0(1.3)†*	222.1(1.3)†*	221.0(2.3)*	227.3(1.4)	230.3(1.1)	234.7(1.2)†	232.2(1.3)‡	LQ
Female			49.4(0.4)	49.5(1.5)	50.0(0.6)	50.6(0.6)	51.4(0.6)†	50.8(0.8)	L
	223.0(1.2)*	218.0(1.2)†*	217.6(1.2)†*	220.7(2.0)*	221.3(1.4)*	227.1(1.0)	226.7(1.0)	230.0(1.4)‡	LQ
<b>RACE/ETHNICITY</b>									
White			79.6(1.6)*	78.6(2.6)	76.5(1.1)	74.5(1.1)†	75.4(0.9)	74.1(0.9)‡	L
	236.0(0.9)*	231.0(0.9)†*	229.6(0.9)†*	229.0(1.9)†*	231.9(1.2)†*	237.5(0.8)	239.1(1.0)	240.3(1.3)‡	LQ
Black			13.7(1.4)	14.3(2.1)	14.9(0.5)	16.3(0.7)	15.9(0.4)	15.0(0.5)	N
	179.0(1.9)*	177.0(1.9)*	174.8(1.8)*	187.0(3.0)*	196.2(1.9)†	196.4(2.0)†	200.3(2.7)†	201.4(1.7)‡	L
Hispanic			5.3(0.9)	5.2(1.3)	6.2(1.1)	5.5(0.6)	5.6(0.8)	6.1(0.4)	N
	191.9(2.7)	189.0(4.2)	189.4(3.1)	199.4(2.2)†	206.2(2.2)†	204.7(2.8)†	201.0(2.7)‡	L	
Other			1.5(0.3)*	2.0(1.0)	2.5(0.5)	3.8(1.0)	3.0(0.4)†	4.0(0.4)‡	L
	214.4(5.4)	222.8(5.3)	220.6(4.6)	227.4(3.6)	226.5(3.4)	215.7(4.2)		N	
<b>REGION</b>									
Northeast			25.3(1.5)	19.0(2.3)	21.1(1.1)	23.2(0.9)	20.9(1.2)	21.8(0.9)‡	Q
	230.0(2.9)	222.0(2.9)*	224.4(1.6)*	221.8(2.9)*	228.2(3.5)	231.1(2.4)	234.4(2.8)	234.6(2.5)	LQ
Southeast			20.2(1.2)	22.6(2.7)	22.5(4.7)	24.1(0.9)†	24.1(1.3)	24.5(1.5)‡	L
	206.0(1.6)*	207.0(1.6)*	205.1(2.9)*	213.9(3.6)*	218.8(3.1)†	219.9(1.9)†	222.8(1.7)†	227.4(2.2)‡	L
Central			29.5(1.9)	30.1(4.3)	28.6(4.0)	24.3(0.6)†	28.2(0.8)	25.9(1.0)	N
	233.0(3.0)	228.0(3.0)	225.2(2.2)*	226.3(3.5)	227.9(2.2)	234.2(1.7)	237.5(1.8)	236.2(2.7)	LQ
West			25.0(2.0)	28.4(2.7)	27.7(1.6)	28.4(0.8)	26.7(0.8)	27.8(1.0)	N
	226.0(2.2)	221.0(2.2)	220.9(2.2)	219.9(4.1)	222.1(3.2)	229.5(1.8)	227.4(2.2)	226.4(2.7)	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors  
(continued)

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>PARENTS' EDUCATION LEVEL</b>							
<b>Less Than H.S.</b>	9.0(0.4)*	6.5(0.9)*	4.2(0.4)†	4.9(0.4)†	4.2(0.3)†	3.8(0.4)‡	LQ
	198.5(2.2)*	198.2(6.0)	203.6(2.9)	209.8(2.7)†	217.2(2.6)†	211.4(3.4)‡	L
<b>Graduated H.S.</b>	26.7(0.5)*	14.7(1.1)†	16.4(0.7)†	16.0(0.7)†	13.5(0.7)†	14.0(0.6)‡	LQ
	223.0(1.4)	218.0(3.3)	219.6(1.5)*	225.8(1.7)	222.0(1.9)	225.3(1.4)	Q
<b>Some Educ. After H.S.</b>	7.2(0.3)	8.3(0.6)	6.6(0.6)	7.4(0.4)	7.8(0.4)	7.0(0.4)	N
	237.2(1.5)	229.1(3.2)	235.8(2.6)	237.6(2.1)	236.6(2.4)	238.9(2.8)	N
<b>Graduated College</b>	23.1(0.7)*	42.0(2.3)†	37.8(1.1)†*	40.1(1.1)†*	41.5(1.2)†	45.0(0.8)‡	LQ
	232.3(1.4)*	230.5(2.3)*	235.2(1.4)	236.2(1.3)	238.9(1.2)†	238.5(1.4)‡	L
<b>Unknown</b>	34.0(0.7)*	28.5(1.8)†	34.9(1.0)*	31.7(0.8)	33.0(0.8)	30.2(0.8)‡	N
	211.0(1.4)*	210.8(2.8)*	215.3(1.5)*	221.5(1.2)†	224.2(1.4)†	223.4(1.9)‡	L
<b>GRADE</b>							
<b>Below Modal Grade</b>	24.1(1.0)*	30.0( 1.9)†	33.9( 1.7)†	34.8(1.4)†	37.6( 1.2)†	33.4( 1.3)‡	LQ
	197.5(1.6)*	197.5( 2.9)*	204.9( 1.6)†*	210.9(1.5)†	214.8( 1.4)†	215.2( 1.7)‡	L
<b>At Modal Grade</b>	74.8(1.0)*	69.5( 1.9)	65.8( 1.7)†	64.8(1.4)†	62.1( 1.2)†	66.4( 1.3)‡	LQ
	227.0(1.2)*	230.7( 2.2)*	234.3( 1.2)†*	238.2(1.0)†	240.1( 1.0)†	238.9( 1.3)‡	L
<b>Above Modal Grade</b>	0.7(0.1)*	0.5( 0.2)	0.3( 0.1)†	0.3(0.1)†	0.3( 0.1)†	***(***)	L
	243.9(6.2)	265.9(13.1)	235.0(10.7)	234.8(9.6)	247.6(16.2)	236.3(14.6)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

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# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors  
(continued)

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>							
<b>Public</b>	88.8(1.2)	90.4(2.3)	83.9(2.7)	88.9(2.1)	86.6(1.6)	88.1(1.8)	N
	218.0(1.4)*	219.7(2.0)*	222.6(1.4)*	227.7(0.9)†	229.1(1.0)†	229.5(1.4)‡	L
<b>Non-Public</b>	11.2(1.2)	9.6(2.3)	16.1(2.7)	11.1(2.1)	13.4(1.6)	11.9(1.8)	N
	234.6(2.2)	231.5(3.2)	233.0(2.9)	236.8(2.4)	240.2(2.7)	242.2(2.8)‡	LQ
<b>QUARTILES</b>							
<b>Upper</b>	25.0(0.8)	25.0(1.7)	25.0(0.9)	24.9(0.8)	25.1(0.8)	26.5(0.8)	N
	265.6(0.9)*	268.3(1.8)	268.8(1.2)*	271.0(0.8)†	272.7(1.2)†	273.0(1.0)‡	L
<b>Middle Two</b>	50.0(0.8)	50.1(1.5)	49.9(0.9)	50.2(0.9)	50.0(0.8)	48.1(0.6)	N
	222.1(0.5)*	221.7(1.1)*	225.8(0.6)†*	231.0(0.5)†	232.5(0.7)†	233.0(1.1)‡	LQ
<b>Lower</b>	25.0(1.2)	24.9(1.5)	25.0(1.3)	25.0(0.9)	24.9(0.9)	25.4(0.7)	N
	169.6(1.1)*	171.4(2.0)*	176.7(1.0)†*	181.9(0.9)†	184.4(1.2)†	183.4(1.2)‡	L

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Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 13

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors

	1970	1973	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>			100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N LQ
	255.0(1.1)	250.0(1.1)†*	247.4(1.1)†*	250.1(1.3)†*	251.4(1.4)*	255.2(0.9)	258.0(0.8)	256.8(1.0)	
<b>GENDER</b>									
<b>Male</b>			49.8(0.3)	48.5(0.7)	49.8(0.9)	49.8(0.6)	49.9(0.8)	49.2(0.8)	N
	257.0(1.3)	252.0(1.3)†*	251.1(1.3)†*	255.6(1.5)	256.1(1.6)	258.5(1.1)	260.1(1.2)	259.4(1.2)	LQ
<b>Female</b>			50.2(0.3)	51.5(0.7)	50.2(0.9)	50.2(0.6)	50.1(0.8)	50.8(0.8)	N
	253.0(1.2)	247.0(1.2)†*	243.7(1.2)†*	245.0(1.3)†*	246.9(1.5)†*	251.8(1.1)	256.0(1.0)	254.3(1.2)	LQ
<b>RACE/ETHNICITY</b>									
<b>White</b>			80.4(1.6)*	79.2(2.1)*	76.8(1.0)*	73.4( 0.7)†	74.2(0.5)†	72.0(0.8)‡	L
	263.0(0.8)*	259.0(0.8)†*	256.1(0.8)†*	257.3(1.1)†*	259.2(1.4)*	264.1( 0.9)	267.1(1.0)†	266.5(1.0)‡	LQ
<b>Black</b>			13.0(1.2)	13.8(1.9)	14.4(0.9)	15.6( 0.3)	15.9(0.3)	15.1(0.3)	L
	215.0(2.4)	205.0(2.4)†*	208.1(2.4)*	217.1(1.3)	221.6(2.5)	225.7( 3.1)†	224.4(2.7)	223.9(4.2)	L
<b>Hispanic</b>			5.0(1.1)*	5.3(1.0)*	6.6(1.1)	7.3( 0.5)	7.0(0.5)	8.0(0.4)‡	L
			213.4(1.9)*	225.5(3.9)†	226.1(3.1)†	231.6( 2.6)†	237.5(2.6)†	232.1(2.4)‡	L
<b>Other</b>			1.6(0.4)*	1.7(0.7)*	2.2(0.3)*	3.7( 0.8)	2.9(0.3)†	3.7(0.2)‡	L
			235.0(3.3)*	262.4(5.9)†	253.0(4.0)†	248.2(10.9)	260.7(2.7)†	257.4(4.3)‡	L
<b>REGION</b>									
<b>Northeast</b>			25.6(1.5)*	24.0(2.9)	22.4(1.6)	24.3(1.0)*	20.9(0.8)†	20.2(0.9)‡	L
	261.0(2.2)	256.0(2.2)	255.2(2.3)	254.1(2.1)*	257.6(3.1)	256.8(2.7)	256.8(2.2)	262.7(1.7)‡	Q
<b>Southeast</b>			21.3(1.1)	22.2(2.3)	24.7(5.8)	23.1(0.8)	23.9(1.6)	22.2(1.7)	N
	239.0(2.4)*	237.0(2.4)*	235.1(1.8)*	238.7(2.3)*	247.1(2.2)	251.3(1.9)†	254.2(2.8)†	252.6(2.6)‡	LQ
<b>Central</b>			27.4(1.9)	27.9(3.9)	24.9(5.0)	23.5(0.7)	26.6(1.0)	26.6(1.8)	N
	262.0(1.8)	256.0(1.8)	253.8(1.8)†	253.8(2.6)	249.4(5.3)	260.4(2.8)	262.5(2.1)	261.1(3.5)	Q
<b>West</b>			25.7(2.1)	25.9(2.5)	28.0(1.5)	29.1(0.9)	28.6(0.9)	31.0(1.1)‡	L
	255.0(1.8)	248.0(1.8)†	243.0(2.3)†*	252.4(2.8)	252.3(2.7)	252.6(2.1)	258.0(1.6)	252.2(2.1)	LQ

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Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors  
(continued)

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>PARENTS' EDUCATION LEVEL</b>							
<b>Less Than H.S.</b>	12.7(0.7)*	9.7(0.6)†*	7.9(1.1)†	7.6(0.5)†	5.9(0.5)†	6.2(0.4)‡	L
	223.5(1.3)*	225.3(1.9)*	229.4(2.7)	232.9(2.1)†	233.8(2.9)†	234.3(2.5)‡	L
<b>Graduated H.S.</b>	32.8(0.6)*	25.6(1.1)†	31.0(1.3)*	26.8(0.8)†*	23.1(0.9)†	23.1(0.9)‡	L
	245.3(1.1)	243.1(1.3)	244.8(1.4)	247.3(1.3)	246.4(1.4)	247.1(1.2)	L
<b>Some Educ. After H.S.</b>	15.0(0.5)	16.8(0.6)	15.6(0.6)	16.8(0.6)	18.4(0.7)†	16.8(0.6)‡	L
	260.3(1.3)	258.8(1.5)	257.8(1.4)	262.8(1.2)	265.9(1.1)†	260.4(2.0)	L
<b>Graduated College</b>	26.6(1.0)*	37.3(1.5)†*	37.5(2.0)†*	40.8(1.2)†*	44.1(1.3)†	45.5(1.3)‡	L
	266.4(1.0)	263.5(1.5)*	264.4(1.9)	267.5(1.1)	269.2(1.0)	268.8(1.3)	LQ
<b>Unknown</b>	12.9(1.1)*	10.5(1.2)	8.0(0.4)†	7.9(0.5)†	8.4(0.4)†	8.3(0.5)‡	LQ
	221.9(1.8)*	229.1(2.8)	226.5(2.7)	224.3(2.1)	231.6(2.0)†	230.2(2.5)‡	L
<b>GRADE</b>							
<b>Below Modal Grade</b>	27.2(0.9)*	28.0(1.3)*	32.7(2.1)	36.1( 1.3)†	37.4( 1.1)†	37.6( 1.3)‡	L
	223.4(1.6)*	228.6(1.6)*	234.2(1.9)†*	239.5( 1.6)†	244.3( 1.4)†	244.3( 1.5)‡	L
<b>At Modal Grade</b>	71.6(0.7)*	71.7(1.3)*	66.8(2.1)	63.4( 1.4)†	62.4( 1.0)†	61.5( 1.3)‡	L
	255.9(1.0)*	258.5(1.3)*	259.8(1.3)	264.0( 1.0)†	266.1( 1.0)†	264.0( 1.1)‡	L
<b>Above Modal Grade</b>	1.1(0.4)	0.2(0.1)	0.5(0.1)	0.5( 0.2)	0.2( 0.1)	***(***)	N
	284.7(3.9)	287.4(8.2)	266.4(6.3)	262.5(17.5)	312.8(14.9)	290.7(24.7)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

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N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 13

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors  
(continued)

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>							
<b>Public</b>	90.4(1.4)	89.4(1.7)	95.9(1.8)*	89.6(1.4)	88.1(1.9)	88.4(1.7)	Q
	245.2(1.2)*	248.5(1.4)*	250.9(1.4)†	253.6(1.1)†	257.2(1.0)†	255.4(1.1)‡	L
<b>Non-Public</b>	9.6(1.4)	10.6(1.7)	4.1(1.8)*	10.4(1.4)	11.9(1.9)	11.6(1.7)	Q
	267.7(2.1)	263.7(3.2)	263.1(6.4)	269.0(1.8)	264.5(2.4)	267.6(2.6)	N
<b>QUARTILES</b>							
<b>Upper</b>	25.0(1.0)	25.0(1.4)	25.0(1.2)	25.0(1.0)	25.0(1.0)	24.6(0.9)	N
	290.5(0.5)*	290.5(0.9)*	292.1(1.1)*	297.1(0.7)†	298.1(1.0)†	297.9(1.2)‡	L
<b>Middle Two</b>	50.0(0.6)	50.0(1.0)	50.0(0.9)	49.9(0.9)	49.9(0.8)	48.9(0.8)	N
	249.0(0.6)*	251.1(0.6)*	252.3(0.7)†*	256.2(0.6)†*	260.1(0.5)†	259.4(0.7)‡	LQ
<b>Lower</b>	25.0(1.2)	25.0(1.4)	25.0(1.4)	25.0(0.9)	25.0(0.8)	26.4(0.9)	N
	201.1(0.8)*	208.1(0.8)†*	209.2(0.9)†*	211.2(1.2)†	213.9(0.8)†	213.7(1.3)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors

	1970	1973	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>			100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
	305.0(1.0)*	296.0(1.0)†	289.5(1.0)†	283.3(1.2)†*	288.5(1.4)†	290.4(1.1)†	294.1(1.3)†	294.0(1.6)‡	LQ
<b>GENDER</b>									
<b>Male</b>			49.5(0.7)	48.4(0.7)	49.0(1.2)	48.6(0.9)	50.7(1.2)	49.3(1.3)	N
	314.0(1.2)*	304.0(1.2)†	297.0(1.2)†	291.9(1.4)†*	294.9(1.9)†	295.6(1.3)†	299.1(1.7)†	299.5(2.0)‡	LQ
<b>Female</b>			50.5(0.7)	51.6(0.7)	51.0(1.2)	51.4(0.9)	49.3(1.2)	50.3(1.3)	N
	297.0(1.1)*	288.0(1.1)†	282.2(1.1)†*	275.2(1.3)†*	282.3(1.5)†*	285.4(1.6)†	289.0(1.5)†	288.9(1.7)‡	LQ
<b>RACE/ETHNICITY</b>									
<b>White</b>			83.4(1.3)*	80.7(2.0)*	77.6( 0.5)†*	73.3(0.5)†	74.6(0.5)†*	71.7(0.6)‡	L
	312.0(0.8)*	304.0(0.8)†	297.7(0.7)†*	293.1(1.0)†*	297.5( 1.7)†*	300.9(1.1)†*	304.2(1.3)†	306.0(1.5)‡	LQ
<b>Black</b>			11.6(1.1)*	12.5(1.4)	14.3( 0.3)	15.6(0.3)†	14.8(0.3)†	15.3(0.3)‡	L
	258.0(1.5)	250.0(1.5)†	240.2(1.5)†*	234.7(1.7)†*	252.8( 2.9)	253.0(4.5)	256.2(3.2)	256.8(3.1)	LQ
<b>Hispanic</b>			3.7(0.9)*	4.5(1.1)*	5.5( 0.3)*	6.9(0.4)†*	7.4(0.5)†	8.7(0.3)‡	L
			262.3(2.2)	248.7(2.3)†	259.3( 3.8)	261.5(4.4)	270.2(5.6)	261.4(6.7)	N
<b>Other</b>			1.4(0.2)*	2.2(0.7)	2.6( 0.4)†	4.2(0.5)†	3.1(0.2)†	3.2(0.3)‡	L
			284.4(4.0)	269.1(5.2)	276.8(11.2)	292.0(5.6)	288.4(4.8)	290.7(8.2)	L
<b>REGION</b>									
<b>Northeast</b>			24.1(1.7)	24.8(3.0)	23.7(0.8)	22.1(1.0)	21.6(0.9)	22.7(1.0)	N
	308.0(2.5)	298.0(2.5)†	296.3(2.2)†	284.4(2.0)†*	292.2(4.3)†	292.6(3.2)†	300.1(2.4)	298.9(4.2)	Q
<b>Southeast</b>			18.4(1.0)*	21.1(2.4)	22.9(2.3)	24.3(0.9)†	24.6(1.4)†	24.6(1.5)‡	L
	287.0(2.3)	283.0(2.3)	276.4(1.9)†*	276.3(2.7)†*	283.5(2.0)	283.6(2.4)	283.0(2.5)	287.8(2.8)	Q
<b>Central</b>			33.4(1.6)*	29.5(3.9)	27.7(2.2)	25.9(0.9)†	25.0(1.0)†	25.5(1.1)‡	L
	308.0(1.9)	300.0(1.9)†	294.0(1.5)†	289.3(2.6)†	294.4(2.3)†	299.6(3.0)	304.2(2.7)	297.8(3.7)‡	Q
<b>West</b>			24.1(1.9)	24.6(2.6)	25.7(0.9)	27.7(0.9)	28.9(0.9)	27.1(1.0)	L
	308.0(1.7)*	295.0(1.7)†	286.5(1.5)†	280.9(2.7)†	283.2(3.8)†	285.8(2.3)†	290.4(3.8)†	291.8(4.1)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors  
(continued)

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>PARENTS' EDUCATION LEVEL</b>							
<b>Less Than H.S.</b>	15.2(0.9)* 265.3(1.3)	12.8(0.7)* 258.5(2.4)	8.3(0.4)† 257.5(3.1)	7.9(0.6)† 261.4(2.8)	8.1(0.6)† 262.0(3.8)	7.0(0.5)‡ 255.8(4.2)‡	LQ N
<b>Graduated H.S.</b>	33.1(0.6)* 284.4(0.8)*	28.7(0.9)†* 275.2(1.6)†	27.9(1.1)†* 277.0(2.0)†	26.4(1.1)†* 276.3(1.4)†	21.4(0.9)† 280.2(2.4)	22.1(0.8)‡ 279.2(1.7)‡	L Q
<b>Some Educ. After H.S.</b>	17.0(0.4)* 295.6(1.1)	21.5(0.6)† 290.1(1.7)†	24.1(1.0)† 295.1(2.5)	23.8(0.9)† 296.5(1.6)	25.4(0.9)† 295.9(1.7)	23.5(1.1)‡ 294.8(1.9)	LQ N
<b>Graduated College</b>	30.2(1.2)* 309.3(1.0)	32.4(1.4)* 300.2(1.7)†*	36.9(1.2)†* 303.8(2.1)	38.9(1.4)†* 305.5(1.7)	42.6(1.4)† 308.3(1.3)	44.4(1.5)‡ 310.6(1.6)	L LQ
<b>Unknown</b>	4.4(0.4)* 252.6(3.2)	4.7(0.8) 251.6(3.9)	2.8(0.3)† 245.4(5.5)	3.0(0.4)† 248.2(5.5)	2.5(0.3)† 257.6(7.4)	3.1(0.3)‡ 246.7(6.7)	L N
<b>GRADE</b>							
<b>Below Modal Grade</b>	14.4(0.6)* 253.2(1.4)	15.5(1.0)* 250.8(2.2)*	16.8(0.9) 259.2(2.7)	21.7(1.0)† 260.5(2.0)†	23.9(1.1)† 262.9(2.6)†	20.6(1.6)‡ 262.4(3.4)‡	L L
<b>At Modal Grade</b>	74.9(0.6) 294.9(0.9)*	75.1(1.0) 288.8(1.1)†*	75.3(1.2) 294.0(1.6)*	70.2(1.0)† 298.7(1.0)†	70.1(1.0)† 303.8(1.2)†	73.1(1.7) 302.1(1.3)‡	L LQ
<b>Above Modal Grade</b>	10.7(0.5)* 300.7(1.5)	9.4(0.7)* 292.5(2.6)†	7.9(0.7)† 298.6(4.3)	8.1(0.6)† 298.3(2.5)	6.1(0.5)† 304.7(4.1)	6.3(0.6)‡ 302.9(4.2)	L N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages and average science scale scores and jackknifed standard errors  
(continued)

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>							
<b>Public</b>	93.6(1.8)	90.1(2.0)	96.0( 1.4)*	92.8(1.8)	90.2(2.4)	87.8(2.3)†#	N
	288.2(1.0)	282.3(1.1)†*	287.1( 1.6)	289.0(1.1)	292.2(1.3)	291.7(1.5)	LQ
<b>Non-Public</b>	6.4(1.8)	9.9(2.0)	4.0( 1.4)*	7.2(1.8)	8.6(2.1)	12.2(2.3)†#	N
	308.4(2.4)	292.0(2.9)†*	321.3(10.1)	307.8(6.6)	311.7(3.7)	310.4(4.8)	N
<b>QUARTILES</b>							
<b>Upper</b>	25.0(0.8)	24.9(0.9)	25.0(1.3)	25.0(0.9)	24.9(1.1)	24.3(1.2)	N
	333.6(0.9)*	328.9(1.0)†*	339.9(1.1)†*	344.3(0.7)†	346.4(0.7)†	346.6(0.9)†#	LQ
<b>Middle Two</b>	50.0(0.5)	50.1(1.1)	50.0(1.2)	50.1(0.8)	50.1(1.0)	51.9(1.3)	N
	291.2(0.5)*	286.1(0.7)†*	289.6(0.7)*	291.6(0.7)*	295.3(1.0)†	295.8(0.7)†#	LQ
<b>Lower</b>	25.0(0.9)	25.0(1.3)	25.0(1.6)	25.0(1.0)	25.0(1.0)	23.8(1.3)	N
	242.0(0.8)*	232.1(1.3)†	234.7(1.3)†	234.0(1.2)†	239.6(1.9)	236.0(1.7)†#	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 150

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	93.5(0.6)*	95.2(0.7)	96.2(0.3)†	97.0(0.3)†	97.4(0.3)†	97.2(0.4)‡	L
<b>GENDER</b>							
Male	94.3(0.5)*	95.0(1.0)	96.8(0.5)†	96.8(0.5)†	97.7(0.3)†	97.1(0.4)‡	L
Female	92.8(0.7)*	95.5(1.2)	95.6(0.6)†	97.1(0.4)†	97.1(0.5)†	97.3(0.5)‡	L
<b>RACE/ETHNICITY</b>							
White	97.7(0.3)*	98.3(0.4)	98.2(0.3)	99.2(0.2)†	99.2(0.1)†	99.1(0.3)‡	L
Black	72.4(1.8)*	82.1(3.0)†*	88.6(1.4)†	88.0(1.3)†	90.7(1.8)†	91.0(1.5)‡	LQ
Hispanic	84.6(1.8)	85.1(3.1)	89.6(2.4)	93.6(1.5)†	92.4(1.7)†	91.1(2.3)‡	L
Other	94.9(2.4)	95.7(3.2)	95.9(1.8)	96.3(2.6)	96.3(1.8)	93.9(1.7)	N
<b>GRADE</b>							
Below Modal Grade	86.2(1.1)*	88.5(1.9)*	91.8(0.8)†	93.2(0.9)†	94.5(0.7)†	94.3(0.9)‡	L
At Modal Grade	95.9(0.6)*	98.1(0.6)†	98.5(0.3)†	99.0(0.3)†	99.2(0.2)†	98.6(0.3)‡	LQ
Above Modal Grade	96.4(2.2)	100.0(0.0)	98.5(3.7)	100.0(0.0)	99.0(1.5)	***(***)	N
<b>REGION</b>							
Northeast	94.6(0.7)*	94.5(1.4)	96.7(0.9)	97.1(0.6)†	97.9(0.9)†	97.9(0.5)‡	L
Southeast	87.8(1.8)*	92.7(1.6)	95.0(1.2)†	94.6(0.9)†	95.6(0.5)†	96.5(0.8)‡	L
Central	95.5(0.8)	97.5(1.1)	97.1(0.6)	98.4(0.7)†	98.7(0.5)†	98.0(0.7)‡	L
West	94.9(1.1)	95.4(1.3)	95.9(0.7)	97.7(0.7)	97.3(0.5)	96.3(0.8)	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	86.0(1.7)*	85.5(3.5)	90.1(3.4)	93.3(2.3)†	96.0(1.5)†	93.2(1.9)‡	L
Graduated H.S.	95.0(0.5)	96.1(1.0)	95.6(0.6)	96.9(0.8)	95.2(0.7)	96.6(0.8)	N
Some Educ. After H.S.	97.1(0.9)	96.6(1.8)	98.0(1.1)	97.6(1.2)	97.6(1.0)	97.8(1.0)	N
Graduated College	96.8(0.6)	97.2(0.7)	98.0(0.4)	98.1(0.4)	98.5(0.5)	98.2(0.3)‡	L
Unknown	91.4(0.8)*	93.8(1.9)	95.0(0.6)†	96.0(0.6)†	97.1(0.5)†	96.3(0.8)‡	L
<b>TYPE OF SCHOOL</b>							
Public	93.0(0.7)*	94.9(0.8)	95.8(0.4)†	96.7(0.4)†	97.1(0.4)†	96.9(0.4)‡	L
Non-Public	98.1(0.6)	98.9(1.4)	98.2(0.7)	98.7(0.9)	99.2(0.6)	99.3(0.4)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	99.5(0.1)*	100.0(0.1)†	99.8(0.1)	100.0(0.0)†	100.0(0.0)†	100.0(0.1)‡	L
Lower	75.2(1.4)*	81.0(2.5)*	85.2(1.1)†	87.9(1.2)	89.6(1.3)†	88.9(1.3)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 200

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	68.0(1.1)*	70.7(1.9)*	72.0(1.1)†*	76.4(0.9)†	78.0(1.2)†	77.4(1.0)‡	L
<b>GENDER</b>							
Male	69.5(1.2)*	69.7(2.0)*	74.1(1.4)	76.3(1.2)†	80.4(1.4)†	77.6(0.9)‡	L
Female	66.5(1.1)*	71.8(2.2)	70.0(1.3)*	76.4(1.1)†	75.7(1.2)†	77.2(1.4)‡	L
<b>RACE/ETHNICITY</b>							
White	76.8(0.7)*	78.4(2.0)*	78.9(1.0)*	84.4(0.7)†	85.5(0.9)†	85.6(1.0)‡	L
Black	27.2(1.5)*	38.9(2.7)†*	46.2(2.3)†	46.4(3.1)†	51.3(3.5)†	51.6(2.3)‡	LQ
Hispanic	42.0(3.1)	40.2(6.1)	50.1(3.7)	56.3(3.7)†	55.5(4.3)	49.9(3.1)	L
Other	62.0(6.9)	77.0(5.6)	67.4(4.1)	76.3(7.0)	73.2(3.7)	65.3(5.6)	N
<b>GRADE</b>							
Below Modal Grade	48.8(1.8)*	50.1(3.3)*	55.1(1.7)*	61.1( 2.1)†	64.5( 1.6)†	64.4(1.4)‡	L
At Modal Grade	74.2(1.1)*	79.6(1.9)	80.7(0.9)†	84.5( 1.0)†	86.1( 1.3)†	83.8(1.3)‡	L
Above Modal Grade	83.0(4.1)	95.6(8.8)	77.5(9.8)	84.7(12.1)	86.3(11.1)	***(***)	N
<b>REGION</b>							
Northeast	72.6(1.6)	71.5(3.5)	75.6(2.5)	78.2(2.3)	80.6(2.2)†	80.0(2.7)‡	L
Southeast	55.0(2.4)*	63.0(3.6)	67.3(3.0)†	68.4(2.4)†	71.4(2.4)†	74.5(2.7)‡	L
Central	72.5(2.1)*	75.4(3.7)	75.2(2.1)	81.9(1.3)†	83.7(1.4)†	81.9(2.2)‡	L
West	68.5(2.3)	71.4(3.8)	69.9(3.0)	76.8(2.1)†	75.9(2.7)	73.6(2.1)	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	49.8(2.4)	54.9(8.7)	55.1(3.6)	60.5(4.2)	68.5(3.2)†	61.8(4.0)‡	L
Graduated H.S.	71.2(1.4)	68.2(4.3)	69.1(1.9)	75.2(2.1)	71.2(2.0)	73.7(1.9)	N
Some Educ. After H.S.	81.9(1.5)	80.7(2.4)	80.2(1.9)	81.3(2.3)	82.1(1.9)	82.8(2.5)	N
Graduated College	77.7(1.2)*	78.8(2.0)	80.4(1.2)	81.9(1.2)	84.3(1.3)†	83.1(1.3)‡	L
Unknown	60.8(1.5)*	60.9(3.6)*	65.0(2.0)	71.3(1.4)†	73.2(1.8)†	71.6(2.0)‡	L
<b>TYPE OF SCHOOL</b>							
Public	66.4(1.3)*	69.5(2.1)*	70.5(1.3)*	75.5(1.0)†	76.7(1.3)†	76.1(1.2)‡	L
Non-Public	80.3(1.7)	82.6(3.5)	79.7(2.3)	83.6(2.4)	86.2(2.0)	87.1(2.4)‡	L
<b>QUARTILES</b>							
Upper	99.0(0.3)*	100.0(0.0)†	99.7(0.2)	99.9(0.1)	99.9(0.1)	99.9(0.1)‡	L
Middle Two	78.4(0.6)*	85.6(1.9)†*	84.9(1.1)†*	90.0(0.8)†	91.3(1.0)†	91.3(0.9)‡	L
Lower	16.2(1.1)*	11.6(2.0)*	18.6(1.6)*	25.6(2.0)†	29.2(2.3)†	27.3(2.1)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons. These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 250

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	25.7(0.7)*	24.3(1.8)*	27.5(1.4)*	31.1(0.8)†	32.8(1.0)†	33.7(1.2)‡	LQ
<b>GENDER</b>							
Male	27.4(0.9)*	25.6(2.6)*	29.9(2.0)	33.1(1.1)†	37.2(1.7)†	35.3(1.4)‡	L
Female	24.0(0.9)*	23.0(2.0)*	25.1(1.4)*	29.1(1.0)†	28.6(1.1)†	32.2(1.5)‡	LQ
<b>RACE/ETHNICITY</b>							
White	30.8(0.7)*	29.4(2.1)*	32.7(1.5)*	37.5(1.1)†	39.4(1.1)†	40.8(1.5)‡	LQ
Black	3.5(0.6)*	3.9(1.3)*	8.3(1.5)†	8.5(1.1)†	9.2(1.4)†	11.1(1.4)‡	L
Hispanic	8.8(1.7)	4.2(2.7)	10.7(2.4)	11.6(2.1)	11.7(1.8)	10.8(2.5)	L
Other	20.5(4.9)	23.4(11.1)	27.1(5.8)	30.1(6.0)	30.4(4.7)	22.1(4.3)	N
<b>GRADE</b>							
Below Modal Grade	11.0(0.9)*	8.4(1.7)*	13.0(1.3)*	16.5(1.2)†	20.0(1.6)†	20.3(1.6)‡	LQ
At Modal Grade	30.3(0.9)*	31.0(2.5)*	35.0(1.7)	39.0(1.1)†	40.4(1.0)†	40.5(1.6)‡	L
Above Modal Grade	45.7(7.0)	60.5(16.3)	32.8(13.1)	26.9(16.3)	55.7(18.3)	***(***)	N
<b>REGION</b>							
Northeast	28.9(1.1)*	25.8(3.1)*	30.5(2.9)	33.4(2.9)	35.9(2.7)	36.8(2.3)‡	L
Southeast	17.2(1.5)*	20.2(3.6)	23.3(3.0)	24.9(1.4)†	26.5(1.8)†	30.4(2.3)‡	L
Central	29.2(1.6)*	27.5(3.6)	30.1(2.3)	34.4(1.8)	38.7(2.3)†	38.1(2.6)‡	L
West	25.3(1.2)	23.1(4.6)	26.2(2.6)	31.7(1.7)†	29.8(2.2)	30.1(2.7)	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	12.7(1.3)	8.6(4.0)	12.7(2.7)	16.3(3.5)	19.6(2.8)	16.2(3.1)	L
Graduated H.S.	27.0(1.2)	20.3(3.1)	23.1(1.8)	27.3(1.8)	26.2(1.7)	27.4(2.3)	Q
Some Educ. After H.S.	39.4(1.5)	31.9(5.1)	38.5(3.7)	40.7(2.5)	39.2(3.1)	42.1(4.3)	N
Graduated College	35.1(1.2)*	32.2(2.7)*	36.8(1.8)	38.3(1.2)	40.2(1.4)†	40.6(1.6)‡	L
Unknown	18.9(0.8)*	16.1(2.1)*	19.5(1.7)*	23.9(1.3)†	26.5(1.7)†	26.8(1.9)‡	LQ
<b>TYPE OF SCHOOL</b>							
Public	24.5(0.9)*	23.9(2.1)*	26.3(1.5)*	30.3(0.8)†	31.5(1.0)†	32.5(1.4)‡	L
Non-Public	35.6(1.9)	28.2(5.6)	33.8(2.8)	37.2(3.0)	40.6(3.4)	42.7(2.8)‡	LQ
<b>QUARTILES</b>							
Upper	70.1(1.1)*	79.1(3.0)†	76.1(2.0)†	80.2(1.5)†	82.7(1.6)†	82.4(1.4)‡	L
Middle Two	16.2(0.6)*	9.1(1.9)†*	16.9(1.5)*	22.1(1.0)†	23.9(1.3)†	24.4(1.6)‡	LQ
Lower	0.2(0.1)	0.0(0.1)	0.2(0.2)	0.2(0.1)	0.4(0.2)	0.4(0.2)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 300

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	3.2(0.3)	2.3(0.7)	3.0(0.5)	3.1(0.3)	3.4(0.3)	3.8(0.4)	N
<b>GENDER</b>							
Male	3.7(0.3)	2.5(1.0)	3.8(0.6)	4.2(0.6)	4.6(0.6)	4.5(0.7)	L
Female	2.6(0.3)	2.1(0.6)	2.2(0.5)	2.0(0.3)	2.2(0.3)	3.2(0.4)	N
<b>RACE/ETHNICITY</b>							
White	3.9(0.3)	2.9(0.9)	3.8(0.6)	3.9(0.4)	4.3(0.4)	4.9(0.6)	L
Black	0.2(0.1)	0.1(0.4)	0.3(0.2)	0.1(0.2)	0.3(0.3)	0.2(0.4)	N
Hispanic	0.3(0.4)	0.0(0.0)	0.2(0.2)	0.4(0.4)	0.4(0.4)	0.7(0.5)	N
Other	1.9(1.0)	0.0(0.0)	2.1(1.1)	3.2(1.5)	3.2(1.5)	1.4(1.6)	N
<b>GRADE</b>							
Below Modal Grade	0.7(0.1)	0.1(0.2)	0.6(0.2)	0.9(0.4)	1.2(0.3)	1.4(0.5)	L
At Modal Grade	3.9(0.4)	3.0(0.9)	4.2(0.7)	4.3(0.5)	4.7(0.4)	5.0(0.6)	L
Above Modal Grade	9.7(5.1)	29.7(17.8)	7.2(5.8)	4.7(7.3)	7.2(8.1)	***(***)	N
<b>REGION</b>							
Northeast	3.6(0.4)	2.6(1.2)	3.7(1.9)	3.4(0.7)	4.1(0.8)	4.5(1.0)	N
Southeast	1.6(0.3)	1.4(0.5)	2.3(0.4)	2.2(0.7)	2.5(0.7)	3.1(1.2)	N
Central	3.8(0.5)	2.9(1.5)	3.2(0.8)	3.8(0.8)	4.4(0.6)	4.3(0.9)	N
West	3.2(0.5)	2.1(1.5)	2.7(0.9)	3.0(0.5)	2.6(0.5)	3.4(0.5)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	0.9(0.4)	0.2(0.4)	0.8(0.9)	0.5(0.5)	1.7(1.0)	0.6(0.7)	N
Graduated H.S.	3.2(0.3)	1.8(1.4)	1.6(0.5)	2.0(0.6)	1.8(0.6)	2.5(0.7)	N
Some Educ. After H.S.	5.7(1.0)	2.4(1.8)	4.4(1.4)	5.4(1.3)	4.8(1.5)	6.2(1.5)	N
Graduated College	5.4(0.7)	3.7(1.1)	5.0(1.0)	4.5(0.6)	5.0(0.6)	5.1(0.7)	N
Unknown	1.7(0.4)	0.8(0.5)	1.4(0.4)	1.6(0.5)	1.9(0.4)	2.4(0.5)	N
<b>TYPE OF SCHOOL</b>							
Public	2.9(0.3)	2.3(0.7)	2.8(0.6)	3.0(0.4)	3.2(0.3)	3.6(0.5)	N
Non-Public	5.1(1.1)	2.1(1.2)	4.0(0.7)	3.9(1.0)	4.6(1.3)	5.6(1.0)	Q
<b>QUARTILES</b>							
Upper	12.0(0.9)	9.1(2.3)	11.7(1.7)	12.1(1.3)	13.2(1.1)	13.9(1.6)	N
Middle Two	0.3(0.1)	0.0(0.0)†	0.1(0.1)	0.2(0.1)	0.2(0.1)	0.2(0.1)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 9

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 350

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.1(0.0)	0.0(0.1)	0.1(0.1)	0.1(0.0)	0.1(0.1)	0.1(0.0)	N
<b>GENDER</b>							
Male	0.1(0.0)	0.1(0.2)	0.1(0.1)	0.1(0.1)	0.1(0.1)	0.1(0.1)	N
Female	0.1(0.0)	0.0(0.1)	0.1(0.1)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>RACE/ETHNICITY</b>							
White	0.1(0.0)	0.1(0.1)	0.1(0.1)	0.1(0.1)	0.1(0.1)	0.1(0.1)	N
Black	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Hispanic	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Other	0.0(0.0)	0.0(0.0)	0.1(0.2)	0.1(0.3)	0.0(0.0)	0.0(0.0)	N
<b>GRADE</b>							
Below Modal Grade	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	N
At Modal Grade	0.1(0.0)	0.1(0.1)	0.2(0.1)	0.1(0.1)	0.1(0.1)	0.1(0.1)	N
Above Modal Grade	0.9(1.3)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	0.1(0.1)	0.0(0.0)	0.2(0.3)	0.0(0.1)	0.1(0.2)	0.1(0.1)	N
Southeast	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.1(0.1)	0.0(0.0)	0.1(0.1)	N
Central	0.1(0.1)	0.0(0.3)	0.1(0.1)	0.1(0.1)	0.2(0.2)	0.1(0.1)	N
West	0.0(0.1)	0.1(0.2)	0.1(0.1)	0.1(0.1)	0.0(0.0)	0.1(0.1)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.2)	0.0(0.0)	N
Graduated H.S.	0.1(0.1)	0.0(0.0)	0.0(0.2)	0.0(0.0)	0.0(0.0)	0.1(0.1)	N
Some Educ. After H.S.	0.1(0.1)	0.0(0.0)	0.1(0.2)	0.1(0.1)	0.1(0.1)	0.1(0.1)	N
Graduated College	0.1(0.1)	0.1(0.2)	0.2(0.2)	0.1(0.1)	0.1(0.1)	0.1(0.1)	N
Unknown	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.1(0.1)	N
<b>TYPE OF SCHOOL</b>							
Public	0.0(0.0)	0.1(0.1)	0.1(0.1)	0.1(0.0)	0.1(0.0)	0.1(0.1)	N
Non-Public	0.2(0.2)	0.0(0.0)	0.2(0.1)	0.1(0.2)	0.1(0.2)	0.1(0.1)	N
<b>QUARTILES</b>							
Upper	0.2(0.1)	0.2(0.3)	0.4(0.3)	0.2(0.1)	0.3(0.2)	0.3(0.2)	N
Middle Two	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.  
These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 13

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 150

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	98.5(0.2)*	99.5(0.1)†	99.7(0.1)†	99.7(0.1)†	99.6(0.1)†	99.7(0.1)‡	LQ
<b>GENDER</b>							
Male	98.8(0.2)*	99.7(0.1)†	99.8(0.1)†	99.7(0.1)†	99.6(0.2)†	99.7(0.1)‡	LQ
Female	98.2(0.2)*	99.2(0.2)†	99.7(0.1)†	99.7(0.2)†	99.6(0.2)†	99.7(0.2)‡	LQ
<b>RACE/ETHNICITY</b>							
White	99.6(0.1)*	99.9(0.0)†	99.9(0.1)	100.0(0.0)†	100.0(0.0)†	100.0(0.0)‡	L
Black	93.1(1.0)*	97.5(0.7)†	99.0(0.4)†	98.8(0.6)†	97.8(0.6)†	98.8(0.6)‡	LQ
Hispanic	94.3(1.3)*	98.0(0.8)	99.0(0.6)†	98.9(0.6)†	99.5(0.5)†	99.2(0.4)‡	LQ
Other	98.0(1.1)	99.8(0.4)	100.0(0.0)	99.5(0.6)	99.7(0.5)	99.3(0.9)	N
<b>GRADE</b>							
Below Modal Grade	96.0(0.5)*	98.4(0.4)†	99.3(0.3)†	99.3(0.2)†	99.1(0.3)†	99.3(0.3)‡	LQ
At Modal Grade	99.4(0.1)*	99.9(0.1)†	99.9(0.0)†	99.9(0.0)†	99.9(0.1)†	99.9(0.0)‡	LQ
Above Modal Grade	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	99.3(0.2)*	99.5(0.2)	99.8(0.1)	99.7(0.3)	99.4(0.3)	100.0(0.1)‡	N
Southeast	97.3(0.4)*	98.9(0.4)†	99.5(0.3)†	99.6(0.2)†	99.4(0.3)†	99.6(0.3)‡	LQ
Central	99.1(0.2)	99.8(0.1)†	99.8(0.3)	99.9(0.2)†	99.8(0.1)†	99.7(0.2)‡	L
West	98.1(0.3)*	99.5(0.2)†	99.8(0.1)†	99.6(0.2)†	99.7(0.3)†	99.5(0.3)‡	LQ
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	96.4(0.6)*	97.9(0.9)	98.6(1.0)	99.5(0.4)†	98.5(1.1)	99.3(0.5)‡	L
Graduated H.S.	99.0(0.2)	99.6(0.3)	99.8(0.1)†	99.7(0.2)	99.3(0.3)	99.6(0.2)	Q
Some Educ. After H.S.	99.6(0.2)	99.8(0.2)	99.9(0.1)	99.9(0.1)	100.0(0.1)	99.9(0.2)	N
Graduated College	99.7(0.1)	99.9(0.1)	99.9(0.1)	99.9(0.2)	99.9(0.1)	99.9(0.1)	N
Unknown	95.5(0.7)*	98.6(0.6)†	98.9(0.5)†	98.4(0.7)†	98.7(0.6)†	98.7(0.9)‡	LQ
<b>TYPE OF SCHOOL</b>							
Public	98.4(0.2)*	99.4(0.1)†	99.7(0.1)†	99.7(0.1)†	99.5(0.1)†	99.7(0.1)‡	LQ
Non-Public	99.8(0.3)	99.8(0.1)	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.1)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	94.1(0.6)*	97.9(0.5)†	98.8(0.4)†	98.8(0.3)†	98.3(0.5)†	98.9(0.4)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 13

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 200

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	86.0(0.7)*	89.8(0.8)†*	91.6(1.0)†	92.3(0.7)†	93.1(0.5)†	92.4(0.6)‡	LQ
<b>GENDER</b>							
Male	87.2(0.8)*	91.9(0.8)†	92.9(1.0)†	92.7(0.8)†	93.1(0.8)†	92.2(0.8)‡	LQ
Female	84.7(0.8)*	87.9(1.0)*	90.3(1.2)†	92.0(0.8)†	93.1(0.7)†	92.6(0.6)‡	L
<b>RACE/ETHNICITY</b>							
White	92.2(0.5)*	94.4(0.6)†*	96.1(0.8)†	96.9(0.4)†	97.9(0.4)†	97.6(0.4)‡	L
Black	57.3(2.4)*	68.6(2.4)†	73.6(3.0)†	77.6(3.6)†	73.8(2.8)†	73.5(3.2)‡	LQ
Hispanic	62.2(2.4)*	75.5(3.3)†	76.7(3.2)†	80.2(2.9)†	86.2(2.6)†	81.2(2.5)‡	L
Other	80.9(2.9)*	94.2(2.4)†	93.6(3.8)†	88.1(4.9)	94.5(1.9)†	92.6(1.9)‡	LQ
<b>GRADE</b>							
Below Modal Grade	71.4(1.6)*	78.0(1.8)†*	83.1(1.9)†	84.9(1.5)†	87.1(1.2)†	86.4(1.0)‡	L
At Modal Grade	91.3(0.6)*	94.4(0.6)†	95.7(0.7)†	96.5(0.5)†	96.7(0.6)†	95.9(0.7)‡	LQ
Above Modal Grade	98.4(0.9)	100.0(0.0)	94.1(3.3)	96.3(6.1)	100.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	90.7(1.4)*	91.5(1.1)*	93.5(1.2)	92.6(1.8)	91.6(1.5)	95.4(1.0)‡	L
Southeast	78.1(1.7)*	83.6(2.2)*	89.8(1.7)†	91.0(1.2)†	90.7(1.5)†	90.6(1.3)‡	LQ
Central	89.9(1.1)	92.0(1.3)	91.9(3.5)	94.6(1.8)	95.4(0.8)†	94.0(2.0)	L
West	83.5(1.5)*	91.3(1.4)†	91.3(1.6)†	91.2(1.3)†	94.1(1.0)†	90.4(1.3)‡	LQ
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	71.6(1.6)*	75.8(2.4)	79.8(3.5)	82.4(2.9)†	82.4(3.1)†	81.9(2.3)‡	L
Graduated H.S.	87.0(0.8)	88.6(1.1)	90.7(1.4)	91.4(1.1)†	89.3(1.2)	90.6(1.2)‡	L
Some Educ. After H.S.	93.4(0.9)	94.9(1.4)	95.9(0.7)	96.6(0.8)†	98.0(0.7)†	94.8(1.1)	L
Graduated College	95.0(0.5)	95.5(0.7)	95.8(0.7)	96.4(0.5)	97.1(0.5)†	96.5(0.4)‡	L
Unknown	70.1(1.9)*	77.9(2.1)†	78.1(3.1)	75.4(2.9)	79.9(1.9)†	79.9(2.6)‡	L
<b>TYPE OF SCHOOL</b>							
Public	84.9(0.8)*	89.2(0.9)†	91.3(1.0)†	91.6(0.8)†	92.7(0.5)†	91.9(0.6)‡	LQ
Non-Public	95.7(1.0)	95.0(1.5)	97.3(1.8)	98.4(0.8)	96.4(1.1)	96.5(1.4)	N
<b>QUARTILES</b>							
Upper	99.9(0.1)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	95.5(0.3)*	98.2(0.2)†*	99.4(0.2)†	99.6(0.2)†	99.8(0.1)†	99.8(0.1)‡	LQ
Lower	53.0(1.3)*	63.0(2.0)†*	67.5(2.7)†	70.1(2.1)†	72.9(1.5)†	71.6(1.7)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons. These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 13

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 250

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	48.8(1.1)*	50.9(1.6)*	52.5(1.6)*	56.5(1.0)†	61.3(1.1)†	59.5(1.1)#	L
<b>GENDER</b>							
Male	52.3(1.3)*	56.2(1.8)	57.3(2.1)	59.8(1.3)†	62.9(1.4)†	62.0(1.3)#	L
Female	45.4(1.2)*	46.0(1.6)*	47.7(1.7)*	53.3(1.4)†	59.6(1.4)†	57.1(1.4)#	LQ
<b>RACE/ETHNICITY</b>							
White	56.5(0.9)*	58.3(1.4)*	61.0(1.7)*	66.5( 1.2)†	71.1(1.3)†	70.5(1.1)#	LQ
Black	14.9(1.7)	17.1(1.9)	19.6(2.8)	24.3( 3.3)	26.2(2.8)†	22.4(4.3)	L
Hispanic	18.1(1.8)*	24.1(5.1)	24.9(4.3)	30.0( 2.8)†	36.5(2.9)†	31.6(3.3)#	L
Other	35.6(4.9)*	64.8(7.1)†	52.6(6.6)	47.1(10.2)	62.0(3.9)†	58.9(4.7)#	L
<b>GRADE</b>							
Below Modal Grade	26.4(1.3)*	28.3(2.1)*	33.0(1.9)†*	39.4( 1.8)†	46.3(1.7)†	45.3( 1.8)#	LQ
At Modal Grade	56.8(1.1)*	59.7(1.7)*	61.9(1.6)*	66.3( 1.2)†	70.1(1.2)†	67.6( 1.1)#	L
Above Modal Grade	82.3(4.0)	90.3(5.5)	67.3(6.9)	52.3(11.5)*	93.0(6.5)	***(***)	Q
<b>REGION</b>							
Northeast	56.1(2.0)*	55.1(2.7)*	59.0(4.0)	58.1(2.7)	60.4(2.8)	66.3(2.0)#	L
Southeast	37.5(1.6)*	40.1(2.3)*	48.6(3.3)†	52.7(2.7)†	57.5(2.5)†	54.6(3.2)#	L
Central	54.8(2.0)	54.1(3.5)	49.5(6.3)	62.7(3.1)	66.2(2.2)†	64.1(3.7)#	L
West	44.5(2.4)*	53.0(3.3)	53.3(2.8)	53.2(2.2)†	60.4(2.2)†	54.6(2.1)#	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	26.0(1.2)	24.2(2.1)	28.6(3.5)	31.1(2.4)	34.2(3.3)	34.9(4.4)	L
Graduated H.S.	46.4(1.4)	43.1(2.0)	44.4(2.0)	47.4(1.7)	48.6(2.0)	48.3(1.8)	N
Some Educ. After H.S.	61.0(1.5)	60.3(2.3)	61.0(2.4)	65.3(1.9)	71.3(1.7)†*	62.7(2.1)	L
Graduated College	67.1(1.1)*	65.6(1.9)*	67.0(2.1)	70.2(1.4)	73.2(1.5)†	73.1(1.4)#	LQ
Unknown	25.7(2.1)	28.0(3.0)	23.9(2.6)	23.3(2.3)	31.0(2.6)	30.3(3.0)	N
<b>TYPE OF SCHOOL</b>							
Public	46.7(1.2)*	49.2(1.8)*	51.9(1.7)*	54.7(1.2)†	60.2(1.2)†	57.8(1.2)#	L
Non-Public	68.8(2.6)	65.8(4.1)	66.8(8.2)	72.0(2.6)	68.9(3.1)	72.7(3.2)	N
<b>QUARTILES</b>							
Upper	92.0(0.5)*	95.1(0.6)†*	97.8(0.5)†*	99.1(0.3)†	99.6(0.3)†	99.5(0.3)#	LQ
Middle Two	49.0(1.0)*	51.8(1.3)*	54.5(1.9)†*	61.6(1.1)†*	69.4(1.4)†	68.0(1.6)#	LQ
Lower	5.3(0.5)	5.2(0.8)	3.2(0.9)	3.9(0.8)	6.5(0.8)	6.4(1.1)	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 13

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 300

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	11.1(0.5)	9.6(0.7)	9.1(0.9)	11.2(0.6)	12.0(0.8)	11.8(0.9)	LQ
<b>GENDER</b>							
Male	13.1(0.6)	12.6(1.1)	11.9(1.3)	14.0(0.9)	14.2(1.1)	14.8(1.1)	N
Female	9.0(0.5)	6.9(0.7)	6.3(1.1)	8.5(0.6)	9.9(0.8)	8.8(1.0)	Q
<b>RACE/ETHNICITY</b>							
White	13.4(0.5)	11.5(0.8)	11.3(1.2)	14.2(0.8)	15.0(1.0)	14.8(1.0)	LQ
Black	1.2(0.4)	0.8(0.3)	1.1(0.4)	1.5(0.5)	1.8(0.8)	2.2(2.1)	N
Hispanic	1.8(0.8)	2.4(0.9)	1.5(0.7)	3.3(0.8)	3.3(1.3)	2.4(0.9)	N
Other	5.6(2.0)	15.9(3.5)†	7.4(2.8)	9.1(4.6)	14.0(2.7)	13.6(4.5)	N
<b>GRADE</b>							
Below Modal Grade	3.3(0.4)*	2.6( 0.4)*	3.4( 0.6)*	5.1( 0.6)†	6.3( 0.8)†	7.0( 0.6)‡	LQ
At Modal Grade	13.7(0.5)	12.3( 0.9)	11.8( 1.3)	14.7( 0.9)	15.2( 1.0)	14.4( 1.1)	L
Above Modal Grade	34.5(5.0)	34.1(15.5)	21.5(10.6)	20.4(16.3)	69.9(19.5)	***(***)	N
<b>REGION</b>							
Northeast	13.8(1.0)	11.2(1.3)	12.4(2.2)	12.6(1.6)	11.7(1.4)	13.4(1.9)	N
Southeast	7.1(0.7)	5.1(0.6)*	6.5(1.1)	8.8(0.9)	11.0(2.1)	10.0(1.2)‡	LQ
Central	13.2(1.0)	10.7(1.4)	7.4(1.6)†	13.3(1.4)	13.6(1.3)	13.9(1.9)	Q
West	9.4(0.8)	10.9(1.6)	10.2(1.7)	10.4(1.3)	11.7(1.1)	10.1(1.3)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	2.9(0.4)	1.8(0.8)	1.9(1.1)	2.5(0.8)	1.7(0.8)	2.7(1.2)	N
Graduated H.S.	8.4(0.6)	4.9(0.7)†	4.5(1.0)†	6.3(1.0)	6.3(0.8)	5.6(1.0)‡	Q
Some Educ. After H.S.	15.7(1.1)	12.4(1.6)	9.5(1.3)†	12.8(1.1)	13.0(1.4)	12.3(2.2)	Q
Graduated College	19.6(0.9)	15.7(1.3)†	15.7(2.0)	17.4(1.1)	17.7(1.3)	17.9(1.4)	Q
Unknown	3.1(0.4)	2.6(0.8)	2.2(0.9)	1.7(0.7)	3.3(0.9)	1.7(0.7)	N
<b>TYPE OF SCHOOL</b>							
Public	10.2(0.5)	8.9(0.8)	8.9(0.9)	10.7(0.7)	11.9(0.9)	11.3(0.9)	LQ
Non-Public	19.6(1.9)	16.0(2.4)	12.8(3.6)	16.2(1.5)	13.2(2.0)	15.5(2.6)	N
<b>QUARTILES</b>							
Upper	36.5(0.8)*	33.8(2.0)*	34.2(3.2)	41.6(1.5)†	43.9(2.8)	44.1(2.3)‡	LQ
Middle Two	3.9(0.4)*	2.4(0.4)†	1.1(0.3)†	1.6(0.4)†	2.1(0.5)†	1.8(0.4)‡	LQ
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 13

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 350

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.7(0.1)*	0.4(0.1)	0.2(0.1)†	0.4(0.1)	0.2(0.1)†	0.2(0.1)‡	L
<b>GENDER</b>							
Male	0.9(0.2)*	0.5(0.2)	0.3(0.2)	0.6(0.2)	0.3(0.1)†	0.3(0.2)‡	L
Female	0.4(0.1)*	0.2(0.1)	0.1(0.1)	0.2(0.1)	0.2(0.2)	0.1(0.1)‡	L
<b>RACE/ETHNICITY</b>							
White	0.8(0.1)*	0.4(0.1)	0.3(0.1)†	0.5(0.1)	0.3(0.1)†	0.3(0.1)‡	L
Black	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.0(0.0)	0.0(0.0)	N
Hispanic	0.0(0.1)	0.0(0.1)	0.0(0.0)	0.1(0.1)	0.0(0.0)	0.0(0.0)	N
Other	0.1(0.5)	0.8(1.0)	0.2(0.5)	0.7(1.7)	0.6(0.5)	0.1(0.3)	N
<b>GRADE</b>							
Below Modal Grade	0.1(0.2)	0.1(0.1)	0.0(0.1)	0.1(0.0)	0.0( 0.1)	0.1(0.1)	N
At Modal Grade	0.8(0.1)*	0.5(0.2)	0.3(0.1)†	0.5(0.2)	0.3( 0.1)†	0.2(0.1)‡	L
Above Modal Grade	4.4(1.9)	3.8(7.7)	0.0(0.0)	5.4(8.4)	19.1(23.5)	***(***)	N
<b>REGION</b>							
Northeast	0.9(0.3)	0.5(0.2)	0.5(0.3)	0.4(0.2)	0.2(0.3)	0.2(0.3)‡	L
Southeast	0.3(0.1)	0.1(0.1)	0.1(0.1)	0.4(0.2)	0.2(0.3)	0.2(0.2)	N
Central	1.0(0.3)	0.4(0.4)	0.1(0.2)	0.5(0.3)	0.3(0.2)	0.3(0.2)	N
West	0.4(0.1)	0.4(0.3)	0.2(0.2)	0.3(0.2)	0.2(0.1)	0.1(0.1)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	0.1(0.1)	0.0(0.0)	0.0(0.0)	0.1(0.2)	0.0(0.1)	0.0(0.0)	N
Graduated H.S.	0.3(0.1)	0.1(0.1)	0.0(0.1)	0.1(0.1)	0.0(0.0)	0.0(0.0)‡	L
Some Educ. After H.S.	1.0(0.2)	0.4(0.6)	0.1(0.1)†	0.3(0.2)	0.3(0.2)	0.3(0.4)	N
Graduated College	1.4(0.3)*	0.7(0.2)	0.5(0.2)	0.8(0.3)	0.4(0.2)†	0.3(0.1)‡	L
Unknown	0.1(0.1)	0.0(0.1)	0.0(0.0)	0.0(0.1)	0.1(0.1)	0.0(0.0)	N
<b>TYPE OF SCHOOL</b>							
Public	0.6(0.1)*	0.3(0.1)	0.2(0.1)	0.4(0.1)	0.3(0.1)	0.2(0.1)‡	L
Non-Public	1.6(0.3)*	0.8(0.5)	0.3(0.7)	0.5(0.5)	0.1(0.2)†	0.1(0.3)‡	L
<b>QUARTILES</b>							
Upper	2.6(0.4)*	1.4(0.4)	0.9(0.4)†	1.6(0.4)	0.9(0.4)†	0.8(0.4)‡	L
Middle Two	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 150

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	99.8(0.0)	99.7(0.1)	99.9(0.1)	99.9(0.2)	100.0(0.0)†	99.8(0.1)	N
<b>GENDER</b>							
Male	99.9(0.0)	99.8(0.1)	99.9(0.1)	99.9(0.2)	99.9(0.1)	99.8(0.2)	N
Female	99.7(0.1)	99.6(0.1)	99.9(0.1)	99.9(0.2)	100.0(0.0)†	99.9(0.1)	L
<b>RACE/ETHNICITY</b>							
White	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Black	98.5(0.3)	97.9(0.5)	99.7(0.4)	99.4(0.7)	99.8(0.3)†	99.6(0.5)	L
Hispanic	99.7(0.2)	98.9(0.9)	99.8(0.4)	99.6(0.9)	100.0(0.0)	99.3(0.5)	N
Other	99.9(0.1)	99.8(0.4)	99.2(1.0)	99.9(0.2)	99.9(0.3)	99.0(1.6)	N
<b>GRADE</b>							
Below Modal Grade	98.9(0.3)	98.6(0.4)	99.6(0.4)	99.4(0.7)	99.8(0.2)†	99.5(0.3)	L
At Modal Grade	100.0(0.0)	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.0)	N
Above Modal Grade	99.9(0.0)	99.8(0.2)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.7(0.5)	N
<b>REGION</b>							
Northeast	99.9(0.1)	99.6(0.2)	99.9(0.3)	99.8(0.4)	100.0(0.1)	99.7(0.2)	N
Southeast	99.5(0.2)	99.5(0.3)	99.9(0.1)	99.9(0.2)	99.9(0.2)	99.9(0.1)‡	L
Central	99.9(0.0)	99.8(0.2)	100.0(0.0)	99.9(0.2)	100.0(0.0)	99.8(0.3)	N
West	99.9(0.0)	99.7(0.2)	99.8(0.2)	99.9(0.2)	100.0(0.0)†	99.8(0.2)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	99.5(0.2)	99.1(0.4)	99.6(0.5)	99.5(0.7)	99.9(0.2)	99.4(0.6)	N
Graduated H.S.	99.9(0.0)	99.6(0.2)	99.9(0.1)	99.9(0.3)	99.9(0.1)	99.8(0.2)	N
Some Educ. After H.S.	100.0(0.0)	99.9(0.1)	100.0(0.1)	100.0(0.0)	100.0(0.0)	99.9(0.1)	N
Graduated College	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.1)	100.0(0.0)	N
Unknown	98.4(0.6)	98.3(1.1)	98.7(1.2)	98.6(2.6)	99.9(0.4)	98.4(1.9)	N
<b>TYPE OF SCHOOL</b>							
Public	99.8(0.0)	99.6(0.1)	99.9(0.1)	99.8(0.2)	100.0(0.0)	99.8(0.1)	N
Non-Public	100.0(0.0)	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.1)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	99.2(0.2)	98.7(0.3)	99.6(0.3)	99.4(0.6)	99.8(0.2)†	99.3(0.4)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 200

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	97.1(0.2)	95.7(0.5)	97.1(0.5)	96.7(0.3)	97.8(0.5)	97.1(0.7)	N
<b>GENDER</b>							
Male	97.8(0.2)	96.8(0.5)	97.4(0.7)	96.8(0.5)	98.0(0.6)	97.1(0.6)	N
Female	96.4(0.3)	94.6(0.8)	96.9(0.5)	96.6(0.6)	97.5(0.7)	97.2(1.0)	L
<b>RACE/ETHNICITY</b>							
White	99.2(0.1)	98.6(0.2)	98.8(0.3)	99.0(0.2)	99.3(0.3)	99.3(0.3)	N
Black	83.6(1.3)*	79.7(1.9)*†	90.9(2.1)†	88.3(1.9)	92.1(1.8)†	91.1(1.9)‡	L
Hispanic	93.1(1.7)	86.9(2.9)	93.3(2.4)	91.9(2.2)	94.6(2.6)	89.9(3.3)	N
Other	97.1(1.8)	95.1(2.2)	89.3(4.8)	96.3(1.6)	95.1(2.6)	95.8(2.8)	N
<b>GRADE</b>							
Below Modal Grade	88.4(1.1)	85.6(1.6)	90.7(2.1)	89.9(1.6)	92.9(1.3)†	90.7(1.8)	L
At Modal Grade	98.5(0.1)	97.5(0.4)	98.5(0.3)	98.6(0.2)	99.3(0.3)†	98.8(0.5)	L
Above Modal Grade	99.0(0.3)	97.3(1.2)	98.0(1.9)	98.8(1.1)	98.7(0.7)	98.2(0.9)	N
<b>REGION</b>							
Northeast	98.0(0.4)	95.7(0.9)	97.1(1.5)	96.4(1.1)	98.3(0.6)	97.1(1.1)	N
Southeast	94.2(0.7)	93.9(1.5)	96.6(1.2)	95.8(0.6)	96.6(1.0)	97.0(1.1)‡	L
Central	98.0(0.3)	97.4(0.7)	98.4(0.5)	97.8(0.7)	98.6(0.8)	97.9(0.9)	N
West	97.3(0.3)	95.0(0.9)	96.3(0.9)	96.7(0.6)	97.6(0.9)	96.3(1.6)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	93.1(0.8)	90.1(1.6)	91.7(2.3)	91.7(2.2)	93.1(3.3)	89.7(3.1)	N
Graduated H.S.	97.3(0.3)	95.2(0.8)†	96.7(0.9)	94.9(1.0)	96.9(0.9)	96.2(1.2)	N
Some Educ. After H.S.	98.9(0.2)	98.0(0.4)	98.6(0.8)	98.7(0.5)	98.8(0.7)	98.4(0.7)	N
Graduated College	99.5(0.1)	98.2(0.3)†	99.2(0.3)	98.7(0.3)	98.9(0.5)	99.0(0.4)	N
Unknown	85.8(1.6)	85.4(3.2)	83.9(5.0)	84.8(5.0)	90.3(4.0)	84.3(4.8)	N
<b>TYPE OF SCHOOL</b>							
Public	97.0(0.2)	95.4(0.6)	97.0(0.5)	96.5(0.4)	97.5(0.5)	96.8(0.7)	N
Non-Public	99.5(0.2)	97.9(0.7)	99.8(0.6)	99.5(0.5)	100.0(0.1)	99.3(0.4)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	99.9(0.1)	99.7(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)‡	L
Lower	88.7(0.7)	83.2(1.6)†	88.5(1.7)	86.8(1.2)	91.1(1.7)	87.7(2.4)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 250

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	81.6(0.7)	76.6(1.0)†*	80.7(1.3)	81.2(0.9)	83.3(1.2)	83.1(1.2)	LQ
<b>GENDER</b>							
Male	85.2(0.7)	81.2(1.2)†	82.4(1.4)	82.5(1.2)	85.0(1.4)	84.9(1.3)	Q
Female	78.0(1.0)	72.2(1.3)†*	79.1(1.7)	79.9(1.4)	81.6(1.4)	81.6(1.6)	LQ
<b>RACE/ETHNICITY</b>							
White	88.2(0.4)*	84.9(0.9)†*	87.8(1.4)	89.6(0.8)	90.5(1.0)	91.5(0.9)‡	LQ
Black	40.5(1.5)*	35.0(2.1)*	52.2(3.2)†	51.4(3.7)†	55.7(3.7)†	58.1(3.7)‡	L
Hispanic	61.5(1.7)	48.0(2.7)†	60.0(7.2)	59.9(5.0)	68.3(6.6)	58.6(7.4)	N
Other	78.7(2.9)	65.4(5.8)	71.0(7.0)	79.2(3.8)	78.4(4.4)	82.7(5.0)	Q
<b>GRADE</b>							
Below Modal Grade	53.6(1.4)	49.9(2.6)*	58.1(2.8)	59.5(2.5)	61.0(3.1)	60.2(2.9)‡	L
At Modal Grade	86.0(0.6)*	81.3(1.0)†*	85.2(1.4)	87.2(0.8)	90.5(0.9)†	89.1(0.8)‡	LQ
Above Modal Grade	88.2(1.0)	83.0(2.4)	86.8(2.6)	86.8(2.3)	88.7(2.9)	89.2(3.1)	N
<b>REGION</b>							
Northeast	85.4(1.6)	77.5(1.9)†	80.8(3.9)	82.1(2.8)	85.8(2.3)	85.5(2.9)	Q
Southeast	72.2(1.5)*	71.2(2.3)*	76.9(1.9)	76.8(2.2)	76.1(2.0)	80.2(2.4)‡	L
Central	85.1(1.1)	81.1(2.3)	85.7(1.8)	86.9(2.0)	90.3(2.2)	85.4(2.9)	N
West	79.9(1.2)	74.8(2.5)	78.8(3.0)	79.0(1.9)	81.7(3.0)	81.7(3.0)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	64.8(1.5)	58.2(2.6)	59.8(3.5)	62.0(4.3)	61.2(4.8)	57.0(5.3)	N
Graduated H.S.	80.0(1.0)	72.3(1.5)†	74.1(2.1)	73.4(1.5)†	76.6(2.5)	75.6(2.1)	Q
Some Educ. After H.S.	87.0(0.8)	83.1(1.4)	86.8(1.9)	88.1(1.6)	87.5(1.3)	86.6(1.6)	N
Graduated College	92.9(0.5)	86.7(1.4)†*	89.6(1.4)	88.9(1.1)†	90.2(1.3)	92.1(0.8)	Q
Unknown	52.7(2.6)	52.1(4.2)	47.4(7.9)	48.5(5.5)	54.1(7.5)	45.7(6.7)	N
<b>TYPE OF SCHOOL</b>							
Public	80.8(0.7)	75.8(1.0)†*	80.1(1.4)	80.4(0.9)	82.0(1.2)	81.7(1.3)	LQ
Non-Public	92.9(1.2)	83.5(2.8)†*	96.5(2.2)	90.6(4.1)	95.5(2.0)	93.1(2.3)	N
<b>QUARTILES</b>							
Upper	99.7(0.1)*	99.5(0.2)	100.0(0.0)†	100.0(0.0)†	100.0(0.0)†	100.0(0.0)‡	L
Middle Two	91.9(0.4)*	88.1(0.7)†*	95.8(0.6)†	96.5(0.6)†	97.5(0.6)†	97.2(0.5)‡	LQ
Lower	42.6(1.1)*	30.5(1.5)†	31.2(2.4)†	31.7(2.2)†	38.2(3.0)	35.1(2.3)‡	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 300

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	41.7(0.9)*	37.3(0.9)†*	41.3(1.4)*	43.3(1.3)	46.6(1.5)†	47.5(1.3)‡	LQ
<b>GENDER</b>							
Male	48.8(1.1)	45.2(1.2)*	48.8(2.1)	48.2(1.6)	50.9(2.0)	52.9(1.8)	LQ
Female	34.8(1.0)*	29.9(1.2)†*	34.1(1.5)*	38.7(1.7)	42.0(1.7)†	42.4(1.8)‡	LQ
<b>RACE/ETHNICITY</b>							
White	47.5(0.7)*	43.9(1.1)†*	48.7(1.7)*	51.2(1.5)*	55.4(1.7)†	57.5(1.6)‡	LQ
Black	7.7(1.0)*	6.5(1.1)*	12.5(2.2)	15.7(4.0)	14.1(2.5)	15.4(2.3)‡	L
Hispanic	18.5(2.1)	11.1(2.0)†	14.8(2.9)	21.1(3.3)	23.0(3.8)	21.7(4.1)	L
Other	36.6(3.8)	25.2(4.8)	35.0(8.1)	45.2(6.5)	42.9(6.1)	44.4(8.0)	L
<b>GRADE</b>							
Below Modal Grade	14.5(0.9)*	16.0(1.8)	17.9(1.9)	19.6(1.5)†	19.1(2.2)	22.0(2.3)‡	L
At Modal Grade	45.7(0.8)*	40.7(1.1)†*	45.6(1.7)*	50.0(1.5)†	55.2(1.7)†	54.2(1.4)‡	LQ
Above Modal Grade	50.5(1.8)	45.4(3.2)	50.6(5.9)	49.2(3.2)	54.9(3.4)	52.8(4.3)	N
<b>REGION</b>							
Northeast	47.9(1.8)	38.3(1.9)†*	46.6(4.0)	45.7(2.7)	52.0(2.5)	52.0(3.6)	LQ
Southeast	31.6(1.8)*	32.2(2.2)*	37.0(2.0)	37.5(2.7)	36.9(2.8)	40.9(2.5)‡	L
Central	45.0(1.3)	42.1(2.2)*	45.0(2.5)	51.7(3.1)	56.4(2.6)†	51.1(2.7)‡	L
West	38.6(1.4)	35.0(2.2)*	36.3(3.5)	38.7(2.5)	42.2(3.4)	46.2(3.5)‡	LQ
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	21.6(1.0)*	17.3(1.7)	14.9(2.4)†	18.2(2.8)	16.8(2.5)	14.7(2.3)‡	L
Graduated H.S.	35.8(0.8)	29.5(1.3)†	29.5(2.0)†	30.8(1.5)†	32.1(2.7)	32.8(2.4)	Q
Some Educ. After H.S.	46.0(1.3)	41.6(2.1)	46.7(3.0)	46.7(1.9)	48.5(2.1)	47.2(2.2)	N
Graduated College	59.6(1.2)	52.5(1.9)†*	55.3(2.4)	57.3(2.0)	60.0(1.7)	62.6(1.9)	LQ
Unknown	16.6(2.3)	15.5(2.9)	11.4(4.4)	13.5(3.9)	18.3(5.9)	14.4(4.1)	N
<b>TYPE OF SCHOOL</b>							
Public	40.5(0.8)*	36.6(0.9)†*	39.9(1.5)*	42.0(1.3)	44.8(1.5)	45.3(1.1)‡	LQ
Non-Public	58.9(2.8)	44.2(2.6)†*	74.6(10.9)	59.8(6.7)	63.1(5.3)	62.7(5.2)	N
<b>QUARTILES</b>							
Upper	86.6(0.9)*	82.8(1.3)*	96.7(1.0)†*	98.4(0.5)†	99.4(0.3)†	99.6(0.3)‡	L
Middle Two	38.2(0.9)*	32.5(1.1)†*	34.1(1.2)†*	37.3(1.6)*	43.2(2.3)	44.6(1.3)‡	LQ
Lower	3.8(0.4)*	1.7(0.3)†*	0.3(0.3)†	0.4(0.4)†	0.5(0.3)†	0.4(0.3)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Science Trend Assessment — Age 17

Average science scale scores across assessment years

Weighted percentages of observations with average science scale scores at or above 350

	1977	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	8.5(0.4)	7.1(0.4)*	7.9(0.7)	9.2(0.5)	10.1(0.7)	10.0(0.8)	LQ
<b>GENDER</b>							
Male	11.8(0.6)	10.4(0.8)	11.4(1.3)	13.0(0.8)	13.6(1.0)	13.8(1.2)	L
Female	5.3(0.4)	3.9(0.4)†*	4.5(0.8)	5.5(0.5)	6.6(1.0)	6.4(0.6)	LQ
<b>RACE/ETHNICITY</b>							
White	10.0(0.4)*	8.6(0.6)*	9.6(0.9)*	11.4(0.7)	12.8(0.9)†	13.2(1.1)‡	LQ
Black	0.4(0.2)	0.2(0.2)	0.9(0.6)	1.5(0.8)	0.8(1.1)	0.5(0.3)	N
Hispanic	1.8(0.6)	1.4(0.9)	1.1(0.7)	2.1(1.6)	2.5(1.2)	1.5(0.7)	N
Other	6.3(2.2)	2.8(1.9)	8.6(6.9)	11.6(4.1)	10.2(2.8)	7.3(2.8)	N
<b>GRADE</b>							
Below Modal Grade	1.3(0.3)	2.0(0.6)	2.0(0.9)	2.6(0.8)	2.4(0.7)	3.2(0.9)‡	L
At Modal Grade	9.3(0.4)	7.8(0.6)*	8.7(0.9)	10.9(0.6)	12.3(0.8)†	11.7(1.0)‡	LQ
Above Modal Grade	12.6(1.0)	9.6(1.0)	12.1(3.2)	12.1(3.0)	16.0(4.0)	13.4(3.4)	N
<b>REGION</b>							
Northeast	10.8(0.9)	7.6(0.9)	10.8(1.9)	10.2(1.1)	12.9(1.9)	13.2(2.2)	N
Southeast	5.2(0.7)	5.7(0.9)	6.0(1.2)	6.7(1.0)	6.2(0.7)	6.8(1.4)	N
Central	9.6(0.6)	7.9(1.2)	8.7(1.7)	12.5(1.2)	13.1(1.4)	11.0(1.5)	N
West	7.2(0.8)	6.7(0.8)	5.9(1.7)	7.4(1.1)	8.9(1.9)	9.4(2.2)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	2.2(0.3)	1.9(0.6)	0.7(0.6)	1.3(0.7)	1.6(0.6)	0.9(0.9)	N
Graduated H.S.	5.7(0.3)	3.9(0.7)	3.7(0.8)	3.8(0.8)	4.8(1.2)	3.6(1.0)‡	N
Some Educ. After H.S.	8.7(0.8)	7.4(1.2)	8.0(1.4)	8.8(0.9)	7.8(1.0)	7.2(0.9)	N
Graduated College	15.7(0.8)	12.4(0.8)†	13.2(1.4)	15.3(0.9)	16.3(1.2)	16.7(1.5)	Q
Unknown	1.7(0.6)	1.8(1.0)	1.0(2.3)	0.8(1.2)	2.4(2.3)	2.4(2.2)	N
<b>TYPE OF SCHOOL</b>							
Public	8.1(0.4)	6.9(0.4)*	7.2(0.7)	8.7(0.5)	9.6(0.8)	9.4(0.5)	LQ
Non-Public	14.8(1.9)	8.5(2.3)	23.1(7.7)	15.8(3.2)	14.1(2.7)	14.8(4.0)	N
<b>QUARTILES</b>							
Upper	29.2(1.1)*	24.5(1.4)†*	31.1(2.0)*	36.3(1.5)†	39.7(2.0)†	40.2(2.0)‡	LQ
Middle Two	2.4(0.2)*	1.9(0.2)*	0.2(0.1)†	0.2(0.2)†	0.5(0.3)†	0.5(0.2)‡	LQ
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 9

Weighted means, standard deviations, and percentiles of science distributions  
with jackknifed standard errors

	1977	1982	1986	1990	1992	1994
<b>TOTAL SAMPLE</b>						
<b>Mean</b>	219.9(1.2)	220.8(1.8)	224.3(1.2)	228.7(0.8)	230.6(1.0)	231.0(1.2)
<b>St. Dev.</b>	44.9(0.6)	40.9(1.4)	41.6(0.6)	40.2(0.4)	39.9(0.7)	40.9(0.5)
<b>Percentiles</b>						
<b>5</b>	143.8(2.3)	150.9(4.9)	155.0(1.3)	159.8(1.3)	162.8(2.0)	161.1(1.7)
<b>10</b>	160.9(2.1)	166.8(2.6)	169.9(1.8)	176.1(1.1)	177.8(1.8)	177.0(1.7)
<b>25</b>	190.1(1.6)	194.4(2.2)	195.9(1.3)	202.0(1.4)	203.8(1.6)	203.4(1.6)
<b>50</b>	221.5(1.1)	221.4(2.4)	225.1(1.7)	230.3(0.9)	232.1(0.9)	233.2(1.9)
<b>75</b>	251.0(1.1)	249.0(2.0)	253.1(1.7)	256.6(0.8)	258.4(1.0)	259.6(1.1)
<b>90</b>	276.5(1.2)	272.4(3.9)	276.9(2.0)	278.8(1.3)	280.6(1.6)	281.5(0.9)
<b>95</b>	291.4(1.2)	286.4(3.7)	290.9(1.9)	292.1(1.4)	293.6(1.4)	295.1(1.4)
<b>MALE STUDENTS</b>						
<b>Mean</b>	222.1(1.3)	221.0(2.3)	227.3(1.4)	230.3(1.1)	234.7(1.2)	232.2(1.3)
<b>St. Dev.</b>	45.0(0.7)	42.0(2.0)	41.9(0.7)	41.9(0.6)	40.7(1.0)	41.8(0.7)
<b>Percentiles</b>						
<b>5</b>	146.8(2.6)	150.4(5.5)	158.0(3.6)	159.6(2.2)	164.7(3.0)	161.1(3.9)
<b>10</b>	163.2(1.9)	166.5(3.8)	172.9(1.8)	176.3(2.3)	180.9(2.7)	176.9(2.1)
<b>25</b>	191.9(1.9)	193.5(4.1)	198.7(1.8)	202.1(2.5)	207.2(1.9)	203.7(1.5)
<b>50</b>	223.6(1.4)	221.3(3.6)	227.9(1.7)	231.6(1.9)	236.2(1.5)	234.1(1.6)
<b>75</b>	253.4(1.4)	250.4(3.1)	256.1(1.9)	259.4(1.0)	263.1(1.5)	261.8(1.1)
<b>90</b>	279.1(1.3)	274.7(4.3)	280.3(2.0)	283.3(1.8)	285.8(1.5)	284.4(1.7)
<b>95</b>	294.2(1.5)	287.1(5.3)	294.8(2.7)	296.3(2.4)	298.6(1.5)	298.3(2.3)
<b>FEMALE STUDENTS</b>						
<b>Mean</b>	217.6(1.2)	220.7(2.0)	221.3(1.4)	227.1(1.0)	226.7(1.0)	230.0(1.4)
<b>St. Dev.</b>	44.6(0.8)	39.8(1.3)	41.1(0.8)	38.4(0.5)	38.8(0.6)	39.9(0.7)
<b>Percentiles</b>						
<b>5</b>	141.3(3.5)	151.2(6.6)	152.5(2.5)	159.9(2.4)	161.0(3.4)	161.8(3.1)
<b>10</b>	158.5(2.2)	167.5(3.1)	166.9(2.6)	175.8(2.2)	175.3(2.2)	177.2(2.9)
<b>25</b>	188.3(1.4)	195.3(2.6)	193.2(1.8)	201.9(1.2)	200.9(1.5)	203.1(1.9)
<b>50</b>	219.5(1.2)	221.4(3.6)	222.5(2.0)	229.2(1.1)	228.5(1.4)	232.5(2.5)
<b>75</b>	248.6(1.1)	247.4(2.4)	250.2(1.9)	254.0(1.1)	253.7(1.5)	257.7(1.2)
<b>90</b>	273.8(1.6)	270.6(3.4)	273.3(1.6)	274.6(1.9)	275.0(1.7)	279.2(1.7)
<b>95</b>	288.2(1.6)	284.4(3.3)	287.0(2.6)	287.0(1.9)	287.7(1.2)	291.6(1.2)
<b>WHITE STUDENTS</b>						
<b>Mean</b>	229.6(0.9)	229.0(1.9)	231.9(1.2)	237.5(0.8)	239.1(1.0)	240.3(1.3)
<b>St. Dev.</b>	40.0(0.5)	37.6(1.3)	39.2(0.7)	36.3(0.4)	36.4(0.5)	37.1(0.6)
<b>Percentiles</b>						
<b>5</b>	163.2(1.3)	167.0(3.0)	166.5(2.3)	176.9(1.4)	178.0(2.0)	177.2(2.3)
<b>10</b>	177.6(1.1)	182.2(3.1)	181.0(1.5)	189.9(1.3)	191.7(1.5)	191.3(1.8)
<b>25</b>	202.4(1.1)	203.8(2.6)	205.5(1.5)	212.6(0.8)	214.5(1.3)	215.3(1.2)
<b>50</b>	229.8(0.9)	228.6(2.4)	232.5(1.6)	238.3(1.0)	240.0(1.1)	241.8(1.4)
<b>75</b>	256.9(0.8)	254.9(2.0)	258.8(1.4)	262.3(1.0)	264.2(1.3)	265.7(1.5)
<b>90</b>	281.1(1.1)	277.6(2.8)	281.7(1.7)	283.5(1.4)	285.1(1.6)	286.5(1.0)
<b>95</b>	295.4(1.9)	290.8(4.0)	294.9(2.5)	295.7(1.3)	297.5(0.8)	299.6(2.6)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 9

Weighted means, standard deviations, and percentiles of science distributions  
with jackknifed standard errors (continued)

	1977	1982	1986	1990	1992	1994
<b>BLACK STUDENTS</b>						
<b>Mean</b>	174.8(1.8)	187.0( 3.0)	196.2(1.9)	196.4(2.0)	200.3(2.7)	201.4(1.7)
<b>St. Dev.</b>	41.4(1.0)	37.7( 1.9)	38.3(1.0)	38.6(1.0)	37.3(0.7)	38.2(1.4)
<b>Percentiles</b>						
<b>5</b>	107.0(3.5)	123.6(11.0)	132.8(3.2)	131.3(4.2)	138.0(4.2)	138.4(2.7)
<b>10</b>	122.8(3.4)	136.7( 8.3)	146.9(3.5)	145.3(3.8)	151.6(4.0)	152.5(3.2)
<b>25</b>	146.6(2.4)	159.2( 4.9)	169.7(2.6)	169.8(2.6)	173.7(3.5)	175.2(2.8)
<b>50</b>	173.8(2.5)	188.2( 5.0)	195.9(2.2)	196.3(2.5)	201.1(3.0)	201.5(2.3)
<b>75</b>	202.9(1.8)	214.4( 3.8)	222.6(1.5)	224.1(1.7)	226.3(3.4)	227.5(3.3)
<b>90</b>	229.2(2.9)	236.4( 4.7)	246.4(3.7)	246.8(2.4)	248.4(3.0)	252.2(2.4)
<b>95</b>	244.1(2.9)	246.5( 3.3)	259.5(3.5)	260.0(5.4)	260.5(4.6)	263.2(1.6)
<b>HISPANIC STUDENTS</b>						
<b>Mean</b>	191.9(2.7)	189.0( 4.2)	199.4( 3.1)	206.2(2.2)	204.7(2.8)	201.0(2.7)
<b>St. Dev.</b>	41.2(1.4)	36.6( 2.3)	38.9( 1.6)	37.0(1.7)	37.3(1.4)	38.6(2.0)
<b>Percentiles</b>						
<b>5</b>	125.2(7.0)	127.3( 9.6)	134.1(10.1)	146.2(5.5)	143.0(3.0)	138.7(9.1)
<b>10</b>	139.8(3.3)	141.9(16.8)	148.1( 5.2)	158.6(4.3)	156.8(3.9)	152.0(4.1)
<b>25</b>	163.9(4.3)	161.9( 7.4)	172.6( 3.4)	180.6(3.7)	179.1(3.5)	175.5(3.4)
<b>50</b>	191.4(3.6)	190.8( 4.8)	199.8( 6.7)	206.2(3.7)	204.8(4.1)	199.7(2.2)
<b>75</b>	219.0(3.2)	215.9( 3.4)	225.6( 4.1)	232.7(4.1)	230.4(2.3)	227.3(4.8)
<b>90</b>	245.7(4.9)	236.2( 5.6)	252.1( 5.4)	252.9(4.4)	253.7(5.5)	251.2(6.5)
<b>95</b>	261.3(6.4)	246.0( 7.6)	264.9( 6.7)	266.8(6.9)	264.9(3.5)	264.4(4.3)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 13

Weighted means, standard deviations, and percentiles of science distributions  
with jackknifed standard errors

	1977	1982	1986	1990	1992	1994
<b>TOTAL SAMPLE</b>						
<b>Mean</b>	247.4(1.1)	250.1(1.3)	251.4(1.4)	255.2(0.9)	258.0(0.8)	256.8(1.0)
<b>St. Dev.</b>	43.5(0.4)	38.6(0.5)	36.6(0.6)	37.6(0.7)	36.9(0.5)	37.2(0.7)
<b>Percentiles</b>						
<b>5</b>	173.7(1.7)	185.2(2.2)	188.9(2.2)	191.4(2.0)	193.1(1.5)	191.0(1.7)
<b>10</b>	190.6(1.4)	199.6(1.8)	203.3(2.0)	205.9(1.7)	208.9(1.3)	206.7(1.4)
<b>25</b>	218.4(1.4)	224.1(1.1)	227.2(1.3)	230.0(1.5)	234.7(1.3)	232.7(1.3)
<b>50</b>	248.6(1.2)	250.9(1.3)	252.1(1.8)	256.4(1.2)	260.4(1.0)	259.2(0.9)
<b>75</b>	277.5(0.9)	276.7(1.5)	276.5(1.5)	281.1(0.9)	283.8(1.0)	283.0(1.1)
<b>90</b>	302.4(0.9)	299.2(1.6)	298.2(2.0)	302.4(1.1)	303.1(1.2)	303.1(1.7)
<b>95</b>	316.9(1.5)	312.8(1.3)	310.3(1.6)	315.1(1.9)	314.6(1.4)	314.3(1.9)
<b>MALE STUDENTS</b>						
<b>Mean</b>	251.1(1.3)	255.6(1.5)	256.1(1.6)	258.5(1.1)	260.1(1.2)	259.4(1.2)
<b>St. Dev.</b>	43.9(0.5)	38.7(0.6)	37.4(1.0)	38.8(0.8)	38.0(0.8)	39.0(0.8)
<b>Percentiles</b>						
<b>5</b>	176.7(1.9)	190.2(2.6)	192.3(4.2)	191.9(2.5)	193.4(2.7)	189.6(2.5)
<b>10</b>	193.5(1.6)	204.4(1.6)	207.2(2.5)	207.3(3.4)	209.4(2.4)	206.2(1.6)
<b>25</b>	221.5(1.7)	229.5(1.7)	231.1(1.6)	232.9(1.4)	235.8(1.1)	234.4(1.4)
<b>50</b>	252.4(1.5)	256.7(1.5)	256.9(2.0)	260.3(1.4)	262.7(1.5)	262.0(1.6)
<b>75</b>	281.6(1.2)	282.6(1.5)	282.4(1.4)	285.8(2.2)	287.0(1.8)	287.4(1.9)
<b>90</b>	306.5(1.3)	305.0(1.7)	303.4(1.6)	307.4(1.5)	306.4(1.8)	307.4(2.3)
<b>95</b>	321.2(1.5)	318.3(2.3)	316.2(2.2)	320.2(1.2)	318.1(1.6)	318.8(2.2)
<b>FEMALE STUDENTS</b>						
<b>Mean</b>	243.7(1.2)	245.0(1.3)	246.9(1.5)	251.8(1.1)	256.0(1.0)	254.3(1.2)
<b>St. Dev.</b>	42.8(0.5)	37.9(0.7)	35.3(0.6)	36.1(0.8)	35.7(0.8)	35.2(0.8)
<b>Percentiles</b>						
<b>5</b>	170.8(1.6)	180.2(1.9)	186.3(2.1)	190.6(2.1)	192.7(1.6)	192.4(1.8)
<b>10</b>	187.7(1.8)	195.5(2.3)	200.5(2.9)	204.8(1.5)	208.4(1.4)	207.2(2.0)
<b>25</b>	215.5(1.7)	219.7(1.4)	223.4(1.5)	227.8(1.6)	233.4(1.3)	231.3(1.9)
<b>50</b>	245.0(1.2)	246.1(1.7)	248.0(1.7)	253.1(1.2)	258.2(1.4)	256.3(1.3)
<b>75</b>	273.0(1.5)	271.0(1.9)	271.0(1.8)	276.8(1.6)	280.7(1.9)	278.9(1.5)
<b>90</b>	297.7(1.0)	292.8(1.5)	291.3(1.7)	296.8(1.1)	299.8(1.1)	297.7(2.1)
<b>95</b>	312.1(2.2)	305.3(1.8)	304.0(3.6)	308.6(1.4)	311.1(1.7)	308.4(2.1)
<b>WHITE STUDENTS</b>						
<b>Mean</b>	256.1(0.8)	257.3(1.1)	259.2(1.4)	264.1(0.9)	267.1(1.0)	266.5(1.0)
<b>St. Dev.</b>	39.5(0.3)	35.7(0.6)	33.6(0.8)	33.8(0.5)	31.8(0.6)	32.1(0.8)
<b>Percentiles</b>						
<b>5</b>	190.8(0.9)	198.0(1.7)	203.5(2.7)	208.6(1.6)	212.6(2.2)	211.9(1.6)
<b>10</b>	205.2(1.2)	210.8(1.7)	215.8(1.5)	220.4(1.2)	225.7(1.6)	225.3(1.2)
<b>25</b>	229.3(1.3)	233.2(1.2)	237.0(1.9)	241.3(0.9)	246.1(1.1)	245.3(1.1)
<b>50</b>	256.3(0.8)	257.6(1.3)	259.2(2.0)	264.5(1.1)	267.8(1.1)	267.3(1.3)
<b>75</b>	282.9(0.7)	281.5(1.1)	282.3(1.9)	287.0(1.7)	289.0(1.2)	288.6(1.5)
<b>90</b>	306.6(0.9)	302.7(1.6)	302.2(1.9)	307.1(1.4)	307.1(1.6)	307.1(1.8)
<b>95</b>	320.8(1.1)	316.2(1.7)	313.9(2.1)	319.4(1.3)	318.0(1.4)	317.6(2.7)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 13

Weighted means, standard deviations, and percentiles of science distributions  
with jackknifed standard errors (continued)

	1977	1982	1986	1990	1992	1994
<b>BLACK STUDENTS</b>						
<b>Mean</b>	208.1(2.4)	217.1(1.3)	221.6(2.5)	225.7(3.1)	224.4(2.7)	223.9( 4.2)
<b>St. Dev.</b>	39.7(0.9)	34.6(1.2)	33.0(0.9)	34.3(1.7)	37.1(1.3)	35.7( 2.6)
<b>Percentiles</b>						
<b>5</b>	144.3(3.2)	160.3(3.1)	167.8(1.7)	169.7(5.5)	162.1(3.7)	167.7( 5.9)
<b>10</b>	157.7(2.4)	173.0(3.1)	180.1(2.2)	181.8(6.1)	177.0(3.8)	179.7( 5.5)
<b>25</b>	180.5(2.2)	193.7(2.4)	198.3(3.0)	202.3(3.7)	198.9(3.6)	198.0( 3.6)
<b>50</b>	207.4(2.5)	216.8(1.3)	221.2(2.8)	225.7(3.0)	223.8(2.4)	222.6( 5.3)
<b>75</b>	234.8(2.6)	240.7(2.2)	243.5(3.6)	249.1(2.6)	251.4(3.6)	246.9( 4.2)
<b>90</b>	259.5(3.4)	262.2(3.5)	264.4(4.9)	269.0(4.2)	272.0(2.7)	271.9( 7.0)
<b>95</b>	274.6(2.7)	274.7(1.9)	276.8(2.5)	283.2(3.7)	286.0(7.6)	286.5(13.3)
<b>HISPANIC STUDENTS</b>						
<b>Mean</b>	213.4(1.9)	225.5(3.9)	226.1(3.1)	231.6(2.6)	237.5(2.6)	232.1(2.4)
<b>St. Dev.</b>	40.4(1.2)	36.2(1.1)	34.2(1.2)	36.6(1.0)	34.0(1.2)	34.9(1.1)
<b>Percentiles</b>						
<b>5</b>	147.1(3.5)	166.3(4.9)	171.1(5.6)	173.7(4.7)	180.3(3.7)	175.2(3.1)
<b>10</b>	161.4(3.0)	179.4(4.1)	181.3(4.5)	185.3(4.5)	193.0(6.4)	187.3(1.8)
<b>25</b>	185.8(3.5)	200.7(3.6)	201.6(5.5)	205.9(4.1)	215.2(3.8)	206.9(3.3)
<b>50</b>	213.3(2.5)	225.9(4.4)	225.6(3.8)	230.9(3.3)	237.9(4.5)	231.4(2.7)
<b>75</b>	240.3(3.5)	249.3(5.1)	249.8(3.4)	256.4(5.1)	260.9(3.4)	257.8(5.0)
<b>90</b>	265.8(2.0)	271.2(5.1)	269.9(3.5)	280.0(5.9)	281.8(2.5)	276.8(7.1)
<b>95</b>	282.1(4.4)	284.8(6.1)	283.0(3.8)	294.2(2.8)	292.1(4.2)	289.7(6.8)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Science Trend Assessment — Age 17

Weighted means, standard deviations, and percentiles of science distributions  
with jackknifed standard errors

	1977	1982	1986	1990	1992	1994
<b>TOTAL SAMPLE</b>						
<b>Mean</b>	289.5(1.0)	283.3(1.2)	288.5(1.4)	290.4(1.1)	294.1(1.3)	294.0(1.6)
<b>St. Dev.</b>	45.0(0.4)	46.7(0.7)	44.4(1.0)	46.2(0.6)	44.7(0.8)	45.6(1.1)
<b>Percentiles</b>						
<b>5</b>	212.6(1.3)	203.2(2.2)	211.8(2.4)	209.9(2.3)	217.7(2.1)	212.3(4.3)
<b>10</b>	231.3(1.4)	221.5(1.9)	229.5(2.4)	228.8(2.0)	234.2(2.5)	232.4(4.3)
<b>25</b>	260.6(1.4)	252.5(2.1)	259.6(1.9)	260.3(1.9)	263.6(2.3)	264.6(2.0)
<b>50</b>	290.8(1.0)	285.4(1.0)	290.1(1.9)	292.2(1.3)	295.9(1.5)	297.3(1.2)
<b>75</b>	320.1(0.9)	315.3(1.6)	319.4(1.3)	322.7(1.4)	326.6(1.3)	326.3(1.1)
<b>90</b>	346.2(1.1)	341.5(1.1)	344.5(1.9)	348.3(1.2)	350.3(1.9)	350.0(1.5)
<b>95</b>	361.5(1.3)	357.3(1.4)	359.9(2.0)	362.9(1.5)	363.8(1.2)	363.4(1.8)
<b>MALE STUDENTS</b>						
<b>Mean</b>	297.0(1.2)	291.9(1.4)	294.9(1.9)	295.6(1.3)	299.1(1.7)	299.5(2.0)
<b>St. Dev.</b>	45.3(0.6)	47.1(0.9)	46.6(1.2)	48.7(0.9)	46.3(1.0)	47.3(1.2)
<b>Percentiles</b>						
<b>5</b>	219.5(2.1)	210.3(2.3)	213.9(2.8)	210.4(3.9)	219.0(3.9)	214.2(4.7)
<b>10</b>	238.2(1.6)	228.9(2.7)	231.4(5.0)	229.5(2.9)	235.5(4.2)	235.4(5.7)
<b>25</b>	267.6(1.5)	261.1(1.9)	263.5(3.0)	263.4(1.3)	267.4(3.0)	269.4(3.3)
<b>50</b>	298.5(1.2)	294.3(1.4)	298.7(2.8)	297.9(1.9)	301.3(2.2)	303.6(2.2)
<b>75</b>	328.1(1.4)	324.8(2.0)	327.6(1.6)	329.9(1.8)	333.6(1.4)	334.0(2.2)
<b>90</b>	353.9(1.4)	350.6(1.9)	353.4(2.8)	356.7(2.3)	357.2(1.0)	357.1(2.8)
<b>95</b>	368.8(1.6)	365.3(1.3)	367.0(4.6)	372.5(1.8)	370.4(1.5)	370.2(4.7)
<b>FEMALE STUDENTS</b>						
<b>Mean</b>	282.2(1.1)	275.2(1.3)	282.3(1.5)	285.4(1.6)	289.0(1.5)	288.9(1.7)
<b>St. Dev.</b>	43.5(0.5)	44.8(0.8)	41.3(1.1)	43.2(1.0)	42.3(1.2)	43.0(1.3)
<b>Percentiles</b>						
<b>5</b>	207.5(1.6)	198.3(3.6)	209.8(3.5)	209.2(3.7)	216.5(4.2)	211.5(4.2)
<b>10</b>	226.1(2.1)	215.5(2.6)	228.1(2.0)	228.2(4.5)	232.9(2.8)	230.9(3.0)
<b>25</b>	254.5(1.5)	245.7(2.1)	256.2(2.0)	257.7(2.4)	260.3(2.4)	261.1(4.2)
<b>50</b>	283.8(1.2)	277.6(2.0)	283.7(1.4)	287.7(2.0)	290.9(2.1)	292.5(1.4)
<b>75</b>	311.5(1.1)	306.2(1.2)	310.8(1.8)	316.2(2.3)	319.8(1.9)	318.6(1.9)
<b>90</b>	336.3(1.2)	330.1(1.0)	333.5(3.0)	339.6(2.3)	341.4(1.9)	341.3(2.6)
<b>95</b>	351.2(1.5)	345.2(1.5)	348.3(3.2)	351.5(1.6)	354.4(2.2)	355.0(2.6)
<b>WHITE STUDENTS</b>						
<b>Mean</b>	297.7(0.7)	293.1(1.0)	297.5(1.7)	300.9(1.1)	304.2(1.3)	306.0(1.5)
<b>St. Dev.</b>	40.5(0.3)	41.6(0.5)	40.6(1.0)	41.1(0.6)	40.6(0.9)	39.8(0.9)
<b>Percentiles</b>						
<b>5</b>	231.1(0.9)	223.0(1.7)	228.3(2.9)	232.8(2.3)	234.3(3.9)	237.7(4.4)
<b>10</b>	246.0(0.7)	239.1(1.5)	244.5(3.1)	249.0(2.0)	251.3(2.5)	253.9(3.1)
<b>25</b>	270.3(0.8)	265.5(1.5)	271.0(2.0)	273.4(1.5)	276.8(2.2)	280.5(1.7)
<b>50</b>	297.5(0.7)	293.6(1.0)	298.7(1.7)	301.2(1.2)	306.0(1.5)	307.6(1.6)
<b>75</b>	325.0(0.9)	321.2(1.6)	324.9(1.3)	329.0(1.6)	333.0(1.7)	333.8(1.4)
<b>90</b>	349.9(1.0)	346.0(1.3)	348.9(3.0)	352.3(1.3)	355.1(1.5)	356.1(2.0)
<b>95</b>	364.6(1.4)	360.8(1.3)	363.5(2.8)	367.3(2.0)	368.5(0.9)	368.8(4.8)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1992 Science Trend Assessment — Age 17

Weighted means, standard deviations, and percentiles of science distributions  
with jackknifed standard errors (continued)

	1977	1982	1986	1990	1992	1994
<b>BLACK STUDENTS</b>						
<b>Mean</b>	240.2(1.5)	234.7(1.7)	252.8(2.9)	253.0( 4.5)	256.2( 3.2)	256.8(3.1)
<b>St. Dev.</b>	41.6(0.9)	41.8(1.3)	40.4(2.2)	44.7( 2.4)	39.4( 1.4)	40.9(1.7)
<b>Percentiles</b>						
<b>5</b>	172.4(1.5)	166.0(3.1)	189.3(4.8)	182.0 (10.1)	191.8( 4.0)	186.2(5.0)
<b>10</b>	187.3(1.9)	180.6(3.5)	201.6(4.9)	196.6( 3.1)	206.6( 4.1)	201.9(3.5)
<b>25</b>	212.1(1.4)	206.4(3.2)	225.0(4.2)	220.5( 4.3)	230.1( 1.7)	229.1(5.5)
<b>50</b>	240.4(1.8)	234.7(3.0)	251.9(5.9)	251.6( 3.0)	255.4( 3.2)	257.9(3.1)
<b>75</b>	267.9(2.0)	262.7(2.2)	279.5(3.4)	282.9( 6.0)	282.4( 5.9)	285.1(5.1)
<b>90</b>	293.4(2.6)	288.8(3.9)	306.0(4.2)	313.6 (11.3)	308.2 (10.3)	310.4(3.8)
<b>95</b>	309.6(2.6)	305.4(1.6)	322.8(5.8)	329.3 (10.2)	324.8( 8.7)	322.1(4.5)
<b>HISPANIC STUDENTS</b>						
<b>Mean</b>	262.3(2.2)	248.7( 2.3)	259.3(3.8)	261.5( 4.4)	270.2( 5.6)	261.4( 6.7)
<b>St. Dev.</b>	41.8(1.5)	43.4( 2.3)	39.3(1.7)	44.1( 2.6)	41.6( 2.0)	46.3( 2.0)
<b>Percentiles</b>						
<b>5</b>	193.7(5.2)	178.0( 6.1)	194.4(9.3)	188.7( 6.2)	196.6 (10.5)	186.4( 6.9)
<b>10</b>	208.4(4.0)	194.2( 7.2)	209.2(3.8)	203.9 (11.1)	215.4 (14.6)	199.2( 5.7)
<b>25</b>	234.3(3.9)	218.8( 3.3)	232.0(5.6)	230.6( 3.6)	241.6( 8.6)	226.4( 7.7)
<b>50</b>	262.4(2.4)	248.0( 2.5)	258.9(5.8)	260.5( 5.7)	272.7 (11.0)	262.9 (12.0)
<b>75</b>	289.5(5.1)	278.4( 3.4)	285.8(3.6)	292.6 (10.6)	297.9( 2.8)	295.9( 5.7)
<b>90</b>	316.9(4.4)	302.1( 3.4)	309.9(7.6)	317.4( 5.1)	322.8( 6.7)	321.1( 5.8)
<b>95</b>	331.3(4.4)	320.8 (11.0)	324.4(6.3)	329.5( 9.1)	339.1( 6.0)	335.5( 4.8)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Animals communicate</b>	1994	84.3(1.3)	85.4(1.6)	83.2(1.5)	87.5(1.3)	74.3(2.3)	75.3(4.8)
	1992	82.3(1.3)	83.1(1.8)	81.5(1.4)	86.5(1.4)	68.4(2.4)	70.8(3.4)
	1990	83.4(1.1)	83.7(1.5)	83.2(1.5)	87.9(1.1)	67.4(3.4)	73.3(4.5)
	1986	77.8(1.7)	78.7(1.7)	76.9(2.1)	81.8(1.9)	61.4(3.1)	66.5(3.7)
	1977	73.5(1.4)	74.2(1.7)	72.8(1.8)	78.0(1.5)	49.3(2.8)	68.4(4.7)
<b>Water evaporation: Put in sun</b>	1994	44.8(1.5)	46.3(2.0)	43.3(2.1)	46.7(1.9)	40.7(2.2)	34.4(6.0)
	1992	46.4(1.3)	49.3(1.7)	43.8(1.7)	47.6(1.7)	42.2(2.3)	41.8(3.6)
	1990	45.6(1.2)	48.6(1.6)	42.7(1.9)	46.3(1.3)	40.3(3.5)	45.6(4.9)
	1986	42.4(1.4)	44.6(1.7)	40.4(2.2)	43.6(1.7)	37.0(3.0)	40.5(6.7)
	1977	53.7(1.5)	54.3(1.7)	53.1(2.1)	56.3(1.7)	40.7(2.5)	48.0(3.9)
<b>Water evaporation: Cover jar</b>	1994	43.6(1.4)	45.3(1.8)	42.0(1.6)	46.8(1.6)	34.0(2.5)	33.2(3.3)
	1992	41.5(1.2)	45.0(1.5)	38.3(1.7)	42.9(1.6)	36.2(2.0)	34.4(3.8)
	1990	43.3(1.2)	45.2(1.8)	41.4(2.1)	44.9(1.3)	38.6(2.6)	33.5(4.1)
	1986	40.7(1.4)	42.0(2.0)	39.4(1.7)	41.9(1.7)	36.6(3.3)	34.5(4.8)
	1977	49.9(1.4)	52.3(1.8)	47.6(1.5)	51.7(1.5)	41.1(2.5)	48.8(3.6)
<b>Finding cause of a sore throat</b>	1994	71.9(1.5)	68.8(1.8)	74.7(1.8)	73.2(1.9)	64.6(3.1)	68.3(3.1)
	1992	68.6(1.3)	64.8(1.7)	72.1(1.7)	70.1(1.5)	64.2(2.4)	63.6(6.4)
	1990	70.8(1.3)	66.1(2.0)	75.3(1.5)	73.4(1.4)	63.6(4.2)	66.4(3.6)
	1986	69.0(1.4)	64.3(1.9)	73.4(1.9)	71.9(1.4)	58.5(2.4)	59.6(6.6)
	1982	64.1(1.3)	61.2(1.6)	67.1(2.0)	66.2(1.6)	59.0(2.7)	50.0(3.1)
	1977	53.9(1.3)	52.6(2.1)	55.2(1.8)	55.1(1.5)	47.1(2.2)	53.6(3.2)
<b>Predator-Prey: Deer/Mt.Lions</b>	1994	69.4(1.8)	70.7(2.1)	68.1(2.2)	73.3(2.1)	59.5(2.5)	56.8(5.1)
	1992	67.3(1.4)	70.2(1.9)	64.7(1.7)	70.1(1.5)	56.6(3.1)	56.8(4.4)
	1990	69.4(1.1)	70.2(1.6)	68.8(1.6)	73.2(1.1)	54.6(2.8)	61.5(4.1)
	1986	62.3(1.4)	62.3(2.1)	62.4(2.3)	66.4(1.8)	47.9(2.8)	47.5(4.2)
	1977	65.4(1.6)	66.5(2.1)	64.3(2.1)	69.4(1.3)	42.5(5.2)	63.1(6.5)
<b>See a doctor? Hurt arm</b>	1994	88.2(1.0)	86.4(1.6)	89.8(1.0)	90.3(1.1)	81.8(2.3)	81.1(4.0)
	1992	88.1(1.0)	86.3(1.3)	89.7(1.1)	91.2(1.2)	78.1(2.1)	78.1(3.7)
	1990	88.1(1.0)	86.0(1.4)	90.0(1.3)	91.5(1.1)	75.7(3.1)	80.2(3.4)
	1986	86.7(1.1)	85.1(1.3)	88.2(1.3)	89.9(1.2)	75.9(2.8)	76.3(3.4)
	1977	90.9(0.8)	89.2(1.0)	92.7(1.0)	92.3(0.7)	86.5(2.2)	81.2(3.3)
<b>See a doctor? Exercise</b>	1994	81.5(1.6)	80.7(1.6)	82.3(2.2)	85.9(1.7)	68.9(2.4)	61.4(4.6)
	1992	80.8(1.2)	81.3(1.8)	80.4(1.3)	85.3(1.3)	65.1(2.7)	70.1(3.7)
	1990	82.7(1.2)	80.0(1.7)	85.3(1.3)	87.2(1.2)	65.2(3.1)	74.6(5.6)
	1986	79.6(1.2)	78.6(1.5)	80.6(1.4)	85.2(1.3)	55.5(2.6)	68.9(6.2)
	1977	76.0(1.1)	75.1(1.6)	76.9(1.4)	80.5(1.1)	57.3(3.2)	62.5(5.0)
<b>See a doctor? Headache</b>	1994	89.8(0.7)	87.7(1.3)	91.6(0.9)	91.0(0.8)	85.8(1.5)	85.4(2.5)
	1992	87.3(1.0)	85.1(1.3)	89.3(1.2)	88.4(1.2)	84.6(2.1)	83.9(4.0)
	1990	89.0(0.6)	87.1(1.1)	90.7(1.1)	89.7(0.7)	87.8(1.8)	85.2(3.6)
	1986	89.1(0.8)	88.0(1.2)	90.2(0.9)	89.9(0.8)	87.1(3.1)	85.0(1.5)
	1977	90.6(0.6)	90.4(1.0)	90.7(0.9)	91.3(0.6)	86.8(1.3)	87.4(2.8)
<b>See a doctor? Stomachache</b>	1994	79.0(1.5)	77.3(1.8)	80.6(1.8)	84.3(1.5)	63.5(2.6)	60.9(4.8)
	1992	77.7(1.4)	77.7(1.8)	77.6(1.5)	81.8(1.4)	63.6(3.6)	63.6(4.2)
	1990	77.3(1.0)	75.5(1.6)	79.0(1.4)	82.9(1.0)	58.2(2.9)	68.0(5.3)
	1986	75.6(1.3)	74.0(1.6)	77.2(1.8)	79.6(1.6)	59.6(3.1)	63.9(5.9)
	1977	69.2(1.5)	67.8(1.8)	70.6(1.9)	73.8(1.4)	46.8(4.0)	60.2(5.1)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>See a doctor? Pain in side</b>	1994	79.4(0.9)	77.0(1.4)	81.9(1.0)	82.0(0.8)	74.4(2.8)	62.6(3.8)
	1992	77.4(1.0)	74.2(1.3)	80.2(1.4)	79.9(1.0)	69.2(2.8)	71.3(4.2)
	1990	80.1(1.1)	76.9(1.5)	83.2(1.4)	82.4(1.1)	72.4(4.0)	75.0(3.7)
	1986	77.5(1.3)	74.5(2.1)	80.4(1.3)	80.6(1.6)	66.7(2.8)	68.6(2.3)
	1977	80.4(1.1)	78.7(1.6)	82.0(1.4)	80.8(1.1)	78.1(2.8)	76.6(4.5)
<b>Balloon shape and volume</b>	1994	60.1(1.6)	60.9(1.6)	59.4(2.1)	63.1(1.8)	49.9(4.0)	54.8(4.8)
	1992	60.8(1.9)	61.8(2.5)	59.8(1.9)	65.3(2.0)	45.3(2.9)	48.9(5.2)
	1990	58.2(1.4)	58.8(1.9)	57.7(1.8)	62.3(1.5)	44.1(3.5)	40.8(5.1)
	1986	57.3(1.2)	59.4(1.9)	55.3(1.7)	60.2(1.5)	46.7(3.6)	46.3(5.9)
	1977	58.5(1.4)	58.7(2.0)	58.2(1.5)	63.7(1.3)	30.7(2.8)	49.4(4.7)
<b>Determining the age of a tree</b>	1994	65.4(2.2)	64.4(2.5)	66.4(2.3)	72.3(2.2)	46.1(3.9)	36.7(5.0)
	1992	60.0(1.6)	61.4(1.8)	58.7(1.8)	67.9(1.8)	31.1(3.4)	37.3(5.8)
	1990	64.0(1.9)	66.2(1.9)	62.0(2.5)	71.0(1.9)	42.2(4.8)	40.6(4.2)
	1986	55.7(1.8)	58.2(2.3)	53.3(2.0)	62.1(1.9)	34.8(3.3)	32.7(3.8)
	1977	61.6(1.9)	64.6(2.0)	58.6(2.1)	68.1(1.7)	34.1(3.0)	37.2(5.0)
<b>Garden loses nutrients</b>	1994	52.7(1.7)	51.9(2.3)	53.3(1.8)	60.2(1.6)	31.7(3.3)	31.1(4.2)
	1992	51.7(1.4)	52.0(1.8)	51.3(1.8)	58.4(1.7)	28.8(2.0)	30.1(3.6)
	1990	55.5(1.5)	54.7(1.9)	56.2(2.3)	63.4(1.7)	31.2(3.5)	33.1(4.3)
	1986	54.3(1.3)	56.2(1.9)	52.5(1.7)	61.3(1.4)	30.5(3.0)	27.9(3.7)
	1982	54.3(1.6)	55.1(2.2)	53.5(2.0)	59.6(1.6)	32.6(1.9)	34.0(3.3)
	1977	56.3(1.7)	57.4(1.9)	55.2(2.4)	62.9(1.5)	28.5(3.8)	31.4(3.9)
<b>How to care for a bleeding cut</b>	1994	53.4(1.5)	56.9(2.0)	50.1(1.9)	55.8(1.9)	46.1(3.6)	45.6(5.4)
	1992	51.5(1.3)	51.7(1.9)	51.3(1.5)	54.0(1.4)	43.9(3.0)	41.2(3.3)
	1990	48.2(1.4)	51.5(2.1)	45.1(1.8)	49.5(1.6)	40.9(3.5)	51.3(4.2)
	1986	39.9(1.4)	36.7(1.6)	42.9(1.8)	41.5(1.5)	35.3(3.3)	32.5(4.5)
	1982	46.2(1.8)	46.2(2.3)	46.1(2.0)	47.8(2.1)	38.7(2.3)	43.5(5.2)
	1977	34.9(1.8)	38.3(2.3)	31.3(2.0)	35.2(2.0)	31.0(4.3)	41.3(5.1)
<b>Selecting a balanced diet</b>	1994	53.9(1.7)	50.7(1.9)	57.3(2.3)	58.9(1.7)	36.0(3.1)	43.0(5.4)
	1992	53.3(1.7)	49.0(2.0)	57.3(2.0)	57.2(2.0)	40.9(4.1)	39.1(5.8)
	1990	55.0(1.5)	51.1(2.0)	58.6(2.0)	58.6(1.7)	42.8(3.3)	42.3(3.4)
	1986	51.3(1.4)	46.6(2.3)	55.8(1.9)	54.3(1.6)	38.9(3.2)	44.6(6.1)
	1982	51.5(1.5)	47.6(2.1)	55.5(1.9)	54.2(1.7)	38.5(3.4)	45.3(5.1)
	1977	46.2(1.5)	44.6(1.8)	47.9(2.2)	50.2(1.6)	28.4(2.9)	29.8(4.5)
<b>Parental care by mammals</b>	1994	53.1(1.1)	54.9(1.8)	51.4(1.7)	54.4(1.3)	48.6(3.3)	53.3(3.2)
	1992	51.4(1.6)	54.6(2.2)	48.4(1.9)	52.3(1.8)	47.1(3.2)	50.7(4.4)
	1990	48.3(1.5)	50.2(1.9)	46.5(1.9)	48.9(1.8)	43.3(3.0)	55.1(4.0)
	1986	43.1(1.4)	45.0(2.1)	41.2(1.7)	43.9(1.8)	38.2(3.7)	40.4(5.0)
	1977	42.9(1.4)	44.1(1.8)	41.6(2.0)	43.2(1.6)	44.0(2.8)	38.2(5.6)
<b>Plants bend toward light</b>	1994	31.3(1.5)	32.9(2.1)	30.0(1.8)	33.9(1.8)	23.0(3.3)	26.7(3.5)
	1992	28.3(0.9)	29.3(1.1)	27.3(1.3)	29.7(1.1)	23.2(2.1)	22.6(2.6)
	1990	27.5(1.3)	27.5(1.8)	27.6(1.7)	29.2(1.6)	20.3(2.7)	29.8(3.9)
	1986	25.6(1.5)	27.7(1.9)	23.7(1.9)	27.6(1.7)	17.2(2.4)	23.3(5.5)
	1977	29.8(1.3)	31.2(1.5)	28.4(1.7)	30.6(1.6)	27.9(3.1)	23.5(4.6)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Life cycle of a butterfly</b>	1994	55.5(1.7)	56.4(2.1)	54.8(2.1)	59.7(1.8)	43.1(3.5)	42.5(3.2)
	1992	52.8(1.5)	54.2(2.1)	51.5(1.7)	56.8(1.6)	39.0(2.7)	34.5(4.3)
	1990	49.6(1.4)	51.4(2.1)	47.9(1.9)	53.3(1.5)	36.2(2.6)	43.5(4.4)
	1986	43.5(1.4)	46.8(1.9)	40.3(1.8)	46.3(1.6)	33.3(3.2)	39.4(5.6)
	1977	30.4(1.6)	33.2(1.9)	27.6(1.7)	32.3(1.8)	21.7(2.0)	25.2(4.2)
<b>Position of fulcrum</b>	1994	58.6(1.2)	62.6(1.6)	54.9(1.7)	59.9(1.3)	50.6(3.7)	65.6(3.9)
	1992	61.2(1.3)	67.4(1.6)	55.6(1.5)	63.4(1.4)	53.0(2.2)	57.2(3.6)
	1990	62.8(1.2)	67.3(1.6)	58.3(1.8)	63.5(1.3)	61.2(3.0)	61.2(4.7)
	1986	65.1(1.5)	68.9(1.7)	61.5(2.2)	65.6(1.7)	61.7(2.7)	68.3(3.8)
	1977	74.3(1.0)	78.6(1.2)	70.0(1.4)	74.9(1.1)	70.5(2.2)	74.7(3.8)
<b>Use of a telescope</b>	1994	81.1(1.0)	82.9(1.8)	79.3(1.1)	84.3(1.0)	71.3(4.0)	64.0(5.6)
	1992	81.5(1.2)	86.6(1.2)	76.9(1.7)	85.2(1.3)	68.6(2.8)	67.5(3.9)
	1990	83.1(1.5)	85.5(1.7)	80.6(1.8)	86.6(1.0)	72.1(4.8)	72.7(4.2)
	1986	82.2(1.4)	85.8(1.4)	78.7(1.8)	85.4(1.6)	71.5(2.1)	73.2(3.5)
	1977	70.5(1.6)	74.2(2.0)	66.8(1.9)	74.6(1.7)	46.7(3.2)	65.5(4.2)
<b>Cycler's movement: Bike</b>	1994	7.8(0.6)	9.6(1.1)	6.0(0.8)	8.7(0.8)	2.4(0.9)	7.2(1.7)
	1992	10.3(0.7)	11.1(1.1)	9.6(0.9)	11.3(0.9)	6.4(1.2)	10.6(2.8)
	1990	8.1(0.9)	8.9(1.1)	7.3(1.0)	8.0(1.1)	7.3(2.0)	7.3(1.5)
	1986	9.0(0.8)	10.6(1.1)	7.4(1.1)	9.4(1.1)	7.3(2.4)	9.7(2.3)
	1977	7.4(0.6)	7.2(0.7)	7.5(0.8)	6.9(0.6)	7.5(1.5)	10.7(2.4)
<b>Cycler's movement: Tree</b>	1994	62.4(1.2)	59.8(1.9)	65.1(1.6)	62.8(1.3)	63.7(3.4)	59.7(3.6)
	1992	61.7(1.3)	62.5(1.6)	61.0(1.6)	61.7(1.7)	61.0(2.3)	63.3(3.7)
	1990	61.9(1.3)	61.3(1.9)	62.6(1.9)	61.7(1.4)	60.8(3.4)	66.4(3.5)
	1986	62.2(1.3)	63.8(2.3)	60.5(1.8)	62.6(1.6)	60.5(3.0)	61.1(3.5)
	1977	64.7(1.2)	64.5(1.7)	65.0(1.5)	64.3(1.4)	61.4(2.9)	79.9(2.7)
<b>Cycler's movement: House</b>	1994	60.4(1.6)	59.2(2.4)	61.6(2.0)	61.5(1.8)	57.6(4.0)	53.7(4.3)
	1992	60.1(1.1)	60.7(1.9)	59.6(1.3)	62.0(1.3)	54.6(2.7)	51.1(7.7)
	1990	58.8(1.3)	58.9(2.1)	58.6(1.6)	60.5(1.7)	50.3(3.6)	62.0(3.5)
	1986	60.7(1.1)	61.9(1.7)	59.6(1.6)	62.4(1.2)	55.4(3.5)	55.6(4.1)
	1977	63.0(1.2)	63.3(1.7)	62.6(1.6)	64.0(1.3)	59.0(4.0)	53.8(3.9)
<b>Circuit: Positive</b>	1994	69.5(1.6)	70.9(1.8)	68.3(2.0)	71.7(1.7)	58.8(5.0)	63.7(3.7)
	1992	67.9(1.4)	73.9(1.2)	62.5(1.9)	71.2(1.5)	55.8(3.2)	57.0(5.3)
	1990	66.7(1.6)	73.2(1.8)	60.1(2.2)	68.8(1.7)	56.2(3.6)	66.2(3.8)
	1986	64.5(1.5)	72.8(1.9)	56.4(1.9)	65.8(1.6)	58.2(2.7)	58.8(1.9)
	1977	66.2(1.3)	71.8(2.2)	60.6(1.6)	69.8(1.2)	50.5(2.7)	58.3(7.3)
<b>Circuit: Positive/negative</b>	1994	77.3(1.3)	79.7(1.7)	75.1(1.7)	78.4(1.4)	74.2(4.1)	68.9(4.5)
	1992	76.7(1.0)	81.9(1.1)	72.0(1.4)	78.7(1.2)	67.9(2.5)	77.0(2.8)
	1990	76.3(1.4)	80.6(1.8)	71.9(1.9)	77.7(1.6)	67.5(3.3)	77.1(3.1)
	1986	76.3(1.2)	80.1(1.5)	72.7(2.0)	77.6(1.2)	72.0(2.1)	69.7(3.4)
	1977	75.5(1.3)	78.5(1.8)	72.6(1.6)	77.8(1.4)	61.5(3.1)	76.2(5.3)
<b>Circuit: Positive/positive</b>	1994	68.9(1.3)	71.4(1.8)	66.5(1.8)	70.4(1.4)	61.8(3.6)	61.7(3.9)
	1992	67.0(1.5)	72.6(1.5)	61.9(2.0)	68.8(1.7)	59.8(2.7)	57.7(2.6)
	1990	67.1(1.5)	72.4(1.8)	61.8(1.8)	68.1(1.8)	61.4(2.6)	69.1(4.5)
	1986	67.9(1.3)	72.4(1.9)	63.6(1.9)	69.3(1.6)	61.1(3.0)	63.7(4.1)
	1977	63.3(1.4)	66.5(2.1)	60.2(1.8)	64.2(1.6)	59.0(3.0)	59.1(6.4)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Circuit: Closed</b>	1994	52.2(1.1)	60.1(1.5)	44.6(1.8)	53.9(1.3)	47.6(3.4)	45.6(4.9)
	1992	48.5(0.9)	55.9(1.5)	41.9(1.2)	50.0(1.1)	42.6(2.2)	42.9(3.4)
	1990	50.7(1.7)	56.8(2.0)	44.6(2.2)	52.5(1.9)	42.7(3.6)	47.5(2.9)
	1986	51.0(1.0)	59.6(1.3)	42.7(1.5)	51.2(1.4)	50.2(3.2)	51.6(4.2)
	1977	56.7(1.3)	64.5(1.9)	49.0(1.5)	58.1(1.3)	47.3(2.9)	54.6(5.4)
<b>Balloon: Volume &amp; temperature</b>	1994	44.2(1.6)	46.8(2.0)	41.5(2.2)	46.9(1.9)	35.7(4.0)	33.5(3.7)
	1992	45.1(1.1)	47.6(1.8)	42.9(1.6)	48.0(1.4)	33.9(2.3)	40.3(3.3)
	1990	41.7(1.5)	44.8(2.2)	38.5(1.9)	44.1(1.7)	27.5(3.0)	42.9(4.4)
	1986	40.4(1.4)	47.6(1.9)	33.4(1.9)	41.9(1.7)	35.5(1.8)	34.2(4.9)
	1977	52.3(1.5)	55.0(2.0)	49.7(2.0)	55.4(1.7)	39.7(3.8)	44.3(4.5)
<b>Electrical conductor: Rubber</b>	1994	79.8(0.9)	81.6(1.1)	78.3(1.6)	81.6(0.8)	75.0(3.7)	73.5(2.9)
	1992	80.1(1.0)	82.0(1.2)	78.3(1.4)	83.3(1.0)	67.1(2.2)	75.7(3.3)
	1990	78.8(1.5)	79.8(1.9)	77.7(1.9)	81.3(1.6)	66.6(3.7)	72.2(5.5)
	1986	80.1(1.2)	81.5(1.3)	78.7(1.7)	83.3(1.4)	69.0(2.7)	70.0(3.0)
	1977	78.4(1.0)	79.7(1.1)	77.1(1.6)	81.8(1.0)	61.4(2.3)	68.8(4.2)
<b>Electrical conductor: Copper</b>	1994	83.6(1.0)	86.8(1.1)	80.5(1.4)	84.5(1.0)	80.2(4.3)	79.2(3.3)
	1992	83.6(0.8)	85.8(0.9)	81.6(1.1)	85.6(0.9)	76.2(1.8)	78.1(3.1)
	1990	81.8(1.1)	84.7(1.3)	78.9(1.5)	83.9(1.2)	71.8(4.0)	77.1(2.9)
	1986	83.7(1.1)	84.8(1.5)	82.6(1.3)	85.6(1.2)	78.7(2.8)	73.6(3.5)
	1977	80.7(1.0)	83.0(1.2)	78.3(1.5)	83.8(1.2)	66.3(2.9)	68.0(3.3)
<b>Electrical conductor: Foil</b>	1994	48.6(1.7)	49.0(2.3)	48.3(2.0)	50.7(1.9)	38.6(3.6)	46.1(5.3)
	1992	46.1(1.2)	48.0(1.7)	44.4(1.4)	47.9(1.3)	39.8(3.5)	38.0(4.3)
	1990	38.1(1.7)	38.7(2.1)	37.5(2.2)	38.3(2.0)	33.7(3.4)	45.5(3.2)
	1986	37.0(1.6)	37.9(1.9)	36.0(2.0)	38.1(2.0)	32.7(3.1)	31.1(5.2)
	1977	36.0(1.4)	38.7(1.7)	33.3(1.8)	35.9(1.7)	38.7(2.5)	31.5(4.9)
<b>Electrical conductor: Penny</b>	1994	34.6(2.0)	34.2(2.6)	35.2(2.4)	36.7(2.5)	27.3(3.0)	27.1(3.4)
	1992	32.4(1.0)	33.5(1.4)	31.3(1.3)	33.6(1.2)	26.6(2.7)	27.0(3.6)
	1990	31.4(1.4)	32.5(1.9)	30.3(1.9)	33.7(1.7)	22.7(2.9)	31.3(4.0)
	1986	28.9(1.0)	30.8(1.5)	27.0(1.3)	31.2(1.1)	19.7(1.8)	22.2(4.6)
	1977	35.8(1.3)	38.8(1.6)	32.8(1.8)	36.0(1.4)	35.2(4.6)	30.8(4.1)
<b>Electrical conductor: Cork</b>	1994	68.6(1.2)	74.0(1.5)	63.3(2.2)	74.7(1.4)	47.7(3.8)	54.2(4.1)
	1992	67.1(1.4)	72.4(1.4)	62.4(2.0)	72.7(1.4)	47.7(3.2)	53.7(4.1)
	1990	65.7(1.5)	72.2(1.7)	59.2(1.9)	72.1(1.5)	43.7(2.5)	48.2(4.6)
	1986	69.8(1.6)	75.4(2.0)	64.4(1.8)	74.2(1.7)	54.0(2.8)	56.6(4.3)
	1977	72.5(1.1)	77.5(1.6)	67.6(1.4)	77.8(1.1)	50.5(3.0)	56.5(4.9)
<b>Sun is a star</b>	1994	68.5(1.7)	71.4(1.8)	65.8(2.0)	74.0(1.6)	51.5(3.5)	47.0(4.7)
	1992	69.7(1.6)	75.7(1.6)	64.3(1.9)	74.5(1.5)	53.4(3.9)	54.1(4.2)
	1990	64.3(1.7)	66.6(1.9)	62.0(2.1)	69.2(1.8)	41.3(3.6)	56.8(4.0)
	1986	61.6(1.7)	66.9(2.0)	56.5(2.2)	65.1(1.7)	47.5(4.3)	55.8(4.3)
	1982	52.3(1.7)	57.3(1.8)	47.3(2.5)	56.9(2.2)	33.5(3.3)	36.6(5.5)
	1977	50.2(2.0)	53.2(2.4)	47.2(2.4)	53.8(2.2)	33.8(2.5)	34.3(7.7)
<b>Objects that conduct heat</b>	1994	62.2(1.1)	62.2(1.6)	62.7(1.6)	65.3(1.4)	52.0(4.0)	50.6(4.8)
	1992	62.2(1.3)	63.0(1.5)	61.5(1.8)	64.6(1.4)	54.4(3.2)	52.1(4.8)
	1990	55.8(1.9)	57.0(2.5)	54.5(2.0)	58.0(2.2)	45.3(2.9)	54.2(3.6)
	1986	59.2(1.4)	60.5(1.9)	58.1(1.8)	62.7(1.6)	48.4(3.3)	46.8(4.7)
	1977	46.7(1.5)	48.4(2.0)	44.9(2.2)	49.8(1.5)	35.2(2.9)	31.9(4.1)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Planting to avoid erosion</b>	1994	35.9(1.5)	35.4(2.1)	36.0(1.8)	35.1(1.8)	40.7(4.1)	36.2(2.9)
	1992	37.5(1.6)	37.0(2.1)	37.9(1.9)	38.1(1.8)	32.1(2.8)	39.8(3.9)
	1990	36.4(1.9)	36.8(2.1)	36.0(2.8)	36.5(2.4)	31.5(3.5)	39.3(4.6)
	1986	36.6(1.7)	38.2(2.1)	35.0(2.1)	36.2(1.9)	35.4(2.9)	41.4(4.4)
	1982	38.0(1.2)	36.9(1.8)	39.3(1.9)	38.4(1.4)	37.4(2.9)	35.4(3.7)
	1977	40.0(1.4)	38.8(1.8)	41.1(1.9)	41.2(1.5)	35.3(2.3)	32.3(4.9)
<b>Length of shadows at noon</b>	1994	27.5(1.1)	32.2(1.8)	23.4(1.2)	29.2(1.4)	21.6(3.8)	19.5(3.4)
	1992	31.1(1.4)	38.5(1.8)	24.4(2.0)	33.0(1.3)	22.4(2.9)	28.3(6.8)
	1990	28.3(1.5)	32.2(2.0)	24.3(1.6)	30.6(1.7)	18.8(3.5)	27.5(2.8)
	1986	29.9(1.6)	35.8(2.5)	24.3(1.5)	32.0(1.8)	21.5(2.7)	28.7(5.6)
	1977	29.7(1.5)	34.1(1.9)	25.3(1.7)	31.5(1.7)	22.0(2.3)	19.8(2.5)
<b>Detect magnet through water</b>	1994	47.0(1.3)	44.7(1.7)	49.3(1.9)	46.1(1.5)	54.1(4.7)	48.7(4.3)
	1992	44.9(1.2)	42.0(1.7)	47.6(1.6)	43.1(1.4)	52.7(2.5)	50.1(4.4)
	1990	49.3(1.3)	46.4(2.0)	52.3(1.5)	48.1(1.7)	54.7(2.3)	52.1(3.6)
	1986	49.1(1.5)	46.1(2.0)	51.9(2.1)	47.4(1.5)	56.1(3.8)	51.3(3.6)
	1977	51.3(1.3)	53.8(1.5)	48.9(2.1)	48.7(1.5)	62.7(2.8)	61.1(5.6)
<b>Detect magnet through paper</b>	1994	76.0(1.3)	80.2(1.4)	72.4(2.0)	77.5(1.3)	71.9(2.4)	75.6(4.4)
	1992	80.6(1.1)	85.2(1.4)	76.5(1.3)	82.5(1.2)	72.9(3.2)	77.9(4.1)
	1990	78.7(1.3)	84.2(1.6)	73.1(1.8)	79.0(1.4)	76.4(3.0)	83.2(3.9)
	1986	76.1(1.2)	82.8(1.6)	69.7(1.3)	76.9(1.4)	67.1(2.5)	88.3(3.3)
	1977	82.2(0.9)	88.1(1.0)	76.3(1.6)	83.3(1.0)	77.6(2.4)	76.7(4.4)
<b>Detect magnet through glass</b>	1994	51.2(1.6)	51.8(1.7)	50.8(2.3)	51.7(1.7)	54.7(3.9)	49.1(4.1)
	1992	49.7(1.3)	52.0(2.1)	47.7(1.4)	47.1(1.4)	60.3(2.9)	53.8(3.5)
	1990	52.1(1.5)	52.8(2.3)	51.3(1.5)	51.1(1.5)	54.3(4.8)	56.8(3.2)
	1986	45.9(1.6)	44.7(2.1)	47.1(2.0)	44.1(2.1)	54.1(2.0)	50.7(4.5)
	1977	38.4(1.0)	41.4(1.6)	35.4(1.4)	35.9(1.2)	52.7(1.9)	39.3(4.1)
<b>Separating salt, sand &amp; water</b>	1994	34.4(1.1)	35.7(1.6)	33.1(1.7)	37.0(1.2)	23.2(4.5)	23.7(4.0)
	1992	35.3(1.0)	37.8(1.5)	33.1(1.2)	38.0(1.0)	23.8(2.9)	31.5(4.5)
	1990	34.4(1.5)	33.7(1.6)	35.2(2.3)	36.7(1.6)	20.6(3.2)	32.3(4.6)
	1986	33.8(1.3)	36.6(2.1)	31.2(1.5)	36.4(1.6)	23.4(2.5)	26.1(3.3)
	1977	29.7(1.0)	31.5(1.5)	27.9(1.5)	32.4(1.2)	19.7(1.7)	17.3(3.1)
<b>Acceleration of a marble</b>	1994	25.3(1.3)	34.2(1.6)	17.1(1.8)	28.7(1.3)	14.6(2.2)	17.2(3.0)
	1992	23.1(1.0)	32.6(1.6)	14.4(1.0)	24.5(1.1)	20.2(2.1)	11.4(2.0)
	1990	23.8(1.2)	33.0(1.8)	14.4(1.6)	26.1(1.5)	15.6(2.1)	15.8(2.6)
	1986	21.3(1.2)	29.5(1.5)	13.3(1.6)	22.0(1.3)	18.3(2.6)	19.9(4.9)
	1977	25.6(1.1)	34.2(1.6)	17.0(1.3)	26.3(1.3)	23.1(2.5)	22.9(3.8)
<b>Using a balance</b>	1994	24.5(1.2)	22.7(1.5)	26.2(1.9)	24.3(1.4)	28.7(3.8)	23.5(4.8)
	1992	23.0(1.0)	20.3(1.4)	25.4(1.2)	22.7(0.9)	22.6(2.5)	27.3(4.6)
	1990	20.7(1.1)	17.9(1.4)	23.6(1.7)	20.3(1.2)	21.0(2.9)	22.0(2.8)
	1986	20.7(0.9)	20.6(1.3)	20.9(1.2)	20.5(1.1)	21.6(2.5)	22.3(3.1)
	1977	17.4(1.0)	13.8(1.3)	21.1(1.4)	17.7(1.1)	17.5(2.4)	13.1(2.8)
<b>Reading a histogram</b>	1994	99.0(0.2)	99.4(0.3)	98.6(0.4)	99.3(0.2)	98.9(0.7)	97.1(1.5)
	1992	98.0(0.3)	97.8(0.4)	98.2(0.3)	98.1(0.3)	97.5(0.8)	98.0(0.6)
	1990	98.8(0.2)	98.9(0.4)	98.8(0.3)	98.9(0.2)	98.3(0.8)	99.0(0.6)
	1986	97.6(0.4)	97.6(0.5)	97.6(0.6)	97.9(0.4)	97.8(0.9)	94.9(3.5)
	1977	92.4(1.0)	92.8(0.9)	92.0(1.3)	93.7(1.0)	83.8(1.8)	93.2(2.0)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Using a grid to locate objects</b>	1994	97.6(0.4)	97.7(0.4)	97.5(0.6)	98.4(0.3)	95.0(1.6)	96.6(1.4)
	1992	97.4(0.3)	97.1(0.5)	97.7(0.4)	97.8(0.3)	95.9(0.9)	95.8(1.4)
	1990	97.8(0.4)	97.5(0.6)	98.1(0.4)	98.2(0.4)	96.4(1.4)	95.6(1.5)
	1986	96.3(0.5)	96.2(0.6)	96.4(0.7)	97.0(0.5)	95.6(1.0)	91.2(3.4)
	1977	90.6(1.1)	91.1(1.2)	90.1(1.5)	94.0(0.6)	74.9(4.5)	80.4(4.3)
<b>Water level in u-tube</b>	1994	88.1(1.0)	89.8(1.1)	86.8(1.4)	91.4(0.9)	76.4(1.9)	82.2(2.3)
	1992	89.7(0.7)	91.3(0.8)	88.1(1.0)	91.1(0.8)	84.1(2.1)	86.0(1.9)
	1990	88.3(0.8)	87.9(1.3)	88.6(1.0)	91.7(0.7)	75.8(2.5)	81.0(2.9)
	1986	90.3(0.9)	92.0(0.9)	88.4(1.4)	91.8(1.0)	83.2(1.8)	87.3(3.5)
	1977	87.8(1.1)	90.1(1.2)	85.3(1.5)	90.8(0.9)	71.0(4.0)	85.8(2.7)
<b>Water level in unequal u-tube</b>	1994	73.9(1.0)	73.9(1.5)	74.0(1.6)	76.6(1.2)	62.7(2.4)	67.2(3.9)
	1992	75.3(0.9)	76.3(1.3)	74.3(1.4)	77.1(1.1)	66.9(2.5)	72.4(2.0)
	1990	73.9(1.1)	75.7(1.1)	72.0(1.7)	77.1(1.0)	62.6(3.9)	69.4(2.8)
	1986	74.9(1.4)	77.7(1.5)	71.8(1.6)	77.9(1.5)	59.5(2.8)	73.4(3.4)
	1977	72.6(1.5)	75.1(1.6)	69.9(2.1)	76.9(1.4)	49.5(3.1)	66.2(4.3)
<b>Floating and sinking blocks</b>	1994	76.3(1.5)	78.2(1.6)	74.6(1.9)	81.9(1.5)	59.1(3.9)	62.5(4.1)
	1992	78.5(1.1)	81.2(1.2)	75.8(1.6)	82.4(1.1)	64.5(2.3)	67.6(2.2)
	1990	77.6(1.2)	77.9(1.8)	77.3(1.4)	82.7(1.1)	60.5(3.8)	61.6(4.1)
	1986	76.8(1.2)	79.5(1.5)	73.8(1.7)	80.8(1.4)	61.0(2.7)	64.9(5.9)
	1977	68.8(1.6)	68.9(1.8)	68.8(2.2)	73.2(1.5)	47.6(4.4)	58.0(4.5)
<b>Balancing a seesaw</b>	1994	59.9(1.9)	59.1(2.3)	61.0(2.2)	63.4(2.0)	48.9(3.9)	50.6(3.7)
	1992	62.9(1.1)	64.2(1.4)	61.6(1.6)	66.5(1.3)	54.3(3.4)	45.3(7.0)
	1990	65.3(1.4)	66.0(1.8)	64.6(1.8)	68.7(1.7)	53.3(3.8)	50.6(4.1)
	1986	58.9(1.3)	59.3(1.7)	58.4(1.9)	61.1(1.3)	48.5(3.4)	59.0(6.2)
	1977	58.5(1.5)	60.7(1.7)	56.0(2.0)	60.5(1.5)	46.5(3.4)	56.0(4.7)
<b>Dog experiment: Any dog learns</b>	1994	62.8(1.1)	59.6(1.5)	66.1(1.5)	67.9(1.0)	47.0(3.1)	52.2(5.5)
	1992	67.3(1.1)	65.1(1.6)	69.5(1.6)	70.2(1.2)	58.9(3.4)	52.6(2.8)
	1990	66.1(1.5)	64.0(1.7)	68.2(1.9)	70.4(1.4)	51.6(4.4)	50.7(3.9)
	1986	61.0(1.4)	58.4(1.5)	63.9(2.3)	65.3(1.7)	45.9(3.2)	49.4(3.8)
	1977	62.9(1.5)	62.2(1.7)	63.5(2.0)	67.0(1.5)	43.3(3.5)	52.3(5.1)
<b>Dog experiment: Some dogs learn</b>	1994	89.8(1.0)	89.9(1.1)	89.9(1.3)	93.3(0.7)	77.6(3.6)	82.7(2.9)
	1992	90.4(0.7)	90.1(0.9)	90.7(1.1)	93.1(0.7)	82.4(3.4)	79.7(3.9)
	1990	90.4(0.9)	89.4(1.2)	91.3(1.1)	93.9(0.6)	79.4(2.8)	80.8(4.5)
	1986	89.0(1.0)	90.0(0.9)	87.9(1.5)	92.0(0.9)	82.2(2.5)	73.7(3.7)
	1977	89.7(1.0)	89.5(1.2)	89.9(1.1)	92.8(0.6)	79.2(2.5)	72.1(5.3)
<b>Dog experiment: Teach any dog</b>	1994	61.4(1.2)	63.9(1.5)	58.9(1.8)	63.8(1.5)	57.8(4.4)	51.9(5.3)
	1992	63.1(1.3)	66.0(1.5)	60.0(2.1)	65.3(1.5)	59.0(3.5)	52.7(6.6)
	1990	63.1(1.5)	64.4(1.8)	61.7(1.8)	65.8(1.4)	59.3(3.8)	48.8(4.6)
	1986	62.9(1.5)	65.5(1.8)	60.1(2.4)	65.2(1.5)	59.3(3.5)	49.2(3.9)
	1977	60.5(1.6)	63.8(2.1)	57.4(2.0)	62.1(1.5)	54.4(3.0)	51.1(4.8)
<b>Relating speed of car/train</b>	1994	48.1(1.8)	52.2(2.4)	44.2(2.1)	53.7(2.1)	30.4(2.1)	28.0(2.6)
	1992	50.0(1.0)	57.6(1.5)	42.2(1.7)	55.0(1.2)	31.0(3.0)	40.5(4.5)
	1990	48.4(1.5)	53.1(2.1)	43.8(2.2)	54.5(1.5)	26.7(2.0)	29.9(4.4)
	1986	49.4(1.3)	57.2(2.0)	40.9(1.5)	53.5(1.5)	32.3(2.5)	38.7(4.0)
	1977	50.7(1.9)	55.1(2.4)	46.1(1.9)	54.5(1.9)	29.8(2.9)	41.1(6.5)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Classifying objects: Shape</b>	1994	77.6(0.8)	75.6(1.3)	79.8(1.1)	82.8(1.0)	64.1(3.4)	57.4(3.4)
	1992	76.8(1.1)	74.9(1.1)	78.7(1.5)	80.1(1.2)	64.8(2.4)	66.0(3.2)
	1990	74.5(1.2)	71.7(1.6)	77.3(1.5)	78.2(1.4)	61.8(2.7)	64.8(3.1)
	1986	71.8(1.3)	69.8(1.6)	74.0(1.5)	75.5(1.5)	60.0(3.1)	57.1(2.6)
	1982	74.5(1.4)	71.8(2.0)	77.4(1.8)	76.7(1.6)	65.0(3.5)	65.9(4.6)
	1977	70.2(1.2)	70.1(1.6)	70.4(1.4)	73.6(1.4)	56.8(2.4)	55.3(3.7)
<b>Classifying objects: Color</b>	1994	82.2(1.0)	79.4(1.3)	85.1(1.3)	87.0(1.1)	69.4(3.0)	69.5(4.9)
	1992	83.3(0.7)	81.5(1.0)	85.1(1.1)	85.9(0.8)	76.3(2.4)	70.9(2.8)
	1990	81.1(1.1)	79.9(1.3)	82.2(1.4)	83.0(1.4)	74.6(2.8)	73.4(3.9)
	1986	77.6(1.4)	76.6(1.5)	78.7(1.7)	80.2(1.3)	71.1(3.2)	62.7(7.8)
	1982	74.8(1.5)	71.7(2.1)	78.0(1.5)	77.5(1.6)	64.8(2.3)	62.9(4.5)
	1977	71.6(1.3)	71.7(1.5)	71.5(1.7)	74.6(1.2)	60.3(3.1)	57.6(5.7)
<b>Classifying objects: Size</b>	1994	76.7(1.1)	74.7(1.6)	78.7(1.4)	82.1(1.1)	63.5(3.7)	58.9(3.5)
	1992	75.6(0.9)	73.5(1.2)	77.7(1.2)	78.5(1.0)	63.9(2.7)	70.2(3.9)
	1990	75.6(1.2)	73.1(1.8)	78.2(1.5)	79.4(1.4)	63.7(2.8)	61.2(4.2)
	1986	71.1(1.2)	70.3(1.5)	71.9(1.7)	74.9(1.3)	59.4(3.5)	53.7(3.6)
	1982	69.0(1.5)	66.4(1.9)	71.6(2.6)	71.9(1.7)	55.9(2.1)	59.1(4.1)
	1977	66.8(1.3)	66.9(1.7)	66.8(1.7)	70.6(1.4)	53.7(2.5)	47.7(4.4)
<b>Magnetism: Copper</b>	1994	48.5(1.2)	54.2(1.8)	42.6(1.7)	50.2(1.5)	41.1(3.7)	42.0(3.7)
	1992	51.0(1.4)	57.5(1.5)	44.4(2.0)	54.3(1.6)	38.1(3.8)	40.0(2.7)
	1990	51.0(1.3)	60.8(1.9)	41.5(2.0)	52.6(1.6)	46.1(3.8)	38.6(5.0)
	1986	54.8(1.5)	60.6(1.9)	48.4(2.1)	57.0(1.8)	44.2(3.8)	52.2(3.7)
	1977	46.5(1.6)	55.4(2.0)	37.7(2.0)	48.6(1.9)	37.2(2.8)	40.2(4.7)
<b>Magnetism: Compass</b>	1994	35.3(1.6)	41.1(2.5)	29.4(1.8)	36.4(2.0)	30.8(3.0)	28.6(3.0)
	1992	34.1(1.4)	39.9(2.0)	28.1(1.8)	34.0(1.6)	33.4(3.1)	33.1(5.5)
	1990	33.6(1.1)	40.8(1.8)	26.5(1.5)	33.9(1.2)	30.7(2.9)	29.4(2.5)
	1986	35.1(1.6)	40.6(2.2)	29.1(2.0)	35.8(2.0)	30.8(3.1)	36.0(3.4)
	1977	38.8(1.4)	49.1(1.9)	28.7(1.6)	40.0(1.5)	36.1(3.8)	29.6(4.3)
<b>Magnetism: Iron</b>	1994	75.4(1.5)	77.9(2.0)	72.8(2.0)	79.0(1.5)	66.3(2.7)	57.2(3.6)
	1992	78.8(1.0)	81.3(1.1)	76.2(1.3)	81.1(1.2)	73.4(2.3)	68.4(5.7)
	1990	78.0(1.5)	80.0(1.5)	76.0(1.8)	80.6(1.2)	70.1(5.0)	60.5(4.1)
	1986	78.4(0.9)	80.7(1.3)	75.8(1.1)	79.8(1.0)	78.1(2.2)	63.7(3.9)
	1977	73.6(1.1)	77.1(1.6)	70.1(1.5)	74.2(1.2)	71.3(3.0)	70.2(4.2)
<b>Magnetism: Foil</b>	1994	66.8(1.3)	68.3(2.0)	65.2(2.0)	70.0(1.6)	57.5(4.5)	55.5(3.6)
	1992	67.1(1.3)	70.8(1.4)	63.4(1.7)	70.9(1.3)	57.5(2.3)	50.8(5.4)
	1990	69.7(1.2)	71.1(1.6)	68.3(1.9)	73.5(1.2)	55.7(3.1)	57.4(3.7)
	1986	71.6(1.2)	73.2(1.6)	69.8(1.6)	74.1(1.4)	63.7(2.6)	60.7(7.0)
	1977	67.1(1.3)	68.7(1.7)	65.6(1.7)	70.5(1.3)	54.1(2.7)	58.6(3.6)
<b>Interpret table of books read</b>	1994	66.2(1.6)	66.3(2.2)	66.2(1.9)	72.2(1.6)	48.5(2.4)	41.9(6.3)
	1992	64.1(1.4)	63.7(1.5)	64.5(1.8)	68.9(1.5)	46.9(3.0)	46.4(3.7)
	1990	63.6(1.4)	62.3(1.9)	64.8(2.0)	68.8(1.3)	47.7(3.2)	41.4(3.6)
	1986	61.3(1.5)	59.2(1.9)	63.6(2.1)	66.5(1.7)	44.1(3.2)	42.3(5.1)
	1982	57.1(1.6)	54.2(1.8)	60.0(2.1)	62.3(2.0)	36.3(2.2)	27.5(4.5)
	1977	60.2(1.9)	58.9(2.1)	61.5(2.3)	65.9(1.7)	35.3(4.0)	33.9(3.8)

The standard errors of the estimated percentages appear in parenthesis.

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## NAEP 1994 National Science Trend Assessment — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Survey height of boys/girls</b>	1994	52.6(1.4)	53.5(1.9)	51.6(1.6)	54.1(1.7)	49.2(2.9)	44.4(4.8)
	1992	50.9(1.3)	54.9(1.7)	46.8(1.7)	51.4(1.6)	52.0(2.7)	45.5(3.5)
	1990	52.0(1.6)	54.5(1.9)	49.5(2.1)	52.8(1.4)	49.9(4.8)	47.2(4.1)
	1986	51.3(1.3)	52.8(1.8)	49.7(2.6)	52.7(1.5)	48.6(4.2)	42.0(6.1)
	1982	51.7(1.6)	54.8(2.0)	48.6(2.6)	53.0(1.9)	48.5(4.2)	44.2(3.0)
	1977	47.0(1.5)	48.8(1.8)	45.2(1.9)	48.6(1.7)	38.1(2.3)	44.7(2.7)
<b>Add heat to dissolve sugar</b>	1994	37.9(1.4)	41.8(1.9)	34.1(1.7)	42.2(1.4)	23.0(2.8)	22.3(3.4)
	1992	36.3(1.1)	37.3(1.5)	35.4(1.7)	40.4(1.2)	21.0(2.0)	23.8(3.7)
	1990	39.7(1.3)	38.9(1.5)	40.6(2.1)	43.5(1.5)	26.9(2.9)	25.7(2.9)
	1986	42.7(1.3)	42.3(1.8)	43.1(1.9)	46.1(1.8)	28.7(3.2)	33.5(5.1)
	1977	38.4(1.5)	38.4(2.0)	38.4(1.6)	42.1(1.6)	20.8(3.0)	27.3(2.7)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Finding cause of a sore throat</b>	1994	81.8(1.2)	78.8(1.8)	84.6(1.1)	84.8(1.0)	70.5(4.5)	79.2(3.1)
	1992	80.0(1.2)	75.2(1.5)	85.2(1.4)	83.0(1.1)	72.0(3.2)	70.0(6.0)
	1990	80.8(1.1)	76.5(1.5)	84.9(1.6)	83.6(1.3)	71.8(3.7)	69.8(3.0)
	1986	78.6(1.7)	73.6(2.2)	83.6(1.5)	80.3(2.2)	71.7(2.6)	71.6(3.8)
	1982	74.7(2.0)	71.9(2.6)	77.3(2.1)	76.0(2.1)	70.2(4.0)	65.6(4.4)
	1977	75.0(1.3)	73.0(1.8)	77.1(1.5)	76.1(1.4)	73.2(2.2)	65.2(5.1)
<b>Plants bend toward light</b>	1994	61.7(1.7)	66.0(2.0)	57.7(1.8)	68.2(1.9)	40.2(3.3)	48.8(3.5)
	1992	62.5(1.8)	65.4(2.3)	59.5(2.1)	67.3(1.9)	45.4(4.2)	52.8(4.8)
	1990	61.0(1.4)	62.5(1.4)	59.5(2.0)	66.6(1.5)	41.0(4.0)	47.2(3.7)
	1986	54.5(2.9)	55.5(2.0)	53.6(4.3)	58.7(3.3)	38.7(3.5)	42.9(4.9)
	1982	55.4(1.7)	56.8(1.9)	54.1(2.3)	60.0(1.9)	36.1(3.5)	38.0(5.2)
	1977	53.3(1.8)	54.8(2.1)	51.7(2.3)	58.1(2.0)	29.3(2.6)	39.7(4.6)
<b>Dog related to wolf</b>	1994	93.6(0.8)	94.9(1.0)	92.4(1.0)	96.6(0.6)	85.1(3.3)	86.5(2.1)
	1992	95.0(0.6)	96.5(0.5)	93.3(0.9)	97.5(0.4)	85.5(2.3)	91.2(2.9)
	1990	94.4(0.6)	96.2(0.6)	92.7(1.0)	96.1(0.6)	88.1(1.9)	91.8(2.4)
	1986	95.7(0.6)	96.6(0.6)	94.8(0.9)	97.3(0.7)	89.8(1.4)	91.7(1.9)
	1977	94.0(0.7)	94.8(0.7)	93.1(0.9)	95.7(0.6)	85.9(2.4)	88.7(2.0)
<b>Observing a sealed aquarium</b>	1994	62.8(1.2)	62.4(1.6)	63.2(1.7)	66.5(1.6)	50.0(3.0)	54.3(4.3)
	1992	63.6(1.2)	66.2(1.6)	60.9(1.9)	65.2(1.4)	56.9(3.3)	57.0(2.8)
	1990	64.9(1.3)	67.5(1.6)	62.3(1.5)	67.9(1.4)	55.7(3.2)	50.8(3.5)
	1986	62.8(1.7)	64.9(2.1)	60.7(2.1)	63.1(2.0)	60.9(3.9)	62.0(2.6)
	1982	70.4(1.1)	72.7(1.3)	68.3(1.7)	71.2(1.2)	67.2(2.3)	66.5(5.6)
	1977	73.7(1.0)	72.7(1.7)	74.5(1.4)	75.2(1.1)	65.0(2.8)	69.2(3.0)
<b>Museum: Habitats</b>	1994	86.7(1.0)	84.3(1.6)	89.0(1.2)	90.4(1.0)	73.2(4.2)	79.6(3.2)
	1992	87.9(1.0)	85.4(1.5)	90.7(1.2)	90.4(0.9)	78.7(2.6)	84.9(3.6)
	1990	85.4(1.0)	83.1(1.6)	87.7(1.0)	86.2(1.2)	85.3(2.4)	80.3(3.2)
	1986	82.2(0.9)	81.8(1.3)	82.6(1.5)	83.7(1.1)	76.9(2.1)	73.7(5.0)
	1977	80.8(1.2)	77.0(1.5)	84.6(1.5)	84.0(0.9)	67.4(3.3)	62.2(5.8)
<b>Museum: Similar animals</b>	1994	61.1(1.4)	62.6(2.2)	59.5(1.6)	64.6(1.5)	47.6(4.0)	56.7(4.0)
	1992	62.4(1.5)	60.4(2.2)	64.4(1.6)	64.7(1.7)	46.5(3.4)	74.0(3.2)
	1990	64.3(1.5)	62.3(1.9)	66.3(1.8)	67.4(1.6)	54.7(3.1)	53.7(4.1)
	1986	59.1(1.7)	60.2(2.3)	58.1(2.7)	62.4(2.1)	45.6(2.6)	52.0(3.1)
	1977	58.8(1.9)	57.7(2.3)	59.8(2.1)	61.6(1.9)	45.0(2.6)	46.5(7.1)
<b>See atom w/unaided eye?</b>	1994	90.4(1.1)	91.1(1.4)	89.6(1.4)	94.8(0.6)	74.3(5.8)	84.2(3.2)
	1992	92.4(0.7)	93.1(0.9)	91.7(0.8)	94.9(0.6)	82.8(2.3)	89.1(3.3)
	1990	91.9(0.7)	92.8(0.9)	91.0(1.0)	94.9(0.8)	82.9(2.1)	81.9(3.6)
	1986	91.4(1.1)	93.1(1.3)	89.7(1.4)	94.3(1.0)	81.6(2.5)	79.6(4.3)
	1977	91.4(0.9)	92.5(1.0)	90.3(1.2)	93.3(1.0)	81.9(2.6)	90.7(2.9)
<b>See atom w/magnifying glass?</b>	1994	72.3(1.5)	76.1(2.0)	68.5(2.1)	79.6(1.2)	47.3(4.7)	56.3(3.9)
	1992	74.2(1.2)	77.7(1.6)	70.5(1.5)	81.2(1.4)	47.0(4.3)	58.7(4.1)
	1990	71.4(1.5)	76.8(1.6)	66.3(2.1)	79.6(1.3)	40.9(4.8)	56.0(5.6)
	1986	72.8(1.7)	77.7(1.4)	68.0(3.2)	79.6(1.7)	46.7(3.8)	47.8(3.8)
	1977	75.6(1.4)	78.5(1.5)	72.6(1.9)	80.9(1.4)	47.6(4.2)	60.3(5.4)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>See atom w/microscope?</b>	1994	55.9(1.2)	59.9(2.0)	52.0(1.9)	62.4(1.2)	32.4(2.8)	44.3(3.7)
	1992	54.0(1.4)	57.7(2.2)	50.0(1.7)	59.3(1.7)	34.7(3.0)	40.4(4.8)
	1990	53.9(1.3)	58.4(1.7)	49.5(1.8)	59.4(1.3)	33.8(3.8)	42.4(3.1)
	1986	56.8(1.7)	60.8(1.8)	52.8(2.1)	61.1(1.8)	39.8(2.7)	43.5(6.0)
	1977	63.5(1.5)	67.1(2.0)	59.8(1.6)	66.4(1.8)	50.5(3.9)	53.8(7.1)
<b>Heating 2 pans: Heats fastest</b>	1994	73.7(1.2)	76.6(2.1)	70.9(1.6)	80.3(1.2)	52.5(4.1)	60.4(2.5)
	1992	73.2(1.3)	75.3(1.9)	71.0(1.7)	78.7(1.4)	51.8(3.7)	64.3(4.4)
	1990	72.1(1.1)	78.4(1.5)	66.1(1.9)	77.5(1.2)	55.5(2.7)	53.0(3.8)
	1986	72.5(1.8)	75.9(1.7)	69.0(2.4)	77.1(1.8)	54.5(3.3)	54.8(5.0)
	1982	75.3(1.5)	79.1(1.6)	71.9(2.2)	79.6(1.4)	54.8(3.7)	65.9(5.2)
	1977	76.1(1.5)	79.7(1.8)	72.7(2.1)	81.8(1.4)	49.5(3.9)	53.8(4.6)
<b>Heating 2 pans: Heats most</b>	1994	40.6(1.0)	40.2(1.3)	41.1(1.5)	40.7(1.3)	45.1(2.3)	32.7(3.6)
	1992	39.5(1.3)	40.7(1.8)	38.2(1.8)	39.3(1.5)	42.0(2.6)	31.4(3.5)
	1990	37.3(1.0)	35.7(1.5)	38.9(1.5)	36.9(1.2)	38.7(3.4)	40.0(3.8)
	1986	38.9(0.9)	38.8(1.8)	38.9(1.6)	37.6(1.1)	44.9(3.1)	40.9(4.6)
	1982	40.7(1.4)	37.9(2.3)	43.3(1.5)	41.5(1.5)	40.4(3.9)	33.5(2.5)
	1977	36.9(0.9)	37.1(1.4)	36.8(1.6)	37.3(1.1)	38.2(2.0)	27.5(4.8)
<b>Heating 2 pans: Cools fastest</b>	1994	63.2(1.1)	57.7(1.7)	68.5(1.5)	65.6(1.1)	58.4(3.2)	54.7(3.2)
	1992	65.0(1.1)	62.6(1.6)	67.7(1.5)	66.7(1.3)	61.8(3.2)	54.0(5.5)
	1990	62.7(1.2)	57.4(2.0)	67.7(1.4)	64.1(1.3)	55.0(2.8)	62.6(2.8)
	1986	65.8(1.6)	63.5(2.3)	68.2(1.8)	66.7(2.2)	61.8(2.4)	63.4(3.0)
	1982	69.1(1.2)	64.4(1.7)	73.5(1.3)	71.4(1.4)	59.0(3.5)	62.0(3.7)
	1977	69.4(1.0)	66.7(1.6)	72.0(1.2)	70.8(1.0)	65.0(3.3)	58.5(2.6)
<b>Tissues and cells</b>	1994	61.6(1.5)	62.6(1.8)	60.7(1.8)	65.0(1.6)	55.9(2.7)	43.5(4.4)
	1992	55.3(1.6)	56.8(2.0)	53.7(2.0)	58.2(1.7)	45.2(3.2)	48.5(4.4)
	1990	56.8(1.5)	57.1(1.7)	56.5(2.0)	58.5(1.9)	50.3(2.6)	52.3(5.5)
	1986	56.6(1.8)	57.2(2.2)	56.1(2.2)	58.1(2.1)	51.2(2.7)	50.9(4.1)
	1982	51.1(1.8)	52.9(2.0)	49.4(2.1)	52.9(2.1)	42.5(4.4)	43.2(6.9)
	1977	52.5(1.5)	51.1(2.3)	54.0(1.6)	53.9(1.5)	42.9(3.7)	56.0(6.1)
<b>Melting crushed ice</b>	1994	41.8(1.7)	45.5(2.4)	38.1(2.0)	48.7(1.6)	17.2(2.3)	27.6(3.9)
	1992	42.3(1.2)	46.0(1.7)	38.4(1.7)	47.9(1.4)	18.7(2.3)	35.9(3.2)
	1990	44.0(1.1)	47.5(1.7)	40.6(1.5)	47.5(1.4)	30.1(2.5)	38.0(4.2)
	1986	39.6(1.6)	45.0(1.7)	34.2(2.6)	43.8(1.9)	21.0(3.3)	25.2(5.5)
	1982	44.6(1.7)	51.4(2.3)	38.3(1.8)	47.5(2.0)	28.8(3.1)	37.7(4.1)
	1977	52.2(1.9)	56.8(2.1)	47.9(2.5)	56.5(1.8)	28.7(2.5)	43.7(3.3)
<b>Function of red blood cells</b>	1994	55.5(1.6)	58.5(1.8)	52.6(2.0)	58.8(1.9)	43.0(3.3)	52.5(4.1)
	1992	55.7(1.3)	59.2(1.6)	52.0(2.3)	57.5(1.5)	45.6(4.4)	57.6(4.7)
	1990	58.5(1.2)	63.1(1.2)	54.2(1.8)	60.2(1.5)	57.9(3.2)	47.0(4.7)
	1986	58.0(2.0)	60.8(2.7)	55.2(1.9)	58.5(2.2)	59.8(3.2)	50.4(4.2)
	1982	57.7(1.3)	59.4(1.9)	56.1(2.2)	58.8(1.7)	54.8(2.9)	46.1(3.5)
	1977	54.2(1.6)	55.5(2.0)	52.8(1.8)	55.3(1.7)	51.6(2.6)	39.1(4.7)
<b>How to recover salt from water</b>	1994	43.6(1.3)	46.9(1.5)	40.3(1.8)	46.0(1.4)	32.5(3.9)	40.0(3.3)
	1992	40.3(1.7)	41.5(2.2)	39.0(2.2)	42.4(1.9)	30.9(2.5)	34.7(5.2)
	1990	38.1(1.2)	41.4(1.7)	34.9(1.7)	39.6(1.3)	36.7(2.3)	29.8(4.1)
	1986	37.6(1.5)	43.1(2.3)	32.0(1.8)	40.3(1.6)	29.1(3.0)	23.2(3.0)
	1977	42.1(1.6)	48.5(1.9)	36.0(2.0)	44.2(1.9)	30.5(1.9)	36.8(4.9)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Water temperature for swimming</b>	1994	34.7(1.4)	41.2(1.7)	28.4(1.7)	38.5(2.0)	23.8(3.3)	22.2(3.3)
	1992	35.7(1.6)	40.8(1.9)	30.4(2.2)	39.0(1.8)	26.1(2.4)	20.4(4.4)
	1990	36.8(1.4)	41.8(1.7)	32.1(1.8)	40.4(1.7)	26.2(2.8)	25.4(4.5)
	1986	33.2(1.7)	37.3(2.7)	29.2(2.0)	34.8(2.0)	27.9(2.6)	25.1(4.0)
	1982	33.8(1.8)	38.0(2.4)	30.0(2.1)	35.7(2.2)	23.6(3.8)	31.4(4.9)
	1977	27.4(2.2)	32.2(2.2)	22.6(2.7)	29.9(2.4)	19.3(3.5)	9.6(2.6)
<b>Sulfur dioxide and acid rain</b>	1994	55.1(1.7)	58.8(2.0)	51.6(2.1)	60.0(1.6)	40.4(5.0)	42.6(3.3)
	1992	59.2(1.6)	62.0(2.2)	56.1(2.0)	64.0(1.8)	39.6(3.5)	49.4(3.5)
	1990	53.7(1.5)	61.7(1.8)	46.0(1.8)	59.4(1.6)	34.6(3.1)	40.7(3.6)
	1986	56.1(1.7)	61.6(2.5)	50.6(3.4)	59.3(1.7)	42.7(4.0)	45.4(7.0)
	1982	35.2(1.7)	39.4(2.2)	31.4(1.5)	37.7(1.9)	21.6(3.5)	32.0(6.6)
	1977	19.9(1.3)	23.6(2.2)	16.4(1.5)	20.6(1.6)	17.6(1.7)	15.3(3.4)
<b>Water is part of all cells</b>	1994	47.8(1.2)	50.6(1.8)	44.9(1.8)	49.8(1.4)	43.0(2.4)	44.3(4.9)
	1992	43.2(1.3)	43.6(1.8)	42.8(2.0)	44.5(1.5)	41.6(2.4)	30.1(4.7)
	1990	49.8(1.3)	50.6(1.6)	49.0(2.0)	50.1(1.5)	52.1(4.4)	46.8(4.3)
	1986	47.2(2.7)	47.4(3.3)	46.9(2.8)	48.0(3.4)	48.0(2.6)	36.4(3.4)
	1977	34.1(1.5)	35.6(1.5)	32.6(2.2)	33.3(1.8)	37.3(2.6)	37.5(3.7)
<b>Wolves and caribou</b>	1994	49.7(1.5)	54.5(2.0)	45.1(1.8)	57.4(1.5)	27.3(3.6)	29.1(2.3)
	1992	47.6(1.6)	51.5(2.0)	43.5(2.3)	53.2(2.0)	27.8(2.6)	32.7(3.5)
	1990	43.9(1.3)	48.5(1.6)	39.5(1.8)	49.6(1.7)	24.8(2.2)	30.4(4.1)
	1986	41.2(2.2)	46.6(1.6)	35.7(4.5)	45.0(2.5)	28.7(2.9)	25.3(4.3)
	1977	34.6(1.6)	39.4(1.7)	30.0(2.3)	38.4(1.7)	18.1(2.7)	22.0(3.2)
<b>Cells, tissues, organs</b>	1994	38.4(1.4)	37.6(2.0)	39.3(1.5)	42.4(1.3)	26.9(4.1)	26.3(3.5)
	1992	36.0(1.5)	34.8(1.5)	37.3(2.3)	38.4(1.7)	26.3(3.5)	30.7(4.7)
	1990	36.3(1.3)	36.7(1.8)	35.9(1.6)	39.0(1.4)	27.5(2.7)	22.4(3.5)
	1986	33.5(1.6)	32.8(1.9)	34.2(2.0)	35.0(1.9)	27.4(3.0)	29.1(3.7)
	1977	25.2(1.3)	25.1(1.9)	25.2(1.6)	26.6(1.4)	18.6(2.6)	19.3(5.1)
<b>Effects of pepsin</b>	1994	25.2(1.0)	28.8(1.5)	21.5(1.5)	27.0(1.0)	17.9(2.1)	21.6(5.3)
	1992	24.6(1.2)	27.8(1.3)	21.3(1.8)	26.6(1.5)	17.5(2.1)	18.1(4.3)
	1990	23.6(1.4)	26.0(1.8)	21.4(1.5)	25.5(1.8)	15.9(2.0)	18.5(1.9)
	1986	25.3(1.4)	30.2(1.8)	20.4(1.8)	26.9(1.7)	20.1(2.5)	21.2(2.2)
	1982	24.6(1.8)	29.8(2.2)	19.8(1.9)	25.2(2.1)	22.4(3.0)	14.2(4.6)
	1977	31.0(1.3)	32.7(1.6)	29.1(1.9)	32.3(1.6)	21.5(1.9)	30.6(4.1)
<b>Seed germination</b>	1994	15.7(0.8)	17.2(1.2)	14.2(1.2)	16.1(1.2)	14.0(1.6)	15.6(2.9)
	1992	15.8(1.2)	17.7(1.6)	13.7(1.1)	15.3(1.3)	19.7(2.1)	14.0(3.6)
	1990	15.7(0.9)	16.8(1.3)	14.6(1.3)	15.8(1.0)	14.1(2.6)	18.9(2.5)
	1986	17.6(1.4)	16.4(2.2)	18.8(1.5)	18.4(1.7)	13.9(1.7)	15.9(2.1)
	1982	21.0(1.3)	20.9(1.5)	21.1(1.5)	20.8(1.3)	22.9(3.1)	18.6(3.8)
	1977	21.0(1.3)	22.1(2.0)	20.0(1.2)	21.6(1.6)	21.2(3.2)	14.0(2.7)
<b>Efficient use of grain as food</b>	1994	20.0(0.8)	23.0(1.4)	17.0(1.3)	19.6(0.9)	19.3(2.3)	23.8(3.5)
	1992	18.0(0.9)	20.5(1.3)	15.3(1.4)	18.5(1.1)	16.0(1.7)	14.3(2.6)
	1990	19.7(0.9)	20.3(1.3)	19.2(1.1)	20.4(1.1)	16.6(2.3)	19.7(1.9)
	1986	22.3(1.3)	25.5(1.6)	19.1(1.9)	22.6(1.5)	21.1(2.6)	22.2(3.9)
	1982	18.4(1.2)	21.7(1.7)	15.2(1.6)	19.2(1.2)	14.5(3.6)	12.7(3.5)
	1977	21.9(0.9)	25.4(1.7)	18.5(1.2)	23.1(1.2)	18.1(2.0)	16.9(3.9)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>World population growth</b>	1994	13.2(1.0)	15.6(1.8)	10.9(0.8)	14.9(1.2)	6.9(2.2)	9.5(2.3)
	1992	13.3(0.9)	16.6(1.3)	9.9(1.1)	15.0(1.1)	6.0(1.3)	12.2(2.6)
	1990	14.3(0.9)	17.3(1.7)	11.5(0.8)	16.3(1.1)	8.5(2.7)	8.2(2.1)
	1986	12.6(1.1)	13.7(1.5)	11.5(1.5)	13.4(1.4)	11.4(2.7)	7.3(2.4)
	1982	12.4(1.1)	16.4(1.6)	8.6(1.0)	13.4(1.3)	7.4(1.7)	9.0(2.2)
	1977	13.8(0.8)	17.3(1.2)	10.4(1.3)	15.0(0.9)	9.3(1.4)	11.2(2.6)
<b>Saving resources: Insulation</b>	1994	61.9(1.7)	66.8(2.0)	57.5(2.3)	63.2(1.6)	60.9(5.5)	53.8(3.5)
	1992	66.6(1.1)	70.4(1.3)	62.7(1.7)	69.2(1.4)	58.0(2.5)	59.8(4.5)
	1990	66.8(1.2)	71.3(1.2)	62.6(1.9)	69.6(1.4)	63.0(3.9)	56.7(4.2)
	1986	80.7(1.7)	84.7(2.4)	76.8(1.9)	81.7(2.1)	76.4(2.8)	76.8(3.2)
	1982	88.9(1.1)	89.7(1.1)	88.2(1.6)	89.2(1.3)	86.5(2.3)	90.7(1.8)
	1977	91.6(0.9)	92.9(1.1)	90.3(1.3)	93.4(1.0)	85.9(2.6)	87.3(2.4)
<b>Saving resources: Planting</b>	1994	73.5(1.4)	73.3(1.5)	73.8(1.9)	78.0(1.2)	57.6(5.7)	66.1(3.1)
	1992	73.5(1.0)	73.7(1.3)	73.3(1.4)	75.9(1.2)	62.7(4.0)	67.4(2.9)
	1990	69.6(1.2)	70.5(1.6)	68.8(1.7)	72.6(1.4)	60.6(3.8)	61.2(3.0)
	1986	62.8(1.6)	65.2(1.9)	60.4(1.7)	64.9(2.0)	51.8(2.8)	61.7(4.5)
	1982	47.5(1.9)	49.7(2.6)	45.4(2.6)	47.9(2.3)	44.7(3.8)	42.1(6.7)
	1977	69.9(1.2)	70.6(1.5)	69.3(1.6)	72.0(1.1)	63.4(2.4)	55.7(9.5)
<b>Saving resources: Throwaways</b>	1994	65.0(1.4)	63.1(1.9)	66.6(1.8)	70.5(1.3)	46.5(5.2)	51.3(4.1)
	1992	69.1(1.3)	67.9(1.8)	70.3(1.5)	73.6(1.3)	47.9(3.6)	63.1(5.0)
	1990	49.5(1.4)	50.3(1.5)	48.8(1.7)	53.2(1.4)	40.9(3.7)	35.7(5.3)
	1986	47.2(1.7)	50.3(1.8)	44.1(2.4)	49.4(2.3)	38.0(2.8)	40.0(3.7)
	1982	58.7(1.2)	60.2(1.4)	57.2(1.6)	61.0(1.3)	47.3(2.9)	52.8(5.0)
	1977	54.2(1.6)	56.9(2.0)	51.5(1.8)	56.7(1.8)	39.3(3.0)	51.1(4.8)
<b>Saving resources: Lawns</b>	1994	41.4(1.3)	41.4(1.6)	41.3(1.8)	44.6(1.5)	33.4(3.6)	32.3(3.7)
	1992	45.6(1.5)	48.2(2.0)	43.1(1.7)	48.2(2.0)	32.3(2.8)	43.4(4.5)
	1990	42.1(1.1)	45.1(1.4)	39.2(1.6)	44.7(1.1)	31.6(3.5)	34.1(4.7)
	1986	45.5(1.4)	47.3(2.3)	43.7(2.0)	48.9(1.6)	30.7(3.8)	37.7(4.0)
	1982	63.5(2.0)	66.9(1.9)	60.1(2.4)	67.6(2.1)	42.0(2.9)	57.3(5.2)
	1977	51.0(1.3)	51.9(1.9)	50.1(2.2)	53.8(1.4)	35.2(2.9)	47.3(6.2)
<b>Plate tectonics: Mountains</b>	1994	66.4(1.4)	67.8(1.5)	65.1(2.3)	68.6(1.3)	60.6(6.4)	56.7(3.9)
	1992	67.3(1.4)	68.5(1.8)	66.1(1.7)	70.2(1.6)	57.5(3.2)	55.8(3.7)
	1990	67.5(1.7)	67.8(2.7)	67.2(1.9)	71.2(1.8)	58.0(3.0)	53.4(3.2)
	1986	64.9(1.7)	67.6(2.0)	62.2(2.7)	69.1(2.0)	45.9(2.9)	54.9(5.2)
	1982	65.0(1.8)	67.6(1.9)	62.4(2.5)	67.7(1.9)	49.2(3.9)	64.7(4.6)
	1977	72.2(1.4)	71.9(1.9)	72.5(1.8)	75.5(1.4)	57.1(2.5)	59.8(7.3)
<b>Plate tectonics: Weather</b>	1994	57.1(1.7)	58.7(1.5)	55.7(2.7)	63.2(1.4)	41.7(9.2)	34.0(3.0)
	1992	59.2(1.7)	60.2(2.1)	58.2(1.9)	65.7(1.5)	29.3(3.7)	50.9(4.4)
	1990	58.6(1.6)	60.5(1.9)	56.8(2.1)	65.5(1.5)	38.2(4.3)	37.2(4.1)
	1986	53.1(1.3)	56.3(1.7)	49.9(2.1)	58.1(1.4)	31.6(2.7)	36.6(7.1)
	1982	69.0(1.7)	70.4(2.4)	67.6(2.0)	73.8(1.6)	50.3(3.7)	45.1(4.4)
	1977	55.9(1.8)	56.0(1.7)	55.8(2.2)	61.3(1.9)	34.6(2.9)	32.4(4.4)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Plate tectonics: Earthquakes</b>	1994	84.2(1.1)	83.4(1.5)	85.0(1.4)	86.7(1.1)	75.3(4.9)	79.9(2.4)
	1992	87.0(1.1)	87.4(1.4)	86.7(1.4)	89.9(0.8)	77.2(2.8)	79.8(5.3)
	1990	87.7(1.0)	88.0(1.2)	87.4(1.2)	89.4(1.0)	82.8(2.7)	81.2(2.8)
	1986	78.9(1.3)	81.1(1.9)	76.7(1.4)	81.4(1.5)	69.2(2.5)	69.6(4.8)
	1982	82.9(0.9)	82.9(1.3)	82.8(1.4)	84.9(1.2)	72.4(3.1)	78.4(2.8)
	1977	84.1(1.1)	84.2(1.3)	84.0(1.5)	87.6(1.1)	70.3(2.9)	63.5(9.2)
<b>Plate tectonics: Continents</b>	1994	72.5(1.5)	72.6(1.9)	72.4(2.0)	76.6(1.3)	60.6(6.2)	58.3(4.5)
	1992	72.9(1.5)	73.1(2.0)	72.8(1.7)	78.6(1.2)	49.4(4.1)	61.8(3.3)
	1990	73.5(1.5)	73.0(1.9)	74.0(1.7)	78.0(1.4)	58.6(4.4)	59.6(3.6)
	1986	65.8(1.2)	67.1(1.5)	64.5(1.9)	70.5(1.4)	46.1(2.8)	52.1(5.6)
	1982	64.8(1.7)	64.1(2.3)	65.6(2.1)	69.2(1.9)	42.5(3.8)	52.3(3.1)
	1977	62.5(1.8)	63.2(1.9)	61.9(2.4)	68.3(1.8)	38.2(3.6)	41.7(5.4)
<b>Plate tectonics: Moon</b>	1994	68.4(1.6)	67.4(1.8)	69.4(2.4)	74.3(1.5)	52.2(7.6)	47.6(3.4)
	1992	69.0(1.6)	68.3(1.7)	69.6(1.9)	74.2(1.5)	45.9(4.9)	59.9(5.3)
	1990	68.9(1.5)	67.8(1.7)	70.0(2.0)	73.6(1.4)	53.1(4.2)	55.8(3.0)
	1986	60.0(1.6)	59.6(1.9)	60.4(2.1)	64.4(2.0)	41.4(2.5)	42.8(4.2)
	1982	78.2(1.6)	77.8(2.0)	78.5(2.0)	82.6(1.3)	58.7(2.9)	59.9(3.9)
	1977	64.6(1.8)	61.5(1.6)	67.5(2.6)	69.3(1.7)	46.7(3.0)	36.3(5.9)
<b>Present energy source in U.S.</b>	1994	42.7(1.6)	44.4(1.7)	41.1(2.4)	46.8(1.8)	33.3(6.4)	22.5(3.5)
	1992	46.6(1.8)	48.5(2.5)	44.7(1.8)	50.3(2.3)	35.0(3.2)	33.1(3.5)
	1990	42.3(1.6)	46.0(2.1)	38.8(1.7)	46.7(1.5)	32.5(4.6)	21.8(3.8)
	1986	41.3(1.6)	45.5(1.9)	37.3(2.4)	44.4(1.9)	32.2(3.1)	23.2(3.3)
	1982	65.9(1.8)	67.2(2.4)	64.8(1.8)	70.5(1.5)	47.4(2.7)	50.2(6.7)
	1977	56.4(1.7)	61.6(2.1)	51.4(2.1)	61.3(2.0)	37.0(2.2)	36.8(5.1)
<b>Components of solar system</b>	1994	73.7(1.5)	73.1(1.8)	74.3(2.3)	76.4(1.3)	66.0(6.0)	62.9(4.2)
	1992	71.6(1.5)	72.6(1.6)	70.7(2.0)	74.4(1.6)	60.0(3.7)	62.8(3.1)
	1990	72.6(1.1)	71.5(1.4)	73.6(1.5)	75.8(1.2)	61.9(3.5)	66.8(5.3)
	1986	65.5(1.6)	67.7(2.3)	63.3(2.1)	67.7(2.0)	56.5(2.7)	59.4(5.9)
	1982	70.9(1.5)	72.1(2.1)	69.8(1.8)	73.6(1.4)	59.7(4.9)	62.5(3.9)
	1977	70.3(1.5)	71.1(2.0)	69.6(1.7)	73.9(1.6)	56.0(3.6)	55.1(4.8)
<b>Acceleration of ball on ramp</b>	1994	59.7(1.5)	63.3(1.4)	56.3(2.7)	65.1(1.6)	46.2(2.9)	39.1(4.7)
	1992	61.0(1.4)	64.8(1.9)	57.2(1.7)	67.5(1.4)	35.3(3.6)	49.8(4.9)
	1990	60.3(1.3)	66.3(1.6)	54.6(1.7)	64.8(1.3)	45.4(4.0)	48.1(4.1)
	1986	59.8(1.8)	65.8(1.9)	53.7(2.4)	63.8(2.2)	46.0(3.1)	44.8(4.2)
	1982	63.3(1.7)	66.7(1.9)	60.1(2.1)	67.7(1.6)	44.1(5.0)	51.9(3.3)
	1977	64.0(1.3)	69.6(1.9)	58.5(1.4)	68.8(1.2)	41.8(2.8)	46.8(4.8)
<b>Weather: Wind speed</b>	1994	88.9(0.9)	87.6(1.2)	90.0(1.1)	92.2(1.0)	79.3(3.7)	79.1(3.0)
	1992	90.4(1.0)	90.7(1.3)	90.1(1.1)	92.6(1.1)	80.0(3.1)	89.5(3.0)
	1990	88.8(0.9)	88.0(1.3)	89.7(1.0)	92.2(0.7)	79.1(4.3)	78.5(5.0)
	1986	87.0(1.0)	87.9(1.6)	86.1(1.4)	89.7(1.1)	75.8(2.1)	79.6(4.5)
	1982	77.5(1.3)	77.4(1.6)	77.5(1.8)	80.1(1.1)	66.1(4.6)	67.0(5.0)
	1977	87.7(1.1)	86.5(1.7)	88.8(0.9)	91.4(0.7)	70.3(3.1)	80.1(4.5)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Weather: Sunrise</b>	1994	63.0(1.6)	59.0(2.0)	66.7(2.0)	66.4(1.7)	54.0(6.6)	49.8(3.0)
	1992	63.3(1.4)	59.8(1.7)	66.7(1.8)	65.0(1.7)	55.8(2.9)	56.7(6.4)
	1990	63.2(1.3)	58.8(1.5)	67.4(1.9)	65.9(1.4)	51.6(3.7)	58.8(3.6)
	1986	64.0(1.2)	61.6(1.5)	66.5(1.5)	65.1(1.3)	57.4(2.4)	66.2(4.5)
	1982	54.2(1.3)	53.5(1.8)	54.8(1.7)	54.7(1.5)	50.8(3.3)	55.2(6.2)
	1977	51.1(1.6)	49.8(2.0)	52.5(1.8)	52.7(1.9)	45.0(2.9)	39.5(6.0)
<b>Weather: Rainfall</b>	1994	76.2(1.0)	76.0(1.3)	76.4(1.5)	80.0(1.0)	65.5(4.7)	65.5(4.5)
	1992	77.0(1.4)	78.0(1.8)	76.0(1.6)	81.2(1.6)	63.4(4.1)	59.4(5.4)
	1990	75.8(1.2)	75.1(1.5)	76.4(1.5)	79.2(1.2)	64.7(3.5)	64.8(3.4)
	1986	76.4(1.2)	77.1(1.8)	75.8(1.3)	81.3(1.3)	59.6(3.5)	59.7(5.3)
	1982	69.0(1.5)	69.3(1.9)	68.7(1.8)	72.9(1.4)	52.2(3.4)	50.8(5.3)
	1977	79.8(1.3)	79.8(1.7)	79.9(1.6)	84.1(1.1)	59.7(2.3)	70.0(5.3)
<b>Weather: Humidity</b>	1994	82.3(1.1)	79.2(1.5)	85.1(1.6)	86.1(1.3)	72.4(4.8)	67.9(5.6)
	1992	83.0(1.0)	81.1(1.4)	84.9(1.2)	87.0(1.0)	66.1(3.2)	74.3(3.5)
	1990	83.2(1.2)	81.7(1.6)	84.6(1.2)	87.0(0.9)	70.9(4.4)	71.9(4.8)
	1986	80.0(1.1)	79.7(1.4)	80.3(2.2)	83.8(1.4)	65.2(2.8)	68.7(4.7)
	1982	68.9(1.5)	70.6(1.7)	67.3(2.1)	72.0(1.6)	56.8(3.8)	49.9(3.8)
	1977	80.6(1.0)	79.9(1.4)	81.4(1.0)	83.5(1.0)	67.9(2.2)	72.5(3.8)
<b>Weather: First day of spring</b>	1994	59.1(1.7)	61.9(1.9)	56.7(2.1)	61.9(2.0)	53.0(4.7)	45.5(4.4)
	1992	61.0(1.6)	62.8(2.0)	59.2(1.8)	63.8(1.7)	53.1(3.2)	48.0(6.5)
	1990	60.6(1.2)	62.3(1.6)	59.0(1.3)	63.0(1.3)	52.7(2.9)	57.5(3.2)
	1986	64.2(1.0)	64.8(1.6)	63.6(2.5)	66.6(1.2)	55.5(2.4)	56.9(3.2)
	1982	65.1(1.2)	66.3(1.6)	64.0(1.9)	66.3(1.4)	59.2(2.3)	60.8(4.8)
	1977	62.0(1.4)	64.8(1.6)	59.2(1.8)	63.4(1.4)	61.2(2.8)	41.0(7.9)
<b>Weather: Average temperature</b>	1994	62.6(1.2)	60.2(1.7)	64.7(1.5)	65.5(1.3)	56.5(3.3)	50.1(4.1)
	1992	63.7(1.3)	64.9(2.1)	62.5(1.4)	65.8(1.3)	54.7(2.5)	60.6(6.2)
	1990	60.2(1.6)	60.7(1.9)	59.7(2.0)	63.7(1.6)	50.9(3.4)	43.5(5.9)
	1986	61.0(1.6)	62.2(1.8)	59.7(2.3)	62.8(1.9)	54.8(2.8)	53.0(5.6)
	1982	54.2(1.3)	55.5(1.5)	53.0(1.7)	56.1(1.4)	48.3(3.2)	41.5(4.5)
	1977	62.2(1.3)	61.2(1.7)	63.2(1.5)	64.9(1.3)	49.9(3.3)	56.5(5.6)
<b>Communicating on the moon</b>	1994	61.8(1.2)	70.5(1.5)	53.9(1.5)	65.1(1.5)	52.0(2.2)	50.5(2.9)
	1992	62.3(1.4)	68.5(1.5)	56.1(2.0)	64.7(1.6)	47.4(3.7)	63.0(3.1)
	1990	61.5(1.3)	69.9(1.8)	53.4(1.7)	63.6(1.4)	49.4(3.1)	63.9(5.2)
	1986	60.5(1.2)	67.0(2.1)	54.1(2.4)	61.8(1.5)	53.4(3.1)	55.9(6.2)
	1982	55.5(1.5)	66.4(1.3)	45.2(2.0)	57.7(1.7)	42.2(2.6)	51.2(3.0)
	1977	59.3(1.7)	66.1(2.3)	52.4(2.1)	62.8(1.7)	45.8(2.8)	37.3(4.8)
<b>Half-life</b>	1994	47.5(1.7)	49.0(1.7)	46.3(2.4)	48.4(1.8)	44.2(5.0)	44.5(5.0)
	1992	50.0(1.6)	50.5(2.0)	49.6(1.9)	49.9(1.8)	45.2(4.1)	54.0(5.0)
	1990	50.0(1.4)	50.4(1.7)	49.7(1.7)	50.1(1.5)	49.9(3.2)	49.4(6.9)
	1986	55.1(1.4)	59.7(1.7)	50.5(2.3)	56.1(1.7)	51.0(2.9)	48.6(3.2)
	1982	50.6(2.1)	54.0(2.4)	47.5(2.5)	49.7(2.5)	54.7(2.5)	53.5(4.2)
	1977	49.6(1.5)	50.3(1.8)	48.8(2.0)	51.4(1.8)	44.4(3.6)	35.9(5.4)
<b>Speed of light and sound</b>	1994	19.3(1.4)	19.9(1.3)	18.8(2.0)	21.3(1.5)	14.0(4.5)	12.6(2.8)
	1992	20.2(1.2)	22.0(1.5)	18.5(1.4)	22.6(1.4)	10.7(2.6)	12.2(3.6)
	1990	18.5(1.1)	21.4(1.5)	15.8(1.4)	20.4(1.2)	11.5(2.0)	13.1(2.9)
	1986	14.9(1.3)	17.6(1.4)	12.4(1.8)	15.8(1.5)	10.5(1.3)	11.2(3.9)
	1977	16.7(1.3)	17.9(1.7)	15.4(1.5)	17.9(1.4)	13.0(1.8)	10.8(3.9)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Angle of reflection</b>	1994	52.8(1.0)	59.8(1.5)	46.6(1.7)	56.6(1.5)	42.3(3.6)	41.5(4.9)
	1992	55.7(1.5)	62.2(1.9)	49.3(2.1)	58.2(1.7)	45.1(3.8)	50.4(2.9)
	1990	56.1(1.4)	64.2(1.6)	48.4(2.0)	59.8(1.4)	40.6(3.2)	51.9(4.4)
	1986	50.8(2.3)	59.9(3.6)	41.8(2.1)	51.9(2.9)	43.9(2.8)	48.9(3.6)
	1982	46.9(1.9)	55.8(2.8)	38.6(1.6)	50.5(1.9)	29.6(3.7)	38.7(5.0)
	1977	47.8(1.1)	56.0(1.8)	39.6(1.6)	51.0(1.3)	31.9(2.3)	35.8(5.4)
<b>Earth's crust: Oldest layers</b>	1994	49.9(1.4)	48.0(1.7)	51.6(2.4)	52.4(1.6)	43.6(5.8)	42.2(4.3)
	1992	50.8(1.3)	51.3(1.8)	50.3(1.8)	54.4(1.5)	35.8(2.4)	46.0(3.9)
	1990	50.7(1.5)	50.1(1.8)	51.3(2.1)	55.2(1.5)	36.5(3.9)	36.4(5.4)
	1986	46.1(1.9)	44.5(1.9)	47.7(3.5)	50.0(2.2)	31.0(2.3)	32.1(3.8)
	1977	42.6(1.5)	42.5(1.9)	42.6(1.9)	46.6(1.6)	22.9(2.3)	30.8(5.2)
<b>Earth's crust: Curved layers</b>	1994	42.5(1.4)	45.8(1.8)	39.5(2.2)	42.5(1.7)	40.7(3.9)	45.9(4.4)
	1992	44.2(1.3)	46.2(1.8)	42.1(1.5)	45.0(1.5)	41.2(3.5)	39.7(4.8)
	1990	44.3(1.5)	44.9(1.8)	43.8(1.8)	46.0(1.6)	38.1(3.0)	39.7(4.3)
	1986	41.6(1.6)	44.2(1.7)	39.0(2.4)	42.7(1.9)	34.9(2.8)	40.2(4.0)
	1977	47.2(1.6)	50.6(1.9)	44.2(1.9)	48.9(1.7)	41.5(3.6)	35.5(3.4)
<b>Measuring current in a circuit</b>	1994	45.1(1.3)	41.6(1.8)	48.3(2.0)	44.6(1.4)	50.7(4.0)	38.0(3.1)
	1992	44.6(1.5)	40.0(2.1)	49.1(1.6)	45.3(1.6)	44.1(3.2)	37.3(4.6)
	1990	43.1(1.1)	40.6(1.3)	45.5(1.6)	43.0(1.3)	45.2(2.4)	39.2(3.6)
	1986	46.0(1.6)	43.9(2.5)	48.1(1.7)	46.0(1.9)	44.4(2.3)	42.3(3.6)
	1982	40.1(1.2)	40.4(1.9)	39.8(1.6)	41.3(1.3)	34.7(3.2)	43.7(5.9)
	1977	39.1(1.2)	37.0(2.2)	41.2(1.8)	39.1(1.2)	36.5(3.3)	49.2(4.2)
<b>Movement of heated water</b>	1994	39.2(1.5)	41.7(1.4)	37.0(2.3)	43.4(1.6)	26.2(6.8)	28.1(3.8)
	1992	36.0(1.3)	38.2(2.0)	33.7(1.6)	38.0(1.5)	27.4(2.3)	28.5(3.8)
	1990	37.5(1.3)	40.4(1.4)	34.8(1.8)	41.0(1.4)	27.4(3.0)	26.8(3.4)
	1986	37.8(1.2)	44.3(1.4)	31.3(2.2)	41.3(1.6)	20.3(2.2)	34.2(3.3)
	1977	34.4(1.9)	40.9(2.7)	27.9(1.6)	38.6(2.0)	15.5(2.1)	17.0(3.9)
<b>Effect of clearing forests</b>	1994	35.1(1.3)	36.8(2.3)	33.5(1.4)	39.9(1.6)	21.3(2.7)	25.3(5.8)
	1992	34.6(1.5)	35.3(2.0)	33.9(1.7)	37.7(1.6)	24.5(3.5)	23.9(4.4)
	1990	36.1(1.3)	40.3(1.5)	32.2(1.7)	39.9(1.3)	27.1(2.9)	21.1(3.0)
	1986	36.2(1.4)	41.0(1.9)	31.5(1.8)	40.6(1.6)	21.4(1.9)	19.9(3.9)
	1982	38.6(1.4)	42.5(2.0)	34.8(1.4)	42.2(1.5)	24.0(3.0)	24.8(5.4)
	1977	44.7(1.7)	52.1(2.0)	37.3(2.3)	49.0(1.7)	26.1(3.1)	23.4(4.0)
<b>Describing the rock cycle</b>	1994	29.7(1.1)	29.0(1.3)	30.4(1.8)	31.4(1.4)	23.9(1.9)	25.6(3.5)
	1992	30.9(1.1)	28.3(1.4)	33.5(1.5)	32.3(1.3)	26.0(3.0)	28.5(4.1)
	1990	29.6(1.2)	29.7(1.5)	29.5(1.8)	29.8(1.4)	29.8(3.0)	26.2(4.3)
	1986	29.8(1.2)	30.3(3.5)	29.4(3.1)	31.0(1.6)	24.8(2.2)	26.1(3.2)
	1982	30.0(1.7)	30.7(2.4)	29.4(2.1)	32.1(2.0)	18.6(2.1)	26.2(3.9)
	1977	31.0(1.6)	28.4(2.1)	33.7(1.5)	32.2(2.0)	26.6(2.8)	19.4(6.1)
<b>Induction of electric current</b>	1994	45.9(1.6)	49.3(2.3)	42.8(2.2)	49.2(1.9)	38.5(3.2)	31.8(2.7)
	1992	45.9(1.5)	49.0(1.7)	42.7(2.2)	48.9(1.8)	32.2(3.6)	38.7(5.6)
	1990	44.9(1.5)	52.1(2.1)	38.0(2.0)	47.4(1.7)	38.1(3.9)	33.6(4.1)
	1986	46.2(1.8)	54.0(2.8)	38.6(1.9)	49.5(2.2)	32.0(2.6)	36.5(4.5)
	1982	34.9(1.5)	44.2(1.8)	26.3(2.0)	36.5(1.6)	28.0(2.7)	28.5(4.6)
	1977	45.0(1.7)	51.1(2.2)	39.3(1.8)	47.0(1.9)	35.7(3.0)	31.7(5.7)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Balancing blocks on seesaw</b>	1994	37.2(1.4)	47.2(1.9)	28.1(1.8)	42.3(1.5)	22.5(3.5)	21.0(3.3)
	1992	38.5(1.4)	47.1(2.0)	29.8(1.7)	43.7(1.7)	17.4(2.1)	27.2(3.5)
	1990	38.6(1.3)	50.6(1.8)	27.1(1.4)	43.9(1.2)	20.5(2.9)	25.3(3.5)
	1986	38.9(1.3)	45.5(1.7)	32.4(2.1)	43.8(1.6)	18.7(2.8)	28.4(3.4)
	1982	42.3(1.6)	54.0(2.1)	31.2(2.0)	46.1(1.8)	23.4(2.1)	29.1(3.3)
	1977	42.8(2.0)	52.9(2.5)	31.5(2.3)	48.2(2.1)	18.9(2.5)	21.6(2.8)
<b>Air masses over oceans</b>	1994	21.3(1.2)	22.7(1.3)	20.0(1.9)	23.6(1.3)	13.0(2.6)	21.6(5.6)
	1992	20.0(1.1)	22.2(1.5)	17.9(1.4)	22.1(1.4)	13.0(2.1)	10.4(2.9)
	1990	19.1(1.3)	20.6(1.4)	17.6(1.6)	20.8(1.4)	13.2(2.0)	16.0(2.9)
	1986	18.5(1.4)	21.1(2.0)	15.9(1.9)	19.1(1.7)	15.8(2.3)	17.0(2.8)
	1977	19.0(1.0)	21.2(1.6)	17.0(1.3)	20.4(1.3)	13.8(1.2)	10.9(2.4)
<b>Product Z: Arthritis</b>	1994	48.8(1.3)	47.9(1.9)	49.8(2.1)	54.5(1.2)	26.7(2.6)	36.4(3.7)
	1992	47.4(1.4)	44.7(2.1)	49.9(1.9)	53.3(1.7)	31.2(2.1)	31.4(3.1)
	1990	47.9(2.0)	44.9(2.2)	51.1(2.1)	54.6(1.8)	28.6(5.5)	30.6(3.5)
	1986	42.5(2.3)	39.9(2.8)	45.1(2.5)	47.6(2.4)	25.6(3.8)	27.9(4.0)
	1982	38.1(1.9)	38.9(2.5)	37.4(1.9)	40.6(2.0)	25.8(3.5)	29.3(5.1)
	1977	41.2(1.3)	36.2(2.0)	45.7(1.7)	44.7(1.4)	24.0(2.9)	29.6(4.3)
<b>Product Z: Harm</b>	1994	81.7(0.9)	79.3(1.3)	84.2(1.3)	84.5(1.0)	72.9(3.2)	72.6(4.0)
	1992	85.1(0.9)	85.1(1.2)	85.1(1.2)	88.2(1.0)	76.5(2.6)	77.4(3.4)
	1990	80.7(1.4)	78.4(1.9)	83.1(1.4)	86.3(1.1)	59.7(4.8)	73.7(3.0)
	1986	81.5(1.4)	79.1(2.0)	83.7(1.4)	84.6(1.6)	67.0(3.3)	77.2(4.1)
	1982	85.1(1.3)	81.5(2.1)	88.6(1.2)	87.5(1.6)	73.4(3.1)	77.3(5.8)
	1977	77.5(1.4)	75.5(1.8)	79.4(1.5)	81.4(1.5)	58.3(2.5)	65.8(4.5)
<b>Product Z: Pain relief</b>	1994	86.1(0.9)	83.5(1.5)	88.7(1.1)	87.8(0.9)	81.4(3.6)	82.7(2.3)
	1992	87.3(0.7)	84.5(1.0)	89.9(1.0)	90.7(0.7)	79.0(2.3)	74.9(2.9)
	1990	83.9(1.2)	82.5(1.5)	85.4(1.5)	87.4(0.9)	75.6(5.4)	72.3(4.2)
	1986	85.3(1.0)	82.4(1.7)	88.3(1.2)	87.4(1.1)	76.4(2.5)	81.8(2.8)
	1982	82.7(1.2)	80.9(1.6)	84.4(1.4)	84.8(1.5)	72.7(2.5)	76.4(3.4)
	1977	80.9(1.1)	78.3(2.0)	83.3(1.1)	84.7(1.0)	63.6(2.4)	67.8(4.6)
<b>Product Z: Feel better</b>	1994	84.4(1.2)	81.8(1.7)	87.0(1.4)	87.5(1.2)	71.3(3.5)	76.0(5.4)
	1992	86.1(0.9)	83.6(1.3)	88.5(1.0)	90.1(0.9)	75.5(3.2)	75.1(3.0)
	1990	81.7(1.4)	79.8(1.9)	83.6(1.5)	86.9(1.2)	63.7(4.2)	70.6(3.1)
	1986	83.5(1.2)	80.9(1.7)	86.0(1.3)	87.5(1.0)	65.5(4.0)	76.3(2.4)
	1982	83.1(1.4)	81.0(1.8)	85.2(1.3)	86.6(1.3)	68.6(4.1)	69.6(4.8)
	1977	76.4(1.6)	73.7(2.3)	78.8(1.5)	81.0(1.5)	56.5(3.1)	56.7(5.3)
<b>Use of controls in experiments</b>	1994	68.2(1.4)	65.3(1.9)	71.1(1.6)	70.2(1.6)	59.4(2.5)	71.4(3.8)
	1992	70.3(0.9)	66.4(1.4)	73.9(1.5)	72.4(1.1)	65.1(2.7)	64.2(3.6)
	1990	70.1(1.5)	67.6(1.7)	72.8(1.6)	73.0(1.6)	62.3(4.2)	62.9(3.4)
	1986	71.2(1.4)	69.4(1.9)	73.1(1.7)	73.3(1.7)	64.6(2.4)	64.5(4.3)
	1977	71.1(1.2)	69.5(1.6)	72.8(1.6)	73.8(1.4)	58.0(2.2)	66.2(5.7)
<b>Using a branching key: Shape</b>	1994	77.6(1.1)	76.5(1.6)	78.7(1.5)	80.3(1.2)	63.4(3.2)	74.2(5.3)
	1992	75.6(1.0)	73.8(1.6)	77.2(1.4)	79.8(1.1)	64.7(2.8)	62.4(4.5)
	1990	70.8(1.5)	69.0(1.8)	72.7(1.8)	75.4(1.4)	54.1(4.9)	62.5(3.1)
	1986	69.5(1.3)	66.9(2.6)	72.0(1.4)	73.8(1.5)	53.6(3.0)	54.5(3.9)
	1982	70.8(1.2)	69.5(1.5)	72.0(1.6)	72.6(1.3)	62.2(2.9)	63.0(5.8)
	1977	67.0(1.6)	64.9(1.9)	69.0(1.9)	70.2(1.4)	57.9(3.7)	43.3(6.4)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Using a branching key: Color</b>	1994	45.0(1.3)	42.8(1.8)	47.2(2.0)	46.7(1.5)	35.4(3.6)	44.1(4.2)
	1992	44.4(1.4)	44.2(1.6)	44.6(1.7)	45.5(1.6)	42.3(3.2)	39.7(3.0)
	1990	43.9(1.5)	44.2(2.0)	43.7(1.9)	47.7(1.5)	31.0(3.6)	37.4(3.8)
	1986	40.4(1.6)	40.3(1.8)	40.6(2.1)	42.3(2.1)	31.3(2.3)	40.2(3.4)
	1982	39.3(1.3)	38.1(1.5)	40.4(1.8)	41.8(1.3)	30.9(2.4)	28.3(5.7)
	1977	34.6(1.5)	33.6(1.9)	35.6(1.5)	37.6(1.5)	22.0(3.1)	22.2(4.3)
<b>Reading a pressure gauge</b>	1994	74.0(1.4)	77.1(2.1)	70.9(1.7)	76.3(1.5)	60.2(3.2)	67.1(5.6)
	1992	72.5(1.0)	72.9(1.6)	72.1(1.3)	75.7(1.2)	59.0(2.3)	68.6(2.6)
	1990	71.1(1.4)	74.1(1.9)	67.9(1.8)	75.2(1.4)	58.3(3.6)	60.3(3.8)
	1986	66.7(1.2)	71.6(1.7)	61.8(2.7)	69.9(1.7)	53.7(2.1)	59.8(3.8)
	1982	61.6(1.3)	65.4(2.1)	57.8(1.8)	64.6(1.6)	48.3(3.2)	47.1(3.6)
	1977	57.0(1.9)	62.4(2.0)	51.7(2.4)	59.9(1.9)	43.7(4.2)	44.7(5.3)
<b>Estimating length of a line</b>	1994	62.7(1.1)	64.8(1.7)	60.4(1.9)	64.3(1.3)	52.5(4.1)	58.8(3.2)
	1992	62.8(1.2)	66.0(1.7)	59.8(1.3)	64.0(1.4)	62.1(3.1)	55.3(3.5)
	1990	58.4(1.3)	60.5(1.9)	56.2(1.6)	60.6(1.5)	53.2(4.3)	50.9(4.8)
	1986	62.4(1.4)	65.3(2.0)	59.6(2.4)	64.6(1.7)	55.5(3.6)	53.0(3.3)
	1982	63.6(1.9)	67.3(3.0)	60.2(1.5)	65.4(2.1)	52.3(3.5)	65.2(6.3)
	1977	51.7(1.7)	54.3(1.8)	49.2(2.6)	54.4(1.8)	43.1(3.2)	39.2(5.3)
<b>Rain and corn growth</b>	1994	58.0(1.6)	60.3(2.3)	55.7(1.6)	61.2(2.0)	47.3(4.0)	49.6(3.6)
	1992	56.3(1.3)	57.8(1.9)	54.9(1.6)	58.9(1.6)	49.8(3.3)	47.9(3.1)
	1990	57.3(1.6)	59.6(2.0)	54.9(1.9)	58.0(2.0)	57.0(3.5)	51.3(3.2)
	1986	57.7(1.1)	59.0(2.0)	56.5(1.6)	58.4(1.5)	52.6(2.6)	56.5(5.2)
	1982	60.7(2.2)	62.3(2.4)	59.2(2.6)	63.3(2.5)	47.1(2.9)	53.4(5.2)
	1977	55.5(1.1)	55.2(1.7)	55.8(1.6)	57.6(1.1)	47.9(2.6)	44.2(5.3)
<b>Food shortage: Birth rate</b>	1994	64.8(2.0)	65.8(2.7)	63.7(1.9)	67.4(2.2)	55.8(3.9)	59.1(3.8)
	1992	67.0(1.1)	65.5(1.4)	68.4(1.4)	68.7(1.2)	62.2(2.9)	59.8(3.7)
	1990	64.3(1.4)	62.9(2.0)	65.8(1.5)	67.0(1.6)	58.3(4.4)	56.9(2.9)
	1986	66.4(2.4)	66.1(3.5)	66.7(2.0)	69.5(2.9)	54.5(1.9)	56.6(3.5)
	1982	68.8(1.4)	66.1(2.0)	71.4(1.8)	72.0(1.6)	53.5(3.3)	57.0(4.5)
	1977	70.8(1.1)	69.2(1.5)	72.4(1.5)	74.7(1.0)	54.7(2.7)	49.5(6.3)
<b>Food shortage: Amount of food</b>	1994	91.5(0.9)	90.0(1.3)	93.0(0.8)	94.6(0.7)	79.3(2.5)	87.0(3.4)
	1992	92.6(0.6)	92.2(1.0)	93.0(0.9)	94.8(0.7)	87.0(1.9)	88.3(2.7)
	1990	90.7(1.0)	89.1(1.4)	92.3(1.0)	93.9(0.8)	83.2(3.1)	78.5(4.4)
	1986	89.0(0.7)	89.3(1.1)	88.6(1.1)	91.5(0.8)	78.9(2.8)	82.4(3.4)
	1982	87.0(1.0)	86.8(1.1)	87.1(1.3)	90.0(1.2)	72.5(3.4)	77.6(2.5)
	1977	89.7(0.9)	89.5(1.1)	89.8(1.1)	93.0(0.8)	71.4(3.1)	88.6(3.0)
<b>Food shortage: Markets</b>	1994	61.0(1.5)	59.2(1.9)	62.9(2.1)	64.6(1.6)	48.8(4.4)	51.2(7.7)
	1992	57.7(1.5)	58.5(1.7)	57.0(2.2)	62.8(1.6)	39.2(3.3)	48.6(2.7)
	1990	56.3(1.4)	55.1(2.0)	57.7(1.9)	61.9(1.2)	40.2(5.2)	39.1(2.9)
	1986	59.9(1.6)	62.3(2.1)	57.5(2.0)	64.3(1.8)	40.2(3.1)	52.9(4.4)
	1982	61.5(1.9)	65.4(2.7)	57.8(2.0)	66.5(2.0)	37.7(2.4)	47.7(3.2)
	1977	57.7(1.7)	58.6(2.2)	56.9(2.1)	62.9(1.6)	36.5(3.3)	33.1(6.2)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Food shortage: Weather</b>	1994	54.7(2.3)	55.3(2.8)	54.1(2.4)	57.0(2.9)	41.9(2.7)	46.9(4.1)
	1992	57.5(1.1)	56.7(1.6)	58.3(1.2)	60.6(1.3)	49.2(2.9)	48.5(3.5)
	1990	57.3(1.6)	55.3(1.9)	59.4(1.9)	60.3(1.9)	48.0(2.3)	49.3(5.0)
	1986	56.1(2.3)	57.5(2.6)	54.6(2.7)	58.0(2.7)	48.7(3.9)	49.9(4.5)
	1982	52.1(1.4)	52.3(2.3)	51.8(1.9)	53.9(1.5)	43.2(3.3)	44.3(2.6)
	1977	59.2(1.3)	62.0(1.5)	56.4(1.6)	61.5(1.2)	44.7(2.8)	57.1(5.1)
<b>Predicting snowfall</b>	1994	66.1(1.0)	64.7(1.8)	67.5(1.5)	70.0(1.2)	52.4(3.1)	62.8(4.4)
	1992	64.5(1.3)	65.9(1.6)	63.2(2.0)	68.6(1.4)	52.7(2.8)	53.7(2.7)
	1990	61.8(1.5)	62.5(1.7)	61.1(2.1)	65.7(1.5)	44.7(3.7)	59.0(4.2)
	1986	61.9(2.3)	61.9(2.6)	61.8(2.5)	67.4(2.7)	40.5(3.9)	47.9(4.9)
	1977	47.6(1.6)	47.0(2.2)	48.2(1.6)	49.9(1.8)	39.3(4.7)	34.2(4.6)
<b>Lab balance: Color of rock</b>	1994	83.4(1.3)	81.8(1.3)	85.1(1.9)	87.2(0.9)	68.8(5.9)	75.6(4.4)
	1992	82.5(1.0)	80.5(1.5)	84.3(1.3)	86.5(1.0)	70.9(2.9)	71.6(4.2)
	1990	82.3(1.6)	80.0(2.0)	84.6(1.6)	85.2(1.1)	73.0(6.1)	74.0(2.7)
	1986	81.3(1.2)	78.5(1.7)	84.2(1.8)	85.0(1.4)	70.0(2.6)	66.5(4.4)
	1982	74.9(1.4)	73.9(2.3)	75.8(1.7)	78.7(1.5)	59.5(4.3)	60.0(3.6)
	1977	59.6(1.8)	57.1(1.9)	62.0(2.7)	63.2(1.9)	43.5(3.2)	41.2(5.0)
<b>Lab balance: Accuracy</b>	1994	61.1(1.3)	61.5(1.6)	60.7(2.0)	64.5(1.5)	54.1(2.7)	50.0(6.1)
	1992	61.3(1.4)	61.1(1.8)	61.5(1.9)	64.1(1.7)	55.3(3.1)	48.5(3.6)
	1990	57.4(1.5)	58.1(1.7)	56.8(2.3)	59.0(1.5)	51.5(5.8)	53.9(3.9)
	1986	56.9(2.4)	56.5(2.2)	57.3(3.2)	60.1(2.9)	45.6(2.0)	48.0(8.5)
	1982	56.3(0.8)	58.1(1.6)	54.5(1.5)	58.1(1.1)	46.4(4.1)	52.4(3.1)
	1977	54.4(1.6)	53.9(1.9)	54.9(2.1)	56.7(1.7)	47.6(3.1)	36.4(6.4)
<b>Lab balance: Grams/ounces</b>	1994	40.8(1.3)	41.0(1.9)	40.6(1.6)	41.3(1.4)	43.9(3.9)	36.1(3.6)
	1992	43.9(1.2)	43.3(1.4)	44.5(1.7)	44.8(1.4)	38.5(3.4)	42.2(3.7)
	1990	41.0(1.3)	41.3(1.6)	40.7(2.0)	41.7(1.6)	37.8(3.5)	39.1(3.3)
	1986	43.3(2.2)	41.8(2.2)	44.9(3.0)	44.4(2.8)	40.4(3.0)	37.5(4.1)
	1982	41.3(1.6)	43.6(2.1)	39.1(2.0)	42.2(1.7)	37.2(4.3)	37.5(5.4)
	1977	39.6(1.2)	39.1(1.5)	40.1(1.6)	40.4(1.2)	34.6(2.7)	35.6(5.8)
<b>Human error in measuring time</b>	1994	53.3(1.7)	58.2(1.8)	48.2(1.9)	55.5(2.0)	42.6(2.9)	48.8(5.5)
	1992	52.6(1.4)	56.3(1.9)	49.2(2.0)	55.8(1.7)	43.9(3.2)	43.4(3.3)
	1990	52.7(1.8)	57.7(2.0)	47.4(2.1)	54.0(2.0)	47.2(5.5)	48.3(2.9)
	1986	57.1(2.5)	58.9(2.1)	55.3(3.7)	60.8(3.0)	41.3(4.0)	48.9(3.9)
	1982	48.6(1.7)	54.1(2.1)	43.4(1.8)	49.5(1.7)	43.3(5.2)	42.5(4.7)
	1977	58.5(1.6)	63.2(1.9)	54.1(2.1)	61.4(1.9)	45.0(3.0)	48.0(7.5)
<b>Volume equation</b>	1994	62.3(1.4)	57.9(2.4)	66.8(1.5)	66.3(1.7)	50.6(3.5)	42.8(4.7)
	1992	58.6(1.5)	54.9(1.7)	62.1(2.0)	61.3(1.8)	52.5(2.8)	46.6(3.7)
	1990	57.1(2.2)	53.8(2.7)	60.7(2.4)	60.4(2.1)	50.5(6.8)	41.2(4.1)
	1986	55.3(1.9)	51.9(2.4)	58.7(2.2)	58.4(2.3)	42.8(4.5)	42.5(5.7)
	1982	45.3(1.8)	44.7(2.2)	45.8(1.9)	48.0(2.2)	33.0(3.1)	31.5(2.6)
	1977	33.1(1.7)	30.1(1.5)	35.8(2.7)	36.0(2.0)	19.0(2.1)	21.9(3.5)
<b>Measurement error: Speedometer</b>	1994	33.5(1.0)	40.1(1.8)	26.8(1.6)	32.4(1.0)	38.4(3.3)	35.3(4.6)
	1992	35.8(1.2)	41.2(1.7)	30.8(1.6)	34.4(1.4)	42.6(3.2)	36.7(3.1)
	1990	36.8(1.5)	40.3(2.0)	33.1(1.8)	34.3(1.3)	51.8(6.0)	28.9(4.4)
	1986	34.3(1.0)	40.9(1.8)	27.9(1.5)	31.0(1.3)	45.7(2.2)	41.0(3.1)
	1982	40.7(2.2)	45.2(2.6)	36.6(2.4)	37.5(2.2)	59.4(4.1)	38.8(6.0)
	1977	44.3(1.7)	50.4(2.3)	38.3(2.1)	41.2(2.0)	59.1(1.9)	50.8(5.9)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Measurement error: Tapemeasure</b>	1994	49.7(1.7)	46.3(1.9)	53.1(1.9)	50.7(2.0)	43.5(4.3)	46.4(4.7)
	1992	46.2(0.9)	42.4(1.6)	49.8(1.4)	47.1(1.2)	44.9(3.5)	38.9(2.9)
	1990	46.4(1.4)	44.5(1.7)	48.4(2.1)	47.7(1.2)	42.2(6.0)	40.7(3.7)
	1986	46.3(1.6)	45.5(1.9)	47.1(2.2)	45.8(1.9)	48.7(2.8)	45.7(4.1)
	1982	43.9(1.4)	40.5(2.2)	47.1(1.8)	45.2(1.4)	36.9(2.7)	42.3(5.2)
	1977	46.0(1.2)	43.6(1.3)	48.3(2.0)	47.2(1.5)	40.6(2.7)	42.5(5.1)
<b>Measurement error: Computer</b>	1994	21.3(1.0)	21.2(2.0)	21.4(1.4)	18.2(1.2)	36.3(2.4)	25.6(2.7)
	1992	22.3(1.1)	20.1(1.4)	24.3(1.5)	20.2(1.2)	27.8(2.7)	26.8(3.8)
	1990	24.6(1.2)	24.2(1.6)	25.1(1.4)	20.3(1.2)	41.8(3.5)	27.2(3.3)
	1986	24.5(1.3)	25.6(1.9)	23.5(1.9)	21.4(1.8)	35.8(2.8)	34.9(4.2)
	1982	28.6(1.6)	33.3(2.1)	24.3(2.0)	25.6(1.5)	44.0(3.5)	30.2(5.4)
	1977	31.6(1.7)	33.0(2.3)	30.2(1.8)	28.7(1.8)	42.8(2.9)	41.5(4.9)
<b>Meaning of 20% chance of rain</b>	1994	22.4(1.1)	25.4(1.8)	19.4(1.2)	24.0(1.4)	13.6(2.8)	22.0(6.2)
	1992	23.8(1.3)	24.4(1.3)	23.1(1.9)	26.7(1.6)	15.2(2.5)	15.3(2.8)
	1990	21.5(1.1)	24.7(1.7)	18.0(1.2)	22.2(1.1)	21.5(4.7)	18.2(2.3)
	1986	19.6(0.9)	20.6(1.3)	18.7(1.5)	21.4(1.2)	15.8(3.1)	9.7(2.1)
	1982	15.7(1.3)	19.6(1.7)	12.1(1.7)	16.1(1.7)	14.0(2.5)	14.1(1.5)
	1977	14.2(0.9)	16.0(1.3)	12.5(1.3)	15.6(1.2)	9.2(1.6)	7.1(1.7)
<b>Seasonal rainfall graph</b>	1994	37.3(1.2)	37.7(1.7)	36.9(2.3)	39.4(1.5)	28.8(3.3)	31.9(3.0)
	1992	39.8(1.4)	41.1(1.6)	38.6(1.8)	42.9(1.6)	30.7(3.8)	29.5(3.3)
	1990	38.4(1.7)	42.1(2.2)	34.4(1.7)	42.6(2.0)	23.2(3.2)	32.2(3.4)
	1986	36.0(1.9)	39.5(2.9)	32.6(1.8)	38.0(2.3)	30.5(2.7)	27.0(4.5)
	1977	32.5(1.7)	35.1(2.0)	30.0(2.1)	34.2(1.8)	27.5(3.0)	20.3(4.9)
<b>Mold growth experiment</b>	1994	23.3(1.2)	24.4(1.4)	22.3(1.6)	24.9(1.3)	14.0(2.2)	19.7(2.6)
	1992	21.9(1.0)	24.6(1.5)	19.4(1.3)	25.6(1.2)	12.7(2.0)	9.7(1.8)
	1990	21.0(1.4)	23.8(1.8)	18.0(1.4)	22.8(1.7)	18.0(3.2)	10.1(2.1)
	1986	20.0(1.3)	20.9(1.6)	19.2(1.5)	21.7(1.5)	14.2(1.4)	15.2(3.4)
	1982	23.4(1.1)	23.8(1.5)	23.1(1.8)	24.7(1.3)	17.1(2.6)	18.7(3.5)
	1977	28.9(1.2)	29.4(1.8)	28.4(1.3)	31.9(1.5)	15.2(2.2)	15.7(4.2)
<b>Invention of telephone</b>	1994	54.9(1.4)	60.9(1.7)	48.8(1.7)	58.1(1.8)	42.3(4.3)	50.6(3.0)
	1992	55.0(1.6)	59.7(2.1)	50.6(2.3)	59.8(2.0)	41.5(2.5)	46.9(2.9)
	1990	52.9(1.7)	59.4(2.2)	46.0(2.0)	58.0(1.7)	36.4(5.3)	44.8(4.7)
	1986	49.6(1.5)	58.4(2.3)	40.9(1.7)	52.6(1.6)	38.6(2.9)	36.7(4.1)
	1977	49.0(1.4)	55.5(1.5)	42.7(1.8)	51.6(1.3)	37.1(4.1)	41.5(4.7)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Finding cause of a sore throat</b>	1994	88.3(1.0)	84.1(1.6)	92.4(1.1)	91.8(1.0)	81.2(2.7)	76.3(3.5)
	1992	88.7(1.0)	85.6(1.4)	91.7(1.0)	91.5(1.0)	80.6(2.5)	86.8(2.7)
	1990	88.0(1.1)	84.7(1.3)	91.0(1.2)	92.3(0.9)	78.6(3.7)	75.0(4.9)
	1986	87.4(0.6)	83.5(1.3)	91.3(1.3)	90.0(0.6)	77.0(2.5)	82.8(2.1)
	1982	84.4(1.2)	79.6(1.6)	88.7(1.2)	86.6(1.3)	74.3(2.8)	74.7(3.8)
	1977	87.2(0.7)	83.9(1.2)	90.2(1.0)	88.4(0.8)	78.9(2.8)	88.2(2.4)
<b>Plants bend toward light</b>	1994	73.2(1.6)	73.9(1.8)	72.5(2.1)	80.5(1.3)	50.5(3.4)	49.3(5.8)
	1992	72.3(1.4)	74.9(1.7)	69.6(1.5)	77.4(1.2)	53.7(4.0)	64.0(6.3)
	1990	67.1(1.4)	71.5(1.6)	63.2(1.9)	73.5(1.1)	42.5(4.0)	55.8(4.5)
	1986	67.9(1.4)	70.3(2.1)	65.4(1.9)	73.5(1.2)	43.7(4.7)	58.2(4.6)
	1982	68.8(1.3)	71.4(2.0)	66.1(1.9)	73.6(1.2)	47.1(3.1)	47.6(3.6)
<b>Observing a sealed aquarium</b>	1994	78.3(1.2)	78.9(1.3)	77.9(1.6)	82.0(1.2)	71.4(2.3)	65.7(4.4)
	1992	75.3(1.1)	75.7(1.8)	74.9(1.5)	78.3(1.3)	65.5(3.5)	69.4(4.0)
	1990	75.3(1.3)	78.1(1.5)	72.8(1.8)	79.0(1.0)	62.8(4.3)	68.3(4.7)
	1986	77.6(1.3)	79.2(1.8)	76.1(1.8)	79.2(1.5)	74.8(4.0)	69.3(5.2)
	1982	79.4(1.4)	80.0(1.6)	78.9(1.7)	81.2(1.7)	71.8(3.7)	73.1(3.5)
	1977	83.1(0.9)	83.0(1.3)	83.1(1.1)	84.8(0.9)	75.5(1.9)	69.6(3.9)
<b>Tissues and cells</b>	1994	67.6(1.3)	70.4(1.6)	65.0(2.0)	70.1(1.4)	60.9(2.6)	55.7(3.9)
	1992	65.7(1.5)	66.3(1.8)	65.1(1.9)	67.5(1.7)	58.3(4.8)	61.3(5.6)
	1990	65.7(1.4)	69.5(1.8)	62.4(1.8)	67.1(1.6)	58.6(3.2)	67.5(5.2)
	1986	68.3(1.5)	69.6(1.8)	67.1(1.7)	70.7(1.8)	59.8(3.3)	58.0(4.9)
	1982	63.7(1.5)	64.3(1.9)	63.1(2.0)	65.8(1.7)	54.1(2.8)	57.0(6.1)
	1977	65.2(1.2)	67.0(1.7)	63.5(1.4)	66.9(1.4)	54.8(2.1)	60.3(3.6)
<b>Melting crushed ice</b>	1994	60.9(1.6)	65.3(1.9)	56.6(2.1)	67.9(1.7)	36.4(2.6)	49.6(3.5)
	1992	64.3(1.4)	70.8(1.7)	57.5(1.9)	69.4(1.5)	39.1(3.9)	55.7(5.1)
	1990	64.6(1.9)	70.3(2.2)	58.8(2.2)	70.3(1.7)	41.2(6.0)	52.9(6.7)
	1986	59.3(1.2)	66.3(1.4)	52.8(2.0)	63.9(1.3)	39.6(3.7)	41.6(5.1)
	1982	61.6(1.4)	69.1(1.3)	54.8(2.0)	66.9(1.4)	35.5(3.0)	37.7(4.5)
	1977	61.2(1.3)	70.5(1.8)	52.2(1.5)	65.6(1.1)	31.4(2.5)	51.1(4.8)
<b>Function of red blood cells</b>	1994	57.2(1.6)	61.3(1.9)	53.6(2.1)	60.3(1.7)	47.0(3.6)	47.4(3.8)
	1992	60.5(1.1)	61.7(1.7)	59.4(1.8)	63.0(1.3)	52.7(3.8)	53.5(4.4)
	1990	64.4(1.2)	68.8(1.6)	60.6(1.7)	66.5(1.3)	55.0(3.4)	62.7(6.2)
	1986	63.8(1.4)	67.0(1.5)	60.7(2.6)	63.5(1.6)	67.2(4.1)	60.2(5.2)
	1982	64.5(2.0)	69.2(1.9)	60.2(2.6)	66.1(1.7)	58.9(4.9)	56.0(8.9)
	1977	65.9(1.2)	69.2(1.7)	62.7(1.8)	66.2(1.3)	60.3(3.6)	67.4(5.5)
<b>Water temperature for swimming</b>	1994	43.7(1.8)	49.5(2.3)	37.8(2.0)	49.3(2.1)	18.7(1.5)	39.6(5.6)
	1992	46.0(1.3)	53.9(1.9)	37.6(1.5)	51.2(1.5)	27.0(3.5)	26.4(3.7)
	1990	44.5(1.7)	51.3(1.8)	37.7(1.9)	49.4(2.0)	25.4(3.3)	26.4(4.1)
	1986	46.8(1.2)	54.5(1.9)	39.8(1.6)	51.7(1.3)	28.8(2.6)	24.5(3.4)
	1977	48.1(1.5)	58.6(1.9)	37.8(1.8)	52.2(1.6)	22.7(3.4)	41.2(6.2)
<b>Sulfur dioxide and acid rain</b>	1994	67.0(1.4)	74.7(1.8)	59.3(1.9)	73.1(1.5)	48.8(4.4)	51.0(3.5)
	1992	71.1(1.0)	76.5(1.5)	65.5(1.3)	75.6(1.1)	51.1(4.4)	60.6(5.9)
	1990	71.1(1.6)	77.3(1.9)	64.9(1.8)	76.4(1.2)	53.6(4.1)	51.2(***)
	1986	65.2(1.0)	72.2(1.7)	58.8(1.6)	69.1(1.2)	51.4(3.4)	44.4(4.7)
	1982	44.7(1.5)	56.5(2.2)	34.2(1.9)	47.9(1.6)	26.1(2.9)	38.0(4.5)
	1977	31.0(2.0)	39.7(2.2)	22.3(1.9)	33.5(2.3)	17.9(2.3)	18.1(3.6)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Seed germination</b>	1994	28.6(1.4)	31.6(2.0)	25.8(2.0)	30.5(1.8)	26.1(3.8)	18.0(3.7)
	1992	31.3(1.1)	37.6(1.5)	25.1(1.5)	32.3(1.1)	29.3(3.1)	26.0(3.5)
	1990	34.1(1.2)	37.3(1.6)	31.2(1.5)	35.3(1.6)	29.1(2.7)	30.3(4.7)
	1986	38.8(1.6)	43.6(2.4)	34.0(1.4)	40.2(1.9)	37.6(3.0)	27.5(3.8)
	1982	33.7(1.3)	36.4(1.7)	30.9(2.1)	35.1(1.4)	27.7(3.6)	25.8(4.9)
<b>Efficient use of grain as food</b>	1994	25.4(1.5)	28.3(2.1)	22.7(1.4)	27.0(1.9)	21.3(2.9)	19.5(4.6)
	1992	26.4(1.2)	28.6(1.6)	24.2(1.8)	29.2(1.4)	17.8(1.9)	19.7(3.9)
	1990	22.9(1.0)	24.8(1.4)	21.3(1.4)	25.4(1.1)	15.0(2.2)	17.8(3.7)
	1986	25.6(1.4)	27.9(2.1)	23.2(1.7)	28.0(1.7)	13.3(1.8)	26.1(5.1)
	1982	29.7(1.9)	33.3(2.2)	26.3(2.1)	30.8(2.2)	25.0(2.1)	31.2(8.8)
	1977	32.0(0.9)	35.6(1.6)	28.5(1.0)	33.6(1.1)	23.4(2.8)	25.2(5.3)
<b>World population growth</b>	1994	18.6(1.2)	26.3(1.6)	11.5(1.2)	22.6(1.3)	5.9(1.5)	8.9(1.8)
	1992	17.7(1.1)	25.2(1.9)	10.1(0.9)	21.0(1.4)	6.2(1.2)	10.2(2.5)
	1990	17.8(1.0)	24.3(1.6)	12.1(1.1)	20.6(1.1)	10.3(1.9)	10.3(2.3)
	1986	19.3(1.7)	23.9(2.5)	14.7(1.5)	21.2(2.0)	10.4(2.0)	15.0(3.8)
	1982	18.9(1.0)	25.1(1.6)	13.1(1.1)	21.4(1.2)	8.4(1.9)	6.6(1.7)
	1977	22.4(1.2)	29.5(1.7)	15.4(1.3)	24.8(1.2)	9.1(1.6)	10.9(4.1)
<b>Saving resources: Insulation</b>	1994	77.4(1.1)	79.5(1.3)	75.6(1.4)	82.1(1.1)	65.9(3.5)	62.7(3.2)
	1992	77.1(1.0)	80.2(1.4)	74.1(1.7)	81.2(0.9)	68.9(2.8)	63.1(4.0)
	1990	74.0(1.2)	76.6(1.5)	71.8(1.4)	75.7(1.4)	71.2(2.4)	66.5(4.1)
	1986	82.9(1.2)	83.7(1.8)	82.1(1.6)	83.1(1.5)	84.0(2.6)	80.3(2.8)
	1982	90.0(1.0)	90.7(1.5)	89.2(1.2)	91.2(1.2)	84.0(2.1)	90.9(2.5)
	1977	94.2(0.5)	95.2(0.7)	93.2(0.7)	95.8(0.5)	86.8(1.8)	84.1(3.1)
<b>Saving resources: Planting</b>	1994	75.6(1.1)	76.8(1.6)	74.6(1.6)	79.8(1.1)	64.4(3.2)	60.5(4.9)
	1992	76.2(1.1)	77.2(1.4)	75.2(1.7)	78.3(1.2)	68.6(3.8)	73.7(3.5)
	1990	76.9(1.2)	79.8(1.4)	74.3(1.9)	80.4(1.3)	64.2(3.2)	70.0(4.5)
	1986	71.1(1.6)	74.5(1.9)	67.8(2.0)	74.7(2.1)	55.7(4.1)	62.3(4.7)
	1982	64.0(1.0)	64.3(1.6)	63.7(1.8)	66.9(1.2)	49.5(3.0)	57.5(6.9)
	1977	79.8(0.8)	82.6(0.9)	77.1(1.2)	82.5(0.7)	61.7(2.5)	77.3(2.9)
<b>Saving resources: Throwaways</b>	1994	74.8(1.2)	74.0(1.5)	75.7(1.7)	81.0(1.2)	53.0(3.3)	61.6(3.7)
	1992	74.6(1.2)	73.9(1.6)	75.4(1.7)	80.9(1.0)	58.2(4.2)	57.0(5.6)
	1990	73.0(1.2)	74.1(1.3)	72.0(1.7)	77.4(1.1)	58.1(3.0)	64.7(4.9)
	1986	67.2(1.3)	69.9(1.8)	64.4(1.4)	70.4(1.6)	55.3(2.4)	55.1(3.6)
	1982	68.7(1.5)	69.9(2.2)	67.5(2.0)	72.0(1.6)	50.6(1.7)	58.8(3.7)
	1977	72.9(0.8)	76.5(1.2)	69.4(1.0)	76.3(0.9)	52.8(2.7)	64.5(4.7)
<b>Saving resources: Lawns</b>	1994	68.5(1.5)	70.6(1.8)	66.6(1.8)	74.4(1.5)	50.6(2.7)	49.4(4.9)
	1992	69.2(1.4)	71.7(1.9)	66.7(1.9)	73.5(1.6)	53.4(3.3)	65.6(5.8)
	1990	67.8(1.6)	68.6(1.8)	67.2(2.1)	73.3(1.2)	47.8(3.9)	62.9(3.6)
	1986	69.4(1.6)	69.5(1.9)	69.3(1.9)	73.6(1.7)	50.6(3.6)	60.5(8.1)
	1982	71.0(1.3)	74.4(1.6)	67.4(1.6)	74.5(1.4)	53.3(3.1)	64.5(6.1)
	1977	63.4(1.4)	65.6(2.0)	61.2(1.8)	66.1(1.5)	45.3(3.2)	60.8(5.9)
<b>Plate tectonics: Mountains</b>	1994	76.0(1.4)	78.4(1.6)	74.0(1.7)	81.6(1.5)	58.1(4.1)	62.4(3.1)
	1992	74.9(1.5)	79.4(2.1)	70.4(1.8)	79.1(1.4)	58.9(4.1)	65.5(6.3)
	1990	73.8(1.6)	76.5(1.6)	71.4(2.2)	79.4(1.4)	51.2(3.5)	66.0(5.6)
	1986	72.5(1.3)	74.5(2.0)	70.5(1.5)	77.6(1.5)	49.8(3.1)	59.0(8.7)
	1982	69.4(1.5)	72.3(1.8)	66.4(2.3)	72.8(1.6)	50.1(3.3)	63.7(4.3)
	1977	79.1(1.0)	80.4(1.3)	77.8(1.3)	81.8(0.9)	59.4(2.6)	78.1(5.1)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Plate tectonics: Weather</b>	1994	77.9(1.3)	80.3(1.5)	75.9(1.8)	84.1(1.0)	59.7(2.8)	59.1(5.4)
	1992	77.0(1.2)	80.3(1.5)	73.7(1.4)	80.9(1.2)	66.6(3.7)	65.9(4.7)
	1990	76.8(1.5)	78.5(1.6)	75.3(2.1)	82.9(1.2)	58.6(4.7)	60.0(4.5)
	1986	73.9(1.6)	75.1(2.0)	72.6(1.6)	78.3(1.5)	55.1(4.9)	63.8(7.3)
	1982	72.0(1.3)	75.8(1.6)	68.1(1.7)	75.7(1.6)	57.7(2.3)	54.1(4.1)
	1977	65.6(1.2)	69.1(1.5)	62.2(1.7)	69.6(1.3)	41.3(2.0)	53.0(3.1)
<b>Plate tectonics: Earthquakes</b>	1994	90.8(0.9)	90.7(1.2)	90.9(1.1)	94.2(0.7)	83.4(2.6)	77.7(5.0)
	1992	90.9(0.7)	91.3(0.9)	90.5(1.1)	93.2(0.7)	83.2(2.1)	86.4(3.0)
	1990	90.3(1.0)	88.9(1.5)	91.5(1.0)	92.7(0.8)	80.7(4.6)	88.4(2.4)
	1986	88.8(0.9)	89.9(1.7)	87.8(1.2)	92.0(0.9)	72.7(3.0)	84.8(6.0)
	1982	89.1(0.9)	89.4(1.3)	88.9(1.1)	91.1(0.9)	78.5(2.4)	84.5(4.5)
	1977	91.2(0.6)	91.9(0.8)	90.6(0.8)	93.3(0.5)	77.8(2.1)	85.1(4.8)
<b>Plate tectonics: Continents</b>	1994	84.9(1.3)	86.2(1.7)	83.7(1.3)	89.9(1.3)	70.3(3.9)	71.9(5.6)
	1992	84.9(1.1)	87.8(1.1)	82.0(1.5)	89.1(0.9)	69.6(3.8)	79.1(4.0)
	1990	83.2(1.3)	83.4(1.5)	83.1(1.8)	88.5(0.9)	64.1(3.3)	72.8(4.2)
	1986	80.9(1.3)	82.6(1.8)	79.3(1.5)	85.8(1.4)	61.1(3.9)	64.9(6.1)
	1982	76.7(1.6)	78.7(1.9)	74.7(2.3)	81.2(1.5)	54.5(3.8)	60.9(5.9)
	1977	80.9(1.3)	80.8(1.3)	81.0(1.5)	85.8(0.9)	54.0(3.0)	59.5(3.7)
<b>Plate tectonics: Moon</b>	1994	84.9(1.2)	85.2(1.3)	84.7(1.3)	90.0(1.0)	69.8(3.3)	67.8(4.7)
	1992	84.9(1.2)	86.5(1.4)	83.2(1.7)	88.3(1.1)	73.5(4.3)	78.8(5.1)
	1990	83.2(1.4)	82.1(1.6)	84.1(1.7)	88.5(1.0)	63.6(3.8)	75.8(4.1)
	1986	81.0(1.6)	81.0(2.4)	81.0(1.4)	85.1(1.3)	61.6(6.8)	76.5(5.5)
	1982	84.1(1.1)	84.1(1.4)	84.1(1.4)	87.6(1.0)	66.6(2.9)	73.7(3.6)
	1977	73.3(1.0)	72.1(1.3)	74.5(1.3)	76.4(1.2)	55.7(2.4)	59.4(3.4)
<b>Components of solar system</b>	1994	79.2(1.1)	84.3(1.5)	74.6(1.5)	80.6(1.2)	73.8(3.5)	76.4(4.5)
	1992	77.9(1.4)	82.4(1.5)	73.4(1.8)	81.0(1.4)	61.6(3.7)	80.7(3.8)
	1990	72.4(1.3)	76.0(1.5)	69.3(1.5)	74.4(1.5)	63.7(2.9)	70.5(3.2)
	1986	72.7(1.8)	79.9(1.7)	65.5(2.6)	75.8(2.0)	57.8(4.3)	68.5(3.4)
	1982	69.7(1.5)	75.2(1.7)	64.5(1.7)	73.2(1.6)	53.3(4.0)	55.3(4.9)
	1977	78.3(0.9)	83.1(1.1)	73.7(1.3)	80.7(1.0)	62.9(2.1)	76.9(3.4)
<b>Weather: Wind speed</b>	1994	93.2(0.8)	91.1(1.1)	95.3(0.8)	96.1(0.5)	84.8(2.2)	85.3(3.8)
	1992	93.2(0.8)	92.6(1.1)	93.7(1.2)	95.6(0.4)	85.2(2.9)	90.7(3.7)
	1990	92.9(1.0)	91.5(1.4)	94.2(0.9)	95.4(0.7)	85.7(3.2)	83.0(4.9)
	1986	92.8(1.2)	91.1(1.6)	94.5(1.2)	94.8(0.9)	82.4(5.5)	89.6(2.3)
	1982	84.7(1.2)	85.1(1.3)	84.4(1.7)	87.6(1.1)	68.4(2.5)	79.5(4.4)
	1977	94.0(0.7)	94.7(0.7)	93.2(0.9)	95.3(0.6)	85.7(2.6)	90.6(2.4)
<b>Weather: Sunrise</b>	1994	61.1(1.7)	56.5(2.4)	65.5(1.9)	63.3(2.0)	56.1(3.5)	45.2(5.1)
	1992	63.1(1.5)	62.2(2.0)	64.0(2.0)	63.2(1.5)	62.1(2.1)	67.8(5.2)
	1990	63.1(1.2)	59.7(1.6)	66.1(1.6)	65.8(1.1)	54.5(4.1)	54.4(3.9)
	1986	61.7(1.3)	62.9(1.7)	60.5(1.9)	63.5(1.4)	51.5(2.6)	54.7(3.8)
	1982	50.7(1.6)	51.3(1.7)	50.1(2.0)	50.3(2.0)	51.9(2.7)	55.1(5.7)
	1977	56.2(1.4)	53.0(1.6)	59.4(1.8)	57.4(1.5)	48.1(3.1)	49.5(4.4)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Weather: Rainfall</b>	1994	84.8(1.2)	85.6(1.7)	84.4(1.3)	89.0(1.0)	77.0(2.1)	65.4(6.6)
	1992	85.4(1.0)	85.2(1.3)	85.5(1.4)	89.3(0.8)	69.2(3.4)	84.0(4.0)
	1990	84.0(1.5)	84.7(1.7)	83.4(1.7)	88.4(1.0)	73.9(3.7)	67.1(5.9)
	1986	84.9(1.0)	85.9(1.4)	83.9(1.3)	87.8(0.9)	74.3(3.4)	75.7(4.5)
	1982	82.2(1.4)	83.1(1.5)	81.4(1.8)	86.7(1.2)	58.2(2.1)	73.3(8.2)
	1977	89.9(0.7)	90.8(0.9)	89.1(0.8)	92.3(0.6)	75.7(3.1)	84.0(3.1)
<b>Weather: Humidity</b>	1994	89.7(0.9)	88.5(1.6)	90.9(0.9)	92.1(0.8)	81.9(2.4)	80.9(3.7)
	1992	90.4(0.8)	89.2(1.1)	91.6(1.0)	92.9(0.8)	82.9(2.8)	86.4(2.5)
	1990	90.1(0.8)	88.5(1.1)	91.6(1.0)	93.2(0.7)	81.3(3.0)	81.2(3.4)
	1986	90.4(0.8)	88.6(1.0)	92.1(1.0)	92.0(1.0)	83.6(3.0)	82.8(2.4)
	1982	78.5(1.2)	80.9(1.6)	76.3(1.6)	82.1(1.1)	62.8(2.3)	62.9(4.5)
	1977	89.4(0.6)	89.1(0.9)	89.7(0.9)	91.2(0.7)	80.2(1.9)	78.2(3.9)
<b>Weather: First day of spring</b>	1994	67.4(1.6)	68.4(2.1)	66.5(1.8)	71.3(1.7)	55.1(3.8)	53.8(4.1)
	1992	71.8(1.3)	73.8(1.8)	69.8(1.7)	73.4(1.4)	64.8(4.9)	72.6(3.6)
	1990	71.0(1.3)	70.4(1.6)	71.5(1.7)	75.6(1.1)	55.4(3.6)	58.4(4.4)
	1986	68.1(1.3)	70.3(1.6)	65.9(1.8)	71.0(1.6)	57.0(5.3)	58.8(4.7)
	1982	62.6(1.4)	64.0(1.9)	61.3(1.8)	64.3(1.6)	57.9(2.3)	52.6(4.5)
	1977	68.2(1.0)	69.1(1.5)	67.4(1.6)	70.7(1.0)	56.4(2.4)	51.5(4.9)
<b>Weather: Average temperature</b>	1994	69.4(1.2)	69.9(1.8)	69.1(1.7)	72.6(1.5)	61.1(2.6)	59.1(4.5)
	1992	67.4(1.3)	67.5(1.8)	67.2(1.6)	71.5(1.4)	57.4(3.3)	57.8(5.4)
	1990	65.6(1.5)	65.8(2.2)	65.4(1.8)	68.5(1.4)	61.1(4.2)	52.7(5.1)
	1986	64.8(1.4)	65.9(1.9)	63.6(1.6)	67.0(1.7)	58.5(3.3)	51.7(2.3)
	1982	62.5(1.2)	65.3(1.0)	59.8(1.9)	65.0(1.4)	48.2(2.8)	54.6(3.5)
	1977	71.8(0.9)	73.3(1.3)	70.3(1.2)	74.0(0.9)	59.8(3.9)	61.2(4.4)
<b>Communicating on the moon</b>	1994	72.6(1.3)	81.6(1.7)	64.0(1.7)	75.7(1.2)	65.2(3.3)	64.0(4.3)
	1992	70.7(1.6)	79.8(1.7)	61.5(2.3)	72.1(1.8)	65.1(3.1)	70.1(3.2)
	1990	68.0(1.1)	78.1(1.3)	59.0(1.5)	70.3(1.2)	58.3(3.0)	71.8(4.3)
	1986	69.8(1.3)	78.7(1.3)	60.7(1.9)	71.3(1.3)	62.2(3.4)	66.9(5.1)
	1982	68.0(1.8)	75.8(2.5)	59.8(2.1)	70.5(1.9)	50.2(3.6)	70.9(5.9)
	1977	69.5(1.2)	78.6(1.3)	60.4(1.7)	71.5(1.1)	57.2(3.1)	59.0(8.7)
<b>Half-life</b>	1994	66.4(1.6)	68.5(1.9)	64.4(1.8)	69.3(1.7)	57.5(3.2)	56.4(3.5)
	1992	67.9(1.3)	70.2(1.9)	65.7(2.1)	71.0(1.7)	56.9(4.9)	63.9(4.8)
	1990	66.1(1.4)	68.1(1.3)	64.3(2.0)	68.4(1.5)	56.8(4.3)	63.5(2.9)
	1986	66.5(1.5)	68.2(1.9)	64.7(1.8)	67.6(1.4)	60.8(5.9)	66.2(2.9)
	1982	58.8(1.8)	62.8(2.1)	55.2(2.2)	58.8(1.9)	59.3(4.6)	66.0(6.9)
	1977	59.8(1.3)	62.2(1.6)	57.4(1.8)	60.8(1.6)	51.9(2.8)	55.8(5.9)
<b>Speed of light and sound</b>	1994	33.2(1.6)	37.6(2.2)	28.9(2.0)	36.7(2.1)	23.2(3.2)	22.9(4.5)
	1992	33.0(1.4)	38.2(1.7)	27.9(1.9)	37.7(1.5)	17.3(2.7)	17.7(4.7)
	1990	30.8(1.2)	36.3(1.8)	25.9(1.7)	33.8(1.2)	23.0(3.3)	19.0(3.1)
	1986	30.4(1.7)	38.0(2.8)	22.7(1.3)	33.0(2.1)	16.6(2.5)	21.5(5.8)
	1977	31.1(1.2)	38.1(1.3)	24.3(1.4)	33.9(1.3)	15.8(2.0)	18.2(4.3)
<b>Angle of reflection</b>	1994	64.1(2.1)	74.4(1.6)	54.4(2.8)	68.4(2.2)	49.4(3.8)	51.8(4.3)
	1992	62.2(1.5)	72.5(1.5)	51.9(1.8)	64.7(1.6)	51.9(4.1)	59.6(4.6)
	1990	58.6(1.2)	70.6(1.6)	47.9(1.7)	61.3(1.3)	51.4(3.5)	47.7(3.6)
	1986	58.1(2.0)	68.4(2.3)	47.8(2.6)	59.6(2.3)	49.6(5.1)	56.6(4.2)
	1982	57.8(1.7)	67.0(2.3)	49.6(2.1)	60.4(2.0)	44.3(3.2)	48.9(2.9)
	1977	55.7(1.1)	66.2(1.4)	45.5(1.5)	57.8(1.3)	43.6(2.4)	48.0(3.0)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Earth's crust: Oldest layers</b>	1994	53.9(1.4)	53.2(1.9)	54.6(2.0)	57.9(1.3)	41.9(3.5)	39.9(5.0)
	1992	51.7(1.3)	52.1(2.0)	51.3(1.7)	53.9(1.6)	44.1(3.5)	47.3(4.9)
	1990	54.2(1.3)	55.0(1.8)	53.5(1.6)	58.1(1.2)	44.0(4.1)	43.2(4.3)
	1986	51.1(2.3)	48.1(2.5)	54.2(2.8)	53.6(2.6)	37.9(4.3)	52.0(3.4)
	1977	47.6(1.4)	45.1(1.7)	50.2(1.8)	49.9(1.5)	32.9(2.3)	46.1(5.6)
<b>Earth's crust: Curved layers</b>	1994	48.4(1.8)	54.5(2.2)	42.9(2.2)	50.4(2.5)	39.3(3.0)	45.3(3.8)
	1992	50.6(1.4)	56.4(1.6)	44.9(1.8)	52.0(1.6)	38.7(2.9)	60.9(5.4)
	1990	48.3(1.3)	55.4(1.8)	42.0(1.7)	50.4(1.3)	39.2(3.3)	47.1(4.6)
	1986	50.8(1.3)	59.3(2.1)	42.2(2.0)	51.0(1.4)	47.6(2.7)	55.1(4.8)
	1977	48.7(1.4)	56.1(1.5)	41.4(1.7)	49.7(1.6)	41.4(2.4)	49.8(3.8)
<b>Discovery: Computers</b>	1994	69.9(1.2)	70.4(1.8)	69.3(1.7)	73.5(1.3)	62.1(2.9)	55.0(4.6)
	1992	69.8(1.2)	73.0(1.7)	66.5(2.1)	71.9(1.4)	61.8(3.6)	66.6(3.7)
	1990	70.8(1.3)	74.9(1.6)	67.1(1.9)	72.7(1.3)	63.8(2.9)	68.6(4.8)
	1986	72.5(1.2)	75.9(1.6)	69.0(1.4)	75.0(1.4)	63.5(4.4)	66.2(3.6)
	1982	67.3(1.3)	72.4(1.2)	62.7(2.0)	69.8(1.5)	55.5(2.8)	56.7(4.2)
	1977	69.4(1.4)	76.8(1.5)	61.8(2.0)	70.0(1.6)	63.3(2.9)	72.9(3.6)
<b>Discovery: Space</b>	1994	55.4(1.3)	55.9(1.4)	54.9(1.7)	57.5(1.4)	51.4(3.1)	44.5(3.9)
	1992	58.2(1.1)	58.0(1.8)	58.4(1.7)	59.8(1.4)	52.8(4.4)	54.5(6.2)
	1990	57.1(1.5)	58.5(2.2)	55.8(1.7)	58.3(1.6)	55.6(2.7)	48.8(4.5)
	1986	52.9(1.7)	54.9(2.2)	51.0(2.5)	53.2(1.8)	52.5(3.1)	56.3(5.2)
	1982	46.7(1.7)	47.3(1.9)	46.2(2.3)	47.3(2.0)	43.0(3.0)	51.1(5.2)
	1977	56.6(1.7)	60.1(1.4)	53.0(2.8)	57.9(2.0)	50.8(3.1)	45.3(4.8)
<b>Discovery: Plastics</b>	1994	66.3(1.5)	67.6(2.0)	64.9(2.1)	70.2(1.4)	55.8(4.4)	51.3(4.6)
	1992	67.8(1.3)	70.8(1.7)	64.7(1.8)	70.8(1.3)	58.9(4.9)	59.5(5.8)
	1990	66.8(1.5)	69.7(1.9)	64.2(1.9)	71.4(1.5)	53.7(3.0)	57.8(4.6)
	1986	68.0(1.5)	67.8(1.8)	68.2(2.0)	71.4(1.9)	52.4(3.9)	60.3(4.4)
	1982	68.4(1.5)	70.8(2.1)	66.2(1.9)	71.2(1.6)	54.8(3.1)	61.6(6.0)
	1977	69.0(1.4)	69.7(1.7)	68.3(2.0)	71.9(1.4)	52.9(3.5)	62.8(6.2)
<b>Discovery: Lasers</b>	1994	88.8(1.1)	87.6(1.3)	90.0(1.3)	92.8(0.7)	78.6(2.9)	72.7(6.8)
	1992	88.0(0.8)	88.2(1.1)	87.8(0.8)	90.9(0.7)	78.2(3.5)	83.6(5.7)
	1990	85.9(1.3)	87.1(1.4)	84.9(1.7)	89.5(1.1)	78.9(3.3)	76.3(3.5)
	1986	86.7(0.8)	87.6(1.7)	85.9(0.9)	90.0(0.9)	72.5(3.3)	82.3(2.6)
	1982	77.6(1.3)	79.9(1.7)	75.6(1.7)	81.4(1.4)	58.0(2.6)	65.3(3.5)
	1977	64.3(1.3)	67.7(2.0)	60.9(1.5)	66.1(1.4)	51.2(3.5)	69.1(4.9)
<b>Effect of clearing forests</b>	1994	42.7(1.6)	48.2(2.2)	37.7(1.6)	48.4(1.8)	29.3(2.9)	23.8(3.6)
	1992	40.3(1.2)	42.8(1.8)	37.8(1.5)	45.9(1.6)	24.8(2.7)	21.3(4.5)
	1990	39.6(1.6)	43.7(2.1)	35.9(1.8)	45.0(1.4)	22.4(3.2)	22.9(4.7)
	1986	46.1(1.5)	52.3(2.5)	39.7(1.8)	50.5(1.7)	27.9(2.3)	34.9(4.7)
	1982	53.0(1.4)	58.6(2.0)	47.6(1.4)	58.9(1.6)	28.2(2.1)	24.7(5.9)
	1977	60.2(1.4)	64.5(1.5)	55.9(1.9)	66.1(1.2)	31.8(3.7)	24.9(7.1)
<b>Cause of seasons</b>	1994	30.7(1.0)	35.7(1.5)	26.1(1.3)	33.3(1.1)	23.7(2.3)	19.9(4.9)
	1992	29.7(1.2)	36.5(1.6)	22.8(1.6)	31.9(1.8)	18.9(2.7)	32.0(3.6)
	1990	26.2(1.4)	30.9(1.7)	21.9(1.6)	27.8(1.5)	20.0(3.2)	22.3(3.3)
	1986	26.5(1.7)	32.9(2.6)	20.0(1.4)	28.3(1.9)	15.7(3.0)	25.5(3.5)
	1977	26.9(0.9)	30.7(1.3)	23.2(1.4)	28.7(1.1)	16.1(1.8)	23.9(5.0)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Product Z: Arthritis</b>	1994	76.1(1.3)	74.2(1.7)	78.3(1.3)	81.5(1.3)	60.6(3.9)	66.5(4.3)
	1992	76.1(1.2)	73.5(1.6)	78.8(1.3)	80.5(1.2)	57.2(3.1)	70.7(3.7)
	1990	76.9(1.5)	76.2(1.9)	77.6(1.4)	82.9(1.2)	59.4(4.7)	57.8(5.0)
	1986	76.2(1.3)	76.1(1.8)	76.4(1.5)	81.2(1.4)	58.0(3.1)	60.9(6.9)
	1982	69.4(1.1)	68.1(1.7)	70.8(1.5)	75.4(1.0)	41.3(3.1)	46.5(3.2)
	1977	76.7(1.1)	73.2(1.9)	80.2(1.2)	81.5(1.0)	47.5(3.1)	62.9(4.2)
<b>Product Z: Harm</b>	1994	86.4(1.1)	85.4(1.4)	88.0(1.5)	89.7(1.1)	76.4(3.1)	79.3(5.4)
	1992	89.0(0.8)	87.0(1.3)	91.2(0.9)	91.5(0.7)	79.9(2.9)	80.9(3.2)
	1990	88.8(0.9)	87.7(1.2)	89.9(1.2)	91.9(0.7)	76.7(2.9)	83.5(3.6)
	1986	88.6(0.8)	88.2(1.2)	89.0(1.1)	90.3(1.0)	83.0(2.4)	79.3(3.2)
	1982	90.8(0.9)	88.3(1.4)	93.3(1.1)	92.8(0.8)	79.1(3.2)	89.5(2.5)
	1977	87.9(0.9)	86.6(1.4)	89.3(0.8)	90.8(0.8)	70.0(2.8)	82.1(3.5)
<b>Product Z: Pain relief</b>	1994	90.6(0.8)	89.4(1.2)	92.1(0.9)	92.4(0.9)	87.2(1.8)	85.3(2.3)
	1992	91.6(0.8)	90.1(1.1)	93.2(1.0)	93.7(0.7)	83.7(3.3)	85.7(3.2)
	1990	91.9(0.8)	89.4(1.2)	94.3(0.7)	93.2(0.6)	89.2(1.6)	81.2(6.1)
	1986	93.0(0.6)	91.5(1.0)	94.3(1.1)	94.2(0.6)	90.4(1.6)	81.9(6.2)
	1982	90.9(0.9)	88.5(1.2)	93.3(1.0)	93.3(0.6)	79.7(3.1)	82.6(5.4)
	1977	91.0(0.6)	88.3(0.9)	93.7(0.7)	93.5(0.4)	74.8(2.8)	87.3(2.8)
<b>Product Z: Feel better</b>	1994	90.2(0.8)	89.3(1.0)	91.6(1.1)	93.2(1.0)	83.5(2.2)	81.1(4.1)
	1992	91.7(0.7)	89.9(1.0)	93.6(0.9)	93.3(0.7)	87.0(2.3)	84.5(3.2)
	1990	91.3(0.9)	89.8(0.9)	92.8(1.2)	93.8(0.6)	81.2(2.6)	87.3(4.9)
	1986	90.5(0.7)	88.7(1.3)	92.2(0.9)	92.8(0.8)	82.6(1.9)	79.8(3.9)
	1982	91.4(0.7)	89.4(1.1)	93.5(0.8)	94.2(0.7)	76.8(2.6)	87.5(2.8)
	1977	89.0(0.8)	87.3(1.3)	90.7(0.9)	92.2(0.7)	69.1(2.7)	80.0(2.9)
<b>Reading a pressure gauge</b>	1994	84.1(0.9)	84.9(1.3)	83.5(1.1)	86.5(1.0)	74.4(3.1)	83.3(3.0)
	1992	85.0(0.8)	87.8(1.2)	82.2(1.1)	87.9(0.8)	74.9(3.0)	83.5(3.6)
	1990	80.5(1.0)	81.6(1.3)	79.6(1.3)	84.2(0.9)	68.4(2.9)	71.2(4.7)
	1986	80.7(1.1)	83.5(1.5)	77.8(1.5)	84.6(1.1)	62.8(4.5)	72.3(2.9)
	1982	78.9(1.2)	83.1(1.5)	74.6(1.7)	82.2(1.3)	62.4(3.8)	69.4(4.6)
	1977	75.0(0.9)	79.1(1.1)	71.0(1.3)	78.8(0.8)	53.4(3.2)	57.3(3.0)
<b>Rain and corn growth</b>	1994	68.6(1.2)	71.4(1.7)	65.9(1.7)	73.3(1.3)	51.9(4.4)	57.8(4.1)
	1992	68.6(1.2)	68.8(1.6)	68.5(1.6)	72.4(1.4)	55.3(2.4)	51.5(5.5)
	1990	68.0(1.4)	70.5(2.0)	65.5(1.7)	70.2(1.4)	58.7(4.3)	61.0(7.5)
	1986	66.4(1.2)	68.7(1.7)	64.3(1.9)	69.8(1.2)	53.4(3.5)	53.7(4.6)
	1982	70.3(1.3)	70.3(1.8)	70.3(2.0)	72.9(1.6)	55.5(3.2)	67.4(3.6)
	1977	69.2(1.3)	70.6(1.5)	67.7(1.6)	72.7(1.2)	54.1(3.3)	47.9(4.1)
<b>Food shortage: Birth rate</b>	1994	85.3(0.9)	86.2(1.5)	84.5(1.1)	88.3(1.1)	72.8(3.5)	81.9(5.2)
	1992	84.9(1.3)	84.0(1.7)	85.8(1.1)	88.5(1.1)	69.9(5.1)	75.8(3.6)
	1990	83.8(0.9)	83.0(1.2)	84.6(1.3)	86.8(1.1)	73.7(3.4)	69.3(3.4)
	1986	84.9(1.2)	84.4(1.6)	85.3(1.6)	88.3(1.1)	73.9(3.7)	68.3(6.2)
	1982	84.3(1.3)	83.6(1.4)	85.1(1.6)	88.6(1.1)	64.6(3.5)	74.1(2.9)
	1977	94.2(0.6)	93.1(0.8)	95.2(0.7)	95.9(0.4)	85.4(2.3)	83.0(2.6)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Food shortage: Amount of food</b>	1994	95.0(0.6)	94.3(0.7)	96.0(0.8)	96.4(0.7)	91.9(1.5)	90.2(3.1)
	1992	94.7(0.6)	92.6(0.9)	96.9(0.6)	96.1(0.6)	89.8(2.3)	90.6(2.8)
	1990	93.7(0.9)	91.9(1.3)	95.6(0.9)	96.0(0.7)	84.9(2.7)	87.7(4.0)
	1986	95.7(0.5)	95.4(0.9)	95.9(0.7)	96.8(0.5)	90.9(1.5)	94.0(1.8)
	1982	92.0(1.2)	92.2(1.1)	91.8(1.6)	94.3(1.3)	79.8(2.9)	92.1(1.8)
	1977	97.6(0.3)	97.0(0.4)	98.1(0.4)	98.6(0.2)	92.2(1.4)	93.4(2.0)
<b>Food shortage: Markets</b>	1994	64.0(1.5)	66.2(2.2)	62.0(1.5)	69.3(1.5)	47.6(3.5)	55.0(6.9)
	1992	66.4(1.2)	64.5(2.0)	68.4(1.6)	71.3(1.3)	49.5(4.1)	50.7(3.3)
	1990	68.0(1.4)	68.9(1.6)	67.0(1.7)	71.3(1.5)	57.6(4.1)	51.8(3.8)
	1986	74.8(1.2)	75.4(1.8)	74.2(1.6)	79.9(1.2)	58.0(3.1)	51.0(6.6)
	1982	71.2(1.1)	72.6(1.4)	69.9(1.4)	76.0(1.0)	48.0(3.7)	54.7(3.6)
	1977	78.2(1.1)	79.4(1.4)	77.0(1.3)	82.1(1.1)	55.6(3.0)	61.9(4.6)
<b>Food shortage: Weather</b>	1994	67.5(1.1)	68.2(1.6)	67.0(1.4)	70.5(1.2)	55.2(2.9)	62.9(6.3)
	1992	69.9(1.2)	72.2(1.6)	67.5(1.4)	72.5(1.2)	57.9(3.4)	65.8(4.5)
	1990	71.8(1.2)	72.3(1.8)	71.3(1.4)	76.1(1.4)	58.7(2.5)	55.1(6.0)
	1986	73.5(1.4)	72.3(1.9)	74.5(1.9)	77.2(1.4)	60.4(3.3)	57.7(4.8)
	1982	61.8(1.2)	62.1(1.6)	61.5(1.9)	66.1(1.2)	39.6(2.9)	49.3(4.5)
	1977	77.2(0.7)	77.2(1.4)	77.1(1.3)	79.8(0.8)	61.0(2.8)	74.8(3.6)
<b>Volume equation</b>	1994	84.4(1.3)	81.5(1.7)	87.3(1.5)	87.7(1.3)	76.8(2.2)	71.8(5.8)
	1992	85.8(0.9)	84.2(1.3)	87.3(1.3)	88.0(1.1)	78.7(3.4)	81.5(4.6)
	1990	84.2(1.3)	81.4(1.9)	86.8(1.4)	87.6(1.1)	73.8(4.2)	76.4(7.4)
	1986	83.2(1.2)	81.6(2.1)	84.7(1.3)	87.1(1.1)	69.2(4.2)	69.7(3.7)
	1982	75.0(1.3)	73.5(1.6)	76.5(1.7)	79.5(1.4)	57.3(3.6)	51.1(4.1)
	1977	68.2(1.5)	65.4(1.9)	70.9(1.7)	73.1(1.3)	40.9(3.1)	41.9(4.1)
<b>Meaning of 20% chance of rain</b>	1994	34.3(1.4)	38.9(2.1)	29.9(1.5)	39.0(1.6)	22.0(3.2)	16.6(4.3)
	1992	33.9(1.1)	38.4(1.9)	29.4(1.6)	38.2(1.3)	21.1(2.9)	24.6(4.8)
	1990	31.8(1.6)	34.7(1.8)	29.3(2.1)	37.2(1.7)	18.2(2.8)	15.9(3.3)
	1986	30.1(1.9)	36.2(2.6)	24.1(1.9)	34.1(2.1)	18.4(3.6)	11.3(3.4)
	1982	28.5(1.4)	34.3(2.5)	23.0(1.5)	31.6(1.6)	13.8(2.0)	18.9(5.1)
	1977	28.7(1.6)	33.2(1.9)	24.1(1.7)	31.0(1.6)	14.7(2.4)	20.0(5.7)
<b>Poisons in food chains</b>	1994	80.9(1.3)	82.2(1.5)	79.7(1.7)	86.2(1.3)	65.2(4.9)	64.9(4.2)
	1992	78.4(1.4)	82.9(1.7)	74.0(1.7)	84.0(1.2)	61.5(4.6)	64.3(7.3)
	1990	80.1(1.4)	81.3(1.8)	79.1(1.6)	85.1(0.8)	64.3(3.8)	73.5(4.6)
	1986	78.1(1.9)	81.6(2.5)	74.5(2.1)	82.5(2.2)	58.5(3.3)	67.3(4.8)
	1977	77.0(1.3)	76.4(1.3)	77.5(1.8)	79.2(1.3)	63.0(4.2)	72.4(4.3)
<b>Inherited/learned: Smiling</b>	1994	58.6(1.3)	63.3(1.6)	54.3(1.7)	59.1(1.6)	59.2(3.1)	53.5(3.1)
	1992	55.3(1.3)	59.6(1.5)	51.0(1.9)	55.7(1.5)	51.2(3.0)	60.4(3.7)
	1990	51.4(1.6)	52.2(2.2)	50.7(2.2)	50.6(1.9)	54.0(3.8)	56.0(3.8)
	1986	51.5(1.5)	57.0(2.2)	46.1(2.3)	47.4(1.7)	68.3(3.9)	65.9(4.9)
	1977	44.9(1.1)	48.1(1.9)	41.6(1.4)	42.5(1.2)	55.6(3.9)	57.4(4.9)
<b>Inherited/learned: Swimming</b>	1994	97.9(0.4)	97.3(0.6)	98.4(0.4)	98.2(0.4)	98.6(0.5)	94.7(2.1)
	1992	98.1(0.3)	97.5(0.5)	98.7(0.3)	98.6(0.3)	96.4(1.0)	98.7(0.7)
	1990	97.1(0.5)	95.8(1.0)	98.3(0.4)	98.3(0.3)	95.5(1.2)	88.4(3.7)
	1986	97.6(0.5)	96.4(0.9)	98.9(0.4)	97.5(0.6)	97.9(0.5)	98.9(0.9)
	1977	98.2(0.3)	97.6(0.5)	98.8(0.3)	98.1(0.3)	99.0(0.4)	96.3(2.1)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Inherited/learned: Writing</b>	1994	91.9(0.8)	90.7(1.1)	93.1(0.9)	92.0(0.9)	92.1(1.5)	90.5(2.3)
	1992	91.6(0.7)	90.4(1.0)	92.8(0.9)	91.9(0.7)	93.1(1.7)	87.8(5.2)
	1990	92.1(0.8)	90.5(1.1)	93.4(0.9)	92.4(0.9)	89.6(1.8)	91.3(2.9)
	1986	93.4(0.8)	93.8(0.9)	93.0(1.1)	93.6(0.9)	93.1(1.1)	94.1(1.9)
	1977	93.0(0.6)	93.4(0.7)	92.6(0.9)	93.4(0.7)	89.3(2.2)	94.1(2.6)
<b>Inherited/learned: Breathing</b>	1994	83.3(1.1)	85.3(1.2)	81.7(1.5)	86.6(1.2)	74.7(2.4)	68.1(3.2)
	1992	82.6(0.8)	83.4(1.4)	81.8(1.3)	83.8(1.0)	78.4(1.9)	79.5(3.9)
	1990	82.3(0.9)	83.4(1.3)	81.3(1.4)	83.9(0.8)	76.4(3.4)	81.4(3.0)
	1986	82.8(1.3)	84.0(1.9)	81.6(1.4)	84.7(1.5)	73.5(2.5)	82.1(3.4)
	1977	84.8(1.0)	85.4(1.2)	84.1(1.3)	85.3(1.2)	80.8(2.0)	84.0(4.8)
<b>Why publish? Share findings</b>	1994	83.7(1.1)	81.3(1.6)	86.1(1.4)	86.7(1.1)	78.5(2.0)	71.4(6.4)
	1992	81.3(1.1)	81.3(1.5)	81.4(1.6)	84.2(1.2)	69.3(3.8)	78.3(3.3)
	1990	79.4(1.1)	77.2(1.6)	81.4(1.2)	81.7(1.3)	72.2(3.2)	70.0(3.7)
	1986	79.9(1.0)	79.8(1.7)	80.1(1.2)	81.7(1.0)	74.3(4.8)	69.3(3.2)
	1977	76.9(1.5)	75.7(1.6)	78.2(2.0)	77.8(1.5)	71.8(2.8)	74.1(4.4)
<b>Why publish? Check findings</b>	1994	79.7(1.1)	78.4(1.7)	80.9(1.3)	81.5(1.2)	76.7(3.7)	72.4(3.9)
	1992	76.5(1.3)	75.1(1.7)	78.0(1.5)	78.7(1.6)	67.4(2.3)	75.1(3.6)
	1990	76.0(1.1)	74.3(1.3)	77.4(1.4)	78.5(1.2)	67.5(4.6)	68.7(4.2)
	1986	74.1(1.4)	71.2(1.7)	77.1(1.8)	75.4(1.6)	68.8(2.9)	74.5(4.6)
	1977	79.8(1.0)	77.5(1.6)	82.2(1.1)	80.4(1.0)	77.8(2.2)	79.1(4.6)
<b>Why publish? Add to knowledge</b>	1994	80.9(1.1)	81.2(1.6)	80.7(1.4)	83.7(1.4)	71.7(2.0)	80.0(3.3)
	1992	83.1(1.0)	81.9(1.6)	84.2(1.3)	85.3(1.2)	75.1(3.4)	77.5(2.0)
	1990	82.9(1.1)	82.2(1.2)	83.5(1.5)	85.0(0.9)	74.4(4.0)	82.7(3.6)
	1986	84.6(1.0)	84.1(1.7)	85.2(1.2)	85.5(1.0)	84.0(2.6)	77.8(3.9)
	1977	85.1(0.7)	83.8(1.0)	86.4(0.9)	86.1(0.8)	81.3(2.0)	80.2(3.2)
<b>Ocean currents and climate</b>	1994	29.4(1.8)	33.5(2.3)	25.4(2.1)	34.0(2.3)	14.5(2.1)	14.5(3.5)
	1992	32.6(1.5)	36.7(2.1)	28.6(1.7)	36.6(1.5)	20.5(2.1)	20.5(5.1)
	1990	31.6(1.4)	36.5(2.1)	27.2(1.4)	36.4(1.4)	15.5(2.6)	22.6(3.1)
	1986	27.8(1.6)	31.3(2.5)	24.4(1.7)	31.1(1.9)	16.5(2.4)	12.2(1.9)
	1977	42.0(1.6)	50.0(2.0)	34.6(1.6)	45.3(1.6)	21.9(1.8)	26.3(3.7)
<b>Energy content of foods</b>	1994	5.8(0.6)	6.2(0.9)	5.5(0.9)	6.0(0.8)	6.4(1.3)	4.0(1.8)
	1992	6.7(0.6)	7.5(0.8)	5.9(0.8)	5.6(0.7)	7.8(1.5)	9.3(2.9)
	1990	6.2(0.7)	7.2(1.0)	5.3(0.8)	6.2(0.8)	8.7(1.7)	1.4(0.9)
	1986	6.4(0.7)	6.6(1.0)	6.2(0.8)	5.8(0.8)	8.0(2.3)	8.3(2.8)
	1977	4.4(0.5)	5.3(0.8)	3.6(0.5)	4.0(0.5)	6.4(1.1)	7.6(3.3)
<b>Heating a copper wire</b>	1994	63.6(1.5)	67.7(1.9)	59.8(2.2)	64.5(1.4)	59.2(4.0)	59.9(4.6)
	1992	65.0(1.3)	70.3(1.9)	59.8(1.5)	66.4(1.4)	58.7(3.5)	62.0(7.9)
	1990	65.4(1.0)	69.2(1.2)	62.1(1.6)	66.5(1.2)	62.2(3.3)	64.3(2.6)
	1986	66.0(1.1)	68.7(1.4)	63.2(2.0)	67.7(1.3)	59.0(3.5)	59.1(4.4)
	1982	67.9(1.9)	68.5(2.2)	67.3(2.6)	68.0(2.2)	69.4(3.0)	63.6(3.4)
	1977	69.3(1.0)	71.8(1.3)	66.9(1.4)	70.2(1.2)	64.3(2.2)	67.7(4.6)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Voltage between two points</b>	1994	64.9(1.2)	64.5(1.4)	65.4(1.6)	70.1(1.3)	51.6(3.6)	48.6(4.4)
	1992	65.4(1.3)	68.2(1.7)	62.6(1.6)	70.4(1.3)	53.3(2.6)	48.6(8.3)
	1990	66.3(1.4)	67.8(1.6)	65.0(1.7)	71.1(1.2)	51.4(1.9)	57.1(5.0)
	1986	66.7(1.2)	68.3(1.5)	65.1(2.1)	70.6(1.5)	48.6(3.0)	61.6(4.5)
	1982	66.1(1.5)	67.1(2.1)	65.2(1.6)	68.5(1.6)	53.9(3.0)	64.8(8.1)
	1977	61.4(1.0)	63.1(1.4)	59.7(1.6)	63.4(1.2)	46.3(2.5)	58.8(6.8)
<b>Relative movement: Boy-bike</b>	1994	25.5(1.7)	30.4(2.1)	20.9(1.8)	29.1(2.0)	16.1(2.8)	12.3(2.9)
	1992	23.4(1.1)	29.2(1.7)	17.7(1.3)	26.8(1.4)	10.9(3.4)	16.0(4.3)
	1990	22.4(1.1)	27.8(1.6)	17.5(1.2)	25.0(1.2)	11.4(2.3)	16.1(3.1)
	1986	21.6(2.0)	28.3(3.5)	14.8(1.5)	24.0(2.4)	13.4(2.5)	9.5(2.8)
	1977	25.7(1.2)	29.7(1.5)	21.8(1.5)	28.4(1.3)	10.0(2.0)	11.8(2.7)
<b>Relative movement: Boy-car</b>	1994	92.4(0.7)	92.6(0.9)	92.3(0.9)	94.8(0.7)	83.6(2.2)	91.1(2.6)
	1992	92.4(0.9)	93.1(0.9)	91.6(1.3)	93.9(0.7)	86.2(2.0)	90.9(5.4)
	1990	90.9(1.0)	91.9(1.3)	90.0(1.2)	93.1(0.8)	83.5(2.9)	85.5(3.2)
	1986	93.0(0.8)	94.0(0.8)	91.9(1.2)	93.8(0.8)	89.3(2.9)	91.7(2.6)
	1977	92.2(0.6)	93.4(0.7)	91.1(1.0)	93.3(0.6)	84.1(2.5)	92.1(3.2)
<b>Relative movement: Car-bike</b>	1994	53.4(1.6)	56.4(2.1)	50.8(1.9)	57.3(1.9)	45.1(2.5)	40.4(4.0)
	1992	52.2(1.3)	56.6(1.6)	47.8(1.5)	56.3(1.5)	42.1(2.4)	38.2(3.5)
	1990	49.1(1.2)	53.3(1.4)	45.5(1.7)	52.1(1.2)	36.8(2.5)	48.2(5.8)
	1986	48.2(1.6)	53.7(2.5)	42.7(2.0)	51.7(2.1)	34.2(3.1)	34.1(5.1)
	1977	60.7(1.0)	61.9(1.4)	59.4(1.4)	63.7(1.0)	43.3(2.5)	45.3(4.6)
<b>Relative movement: Boy-tree</b>	1994	88.8(0.9)	89.6(1.1)	88.1(1.4)	90.5(0.9)	81.6(2.3)	85.3(3.1)
	1992	90.1(0.7)	89.1(1.0)	91.0(1.0)	91.2(0.7)	86.6(2.7)	86.8(5.1)
	1990	89.9(0.8)	91.1(1.0)	88.9(1.1)	91.2(0.9)	85.8(2.2)	85.3(4.4)
	1986	90.6(0.7)	91.9(0.9)	89.3(1.1)	91.5(0.8)	85.7(2.3)	92.4(1.9)
	1977	90.0(0.7)	90.4(0.9)	89.7(0.8)	90.8(0.7)	83.8(1.9)	90.8(4.1)
<b>Temperature affects pressure</b>	1994	46.3(1.6)	55.3(2.2)	37.9(2.0)	52.7(2.0)	28.3(2.5)	25.0(3.4)
	1992	45.7(1.5)	53.9(1.7)	37.6(2.4)	51.6(1.7)	22.7(3.1)	37.7(4.6)
	1990	43.0(1.5)	53.3(1.9)	33.8(1.9)	48.6(1.5)	26.2(2.9)	25.0(3.2)
	1986	43.5(1.6)	57.9(2.3)	29.0(1.5)	47.7(1.5)	25.7(4.3)	31.1(3.7)
	1977	45.1(1.5)	58.5(1.7)	32.7(1.8)	49.1(1.4)	19.6(2.0)	33.1(5.6)
<b>Beam of electrons in TV screen</b>	1994	45.0(1.4)	47.3(2.2)	42.7(1.6)	48.8(1.8)	34.6(2.3)	34.2(3.3)
	1992	40.4(1.3)	41.4(1.9)	39.3(2.0)	44.4(1.6)	32.2(3.4)	24.3(3.8)
	1990	37.1(1.1)	39.4(1.6)	35.0(1.6)	38.3(1.1)	34.3(3.3)	29.9(2.4)
	1986	33.7(1.2)	37.0(1.9)	30.3(1.3)	35.7(1.4)	23.9(3.5)	28.4(6.1)
	1977	34.2(1.2)	39.3(1.8)	29.5(1.4)	34.4(1.3)	33.2(3.3)	31.9(4.3)
<b>Acceleration of wagon on hill</b>	1994	32.3(1.4)	41.8(1.8)	23.4(1.7)	38.4(1.6)	11.6(3.0)	18.5(2.8)
	1992	28.9(1.4)	37.4(1.4)	20.4(2.0)	34.0(1.7)	13.7(2.8)	13.7(3.0)
	1990	28.3(1.3)	35.3(1.6)	22.2(1.5)	32.6(1.5)	11.9(2.1)	20.5(4.2)
	1986	28.6(1.6)	38.0(2.9)	19.2(1.3)	32.2(1.7)	13.3(3.0)	17.2(2.5)
	1977	26.0(1.1)	35.8(1.3)	16.3(1.3)	29.1(1.1)	9.2(1.7)	13.6(2.8)
<b>Light bulbs in series</b>	1994	30.2(1.4)	35.0(1.9)	25.6(1.8)	35.6(1.7)	13.5(1.7)	20.6(4.1)
	1992	29.4(1.3)	33.6(2.0)	25.3(1.7)	34.7(1.3)	11.6(1.7)	20.7(3.4)
	1990	28.3(1.4)	35.5(1.7)	22.0(1.5)	31.8(1.5)	14.5(2.1)	24.4(3.9)
	1986	24.5(1.3)	32.2(1.9)	16.9(1.3)	26.7(1.3)	15.6(3.6)	19.7(3.2)
	1977	25.4(1.1)	32.0(1.6)	19.0(1.3)	27.8(1.2)	11.2(2.1)	19.3(4.0)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Interpret a chemical formula</b>	1994	61.4(1.8)	59.8(2.2)	63.4(2.4)	64.5(1.9)	55.9(4.3)	49.3(4.7)
	1992	59.5(1.2)	58.4(2.0)	60.7(1.5)	62.4(1.4)	48.5(3.7)	45.6(4.0)
	1990	57.4(1.3)	58.6(1.7)	56.3(1.8)	60.1(1.3)	53.8(2.8)	39.8(6.6)
	1986	56.3(1.4)	57.9(2.2)	54.9(1.7)	59.7(1.6)	46.2(3.6)	42.9(5.4)
	1977	44.6(1.7)	46.8(2.3)	42.6(1.7)	47.6(1.7)	28.3(4.1)	32.8(4.8)
<b>Analyzing causes of disease</b>	1994	55.6(1.6)	54.9(2.2)	56.5(1.9)	60.0(1.9)	37.0(2.9)	49.8(5.0)
	1992	56.7(1.4)	56.2(1.9)	57.2(1.7)	60.0(1.5)	43.3(3.7)	51.3(2.8)
	1990	54.6(1.6)	53.9(2.2)	55.2(1.6)	57.7(1.9)	40.3(3.6)	49.2(5.4)
	1986	55.7(1.6)	54.9(2.5)	56.5(2.1)	59.7(1.9)	38.3(3.0)	48.6(3.7)
	1977	56.0(1.2)	54.5(1.7)	57.4(1.2)	59.3(1.3)	34.5(2.3)	41.2(4.7)
<b>Neutralize alkali</b>	1994	11.0(0.7)	11.6(0.9)	10.4(1.0)	11.9(0.7)	9.9(1.7)	6.1(1.7)
	1992	10.7(0.8)	11.7(1.0)	9.7(1.1)	11.1(0.9)	7.8(2.1)	9.8(2.3)
	1990	10.1(0.8)	11.1(1.1)	9.1(0.9)	10.1(0.8)	9.1(1.8)	7.6(4.2)
	1986	10.6(1.0)	11.5(1.6)	9.9(1.0)	11.1(1.0)	7.7(1.8)	8.9(2.8)
	1977	9.9(0.9)	10.2(1.3)	9.6(1.1)	9.7(1.0)	10.7(1.6)	8.1(3.1)
<b>Ratio of oxygen/copper</b>	1994	51.3(1.8)	51.2(2.4)	51.8(2.3)	53.3(2.0)	40.4(5.1)	48.1(5.3)
	1992	49.5(1.6)	50.1(1.9)	48.9(2.0)	52.5(1.8)	33.7(4.2)	43.9(4.7)
	1990	47.3(1.9)	47.6(2.3)	46.9(2.1)	49.6(1.9)	37.1(6.1)	36.6(8.1)
	1986	43.2(1.9)	42.6(2.3)	43.8(2.4)	46.9(2.3)	30.8(4.3)	25.2(5.3)
	1977	37.1(1.8)	39.2(2.4)	35.1(1.7)	39.4(1.6)	22.2(3.9)	24.4(5.8)
<b>Plant experiment: Conclusion</b>	1994	29.9(1.4)	29.9(1.6)	29.9(1.9)	34.6(1.8)	19.6(3.9)	15.5(3.0)
	1992	29.5(1.3)	29.7(1.3)	29.2(2.0)	32.5(1.5)	19.3(2.6)	19.9(3.5)
	1990	28.8(1.4)	29.7(2.1)	27.9(1.6)	32.5(1.5)	18.0(2.4)	10.1(3.8)
	1986	31.5(1.8)	31.1(2.4)	31.8(2.2)	35.6(2.0)	17.0(3.3)	14.2(3.1)
	1977	28.7(1.2)	28.3(1.7)	29.0(1.5)	31.3(1.3)	14.0(2.4)	17.1(2.8)
<b>Plant experiment: Control</b>	1994	79.7(1.3)	77.4(2.0)	82.2(1.1)	82.9(1.4)	67.3(4.3)	75.3(5.8)
	1992	81.8(1.2)	78.1(1.6)	85.6(1.3)	84.5(1.1)	68.0(3.9)	75.6(3.3)
	1990	79.2(1.2)	74.4(1.7)	84.1(1.3)	81.8(1.0)	70.3(2.8)	68.7(6.5)
	1986	77.9(1.5)	74.0(2.2)	81.4(1.7)	81.7(1.5)	62.2(3.6)	72.0(3.6)
	1977	77.9(1.1)	75.2(1.6)	80.3(1.7)	79.7(1.3)	67.1(2.8)	71.9(4.2)
<b>Formation of chemical product</b>	1994	34.4(1.5)	37.2(2.1)	32.0(2.1)	39.5(1.8)	19.3(3.4)	22.3(4.5)
	1992	35.2(1.3)	36.5(1.6)	33.8(1.8)	39.6(1.4)	18.7(2.8)	21.5(3.2)
	1990	36.3(1.5)	39.0(2.1)	33.5(1.8)	39.6(1.4)	22.4(4.7)	28.1(5.4)
	1986	34.2(1.3)	34.2(2.1)	34.2(1.8)	38.4(1.4)	15.9(2.3)	17.6(3.9)
	1977	32.3(1.2)	34.8(1.7)	30.1(1.4)	35.5(1.2)	12.6(2.7)	18.4(4.1)
<b>Energy added to melting ice</b>	1994	33.9(1.4)	35.9(1.8)	31.8(1.8)	36.8(1.7)	21.2(2.3)	30.0(6.0)
	1992	33.0(1.2)	33.7(2.0)	32.2(1.2)	35.5(1.3)	21.5(2.5)	26.7(3.9)
	1990	31.2(1.5)	33.5(2.0)	28.9(1.8)	33.4(1.6)	23.5(2.8)	19.9(6.6)
	1986	29.7(1.3)	31.8(1.7)	27.8(1.7)	30.8(1.5)	23.4(2.7)	28.8(3.5)
	1977	30.7(1.2)	33.0(1.4)	28.4(1.4)	32.4(1.2)	18.8(2.4)	29.3(6.4)
<b>Balancing a chemical equation</b>	1994	46.5(1.6)	47.2(1.8)	45.8(2.0)	49.3(1.8)	32.5(3.8)	38.5(4.9)
	1992	46.4(1.6)	43.8(2.2)	49.1(1.9)	49.9(1.6)	31.3(4.3)	31.8(6.9)
	1990	45.0(1.8)	43.4(2.3)	46.6(2.2)	47.7(1.7)	35.5(7.1)	29.9(6.0)
	1986	40.3(2.4)	40.5(3.1)	40.1(2.6)	43.6(2.7)	26.9(2.9)	23.3(4.5)
	1977	32.6(1.6)	33.3(1.7)	31.8(2.3)	35.9(1.7)	13.4(2.3)	19.6(5.8)

The standard errors of the estimated percentages appear in parenthesis.

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## NAEP 1994 National Science Trend Assessment — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
Estimate half-life from graph	1994	32.0(1.4)	37.6(1.8)	26.3(1.6)	36.4(1.7)	17.1(3.3)	26.2(5.7)
	1992	33.4(1.7)	36.9(2.1)	29.8(1.9)	36.9(1.9)	20.6(3.0)	16.9(3.5)
	1990	34.1(1.8)	38.3(2.1)	29.9(1.9)	36.7(1.8)	26.8(4.6)	16.2(4.4)
	1986	32.8(1.1)	36.2(1.6)	29.6(1.6)	34.5(1.3)	25.1(3.5)	30.5(3.8)
	1977	26.4(1.2)	31.0(1.7)	22.1(1.2)	28.8(1.2)	13.0(1.5)	14.8(2.6)
Equilibrium reaction	1994	26.2(1.2)	28.1(1.8)	24.3(1.5)	27.2(1.5)	21.3(3.1)	23.3(4.4)
	1992	27.9(0.8)	28.3(1.3)	27.4(1.3)	27.5(1.0)	32.0(3.2)	22.8(3.4)
	1990	24.6(1.4)	26.9(2.0)	22.3(1.4)	25.6(1.3)	23.1(3.4)	10.5(3.1)
	1986	28.7(1.4)	31.3(2.2)	26.4(1.7)	29.5(1.6)	24.7(2.8)	26.8(4.4)
	1977	30.6(1.3)	30.1(1.9)	31.0(1.6)	30.8(1.5)	33.4(3.1)	19.9(4.3)

The standard errors of the estimated percentages appear in parenthesis.

# *Data Appendix*

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## **Mathematics**



# NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors

	1973	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>		100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
	219.0(0.8)*	218.6(0.8)*	219.0(1.1)*	221.7(1.0)*	229.6(0.8)†	229.6(0.8)†	231.1(0.8)‡	LQ
<b>GENDER</b>								
<b>Male</b>		49.7(0.5)	49.3(0.6)	50.0(0.6)	49.4(0.6)	48.6(0.6)	48.9(0.8)	N
	218.0(0.7)*	217.4(0.7)*	217.1(1.2)*	221.7(1.1)†*	229.1(0.9)†	230.8(1.0)†	232.2(1.0)‡	LQ
<b>Female</b>		50.3(0.5)	50.7(0.6)	50.0(0.6)	50.6(0.6)	51.4(0.6)	51.1(0.8)	N
	220.0(1.1)*	219.9(1.0)*	220.8(1.2)*	221.7(1.2)*	230.2(1.1)†	228.4(1.0)†	230.0(0.9)‡	LQ
<b>RACE/ETHNICITY</b>								
<b>White</b>		79.4(1.4)*	78.6(2.5)	76.5(1.1)	74.5(1.1)†	75.4(0.9)	74.7(0.7)‡	L
	225.0(1.0)*	224.1(0.9)*	224.0(1.1)*	226.9(1.1)*	235.2(0.8)†	235.1(0.8)†	236.8(1.0)‡	LQ
<b>Black</b>		13.8(1.4)	14.3(2.0)	14.9(0.5)	16.3(0.7)	15.9(0.4)	15.1(0.5)	N
	190.0(1.8)*	192.4(1.1)*	194.9(1.6)*	201.6(1.6)†*	208.4(2.2)†	208.0(2.0)†	212.1(1.6)‡	L
<b>Hispanic</b>		5.4(0.7)	5.4(1.1)	6.2(1.1)	5.5(0.6)	5.6(0.8)	6.1(0.4)	N
	202.0(2.4)	202.9(2.2)	204.0(1.3)	205.4(2.1)	213.8(2.1)†	211.9(2.3)†	209.9(2.3)‡	L
<b>Other</b>		1.4(0.2)*	1.7(0.6)*	2.5(0.5)	3.8(1.0)	3.0(0.4)†	4.1(0.4)‡	L
	227.2(3.4)	238.5(3.4)	221.8(7.5)	235.2(3.2)	239.3(3.4)	231.1(4.6)	N	
<b>REGION</b>								
<b>Northeast</b>		22.5(2.5)	21.0(2.7)	21.1(1.1)	23.2(0.9)	20.9(1.2)	21.8(0.9)	N
	227.0(1.9)*	226.9(1.9)*	225.7(1.8)*	226.0(2.7)*	235.8(2.1)†	234.8(1.9)†	237.6(2.2)‡	LQ
<b>Southeast</b>		23.7(2.1)	24.1(2.7)	22.5(4.7)	24.1(0.9)	24.1(1.3)	24.5(1.5)	N
	208.0(1.3)*	208.9(1.2)*	210.4(2.5)*	217.8(2.5)†*	223.9(2.4)†	221.0(1.7)†*	229.0(1.4)‡	LQ
<b>Central</b>		30.7(1.8)	27.6(3.8)	28.6(4.0)	24.3(0.6)†	28.2(0.8)	25.9(1.0)‡	N
	224.0(1.5)*	224.0(1.5)*	221.1(2.7)*	226.0(2.3)	230.7(1.3)†	233.7(1.6)†	233.1(1.8)‡	LQ
<b>West</b>		23.1(2.0)	27.3(2.0)	27.7(1.6)	28.4(0.8)	26.7(0.8)	27.8(1.0)‡	N
	216.0(2.2)*	213.5(1.3)*	219.3(1.8)*	217.2(2.4)*	228.5(1.8)†	229.0(2.3)†	226.0(1.6)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>PARENTS' EDUCATION LEVEL</b>							
<b>Less Than H.S.</b>	7.9(0.4)*	8.0(0.7)*	4.2(0.4)†	4.9(0.4)†	4.2(0.3)†	3.8(0.4)‡	L
	200.3(1.5)*	199.0(1.7)*	200.6(2.5)	210.4(2.3)†	216.7(2.2)†	210.0(3.0)‡	L
<b>Graduated H.S.</b>	23.0(0.8)*	25.1(0.8)*	16.4(0.7)†	16.0(0.7)†	13.5(0.7)†	14.0(0.6)‡	L
	219.2(1.1)*	218.3(1.1)*	218.4(1.6)*	226.2(1.2)†	222.0(1.5)	225.3(1.3)‡	L
<b>Some Educ. After H.S.</b>	8.8(0.4)*	9.4(0.4)*	6.6(0.6)†	7.4(0.4)	7.8(0.4)	7.0(0.4)‡	L
	230.1(1.7)*	225.2(2.1)*	228.6(2.1)*	235.8(2.0)	237.4(1.9)†	239.3(2.1)‡	LQ
<b>Graduated College</b>	23.6(1.1)*	30.1(1.5)†*	37.8(1.1)†*	40.1(1.1)†*	41.5(1.2)†	45.0(0.8)‡	LQ
	231.3(1.1)*	228.8(1.5)*	231.3(1.1)*	237.6(1.3)†	236.2(1.0)†	237.8(0.8)‡	LQ
<b>Unknown</b>	36.8(1.5)*	27.3(1.1)†	34.9(1.0)*	31.7(0.8)†	33.0(0.8)	30.2(0.8)‡	N
	211.4(1.1)*	212.6(1.5)*	214.3(1.4)*	223.0(1.0)†	224.5(1.0)†	224.8(1.1)‡	L
<b>GRADE</b>							
<b>Below Modal Grade</b>	26.0(0.9)*	30.4(1.5)	33.9( 1.7)†	34.8(1.4)†	37.6(1.2)†	33.4( 1.3)‡	LQ
	190.9(1.1)*	193.1(1.4)*	198.1( 1.0)†*	207.2(1.2)†	208.1(1.2)†	210.7( 1.1)‡	L
<b>At Modal Grade</b>	72.3(0.9)*	68.7(1.5)	65.8( 1.7)†	64.8(1.4)†	62.1(1.2)†	66.4( 1.3)‡	LQ
	228.5(0.9)*	230.1(1.0)*	233.8( 1.0)†*	241.7(1.0)†	242.5(0.7)†	241.2( 1.0)‡	L
<b>Above Modal Grade</b>	0.8(0.2)*	0.5(0.1)	0.3( 0.1)†	0.3(0.1)	0.3(0.1)†	***(***)	L
	240.5(7.1)	258.3(9.3)	248.8(10.8)	239.3(8.9)	260.0(5.4)	263.6(12.1)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>							
<b>Public</b>	88.9(1.8)	86.5(2.2)	83.9(2.7)	88.9(2.1)	86.6(1.6)	88.1(1.8)	N
	217.2(0.8)*	217.0(1.1)*	220.1(1.2)*	228.6(0.9)†	227.7(0.9)†	229.3(0.9)‡	L
<b>Non-Public</b>	11.1(1.8)	13.5(2.2)	16.1(2.7)	11.1(2.1)	13.4(1.6)	11.9(1.8)	N
	230.5(1.7)*	231.8(2.1)*	230.0(2.5)*	238.1(2.3)†	241.5(1.7)†	244.5(2.3)‡	LQ
<b>QUARTILES</b>							
<b>Upper</b>	25.0(0.8)	25.0(1.1)	25.0(1.0)	25.0(0.8)	24.9(0.9)	25.0(0.8)	N
	256.0(0.8)*	256.0(0.6)*	259.3(0.7)†*	265.6(0.8)†	265.6(0.8)†	267.1(0.8)‡	LQ
<b>Middle Two</b>	50.0(0.6)	50.0(0.7)	50.0(0.9)	50.0(0.6)	50.0(0.7)	50.1(0.8)	N
	220.5(0.5)*	220.7(0.5)*	223.3(0.5)†*	231.3(0.4)†	231.5(0.5)†	233.0(0.6)‡	LQ
<b>Lower</b>	25.0(0.8)	25.0(1.1)	25.0(1.2)	25.0(0.9)	25.0(0.9)	24.9(0.8)	N
	177.6(0.6)*	178.5(0.8)*	180.9(0.7)†*	190.3(1.0)†	189.9(0.8)†	191.2(0.8)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.  
These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors

	1973	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
	266.0(1.1)*	264.1(1.1)*	268.6(1.1)*	269.0(1.2)*	270.4(0.9)†*	273.1(0.9)†	274.3(1.0)‡	LQ
<b>GENDER</b>								
<b>Male</b>	49.9(0.5)	50.2(0.4)	49.8(0.9)	49.8(0.6)	49.9(0.8)	49.2(0.8)	49.2(0.8)	N
	265.0(1.3)*	263.6(1.3)*	269.2(1.4)*	270.0(1.1)†*	271.2(1.2)†*	274.1(1.1)†	276.0(1.3)‡	L
<b>Female</b>	50.1(0.5)	49.8(0.4)	50.2(0.9)	50.2(0.6)	50.1(0.8)	50.8(0.8)	50.8(0.8)	N
	267.0(1.1)*	264.7(1.1)*	268.0(1.1)*	267.9(1.5)	269.6(0.9)	272.0(1.0)†	272.7(1.0)‡	LQ
<b>RACE/ETHNICITY</b>								
<b>White</b>	80.2(1.7)*	79.2(2.1)*	76.8(1.0)*	73.4(0.7)†	74.2(0.5)†	72.9(0.5)‡	72.9(0.5)‡	L
	274.0(0.9)*	271.6(0.8)*	274.4(1.0)*	273.6(1.3)*	276.3(1.1)*	278.9(0.9)†	280.8(0.9)‡	LQ
<b>Black</b>	13.1(1.5)	13.8(1.8)	14.4(0.9)	15.6(0.3)	15.9(0.3)	15.3(0.3)	15.3(0.3)	N
	228.0(1.9)*	229.6(1.9)*	240.4(1.6)†*	249.2(2.3)†	249.1(2.3)†	250.2(1.9)†	251.5(3.5)‡	L
<b>Hispanic</b>	5.8(0.9)	5.0(1.2)	6.6(1.1)	7.3(0.5)	7.0(0.5)	8.1(0.4)‡	8.1(0.4)‡	L
	239.0(2.2)*	238.0(2.0)*	252.4(1.7)†	254.3(2.9)†	254.6(1.8)†	259.3(1.8)†	256.0(1.9)‡	L
<b>Other</b>	0.9(0.2)*	2.0(0.5)*	2.2(0.3)†*	3.7(0.8)†	2.9(0.3)†*	3.7(0.2)‡	3.7(0.2)‡	L
	272.5(3.5)	274.5(4.1)	282.7(3.4)	273.5(7.2)	282.0(2.3)	283.6(3.0)‡	283.6(3.0)‡	L
<b>REGION</b>								
<b>Northeast</b>	22.5(2.2)	23.8(2.5)	22.4(1.6)	24.3(1.0)*	20.9(0.8)	20.2(0.9)	20.2(0.9)	N
	275.0(2.4)*	272.7(2.4)*	276.9(2.0)*	276.6(2.2)*	274.7(2.3)*	273.6(2.2)*	284.2(1.5)‡	L
<b>Southeast</b>	22.6(2.0)	22.5(2.2)	24.7(5.8)	23.1(0.8)	23.9(1.6)	22.2(1.7)	22.2(1.7)	N
	255.0(3.2)*	252.7(3.3)*	258.1(2.2)*	263.5(1.4)	265.7(1.9)†	271.0(2.5)†	268.6(2.0)‡	L
<b>Central</b>	31.3(1.8)	26.9(3.4)	24.9(5.0)	23.5(0.7)†	26.6(1.0)	26.6(1.8)	26.6(1.8)	N
	271.0(1.8)	269.4(1.8)	272.8(2.1)	266.1(4.5)	272.2(2.4)	275.4(1.5)	275.0(3.4)	N
<b>West</b>	23.6(2.2)*	26.9(2.3)	28.0(1.5)	29.1(0.9)	28.6(0.9)	31.0(1.1)‡	31.0(1.1)‡	L
	262.0(1.9)*	260.0(1.9)*	266.0(2.4)	270.4(2.1)†	269.1(1.6)†	272.3(1.4)†	271.5(1.7)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>PARENTS' EDUCATION LEVEL</b>							
<b>Less Than H.S.</b>	12.2(0.6)*	10.7(0.6)*	7.9(1.1)†	7.6(0.5)†	5.9(0.5)†	6.2(0.4)‡	L
	244.7(1.2)*	251.0(1.4)†	252.3(2.3)†	253.4(1.8)†	255.5(1.0)†	254.5(2.1)‡	L
<b>Graduated H.S.</b>							
	33.0(0.8)*	34.4(0.8)*	31.0(1.3)*	26.8(0.8)†*	23.1(0.9)†	23.1(0.9)‡	LQ
	263.1(1.0)	262.9(0.8)	262.7(1.2)	262.6(1.2)	263.2(1.2)	265.7(1.1)	N
<b>Some Educ. After H.S.</b>							
	14.3(0.4)*	14.1(0.4)*	15.6(0.6)	16.8(0.6)†	18.4(0.7)†	16.8(0.6)‡	L
	273.1(1.2)	275.1(0.9)	273.7(0.8)	277.1(1.0)†	277.6(1.0)†	277.3(1.6)‡	L
<b>Graduated College</b>							
	25.7(1.2)*	32.1(1.3)†*	37.5(2.0)†*	40.8(1.2)†*	44.1(1.3)†	45.5(1.3)‡	L
	283.8(1.2)	282.3(1.5)	279.9(1.4)*	280.4(1.0)*	282.8(1.0)	284.9(1.2)	Q
<b>Unknown</b>							
	14.8(0.9)*	8.8(0.8)†	8.0(0.4)†	7.9(0.5)†	8.4(0.4)†	8.3(0.5)‡	LQ
	239.5(1.3)*	251.9(3.2)†	247.4(2.3)†	247.8(2.1)†	252.9(1.8)†	252.4(2.4)‡	L
<b>GRADE</b>							
<b>Below Modal Grade</b>	27.4(1.1)*	28.4(1.4)*	32.7(2.1)	36.1( 1.3)†	37.4(1.1)†	37.6( 1.3)‡	L
	239.6(1.4)*	247.2(1.4)†*	251.1(1.1)†*	252.7( 1.0)†*	258.1(1.3)†	259.3( 1.2)‡	L
<b>At Modal Grade</b>							
	70.5(1.1)*	70.3(1.4)*	66.8(2.1)	63.4( 1.4)†	62.4(1.0)†	61.5( 1.3)‡	L
	273.8(1.1)*	276.6(0.9)*	277.6(1.0)†*	280.4( 0.9)†	281.8(0.9)†	283.0( 1.0)‡	L
<b>Above Modal Grade</b>							
	0.7(0.2)	1.4(0.5)	0.5(0.1)	0.5( 0.2)	0.2(0.1)	***(***)	N
	297.6(9.1)	303.9(6.3)	296.9(7.7)	277.8(16.5)	327.9(9.5)	309.4(29.5)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>							
<b>Public</b>	90.8(1.6)	89.4(1.3)	95.9(1.8)*	89.6(1.4)	88.1(1.9)	88.4(1.7)	Q
	262.6(1.2)*	267.1(1.3)†*	268.7(1.2)†*	269.3(1.0)†	271.7(1.0)†	273.0(1.1)‡	L
<b>Non-Public</b>	9.2(1.6)	10.6(1.3)	4.1(1.8)*	10.4(1.4)	11.9(1.9)	11.6(1.7)	Q
	279.2(1.4)	281.1(2.1)	275.7(4.9)	279.9(1.7)	283.3(2.5)	284.6(2.4)	L
<b>QUARTILES</b>							
<b>Upper</b>	25.0(1.1)	25.0(1.1)	25.0(1.4)	25.0(1.1)	24.9(1.1)	25.0(1.1)	N
	305.0(0.6)*	305.6(0.7)*	305.7(0.7)*	306.5(0.6)*	308.6(0.6)†*	311.5(0.9)‡	LQ
<b>Middle Two</b>	50.0(0.7)	50.0(0.7)	50.0(0.9)	50.1(0.9)	50.1(0.8)	50.0(0.9)	N
	265.5(0.4)*	269.3(0.3)†*	268.6(0.5)†*	270.7(0.4)†*	273.8(0.4)†	275.1(0.5)‡	LQ
<b>Lower</b>	25.0(1.1)	25.0(1.3)	25.0(1.2)	24.9(1.0)	25.0(0.9)	25.0(1.0)	N
	220.6(0.7)*	230.3(0.8)†*	232.9(0.7)†	233.7(0.8)†	236.3(1.2)†	235.7(1.0)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.  
These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors

	1973	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>		100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
	304.0(1.1)	300.4(1.0)*	298.5(0.9)†*	302.0(0.9)*	304.6(0.9)	306.7(0.9)	306.2(1.0)	LQ
<b>GENDER</b>								
<b>Male</b>		48.7(0.5)	48.7(0.6)	49.0(1.2)	48.6(0.9)	50.7(1.2)	49.5(1.3)	N
	309.0(1.2)	303.8(1.0)†*	301.5(1.0)†*	304.7(1.2)	306.3(1.1)	308.9(1.1)	308.5(1.4)	Q
<b>Female</b>		51.3(0.5)	51.3(0.6)	51.0(1.2)	51.4(0.9)	49.3(1.2)	50.5(1.3)	N
	301.0(1.1)	297.1(1.0)*	295.6(1.0)†*	299.4(1.0)*	302.9(1.1)	304.5(1.1)	304.1(1.1)‡	LQ
<b>RACE/ETHNICITY</b>								
<b>White</b>		83.1(1.3)*	80.7(2.0)*	77.6(0.5)†*	73.3(0.5)†	74.7(0.5)†*	72.5(0.5)‡	L
	310.0(1.1)	305.9(0.9)†*	303.7(0.9)†*	307.5(1.0)*	309.5(1.0)	311.9(0.8)	312.3(1.1)	LQ
<b>Black</b>		11.8(1.1)*	12.5(1.7)	14.3(0.3)	15.6(0.3)†	14.8(0.3)	15.5(0.3)‡	L
	270.0(1.3)*	268.4(1.3)*	271.8(1.2)*	278.6(2.1)†	288.5(2.8)†	285.8(2.2)†	285.5(1.8)‡	L
<b>Hispanic</b>		4.0(0.5)*	4.9(1.0)*	5.5(0.3)*	6.9(0.4)†*	7.4(0.5)†	8.8(0.3)‡	L
	277.0(2.2)*	276.3(2.3)*	276.7(1.8)*	283.1(2.9)	283.5(2.9)	292.2(2.6)†	290.8(3.7)‡	LQ
<b>Other</b>		1.1(0.1)*	1.9(0.6)	2.6(0.4)†	4.2(0.5)†	3.1(0.2)†	3.2(0.3)‡	LQ
	312.9(3.3)	309.4(4.5)	304.7(7.2)	312.5(5.2)	317.1(4.0)	312.7(4.5)	N	
<b>REGION</b>								
<b>Northeast</b>		23.0(2.0)	24.0(2.8)	23.7(0.8)	22.1(1.0)	21.6(0.9)	22.7(1.0)	N
	312.0(1.8)	306.7(1.8)	304.0(2.0)†	307.4(1.9)	303.8(2.1)†	311.4(2.0)	312.7(2.9)	Q
<b>Southeast</b>		22.3(2.1)	20.5(2.1)	22.9(2.3)	24.3(0.9)	24.6(1.4)	24.6(1.5)	N
	296.0(1.8)	292.3(1.7)*	292.3(2.1)*	297.3(1.4)	301.0(2.3)	301.3(1.9)	300.9(1.6)‡	L
<b>Central</b>		31.3(2.1)	29.6(4.3)	27.7(2.2)	25.9(0.9)	25.0(1.0)†	25.5(1.1)‡	L
	306.0(1.8)	305.2(1.9)	302.0(1.4)	303.6(1.9)	311.2(2.1)	312.2(2.0)	307.0(2.2)	LQ
<b>West</b>		23.4(2.5)	25.9(2.8)	25.7(0.9)	27.7(0.9)	28.9(0.9)	27.1(1.0)	N
	303.0(2.0)	295.5(1.8)†*	294.1(1.9)†*	299.3(2.7)	302.1(1.5)	303.1(2.3)	304.8(2.4)	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>PARENTS' EDUCATION LEVEL</b>							
<b>Less Than H.S.</b>	13.3(0.6)* 279.6(1.2)	13.8(0.9)* 279.3(1.0)	8.3(0.4)† 279.3(2.3)	7.9(0.6)† 285.4(2.2)	8.1(0.6)† 285.5(2.3)	7.0(0.5)#+ 283.7(2.4)	L
<b>Graduated H.S.</b>	33.3(0.7)* 293.9(0.8)	32.7(0.8)* 293.4(0.8)	27.9(1.1)†* 293.1(1.0)	26.4(1.1)†* 293.7(0.9)	21.4(0.9)† 297.6(1.7)	22.1(0.8)#+ 295.3(1.1)	L
<b>Some Educ. After H.S.</b>	16.2(0.4)* 305.3(0.9)	17.7(0.5)* 303.9(0.9)	24.1(1.0)† 305.2(1.2)	23.8(0.9)† 307.7(1.0)	25.4(0.9)† 307.5(1.1)	23.5(1.1)#+ 305.0(1.3)	LQ
<b>Graduated College</b>	32.4(1.1)* 316.8(1.0)	31.8(1.3)* 312.4(1.0)†*	36.9(1.2)†* 313.9(1.4)	38.9(1.4)†* 316.2(1.3)	42.6(1.4)† 315.9(1.0)	44.4(1.5)#+ 317.6(1.4)	L
<b>Unknown</b>	4.8(0.4)* 275.7(1.9)	4.0(0.3)* 271.7(1.8)*	2.8(0.3)† 280.6(2.4)	3.0(0.4)† 276.8(2.8)	2.5(0.3)† 290.2(3.9)†	3.1(0.3)#+ 282.7(3.8)	LQ
<b>GRADE</b>							
<b>Below Modal Grade</b>	14.8(0.6)* 272.7(1.1)*	15.6(1.0)* 274.1(1.6)*	16.8(0.9) 277.3(1.6)*	21.7(1.0)† 281.8(1.7)†	23.9(1.1)† 284.5(1.4)†	20.6(1.6)#+ 284.2(1.6)#+	L
<b>At Modal Grade</b>	75.3(0.7) 304.7(1.0)*	74.9(1.0) 302.5(0.9)*	75.3(1.2) 306.7(0.9)*	70.2(1.0)† 310.9(0.8)†	70.1(1.0)† 313.3(0.8)†	73.1(1.7) 311.6(0.9)#+	L
<b>Above Modal Grade</b>	9.8(0.5)* 309.3(1.0)	9.5(0.7)* 306.5(1.4)*	7.9(0.7) 309.1(3.0)	8.1(0.6) 310.6(1.8)	6.1(0.5)† 317.7(2.4)†	6.3(0.6)#+ 315.9(3.1)#+	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages and average mathematics scale scores and jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>							
<b>Public</b>	94.4(1.0)*	91.6(1.6)	96.0(1.4)*	92.8(1.8)	91.3(2.2)	87.8(2.3)†	L
	299.6(1.0)*	297.3(0.9)*	301.2(1.0)	303.5(0.8)†	305.3(0.9)†	304.4(0.9)†	L
<b>Non-Public</b>	5.6(1.0)*	8.4(1.6)	4.0(1.4)*	7.2(1.8)	8.7(2.2)	12.2(2.3)†	L
	314.3(3.2)	311.4(1.7)	320.1(9.8)	317.7(6.6)	320.4(3.0)	319.4(4.0)	N
<b>QUARTILES</b>							
<b>Upper</b>	25.0(1.1)	25.0(1.0)	25.0(1.1)	25.6(1.2)	24.9(1.0)	25.0(1.4)	N
	338.5(0.4)*	336.1(0.6)†*	339.8(0.7)	341.1(0.8)†	342.0(0.7)†	341.9(1.1)†	L
<b>Middle Two</b>	50.0(0.7)	50.0(0.6)	50.0(1.1)	49.1(1.1)	50.1(0.9)	50.0(1.2)	N
	301.7(0.3)*	298.8(0.3)†*	301.4(0.5)*	304.7(0.5)†*	307.5(0.4)†	306.5(0.4)†	LQ
<b>Lower</b>	25.0(1.0)	25.0(1.2)	25.0(0.9)	25.4(1.0)	25.0(1.0)	25.0(1.1)	N
	259.6(0.5)*	260.2(0.7)*	265.2(0.9)†*	267.5(0.9)†	269.9(0.9)†	269.9(0.8)†	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.  
These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 150

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	96.7(0.3)*	97.1(0.3)*	97.9(0.3)†*	99.1(0.2)†	99.0(0.2)†	99.0(0.2)‡	L
<b>GENDER</b>							
Male	96.2(0.5)*	96.5(0.5)*	98.0(0.5)†	99.0(0.3)†	99.0(0.3)†	99.1(0.3)‡	L
Female	97.2(0.3)*	97.6(0.3)*	97.8(0.4)	99.1(0.3)†	99.0(0.3)†	98.9(0.3)‡	L
<b>RACE/ETHNICITY</b>							
White	98.3(0.2)*	98.5(0.3)*	98.8(0.2)	99.6(0.2)†	99.6(0.1)†	99.6(0.2)‡	L
Black	88.4(1.0)*	90.2(1.0)*	93.9(1.4)†	96.9(0.9)†	96.6(1.1)†	97.4(1.0)‡	L
Hispanic	93.0(1.2)	94.3(1.2)	96.4(1.3)	98.0(0.8)†	97.2(1.3)	97.2(1.2)‡	L
Other	98.1(1.6)	99.2(0.5)	97.4(2.2)	99.2(0.8)	99.8(0.3)	98.1(1.2)	N
<b>GRADE</b>							
Below Modal Grade	89.4(0.8)*	91.5(1.0)*	94.1(0.8)†*	97.5(0.6)†	97.3(0.6)†	97.4(0.8)‡	L
At Modal Grade	99.3(0.2)*	99.5(0.1)	99.8(0.1)†	99.9(0.1)†	99.9(0.1)†	99.8(0.1)‡	L
Above Modal Grade	99.6(0.6)	99.8(0.7)	100.0(0.0)	100.0(0.0)	100.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	97.9(0.4)	98.3(0.4)	98.4(0.5)	99.3(0.3)†	99.5(0.2)†	99.3(0.5)‡	L
Southeast	94.0(0.6)*	94.6(0.8)*	97.1(0.7)†	98.2(0.7)†	98.1(0.7)†	99.0(0.4)‡	L
Central	98.2(0.3)*	97.9(0.5)*	98.5(0.5)	99.4(0.3)†	99.4(0.3)†	99.4(0.3)‡	L
West	96.2(0.6)	97.5(0.6)	97.5(0.9)	99.3(0.3)†	98.8(0.5)†	98.4(0.6)‡	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	92.2(1.1)	90.9(1.6)*	93.9(1.8)	97.9(1.2)†	98.1(1.1)†	97.2(1.8)‡	L
Graduated H.S.	97.1(0.4)*	97.6(0.4)	97.4(0.5)	98.7(0.4)†	98.2(0.6)	98.7(0.5)‡	L
Some Educ. After H.S.	98.5(0.6)	98.2(0.6)	98.9(1.0)	99.1(0.6)	99.5(0.3)	99.7(0.2)‡	L
Graduated College	98.8(0.3)	98.6(0.3)	99.0(0.3)	99.5(0.3)	99.3(0.3)	99.3(0.3)	L
Unknown	95.6(0.5)*	96.3(0.5)*	97.4(0.6)	99.0(0.3)†	98.8(0.4)†	98.9(0.4)‡	L
<b>TYPE OF SCHOOL</b>							
Public	96.4(0.3)*	96.8(0.4)*	97.7(0.3)†*	99.0(0.2)†	98.8(0.3)†	98.9(0.3)‡	L
Non-Public	99.0(1.0)	99.0(0.4)	98.7(0.8)	99.7(0.3)	99.8(0.1)	99.8(0.3)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	99.9(0.1)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	86.9(0.9)*	88.4(1.2)*	91.6(1.1)†*	96.3(0.8)†	95.9(0.9)†	96.1(0.9)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 200

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	70.4(0.9)*	71.4(1.2)*	74.1(1.2)*	81.5(1.0)†	81.4(0.8)†	82.0(0.7)‡	L
<b>GENDER</b>							
Male	68.9(1.0)*	68.8(1.3)*	74.0(1.4)†*	80.6(1.0)†	81.9(1.0)†	82.3(0.9)‡	L
Female	72.0(1.1)*	74.0(1.3)*	74.3(1.3)*	82.3(1.3)†	80.9(1.1)†	81.7(0.9)‡	L
<b>RACE/ETHNICITY</b>							
White	76.3(1.0)*	76.8(1.2)*	79.6(1.3)*	86.9(0.9)†	86.9(0.7)†	87.0(0.8)‡	L
Black	42.0(1.4)*	46.1(2.4)*	53.4(2.5)†*	60.0(2.8)†	59.8(2.8)†	65.9(2.6)‡	L
Hispanic	54.2(2.8)	55.7(2.3)	57.6(2.9)	68.4(3.0)†	65.0(2.9)†	63.5(3.1)‡	L
Other	80.3(3.6)	85.2(3.4)	70.4(8.0)	87.0(5.4)	87.8(3.1)	79.6(3.9)	N
<b>GRADE</b>							
Below Modal Grade	39.6(1.6)*	41.7(2.3)*	48.0(1.9)†*	60.3(1.9)†	61.0(1.4)†	64.0(1.6)‡	L
At Modal Grade	81.5(0.9)*	84.4(0.9)*	87.5(1.1)†*	92.8(0.9)†	93.6(0.5)†*	91.0(0.8)‡	LQ
Above Modal Grade	85.5(6.6)	93.4(3.4)	93.2(9.1)	89.0(10.9)	100.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	78.7(2.3)*	78.0(2.1)*	77.9(3.2)	85.9(2.2)	85.5(1.8)	87.0(1.9)‡	L
Southeast	60.3(1.8)*	62.5(2.3)*	70.6(2.7)†*	75.1(2.8)†	72.9(2.0)†*	80.7(1.0)‡	L
Central	75.9(1.7)*	73.8(2.7)*	77.6(2.5)	83.7(1.3)†	85.3(1.4)†	85.0(1.5)‡	L
West	65.6(1.7)*	71.9(2.2)	70.5(2.9)	81.4(1.8)†	81.6(2.1)†	76.4(1.6)‡	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	51.8(2.7)	51.0(2.6)	50.1(3.9)	63.4(4.7)	71.0(4.1)†	62.1(4.5)‡	L
Graduated H.S.	71.7(1.4)	72.1(1.4)	72.2(2.1)	79.3(1.6)†	75.5(1.9)	77.4(1.9)‡	L
Some Educ. After H.S.	80.7(2.0)*	77.9(2.5)*	80.7(2.7)*	85.7(2.3)	87.2(2.0)	90.0(1.9)‡	L
Graduated College	82.1(1.3)*	80.3(1.5)*	82.6(1.2)*	87.2(1.3)†	86.5(1.0)†	87.0(0.8)‡	L
Unknown	63.6(1.3)*	64.9(2.2)*	67.7(1.6)*	77.1(1.4)†	77.7(1.4)†	77.5(1.2)‡	L
<b>TYPE OF SCHOOL</b>							
Public	68.8(0.9)*	69.4(1.2)*	72.7(1.4)*	80.5(1.1)†	79.7(0.9)†	80.6(0.8)‡	L
Non-Public	83.3(1.9)*	84.3(2.1)*	81.8(2.3)*	89.3(1.8)	92.2(1.2)†	92.3(1.3)‡	LQ
<b>QUARTILES</b>							
Upper	99.6(0.1)	99.7(0.2)	99.9(0.2)	100.0(0.0)	99.9(0.1)	100.0(0.0)‡	L
Middle Two	82.2(0.6)*	84.3(0.7)*	89.5(0.9)†*	95.8(0.5)†	95.7(0.4)†	96.1(0.5)‡	L
Lower	17.7(0.9)*	17.5(1.6)*	17.6(1.5)*	34.3(2.2)†	34.1(1.4)†	35.7(1.3)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 250

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	19.6(0.7)*	18.8(1.0)*	20.7(0.9)*	27.7(0.9)†	27.8(0.9)†	29.9(1.1)#	LQ
<b>GENDER</b>							
Male	19.2(0.6)*	18.1(1.1)*	20.9(1.1)*	27.5(1.0)†	29.4(1.2)†	31.5(1.6)#	LQ
Female	19.9(1.0)*	19.6(1.1)*	20.6(1.3)*	27.9(1.3)†	26.3(1.5)†	28.3(1.3)#	L
<b>RACE/ETHNICITY</b>							
White	22.9(0.9)*	21.8(1.1)*	24.6(1.0)*	32.7(1.0)†	32.4(1.0)†	35.3(1.3)#	LQ
Black	4.1(0.6)*	4.4(0.8)*	5.6(0.9)*	9.4(1.7)†	9.6(1.4)†	11.1(1.7)#	L
Hispanic	9.2(2.5)	7.8(1.7)	7.3(2.8)	11.3(3.5)	11.7(2.5)	9.7(1.8)	N
Other	25.1(3.6)	38.3(4.7)	25.1(6.4)	31.7(3.6)	38.7(5.2)	31.2(5.5)	N
<b>GRADE</b>							
Below Modal Grade	2.9(0.6)*	3.2( 0.4)*	4.2( 0.5)*	6.9( 0.6)†	7.6( 0.9)†	9.8( 1.1)#	LQ
At Modal Grade	25.4(0.9)*	25.4( 1.1)*	29.1( 1.1)†*	38.9( 1.3)†	39.9( 1.1)†	39.8( 1.4)#	L
Above Modal Grade	42.2(7.5)	62.4(16.3)	48.2(14.5)	35.8(13.9)	67.1(17.2)	***(***)	N
<b>REGION</b>							
Northeast	25.9(1.6)*	23.8(1.4)*	24.8(2.7)*	34.4(2.1)†	32.4(2.1)	37.2(2.8)#	LQ
Southeast	13.4(0.8)*	13.6(1.7)*	17.2(2.4)*	24.0(2.0)†	20.3(1.6)†	27.3(2.4)#	L
Central	23.2(1.4)	19.9(2.5)*	24.7(1.8)	27.5(1.8)	31.4(1.9)†	30.3(2.6)#	L
West	14.9(1.1)*	18.6(1.4)*	16.3(2.2)*	25.6(1.6)†	27.1(2.5)†	26.0(1.2)†	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	7.5(1.2)	7.1(1.5)	6.4(2.3)	9.9(2.6)	15.0(2.2)†	9.5(2.7)	L
Graduated H.S.	18.8(1.1)	16.4(1.3)*	17.4(2.1)	23.6(1.6)	20.5(2.1)	24.0(1.8)#	L
Some Educ. After H.S.	29.2(1.9)	23.7(2.9)*	26.6(2.6)	35.0(4.2)	36.9(2.4)	36.9(3.8)	L
Graduated College	30.4(1.3)*	27.2(1.3)*	29.6(1.4)*	36.6(1.7)†	34.8(1.4)	37.3(1.4)†	LQ
Unknown	13.4(1.1)*	13.6(1.3)*	13.3(1.1)*	19.7(1.1)†	21.7(1.3)†	22.5(1.6)†	LQ
<b>TYPE OF SCHOOL</b>							
Public	18.5(0.7)*	17.3(0.9)*	19.1(1.1)*	26.8(1.0)†	26.1(0.9)†	27.9(1.2)†	LQ
Non-Public	28.4(2.0)*	28.6(2.6)*	28.9(2.7)*	35.2(3.3)	38.6(2.7)†	44.4(4.0)†	LQ
<b>QUARTILES</b>							
Upper	59.7(1.4)*	60.0(1.6)*	67.9(1.4)†*	79.8(1.3)†	79.9(1.3)†	83.0(2.1)†	L
Middle Two	9.3(0.6)*	7.7(0.7)*	7.5(0.7)*	15.5(0.8)†	15.6(1.0)†	18.1(1.3)†	LQ
Lower	0.1(0.1)	0.0(0.1)	0.0(0.0)	0.1(0.2)	0.1(0.1)	0.1(0.1)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 300

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.8(0.1)	0.6(0.1)	0.6(0.2)	1.2(0.3)	1.2(0.3)	1.3(0.4)	L
<b>GENDER</b>							
Male	0.7(0.2)	0.6(0.1)	0.7(0.3)	1.3(0.4)	1.4(0.3)	1.4(0.4)	L
Female	0.8(0.2)	0.5(0.1)	0.6(0.3)	1.0(0.3)	1.0(0.4)	1.1(0.4)	N
<b>RACE/ETHNICITY</b>							
White	0.9(0.2)	0.6(0.1)	0.8(0.3)	1.5(0.4)	1.4(0.3)	1.5(0.4)	L
Black	0.0(0.1)	0.0(0.1)	0.1(0.1)	0.1(0.1)	0.1(0.1)	0.0(0.1)	N
Hispanic	0.2(0.5)	0.0(0.0)	0.1(0.2)	0.2(0.2)	0.1(0.5)	0.0(0.1)	N
Other	1.9(0.9)	3.7(2.1)	0.8(0.8)	2.0(1.0)	4.0(1.7)	2.3(1.5)	N
<b>GRADE</b>							
Below Modal Grade	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.0(0.0)	0.0(0.1)	N
At Modal Grade	1.0(0.2)	0.7(0.1)	0.9(0.3)	1.8(0.4)	1.9(0.4)	1.8(0.5)	L
Above Modal Grade	4.9(4.4)	9.4(6.5)	6.1(5.4)	1.0(2.5)	7.2(7.6)	***(***)	N
<b>REGION</b>							
Northeast	1.3(0.5)	0.9(0.3)	1.0(0.4)	2.1(0.7)	1.7(0.7)	2.3(1.0)	N
Southeast	0.3(0.2)	0.3(0.1)	0.3(0.2)	1.2(0.6)	0.7(0.2)	0.9(0.5)	L
Central	1.1(0.3)	0.6(0.3)	1.0(0.7)	0.6(0.2)	1.4(0.6)	1.1(0.3)	N
West	0.4(0.2)	0.6(0.1)	0.2(0.2)	0.9(0.4)	1.0(0.5)	0.9(0.4)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	0.1(0.2)	0.0(0.1)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.0(0.0)	N
Graduated H.S.	0.6(0.2)	0.4(0.2)	0.4(0.4)	0.4(0.4)	0.4(0.5)	0.7(0.4)	N
Some Educ. After H.S.	1.6(0.6)	0.5(0.5)	1.2(0.9)	1.4(0.8)	2.0(0.8)	2.2(1.5)	N
Graduated College	1.6(0.5)	1.0(0.3)	1.2(0.5)	2.1(0.5)	1.8(0.5)	1.9(0.6)	N
Unknown	0.3(0.1)	0.4(0.2)	0.2(0.1)	0.5(0.3)	0.7(0.2)	0.5(0.3)	N
<b>TYPE OF SCHOOL</b>							
Public	0.7(0.2)	0.5(0.1)	0.6(0.2)	1.1(0.3)	1.1(0.3)	1.1(0.4)	L
Non-Public	1.2(0.4)	1.0(0.6)	1.1(0.6)	1.8(1.2)	1.9(0.7)	2.2(0.8)	N
<b>QUARTILES</b>							
Upper	3.0(0.5)	2.2(0.3)	2.6(0.8)	4.6(1.1)	4.7(1.0)	5.0(1.4)	L
Middle Two	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.1(0.0)	0.0(0.0)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons. These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 9

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 350

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>GENDER</b>							
<b>Male</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Female</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>RACE/ETHNICITY</b>							
<b>White</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Black</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Hispanic</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Other</b>	0.0(0.0)	0.1(0.2)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>GRADE</b>							
<b>Below Modal Grade</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>At Modal Grade</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Above Modal Grade</b>	0.0(0.0)	0.5(0.8)	0.0(0.0)	0.0(0.0)	0.0(0.0)	***(***)	N
<b>REGION</b>							
<b>Northeast</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	N
<b>Southeast</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Central</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>West</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	N
<b>PARENTS' EDUCATION LEVEL</b>							
<b>Less Than H.S.</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Graduated H.S.</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Some Educ. After H.S.</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Graduated College</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Unknown</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>TYPE OF SCHOOL</b>							
<b>Public</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Non-Public</b>	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	0.1(0.1)	N
<b>QUARTILES</b>							
<b>Upper</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.1)	N
<b>Middle Two</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Lower</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons. These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 150

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	99.8(0.1)*	100.0(0.0)†	100.0(0.0)†	100.0(0.0)†	100.0(0.0)†	100.0(0.0)‡	LQ
<b>GENDER</b>							
Male	99.7(0.1)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)†	99.9(0.1)	LQ
Female	99.8(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)‡	LQ
<b>RACE/ETHNICITY</b>							
White	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Black	98.6(0.4)*	99.8(0.2)†	100.0(0.0)†	100.0(0.0)†	99.9(0.1)†	99.9(0.1)‡	LQ
Hispanic	99.6(0.3)	99.9(0.1)	100.0(0.3)	99.9(0.2)	100.0(0.0)	100.0(0.1)	N
Other	99.8(0.4)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.2)	N
<b>GRADE</b>							
Below Modal Grade	99.2(0.2)*	99.9(0.1)†	100.0(0.1)†	100.0(0.0)†	100.0(0.0)†	99.9(0.1)‡	LQ
At Modal Grade	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Above Modal Grade	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)‡	L
Southeast	99.4(0.2)	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)‡	LQ
Central	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
West	99.8(0.1)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	99.9(0.1)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	99.5(0.2)	99.9(0.2)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)‡	L
Graduated H.S.	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Some Educ. After H.S.	99.9(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	N
Graduated College	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Unknown	99.1(0.3)	99.9(0.1)†	100.0(0.2)	100.0(0.1)†	100.0(0.0)†	99.9(0.3)	L
<b>TYPE OF SCHOOL</b>							
Public	99.7(0.1)*	100.0(0.0)†	100.0(0.0)†	100.0(0.0)†	100.0(0.0)†	100.0(0.0)‡	LQ
Non-Public	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.2)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	99.0(0.3)*	99.9(0.1)†	100.0(0.1)†	100.0(0.1)†	100.0(0.0)†	99.9(0.1)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons. These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 200

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	94.6(0.5)*	97.7(0.4)†	98.6(0.2)†	98.5(0.2)†	98.7(0.3)†	98.5(0.3)‡	LQ
<b>GENDER</b>							
Male	93.9(0.5)*	97.5(0.6)†	98.5(0.3)†	98.2(0.3)†	98.8(0.4)†	98.3(0.4)‡	LQ
Female	95.2(0.5)*	98.0(0.3)†	98.6(0.3)†	98.9(0.2)†	98.6(0.2)†	98.7(0.3)‡	LQ
<b>RACE/ETHNICITY</b>							
White	97.6(0.3)*	99.1(0.1)†	99.3(0.3)†	99.4(0.1)†	99.6(0.2)†	99.3(0.2)‡	LQ
Black	79.7(1.5)*	90.2(1.6)†	95.4(0.9)†	95.4(1.1)†	95.0(1.4)†	95.6(1.6)‡	LQ
Hispanic	86.4(0.9)*	95.9(0.9)†	96.9(1.4)†	96.8(1.1)†	98.1(0.7)†	97.1(1.3)‡	LQ
Other	97.3(1.5)	99.1(0.6)	99.6(0.4)	98.3(1.0)	99.0(0.8)	99.3(0.6)	N
<b>GRADE</b>							
Below Modal Grade	86.2(1.1)*	93.6(1.0)†	96.4(0.6)†	96.3(0.5)†	97.1(0.6)†	96.7(0.7)‡	LQ
At Modal Grade	97.9(0.3)*	99.4(0.2)†	99.6(0.1)†	99.8(0.1)†	99.7(0.1)†	99.6(0.2)‡	LQ
Above Modal Grade	99.2(0.9)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	96.5(0.9)*	99.0(0.3)†	99.2(0.2)†	99.1(0.6)	98.6(0.7)	99.5(0.3)‡	LQ
Southeast	90.1(1.6)*	95.6(1.0)†	98.3(0.6)†	97.8(0.6)†	98.0(0.7)†	98.2(0.5)‡	LQ
Central	96.8(0.4)	98.6(0.5)†	98.4(1.0)	99.0(0.3)†	99.3(0.4)†	98.7(0.9)	L
West	94.0(0.9)*	97.6(0.9)†	98.3(0.5)†	98.3(0.5)†	98.8(0.4)†	98.0(0.5)‡	LQ
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	89.2(1.1)*	95.3(1.2)†	96.5(1.6)†	96.4(1.3)†	98.0(0.9)†	96.9(1.6)‡	LQ
Graduated H.S.	96.0(0.4)*	98.0(0.4)†	98.8(0.5)†	98.5(0.5)†	98.3(0.7)†	98.2(0.5)‡	LQ
Some Educ. After H.S.	97.6(0.6)	98.6(0.3)	99.3(0.4)†	99.7(0.3)†	99.6(0.2)†	99.3(0.4)‡	LQ
Graduated College	98.8(0.2)*	98.9(0.4)	99.2(0.3)	99.3(0.2)	99.3(0.2)	99.6(0.2)‡	L
Unknown	85.5(1.3)*	94.1(1.6)†	95.2(1.7)†	94.2(1.6)†	95.4(1.4)†	94.9(1.6)‡	LQ
<b>TYPE OF SCHOOL</b>							
Public	94.1(0.5)*	97.5(0.4)†	98.5(0.3)†	98.4(0.2)†	98.5(0.3)†	98.5(0.3)‡	LQ
Non-Public	99.0(0.4)	99.5(0.3)	98.9(0.6)	99.7(0.3)	99.9(0.1)	98.7(1.1)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	99.6(0.1)*	100.0(0.0)†	100.0(0.0)†	100.0(0.0)†	100.0(0.0)†	100.0(0.0)‡	LQ
Lower	79.0(1.2)*	91.0(1.2)†	94.2(0.8)†	94.1(0.8)†	94.9(1.0)†	94.0(1.2)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 250

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	64.9(1.2)*	71.4(1.2)†*	73.3(1.6)†	74.7(1.0)†	77.9(1.1)†	78.1(1.1)‡	L
<b>GENDER</b>							
Male	63.9(1.3)*	71.3(1.4)†*	73.8(1.8)†	75.1(1.8)†	78.1(1.6)†	78.9(1.5)‡	L
Female	65.9(1.2)*	71.4(1.3)†*	72.7(1.9)†	74.4(1.3)†	77.7(1.1)†	77.3(1.0)‡	L
<b>RACE/ETHNICITY</b>							
White	72.9(0.9)*	78.3(0.9)†*	78.9(1.7)†*	82.0(1.0)†	84.9(1.1)†	85.5(0.9)‡	L
Black	28.7(2.1)*	37.9(2.5)†*	49.0(3.7)†	48.7(3.6)†	51.0(2.7)†	51.0(3.9)‡	LQ
Hispanic	36.0(2.9)*	52.2(2.5)†	56.0(5.0)†	56.7(3.3)†	63.3(2.7)†	59.2(2.2)‡	LQ
Other	68.6(4.3)*	75.3(5.9)	85.7(4.7)†	76.5(5.0)	82.9(3.2)†	84.8(3.0)‡	L
<b>GRADE</b>							
Below Modal Grade	39.2(1.6)*	46.0(2.0)†*	51.3(2.1)†*	54.2(1.7)†*	61.6(2.1)†	63.1(1.7)‡	L
At Modal Grade	75.2(1.1)*	81.2(1.0)†*	83.9(1.3)†	86.5(0.9)†	87.6(0.8)†	86.9(0.9)‡	LQ
Above Modal Grade	88.7(5.1)	92.3(4.7)	96.8(4.6)	69.3(14.1)	100.0(0.0)	***(***)	N
<b>REGION</b>							
Northeast	73.4(2.4)*	79.4(1.5)*	80.5(2.2)	78.2(2.3)*	78.4(2.5)*	86.7(1.4)‡	L
Southeast	53.5(3.6)*	60.3(2.0)*	68.6(2.3)†	70.1(2.4)†	74.8(2.7)†	73.9(3.1)‡	L
Central	70.4(1.9)	75.9(2.4)	70.7(6.3)	77.9(2.8)	80.6(1.8)†	78.9(3.4)‡	L
West	60.5(2.4)*	69.0(3.0)	73.9(2.2)†	72.9(1.8)†	77.7(2.0)†	74.7(1.8)‡	LQ
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	44.6(1.7)*	51.2(2.3)	54.7(3.9)	55.8(2.6)†	59.7(2.3)†	57.2(4.4)‡	L
Graduated H.S.	64.9(1.2)*	66.7(1.0)*	68.7(1.5)	68.2(1.9)	67.9(2.4)	71.6(1.6)‡	L
Some Educ. After H.S.	75.5(1.5)*	80.5(1.3)	80.7(1.9)	84.6(1.5)†	85.8(1.3)†	82.2(1.7)‡	L
Graduated College	83.4(1.1)*	84.2(1.5)	83.5(1.6)	84.1(1.1)	87.0(1.0)	87.6(1.1)‡	L
Unknown	39.3(1.5)*	52.7(3.9)†	45.2(4.4)	46.3(3.6)	54.7(3.0)†	53.9(3.6)‡	L
<b>TYPE OF SCHOOL</b>							
Public	63.3(1.2)*	69.7(1.3)†*	72.9(1.7)†	73.3(1.2)†	76.3(1.2)†	76.7(1.2)‡	L
Non-Public	80.8(1.7)	85.1(1.6)	81.9(3.3)	87.0(2.0)	89.7(2.1)†	88.5(2.6)‡	L
<b>QUARTILES</b>							
Upper	98.8(0.3)*	99.8(0.1)†	100.0(0.1)†	99.9(0.1)†	100.0(0.0)†	100.0(0.1)‡	LQ
Middle Two	74.0(0.6)*	83.9(0.8)†*	88.2(1.1)†*	89.6(0.8)†*	93.1(0.9)†	93.5(0.7)‡	LQ
Lower	12.9(0.6)*	17.8(0.9)†*	16.7(1.5)*	19.7(1.7)†	25.5(2.2)†	25.3(1.7)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 300

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	18.0(0.7)	17.4(0.9)	15.8(1.0)*	17.3(1.0)	18.9(1.0)	21.3(1.4)†	LQ
<b>GENDER</b>							
Male	18.4(0.9)*	18.9(1.2)	17.6(1.1)*	19.0(1.2)	20.7(1.1)	23.9(1.6)†	LQ
Female	17.5(0.7)	15.9(1.0)	14.1(1.3)	15.7(1.0)	17.2(1.4)	18.7(1.4)	Q
<b>RACE/ETHNICITY</b>							
White	21.4(0.7)	20.5(1.0)*	18.6(1.2)*	21.0(1.2)	22.8(1.3)	25.6(1.6)†	LQ
Black	2.3(0.5)	2.9(1.0)	4.0(1.4)	3.9(1.6)	4.0(0.7)	6.4(2.4)	L
Hispanic	4.0(1.0)	6.3(1.0)	5.5(1.1)	6.4(1.7)	7.0(1.2)	6.4(1.8)	N
Other	27.4(4.8)	24.2(3.9)	28.1(6.2)	22.2(8.3)	30.1(4.7)	32.4(4.5)	N
<b>GRADE</b>							
Below Modal Grade	4.5(0.5)*	4.3(0.7)*	4.0(0.7)*	4.5(0.6)*	7.3(1.0)	8.6(1.1)†	LQ
At Modal Grade	23.2(0.9)*	21.9(0.9)*	21.4(1.1)*	24.6(1.3)	25.6(1.4)	28.5(1.6)†	LQ
Above Modal Grade	47.9(9.2)	60.6(7.2)	45.5(7.9)	25.9(24.9)	92.1(7.5)†	***(***)	N
<b>REGION</b>							
Northeast	24.2(1.9)	23.9(2.1)	22.5(2.4)	21.3(2.4)	19.7(2.4)*	30.3(2.6)	Q
Southeast	11.6(1.5)	10.2(1.3)	10.0(1.3)	13.7(1.4)	18.2(2.7)	15.3(1.7)	L
Central	20.4(1.3)	20.1(1.8)	12.8(2.6)†	17.4(2.4)	20.6(1.7)	21.2(3.3)	Q
West	14.8(1.2)	15.1(1.8)	18.3(2.3)	16.9(1.8)	17.3(1.4)	19.7(1.8)†	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	5.8(0.6)	5.6(0.7)	4.5(1.3)	4.7(1.4)	4.4(1.6)	5.8(1.4)	N
Graduated H.S.	14.8(0.7)*	10.8(0.7)†	8.0(0.9)†	8.7(0.9)†	9.6(1.2)†	11.3(1.1)†	LQ
Some Educ. After H.S.	22.2(1.3)	20.4(1.2)	16.9(2.2)	19.8(1.8)	19.3(1.6)	22.2(2.1)	Q
Graduated College	32.6(1.5)	30.0(1.6)	26.0(1.4)†	26.9(1.5)†	28.2(1.5)	31.1(2.1)	Q
Unknown	5.4(0.9)	7.2(1.9)	4.3(1.9)	4.2(1.3)	6.1(1.6)	5.8(1.3)	N
<b>TYPE OF SCHOOL</b>							
Public	17.0(0.8)	16.4(1.0)	15.6(1.0)	16.7(1.1)	18.0(1.0)	20.0(1.4)	LQ
Non-Public	26.9(1.8)	26.3(3.1)	22.0(6.8)	23.2(2.5)	25.9(3.7)	30.7(3.7)	N
<b>QUARTILES</b>							
Upper	56.9(0.9)*	59.1(1.5)*	59.6(1.9)*	63.2(1.6)†*	67.4(1.6)†	73.5(2.6)†	LQ
Middle Two	7.4(0.4)	5.3(0.4)†	1.9(0.6)†*	3.1(0.5)†*	4.2(0.6)†	5.8(0.9)	LQ
Lower	0.1(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 13

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 350

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	1.0(0.2)	0.5(0.1)	0.4(0.1)†	0.4(0.1)†	0.4(0.2)	0.6(0.2)	Q
<b>GENDER</b>							
Male	1.1(0.2)	0.7(0.2)	0.5(0.2)	0.5(0.2)	0.5(0.2)	0.8(0.3)	N
Female	0.9(0.2)	0.4(0.2)	0.3(0.1)	0.2(0.1)†	0.3(0.3)	0.5(0.3)	Q
<b>RACE/ETHNICITY</b>							
White	1.2(0.2)	0.6(0.1)	0.4(0.1)†	0.4(0.2)†	0.4(0.2)†	0.7(0.3)	Q
Black	0.0(0.1)	0.0(0.0)	0.1(0.1)	0.1(0.3)	0.1(0.3)	0.3(0.6)	N
Hispanic	0.1(0.1)	0.0(0.1)	0.2(0.4)	0.1(0.1)	0.0(0.1)	0.0(0.1)	N
Other	3.7(2.1)	1.0(0.5)	1.4(1.1)	0.5(0.7)	1.2(1.3)	1.8(1.0)	N
<b>GRADE</b>							
Below Modal Grade	0.1(0.1)	0.0(0.1)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.1(0.1)	N
At Modal Grade	1.3(0.2)	0.6(0.1)†	0.5(0.2)†	0.5(0.2)†	0.5(0.1)†	0.8(0.3)	Q
Above Modal Grade	9.0(4.6)	7.7(4.2)	4.6(6.5)	4.9(6.5)	14.8(31.5)	***(***)	N
<b>REGION</b>							
Northeast	1.3(0.5)	1.0(0.4)	0.7(0.3)	0.7(0.4)	0.4(0.3)	1.4(0.6)	N
Southeast	0.5(0.2)	0.1(0.1)	0.2(0.2)	0.1(0.1)	0.5(0.5)	0.2(0.1)	N
Central	1.2(0.3)	0.6(0.2)	0.3(0.3)	0.3(0.2)†	0.3(0.2)†	0.7(0.7)	N
West	0.8(0.3)	0.3(0.1)	0.4(0.3)	0.3(0.2)	0.3(0.1)	0.4(0.2)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	0.1(0.1)	0.0(0.1)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	N
Graduated H.S.	0.5(0.1)	0.1(0.1)	0.1(0.1)	0.0(0.1)†	0.1(0.1)	0.1(0.1)‡	L
Some Educ. After H.S.	1.1(0.2)	0.5(0.2)	0.5(0.4)	0.4(0.3)	0.2(0.2)†	1.0(0.6)	N
Graduated College	2.6(0.6)	1.2(0.4)	0.7(0.3)†	0.7(0.3)†	0.7(0.4)†	1.0(0.4)‡	LQ
Unknown	0.1(0.1)	0.0(0.1)	0.0(0.0)	0.1(0.1)	0.0(0.2)	0.1(0.1)	N
<b>TYPE OF SCHOOL</b>							
Public	0.9(0.2)	0.5(0.1)	0.4(0.1)	0.3(0.1)†	0.3(0.2)	0.6(0.2)	Q
Non-Public	1.4(0.4)	1.0(0.3)	0.1(0.2)†	0.7(0.4)	0.7(0.4)	1.0(1.0)	N
<b>QUARTILES</b>							
Upper	3.9(0.6)	2.1(0.4)	1.5(0.5)†	1.4(0.5)†	1.5(0.6)†	2.5(0.9)	Q
Middle Two	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons. These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 150

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>GENDER</b>							
Male	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Female	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>RACE/ETHNICITY</b>							
White	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Black	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Hispanic	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Other	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>GRADE</b>							
Below Modal Grade	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
At Modal Grade	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Above Modal Grade	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>REGION</b>							
Northeast	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Southeast	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Central	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
West	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Graduated H.S.	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Some Educ. After H.S.	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Graduated College	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Unknown	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>TYPE OF SCHOOL</b>							
Public	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Non-Public	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 200

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	99.8(0.1)*	99.9(0.0)*	99.9(0.1)	100.0(0.1)	100.0(0.0)†	100.0(0.0)‡	L
<b>GENDER</b>							
Male	99.9(0.1)	100.0(0.1)	99.9(0.1)	99.9(0.1)	100.0(0.0)	100.0(0.0)	N
Female	99.7(0.1)*	99.9(0.0)*	100.0(0.1)	100.0(0.1)	100.0(0.0)†	100.0(0.0)‡	L
<b>RACE/ETHNICITY</b>							
White	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Black	98.8(0.3)*	99.7(0.2)	100.0(0.1)†	99.9(0.2)†	100.0(0.1)†	100.0(0.0)‡	LQ
Hispanic	99.3(0.4)	99.8(0.3)	99.4(1.2)	99.6(0.7)	100.0(0.0)	100.0(0.0)	N
Other	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>GRADE</b>							
Below Modal Grade	99.1(0.3)*	99.7(0.2)	99.8(0.5)	99.9(0.2)	100.0(0.0)†	100.0(0.0)‡	L
At Modal Grade	99.9(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Above Modal Grade	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>REGION</b>							
Northeast	99.9(0.1)	99.9(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Southeast	99.6(0.2)	99.9(0.1)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)‡	L
Central	99.9(0.1)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
West	99.8(0.1)	99.9(0.1)	99.8(0.3)	99.9(0.2)	100.0(0.0)	100.0(0.0)‡	N
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	99.5(0.3)	99.8(0.1)	100.0(0.0)	99.9(0.3)	100.0(0.1)	100.0(0.0)	N
Graduated H.S.	99.8(0.1)	99.9(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	N
Some Educ. After H.S.	99.9(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Graduated College	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Unknown	99.1(0.4)	99.5(0.5)	100.0(0.0)	99.3(1.1)	100.0(0.0)	100.0(0.0)‡	N
<b>TYPE OF SCHOOL</b>							
Public	99.8(0.1)*	99.9(0.0)*	99.9(0.1)	100.0(0.1)	100.0(0.0)†	100.0(0.0)‡	L
Non-Public	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	99.3(0.2)*	99.7(0.1)*	99.8(0.3)	99.8(0.2)	100.0(0.0)†	100.0(0.0)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 250

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	92.0(0.5)*	93.0(0.5)*	95.6(0.5)†	96.0(0.5)†	96.6(0.5)†	96.5(0.5)#	L
<b>GENDER</b>							
Male	93.0(0.5)*	93.9(0.6)*	96.1(0.6)†	95.8(0.8)†	96.9(0.6)†	97.3(0.6)#	L
Female	91.0(0.6)*	92.1(0.6)*	95.1(0.7)†	96.2(0.8)†	96.3(0.8)†	96.0(0.6)#	L
<b>RACE/ETHNICITY</b>							
White	95.6(0.3)*	96.2(0.3)*	98.0(0.4)†	97.6(0.3)†	98.3(0.4)†	98.4(0.4)#	L
Black	70.7(1.7)*	76.4(1.5)*	85.6(2.5)†	92.4(2.2)†	89.6(2.5)†	90.6(1.8)#	LQ
Hispanic	78.3(2.3)*	81.4(1.9)*	89.3(2.5)†	85.8(4.2)	94.1(2.2)†	91.8(3.6)#	L
Other	94.5(2.6)	97.2(1.7)	91.9(2.7)	97.9(1.9)	96.5(1.7)	97.0(2.2)	N
<b>GRADE</b>							
Below Modal Grade	75.5(1.3)*	79.0(1.9)*	84.2(2.3)†	88.2(1.8)†	90.0(1.7)†	89.1(2.0)#	L
At Modal Grade	94.8(0.5)*	95.5(0.4)*	98.0(0.4)†	98.1(0.4)†	98.7(0.3)†	98.4(0.3)#	LQ
Above Modal Grade	95.7(0.6)*	96.4(0.8)	97.6(1.2)	98.5(0.9)	99.0(0.7)†	98.9(0.8)#	L
<b>REGION</b>							
Northeast	93.8(0.6)*	95.2(0.9)	96.6(0.9)	94.5(1.7)	97.3(0.7)†	97.3(0.8)#	L
Southeast	87.6(1.3)*	89.2(1.7)*	94.1(1.0)†	96.2(0.7)†	95.6(1.7)†	95.6(0.7)#	L
Central	94.9(0.8)	94.8(0.5)*	96.8(0.9)	97.8(0.6)†	97.9(0.7)†	97.3(0.8)#	L
West	90.5(1.1)*	91.8(1.0)	94.8(1.1)†	95.5(1.0)†	95.8(1.2)†	96.1(1.4)#	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	82.1(1.1)	84.0(1.4)	88.0(2.1)	90.5(2.5)†	89.9(3.7)	90.1(3.9)#	L
Graduated H.S.	90.7(0.6)*	92.7(0.6)	93.9(1.2)	93.8(1.2)	94.8(0.9)†	94.6(1.1)#	L
Some Educ. After H.S.	95.5(0.5)*	96.2(0.7)	97.9(0.6)†	98.5(0.7)†	98.5(0.4)†	98.0(0.8)#	L
Graduated College	97.7(0.3)	97.8(0.4)	98.3(0.4)	98.6(0.5)	98.0(0.6)	98.6(0.4)	N
Unknown	77.2(2.0)	74.4(3.1)	88.0(4.1)	80.1(4.1)	90.9(4.7)†	87.0(5.1)	L
<b>TYPE OF SCHOOL</b>							
Public	91.7(0.5)*	92.5(0.6)*	95.5(0.5)†	95.8(0.6)†	96.3(0.6)†	96.2(0.5)#	L
Non-Public	97.1(0.6)	98.1(0.5)	99.4(0.6)†	98.2(1.2)	99.5(0.5)†	98.8(0.6)	L
<b>QUARTILES</b>							
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	99.4(0.2)*	99.7(0.1)	99.9(0.0)†	99.9(0.1)	100.0(0.1)†	100.0(0.0)#	L
Lower	69.1(1.0)*	72.5(1.3)*	82.5(1.8)†	84.5(2.0)†	86.5(1.8)†	86.2(1.8)#	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 300

	1978	1982	1986	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	51.5(1.1)*	48.5(1.3)*	51.7(1.4)*	56.1(1.4)	59.1(1.3)†	58.6(1.4)‡	LQ
<b>GENDER</b>							
Male	55.1(1.2)	51.9(1.5)*	54.6(1.8)	57.6(1.4)	60.5(1.8)	60.2(2.1)‡	L
Female	48.2(1.3)*	45.3(1.4)*	48.9(1.7)*	54.7(1.8)†	57.7(1.6)†	57.2(1.4)‡	LQ
<b>RACE/ETHNICITY</b>							
White	57.6(1.1)*	54.7(1.4)*	59.1(1.7)*	63.2(1.6)†	66.4(1.4)†	67.0(1.4)‡	LQ
Black	16.8(1.6)*	17.1(1.5)*	20.8(2.8)	32.8(4.5)†	29.8(3.9)†	29.8(3.4)‡	L
Hispanic	23.4(2.7)	21.6(2.2)*	26.5(4.5)	30.1(3.1)	39.2(4.9)†	38.3(5.5)‡	L
Other	64.7(4.9)	62.0(6.8)	54.9(8.2)	61.6(7.0)	69.8(4.8)	66.4(6.6)	N
<b>GRADE</b>							
Below Modal Grade	20.1(1.1)*	18.5(1.5)*	19.8(2.2)	24.4(2.1)	27.2(2.6)	28.2(2.6)‡	L
At Modal Grade	56.5(1.2)*	53.5(1.3)*	58.3(1.5)*	65.1(1.4)†	69.0(1.2)†	66.1(1.4)‡	LQ
Above Modal Grade	61.4(1.6)	58.2(2.0)*	56.8(4.4)*	63.3(3.7)	70.6(3.8)	72.0(3.8)‡	LQ
<b>REGION</b>							
Northeast	59.2(2.1)	55.6(2.5)	58.9(2.9)	55.7(3.2)	64.8(2.8)	66.6(3.8)	LQ
Southeast	42.4(1.9)*	41.7(2.6)*	45.5(2.0)	49.4(2.8)	51.6(2.8)†	51.3(2.5)‡	L
Central	57.1(2.3)	52.0(2.3)	53.9(2.6)	65.3(3.3)	68.5(3.0)†	60.2(3.2)	L
West	45.3(2.3)*	43.3(2.7)*	48.3(4.1)	53.8(2.6)	53.1(3.3)	57.1(2.6)‡	L
<b>PARENTS' EDUCATION LEVEL</b>							
Less Than H.S.	26.1(1.4)	23.6(1.6)	21.1(2.9)	29.7(3.4)	30.9(4.2)	27.1(3.8)	N
Graduated H.S.	43.2(1.2)	41.0(1.2)	39.8(1.7)	41.6(1.7)	47.2(2.7)	42.8(2.7)	N
Some Educ. After H.S.	57.5(1.4)	55.8(1.4)	55.4(2.5)	61.0(2.0)	60.1(2.8)	58.1(2.0)	N
Graduated College	71.7(1.4)	66.8(1.5)*	68.2(2.1)	71.1(1.9)	71.2(1.7)	74.0(1.9)	Q
Unknown	23.9(2.2)	17.9(2.0)	18.3(4.3)	23.3(5.2)	35.3(6.2)	28.0(5.1)	L
<b>TYPE OF SCHOOL</b>							
Public	50.6(1.2)*	46.9(1.3)*	50.7(1.6)*	55.0(1.3)	56.9(1.2)†	56.2(1.3)‡	LQ
Non-Public	67.7(3.3)	66.3(2.4)	75.1(10.6)	71.0(7.9)	79.5(3.7)	75.7(4.3)	L
<b>QUARTILES</b>							
Upper	97.6(0.4)*	98.5(0.4)	99.6(0.3)†	99.5(0.2)†	99.7(0.2)†	99.6(0.3)‡	LQ
Middle Two	53.1(0.6)*	47.3(1.1)†*	53.1(1.8)*	61.5(1.6)†	67.1(1.4)†	66.0(1.3)‡	LQ
Lower	2.4(0.3)	1.0(0.3)†	1.2(0.6)	2.0(0.7)	2.5(0.7)	2.8(1.0)	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Age 17

Average mathematics scale scores across assessment years

Weighted percentages of observations with average mathematics scale scores at or above 350

	1978	1982	1986	1990	1992	TREND TESTS
<b>TOTAL</b>	7.3(0.4)	5.5(0.4)†	6.5(0.5)	7.2(0.6)	7.2(0.6)	7.4(0.8) N
<b>GENDER</b>						
Male	9.5(0.6)	6.9(0.7)†	8.4(0.9)	8.8(0.8)	9.1(0.7)	9.3(1.0) N
Female	5.2(0.7)	4.1(0.4)	4.7(0.6)	5.6(0.8)	5.2(0.8)	5.5(0.9) N
<b>RACE/ETHNICITY</b>						
White	8.5(0.5)	6.4(0.5)†	7.9(0.7)	8.3(0.7)	8.7(0.9)	9.4(1.1) N
Black	0.5(0.2)	0.5(0.3)	0.2(0.3)	2.0(1.0)	0.9(0.7)	0.4(0.4) N
Hispanic	1.4(0.6)	0.7(0.4)	1.1(0.8)	1.9(0.8)	1.2(0.8)	1.4(1.0) N
Other	15.4(3.2)	9.5(2.7)	10.8(6.4)	15.9(4.3)	16.9(5.7)	12.1(3.6) N
<b>GRADE</b>						
Below Modal Grade	0.7(0.3)	0.7(0.3)	0.4(0.3)	1.2(0.5)	0.6(0.4)	1.6(0.5) N
At Modal Grade	8.1(0.5)	6.1(0.5)†*	7.2(0.6)	8.9(0.7)	8.9(0.8)	8.6(0.8) L
Above Modal Grade	11.4(0.9)	8.6(1.4)	13.5(2.4)	8.4(1.8)	14.0(2.9)	11.5(4.0) N
<b>REGION</b>						
Northeast	10.3(1.0)	7.3(1.3)	8.9(1.9)	7.3(1.0)	10.3(1.7)	12.4(2.2) Q
Southeast	5.1(0.5)	4.0(0.7)	4.9(1.1)	6.8(1.8)	4.9(0.9)	5.0(1.0) N
Central	8.4(1.0)	6.9(0.8)	6.6(1.1)	9.3(1.1)	7.9(1.2)	6.7(1.1) N
West	5.0(0.6)	3.3(0.4)	5.6(1.4)	5.5(1.0)	6.3(1.2)	6.0(1.6) N
<b>PARENTS' EDUCATION LEVEL</b>						
Less Than H.S.	1.4(0.3)	1.0(0.4)	0.5(0.5)	1.2(0.8)	0.8(0.8)	0.7(0.7) N
Graduated H.S.	3.9(0.3)	3.1(0.4)	2.7(0.6)	2.4(0.6)	2.9(1.2)	2.3(0.5)‡ N
Some Educ. After H.S.	7.4(0.7)*	5.9(0.6)	6.9(0.9)	6.7(1.0)	5.8(0.8)	4.0(1.1)‡ L
Graduated College	14.1(0.9)	10.2(1.1)†	11.0(1.1)	12.5(1.2)	11.7(1.2)	13.2(1.3) Q
Unknown	1.4(0.6)	0.8(0.4)	1.0(1.7)	0.4(0.4)	2.0(2.5)	0.5(1.0) N
<b>TYPE OF SCHOOL</b>						
Public	7.0(0.4)	5.2(0.4)†	6.1(0.5)	6.5(0.5)	6.7(0.7)	6.4(0.7) N
Non-Public	12.9(2.7)	8.2(1.4)	16.3(9.1)	15.7(5.3)	12.2(2.7)	14.5(3.5) N
<b>QUARTILES</b>						
Upper	27.2(1.0)	21.5(1.3)†*	25.9(1.6)	27.7(1.7)	28.3(2.4)	29.0(2.4) L
Middle Two	1.0(0.2)*	0.2(0.1)†	0.1(0.1)†	0.2(0.2)†	0.3(0.3)	0.3(0.2)‡ LQ
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0) N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 9

Weighted means, standard deviations, and percentiles of mathematics distributions with jackknifed standard errors

	1978	1982	1986	1990	1992	1994
<b>TOTAL SAMPLE</b>						
<b>Mean</b>	218.6(0.8)	219.0(1.1)	221.7(1.0)	229.6(0.8)	229.6(0.8)	231.1(0.8)
<b>St. Dev.</b>	36.0(0.3)	34.8(0.4)	34.0(0.5)	32.9(0.5)	33.1(0.5)	33.2(0.5)
<b>Percentiles</b>						
<b>5</b>	157.1(1.0)	159.3(1.8)	163.0(1.3)	173.3(2.6)	172.2(1.6)	174.1(1.4)
<b>10</b>	171.1(1.2)	173.2(1.8)	176.7(1.5)	185.8(2.2)	185.4(1.2)	186.8(1.4)
<b>25</b>	194.6(1.0)	196.0(1.1)	199.0(1.6)	207.8(1.3)	207.9(1.2)	209.0(0.9)
<b>50</b>	220.1(1.0)	220.4(1.2)	223.3(1.1)	231.1(0.9)	231.0(0.8)	232.5(1.1)
<b>75</b>	243.7(0.9)	243.3(1.4)	245.6(1.2)	252.5(0.7)	252.6(0.8)	254.7(0.8)
<b>90</b>	264.0(1.2)	262.7(1.0)	264.2(1.3)	271.0(1.0)	270.9(1.3)	272.4(1.0)
<b>95</b>	275.7(1.2)	273.8(1.3)	275.5(1.2)	282.1(1.3)	281.7(1.2)	282.9(1.1)
<b>MALE STUDENTS</b>						
<b>Mean</b>	217.4(0.7)	217.1(1.2)	221.7(1.1)	229.1(0.9)	230.8(1.0)	232.2(1.0)
<b>St. Dev.</b>	36.7(0.5)	35.8(0.5)	34.3(0.8)	33.5(0.6)	33.5(0.6)	33.6(0.6)
<b>Percentiles</b>						
<b>5</b>	154.9(2.3)	156.4(2.1)	162.7(2.0)	171.8(2.5)	172.7(1.5)	174.7(2.1)
<b>10</b>	169.0(1.3)	170.2(1.4)	176.1(1.7)	184.6(2.1)	186.1(1.4)	186.8(1.9)
<b>25</b>	192.8(1.0)	193.0(1.5)	198.6(1.6)	206.7(1.2)	208.9(1.6)	209.7(1.3)
<b>50</b>	218.4(0.9)	218.6(1.7)	223.0(1.0)	230.4(1.0)	232.2(1.0)	233.9(1.1)
<b>75</b>	243.0(1.1)	242.3(1.6)	245.7(1.6)	252.4(0.8)	254.2(1.1)	256.2(1.0)
<b>90</b>	263.8(1.2)	262.2(1.2)	265.1(1.9)	271.6(1.8)	272.5(1.2)	274.1(1.1)
<b>95</b>	275.2(1.1)	273.6(1.9)	276.4(2.1)	282.8(1.7)	283.8(1.4)	284.6(1.6)
<b>FEMALE STUDENTS</b>						
<b>Mean</b>	219.9(1.0)	220.8(1.2)	221.7(1.2)	230.2(1.1)	228.4(1.0)	230.0(0.9)
<b>St. Dev.</b>	35.3(0.4)	33.7(0.5)	33.7(0.6)	32.4(0.6)	32.7(0.7)	32.9(0.7)
<b>Percentiles</b>						
<b>5</b>	159.4(1.3)	162.8(1.7)	163.5(2.3)	174.5(2.8)	171.8(1.6)	173.5(1.5)
<b>10</b>	173.1(2.0)	176.6(1.6)	177.5(2.6)	187.0(2.7)	184.9(1.6)	187.0(1.3)
<b>25</b>	196.4(1.2)	198.9(1.8)	199.2(1.8)	208.9(1.3)	206.9(1.5)	208.6(1.0)
<b>50</b>	221.5(1.0)	222.2(1.1)	223.5(1.1)	231.8(1.0)	229.9(1.0)	231.5(1.0)
<b>75</b>	244.3(1.5)	244.2(1.4)	245.5(1.5)	252.7(1.0)	251.1(1.1)	253.5(1.3)
<b>90</b>	264.2(1.4)	263.1(1.0)	263.3(1.6)	270.4(1.3)	269.2(1.2)	270.8(1.7)
<b>95</b>	276.1(1.8)	273.9(1.7)	274.2(2.0)	281.4(1.1)	279.8(2.3)	281.0(1.8)
<b>WHITE STUDENTS</b>						
<b>Mean</b>	224.1(0.9)	224.0(1.1)	226.9(1.1)	235.2(0.8)	235.1(0.8)	236.8(1.0)
<b>St. Dev.</b>	34.0(0.3)	32.8(0.4)	32.6(0.5)	31.2(0.5)	31.0(0.5)	31.4(0.4)
<b>Percentiles</b>						
<b>5</b>	166.3(1.5)	168.1(1.4)	170.6(2.4)	181.8(2.4)	181.8(1.5)	182.4(2.4)
<b>10</b>	179.4(1.5)	180.8(1.7)	183.9(1.7)	194.0(1.6)	194.2(1.5)	194.7(1.1)
<b>25</b>	201.4(1.1)	201.9(1.3)	205.3(1.1)	214.6(0.9)	215.0(0.9)	216.5(1.3)
<b>50</b>	225.1(1.0)	225.3(1.4)	228.3(1.1)	236.3(1.0)	236.1(1.1)	238.3(1.1)
<b>75</b>	247.7(0.8)	246.8(0.9)	249.6(0.8)	256.4(0.6)	256.4(1.0)	258.9(1.1)
<b>90</b>	267.0(1.1)	265.3(1.0)	267.4(1.2)	274.5(0.8)	273.9(1.3)	275.3(1.1)
<b>95</b>	278.4(1.7)	276.0(1.3)	278.2(1.8)	284.8(2.1)	284.5(1.6)	285.7(1.2)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 9

Weighted means, standard deviations, and percentiles of mathematics distributions with jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994
<b>BLACK STUDENTS</b>						
<b>Mean</b>	192.4(1.1)	194.9(1.6)	201.6(1.6)	208.4(2.2)	208.0(2.0)	212.1(1.6)
<b>St. Dev.</b>	34.5(0.8)	33.7(0.8)	31.7(1.1)	31.5(0.8)	31.8(0.7)	30.8(1.1)
<b>Percentiles</b>						
<b>5</b>	133.7(1.9)	136.7(2.5)	146.2(3.2)	156.0(1.7)	154.9(3.4)	159.8(3.8)
<b>10</b>	147.0(1.7)	150.4(2.3)	158.4(4.9)	167.1(3.7)	165.9(2.9)	171.1(3.0)
<b>25</b>	169.3(1.9)	172.5(2.0)	180.5(4.1)	186.0(4.1)	185.5(2.4)	191.3(1.7)
<b>50</b>	193.0(1.1)	196.6(2.0)	202.9(1.6)	208.4(3.1)	208.6(2.1)	213.3(1.7)
<b>75</b>	216.4(1.6)	218.2(2.0)	223.6(2.0)	231.4(2.1)	230.4(2.0)	233.7(1.0)
<b>90</b>	236.1(1.6)	236.7(2.5)	241.2(1.7)	248.9(2.9)	249.2(2.1)	251.6(5.2)
<b>95</b>	247.5(1.4)	247.9(2.8)	251.3(1.3)	258.9(4.3)	258.7(3.4)	261.6(2.2)
<b>HISPANIC STUDENTS</b>						
<b>Mean</b>	202.9(2.2)	204.0(1.3)	205.4(2.1)	213.8(2.1)	211.9(2.3)	209.9(2.3)
<b>St. Dev.</b>	35.1(1.4)	32.8(1.1)	31.1(1.9)	30.3(1.2)	31.9(1.4)	30.7(1.3)
<b>Percentiles</b>						
<b>5</b>	144.4(5.4)	148.1(2.8)	154.8(3.7)	161.8(3.4)	158.6(4.4)	159.1(3.3)
<b>10</b>	156.3(3.7)	160.8(3.2)	163.8(1.8)	173.4(1.4)	169.0(3.5)	170.3(4.1)
<b>25</b>	178.7(3.2)	181.3(2.3)	184.6(3.2)	193.1(3.6)	189.7(2.2)	189.8(3.0)
<b>50</b>	204.3(3.0)	205.2(1.6)	206.3(2.4)	216.2(4.1)	211.8(3.5)	210.5(2.5)
<b>75</b>	227.2(2.5)	226.5(2.0)	226.0(3.8)	235.1(3.3)	233.8(3.4)	230.3(3.8)
<b>90</b>	249.5(4.0)	246.4(3.4)	244.8(3.8)	251.7(3.4)	252.7(3.8)	249.4(4.4)
<b>95</b>	259.6(4.6)	256.6(2.9)	254.4(4.6)	262.2(3.5)	263.1(6.8)	259.4(7.3)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 13

Weighted means, standard deviations, and percentiles of mathematics distributions with jackknifed standard errors

	1978	1982	1986	1990	1992	1994
<b>TOTAL SAMPLE</b>						
<b>Mean</b>	264.1(1.1)	268.6(1.1)	269.0(1.2)	270.4(0.9)	273.1(0.9)	274.3(1.0)
<b>St. Dev.</b>	39.0(0.5)	33.4(0.5)	30.8(0.5)	31.1(0.5)	30.9(0.6)	32.4(0.5)
<b>Percentiles</b>						
<b>5</b>	198.2(1.6)	212.4(2.7)	218.3(1.8)	217.6(2.2)	220.5(2.0)	219.7(2.0)
<b>10</b>	213.3(1.5)	225.3(1.6)	230.0(1.4)	230.2(1.4)	233.2(1.2)	232.5(1.4)
<b>25</b>	238.1(1.3)	246.2(1.2)	248.3(1.8)	249.8(0.9)	252.9(1.1)	253.3(1.3)
<b>50</b>	265.2(1.1)	269.5(1.0)	268.7(1.3)	270.9(1.0)	274.1(0.7)	275.6(0.9)
<b>75</b>	291.1(1.1)	291.6(1.1)	289.6(1.3)	291.7(1.0)	294.0(1.0)	296.5(1.2)
<b>90</b>	313.4(1.2)	310.8(1.2)	309.2(1.5)	309.9(1.0)	311.9(1.6)	314.6(1.2)
<b>95</b>	326.6(1.3)	322.2(1.2)	320.5(2.2)	320.1(1.6)	322.9(1.2)	326.1(1.5)
<b>MALE STUDENTS</b>						
<b>Mean</b>	263.6(1.3)	269.2(1.4)	270.0(1.1)	271.2(1.2)	274.1(1.1)	276.0(1.3)
<b>St. Dev.</b>	40.1(0.5)	34.4(0.7)	31.6(0.7)	32.4(0.7)	31.6(0.9)	33.5(0.8)
<b>Percentiles</b>						
<b>5</b>	195.8(1.4)	211.5(2.2)	218.0(1.8)	215.5(2.1)	220.5(2.9)	218.9(2.9)
<b>10</b>	211.4(1.4)	224.3(2.0)	229.5(1.7)	228.6(2.0)	233.2(2.0)	232.6(2.6)
<b>25</b>	236.7(1.4)	246.1(1.5)	248.9(2.3)	250.2(1.7)	253.1(1.8)	254.8(1.7)
<b>50</b>	264.8(1.4)	270.2(1.2)	270.1(1.6)	272.0(1.0)	274.9(1.0)	278.0(1.3)
<b>75</b>	291.5(1.5)	293.3(1.2)	291.4(1.6)	293.1(1.2)	295.7(0.8)	298.9(1.5)
<b>90</b>	314.4(1.7)	312.5(1.5)	310.8(1.5)	312.4(1.4)	314.0(1.6)	317.2(2.2)
<b>95</b>	327.5(1.5)	324.1(1.3)	322.0(2.6)	323.1(1.9)	324.8(2.1)	328.7(2.2)
<b>FEMALE STUDENTS</b>						
<b>Mean</b>	264.7(1.1)	268.0(1.1)	267.9(1.5)	269.6(0.9)	272.0(1.0)	272.7(1.0)
<b>St. Dev.</b>	37.9(0.6)	32.3(0.5)	30.0(0.7)	29.7(0.5)	30.3(0.6)	31.1(0.5)
<b>Percentiles</b>						
<b>5</b>	200.9(2.6)	213.5(1.5)	218.5(3.2)	220.4(2.3)	220.6(1.0)	220.4(1.9)
<b>10</b>	215.0(1.6)	226.2(1.4)	230.6(2.0)	231.4(1.2)	233.0(1.3)	232.5(1.5)
<b>25</b>	239.4(1.4)	246.3(1.1)	247.8(1.6)	249.5(1.1)	252.7(1.2)	252.3(0.8)
<b>50</b>	265.7(1.2)	268.8(0.9)	267.4(1.7)	269.9(1.2)	273.4(1.0)	273.5(0.9)
<b>75</b>	290.7(1.0)	290.1(1.1)	287.8(1.7)	290.3(1.3)	292.2(1.3)	293.9(1.6)
<b>90</b>	312.4(1.4)	308.8(1.5)	307.2(2.8)	307.7(1.5)	309.8(1.2)	311.4(1.7)
<b>95</b>	325.6(1.2)	320.1(2.0)	318.5(2.4)	317.3(0.8)	320.8(1.1)	323.1(2.9)
<b>WHITE STUDENTS</b>						
<b>Mean</b>	271.6(0.8)	274.4(1.0)	273.6(1.3)	276.3(1.1)	278.9(0.9)	280.8(0.9)
<b>St. Dev.</b>	35.7(0.5)	31.0(0.4)	29.4(0.6)	29.0(0.5)	28.5(0.5)	29.8(0.6)
<b>Percentiles</b>						
<b>5</b>	211.9(1.4)	223.0(1.6)	225.7(1.5)	228.2(1.5)	230.9(1.6)	230.7(1.0)
<b>10</b>	225.5(1.4)	234.4(1.2)	236.5(1.8)	239.3(1.0)	242.2(1.4)	242.8(1.1)
<b>25</b>	247.6(0.9)	253.5(1.1)	254.1(1.4)	257.3(1.1)	260.5(0.8)	262.0(1.1)
<b>50</b>	272.2(1.0)	274.9(0.9)	273.3(1.0)	276.6(1.0)	279.4(1.0)	281.9(1.2)
<b>75</b>	296.0(0.7)	295.5(1.0)	293.2(1.3)	296.0(1.1)	298.0(1.1)	300.5(1.3)
<b>90</b>	317.1(1.2)	313.8(1.4)	312.1(2.2)	313.2(1.3)	315.1(1.3)	317.7(1.5)
<b>95</b>	329.6(1.3)	324.8(1.4)	322.9(1.8)	322.9(1.6)	325.2(1.4)	328.6(1.7)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 13

Weighted means, standard deviations, and percentiles of mathematics distributions with jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994
<b>BLACK STUDENTS</b>						
<b>Mean</b>	229.6(1.9)	240.4(1.6)	249.2(2.3)	249.1(2.3)	250.2(1.9)	251.5(3.5)
<b>St. Dev.</b>	36.0(0.6)	31.0(1.1)	28.3(1.1)	28.7(1.2)	30.1(1.2)	31.5(2.2)
<b>Percentiles</b>						
<b>5</b>	170.2(1.9)	189.0(4.3)	201.7(4.5)	201.6(5.4)	199.5(4.5)	201.8(7.7)
<b>10</b>	184.1(2.6)	200.2(3.7)	213.2(2.3)	211.8(2.2)	212.3(5.1)	212.8(3.8)
<b>25</b>	205.5(1.9)	219.3(1.8)	230.7(2.2)	229.9(3.0)	231.1(3.0)	231.2(3.6)
<b>50</b>	229.0(2.2)	241.0(1.9)	249.3(2.3)	249.4(2.0)	250.6(1.9)	250.6(3.8)
<b>75</b>	254.1(2.2)	260.9(1.4)	266.9(1.5)	267.8(2.9)	270.9(1.8)	271.1(4.8)
<b>90</b>	276.4(2.4)	279.7(2.2)	284.4(3.7)	285.3(2.8)	286.5(2.1)	291.7(3.5)
<b>95</b>	288.4(3.9)	291.1(1.7)	296.4(4.3)	296.2(4.1)	297.4(3.5)	304.2(8.3)
<b>HISPANIC STUDENTS</b>						
<b>Mean</b>	238.0(2.0)	252.4(1.7)	254.3(2.9)	254.6(1.8)	259.3(1.8)	256.0(1.9)
<b>St. Dev.</b>	35.2(1.1)	31.0(1.0)	29.3(1.3)	29.9(1.2)	28.1(1.0)	28.8(1.2)
<b>Percentiles</b>						
<b>5</b>	180.2(1.8)	202.3(2.2)	205.9(3.6)	206.2(3.7)	212.2(3.5)	208.8(2.8)
<b>10</b>	192.5(2.2)	213.5(2.6)	216.2(3.8)	216.4(3.1)	224.0(2.4)	219.4(3.0)
<b>25</b>	214.3(1.8)	230.7(1.9)	235.5(2.7)	234.3(2.2)	240.6(3.2)	237.5(2.3)
<b>50</b>	237.4(2.0)	251.9(1.4)	254.3(3.4)	255.1(1.9)	259.4(2.3)	255.8(1.6)
<b>75</b>	261.9(3.2)	273.7(1.4)	274.2(2.4)	275.2(3.5)	278.6(2.9)	274.3(2.2)
<b>90</b>	283.7(3.4)	292.8(2.4)	291.7(3.1)	292.2(2.9)	294.9(1.6)	292.7(2.3)
<b>95</b>	296.3(3.1)	304.1(2.9)	301.2(1.9)	303.3(3.3)	304.1(3.2)	304.3(9.7)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 17

Weighted means, standard deviations, and percentiles of mathematics distributions with jackknifed standard errors

	1978	1982	1986	1990	1992	1994
<b>TOTAL SAMPLE</b>						
<b>Mean</b>	300.4(1.0)	298.5(0.9)	302.0(0.9)	304.6(0.9)	306.7(0.9)	306.2(1.0)
<b>St. Dev.</b>	34.9(0.3)	32.4(0.4)	31.0(0.5)	31.1(0.6)	30.1(0.5)	30.2(0.6)
<b>Percentiles</b>						
<b>5</b>	241.3(1.3)	244.9(1.1)	251.7(1.2)	253.4(1.0)	255.6(2.1)	255.9(1.9)
<b>10</b>	254.2(1.1)	255.9(1.0)	262.7(1.0)	264.0(1.1)	267.2(1.6)	267.0(1.0)
<b>25</b>	276.4(1.2)	275.8(1.3)	280.7(0.6)	282.5(1.0)	286.3(1.2)	285.6(1.0)
<b>50</b>	301.4(1.1)	298.8(1.0)	301.4(1.3)	304.9(1.1)	307.6(1.0)	306.4(1.2)
<b>75</b>	325.4(1.0)	321.5(0.8)	323.1(1.9)	326.5(1.2)	328.0(1.0)	327.0(1.2)
<b>90</b>	344.7(0.8)	340.6(0.9)	343.0(1.3)	344.5(1.3)	345.2(1.1)	345.5(1.5)
<b>95</b>	355.7(0.9)	351.2(1.1)	354.0(1.1)	355.5(2.2)	354.8(1.0)	355.5(1.7)
<b>MALE STUDENTS</b>						
<b>Mean</b>	303.8(1.0)	301.5(1.0)	304.7(1.2)	306.3(1.1)	308.9(1.1)	308.5(1.4)
<b>St. Dev.</b>	35.4(0.4)	32.8(0.5)	32.0(0.7)	32.3(0.7)	30.8(0.6)	30.9(0.6)
<b>Percentiles</b>						
<b>5</b>	243.8(1.2)	247.0(1.3)	252.7(3.0)	252.8(3.0)	257.8(1.7)	258.0(1.8)
<b>10</b>	257.0(1.2)	257.9(1.2)	264.1(1.2)	263.9(1.2)	268.9(1.8)	268.4(2.9)
<b>25</b>	278.9(1.2)	278.1(1.1)	282.3(1.8)	283.7(1.3)	287.8(1.2)	286.8(2.2)
<b>50</b>	304.8(1.3)	301.8(1.6)	303.9(1.2)	306.4(1.6)	309.0(1.6)	308.3(1.9)
<b>75</b>	329.5(1.1)	325.1(1.2)	327.8(2.1)	329.3(1.1)	331.4(1.1)	330.7(1.8)
<b>90</b>	349.2(1.0)	344.4(1.1)	346.7(1.6)	347.8(1.4)	348.6(1.3)	348.9(1.7)
<b>95</b>	360.1(1.0)	354.4(1.8)	357.5(1.7)	358.5(1.3)	358.1(1.4)	358.8(1.6)
<b>FEMALE STUDENTS</b>						
<b>Mean</b>	297.1(1.0)	295.6(1.0)	299.4(1.0)	302.9(1.1)	304.5(1.1)	304.1(1.1)
<b>St. Dev.</b>	34.0(0.4)	31.7(0.4)	29.9(0.7)	29.9(0.9)	29.3(0.7)	29.1(0.7)
<b>Percentiles</b>						
<b>5</b>	239.3(1.3)	242.8(1.6)	250.3(2.8)	253.9(1.9)	253.7(2.3)	254.0(3.2)
<b>10</b>	252.2(1.0)	254.1(1.2)	261.2(1.4)	264.0(1.5)	265.6(2.4)	266.2(1.0)
<b>25</b>	274.3(1.3)	273.7(1.2)	279.3(1.3)	281.5(1.3)	284.8(1.1)	285.1(1.1)
<b>50</b>	298.3(1.1)	296.1(1.2)	299.1(1.3)	303.7(1.7)	305.8(1.5)	304.9(1.3)
<b>75</b>	321.5(1.0)	317.7(0.8)	319.8(1.7)	324.1(1.2)	324.8(1.2)	323.7(1.3)
<b>90</b>	340.3(1.4)	336.7(1.7)	338.2(2.2)	341.4(1.6)	341.4(2.1)	341.0(2.1)
<b>95</b>	350.4(1.5)	347.2(1.5)	349.3(1.9)	351.8(2.2)	350.6(2.3)	351.5(2.9)
<b>WHITE STUDENTS</b>						
<b>Mean</b>	305.9(0.9)	303.7(0.9)	307.5(1.0)	309.5(1.0)	311.9(0.8)	312.3(1.1)
<b>St. Dev.</b>	32.3(0.2)	30.4(0.4)	29.1(0.6)	29.5(0.5)	28.4(0.5)	28.6(0.6)
<b>Percentiles</b>						
<b>5</b>	251.9(0.6)	253.3(1.1)	261.2(1.6)	260.2(1.3)	264.1(2.0)	264.8(1.7)
<b>10</b>	263.3(1.3)	263.8(1.1)	270.5(1.8)	270.5(1.5)	274.4(1.4)	275.3(1.7)
<b>25</b>	283.5(1.0)	282.3(1.1)	286.9(1.2)	288.8(1.5)	292.8(1.1)	293.1(1.5)
<b>50</b>	306.6(1.0)	303.9(1.2)	306.8(1.3)	310.1(1.3)	312.8(1.0)	312.4(1.3)
<b>75</b>	328.9(0.8)	325.1(0.9)	327.8(1.7)	330.1(1.2)	332.2(1.0)	332.2(1.2)
<b>90</b>	347.3(0.7)	343.4(1.1)	346.1(1.3)	347.2(1.0)	348.0(1.0)	349.1(1.6)
<b>95</b>	357.8(0.7)	353.4(1.5)	356.0(1.4)	357.1(1.3)	357.4(1.2)	358.9(1.8)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Mathematics Trend Assessment — Age 17

Weighted means, standard deviations, and percentiles of mathematics distributions with jackknifed standard errors (continued)

	1978	1982	1986	1990	1992	1994
<b>BLACK STUDENTS</b>						
<b>Mean</b>	268.4(1.3)	271.8(1.2)	278.6(2.1)	288.5(2.8)	285.8(2.2)	285.5(1.8)
<b>St. Dev.</b>	31.8(1.0)	29.2(0.7)	26.4(1.4)	27.9(1.7)	27.5(1.3)	25.6(1.0)
<b>Percentiles</b>						
<b>5</b>	217.2(2.0)	225.1(1.4)	236.7(3.9)	245.4(4.4)	238.5(4.3)	241.1(5.7)
<b>10</b>	227.8(1.7)	234.5(1.7)	244.3(4.2)	253.5(3.5)	248.9(6.9)	251.1(1.9)
<b>25</b>	245.7(1.2)	251.4(1.6)	259.9(1.6)	268.7(1.8)	267.4(3.8)	268.2(2.5)
<b>50</b>	267.7(1.6)	271.2(1.4)	278.6(3.9)	287.1(2.5)	286.9(1.9)	285.9(2.1)
<b>75</b>	290.5(2.2)	291.2(1.7)	296.1(2.5)	307.1(5.3)	303.9(3.9)	303.4(2.0)
<b>90</b>	310.3(2.1)	310.8(1.7)	312.0(7.4)	325.7(5.8)	320.8(2.3)	317.3(4.1)
<b>95</b>	320.7(2.5)	321.3(2.2)	324.8(4.1)	337.7(4.2)	330.8(3.0)	326.1(6.5)
<b>HISPANIC STUDENTS</b>						
<b>Mean</b>	276.3(2.3)	276.7(1.8)	283.1(2.9)	283.5(2.9)	292.2(2.6)	290.8(3.7)
<b>St. Dev.</b>	32.9(1.0)	29.3(1.0)	28.7(2.0)	31.8(1.8)	26.9(1.0)	28.4(1.7)
<b>Percentiles</b>						
<b>5</b>	224.1(4.4)	232.0(1.7)	236.3(5.3)	229.1(5.4)	247.5(4.3)	244.5(5.1)
<b>10</b>	234.0(2.9)	240.7(3.2)	248.5(4.5)	242.2(8.1)	257.8(3.5)	253.6(5.8)
<b>25</b>	253.4(1.8)	255.8(2.4)	264.7(2.8)	263.8(6.8)	273.3(4.5)	271.1(3.8)
<b>50</b>	275.1(3.6)	275.3(3.2)	283.1(2.5)	281.8(2.4)	291.6(3.4)	290.1(5.4)
<b>75</b>	298.5(3.9)	297.1(2.6)	301.2(4.2)	304.0(4.4)	310.7(3.7)	311.0(5.5)
<b>90</b>	319.5(3.9)	314.9(2.6)	318.6(2.3)	325.1(3.6)	327.7(4.8)	328.7(3.6)
<b>95</b>	332.0(0.9)	326.7(4.4)	329.3(7.3)	336.3(8.6)	336.4(2.7)	338.4(2.9)

The standard errors of the estimated scale scores appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Apply concept of probability</b>	1994	42.2(1.7)	47.1(2.1)	37.4(2.2)	46.3(1.8)	32.5(3.6)	30.5(4.5)
	1992	41.8(1.2)	43.6(1.7)	39.9(1.5)	44.4(1.1)	33.5(3.1)	28.2(2.0)
	1990	39.0(1.3)	40.1(1.7)	37.8(1.9)	40.9(1.7)	29.9(2.5)	34.6(3.4)
	1986	37.1(1.3)	39.4(1.9)	34.5(2.2)	38.3(1.5)	35.9(1.9)	25.4(3.9)
	1982	43.6(1.6)	43.8(2.4)	43.3(1.7)	45.2(1.9)	36.0(3.9)	34.8(3.6)
	1978	42.6(1.3)	45.6(2.0)	39.5(1.9)	45.3(1.4)	29.1(2.8)	36.2(3.6)
<b>Read tally chart</b>	1994	90.8(1.0)	91.9(1.1)	90.0(1.1)	95.1(0.6)	77.6(3.3)	82.6(3.6)
	1992	88.5(1.0)	87.9(1.1)	89.1(1.2)	92.2(0.7)	74.0(3.1)	77.8(4.0)
	1990	83.1(1.6)	83.2(1.7)	82.9(1.8)	88.2(1.4)	61.6(3.9)	75.6(5.5)
	1986	70.1(1.6)	71.1(1.7)	69.0(2.1)	74.8(1.8)	51.5(4.0)	57.2(8.2)
	1982	63.5(2.2)	63.7(2.1)	63.3(2.9)	68.4(2.2)	38.0(4.1)	57.5(3.8)
<b>Interpret tally chart</b>	1994	85.0(1.1)	84.5(1.3)	85.5(1.3)	88.2(1.0)	77.9(2.2)	69.9(4.6)
	1992	82.6(1.1)	83.5(1.4)	81.7(1.4)	86.2(0.9)	70.1(3.2)	68.9(2.8)
	1990	80.4(1.7)	79.8(1.9)	81.1(1.8)	83.6(1.4)	66.8(5.0)	73.6(4.2)
	1986	71.6(1.4)	72.3(1.6)	70.7(1.7)	74.5(1.6)	59.7(3.3)	65.2(6.1)
	1982	72.8(1.7)	71.4(2.1)	74.3(1.8)	76.0(2.0)	55.3(2.7)	67.8(4.3)
<b>Interpret tally chart</b>	1994	59.1(1.3)	61.2(1.9)	57.1(1.8)	65.4(1.1)	40.3(4.1)	38.0(4.9)
	1992	56.2(1.2)	56.3(1.6)	56.1(1.6)	60.8(1.4)	38.4(2.9)	41.9(4.0)
	1990	51.6(1.5)	52.7(2.1)	50.4(1.9)	56.5(1.7)	31.7(3.8)	39.0(3.7)
	1986	44.9(1.7)	46.7(2.1)	43.0(1.8)	49.6(1.9)	27.0(2.3)	29.0(5.6)
	1982	40.0(1.7)	40.6(2.3)	39.3(2.2)	44.4(2.0)	17.7(2.4)	30.5(3.7)
<b>Read data from table</b>	1994	80.6(1.1)	79.6(1.3)	81.8(1.6)	83.2(1.2)	73.9(2.8)	69.4(4.6)
	1992	80.0(1.2)	78.5(1.6)	81.3(1.4)	81.2(1.3)	76.4(1.8)	72.2(5.1)
	1990	81.3(1.1)	77.1(1.7)	85.3(1.4)	83.4(1.0)	73.8(3.2)	73.2(4.3)
	1986	76.0(1.4)	72.5(2.0)	79.3(1.5)	78.1(1.8)	67.6(3.6)	70.5(5.5)
	1982	76.2(1.3)	75.2(1.9)	77.2(1.3)	78.4(1.1)	65.3(3.1)	69.1(4.5)
	1978	72.8(1.0)	70.0(1.4)	75.5(1.5)	76.0(1.1)	59.7(3.9)	59.0(5.9)
<b>Interpret data in table</b>	1994	44.2(1.8)	47.0(2.1)	41.5(2.0)	50.5(2.1)	25.3(2.3)	22.2(3.9)
	1992	41.8(1.5)	41.2(2.1)	42.3(1.9)	46.7(1.4)	25.4(3.5)	23.3(4.6)
	1990	44.5(1.5)	43.0(1.6)	46.0(2.3)	49.7(1.9)	27.2(2.9)	28.5(4.3)
	1986	35.8(1.7)	36.3(2.3)	35.4(2.0)	40.1(2.3)	19.4(2.2)	23.3(4.1)
	1982	36.6(2.2)	36.0(2.2)	37.2(2.8)	40.9(2.7)	20.7(2.2)	19.4(3.5)
	1978	36.6(1.4)	37.5(1.7)	35.8(1.6)	39.6(1.6)	26.3(3.2)	23.2(4.9)
<b>Compute using data in table</b>	1994	67.6(1.6)	67.8(1.9)	67.6(2.0)	73.0(1.6)	52.8(3.8)	44.7(3.4)
	1992	64.3(1.3)	65.5(1.6)	63.2(1.5)	68.2(1.5)	51.2(2.2)	44.9(5.5)
	1990	67.8(1.4)	65.8(2.3)	69.6(1.6)	71.8(1.5)	53.6(4.0)	55.1(4.2)
	1986	60.9(1.9)	58.8(2.2)	62.9(2.0)	64.2(2.3)	47.9(2.4)	46.8(4.9)
	1982	54.9(1.8)	54.1(1.9)	55.7(2.5)	59.3(2.0)	33.4(2.7)	45.1(5.7)
	1978	54.9(1.7)	54.7(1.8)	55.0(2.3)	59.6(1.9)	32.9(3.1)	42.7(8.6)
<b>Read data in bar graph</b>	1994	82.4(1.2)	83.3(1.4)	81.6(1.5)	86.3(1.2)	71.1(4.2)	72.0(4.4)
	1992	82.8(0.8)	81.1(1.2)	84.5(1.4)	84.7(0.8)	75.8(2.0)	74.6(3.2)
	1990	82.7(1.1)	82.0(1.7)	83.4(1.2)	85.2(1.1)	73.3(3.2)	76.1(4.2)
	1986	75.8(1.2)	74.3(1.7)	77.5(1.3)	77.4(1.3)	71.0(3.0)	72.7(3.9)
	1982	67.0(1.7)	62.6(2.4)	71.2(1.9)	70.5(2.0)	47.8(5.1)	61.6(4.7)
	1978	53.8(1.9)	53.7(2.2)	53.9(2.2)	58.0(2.2)	36.2(3.0)	38.2(3.3)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Interpret data in bar graph</b>	1994	44.9(1.7)	48.7(2.3)	41.2(1.9)	50.8(1.8)	30.9(2.8)	17.9(3.8)
	1992	43.4(1.5)	47.0(1.8)	39.8(2.0)	47.6(1.8)	29.7(2.2)	26.9(4.7)
	1990	42.1(1.7)	43.0(2.2)	41.2(2.4)	47.2(1.8)	27.6(3.1)	20.8(4.0)
	1986	33.4(1.3)	35.9(1.5)	30.7(1.5)	37.7(1.5)	16.9(2.0)	23.3(4.0)
	1982	26.2(1.9)	26.1(1.7)	26.3(2.7)	28.8(2.3)	16.2(2.0)	11.8(2.4)
	1978	23.9(1.3)	26.3(1.6)	21.4(1.7)	25.7(1.6)	17.3(2.5)	16.5(3.4)
<b>Compute with data in bar graph</b>	1994	57.3(1.1)	59.4(1.8)	55.4(1.5)	61.7(1.4)	49.3(3.2)	29.6(4.2)
	1992	57.8(1.4)	59.5(1.8)	56.1(1.6)	61.8(1.3)	42.9(3.1)	45.1(5.1)
	1990	55.2(1.7)	56.3(1.9)	54.1(2.3)	59.4(1.7)	39.9(2.8)	40.9(4.0)
	1986	49.1(1.4)	51.7(1.7)	46.3(1.7)	54.7(1.7)	29.3(2.1)	31.7(3.0)
	1982	34.9(1.5)	37.8(2.4)	32.1(2.4)	38.5(1.8)	16.8(1.9)	24.1(5.1)
	1978	28.6(1.5)	29.4(1.9)	27.7(1.9)	31.9(1.8)	16.6(3.1)	11.3(3.6)
<b>Solve time problem</b>	1994	71.2(1.1)	73.5(1.9)	68.8(1.2)	75.0(1.2)	60.5(3.4)	58.0(4.4)
	1992	71.5(1.2)	73.8(1.4)	69.3(1.5)	74.1(1.2)	58.6(2.3)	68.9(4.6)
	1990	72.4(1.3)	75.7(1.4)	69.1(1.9)	74.5(1.3)	63.0(4.0)	67.5(3.9)
	1986	65.3(1.5)	69.7(1.9)	60.6(1.9)	68.7(1.7)	49.8(2.5)	56.4(5.8)
	1982	57.6(1.5)	58.4(2.2)	56.8(2.1)	61.7(1.8)	36.6(2.5)	47.2(4.4)
<b>Find perimeter of rectangle</b>	1994	22.8(1.2)	23.0(1.9)	22.7(1.3)	25.1(1.4)	13.2(2.4)	17.6(4.0)
	1992	22.4(1.3)	23.9(1.6)	20.9(1.5)	24.1(1.6)	17.1(2.3)	15.8(2.4)
	1990	20.0(1.2)	23.7(1.8)	16.4(1.3)	21.0(1.3)	14.9(2.4)	18.2(2.6)
	1986	15.8(1.1)	16.6(1.4)	14.9(1.2)	17.5(1.2)	10.3(1.5)	9.8(3.2)
	1982	11.5(1.1)	12.7(1.6)	10.2(1.1)	11.0(1.3)	13.8(2.0)	11.5(2.2)
<b>Find perimeter of rectangle</b>	1994	28.9(2.0)	30.9(2.4)	27.1(2.4)	31.7(2.4)	22.2(2.6)	15.9(3.0)
	1992	25.1(1.6)	26.4(1.8)	23.8(1.9)	27.5(1.9)	14.8(2.3)	19.9(4.3)
	1990	24.9(1.6)	26.0(2.4)	24.0(1.5)	27.0(2.1)	17.0(2.4)	17.4(4.0)
	1986	18.5(1.2)	20.4(1.6)	16.7(1.2)	19.0(1.5)	16.9(2.5)	10.8(3.2)
	1982	24.8(1.7)	25.6(1.9)	24.0(2.4)	26.9(2.0)	12.9(1.7)	21.3(4.3)
<b>Determine distance on map</b>	1994	15.1(1.1)	14.2(1.6)	15.9(1.3)	14.7(1.2)	14.3(2.3)	18.3(2.0)
	1992	15.0(0.9)	15.3(1.1)	14.8(1.1)	13.6(1.0)	19.5(2.6)	22.1(3.3)
	1990	14.1(1.0)	14.1(1.4)	14.1(1.2)	13.5(1.1)	15.7(2.2)	14.8(3.0)
	1986	15.7(1.0)	15.5(1.4)	15.8(1.2)	14.8(1.3)	19.8(2.0)	17.1(3.2)
	1982	19.0(1.1)	19.0(1.6)	19.1(1.5)	17.7(1.2)	23.2(2.8)	30.0(2.4)
<b>Understand place value</b>	1994	73.9(2.4)	77.5(2.7)	70.5(2.6)	78.5(2.3)	58.4(3.7)	66.6(5.4)
	1992	74.2(1.1)	77.6(1.4)	71.1(1.3)	78.7(1.1)	56.8(3.5)	61.5(6.0)
	1990	75.7(1.4)	77.4(1.7)	74.1(1.9)	81.1(1.4)	56.5(4.0)	63.4(4.6)
	1986	70.3(1.4)	71.3(1.8)	69.5(1.7)	75.5(1.5)	50.5(2.3)	50.5(6.0)
	1982	73.0(1.8)	75.1(2.6)	71.0(2.0)	77.1(1.9)	55.3(3.1)	57.2(5.0)
	1978	79.9(1.2)	81.3(1.8)	78.6(1.5)	84.9(1.1)	56.0(3.2)	69.8(4.3)
<b>Identify greatest number</b>	1994	82.2(0.9)	84.7(1.3)	79.7(1.4)	84.9(0.9)	75.7(2.8)	68.8(3.4)
	1992	81.7(0.8)	81.9(1.2)	81.4(1.3)	84.3(1.0)	69.9(3.1)	73.8(3.6)
	1990	80.5(1.2)	81.0(1.4)	80.1(1.6)	83.1(1.2)	71.0(2.6)	78.5(2.6)
	1986	76.9(1.3)	77.0(1.5)	76.8(1.5)	78.1(1.5)	71.3(2.2)	76.5(3.7)
	1982	75.3(1.4)	73.9(1.3)	76.7(2.1)	77.1(1.5)	66.7(2.3)	69.6(5.0)
	1978	75.1(1.0)	73.1(1.6)	77.0(1.1)	78.2(1.0)	62.6(3.1)	62.5(3.1)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Relate part to whole</b>	1994	30.1(1.9)	32.2(2.4)	28.2(2.5)	30.8(2.2)	27.8(3.5)	21.3(4.2)
	1992	29.4(1.1)	30.9(1.5)	28.0(1.3)	31.9(1.4)	20.3(2.7)	20.5(3.1)
	1990	29.6(1.8)	30.5(2.3)	28.7(2.3)	30.8(1.9)	26.9(2.8)	25.7(3.4)
	1986	31.5(1.4)	33.0(1.7)	30.0(1.6)	33.6(1.6)	23.9(2.6)	23.5(3.1)
	1982	42.1(1.6)	44.4(2.0)	39.8(2.2)	45.5(2.0)	29.3(1.7)	24.2(4.4)
	1978	44.0(1.4)	43.7(1.5)	44.2(2.0)	46.6(1.5)	34.1(2.6)	30.5(3.9)
<b>Estimate large number</b>	1994	66.5(1.2)	69.4(1.9)	63.8(1.4)	69.1(1.6)	59.6(2.8)	56.5(4.6)
	1992	66.2(1.2)	68.0(1.5)	64.3(1.6)	70.1(1.3)	49.6(3.6)	56.6(3.2)
	1990	65.3(1.2)	66.9(1.6)	63.6(1.6)	68.8(1.3)	51.7(3.3)	51.8(3.8)
	1986	62.3(0.9)	63.2(1.3)	61.3(1.3)	65.1(1.2)	49.1(2.2)	56.5(4.1)
	1982	63.1(1.7)	62.8(1.8)	63.4(2.2)	65.8(1.9)	50.1(2.9)	53.9(6.0)
<b>Use property of transitivity</b>	1994	75.6(1.9)	74.1(2.3)	77.1(2.3)	76.6(2.1)	75.0(3.3)	65.5(5.6)
	1992	73.2(1.6)	70.3(1.7)	75.9(2.0)	76.5(1.3)	59.7(4.5)	61.8(6.6)
	1990	76.8(1.2)	73.8(1.4)	79.7(1.5)	79.1(1.3)	68.9(3.1)	69.8(5.3)
	1986	72.6(1.8)	69.7(2.1)	75.3(2.1)	74.7(2.1)	61.7(3.7)	69.2(6.1)
	1982	78.0(1.2)	76.9(1.8)	79.0(1.2)	80.7(1.1)	64.8(3.8)	74.8(5.4)
	1978	73.3(1.2)	69.4(1.4)	77.3(1.7)	75.4(1.4)	68.1(2.5)	54.8(5.6)
<b>Determine age relationship</b>	1994	56.2(1.3)	57.8(2.1)	54.6(1.4)	60.3(1.5)	39.5(2.5)	39.7(4.1)
	1992	56.1(1.3)	60.5(1.7)	52.1(1.7)	59.6(1.5)	42.2(3.1)	46.6(4.4)
	1990	55.9(1.5)	55.9(1.9)	55.9(2.0)	59.6(1.5)	42.3(4.4)	43.3(2.9)
	1986	54.4(1.1)	57.3(1.3)	51.6(1.9)	57.2(1.4)	40.5(3.3)	55.1(3.7)
	1982	48.2(1.3)	49.2(1.8)	47.4(1.6)	50.6(1.4)	37.5(3.0)	42.5(3.9)
	1978	49.7(1.5)	50.0(1.8)	49.5(2.0)	50.9(1.8)	43.8(2.4)	43.6(8.6)
<b>Identify valid conclusion</b>	1994	62.7(1.6)	65.0(1.9)	60.7(2.2)	65.8(1.4)	54.5(3.4)	48.6(4.6)
	1992	63.1(1.0)	63.5(1.2)	62.6(1.5)	66.2(1.2)	54.2(2.7)	51.0(3.8)
	1990	65.7(1.2)	64.7(1.9)	66.7(1.9)	68.8(1.7)	57.6(3.4)	50.2(4.7)
	1986	63.4(1.5)	61.8(2.3)	65.0(1.7)	66.1(1.5)	53.3(3.3)	57.7(4.4)
	1982	60.2(1.5)	58.4(2.3)	61.8(1.8)	60.8(1.7)	57.4(2.6)	55.9(4.1)
	1978	66.7(1.5)	65.5(1.9)	67.9(2.1)	67.7(1.5)	60.7(3.3)	66.8(5.0)
<b>Identify valid conclusion</b>	1994	24.1(1.3)	24.4(1.5)	23.8(1.9)	24.5(1.6)	21.1(2.2)	27.1(3.9)
	1992	21.8(0.8)	20.3(1.1)	23.2(1.4)	22.6(1.0)	19.2(2.1)	22.3(3.2)
	1990	22.9(1.0)	22.9(1.4)	22.8(1.5)	22.7(1.2)	21.4(2.8)	26.6(3.1)
	1986	22.0(0.9)	20.5(1.3)	23.5(1.4)	22.0(1.0)	23.7(2.5)	18.6(2.8)
	1982	23.6(1.3)	24.2(1.7)	23.0(1.8)	24.5(1.5)	20.0(2.7)	21.1(2.1)
	1978	25.1(1.3)	25.5(1.9)	24.7(1.4)	26.3(1.4)	21.2(3.0)	20.1(3.9)
<b>Read circle graph</b>	1994	81.6(1.2)	80.1(1.7)	83.2(1.6)	85.1(1.2)	72.7(2.8)	62.3(5.1)
	1992	84.3(1.0)	83.1(1.2)	85.5(1.3)	87.1(1.0)	73.9(2.7)	73.1(4.6)
	1990	83.9(1.4)	82.0(1.7)	85.8(1.6)	86.9(1.3)	75.1(3.9)	73.1(4.6)
	1986	77.6(1.4)	77.4(1.6)	77.7(1.6)	80.5(1.5)	70.1(2.7)	62.3(5.6)
	1982	82.6(1.2)	80.9(1.6)	84.3(1.3)	85.8(1.2)	67.4(2.5)	76.5(6.1)
	1978	74.7(1.5)	72.0(2.0)	77.2(1.6)	78.1(1.4)	56.7(3.3)	68.2(4.0)
<b>Interpret data in circle graph</b>	1994	70.3(1.6)	66.9(2.2)	73.6(1.7)	75.6(1.9)	54.2(3.0)	49.5(5.3)
	1992	72.4(1.2)	68.9(1.9)	76.0(1.3)	75.8(1.3)	63.8(3.0)	54.8(4.9)
	1990	72.2(1.5)	69.9(1.9)	74.5(1.8)	76.1(1.6)	60.6(3.6)	61.2(3.9)
	1986	60.5(1.8)	57.6(1.9)	63.7(2.0)	63.6(1.8)	50.1(2.9)	49.9(8.1)
	1982	72.8(1.5)	70.2(1.7)	75.4(1.9)	76.0(1.2)	54.6(3.9)	73.0(5.3)
	1978	59.1(1.6)	54.0(2.2)	63.7(1.8)	62.3(1.7)	44.6(3.1)	45.5(5.0)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Estimate weight (metric)</b>	1994	23.4(1.9)	27.3(2.0)	19.6(2.2)	22.6(2.4)	26.1(3.2)	21.4(4.0)
	1992	24.4(1.3)	26.9(1.7)	22.1(1.7)	24.2(1.4)	25.1(3.2)	21.6(3.0)
	1990	23.0(1.2)	25.6(1.6)	20.6(1.6)	22.6(1.4)	22.2(2.3)	30.6(5.3)
	1986	24.5(1.3)	29.0(1.6)	20.2(1.7)	23.7(1.3)	29.5(3.7)	22.6(4.6)
	1982	37.2(1.7)	38.9(2.0)	35.3(2.3)	35.4(2.0)	45.0(2.5)	40.8(5.1)
<b>Identify greatest metric unit</b>	1994	41.3(2.5)	46.7(2.5)	36.2(2.9)	44.6(2.5)	31.0(5.3)	24.3(4.2)
	1992	41.9(1.8)	45.9(2.3)	38.3(2.4)	44.3(2.2)	34.5(3.1)	28.8(2.9)
	1990	38.4(2.3)	41.5(2.8)	35.5(2.4)	41.1(2.6)	26.0(2.9)	34.0(4.9)
	1986	28.5(1.8)	32.4(1.9)	24.8(2.2)	30.0(1.9)	22.0(2.8)	23.7(4.9)
	1982	38.5(1.9)	41.0(1.7)	36.1(2.5)	39.5(2.2)	36.6(3.3)	31.2(2.3)
	1978	36.6(1.5)	37.2(1.9)	36.0(2.0)	38.2(1.6)	24.6(1.5)	38.3(4.7)
<b>Read scale</b>	1994	86.4(0.7)	87.9(0.8)	85.1(1.2)	88.5(0.7)	75.6(3.0)	81.9(3.7)
	1992	86.8(0.9)	87.3(1.1)	86.3(1.1)	90.1(0.8)	74.2(3.0)	80.4(3.4)
	1990	87.2(1.1)	87.0(1.4)	87.5(1.3)	90.7(0.9)	72.1(4.9)	80.3(2.9)
	1986	83.8(1.0)	85.2(1.3)	82.3(1.2)	87.5(1.0)	68.3(2.6)	75.4(3.4)
	1982	79.5(1.2)	79.2(1.4)	79.8(1.5)	84.3(0.9)	57.1(2.8)	70.1(2.8)
	1978	80.3(1.1)	81.1(1.5)	79.5(1.5)	84.1(1.1)	63.4(2.7)	72.0(4.3)
<b>Identify greatest money value</b>	1994	77.5(1.2)	80.2(1.4)	74.9(1.8)	82.1(1.3)	64.3(3.2)	58.3(5.1)
	1992	73.2(1.2)	76.5(1.6)	70.2(1.5)	78.6(1.1)	54.1(2.7)	52.4(4.1)
	1990	77.5(1.1)	79.8(1.6)	75.3(1.6)	82.1(1.2)	62.5(3.2)	65.6(4.3)
	1986	74.4(1.4)	76.5(1.9)	72.4(1.6)	79.1(1.6)	56.5(3.5)	63.6(5.3)
	1982	74.3(1.5)	76.7(1.6)	72.1(1.8)	78.9(1.4)	54.7(3.1)	57.7(5.4)
	1978	76.0(1.3)	77.5(1.7)	74.5(1.7)	80.5(1.3)	57.3(4.7)	57.8(4.8)
<b>Identify greatest money value</b>	1994	62.4(1.4)	67.0(1.6)	58.1(2.0)	67.2(1.5)	48.1(3.4)	48.8(6.0)
	1992	57.3(1.4)	61.2(1.6)	53.7(1.7)	62.9(1.5)	36.4(2.1)	38.3(4.5)
	1990	61.6(1.5)	63.8(1.9)	59.5(2.0)	66.6(1.9)	44.0(3.1)	53.3(4.6)
	1986	56.7(1.9)	58.8(2.3)	54.7(2.5)	60.9(1.9)	40.8(4.4)	38.4(4.7)
	1982	57.5(1.5)	59.2(2.3)	55.9(1.9)	62.2(1.5)	37.4(3.1)	38.0(4.5)
	1978	61.4(1.4)	62.3(1.8)	60.5(1.9)	65.5(1.5)	41.9(4.2)	50.0(4.7)
<b>Solve money problem</b>	1994	47.7(1.7)	49.4(2.0)	46.2(2.5)	51.3(2.0)	34.7(2.6)	35.5(6.1)
	1992	43.1(1.2)	47.4(1.7)	39.3(1.7)	46.9(1.3)	29.1(3.2)	28.7(4.6)
	1990	43.2(1.4)	43.2(1.9)	43.2(1.7)	46.8(1.6)	29.7(3.5)	30.5(3.9)
	1986	37.9(1.3)	37.2(1.7)	38.6(2.0)	42.5(1.6)	21.8(2.7)	22.6(2.3)
	1982	34.2(1.4)	33.8(1.5)	34.6(2.0)	36.5(1.4)	23.3(2.2)	26.8(3.5)
	1978	37.9(1.2)	40.7(1.6)	35.1(1.5)	40.8(1.3)	25.9(2.6)	28.8(5.1)
<b>Solve money problem</b>	1994	43.3(2.1)	42.7(2.8)	44.2(2.1)	46.9(2.3)	24.2(3.3)	36.6(4.5)
	1992	39.3(1.1)	41.7(1.6)	37.1(1.6)	43.9(1.4)	21.3(2.5)	21.5(3.4)
	1990	35.1(1.9)	35.4(2.0)	34.8(2.3)	38.7(2.1)	21.1(4.2)	23.6(4.0)
	1986	29.9(1.6)	31.6(2.3)	28.3(1.7)	32.7(1.9)	20.3(2.8)	17.9(3.6)
	1982	28.9(1.6)	31.5(1.7)	26.4(2.0)	31.9(2.0)	15.4(2.3)	15.9(3.2)
	1978	31.1(1.6)	31.2(2.0)	31.1(2.0)	34.4(1.8)	17.7(2.4)	20.1(4.0)
<b>Find area of rectangle</b>	1994	9.8(0.7)	9.2(1.0)	10.5(1.1)	9.8(0.9)	10.9(2.1)	4.9(1.4)
	1992	9.5(0.9)	9.8(1.1)	9.1(1.1)	9.1(0.9)	10.8(2.5)	8.9(3.2)
	1990	9.9(1.4)	9.3(1.4)	10.4(1.9)	10.1(1.6)	7.9(2.1)	5.5(2.1)
	1986	9.2(1.0)	8.6(1.1)	9.8(1.3)	9.6(1.3)	8.4(1.7)	3.5(1.8)
	1982	8.4(1.1)	7.8(1.3)	8.9(1.6)	9.0(1.4)	4.2(1.2)	7.9(3.1)
	1978	3.4(0.5)	3.0(0.5)	3.9(0.7)	3.8(0.6)	2.0(0.6)	2.1(1.5)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find area of rectangle</b>	1994	35.5(1.2)	35.1(1.9)	36.0(1.7)	37.2(1.5)	29.6(3.6)	30.7(3.6)
	1992	32.9(1.6)	35.2(2.0)	30.8(2.0)	34.5(1.8)	29.8(3.5)	21.3(3.6)
	1990	33.6(1.5)	34.2(2.0)	33.0(1.8)	35.4(1.7)	29.8(2.9)	19.6(3.6)
	1986	29.3(1.3)	30.6(1.8)	28.0(1.6)	30.1(1.3)	25.8(3.9)	22.1(3.3)
	1982	24.8(1.6)	26.2(2.2)	23.5(1.9)	25.0(1.9)	21.5(3.0)	24.3(4.1)
	1978	27.7(1.4)	26.2(1.7)	29.2(2.1)	28.0(1.6)	26.4(2.7)	22.2(4.6)
<b>Apply property of square</b>	1994	65.4(1.5)	63.5(2.1)	67.3(2.2)	72.1(1.4)	40.6(3.7)	54.6(5.2)
	1992	60.4(1.3)	60.9(1.7)	60.0(1.8)	65.7(1.5)	40.2(3.6)	46.1(3.9)
	1990	64.8(1.5)	64.4(1.9)	65.2(1.8)	70.4(1.3)	44.6(3.9)	53.8(4.2)
	1986	62.4(1.5)	62.0(1.6)	62.7(2.1)	68.1(1.5)	41.7(2.9)	42.8(4.5)
	1982	64.5(1.7)	63.0(2.0)	66.0(2.1)	69.4(1.9)	41.1(3.1)	54.0(5.4)
	1978	66.4(1.4)	66.4(1.9)	66.4(1.6)	71.6(1.3)	40.3(2.6)	57.6(4.5)
<b>Solve number sentence</b>	1994	91.2(1.8)	91.5(1.6)	90.9(2.1)	92.6(1.8)	86.5(3.3)	92.2(1.8)
	1992	94.5(0.8)	94.2(1.0)	94.8(0.8)	95.4(0.7)	90.6(1.7)	91.7(4.2)
	1990	94.7(0.7)	94.1(1.0)	95.3(0.9)	95.4(0.6)	92.0(1.9)	93.8(2.1)
	1986	92.3(0.6)	92.0(0.9)	92.7(0.9)	93.9(0.8)	85.1(2.0)	88.5(3.1)
	1982	90.7(0.8)	88.5(1.1)	92.8(0.9)	92.4(0.8)	82.9(2.2)	85.0(3.0)
	1978	92.3(1.1)	91.0(1.6)	93.6(1.0)	94.8(0.8)	78.2(4.5)	90.2(2.6)
<b>Solve number sentence</b>	1994	54.4(1.5)	54.8(2.5)	54.3(1.4)	58.5(1.9)	42.7(3.1)	36.1(4.8)
	1992	51.3(1.4)	52.6(1.6)	50.0(1.8)	54.5(1.4)	37.1(2.9)	45.5(4.1)
	1990	47.0(1.4)	46.9(2.0)	47.0(1.8)	49.5(1.5)	37.1(2.7)	38.3(4.5)
	1986	50.5(1.8)	51.9(2.1)	48.9(2.0)	52.4(2.1)	44.9(3.3)	40.0(8.6)
	1982	55.9(1.8)	53.9(2.0)	57.9(2.6)	57.9(2.0)	47.0(2.8)	45.5(6.3)
	1978	63.1(1.7)	61.4(1.8)	64.8(2.3)	66.3(1.6)	46.4(4.0)	53.8(8.1)
<b>Understand place value</b>	1994	79.0(1.1)	79.1(1.3)	78.8(1.6)	81.0(1.0)	71.8(3.7)	70.3(4.5)
	1992	81.4(1.1)	82.2(1.3)	80.7(1.4)	83.2(0.9)	75.0(3.5)	74.4(3.8)
	1990	78.8(1.4)	78.6(1.8)	79.1(1.8)	81.5(1.5)	66.4(3.8)	70.5(3.3)
	1986	72.7(1.5)	71.9(1.7)	73.5(2.0)	74.5(1.7)	68.3(2.3)	62.3(6.8)
	1982	76.6(1.8)	74.7(2.1)	78.7(2.3)	78.3(2.1)	70.0(3.3)	66.4(5.5)
<b>Understand place value</b>	1994	67.1(2.2)	66.7(2.5)	67.5(2.4)	71.3(2.3)	56.5(3.1)	46.9(5.4)
	1992	62.3(1.5)	63.7(1.8)	60.9(1.7)	66.9(1.4)	44.9(3.2)	45.6(6.5)
	1990	64.6(1.7)	64.6(2.3)	64.6(1.8)	67.9(2.0)	51.1(3.9)	61.8(4.4)
	1986	59.3(1.6)	57.4(2.0)	61.1(1.9)	62.5(2.0)	46.2(4.6)	49.5(4.5)
	1982	63.0(2.1)	61.7(2.3)	64.4(2.5)	65.8(2.5)	50.0(3.3)	50.7(2.8)
<b>Apply multiplication</b>	1994	93.7(0.6)	93.0(1.0)	94.3(0.8)	94.5(0.6)	90.5(1.8)	91.2(1.4)
	1992	94.4(0.6)	94.5(0.7)	94.3(0.7)	96.1(0.5)	88.6(1.6)	89.6(2.6)
	1990	94.3(0.7)	93.9(0.9)	94.6(1.1)	95.6(0.7)	89.0(1.9)	91.4(2.8)
	1986	91.8(0.6)	92.2(0.9)	91.3(0.7)	93.3(0.7)	87.1(1.8)	88.3(3.2)
	1982	92.7(0.7)	92.0(1.1)	93.4(0.9)	94.4(0.5)	86.2(2.7)	85.8(2.7)
<b>Translate words to numbers</b>	1994	88.2(1.0)	87.7(1.3)	88.7(1.1)	89.4(1.1)	83.8(2.3)	81.2(3.6)
	1992	91.0(0.7)	90.8(0.9)	91.2(1.0)	93.1(0.7)	83.6(2.1)	84.7(2.4)
	1990	90.0(1.1)	88.6(1.3)	91.4(1.3)	92.4(0.9)	81.4(4.0)	80.0(4.0)
	1986	84.4(1.1)	81.8(1.7)	86.9(1.0)	87.6(1.2)	74.0(2.7)	71.3(4.5)
	1982	87.8(0.7)	84.7(1.1)	91.0(0.7)	89.0(0.7)	80.5(2.2)	86.5(2.7)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Identify true statement</b>	1994	76.0(1.5)	76.1(1.7)	75.8(2.2)	79.2(1.6)	65.0(4.0)	64.2(5.6)
	1992	77.7(1.1)	76.4(1.4)	78.9(1.6)	79.7(1.1)	67.8(2.8)	74.7(3.9)
	1990	77.2(1.3)	75.9(2.0)	78.5(1.8)	79.4(1.3)	71.9(2.7)	63.6(5.8)
	1986	69.8(1.9)	71.0(1.8)	68.6(2.6)	72.6(2.2)	59.9(3.5)	61.2(7.5)
	1982	75.7(2.1)	74.4(2.4)	77.1(2.1)	78.1(2.4)	68.4(3.0)	60.0(6.0)
<b>Write multiplication sentence</b>	1994	73.8(1.6)	71.6(2.3)	75.8(1.6)	77.3(1.7)	68.2(3.4)	56.6(4.2)
	1992	71.2(1.7)	70.0(1.7)	72.4(2.2)	74.0(1.9)	59.6(3.0)	59.2(4.4)
	1990	70.6(1.6)	69.7(2.0)	71.5(1.9)	73.0(1.6)	62.1(3.7)	58.7(4.5)
	1986	66.3(1.6)	66.9(1.7)	65.8(2.1)	69.4(2.1)	57.5(2.8)	54.0(5.2)
	1982	67.0(2.1)	63.4(2.1)	70.3(2.8)	71.0(2.3)	48.6(3.1)	54.4(5.8)
	1978	66.6(1.4)	67.1(1.7)	66.1(2.1)	72.0(1.4)	44.5(3.9)	44.4(4.5)
<b>Divide whole numbers</b>	1994	73.7(1.7)	72.9(2.3)	74.7(1.7)	74.3(1.8)	76.1(4.1)	62.1(5.4)
	1992	72.2(1.7)	72.6(1.9)	71.8(2.0)	73.0(1.7)	66.9(4.0)	69.5(4.2)
	1990	72.3(1.8)	70.3(2.0)	74.3(2.0)	72.3(1.9)	70.9(3.3)	64.7(4.2)
	1986	72.7(1.6)	71.1(1.9)	74.4(1.8)	72.6(1.7)	75.2(3.2)	68.4(7.2)
	1982	74.4(1.3)	72.8(1.7)	76.1(1.6)	76.0(1.7)	65.7(2.5)	70.8(4.8)
	1978	74.2(1.4)	73.4(1.7)	75.1(1.8)	77.2(1.5)	62.1(3.9)	65.2(6.6)
<b>Divide whole numbers</b>	1994	26.1(2.4)	27.0(2.9)	25.3(2.4)	27.9(2.8)	21.4(3.9)	15.0(2.7)
	1992	26.5(1.9)	27.6(1.9)	25.4(2.2)	27.8(2.0)	17.6(2.7)	22.1(4.8)
	1990	25.9(1.9)	26.5(2.0)	25.4(2.2)	26.6(2.2)	20.9(2.8)	21.2(3.0)
	1986	18.8(1.2)	19.5(1.8)	18.2(1.3)	19.4(1.4)	18.4(4.1)	11.0(4.4)
	1982	14.2(1.5)	14.5(1.5)	14.0(1.9)	14.3(1.8)	11.5(1.6)	14.7(3.6)
	1978	18.7(1.5)	17.6(1.4)	19.8(2.2)	20.1(1.7)	13.3(2.4)	13.7(4.5)
<b>Divide whole numbers</b>	1994	80.5(1.4)	79.2(1.7)	81.9(1.7)	80.4(1.5)	78.7(4.7)	77.5(3.6)
	1992	80.5(1.2)	79.9(1.4)	80.9(1.7)	82.0(1.4)	74.6(2.4)	71.6(4.3)
	1990	77.3(1.5)	70.8(2.0)	84.0(1.6)	79.0(1.5)	67.0(3.9)	79.3(2.8)
	1986	73.9(1.0)	71.0(1.6)	76.7(1.3)	75.7(1.2)	66.4(2.4)	66.7(5.4)
	1982	77.7(1.8)	74.8(1.7)	80.7(2.6)	79.6(1.8)	67.9(3.6)	73.2(6.6)
	1978	75.5(1.7)	71.7(1.9)	79.6(2.0)	79.0(1.6)	62.1(4.1)	58.9(7.4)
<b>Divide whole numbers</b>	1994	74.5(1.8)	72.5(2.3)	76.4(2.0)	75.6(1.9)	71.1(5.2)	64.7(4.2)
	1992	74.1(1.4)	71.4(1.7)	76.5(1.8)	76.6(1.5)	64.6(3.3)	63.1(4.1)
	1990	69.3(1.5)	63.9(2.2)	74.9(1.9)	72.3(1.3)	56.0(4.2)	65.3(3.3)
	1986	64.0(1.6)	58.3(2.1)	69.5(1.8)	66.6(1.5)	51.8(4.5)	58.1(6.9)
	1982	67.8(2.1)	63.7(2.4)	71.9(2.4)	70.1(2.6)	52.7(3.2)	66.9(5.6)
	1978	70.2(1.6)	65.9(1.9)	75.0(1.8)	74.5(1.5)	53.9(3.8)	51.8(7.7)
<b>Apply operation of subtraction</b>	1994	78.7(1.5)	80.2(1.6)	77.4(1.9)	84.9(1.2)	54.8(3.8)	68.1(4.8)
	1992	75.8(1.3)	78.5(1.5)	73.3(1.5)	82.6(1.2)	50.8(3.1)	57.3(5.0)
	1990	75.9(1.2)	78.1(1.4)	73.8(1.7)	82.7(1.0)	51.7(3.3)	61.9(4.7)
	1986	70.6(1.5)	70.4(2.1)	70.7(1.7)	76.1(1.7)	47.0(3.0)	61.7(6.0)
	1982	71.5(2.1)	73.0(2.2)	70.2(2.5)	77.3(2.3)	47.4(2.8)	50.6(3.5)
	1978	69.5(1.6)	70.7(2.1)	68.2(1.6)	74.5(1.5)	48.6(4.5)	54.0(6.2)
<b>Determine amount of change</b>	1994	83.5(1.0)	85.9(1.4)	81.0(1.5)	86.2(1.1)	76.1(3.3)	67.9(3.4)
	1992	82.7(1.0)	85.6(1.4)	79.8(1.1)	86.0(1.0)	70.2(2.2)	73.8(3.1)
	1990	83.5(1.0)	85.0(1.4)	82.1(1.3)	86.6(1.0)	71.4(2.9)	74.1(3.7)
	1986	81.2(1.0)	84.7(1.4)	77.4(1.3)	84.2(1.0)	68.3(3.6)	75.9(4.6)
	1982	82.6(1.1)	83.7(1.3)	81.4(1.8)	85.4(1.2)	70.0(4.3)	71.7(3.6)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Add whole numbers</b>	1994	95.6(0.9)	96.1(0.8)	95.1(1.1)	96.6(0.8)	94.0(1.6)	92.3(2.2)
	1992	95.9(0.5)	95.8(0.8)	96.0(0.5)	96.3(0.6)	94.3(1.2)	94.8(1.7)
	1990	96.6(0.4)	96.7(0.6)	96.5(0.6)	97.4(0.4)	93.8(1.4)	90.8(1.6)
	1986	95.9(0.4)	94.5(0.7)	97.1(0.5)	96.1(0.5)	95.7(0.9)	94.4(1.6)
	1982	89.8(0.9)	89.9(1.4)	89.6(1.1)	90.2(1.0)	86.0(2.3)	91.5(1.4)
<b>Add whole numbers</b>	1994	87.2(1.3)	86.3(1.7)	88.2(1.4)	89.4(1.3)	81.1(2.7)	77.9(4.5)
	1992	88.5(0.7)	87.4(1.0)	89.6(0.8)	89.7(0.8)	81.9(2.4)	88.6(4.0)
	1990	89.7(0.9)	89.4(1.2)	90.1(1.1)	91.7(0.9)	83.0(2.4)	82.9(3.7)
	1986	86.6(1.0)	83.8(1.2)	89.3(1.2)	88.0(1.1)	79.1(2.6)	86.1(2.6)
	1982	83.8(0.9)	81.8(1.5)	85.9(1.3)	85.8(1.0)	72.9(2.6)	82.2(3.1)
<b>Add whole numbers</b>	1994	51.1(1.2)	47.2(1.8)	54.7(1.9)	53.0(1.4)	42.8(2.4)	50.8(3.7)
	1992	52.0(1.2)	49.0(1.6)	54.7(1.7)	54.2(1.4)	43.1(2.9)	45.6(3.8)
	1990	53.6(1.5)	50.0(2.0)	56.9(1.7)	56.4(1.7)	41.4(2.7)	46.8(4.0)
	1986	53.1(1.8)	47.4(2.3)	58.4(2.1)	55.6(2.3)	42.3(2.8)	44.2(4.0)
	1982	46.4(1.5)	42.3(1.5)	50.8(2.2)	50.4(1.6)	28.6(3.4)	33.0(4.3)
<b>Add whole numbers</b>	1994	95.9(0.6)	95.3(0.8)	96.7(0.6)	96.1(0.6)	94.2(2.2)	96.2(1.0)
	1992	96.4(0.4)	96.0(0.6)	96.8(0.4)	96.7(0.5)	95.7(1.0)	94.4(1.6)
	1990	94.3(0.7)	93.3(0.8)	95.2(0.9)	94.4(0.7)	92.7(1.5)	94.3(2.4)
	1986	93.5(0.7)	91.5(0.9)	95.4(0.7)	94.3(0.9)	90.0(1.3)	89.0(2.3)
	1982	94.4(0.6)	93.2(0.8)	95.5(0.8)	95.7(0.7)	89.8(1.6)	87.3(2.5)
<b>Add whole numbers</b>	1994	93.7(0.6)	93.1(0.9)	94.3(0.7)	94.1(0.6)	92.1(1.8)	90.1(2.7)
	1992	94.6(0.5)	94.0(1.0)	95.2(0.6)	95.3(0.6)	92.7(1.0)	89.9(1.7)
	1990	90.3(0.9)	88.9(1.2)	91.7(1.1)	91.5(0.9)	83.1(2.4)	89.5(2.7)
	1986	90.7(0.8)	90.4(1.0)	91.0(1.2)	92.3(1.0)	85.2(1.6)	86.8(2.1)
	1982	89.4(1.0)	88.9(1.1)	89.9(1.2)	92.5(0.6)	75.5(3.4)	80.9(3.4)
<b>Add whole numbers</b>	1994	70.8(1.3)	68.5(1.9)	73.0(2.0)	72.9(1.6)	63.7(3.5)	61.4(3.2)
	1992	69.1(1.2)	66.1(1.6)	71.8(1.5)	72.7(1.2)	56.4(2.6)	59.1(3.4)
	1990	65.1(1.7)	62.3(2.1)	68.0(1.9)	68.9(1.6)	46.9(5.0)	62.4(4.3)
	1986	56.0(1.7)	54.5(1.9)	57.5(2.1)	59.0(1.8)	46.8(3.1)	43.7(4.8)
	1982	54.7(1.9)	53.2(2.2)	56.1(2.4)	59.5(2.1)	34.3(3.2)	34.6(4.5)
<b>Apply operation of addition</b>	1994	89.5(1.0)	89.7(1.3)	89.3(1.2)	91.7(0.9)	84.0(1.7)	82.3(4.3)
	1992	89.5(0.7)	88.7(0.9)	90.3(1.1)	90.6(0.8)	85.2(2.5)	87.4(2.7)
	1990	91.4(0.9)	90.5(1.3)	92.3(1.0)	92.9(0.9)	86.0(2.7)	86.8(2.7)
	1986	89.9(0.7)	85.8(1.0)	93.8(0.9)	90.1(0.8)	90.2(1.5)	87.0(3.7)
	1982	85.1(0.9)	84.4(1.2)	85.9(1.0)	87.0(0.9)	78.8(2.6)	74.7(3.1)
<b>Add whole numbers</b>	1994	65.4(1.2)	66.7(2.0)	64.1(1.2)	67.9(1.5)	58.1(4.1)	58.1(5.1)
	1992	63.1(1.2)	61.3(1.6)	64.9(2.1)	65.0(1.3)	53.0(2.5)	56.6(4.5)
	1990	62.9(1.5)	61.1(2.1)	64.6(2.0)	65.0(1.7)	55.5(2.8)	56.8(4.5)
	1986	57.6(1.5)	56.2(2.1)	59.2(1.7)	60.5(1.7)	45.5(3.6)	51.2(6.0)
	1982	65.5(1.4)	64.6(1.9)	66.3(1.7)	68.2(1.5)	48.7(2.9)	64.9(2.8)
	1978	66.2(1.5)	63.7(2.1)	68.6(1.8)	69.1(1.6)	52.9(4.0)	60.5(5.7)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Subtract whole numbers</b>	1994	73.1(1.3)	70.1(2.0)	75.9(1.6)	76.3(1.7)	63.3(3.2)	63.5(3.3)
	1992	76.3(1.1)	74.4(1.5)	78.4(1.5)	78.5(1.1)	64.3(2.5)	74.9(3.7)
	1990	76.5(1.4)	73.2(1.5)	79.7(2.3)	78.3(1.4)	69.7(4.0)	68.5(4.0)
	1986	75.5(1.3)	75.8(1.3)	75.0(2.0)	77.8(1.6)	66.1(3.4)	71.5(5.8)
	1982	68.4(1.4)	63.2(2.3)	73.6(1.5)	70.8(1.6)	57.6(3.1)	57.1(6.2)
	1978	65.5(2.1)	62.0(2.6)	69.1(2.1)	68.6(2.4)	46.2(3.8)	65.3(6.1)
<b>Subtract whole numbers</b>	1994	52.5(1.6)	51.6(2.4)	53.3(1.9)	56.5(1.9)	41.8(3.2)	39.1(3.7)
	1992	52.9(1.8)	52.4(2.4)	53.5(1.9)	56.1(2.0)	37.0(3.7)	47.1(3.1)
	1990	54.5(1.7)	52.7(2.2)	56.3(2.0)	57.3(1.6)	42.1(4.6)	46.6(4.9)
	1986	54.3(1.9)	51.9(2.2)	57.0(2.4)	58.0(2.2)	38.3(2.8)	45.3(5.6)
	1982	43.3(2.0)	40.7(2.2)	45.9(2.2)	46.1(2.4)	27.2(2.7)	34.5(7.8)
	1978	42.9(2.2)	39.6(2.5)	46.2(2.6)	47.0(2.5)	21.4(3.1)	34.2(3.3)
<b>Subtract whole numbers</b>	1994	54.4(1.7)	54.0(2.3)	54.8(2.1)	58.7(1.9)	39.3(4.0)	41.7(3.8)
	1992	57.3(1.3)	55.8(1.6)	59.0(2.0)	61.1(1.4)	41.1(2.8)	49.4(5.5)
	1990	59.2(1.6)	55.8(1.9)	62.6(2.1)	61.9(1.4)	48.7(5.3)	46.8(5.5)
	1986	59.8(1.7)	61.1(1.9)	58.5(2.1)	63.8(1.9)	43.4(2.9)	51.1(7.1)
	1982	48.4(2.1)	44.8(2.2)	52.0(2.6)	50.5(2.5)	36.1(3.1)	41.2(5.6)
	1978	49.4(2.7)	46.8(3.3)	52.0(2.6)	53.2(3.1)	26.7(3.7)	49.3(7.1)
<b>Subtract whole numbers</b>	1994	91.2(0.8)	89.9(1.3)	92.3(1.0)	92.0(0.8)	88.1(2.7)	86.1(3.2)
	1992	92.1(0.6)	90.8(0.8)	93.3(0.7)	93.5(0.5)	86.3(1.8)	89.0(1.9)
	1990	90.3(1.0)	87.8(1.3)	92.9(1.1)	92.7(0.7)	78.6(2.8)	87.8(2.4)
	1986	89.4(0.8)	87.3(1.3)	91.5(0.8)	92.5(0.8)	79.5(2.3)	78.8(2.4)
	1982	89.2(0.8)	87.1(1.1)	91.3(1.0)	91.8(0.7)	77.1(2.4)	83.2(3.3)
	1978	84.3(1.1)	83.0(1.4)	85.8(1.5)	87.9(1.0)	69.4(3.2)	73.2(4.6)
<b>Subtract whole numbers</b>	1994	87.7(0.9)	84.9(1.5)	90.5(1.0)	88.3(0.9)	84.8(2.1)	86.9(2.3)
	1992	89.6(0.7)	87.8(1.1)	91.2(1.0)	90.9(0.8)	84.0(1.9)	89.3(2.1)
	1990	87.5(1.1)	84.5(1.8)	90.5(1.1)	90.4(1.0)	75.8(3.8)	77.2(3.2)
	1986	86.3(0.9)	84.2(1.2)	88.4(1.3)	89.2(1.0)	75.6(2.3)	78.5(2.8)
	1982	86.3(1.1)	83.9(1.8)	88.8(1.1)	89.2(1.1)	71.2(2.4)	84.2(2.6)
	1978	79.5(1.2)	77.1(1.6)	82.2(1.4)	83.1(0.9)	63.4(3.9)	70.5(2.7)
<b>Subtract whole numbers</b>	1994	88.6(0.8)	88.2(1.3)	89.1(1.1)	89.8(0.8)	84.2(1.9)	85.6(2.4)
	1992	90.3(0.6)	89.5(1.1)	90.9(0.8)	91.5(0.7)	85.5(1.8)	87.8(2.0)
	1990	87.2(1.0)	84.5(1.4)	89.9(1.3)	89.0(0.9)	78.4(2.9)	82.9(2.7)
	1986	85.3(1.0)	82.4(1.3)	88.0(1.3)	88.7(1.0)	74.7(3.2)	71.3(2.3)
	1982	85.6(1.0)	83.1(1.4)	88.1(1.2)	88.6(0.9)	69.3(2.1)	81.4(2.5)
	1978	79.8(1.2)	77.8(1.4)	82.1(1.6)	83.7(1.0)	60.4(3.2)	74.4(3.4)
<b>Multiply whole numbers</b>	1994	72.1(1.5)	71.5(1.9)	72.7(2.0)	73.4(1.7)	68.2(2.9)	62.4(5.8)
	1992	67.8(1.5)	66.8(2.0)	68.8(1.9)	68.7(1.4)	62.1(2.6)	60.0(4.2)
	1990	71.4(1.4)	68.6(1.9)	73.9(1.6)	72.3(1.5)	64.4(2.8)	72.6(4.3)
	1986	64.9(1.7)	61.2(2.3)	68.4(1.6)	66.5(1.7)	62.6(3.8)	47.8(5.0)
	1982	61.0(3.1)	55.5(3.0)	66.5(3.4)	61.9(4.0)	52.9(3.6)	65.7(5.7)
	1978	64.0(1.6)	62.1(1.8)	65.9(2.1)	66.1(1.6)	53.7(3.4)	53.0(8.9)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Multiply whole numbers</b>	1994	13.9(1.6)	10.8(1.6)	16.8(2.0)	14.8(1.9)	8.5(1.9)	4.4(1.5)
	1992	10.6(1.2)	10.4(1.1)	10.8(1.8)	11.1(1.3)	4.9(1.7)	10.2(2.9)
	1990	16.4(2.0)	15.0(2.0)	17.8(2.4)	17.1(2.3)	13.2(2.3)	9.4(2.8)
	1986	11.5(1.3)	10.3(1.6)	12.7(1.5)	12.1(1.4)	7.6(1.8)	8.0(2.5)
	1982	13.7(1.9)	12.3(1.9)	15.1(2.1)	14.9(2.2)	4.6(1.3)	15.2(5.8)
	1978	8.2(1.1)	7.1(1.1)	9.3(1.4)	9.0(1.3)	4.4(1.5)	6.4(2.6)
<b>Multiply whole numbers</b>	1994	91.4(0.7)	89.6(1.0)	93.0(0.9)	91.0(0.7)	93.8(2.1)	88.8(3.0)
	1992	91.1(0.6)	90.0(0.9)	92.1(0.8)	91.3(0.7)	89.7(1.2)	91.2(1.3)
	1990	91.1(0.8)	88.7(1.2)	93.5(0.9)	92.5(0.8)	84.5(2.5)	88.4(1.7)
	1986	88.8(1.0)	88.0(1.2)	89.6(1.4)	90.9(1.0)	82.2(2.0)	79.8(3.2)
	1982	87.8(0.9)	85.1(1.2)	90.6(1.0)	90.2(0.8)	76.4(2.6)	81.3(3.4)
	1978	88.7(0.9)	87.0(1.2)	90.6(1.2)	91.0(0.7)	77.3(3.0)	83.8(3.2)
<b>Multiply whole numbers</b>	1994	83.8(1.0)	82.5(1.8)	85.0(1.0)	84.2(1.1)	82.4(2.4)	82.9(3.0)
	1992	87.2(0.9)	85.3(1.5)	89.0(0.9)	88.4(1.0)	83.3(2.3)	87.3(1.9)
	1990	82.5(1.3)	79.9(1.7)	85.1(1.4)	85.3(1.3)	71.7(2.5)	78.7(3.5)
	1986	82.8(0.9)	81.0(1.6)	84.5(1.1)	85.6(0.9)	71.6(2.6)	78.7(2.8)
	1982	79.9(1.2)	77.7(1.8)	82.0(1.2)	82.7(1.1)	65.9(2.8)	71.4(3.5)
	1978	79.8(1.2)	76.4(1.4)	83.5(1.7)	82.6(1.0)	65.6(3.6)	74.3(5.7)
<b>Apply place value</b>	1994	73.2(1.8)	75.6(1.9)	70.8(2.4)	78.6(1.6)	53.9(3.6)	63.0(4.4)
	1992	71.5(1.4)	74.8(1.7)	68.5(1.6)	77.6(1.4)	50.9(3.0)	49.0(4.2)
	1990	71.4(1.5)	73.4(1.6)	69.5(1.8)	78.2(1.6)	46.3(3.4)	57.5(5.3)
	1986	64.8(1.8)	66.4(2.1)	63.2(2.1)	71.2(2.0)	40.9(3.8)	45.7(4.8)
	1982	67.4(2.0)	68.1(2.3)	66.7(2.3)	73.6(1.9)	41.9(3.4)	45.3(5.7)
	1978	62.6(1.7)	65.1(2.1)	60.3(2.0)	68.9(1.6)	33.6(3.8)	41.6(5.3)
<b>Apply place value</b>	1994	50.1(1.8)	51.7(2.6)	48.6(2.0)	57.0(2.1)	30.0(3.3)	27.3(3.7)
	1992	49.9(1.5)	51.8(1.6)	47.9(1.8)	55.0(1.5)	32.7(3.1)	30.0(2.8)
	1990	47.9(1.8)	51.3(2.4)	44.6(1.9)	54.8(1.8)	25.7(4.0)	27.0(4.3)
	1986	43.1(2.2)	47.8(2.1)	38.1(3.0)	48.5(2.8)	26.9(3.0)	20.0(5.2)
	1982	56.4(1.6)	57.1(2.0)	55.7(2.0)	62.4(1.7)	31.6(2.5)	35.0(4.2)
	1978	51.5(2.0)	55.6(2.4)	47.8(2.5)	57.4(2.0)	24.2(2.5)	32.0(7.9)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Understand probability</b>	1994	85.5(0.9)	87.2(1.1)	83.8(1.4)	88.8(0.9)	73.5(2.7)	83.1(2.7)
	1992	85.4(0.9)	85.3(1.1)	85.5(1.2)	89.4(1.0)	70.8(2.8)	80.7(2.6)
	1990	81.9(1.0)	83.2(1.5)	80.6(1.5)	86.1(0.9)	68.4(3.6)	78.1(3.1)
	1986	81.7(1.1)	81.3(1.4)	82.0(1.5)	85.3(1.2)	66.7(3.9)	72.8(3.9)
	1982	86.2(1.3)	87.4(1.6)	84.9(1.3)	90.0(1.0)	68.0(4.5)	76.7(6.6)
	1978	83.5(1.3)	83.3(1.6)	83.7(1.6)	87.1(1.3)	63.3(2.9)	80.3(3.2)
<b>Read data from table</b>	1994	96.0(0.6)	95.5(0.9)	96.5(0.8)	96.5(0.5)	94.1(1.9)	94.8(1.8)
	1992	95.4(0.4)	95.5(0.9)	95.2(0.8)	96.0(0.4)	92.7(1.7)	93.4(1.7)
	1990	95.3(0.5)	94.9(0.8)	95.9(0.5)	96.1(0.7)	94.2(1.6)	92.0(2.0)
	1986	94.9(0.5)	94.1(0.6)	95.8(0.7)	95.3(0.6)	92.5(1.1)	94.9(1.4)
	1982	92.6(0.5)	91.9(1.1)	93.2(0.8)	93.4(0.5)	85.1(2.1)	97.8(0.9)
	1978	91.8(0.8)	90.5(1.2)	93.1(1.0)	93.0(0.8)	85.8(3.1)	89.8(3.8)
<b>Interpret data in table</b>	1994	84.3(1.0)	84.9(1.0)	83.6(1.6)	87.1(0.8)	72.5(2.8)	74.4(2.6)
	1992	83.9(0.9)	83.8(1.3)	83.9(1.1)	87.6(0.9)	75.8(2.4)	69.1(3.8)
	1990	79.5(1.3)	79.1(1.8)	80.0(1.5)	84.3(1.2)	68.2(4.6)	61.1(4.4)
	1986	80.4(1.2)	80.9(1.9)	79.9(1.3)	84.7(1.0)	66.9(3.9)	60.7(3.5)
	1982	76.2(1.6)	74.7(2.5)	77.7(1.9)	79.9(1.5)	59.5(4.4)	65.7(4.7)
	1978	67.4(1.5)	66.4(1.7)	68.5(2.2)	72.6(1.3)	45.3(2.8)	48.5(8.7)
<b>Compute using data in table</b>	1994	92.7(0.9)	91.4(1.1)	94.1(1.1)	92.8(0.9)	90.9(2.7)	93.0(1.9)
	1992	92.2(0.5)	91.9(0.8)	92.5(0.7)	93.5(0.6)	89.2(1.7)	89.0(1.7)
	1990	92.3(0.7)	91.4(0.9)	93.2(1.1)	93.0(0.9)	91.0(1.6)	89.6(3.2)
	1986	91.3(0.6)	90.0(1.1)	92.5(1.3)	91.6(0.7)	88.8(2.1)	94.5(1.6)
	1982	92.4(0.9)	92.0(1.1)	92.7(0.9)	94.1(0.9)	83.1(1.9)	89.9(1.6)
	1978	87.0(1.0)	86.1(1.2)	87.9(1.3)	89.5(0.9)	74.5(2.9)	79.7(3.5)
<b>Read data in bar graph</b>	1994	91.3(0.8)	91.2(1.0)	91.5(1.0)	92.1(0.8)	86.7(2.0)	90.3(2.3)
	1992	90.3(0.9)	88.9(1.4)	91.7(0.9)	91.7(0.9)	82.9(2.4)	92.6(2.3)
	1990	89.9(0.7)	86.7(1.3)	93.0(0.8)	90.8(0.7)	87.9(2.8)	82.9(3.3)
	1986	89.6(0.7)	89.0(1.0)	90.2(1.4)	90.1(0.8)	87.7(1.6)	86.8(3.0)
	1982	88.0(0.6)	86.5(0.9)	89.4(1.0)	89.5(0.7)	81.8(2.0)	81.3(2.6)
	1978	85.5(0.9)	83.7(1.4)	87.4(1.3)	87.6(0.8)	74.5(1.9)	80.8(5.0)
<b>Interpret data in bar graph</b>	1994	76.1(1.5)	75.6(2.6)	76.4(1.6)	82.2(1.0)	59.1(5.4)	59.6(4.0)
	1992	75.4(1.0)	75.1(1.7)	75.8(1.6)	81.2(1.1)	54.8(2.9)	60.8(3.7)
	1990	70.9(1.3)	73.1(1.4)	68.8(2.0)	76.2(1.3)	52.7(4.2)	53.5(6.1)
	1986	69.2(1.7)	71.5(2.2)	67.0(1.9)	73.1(1.7)	54.1(4.2)	55.4(5.3)
	1982	62.4(1.7)	62.6(2.2)	62.1(2.7)	67.6(1.9)	38.6(2.8)	48.9(4.7)
	1978	53.5(1.8)	55.8(2.1)	51.1(1.9)	59.7(1.6)	29.1(1.8)	22.8(5.6)
<b>Compute with data in bar graph</b>	1994	92.0(1.0)	91.4(1.0)	92.5(1.4)	94.4(0.8)	86.5(3.8)	83.9(2.6)
	1992	90.9(0.8)	90.3(1.0)	91.4(1.0)	92.8(0.8)	83.0(2.8)	90.2(2.9)
	1990	90.9(0.8)	88.5(1.2)	93.2(0.8)	92.4(0.8)	87.0(2.4)	84.8(2.5)
	1986	88.8(0.8)	86.9(1.2)	90.7(1.1)	91.4(0.8)	82.4(2.7)	71.0(5.9)
	1982	85.7(1.0)	86.0(1.8)	85.3(1.4)	88.5(1.1)	71.4(3.9)	79.5(6.1)
	1978	80.5(1.2)	79.6(1.3)	81.3(1.6)	84.0(1.4)	63.7(4.4)	69.4(6.6)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find perimeter of rectangle</b>	1994	51.7(1.5)	54.2(1.8)	49.2(1.7)	56.3(1.8)	28.7(2.1)	43.4(4.0)
	1992	45.2(1.4)	46.8(1.8)	43.8(2.0)	49.7(1.7)	30.7(2.7)	33.6(3.7)
	1990	43.2(1.3)	45.2(1.7)	41.1(1.7)	46.5(1.5)	31.7(3.2)	32.0(2.4)
	1986	39.0(2.6)	42.3(3.1)	35.8(2.7)	43.2(3.2)	20.7(2.4)	29.6(5.1)
	1982	38.8(2.0)	41.0(3.0)	36.5(1.9)	42.1(2.4)	22.2(3.6)	26.5(4.6)
<b>Find perimeter of rectangle</b>	1994	60.3(1.8)	65.1(2.2)	55.7(2.9)	64.6(2.1)	44.6(4.2)	50.6(4.2)
	1992	61.4(1.3)	64.6(1.9)	57.9(1.8)	63.4(1.5)	51.6(2.7)	57.9(5.6)
	1990	54.4(1.8)	59.1(2.0)	50.0(2.3)	56.7(2.0)	41.5(4.0)	52.2(4.5)
	1986	52.6(2.7)	56.3(2.4)	49.0(3.5)	55.3(3.2)	41.6(3.1)	40.1(6.5)
	1982	50.5(1.7)	54.6(1.9)	46.1(2.4)	54.4(1.9)	32.4(4.0)	38.9(3.8)
<b>Use ruler to measure length</b>	1994	58.4(2.0)	66.7(2.4)	50.5(2.7)	66.6(1.9)	25.5(3.7)	48.2(2.7)
	1992	58.1(1.3)	62.1(1.6)	53.8(2.0)	67.1(1.4)	21.4(2.6)	45.3(4.6)
	1990	54.9(1.6)	61.9(1.6)	48.2(2.3)	62.5(1.5)	22.4(3.0)	39.6(4.0)
	1986	55.1(2.6)	60.5(2.6)	49.6(3.1)	60.7(2.6)	27.9(3.1)	45.8(6.5)
	1982	61.0(1.7)	66.9(2.1)	55.2(2.2)	66.6(1.8)	34.2(3.9)	46.0(7.4)
<b>Apply triangle inequality</b>	1994	73.1(1.0)	75.6(1.6)	70.6(1.2)	75.5(1.2)	63.1(4.0)	69.8(5.0)
	1992	72.1(1.0)	73.6(1.4)	70.7(1.6)	72.8(1.3)	70.8(2.6)	67.8(4.0)
	1990	71.5(1.1)	74.7(1.6)	68.2(1.5)	72.1(1.4)	69.6(3.0)	68.0(3.7)
	1986	69.1(1.7)	70.2(2.7)	68.0(3.6)	70.6(1.9)	61.1(3.5)	68.4(3.8)
	1982	71.7(1.5)	74.0(2.3)	69.4(2.3)	73.1(1.5)	63.3(3.8)	70.9(4.7)
	1978	64.3(1.2)	65.6(1.5)	63.1(1.8)	65.6(1.4)	58.5(3.9)	56.2(6.1)
<b>Identify a sphere</b>	1994	70.2(2.0)	73.2(2.3)	67.6(2.8)	74.7(1.8)	57.3(7.3)	54.3(5.1)
	1992	73.8(1.6)	77.5(1.7)	70.1(2.2)	77.8(1.6)	55.4(4.1)	67.6(5.3)
	1990	74.2(1.8)	75.9(2.2)	72.7(1.9)	78.6(1.9)	59.1(4.1)	61.8(4.1)
	1986	73.1(1.5)	74.1(1.8)	72.0(2.0)	76.1(1.6)	59.1(4.7)	65.3(4.7)
	1982	71.3(2.1)	70.9(2.1)	71.6(2.5)	76.1(2.1)	49.1(3.3)	55.8(3.7)
	1978	63.6(2.0)	62.1(2.1)	65.0(2.5)	69.0(2.0)	38.8(3.4)	44.5(6.9)
<b>Identify parallel lines</b>	1994	93.3(0.8)	93.1(1.2)	93.4(0.7)	94.9(0.7)	88.6(3.1)	87.9(1.9)
	1992	94.0(0.7)	93.7(1.0)	94.3(0.6)	95.6(0.6)	89.1(2.3)	88.8(2.6)
	1990	93.0(0.7)	92.8(0.7)	93.2(1.0)	94.9(0.7)	86.0(2.0)	90.1(1.8)
	1986	93.4(0.7)	92.0(0.9)	94.8(0.9)	95.1(0.6)	88.5(2.2)	85.8(4.7)
	1982	91.4(0.9)	90.7(1.5)	92.0(0.9)	94.1(1.1)	76.9(2.5)	87.9(1.2)
	1978	89.6(1.0)	91.1(1.1)	88.4(1.3)	92.6(1.0)	73.2(3.4)	84.3(2.6)
<b>Identify perpendicular lines</b>	1994	38.9(1.9)	41.5(2.4)	36.5(2.3)	42.5(2.6)	25.6(2.2)	29.6(4.9)
	1992	37.4(1.7)	35.9(2.1)	39.0(2.3)	39.9(1.9)	28.3(2.1)	30.2(4.1)
	1990	35.2(1.7)	34.6(1.7)	35.8(2.3)	38.7(2.0)	21.2(2.6)	25.9(5.5)
	1986	37.9(1.9)	36.3(1.6)	39.5(3.2)	40.2(2.1)	30.0(3.0)	27.1(4.2)
	1982	37.9(1.6)	37.1(2.0)	38.7(2.6)	40.9(1.9)	25.5(2.4)	20.2(4.6)
	1978	33.2(1.9)	32.6(2.1)	33.8(2.4)	35.8(2.2)	23.6(3.2)	18.3(4.0)
<b>Add monomials</b>	1994	31.5(2.0)	29.5(2.4)	33.2(2.0)	34.7(2.4)	20.2(3.8)	21.9(2.8)
	1992	29.3(2.2)	26.9(2.8)	31.8(2.2)	31.5(2.6)	17.9(4.4)	28.0(3.4)
	1990	27.5(1.9)	25.4(2.0)	29.6(2.1)	30.5(2.3)	16.4(2.4)	15.7(2.3)
	1986	24.7(3.5)	23.3(2.6)	26.0(4.6)	26.6(4.2)	16.8(2.4)	15.3(2.7)
	1982	27.4(1.3)	24.7(1.8)	30.2(2.4)	30.8(1.6)	10.9(1.6)	14.1(3.6)
	1978	25.1(1.4)	23.8(1.7)	26.5(1.7)	28.1(1.6)	12.2(2.4)	12.8(3.9)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Evaluate algebraic expression</b>	1994	84.1(1.2)	84.0(1.5)	84.3(1.4)	88.0(1.1)	68.3(4.0)	75.9(4.7)
	1992	80.9(1.2)	80.0(1.4)	81.7(1.6)	83.9(1.2)	74.4(2.8)	66.9(2.9)
	1990	79.0(1.4)	79.1(1.9)	79.0(1.7)	83.4(1.2)	68.3(3.7)	62.7(4.9)
	1986	80.8(1.2)	79.5(1.5)	82.1(1.7)	83.8(1.3)	67.5(3.5)	75.5(3.1)
	1982	78.8(1.9)	76.7(2.6)	80.8(1.9)	83.4(2.2)	56.5(3.5)	66.6(2.7)
	1978	69.5(1.9)	64.9(2.1)	74.0(2.5)	74.7(1.6)	49.6(3.8)	42.6(5.6)
<b>Apply transitive property</b>	1994	52.3(1.7)	53.9(1.9)	50.8(2.7)	56.9(1.5)	38.5(8.4)	36.3(4.3)
	1992	51.5(1.8)	51.5(2.0)	51.4(2.1)	55.9(1.9)	32.9(3.7)	36.9(5.6)
	1990	49.1(1.5)	51.5(1.8)	46.9(2.0)	52.9(1.7)	34.8(3.1)	40.4(3.7)
	1986	43.3(1.3)	43.9(1.8)	42.7(1.7)	46.2(1.6)	29.1(2.5)	33.8(4.2)
	1982	54.6(1.7)	56.1(1.8)	53.0(2.1)	57.4(1.9)	41.4(3.1)	38.7(4.9)
	1978	57.3(1.4)	59.5(1.8)	54.8(1.9)	60.5(1.6)	41.4(3.6)	48.3(3.1)
<b>Identify number line property</b>	1994	51.3(1.8)	51.8(2.2)	50.8(2.9)	56.5(1.9)	35.5(7.2)	33.8(4.1)
	1992	50.6(1.5)	49.2(1.8)	51.9(2.1)	55.0(1.8)	31.7(3.2)	38.8(3.7)
	1990	46.3(1.7)	45.9(1.8)	46.6(2.5)	49.8(1.8)	30.6(4.0)	37.3(5.4)
	1986	45.8(1.3)	46.7(2.0)	44.9(2.0)	48.6(1.5)	34.6(1.9)	35.8(4.6)
	1982	47.6(1.8)	50.3(2.9)	45.1(2.0)	52.1(1.9)	27.8(3.0)	33.0(6.2)
	1978	52.3(1.6)	54.4(1.7)	50.5(2.2)	57.3(1.6)	28.6(3.5)	37.1(6.2)
<b>Write improper fraction</b>	1994	69.3(2.0)	65.7(2.8)	72.8(1.8)	75.0(1.7)	48.2(8.2)	55.3(4.7)
	1992	67.2(1.5)	63.5(1.9)	71.2(1.6)	70.8(1.4)	49.2(3.9)	67.1(4.2)
	1990	70.8(1.3)	66.4(1.8)	75.1(1.6)	75.0(1.3)	54.4(5.0)	56.7(3.9)
	1986	69.9(1.9)	66.8(2.1)	73.0(2.4)	73.2(2.2)	55.6(4.1)	55.8(8.8)
	1982	67.3(1.6)	65.0(1.5)	69.7(2.0)	71.3(1.6)	49.8(4.6)	50.7(5.3)
	1978	60.7(2.2)	57.2(2.5)	64.3(2.6)	67.3(2.2)	32.4(4.9)	30.2(1.7)
<b>Find percent greater than 100</b>	1994	50.3(1.6)	55.9(1.9)	44.8(2.2)	54.7(2.1)	38.7(3.1)	34.0(4.0)
	1992	52.0(1.5)	55.7(1.8)	48.1(2.1)	56.1(1.6)	38.1(3.8)	40.1(4.5)
	1990	48.4(1.1)	51.2(1.5)	45.6(1.5)	51.6(1.5)	37.6(2.1)	33.0(5.8)
	1986	48.6(1.8)	52.0(2.5)	45.1(2.3)	49.9(1.9)	42.5(3.2)	43.5(3.7)
	1982	51.7(1.7)	53.6(1.8)	49.8(2.6)	52.8(1.8)	48.5(3.1)	43.0(6.3)
	1978	49.2(1.3)	52.5(1.5)	45.8(2.0)	50.9(1.4)	40.4(3.7)	46.0(6.2)
<b>Understand concept of percent</b>	1994	50.0(1.6)	56.5(2.4)	43.3(2.1)	55.9(1.7)	26.5(3.7)	33.5(4.0)
	1992	45.1(1.4)	51.3(1.6)	39.4(2.1)	50.1(1.8)	31.1(3.1)	27.9(2.8)
	1990	42.4(1.9)	47.1(2.2)	37.4(2.2)	48.2(2.1)	26.8(3.7)	28.1(3.6)
	1986	41.4(1.6)	46.3(2.2)	36.5(2.4)	46.0(1.9)	22.9(2.0)	28.5(5.0)
	1982	52.8(2.1)	59.6(2.4)	46.2(2.7)	57.9(2.1)	31.7(2.8)	33.1(3.7)
	1978	47.6(1.5)	52.2(1.7)	42.7(1.9)	51.3(1.4)	31.1(2.6)	34.8(4.4)
<b>Convert decimal to percent</b>	1994	38.1(2.0)	37.5(2.1)	38.8(2.5)	41.4(2.2)	21.6(2.5)	28.5(4.6)
	1992	31.0(1.4)	29.9(1.6)	32.0(1.8)	32.7(1.5)	25.0(2.6)	19.5(3.4)
	1990	28.4(1.8)	30.0(2.0)	26.7(2.1)	30.3(2.2)	21.8(1.9)	23.5(3.1)
	1986	25.7(2.1)	26.0(1.9)	25.4(2.9)	26.6(2.4)	20.4(2.3)	25.2(6.1)
	1982	31.0(1.7)	32.3(2.0)	29.6(2.4)	31.9(2.1)	22.8(2.5)	37.4(4.5)
	1978	28.6(1.1)	28.6(1.8)	28.6(1.2)	30.2(1.3)	20.0(3.5)	21.6(4.4)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Solve percent problem</b>	1994	48.1(2.2)	48.7(2.1)	47.6(3.3)	51.3(2.0)	39.4(9.4)	35.0(3.6)
	1992	48.1(1.9)	53.3(2.1)	42.9(2.5)	51.5(2.1)	32.6(3.8)	37.9(4.6)
	1990	41.6(1.7)	45.0(2.2)	38.4(2.1)	45.7(2.0)	26.4(3.3)	29.5(2.9)
	1986	38.7(1.6)	40.6(2.0)	36.9(2.4)	42.2(2.1)	22.2(1.5)	28.3(4.2)
	1982	44.7(1.8)	46.3(2.3)	43.0(2.5)	48.4(1.4)	31.9(4.8)	29.2(4.2)
	1978	38.9(1.6)	42.1(1.9)	35.7(2.1)	41.9(1.7)	22.9(2.8)	29.2(5.6)
<b>Add integers</b>	1994	61.8(2.1)	64.7(2.5)	58.8(2.1)	69.0(1.9)	43.2(5.6)	36.4(2.7)
	1992	58.4(1.6)	60.8(2.1)	55.9(1.7)	64.2(1.8)	37.1(3.6)	39.1(4.3)
	1990	54.4(1.8)	56.0(2.3)	52.9(2.1)	59.2(2.1)	33.0(3.3)	46.4(6.7)
	1986	51.3(1.8)	52.1(2.0)	50.5(2.8)	54.8(1.7)	34.9(3.9)	38.4(5.2)
	1982	45.4(2.4)	48.8(2.6)	41.9(2.7)	49.7(2.6)	22.4(3.0)	38.2(6.1)
	1978	44.0(2.0)	44.7(2.5)	43.3(2.4)	49.6(2.2)	18.4(3.1)	22.7(5.6)
<b>Solve number sentence</b>	1994	53.9(1.6)	57.1(2.5)	50.8(1.9)	59.0(1.6)	38.8(3.1)	35.9(3.5)
	1992	52.3(1.3)	53.3(1.9)	51.2(1.6)	55.9(1.6)	39.2(2.8)	43.6(3.8)
	1990	51.6(1.1)	52.6(1.5)	50.5(1.8)	55.2(1.3)	37.1(3.1)	45.2(4.9)
	1986	49.3(1.9)	49.4(2.1)	49.3(3.0)	51.9(2.1)	35.8(3.8)	45.8(4.7)
	1982	36.3(1.5)	38.7(1.8)	33.9(2.0)	37.7(1.7)	28.9(3.3)	31.3(5.5)
	1978	43.7(1.2)	45.6(1.9)	41.9(1.6)	47.7(1.1)	22.1(3.3)	34.9(4.6)
<b>Estimate weight</b>	1994	33.8(1.1)	35.6(1.7)	32.0(1.6)	34.1(1.3)	28.6(3.4)	35.9(4.7)
	1992	33.5(1.0)	33.2(1.3)	33.8(1.4)	34.6(1.3)	27.5(2.3)	30.5(2.7)
	1990	33.3(1.4)	35.0(1.9)	31.4(1.7)	34.3(1.6)	31.3(3.6)	26.4(4.0)
	1986	34.8(1.5)	36.6(2.1)	32.9(1.8)	36.8(1.9)	23.1(1.9)	36.4(3.8)
	1982	32.5(1.3)	32.6(1.8)	32.4(2.4)	34.7(1.5)	19.0(2.6)	35.1(4.9)
<b>Estimate total weight</b>	1994	40.7(1.6)	43.5(2.1)	37.9(1.9)	43.7(1.9)	25.6(3.4)	35.8(5.3)
	1992	40.1(1.0)	42.7(1.7)	37.8(1.1)	43.5(1.1)	28.1(2.5)	35.1(2.2)
	1990	38.5(1.2)	39.2(1.3)	37.8(1.5)	42.5(1.4)	27.6(2.8)	28.3(3.4)
	1986	37.1(1.8)	38.5(2.2)	35.7(2.6)	40.5(2.3)	26.1(2.6)	22.7(3.2)
	1982	35.1(1.7)	36.5(2.2)	33.6(2.2)	38.2(1.6)	18.5(2.7)	29.2(3.4)
<b>Estimate cost of pencils</b>	1994	76.3(1.1)	78.1(1.9)	74.3(1.2)	78.9(1.4)	64.1(3.2)	72.4(2.6)
	1992	77.9(1.0)	78.0(1.4)	77.8(1.4)	81.1(0.9)	67.0(2.5)	72.1(3.3)
	1990	75.9(1.4)	76.7(1.8)	75.2(1.7)	79.6(1.1)	61.9(6.2)	72.5(2.9)
	1986	74.9(1.3)	76.4(1.4)	73.5(1.7)	77.3(1.5)	63.7(2.9)	69.9(4.2)
	1982	58.8(2.1)	60.6(2.9)	56.8(2.3)	63.0(1.9)	38.1(5.1)	47.2(6.0)
<b>Estimate cost using percent</b>	1994	39.1(1.5)	41.7(1.8)	36.4(2.5)	40.5(1.7)	34.3(3.1)	33.5(3.1)
	1992	36.3(1.0)	41.1(1.6)	32.0(1.6)	36.7(1.2)	32.6(2.3)	41.2(4.2)
	1990	35.0(1.2)	37.5(1.8)	32.3(1.4)	37.8(1.2)	27.2(4.2)	25.6(3.7)
	1986	38.0(1.9)	38.6(2.4)	37.4(2.2)	40.2(2.2)	32.1(3.0)	28.3(3.1)
	1982	38.2(1.2)	40.6(2.3)	35.6(1.5)	41.0(1.3)	27.0(5.0)	29.6(5.9)
<b>Estimate difference in length</b>	1994	63.7(1.4)	66.2(2.1)	61.2(1.8)	66.7(1.4)	52.0(3.8)	55.2(5.0)
	1992	62.3(1.3)	62.4(1.5)	62.1(1.9)	66.4(1.5)	48.5(2.9)	53.6(3.5)
	1990	61.6(2.0)	62.6(2.2)	60.6(2.7)	65.8(1.9)	47.3(4.5)	51.7(5.3)
	1986	58.8(1.9)	59.4(2.2)	58.3(2.6)	63.1(2.0)	39.6(3.2)	52.3(4.2)
	1982	56.4(1.7)	56.8(2.0)	55.9(2.3)	60.1(2.0)	37.2(2.6)	47.9(6.1)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Use property of transitivity</b>	1994	83.6(0.9)	81.7(1.5)	85.4(1.5)	84.3(1.0)	82.0(1.9)	79.7(3.9)
	1992	82.8(1.0)	82.0(1.2)	83.6(1.4)	84.8(1.0)	77.7(2.4)	77.4(2.8)
	1990	84.1(1.2)	83.5(1.5)	84.7(1.5)	86.5(1.0)	75.6(4.5)	80.3(2.8)
	1986	85.9(0.8)	84.8(1.3)	86.9(1.1)	87.2(1.2)	79.6(1.9)	83.2(3.3)
	1982	84.8(1.4)	80.9(2.1)	88.6(1.6)	86.4(1.5)	78.2(4.1)	76.5(4.2)
	1978	83.1(1.1)	81.1(1.5)	84.9(1.2)	85.1(1.1)	74.5(3.0)	75.2(4.7)
<b>Determine age relationship</b>	1994	74.2(1.5)	75.1(1.8)	73.4(1.9)	80.4(1.3)	50.2(3.5)	64.0(3.2)
	1992	73.2(1.0)	73.9(1.2)	72.5(1.6)	77.9(1.1)	53.8(2.4)	65.3(3.3)
	1990	74.9(1.0)	76.3(1.2)	73.6(1.7)	78.3(1.3)	64.8(3.1)	62.2(4.0)
	1986	72.1(1.3)	71.4(1.7)	72.8(1.7)	74.7(1.2)	60.5(4.3)	64.1(3.8)
	1982	75.3(1.5)	77.1(1.5)	73.6(2.3)	79.6(1.6)	54.8(4.2)	63.8(4.4)
	1978	73.5(1.1)	73.0(1.4)	74.1(1.4)	77.3(0.9)	56.7(5.3)	61.7(4.0)
<b>Identify valid conclusion</b>	1994	79.5(1.4)	77.4(2.1)	81.6(1.4)	83.2(1.3)	69.5(4.8)	72.2(2.3)
	1992	78.4(1.2)	76.0(1.6)	81.0(1.5)	81.5(1.2)	67.7(3.4)	71.3(4.6)
	1990	77.7(1.0)	76.4(1.5)	79.1(1.5)	79.8(1.3)	73.0(3.4)	67.6(2.2)
	1986	75.3(1.4)	73.8(2.2)	76.8(1.5)	76.3(1.6)	72.8(3.5)	65.3(3.2)
	1982	67.6(1.4)	66.0(1.9)	69.2(1.8)	69.4(1.8)	61.9(3.5)	58.0(3.7)
	1978	64.6(1.3)	62.2(1.8)	67.2(1.7)	66.1(1.3)	60.6(3.9)	54.3(3.9)
<b>Identify valid conclusion</b>	1994	28.4(1.3)	31.1(1.8)	25.8(1.8)	28.4(1.3)	28.9(2.2)	24.6(3.6)
	1992	29.5(1.2)	31.5(1.8)	27.2(1.8)	29.8(1.3)	28.4(3.8)	27.0(5.2)
	1990	28.0(1.3)	30.2(1.6)	25.9(1.6)	28.3(1.3)	25.5(3.7)	28.4(4.6)
	1986	29.8(1.3)	30.8(2.0)	28.9(2.2)	30.3(1.5)	26.0(3.1)	33.3(2.8)
	1982	44.9(1.6)	47.9(2.0)	42.0(2.4)	46.7(1.7)	36.0(2.5)	44.6(3.0)
	1978	50.1(1.6)	53.0(2.0)	46.9(2.2)	53.1(1.6)	39.1(4.0)	32.0(6.9)
<b>Interpret data in table</b>	1994	61.9(1.9)	64.8(2.3)	59.1(2.2)	68.1(1.3)	38.2(6.6)	51.3(4.3)
	1992	62.4(1.3)	65.7(1.6)	58.9(2.0)	68.0(1.3)	39.7(3.9)	55.1(3.8)
	1990	61.3(1.3)	64.1(1.5)	58.6(1.9)	66.8(1.5)	39.8(3.8)	50.6(4.3)
	1986	60.8(1.9)	63.4(2.2)	58.2(2.3)	64.5(2.2)	42.5(4.0)	61.2(3.2)
	1982	50.2(2.0)	55.1(2.6)	45.3(2.0)	53.5(2.4)	32.3(4.8)	46.1(4.0)
	1978	56.8(1.6)	63.2(1.7)	50.3(2.3)	60.8(1.7)	34.7(2.8)	52.1(3.9)
<b>Read circle graph</b>	1994	95.5(0.5)	94.7(0.9)	96.3(0.7)	97.0(0.5)	92.9(1.4)	90.9(2.2)
	1992	94.4(0.6)	94.7(1.2)	94.2(0.8)	96.1(0.6)	89.5(1.8)	90.1(2.0)
	1990	92.5(1.0)	91.3(1.5)	93.8(0.9)	96.1(0.6)	80.5(4.3)	85.7(2.6)
	1986	94.8(0.7)	95.1(0.9)	94.5(0.8)	96.4(0.6)	90.0(1.9)	89.1(5.0)
	1982	94.8(0.8)	94.0(0.8)	95.5(1.0)	95.9(0.9)	90.4(1.6)	87.4(2.7)
	1978	93.3(0.8)	91.2(1.2)	95.5(0.8)	95.4(0.7)	83.5(2.4)	87.7(3.0)
<b>Interpret data in circle graph</b>	1994	89.9(0.9)	87.6(1.1)	92.2(1.2)	92.0(0.9)	83.6(2.2)	86.2(2.3)
	1992	88.9(0.9)	86.3(1.5)	91.3(1.0)	90.6(0.9)	84.1(3.1)	82.9(2.8)
	1990	86.9(1.2)	85.9(1.7)	88.0(1.2)	89.9(1.2)	77.4(3.9)	82.7(2.4)
	1986	86.2(1.0)	86.2(1.8)	86.1(1.3)	88.5(1.1)	78.2(2.4)	75.7(5.4)
	1982	93.7(0.8)	90.9(1.1)	96.5(0.7)	95.2(0.7)	86.7(2.4)	89.7(2.5)
	1978	90.8(0.8)	89.9(1.2)	91.7(0.9)	93.5(0.7)	78.6(2.7)	80.8(3.2)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find average</b>	1994	58.3(2.0)	59.9(3.0)	56.6(1.9)	61.9(2.2)	42.4(4.5)	51.6(3.4)
	1992	57.5(1.7)	56.9(1.9)	58.0(2.4)	63.1(1.9)	37.6(3.1)	43.7(3.4)
	1990	50.5(2.4)	50.8(2.8)	50.1(2.7)	55.1(2.6)	35.5(5.9)	42.0(5.3)
	1986	48.6(2.0)	49.1(2.6)	48.2(2.5)	53.4(2.5)	31.2(3.7)	31.0(4.0)
	1982	52.7(2.2)	52.3(2.7)	53.1(2.4)	56.6(2.0)	36.6(4.0)	33.6(4.3)
	1978	50.6(1.9)	50.6(2.3)	50.6(2.2)	56.4(2.0)	25.0(4.3)	22.5(4.9)
<b>Solve money problem</b>	1994	59.3(1.8)	57.6(2.3)	60.9(2.1)	64.6(1.9)	41.0(6.8)	46.6(4.1)
	1992	56.7(2.1)	53.3(2.2)	60.1(2.6)	62.9(2.4)	26.7(3.5)	50.2(4.0)
	1990	51.5(1.7)	47.1(2.1)	55.7(1.9)	55.4(1.8)	39.4(3.6)	36.4(4.0)
	1986	43.7(1.7)	40.3(2.2)	47.0(2.2)	48.0(2.0)	24.0(2.3)	28.8(4.4)
	1982	46.8(2.0)	44.4(2.4)	49.3(2.5)	51.8(1.8)	24.7(4.5)	31.6(2.0)
	1978	43.5(2.2)	42.8(2.4)	44.1(2.6)	48.6(2.3)	20.5(2.5)	24.8(4.3)
<b>Identify algebraic identity</b>	1994	49.0(1.4)	46.0(1.9)	52.1(2.0)	51.8(1.7)	33.7(2.9)	44.3(8.5)
	1992	47.2(1.7)	42.3(1.9)	51.8(2.2)	51.7(1.7)	35.0(3.0)	32.7(4.3)
	1990	41.6(2.2)	39.3(2.7)	44.0(2.3)	46.3(2.5)	27.2(4.9)	26.8(4.4)
	1986	37.6(2.8)	36.4(2.8)	38.8(3.3)	41.2(3.2)	22.8(2.6)	25.9(3.9)
	1982	41.5(1.7)	38.2(2.4)	44.8(2.2)	44.8(2.0)	27.7(3.5)	23.7(3.4)
	1978	35.7(1.8)	32.3(2.2)	39.3(1.9)	39.8(1.9)	19.8(1.9)	16.5(4.9)
<b>Identify unit of length</b>	1994	92.9(0.6)	93.1(1.2)	92.7(0.9)	93.9(0.8)	88.8(1.5)	91.8(2.2)
	1992	95.1(0.7)	94.8(1.1)	95.3(0.7)	96.2(0.6)	91.1(2.4)	92.8(1.8)
	1990	94.0(0.6)	93.7(0.8)	94.2(0.9)	94.9(0.6)	89.6(2.4)	93.5(2.4)
	1986	91.9(1.1)	92.5(1.3)	91.4(1.1)	93.5(1.3)	86.4(2.3)	84.5(4.2)
	1982	87.5(1.5)	87.7(1.6)	87.4(1.8)	89.9(1.4)	74.5(3.1)	84.9(2.8)
<b>Identify unit of weight</b>	1994	72.8(1.3)	78.2(1.6)	67.5(2.0)	77.5(1.7)	54.3(2.5)	66.2(4.1)
	1992	71.9(2.0)	73.2(2.6)	70.5(1.8)	75.4(1.9)	59.4(5.0)	61.6(5.2)
	1990	68.9(1.6)	72.3(1.7)	65.7(2.3)	72.0(2.0)	55.8(2.9)	64.8(3.9)
	1986	66.8(1.7)	70.9(1.8)	62.7(2.4)	69.5(1.9)	58.4(4.8)	51.5(4.6)
	1982	70.7(1.6)	73.7(1.8)	67.5(2.5)	75.2(1.9)	46.5(2.6)	64.4(3.0)
<b>Convert metric units</b>	1994	44.1(1.9)	45.3(2.4)	42.9(2.1)	47.1(2.2)	33.6(4.6)	34.0(2.4)
	1992	44.0(2.0)	46.4(2.5)	41.4(2.1)	47.2(2.3)	33.1(3.1)	27.7(4.0)
	1990	45.2(1.5)	46.0(1.8)	44.5(1.9)	49.2(1.8)	32.1(2.5)	32.6(4.1)
	1986	46.3(4.0)	46.7(4.3)	45.9(4.1)	48.5(5.0)	35.3(3.3)	41.3(4.1)
	1982	49.5(1.4)	52.4(2.1)	46.7(1.3)	49.5(1.7)	50.4(6.6)	47.0(6.7)
<b>Convert metric units</b>	1994	43.1(2.1)	44.5(2.5)	41.9(3.3)	44.5(2.1)	44.3(7.3)	30.3(4.2)
	1992	44.8(1.5)	46.1(1.8)	43.6(2.2)	46.0(1.8)	40.3(3.5)	38.0(6.3)
	1990	48.8(1.9)	48.5(2.2)	49.1(2.3)	50.7(2.1)	43.7(3.3)	39.2(4.5)
	1986	50.1(2.0)	50.4(2.3)	49.7(2.7)	51.6(2.4)	45.2(3.2)	41.6(5.2)
	1982	37.9(2.3)	39.6(3.2)	36.3(2.2)	38.8(2.3)	36.5(6.0)	27.0(5.7)
<b>Identify greatest metric unit</b>	1994	76.5(1.5)	78.9(1.8)	74.4(2.2)	80.1(1.4)	66.1(4.0)	61.9(6.4)
	1992	79.4(1.5)	82.8(1.6)	76.0(1.9)	81.7(1.6)	66.8(3.7)	78.3(3.4)
	1990	74.9(1.7)	77.9(2.0)	72.1(1.9)	78.6(1.9)	59.8(3.8)	66.5(5.7)
	1986	71.7(1.6)	77.0(1.9)	66.4(2.2)	75.1(2.1)	60.9(3.9)	52.1(5.4)
	1982	73.7(1.9)	76.8(2.4)	70.6(2.1)	78.2(2.1)	50.6(4.3)	70.6(4.7)
	1978	63.5(1.5)	71.0(2.1)	55.2(1.8)	67.3(1.5)	46.4(3.3)	51.1(4.7)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Estimate height of door</b>	1994	81.0(0.9)	86.8(1.2)	75.5(1.9)	87.4(1.0)	58.9(2.8)	67.1(4.2)
	1992	81.9(0.9)	88.0(1.3)	75.4(1.5)	86.4(0.9)	65.1(3.1)	73.6(3.3)
	1990	81.0(1.1)	88.0(1.3)	74.4(1.5)	86.5(1.1)	62.4(3.9)	64.7(4.5)
	1986	81.3(1.8)	88.0(1.4)	74.6(2.5)	85.6(2.2)	62.5(2.7)	75.4(2.4)
	1982	76.9(1.5)	82.3(1.9)	71.7(1.9)	80.2(1.7)	64.5(2.9)	61.5(5.5)
	1978	78.8(1.3)	83.2(1.3)	74.5(1.9)	83.8(1.0)	53.2(4.5)	69.4(2.9)
<b>Read length using ruler</b>	1994	84.2(1.2)	86.2(1.8)	82.4(1.4)	88.0(1.0)	70.4(4.0)	76.0(1.7)
	1992	84.4(1.0)	85.6(1.1)	83.0(1.6)	88.4(1.1)	69.5(2.8)	74.9(3.4)
	1990	82.9(0.9)	83.7(1.1)	82.1(1.3)	86.5(0.8)	70.4(4.4)	72.6(3.0)
	1986	81.0(1.1)	81.4(1.3)	80.5(1.5)	83.4(1.2)	67.9(3.0)	79.0(3.2)
	1982	83.8(1.4)	87.4(1.9)	80.1(2.0)	87.1(1.2)	69.5(4.5)	72.0(2.6)
<b>Find area of rectangle</b>	1994	59.7(1.7)	59.5(2.3)	59.8(1.8)	66.5(1.7)	36.0(3.0)	42.0(4.2)
	1992	55.9(1.7)	54.0(2.4)	57.9(1.9)	59.5(2.0)	41.3(3.4)	46.9(4.8)
	1990	53.6(1.9)	52.3(2.3)	54.8(2.2)	56.3(2.1)	46.0(3.1)	39.1(5.0)
	1986	51.6(1.9)	50.2(2.5)	53.0(1.9)	53.9(2.2)	44.2(3.7)	34.8(6.1)
	1982	48.4(2.2)	47.2(2.8)	49.5(2.5)	53.1(2.6)	24.4(3.7)	39.9(5.7)
	1978	51.4(2.0)	49.6(2.3)	53.1(2.1)	55.2(2.2)	32.4(3.8)	37.3(4.5)
<b>Find area of rectangle</b>	1994	67.8(1.4)	66.3(1.8)	69.4(1.7)	71.1(1.5)	53.1(3.4)	60.5(3.4)
	1992	67.7(1.4)	65.3(1.7)	70.0(1.9)	72.5(1.6)	54.2(3.4)	48.3(3.4)
	1990	62.0(2.3)	60.5(2.8)	63.7(2.4)	66.5(2.5)	47.9(4.1)	54.7(3.9)
	1986	63.4(1.7)	64.5(1.8)	62.4(2.6)	65.6(2.1)	52.6(3.3)	58.1(4.1)
	1982	64.0(2.2)	66.3(2.1)	61.8(2.9)	68.0(2.5)	45.1(3.4)	50.2(4.3)
	1978	70.5(1.6)	70.6(1.6)	70.4(2.2)	73.7(1.5)	52.8(4.1)	62.2(5.2)
<b>Find area of square</b>	1994	13.1(1.1)	14.8(1.5)	11.4(1.2)	14.0(1.2)	3.8(1.4)	11.0(4.6)
	1992	12.0(0.9)	12.6(1.1)	11.5(1.2)	12.7(1.2)	8.6(2.8)	8.6(2.0)
	1990	12.5(1.4)	13.0(1.6)	12.1(1.6)	13.9(1.8)	5.9(2.7)	8.4(1.6)
	1986	13.0(1.5)	15.8(1.6)	10.2(1.6)	14.4(1.7)	5.3(1.6)	7.4(2.4)
	1982	17.7(1.9)	20.2(2.2)	15.3(2.3)	20.5(2.1)	4.3(1.3)	3.4(2.6)
	1978	12.1(1.4)	12.8(1.6)	11.4(1.5)	14.4(1.6)	3.1(1.2)	1.4(0.9)
<b>Identify parallelograms</b>	1994	69.6(1.6)	69.0(2.2)	70.1(1.7)	73.8(1.8)	56.0(3.6)	61.2(3.6)
	1992	70.8(1.2)	68.0(1.8)	73.5(1.4)	75.4(1.2)	52.9(3.0)	56.9(3.4)
	1990	67.2(1.3)	66.4(1.9)	67.9(1.9)	69.3(1.6)	58.1(3.7)	61.9(4.2)
	1986	67.5(2.1)	69.3(2.3)	65.8(2.2)	70.5(2.8)	51.3(2.8)	62.0(4.5)
	1982	72.3(2.0)	71.8(2.3)	72.9(2.6)	75.6(2.0)	59.5(4.2)	59.4(9.0)
	1978	66.4(1.4)	65.5(1.6)	67.3(1.9)	68.2(1.5)	56.9(3.8)	58.3(5.2)
<b>Apply vertical angles</b>	1994	82.7(1.1)	81.7(1.3)	83.7(1.5)	84.9(1.1)	70.7(3.2)	79.3(3.3)
	1992	81.1(1.0)	82.2(1.3)	80.1(1.6)	82.7(1.2)	73.6(2.6)	80.5(3.4)
	1990	81.1(1.5)	81.3(1.7)	80.9(2.0)	84.4(1.3)	71.3(4.5)	72.3(2.8)
	1986	80.4(1.8)	78.2(2.6)	82.7(1.8)	81.6(2.1)	76.6(2.3)	76.2(2.9)
	1982	75.0(1.3)	74.6(1.7)	75.4(1.6)	77.5(1.5)	63.4(2.6)	71.2(3.0)
	1978	72.1(1.3)	71.4(1.8)	73.0(1.6)	74.0(1.4)	60.7(4.9)	69.7(4.7)
<b>Apply supplementary angles</b>	1994	13.9(1.2)	14.9(1.6)	12.9(1.2)	15.5(1.4)	5.6(1.0)	6.5(2.1)
	1992	10.7(1.0)	12.7(1.4)	8.9(0.9)	11.8(1.4)	6.8(1.5)	4.2(1.3)
	1990	10.6(1.2)	12.8(1.7)	8.4(1.1)	12.1(1.6)	6.7(1.3)	2.3(0.6)
	1986	8.9(1.1)	10.9(1.4)	6.9(1.3)	9.7(1.2)	4.3(1.9)	6.8(2.5)
	1982	12.8(1.6)	16.2(1.8)	9.4(1.6)	13.1(1.7)	12.6(4.0)	9.0(3.2)
	1978	10.3(1.2)	11.7(1.2)	8.9(1.4)	12.1(1.4)	1.4(0.8)	3.5(1.2)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Identify greatest number</b>	1994	62.3(1.9)	68.2(2.4)	56.4(2.1)	70.4(1.3)	35.4(4.9)	41.9(4.5)
	1992	58.4(1.8)	62.3(2.3)	54.2(2.3)	64.6(1.7)	32.7(4.2)	47.9(4.6)
	1990	58.0(1.8)	59.9(2.3)	56.2(1.9)	63.3(2.1)	36.0(5.8)	45.2(3.7)
	1986	53.4(1.5)	56.2(1.7)	50.6(2.0)	58.9(1.6)	31.2(2.5)	34.4(5.5)
	1982	54.7(1.8)	56.0(2.5)	53.3(2.2)	58.5(1.5)	37.3(6.2)	38.9(5.8)
<b>Change decimal to percent</b>	1994	67.5(1.5)	67.1(1.8)	67.8(1.8)	70.8(1.5)	56.9(3.9)	56.8(3.8)
	1992	63.1(1.4)	63.3(2.2)	63.0(1.9)	65.8(1.6)	50.5(2.9)	62.8(5.1)
	1990	63.3(1.5)	62.4(1.7)	64.2(1.7)	65.4(1.6)	48.5(3.3)	68.8(3.9)
	1986	65.2(1.8)	64.5(2.1)	65.9(2.3)	66.7(1.9)	55.1(3.6)	68.6(3.4)
	1982	68.4(1.4)	65.1(1.8)	71.7(1.7)	69.4(1.5)	61.3(4.5)	68.2(5.1)
<b>Write addition sentence</b>	1994	30.7(1.4)	33.3(1.4)	28.4(2.2)	34.8(1.6)	20.5(2.4)	14.2(2.9)
	1992	29.3(1.3)	28.9(1.5)	29.7(1.7)	32.4(1.6)	18.5(2.4)	18.6(3.3)
	1990	28.9(1.4)	29.6(1.6)	28.2(1.6)	31.3(1.6)	18.5(2.8)	22.1(3.4)
	1986	31.8(1.7)	30.2(1.9)	33.4(1.9)	34.1(1.8)	19.6(3.9)	27.3(4.5)
	1982	46.5(2.5)	46.3(2.9)	46.6(2.9)	49.8(2.5)	30.1(6.8)	31.6(7.1)
	1978	48.2(1.5)	46.4(1.8)	50.2(2.3)	53.4(1.5)	25.4(6.0)	26.5(4.0)
<b>Find common factor</b>	1994	83.0(0.9)	82.0(1.5)	83.9(1.1)	84.4(0.9)	80.6(2.8)	73.8(2.9)
	1992	84.4(1.1)	84.2(1.8)	84.5(1.6)	86.4(1.2)	75.0(2.8)	85.8(2.4)
	1990	83.8(1.3)	81.1(1.7)	86.4(1.6)	86.5(1.2)	77.9(4.0)	71.6(5.4)
	1986	84.3(1.1)	84.1(1.3)	84.6(1.5)	85.4(1.2)	82.8(2.0)	77.2(3.0)
	1982	79.5(1.3)	78.3(1.6)	80.6(1.5)	81.1(1.4)	75.5(2.8)	68.1(4.2)
	1978	72.5(1.4)	72.9(1.7)	72.2(1.8)	75.3(1.5)	61.4(2.7)	62.9(4.6)
<b>Add whole numbers</b>	1994	96.7(0.5)	96.3(0.8)	97.1(0.5)	97.0(0.6)	96.1(1.0)	93.8(1.6)
	1992	97.1(0.4)	97.6(0.5)	96.7(0.6)	97.3(0.4)	96.1(1.2)	96.7(1.2)
	1990	97.1(0.3)	97.1(0.6)	97.1(0.4)	97.2(0.3)	97.1(1.4)	96.3(1.2)
	1986	96.2(0.5)	96.1(0.5)	96.3(0.7)	96.6(0.6)	94.0(1.8)	96.2(0.8)
	1982	96.3(0.5)	95.9(0.7)	96.6(0.5)	96.2(0.6)	95.9(1.0)	97.1(1.4)
<b>Add whole numbers</b>	1994	96.0(0.6)	94.5(1.1)	97.7(0.5)	96.2(0.6)	94.9(1.6)	95.4(2.1)
	1992	95.5(0.5)	95.3(0.8)	95.8(0.5)	95.9(0.6)	93.7(1.3)	94.7(2.1)
	1990	96.6(0.4)	96.1(0.8)	97.0(0.5)	96.8(0.3)	96.0(1.7)	94.4(1.8)
	1986	95.3(0.6)	94.5(0.8)	96.1(0.9)	95.4(0.7)	94.4(1.2)	96.3(1.4)
	1982	96.4(0.5)	95.2(0.8)	97.7(0.4)	97.7(0.4)	89.7(1.3)	94.2(1.8)
<b>Add whole numbers</b>	1994	78.1(0.8)	77.2(1.3)	78.9(1.4)	80.4(1.1)	67.2(2.3)	72.4(3.1)
	1992	79.3(1.0)	78.9(1.4)	79.8(1.2)	80.5(1.2)	74.6(2.9)	77.3(2.7)
	1990	81.6(0.8)	79.1(1.4)	84.0(1.1)	82.4(0.9)	77.1(2.9)	79.1(3.6)
	1986	81.3(1.6)	80.1(2.0)	82.5(1.8)	82.0(1.7)	77.6(3.3)	78.4(4.1)
	1982	85.7(1.0)	83.7(1.3)	87.8(1.3)	87.1(1.1)	78.2(2.2)	82.6(2.5)
<b>Add whole numbers</b>	1994	97.3(0.4)	96.5(0.8)	98.1(0.5)	97.3(0.4)	97.4(1.1)	97.4(1.0)
	1992	98.1(0.4)	97.5(0.5)	98.7(0.4)	98.1(0.5)	98.9(0.5)	97.9(1.0)
	1990	98.1(0.2)	97.8(0.4)	98.3(0.4)	98.0(0.3)	98.2(0.8)	98.4(0.8)
	1986	97.8(0.4)	97.5(0.5)	98.0(0.6)	97.7(0.5)	98.1(0.6)	97.2(1.2)
	1982	97.1(0.5)	96.7(0.8)	97.5(0.7)	97.6(0.4)	94.1(1.7)	96.7(2.4)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Add whole numbers</b>	1994	97.0(0.5)	96.7(0.6)	97.3(0.7)	97.2(0.5)	96.6(1.2)	96.0(1.6)
	1992	97.7(0.4)	97.1(0.7)	98.3(0.5)	97.8(0.5)	96.7(1.3)	100.0(0.0)
	1990	98.0(0.4)	97.5(0.6)	98.4(0.4)	98.3(0.4)	97.2(1.0)	96.2(1.4)
	1986	97.6(0.3)	96.9(0.8)	98.2(0.6)	97.6(0.4)	97.6(0.8)	95.9(1.6)
	1982	97.9(0.4)	97.7(0.6)	98.1(0.5)	98.2(0.3)	96.1(1.5)	97.5(1.4)
<b>Add whole numbers</b>	1994	90.7(0.8)	89.3(1.1)	91.9(1.1)	92.0(0.8)	85.6(2.0)	89.2(2.3)
	1992	91.9(0.7)	89.9(1.2)	94.0(0.8)	92.3(0.8)	89.4(2.3)	93.3(2.6)
	1990	92.5(0.7)	90.1(1.0)	94.8(0.8)	93.5(0.6)	89.5(2.2)	87.1(3.5)
	1986	89.6(1.0)	87.2(1.9)	92.0(0.8)	91.1(1.2)	82.3(1.2)	87.0(3.3)
	1982	87.9(1.6)	83.9(2.4)	92.1(1.3)	91.1(1.0)	70.9(6.0)	87.5(3.0)
<b>Apply operation of addition</b>	1994	96.0(0.6)	95.6(0.8)	96.3(0.7)	96.2(0.7)	94.5(1.3)	95.0(1.7)
	1992	95.4(0.6)	95.5(0.7)	95.3(0.9)	97.3(0.5)	89.5(2.3)	92.1(2.1)
	1990	96.0(0.4)	95.2(0.7)	96.7(0.5)	96.3(0.4)	95.5(1.3)	94.1(1.4)
	1986	96.5(0.5)	95.9(0.7)	97.1(0.7)	96.8(0.7)	96.2(0.9)	93.4(1.7)
	1982	97.6(0.3)	97.8(0.4)	97.5(0.6)	97.9(0.4)	97.0(1.2)	96.7(1.4)
<b>Subtract whole numbers</b>	1994	92.8(0.8)	91.6(0.9)	93.9(1.1)	94.1(0.7)	88.5(3.0)	88.5(3.5)
	1992	94.3(0.7)	93.9(1.1)	94.8(0.7)	95.2(0.7)	88.9(2.1)	96.9(1.4)
	1990	94.9(0.5)	93.1(1.0)	96.7(0.6)	95.3(0.5)	93.7(1.8)	90.9(2.1)
	1986	94.7(0.5)	93.5(1.0)	95.9(0.4)	95.2(0.7)	93.5(1.9)	91.0(2.5)
	1982	95.4(0.5)	94.6(0.9)	96.1(0.7)	96.8(0.5)	87.0(2.3)	95.3(1.2)
	1978	92.1(0.7)	91.5(0.9)	92.6(1.0)	94.2(0.7)	79.9(1.8)	92.0(1.8)
<b>Subtract whole numbers</b>	1994	80.8(1.0)	79.8(1.8)	81.7(1.6)	85.0(0.9)	64.7(3.0)	75.7(4.3)
	1992	82.5(1.1)	81.0(1.6)	84.1(1.0)	85.4(0.8)	69.3(4.0)	81.5(3.0)
	1990	81.7(1.1)	80.0(1.6)	83.4(1.5)	84.5(1.3)	68.7(2.9)	79.5(3.8)
	1986	82.8(1.1)	80.8(1.2)	84.7(1.9)	84.0(1.1)	75.9(3.4)	79.5(3.9)
	1982	86.3(1.2)	85.1(1.6)	87.4(2.0)	89.5(1.3)	70.8(3.2)	77.8(3.6)
	1978	80.6(1.2)	80.4(1.4)	80.8(1.6)	83.8(1.3)	63.0(3.5)	77.3(2.7)
<b>Subtract whole numbers</b>	1994	85.8(1.0)	84.4(1.4)	87.1(1.3)	87.8(0.9)	75.7(4.3)	84.8(4.5)
	1992	87.3(0.8)	86.6(1.1)	87.9(1.3)	89.6(0.8)	76.1(2.5)	86.1(2.6)
	1990	88.2(0.9)	87.1(1.3)	89.3(1.4)	89.7(0.9)	81.3(3.3)	85.2(2.3)
	1986	87.8(1.6)	86.1(1.7)	89.5(2.1)	89.7(1.7)	79.2(2.6)	83.7(2.2)
	1982	88.0(1.1)	85.9(1.5)	90.1(1.3)	90.3(1.2)	74.0(3.2)	91.1(2.2)
	1978	84.7(0.9)	83.7(1.2)	85.7(1.6)	87.6(0.9)	70.9(2.9)	76.6(3.3)
<b>Subtract whole numbers</b>	1994	95.6(0.5)	95.3(0.7)	95.9(0.7)	96.5(0.5)	92.5(1.9)	93.5(1.9)
	1992	95.4(0.6)	95.3(0.7)	95.4(1.0)	96.3(0.6)	91.2(1.7)	94.7(1.7)
	1990	95.1(0.6)	94.7(0.7)	95.6(0.8)	96.3(0.5)	92.3(2.5)	90.5(1.4)
	1986	95.4(0.6)	95.5(0.6)	95.3(1.1)	96.0(0.7)	91.7(1.4)	96.2(1.4)
	1982	96.2(0.7)	95.3(0.9)	97.0(0.7)	96.9(0.7)	92.3(1.5)	94.9(2.3)
	1978	95.8(0.6)	94.8(0.9)	96.8(0.6)	96.9(0.7)	89.4(1.3)	95.8(1.6)
<b>Subtract whole numbers</b>	1994	96.2(0.5)	95.3(0.7)	97.0(0.7)	96.6(0.5)	95.0(1.7)	93.3(1.7)
	1992	95.5(0.5)	94.5(1.1)	96.4(0.8)	96.2(0.6)	92.7(1.6)	95.1(1.8)
	1990	95.7(0.6)	94.8(0.7)	96.7(0.8)	96.2(0.5)	95.3(1.5)	91.2(1.7)
	1986	96.8(0.6)	96.5(0.7)	97.0(0.7)	97.4(0.6)	93.3(1.3)	96.0(1.9)
	1982	96.1(0.6)	94.5(0.9)	97.8(0.7)	96.2(0.7)	94.7(1.3)	97.3(2.0)
	1978	94.9(0.4)	93.3(0.8)	96.6(0.6)	95.8(0.5)	89.5(1.7)	94.3(1.7)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Subtract whole numbers</b>	1994	92.3(0.8)	91.9(1.0)	92.7(1.0)	93.3(0.7)	87.9(2.7)	91.0(2.8)
	1992	92.3(1.0)	91.3(1.1)	93.2(1.1)	93.8(1.0)	86.3(2.8)	91.7(1.6)
	1990	91.9(0.9)	91.2(1.3)	92.5(0.9)	93.1(0.8)	87.2(2.8)	89.4(2.5)
	1986	92.9(0.8)	92.3(1.0)	93.6(1.1)	94.3(0.9)	86.9(1.5)	90.2(2.6)
	1982	93.7(0.8)	93.6(1.2)	93.9(1.1)	94.8(0.7)	86.5(2.6)	95.3(2.1)
	1978	91.5(0.7)	90.1(1.0)	92.9(0.8)	93.8(0.6)	80.6(2.5)	85.4(2.5)
<b>Find percent given numbers</b>	1994	58.4(1.7)	66.7(2.1)	49.7(2.5)	63.8(2.0)	37.9(4.3)	44.8(3.7)
	1992	55.6(1.5)	62.1(1.6)	49.6(2.3)	60.3(1.6)	39.8(3.7)	46.9(4.5)
	1990	49.0(1.9)	56.7(2.2)	40.8(2.3)	54.5(2.0)	29.4(3.4)	42.4(3.3)
	1986	47.8(1.8)	55.4(2.6)	40.2(2.4)	53.1(2.0)	23.7(1.9)	37.3(5.1)
	1982	50.8(1.8)	55.6(2.1)	45.6(2.0)	56.1(1.6)	25.8(3.1)	40.0(3.1)
<b>Find percent of number</b>	1994	41.5(1.4)	45.9(2.2)	36.9(1.3)	45.7(1.5)	21.8(2.5)	38.1(3.4)
	1992	36.6(1.5)	42.4(2.1)	31.3(1.8)	40.1(1.7)	26.2(2.2)	27.0(4.3)
	1990	35.7(1.5)	39.3(1.9)	31.9(1.6)	38.8(1.8)	25.4(2.6)	27.2(3.5)
	1986	33.1(2.2)	36.2(2.6)	30.1(2.1)	35.1(2.6)	25.5(3.6)	24.4(3.8)
	1982	32.8(1.3)	36.1(1.6)	29.4(2.2)	34.0(1.6)	26.0(3.6)	29.2(3.1)
<b>Find percent greater than 100</b>	1994	37.5(1.8)	40.7(2.0)	34.1(2.7)	41.4(2.2)	20.8(3.1)	29.5(3.7)
	1992	34.3(1.2)	39.8(1.4)	29.2(1.7)	37.6(1.4)	25.2(3.4)	20.7(2.4)
	1990	31.9(1.9)	37.0(2.4)	26.5(2.0)	35.1(2.2)	22.7(3.0)	22.0(3.6)
	1986	30.3(1.4)	36.4(1.8)	24.2(2.3)	32.8(1.7)	19.6(2.2)	21.6(4.7)
	1982	29.0(1.7)	33.4(2.0)	24.3(2.1)	31.4(1.8)	17.0(3.4)	22.3(3.3)
<b>Find percent given numbers</b>	1994	30.8(1.7)	35.8(2.0)	26.0(2.0)	34.4(1.9)	17.7(5.6)	23.9(2.5)
	1992	29.0(1.5)	33.0(1.9)	24.7(1.8)	32.5(1.7)	16.9(1.8)	19.3(3.4)
	1990	24.4(1.2)	28.6(1.5)	20.4(1.4)	27.5(1.3)	11.4(2.2)	18.9(4.4)
	1986	25.6(1.6)	28.6(1.8)	22.5(3.9)	27.7(2.0)	17.3(2.4)	17.2(3.0)
	1982	22.6(1.2)	26.7(1.8)	18.2(1.6)	24.1(1.4)	15.3(3.3)	18.0(2.1)
<b>Find percent given numbers</b>	1994	52.7(1.9)	59.6(2.1)	46.6(2.5)	58.5(2.0)	31.5(6.2)	41.2(4.9)
	1992	49.0(1.8)	53.8(2.0)	44.1(2.3)	54.4(1.9)	25.3(3.4)	35.3(4.9)
	1990	46.0(1.7)	50.9(1.6)	41.3(2.2)	52.1(1.7)	23.4(3.6)	33.3(5.0)
	1986	38.9(1.8)	42.7(2.2)	35.1(3.0)	43.2(2.1)	16.8(2.7)	28.4(3.2)
	1982	41.2(2.3)	46.1(3.3)	36.0(2.3)	46.0(1.9)	20.9(4.4)	26.0(3.6)
<b>Find percent of number</b>	1994	42.3(2.0)	44.3(2.3)	40.5(2.9)	44.0(1.6)	38.4(8.8)	30.5(4.0)
	1992	41.0(1.4)	42.9(1.9)	39.1(1.8)	44.1(1.7)	25.2(3.1)	29.5(4.7)
	1990	34.5(1.4)	38.1(1.6)	31.0(1.8)	37.0(1.5)	21.1(2.8)	27.8(3.5)
	1986	33.4(1.1)	37.9(1.7)	29.0(1.5)	34.8(1.4)	24.7(2.4)	30.9(4.2)
	1982	32.8(1.4)	32.5(2.0)	33.2(1.6)	34.7(1.6)	24.7(4.0)	21.2(5.1)
<b>Find percent greater than 100</b>	1994	34.5(1.4)	36.9(1.9)	32.4(1.8)	36.7(1.7)	29.3(5.7)	20.9(3.1)
	1992	34.6(1.5)	36.7(1.8)	32.5(1.9)	37.2(1.6)	19.3(2.8)	28.1(4.2)
	1990	29.1(1.3)	33.3(1.7)	25.0(1.7)	31.4(1.6)	19.0(3.0)	23.7(3.0)
	1986	27.7(1.0)	30.1(1.6)	25.5(1.8)	29.0(1.4)	19.2(1.9)	21.7(3.7)
	1982	26.5(1.4)	29.4(2.1)	23.5(1.7)	28.1(1.6)	18.9(3.1)	22.0(2.9)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find percent given numbers</b>	1994	31.9(1.3)	33.3(1.9)	30.7(1.5)	35.2(1.7)	20.2(3.7)	24.5(6.0)
	1992	32.5(1.4)	35.0(1.7)	30.0(2.0)	34.0(1.6)	24.1(3.0)	27.3(4.5)
	1990	24.9(1.2)	26.6(1.7)	23.3(1.2)	26.3(1.3)	17.0(2.9)	20.6(3.4)
	1986	24.0(2.0)	25.1(1.5)	23.0(3.0)	24.8(2.5)	17.0(2.4)	23.4(2.8)
	1982	24.0(1.3)	24.9(2.2)	23.1(1.6)	25.6(1.5)	16.0(3.3)	13.1(2.1)
<b>Find number given percent</b>	1994	32.6(1.3)	33.8(1.7)	31.5(1.9)	34.4(1.7)	25.0(2.3)	26.9(4.6)
	1992	31.8(1.5)	30.8(1.5)	32.7(2.1)	33.6(1.8)	23.1(2.7)	24.3(3.0)
	1990	26.2(1.2)	26.2(1.4)	26.1(1.7)	27.7(1.4)	17.5(2.1)	23.6(2.8)
	1986	24.6(1.3)	24.8(2.0)	24.5(1.8)	25.0(1.6)	20.8(2.4)	25.3(3.3)
	1982	20.8(1.0)	20.0(1.3)	21.6(1.9)	21.5(1.1)	17.9(1.8)	19.2(5.2)
<b>Subtract decimals</b>	1994	84.8(0.8)	84.8(1.4)	84.8(1.1)	87.2(0.9)	75.1(2.7)	80.6(4.0)
	1992	85.4(1.0)	84.2(1.5)	86.6(1.1)	87.7(1.1)	74.9(3.8)	80.4(2.8)
	1990	86.3(0.8)	86.2(1.3)	86.4(1.1)	88.4(0.7)	79.6(3.0)	82.8(4.0)
	1986	82.6(0.9)	82.6(1.5)	82.7(1.7)	85.3(1.1)	69.9(3.8)	77.9(2.8)
	1982	77.0(2.1)	73.3(3.8)	80.9(1.5)	81.0(2.1)	54.4(XXX)	75.1(3.9)
	1978	80.1(1.3)	80.0(1.6)	80.3(1.5)	83.6(1.2)	61.8(4.3)	74.0(4.2)
<b>Divide decimals</b>	1994	60.8(1.7)	54.0(2.0)	67.0(2.1)	66.9(1.6)	41.5(8.1)	43.6(3.8)
	1992	61.0(2.0)	55.7(2.2)	66.2(2.4)	65.6(2.1)	37.6(4.0)	55.5(4.3)
	1990	56.9(1.3)	52.0(1.7)	61.7(1.8)	60.4(1.5)	45.1(3.7)	45.0(3.6)
	1986	52.4(2.2)	47.9(1.9)	56.9(3.3)	58.1(2.6)	28.5(2.9)	37.2(4.1)
	1982	44.1(1.9)	39.9(2.6)	48.5(2.3)	49.7(2.0)	20.5(4.5)	24.5(3.9)
	1978	54.5(1.9)	50.0(2.1)	58.9(2.3)	59.2(1.8)	28.6(3.8)	46.6(5.8)
<b>Add decimals</b>	1994	78.9(1.6)	74.7(2.0)	82.7(1.8)	81.7(1.7)	70.2(6.0)	70.5(4.1)
	1992	80.5(1.4)	77.6(1.9)	83.4(1.6)	84.1(1.4)	62.2(3.5)	77.6(4.6)
	1990	79.5(1.0)	73.3(1.3)	85.3(1.3)	82.2(1.1)	67.4(3.9)	74.6(3.3)
	1986	74.1(1.4)	69.1(2.0)	79.0(2.0)	77.8(1.6)	55.6(3.2)	66.1(3.3)
	1982	72.5(2.1)	67.2(3.2)	78.2(2.1)	77.8(1.7)	48.8(6.4)	59.7(5.1)
	1978	76.8(1.7)	72.8(2.1)	80.7(1.8)	79.8(1.8)	59.8(4.0)	74.5(3.4)
<b>Divide decimals</b>	1994	66.4(1.7)	63.0(1.9)	69.4(2.0)	70.1(1.7)	52.6(6.4)	60.8(5.4)
	1992	63.6(1.9)	60.3(2.3)	66.8(2.2)	67.1(1.9)	44.3(4.3)	61.3(4.6)
	1990	61.8(1.3)	55.9(1.4)	67.5(1.8)	64.9(1.5)	50.6(3.7)	49.7(3.6)
	1986	58.0(2.2)	53.3(2.4)	62.7(2.4)	63.2(2.7)	34.4(3.9)	48.8(4.8)
	1982	58.0(1.7)	50.0(2.0)	66.4(2.3)	61.6(1.7)	39.3(3.9)	56.8(7.3)
	1978	64.0(1.8)	58.5(2.4)	69.4(2.0)	67.1(1.8)	44.5(3.8)	65.2(4.1)
<b>Subtract decimals</b>	1994	63.6(2.1)	59.6(2.4)	67.2(2.3)	66.5(2.3)	52.0(7.1)	58.6(6.5)
	1992	56.2(1.9)	50.9(2.3)	61.6(2.1)	59.0(2.1)	46.6(4.0)	41.8(4.6)
	1990	57.4(1.8)	49.8(1.8)	64.8(2.4)	59.7(2.1)	50.4(4.0)	48.5(4.0)
	1986	51.3(3.0)	45.7(3.0)	56.9(3.3)	55.2(3.7)	34.1(3.9)	40.4(5.8)
	1982	40.1(1.6)	30.9(1.6)	49.7(2.3)	43.6(1.5)	23.1(3.9)	32.4(5.5)
	1978	43.9(1.6)	38.1(2.2)	49.6(2.1)	47.2(1.5)	28.5(3.5)	32.6(3.7)
<b>Divide decimals</b>	1994	47.6(2.1)	42.8(2.3)	52.0(2.6)	49.7(1.9)	38.9(6.9)	43.4(6.1)
	1992	42.8(1.7)	39.8(1.8)	45.8(2.4)	44.7(2.0)	32.9(3.8)	36.3(3.6)
	1990	43.4(1.7)	38.3(2.0)	48.3(2.1)	46.1(2.1)	33.5(2.5)	30.5(3.6)
	1986	37.1(2.5)	32.4(3.1)	41.6(2.3)	40.3(2.9)	24.1(3.7)	26.9(4.3)
	1982	29.9(1.4)	21.2(1.8)	39.2(1.8)	31.6(1.5)	21.8(4.9)	25.2(2.8)
	1978	41.8(1.8)	36.0(1.9)	47.4(2.3)	45.0(2.0)	26.0(4.5)	32.2(2.7)

The standard errors of the estimated percentages appear in parenthesis.  
XXX The standard error exceeds 10.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Estimate total cost</b>	1994	24.0(1.3)	27.8(2.0)	20.0(1.4)	24.8(1.6)	15.3(2.4)	27.3(5.1)
	1992	24.7(1.0)	28.5(1.5)	21.3(1.2)	26.9(1.3)	18.9(2.4)	18.8(2.8)
	1990	22.9(1.3)	25.1(1.8)	20.5(1.5)	24.4(1.5)	20.3(2.8)	15.0(2.7)
	1986	23.6(1.4)	27.1(2.5)	20.1(1.5)	25.0(1.8)	15.1(1.6)	24.3(2.4)
	1982	19.3(1.2)	20.5(1.6)	18.1(1.6)	21.3(1.5)	11.6(2.0)	9.4(3.9)
<b>Identify even number</b>	1994	95.6(0.7)	95.0(0.7)	96.1(1.0)	96.8(0.5)	89.8(3.0)	96.2(1.9)
	1992	96.7(0.5)	96.9(0.7)	96.5(0.6)	98.0(0.5)	93.5(1.6)	89.6(2.1)
	1990	96.2(0.4)	95.7(0.6)	96.6(0.6)	97.1(0.3)	93.8(2.0)	89.9(1.6)
	1986	95.3(0.8)	94.6(0.9)	96.0(1.0)	96.5(0.9)	91.0(1.4)	90.7(3.3)
	1982	95.9(0.6)	95.9(0.7)	95.9(0.9)	97.4(0.6)	90.7(2.0)	87.0(5.4)
	1978	92.9(0.8)	93.0(1.0)	92.8(1.0)	95.4(0.6)	81.8(2.1)	83.5(2.9)
<b>Identify even number property</b>	1994	53.1(1.4)	56.0(2.1)	50.2(2.3)	56.2(1.6)	35.7(3.9)	51.6(5.0)
	1992	52.0(1.4)	52.7(1.7)	51.4(2.2)	55.2(1.7)	43.2(2.4)	39.2(3.3)
	1990	49.2(1.7)	51.2(2.3)	47.1(2.0)	53.3(2.1)	35.8(3.2)	38.8(3.2)
	1986	48.5(1.8)	51.7(2.4)	45.3(1.6)	51.0(2.1)	35.6(3.9)	44.0(2.4)
	1982	58.4(1.8)	58.2(2.0)	58.5(2.1)	60.9(2.1)	45.2(2.8)	53.8(6.8)
	1978	54.6(1.6)	52.6(2.1)	56.5(2.1)	58.3(1.8)	37.8(3.0)	40.7(3.5)
<b>Identify even number property</b>	1994	72.9(1.6)	70.1(2.0)	75.5(1.9)	76.6(1.7)	61.8(6.7)	59.4(4.1)
	1992	72.6(1.6)	71.6(1.7)	73.6(2.1)	76.2(1.3)	58.4(4.6)	64.6(3.7)
	1990	72.0(1.5)	70.0(1.6)	73.9(2.0)	76.8(1.4)	54.8(4.8)	61.8(3.6)
	1986	70.1(1.1)	68.8(1.7)	71.5(2.2)	72.9(1.4)	59.0(4.2)	60.8(3.8)
	1982	76.8(1.4)	75.1(2.1)	78.5(1.8)	80.8(1.2)	60.6(4.0)	61.5(4.9)
	1978	70.9(1.6)	68.4(2.1)	73.4(1.8)	75.7(1.5)	48.4(3.7)	55.8(4.2)
<b>Understand percent less than 1</b>	1994	28.5(1.5)	28.3(1.9)	28.8(1.8)	32.8(1.9)	16.6(2.2)	13.8(3.4)
	1992	25.0(1.3)	26.5(1.6)	23.4(1.7)	26.9(1.6)	16.7(2.3)	18.9(3.5)
	1990	23.3(1.1)	25.9(1.4)	20.8(1.4)	24.3(1.3)	20.5(2.3)	17.1(2.2)
	1986	22.5(1.4)	22.4(1.3)	22.6(2.0)	24.1(1.7)	13.5(2.2)	21.2(2.8)
	1982	17.1(1.1)	16.7(1.7)	17.4(1.9)	17.6(1.3)	15.0(2.8)	12.3(3.5)
	1978	19.0(1.2)	19.2(1.5)	18.8(1.5)	19.6(1.4)	15.4(2.1)	16.9(2.7)
<b>Identify expected value</b>	1994	64.0(1.8)	69.3(2.0)	58.5(1.9)	68.4(2.0)	48.9(4.0)	51.2(4.9)
	1992	60.6(1.3)	65.6(1.6)	56.0(2.0)	66.1(1.6)	44.4(2.4)	46.6(4.4)
	1990	57.4(1.6)	62.4(1.9)	52.2(2.1)	63.1(1.7)	34.8(3.7)	48.7(3.5)
	1986	54.9(1.9)	59.1(2.0)	50.8(3.5)	58.9(2.5)	38.8(2.5)	46.0(3.2)
	1982	65.6(1.8)	69.8(2.3)	61.3(2.2)	69.3(1.9)	46.2(3.3)	62.5(2.8)
	1978	64.8(1.3)	69.2(1.3)	60.4(2.1)	68.2(1.6)	51.8(2.4)	49.8(2.9)
<b>Identify number sentence</b>	1994	79.1(1.5)	79.8(2.2)	78.4(1.6)	83.2(1.4)	66.5(3.1)	68.8(3.7)
	1992	77.9(1.1)	76.4(2.0)	79.6(1.2)	81.3(1.3)	63.2(2.7)	75.1(3.3)
	1990	78.4(1.0)	77.0(1.4)	79.7(1.4)	81.1(1.1)	68.1(3.0)	68.3(2.4)
	1986	75.7(2.3)	77.3(2.1)	74.1(3.1)	78.5(2.7)	64.4(3.6)	67.7(4.4)
	1982	80.4(1.1)	79.8(1.8)	81.1(1.3)	84.9(1.0)	56.7(2.8)	73.7(3.9)
	1978	81.5(1.1)	81.5(1.3)	81.5(1.3)	85.4(1.0)	64.9(2.8)	65.1(4.0)
<b>Understand decimal place value</b>	1994	48.9(1.6)	52.2(2.3)	45.8(1.8)	55.6(1.7)	25.2(3.3)	32.6(2.0)
	1992	48.0(1.6)	49.9(2.1)	46.0(1.6)	53.3(2.0)	26.5(2.9)	40.0(3.7)
	1990	44.2(1.6)	47.3(1.8)	41.2(2.2)	48.9(1.8)	25.3(3.3)	29.0(4.0)
	1986	40.5(1.9)	42.2(1.6)	38.8(3.7)	44.3(2.1)	22.2(2.7)	32.5(4.6)
	1982	46.6(2.2)	46.3(2.7)	47.0(2.3)	52.4(2.6)	21.1(2.9)	24.7(3.3)
	1978	37.4(1.5)	39.2(1.7)	35.7(2.0)	40.9(1.7)	20.6(2.0)	22.8(4.7)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Divide integers</b>	1994	34.6(2.0)	32.7(2.3)	36.4(2.0)	36.3(2.2)	28.1(3.9)	25.4(3.0)
	1992	30.2(1.8)	28.4(2.0)	32.2(2.1)	30.1(2.2)	28.3(2.2)	33.7(4.3)
	1990	30.4(1.6)	25.5(1.6)	35.2(2.3)	30.3(2.0)	29.8(3.6)	28.2(3.1)
	1986	28.5(2.8)	27.7(2.4)	29.4(3.8)	29.8(3.3)	25.4(3.6)	15.9(4.1)
	1982	30.0(1.7)	27.8(2.1)	32.3(2.2)	31.8(2.1)	23.1(3.0)	19.1(2.7)
	1978	30.2(2.1)	27.4(2.1)	33.0(2.6)	33.0(2.4)	17.3(2.9)	18.8(2.5)
<b>Divide integers</b>	1994	28.9(2.0)	29.9(2.5)	27.9(2.1)	30.2(2.2)	18.4(1.7)	20.8(3.8)
	1992	25.2(1.5)	22.2(1.5)	28.0(2.1)	25.5(1.6)	23.8(2.8)	20.2(3.2)
	1990	23.2(2.1)	21.6(2.5)	24.9(2.0)	24.4(2.3)	20.8(4.3)	16.0(2.6)
	1986	21.8(2.3)	20.5(2.2)	23.0(3.0)	23.9(2.7)	13.7(2.2)	7.7(1.9)
	1982	26.9(1.7)	24.7(2.1)	29.1(2.4)	28.6(1.9)	19.9(3.3)	16.8(3.9)
	1978	28.5(1.9)	26.2(2.3)	30.8(2.2)	30.6(2.2)	21.6(3.3)	15.8(6.9)
<b>Convert fraction to decimal</b>	1994	59.9(1.9)	57.2(2.1)	62.6(2.7)	64.7(1.5)	38.8(5.8)	46.5(3.8)
	1992	59.3(1.8)	58.2(1.9)	60.3(2.4)	63.2(2.2)	46.2(3.7)	45.8(3.9)
	1990	61.4(2.0)	60.4(2.7)	62.4(1.8)	66.8(1.9)	44.0(6.2)	47.8(4.5)
	1986	59.3(1.6)	57.3(2.0)	61.3(1.7)	62.6(2.1)	44.6(3.9)	53.6(6.5)
	1982	62.9(2.3)	60.3(2.7)	65.5(2.6)	66.9(2.8)	41.5(3.8)	53.6(5.9)
	1978	54.7(2.1)	53.6(2.4)	55.7(2.6)	61.0(2.1)	27.8(3.4)	29.5(5.7)
<b>Convert fraction to decimal</b>	1994	62.1(1.8)	60.2(1.7)	64.1(2.7)	67.4(1.3)	38.9(4.2)	47.1(4.5)
	1992	63.3(1.7)	62.5(1.9)	64.0(2.1)	67.7(2.0)	50.3(3.0)	48.9(5.1)
	1990	62.0(1.7)	61.9(2.5)	62.1(1.6)	67.0(1.8)	44.7(4.9)	54.0(4.2)
	1986	62.5(1.6)	59.7(2.2)	65.2(2.1)	67.4(2.2)	42.1(3.2)	49.0(4.9)
	1982	68.4(2.0)	64.5(2.5)	72.3(2.4)	72.5(2.3)	45.2(3.8)	65.8(5.6)
	1978	54.3(1.9)	53.4(2.1)	55.2(2.3)	59.8(1.8)	28.0(3.3)	37.3(5.4)
<b>Convert fraction to decimal</b>	1994	35.2(1.8)	39.3(3.2)	31.0(1.6)	39.5(2.1)	16.8(2.5)	23.5(3.9)
	1992	33.2(1.3)	35.2(1.5)	31.4(1.9)	37.8(1.6)	18.3(3.0)	20.5(3.0)
	1990	33.0(2.0)	35.0(2.8)	30.8(1.7)	38.1(2.1)	13.6(3.5)	23.7(4.0)
	1986	34.3(1.3)	35.6(1.8)	33.0(2.0)	38.1(1.8)	17.8(2.1)	22.5(3.2)
	1982	40.2(1.6)	40.4(2.5)	40.0(2.0)	44.5(2.0)	18.5(3.5)	28.9(4.8)
	1978	40.2(2.0)	41.4(2.0)	39.0(2.8)	45.9(2.0)	12.8(2.2)	23.0(4.9)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find area of irregular shape</b>	1994	21.6(2.0)	26.1(2.8)	17.1(1.7)	25.2(2.3)	5.8(1.9)	17.7(5.2)
	1992	23.6(1.8)	28.4(2.6)	18.6(1.5)	27.2(2.0)	6.0(1.9)	17.8(3.0)
	1990	22.2(1.8)	25.8(2.2)	18.6(2.0)	24.3(2.1)	11.2(3.5)	13.6(3.7)
	1986	19.5(1.2)	24.7(2.0)	14.6(1.5)	22.5(1.3)	5.3(1.9)	6.2(2.6)
	1982	13.9(1.2)	17.2(1.7)	10.8(1.2)	16.1(1.3)	3.1(0.9)	3.2(1.8)
	1978	16.1(1.3)	22.1(1.8)	10.7(1.3)	17.8(1.4)	3.3(1.1)	6.8(2.9)
<b>Relate square to circle</b>	1994	63.3(1.4)	63.6(1.8)	63.3(2.0)	68.5(1.6)	45.9(4.4)	48.9(4.2)
	1992	63.9(1.4)	64.9(2.1)	62.8(1.9)	67.6(1.6)	46.6(3.2)	52.5(4.8)
	1990	63.6(1.7)	64.6(1.9)	62.6(2.1)	66.2(1.9)	56.3(4.5)	52.1(6.8)
	1986	54.6(1.6)	59.5(2.3)	50.2(1.8)	57.1(1.9)	44.0(3.2)	42.4(4.6)
	1982	57.7(1.5)	61.9(2.5)	53.6(2.2)	61.6(1.6)	35.1(3.5)	46.4(3.9)
<b>Use properties of triangles</b>	1994	69.5(1.7)	70.2(2.3)	68.8(2.1)	73.8(1.6)	53.1(5.2)	64.2(5.5)
	1992	70.4(1.2)	70.0(1.4)	70.8(1.7)	74.4(1.4)	55.6(3.3)	54.9(4.4)
	1990	68.3(1.8)	68.1(2.0)	68.4(2.0)	70.9(2.1)	58.2(4.5)	55.6(3.9)
	1986	62.7(1.9)	64.6(2.1)	61.0(2.2)	66.5(1.9)	48.7(4.2)	43.0(4.2)
	1982	58.2(1.5)	59.1(1.8)	57.3(1.6)	61.9(1.8)	40.4(3.4)	32.8(4.1)
	1978	60.3(1.6)	63.0(1.9)	57.8(2.1)	63.4(1.8)	41.1(3.6)	50.5(5.6)
<b>Use properties of triangles</b>	1994	60.2(1.4)	61.2(1.6)	59.2(2.3)	63.6(1.7)	46.7(3.0)	57.0(5.6)
	1992	57.7(1.5)	57.3(1.7)	58.2(2.1)	60.7(1.4)	47.5(2.8)	43.3(6.4)
	1990	57.4(1.6)	57.2(2.1)	57.5(1.7)	58.5(1.8)	51.9(3.2)	49.4(XXX)
	1986	57.2(1.5)	57.6(1.5)	56.8(2.3)	61.1(1.7)	42.0(3.4)	46.3(4.3)
	1982	54.3(1.2)	54.3(1.7)	54.3(1.7)	56.6(1.3)	44.0(3.2)	38.1(5.1)
	1978	53.2(1.5)	55.3(1.9)	51.3(1.9)	55.6(1.6)	42.2(3.2)	38.4(5.1)
<b>Use properties of triangles</b>	1994	51.9(1.5)	54.8(2.3)	49.2(1.7)	54.4(1.8)	41.6(3.4)	46.6(4.9)
	1992	53.9(1.2)	55.8(1.9)	51.9(1.4)	56.1(1.5)	42.7(2.9)	45.3(3.6)
	1990	49.6(2.0)	52.4(2.7)	46.7(2.3)	51.4(1.9)	43.9(6.2)	35.4(5.3)
	1986	45.7(1.7)	47.3(2.3)	44.3(1.8)	49.3(2.0)	30.1(3.9)	34.3(5.1)
	1982	44.9(1.8)	46.1(2.2)	43.8(1.8)	48.1(2.2)	26.1(2.7)	32.8(5.9)
	1978	47.4(1.4)	53.4(1.9)	41.9(1.8)	49.9(1.6)	37.8(3.9)	25.0(3.6)
<b>Use properties of triangles</b>	1994	54.2(1.5)	55.4(2.1)	53.1(1.7)	56.9(1.7)	44.3(3.1)	45.2(4.4)
	1992	55.8(1.2)	56.2(1.7)	55.4(1.6)	58.2(1.3)	45.2(2.8)	47.5(5.2)
	1990	54.3(1.5)	56.2(1.6)	52.3(2.1)	56.4(1.6)	43.7(3.4)	47.7(6.0)
	1986	50.2(1.5)	53.6(1.6)	47.0(2.1)	53.0(1.6)	38.0(3.0)	36.3(6.6)
	1982	50.9(1.6)	52.2(2.0)	49.6(1.9)	53.7(1.9)	33.0(2.5)	43.3(6.0)
	1978	54.7(1.8)	60.1(1.9)	49.8(2.2)	57.4(1.9)	42.3(3.8)	33.8(5.9)
<b>Identify a sphere</b>	1994	80.7(1.1)	84.9(1.4)	76.5(1.6)	85.5(1.0)	65.3(4.9)	69.5(5.3)
	1992	82.3(1.3)	86.0(1.7)	78.3(1.6)	84.1(1.3)	74.2(4.8)	77.9(3.5)
	1990	80.0(1.4)	82.4(1.8)	77.6(1.5)	83.7(1.1)	65.9(5.1)	67.8(7.6)
	1986	77.2(1.3)	79.4(2.1)	75.1(1.7)	81.8(1.4)	62.2(3.9)	54.9(4.8)
	1982	76.1(1.5)	77.5(1.7)	74.8(1.8)	81.6(1.4)	49.4(4.7)	55.6(4.6)
	1978	79.1(1.3)	81.0(1.5)	77.5(1.6)	83.4(1.2)	51.6(3.1)	65.2(4.2)
<b>Apply angle addition property</b>	1994	61.2(1.1)	61.8(1.6)	60.9(1.6)	64.7(1.6)	50.5(4.0)	52.2(5.2)
	1992	59.6(1.5)	61.7(1.6)	57.4(2.1)	62.3(1.4)	46.4(3.4)	51.1(5.5)
	1990	59.8(1.8)	60.5(1.9)	59.0(2.2)	61.9(2.2)	51.5(3.1)	51.8(5.5)
	1986	60.2(1.6)	62.3(2.4)	58.3(2.1)	64.0(1.6)	41.6(5.4)	51.8(5.3)
	1982	63.7(1.6)	65.3(1.9)	62.3(2.1)	67.4(1.5)	48.0(3.4)	43.9(4.3)
	1978	63.4(1.4)	63.6(2.2)	63.2(1.5)	66.3(1.5)	44.9(2.8)	55.6(6.8)

The standard errors of the estimated percentages appear in parenthesis.  
XXX The standard error exceeds 10.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Identify parallel lines</b>	1994	96.2(0.6)	96.0(0.7)	96.4(0.7)	97.1(0.7)	93.2(2.0)	94.4(2.2)
	1992	96.4(0.4)	95.7(0.7)	97.2(0.6)	97.6(0.4)	91.8(2.2)	93.2(2.5)
	1990	97.1(0.5)	96.8(0.8)	97.5(0.6)	98.0(0.4)	95.7(1.0)	91.1(5.2)
	1986	95.8(0.6)	96.2(0.7)	95.4(0.8)	97.9(0.4)	87.5(2.4)	90.9(3.2)
	1982	96.3(0.6)	97.0(0.7)	95.6(0.9)	97.8(0.5)	89.5(2.2)	87.3(2.3)
	1978	94.8(0.7)	94.3(1.0)	95.2(0.7)	96.8(0.6)	83.3(2.3)	85.0(7.8)
<b>Identify perpendicular lines</b>	1994	68.9(1.9)	68.3(2.1)	69.9(2.5)	73.0(2.1)	56.2(3.0)	58.1(7.6)
	1992	68.3(1.3)	64.9(1.6)	71.9(1.7)	71.4(1.3)	57.6(4.1)	52.9(3.2)
	1990	65.8(1.8)	64.1(2.4)	67.6(1.8)	68.9(2.2)	55.7(4.5)	46.9(4.2)
	1986	65.4(1.7)	65.8(2.0)	65.0(2.2)	70.1(1.7)	46.8(3.9)	48.7(5.1)
	1982	70.3(1.7)	73.8(2.3)	67.2(2.0)	74.6(1.7)	49.1(3.9)	53.1(4.7)
	1978	70.1(1.5)	72.8(1.8)	67.7(1.9)	74.6(1.3)	46.0(4.1)	42.8(5.4)
<b>Apply concept of inequality</b>	1994	25.3(1.4)	28.1(1.9)	22.6(1.7)	27.0(1.6)	20.4(2.8)	18.8(3.3)
	1992	23.8(1.0)	25.6(1.6)	21.9(1.6)	24.0(1.1)	21.5(2.9)	23.2(3.4)
	1990	25.5(1.3)	30.0(1.9)	21.0(1.3)	24.7(1.6)	25.1(2.4)	28.9(5.4)
	1986	25.5(1.2)	28.2(2.2)	23.1(1.3)	26.1(1.4)	19.4(2.3)	27.8(4.2)
	1982	35.4(1.2)	37.0(2.0)	34.0(1.3)	36.9(1.5)	25.7(3.0)	35.9(4.5)
	1978	34.3(1.4)	38.9(2.2)	30.2(1.3)	36.0(1.6)	23.3(3.4)	24.8(4.9)
<b>Define equivalent equations</b>	1994	55.6(1.8)	53.9(2.1)	57.4(2.7)	61.0(1.9)	37.3(4.1)	40.5(3.9)
	1992	57.0(1.3)	56.2(1.8)	57.8(1.6)	62.5(1.5)	38.7(3.0)	46.7(4.4)
	1990	55.1(1.6)	55.0(1.8)	55.1(2.3)	58.6(1.5)	40.2(3.8)	50.6(4.5)
	1986	56.5(2.8)	56.0(3.4)	57.0(3.2)	59.4(3.1)	44.0(4.4)	45.8(4.4)
	1982	52.5(2.2)	53.7(2.6)	51.3(2.6)	55.8(2.5)	38.4(3.7)	31.5(5.0)
	1978	60.2(1.4)	60.7(1.9)	59.7(2.1)	63.2(1.4)	42.9(4.7)	46.1(4.8)
<b>Identify valid identity</b>	1994	30.2(1.4)	30.3(2.1)	30.2(1.3)	31.4(1.5)	27.3(2.6)	18.8(3.2)
	1992	33.9(1.3)	34.2(1.8)	33.6(1.9)	35.3(1.5)	26.6(2.8)	27.6(4.8)
	1990	33.9(1.5)	33.9(1.8)	33.9(1.8)	35.2(1.5)	26.8(3.4)	29.2(9.4)
	1986	32.0(1.4)	33.4(1.9)	30.7(1.7)	33.0(1.7)	27.5(2.6)	26.7(3.2)
	1982	38.6(1.9)	39.5(2.4)	37.8(2.0)	40.2(2.0)	31.0(3.7)	33.1(4.2)
	1978	37.9(1.4)	38.1(2.1)	37.7(1.9)	39.4(1.6)	28.4(2.9)	28.9(6.8)
<b>Add monomials</b>	1994	82.2(1.2)	81.0(1.8)	84.0(1.6)	84.6(1.5)	75.5(2.3)	74.6(4.3)
	1992	79.5(1.2)	77.0(1.4)	82.1(1.8)	82.7(1.2)	67.0(3.8)	63.6(3.8)
	1990	78.3(1.5)	75.0(1.9)	81.6(1.6)	81.1(1.7)	68.0(5.3)	61.4(5.6)
	1986	73.3(1.7)	71.6(2.0)	74.9(1.9)	77.4(1.8)	55.8(3.9)	58.5(5.3)
	1982	64.4(1.3)	63.0(1.8)	65.7(1.7)	67.7(1.5)	46.4(3.4)	45.7(3.2)
	1978	63.3(1.8)	61.8(2.3)	64.7(2.0)	68.1(1.7)	36.4(3.1)	38.4(3.7)
<b>Simplify square root</b>	1994	15.5(1.2)	19.9(2.2)	11.1(1.4)	17.3(1.4)	9.6(2.9)	5.0(1.3)
	1992	16.4(1.0)	18.2(1.6)	14.6(1.3)	18.4(1.1)	6.1(2.0)	9.0(2.8)
	1990	15.2(1.1)	17.9(1.4)	12.4(1.3)	16.1(1.2)	11.0(2.7)	8.7(4.4)
	1986	15.0(1.3)	18.2(1.8)	12.1(1.4)	16.6(1.5)	4.8(1.8)	7.1(3.0)
	1982	11.8(1.3)	13.2(1.8)	10.5(1.3)	12.8(1.4)	3.9(1.3)	11.1(3.8)
	1978	11.3(1.2)	14.4(1.5)	8.4(1.3)	12.2(1.2)	5.2(1.9)	4.8(2.8)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Evaluate function for value</b>	1994	58.1(1.8)	55.8(2.5)	60.3(2.1)	62.7(1.9)	46.2(3.2)	42.2(4.9)
	1992	56.3(1.6)	55.4(2.1)	57.2(2.1)	61.6(1.8)	36.4(3.0)	40.6(5.7)
	1990	50.4(1.5)	47.9(2.0)	52.5(1.9)	53.2(1.5)	44.9(5.4)	34.6(4.6)
	1986	53.4(1.8)	52.5(2.6)	54.3(2.4)	56.4(1.8)	38.7(5.2)	43.1(4.0)
	1982	48.8(1.8)	49.6(1.9)	48.1(2.3)	50.8(1.7)	38.7(4.5)	34.1(7.3)
	1978	43.7(1.7)	44.3(2.7)	43.1(2.4)	46.4(1.9)	27.8(3.3)	29.5(3.7)
<b>Evaluate algebraic expression</b>	1994	91.2(0.8)	90.7(1.1)	92.1(1.1)	93.1(0.8)	86.1(2.1)	84.7(4.3)
	1992	91.2(1.0)	89.9(1.2)	92.5(1.1)	93.2(0.7)	83.8(3.6)	82.6(4.9)
	1990	90.8(0.8)	90.1(1.2)	91.6(0.8)	92.3(0.7)	85.6(2.9)	83.7(6.3)
	1986	89.3(0.9)	88.7(1.3)	90.0(0.9)	92.3(1.0)	78.2(3.0)	81.0(3.4)
	1982	89.1(0.9)	88.8(1.3)	89.5(1.2)	91.6(0.9)	75.3(2.4)	82.3(3.8)
	1978	89.9(0.9)	90.2(1.2)	89.6(1.3)	92.8(0.8)	73.9(3.4)	77.0(3.7)
<b>Identify number line property</b>	1994	71.7(1.0)	73.1(1.5)	70.6(1.2)	77.2(0.9)	51.3(3.5)	59.0(4.1)
	1992	74.5(1.2)	75.3(1.7)	73.7(1.8)	79.2(1.2)	54.4(3.5)	58.2(4.2)
	1990	71.7(1.4)	73.2(2.0)	70.3(1.6)	76.5(1.3)	52.7(5.0)	58.1(4.1)
	1986	69.0(1.7)	70.3(2.1)	67.7(2.2)	74.4(1.8)	44.9(3.3)	51.1(3.8)
	1982	61.4(1.6)	65.5(2.4)	57.3(2.5)	66.1(1.6)	37.6(2.4)	39.4(4.7)
	1978	70.9(1.6)	74.9(2.1)	67.0(1.8)	75.4(1.7)	46.9(3.6)	54.6(5.3)
<b>Identify linear inequality</b>	1994	33.5(1.2)	36.2(1.4)	31.1(1.9)	35.7(1.5)	28.2(3.0)	27.5(3.6)
	1992	34.4(1.2)	34.7(1.8)	34.1(1.9)	35.2(0.9)	29.3(5.9)	29.8(4.5)
	1990	35.1(1.7)	37.4(2.0)	33.1(2.0)	36.6(1.8)	30.3(4.2)	29.4(3.2)
	1986	35.4(1.9)	38.1(2.5)	32.7(2.0)	35.5(2.2)	33.8(3.5)	34.8(5.5)
	1982	32.0(1.7)	31.9(2.1)	32.0(1.7)	33.0(2.1)	28.0(3.0)	25.5(4.7)
	1978	33.6(1.0)	36.3(1.4)	30.9(1.4)	34.9(1.2)	27.7(3.4)	22.3(3.8)
<b>Find percent greater than 100</b>	1994	71.3(1.6)	78.1(1.8)	64.8(2.1)	77.4(1.6)	48.2(4.5)	57.9(6.5)
	1992	73.6(1.6)	78.3(2.3)	68.6(1.7)	77.0(1.6)	58.4(3.6)	62.8(4.4)
	1990	72.8(1.6)	76.0(1.9)	69.7(2.1)	77.4(1.8)	55.7(3.8)	55.2(8.0)
	1986	70.6(1.4)	75.2(1.7)	66.5(1.9)	74.4(1.6)	57.4(3.6)	56.1(5.1)
	1982	65.0(1.6)	67.4(2.1)	62.6(1.8)	68.0(1.7)	49.5(3.5)	54.4(4.8)
	1978	58.2(1.5)	66.7(1.7)	50.6(2.1)	60.0(1.6)	41.7(2.8)	60.4(9.1)
<b>Understand concept of percent</b>	1994	70.9(1.2)	76.0(1.5)	65.9(1.8)	76.7(1.2)	50.4(3.0)	58.6(5.9)
	1992	71.0(1.6)	75.2(2.3)	66.5(1.7)	75.8(1.3)	51.3(5.3)	50.6(4.1)
	1990	70.5(1.8)	75.1(2.2)	65.9(1.9)	75.8(1.7)	54.4(6.8)	43.1(8.0)
	1986	69.6(1.4)	74.1(1.9)	65.5(1.9)	75.8(1.2)	46.3(4.3)	47.7(7.6)
	1982	71.4(1.8)	76.2(1.8)	66.6(2.3)	76.3(1.5)	46.8(5.0)	51.5(6.1)
	1978	67.9(1.5)	75.2(1.6)	61.4(2.1)	72.0(1.5)	45.3(3.3)	43.0(6.0)
<b>Convert decimal to percent</b>	1994	60.0(1.5)	63.4(1.8)	57.0(1.7)	64.4(1.8)	41.6(5.3)	53.7(6.3)
	1992	60.8(1.4)	62.7(1.7)	58.9(1.6)	64.5(1.6)	41.2(4.1)	55.5(3.5)
	1990	61.3(1.8)	62.0(2.7)	60.6(1.9)	64.1(1.7)	49.1(5.2)	45.7(5.9)
	1986	54.1(1.6)	55.3(2.4)	53.0(1.6)	58.4(1.8)	34.3(2.4)	37.5(4.8)
	1982	44.9(1.9)	49.2(2.8)	40.6(2.0)	48.5(2.1)	25.7(3.5)	29.9(5.0)
	1978	45.0(1.6)	45.7(1.9)	44.3(2.0)	47.4(1.6)	27.6(3.2)	40.9(7.0)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Convert percent to decimal</b>	1994	92.7(0.7)	92.0(0.9)	93.5(1.1)	93.8(0.8)	88.8(2.4)	89.4(2.9)
	1992	93.3(1.0)	92.8(1.1)	93.8(1.1)	94.5(1.0)	89.1(2.8)	88.0(2.6)
	1990	94.9(0.6)	94.3(0.9)	95.5(0.7)	95.6(0.5)	90.1(2.1)	96.2(1.9)
	1986	92.6(0.6)	91.1(1.1)	94.0(0.7)	94.0(0.5)	87.1(2.6)	88.2(2.8)
	1982	81.6(0.9)	81.7(1.6)	81.6(1.3)	83.4(1.1)	74.7(2.3)	71.9(5.5)
	1978	78.2(1.1)	77.8(1.6)	78.5(1.2)	79.0(1.1)	74.0(3.0)	72.1(6.9)
<b>Use concept of percent</b>	1994	58.9(1.8)	65.0(2.0)	53.0(2.0)	66.4(1.6)	29.9(3.3)	46.2(7.1)
	1992	63.4(1.8)	68.5(2.5)	58.0(2.2)	69.6(1.8)	37.8(4.2)	44.2(5.0)
	1990	62.4(1.8)	66.0(2.2)	58.8(1.9)	69.5(1.9)	37.2(5.3)	41.0(6.2)
	1986	61.1(1.7)	64.8(2.1)	57.7(2.3)	67.4(1.8)	34.2(4.2)	42.3(7.1)
	1982	70.9(1.7)	74.5(1.5)	67.4(2.7)	76.8(1.9)	45.2(3.1)	45.1(1.8)
	1978	69.8(1.3)	74.4(1.7)	65.4(1.7)	74.9(1.1)	38.6(4.4)	53.0(5.2)
<b>Find percent of number</b>	1994	64.0(1.5)	66.7(2.1)	61.1(2.0)	68.2(1.6)	47.1(3.5)	57.8(5.1)
	1992	71.1(1.0)	73.8(1.5)	68.4(1.5)	74.0(1.0)	62.2(3.0)	56.4(4.7)
	1990	69.2(1.6)	74.1(1.8)	64.2(2.2)	72.8(1.7)	58.1(5.1)	46.4(4.8)
	1986	68.4(1.4)	71.9(1.6)	65.2(1.9)	72.9(1.3)	49.5(3.5)	54.9(5.3)
	1982	69.6(1.4)	75.1(1.6)	64.2(2.0)	73.5(1.5)	49.4(2.7)	49.1(4.6)
	1978	69.3(1.4)	76.0(1.7)	63.1(1.8)	73.6(1.4)	45.8(4.0)	50.8(5.7)
<b>Solve percent problem</b>	1994	70.8(1.7)	72.4(2.3)	69.0(1.8)	76.1(1.8)	57.2(3.9)	51.4(4.9)
	1992	70.0(1.2)	74.5(1.3)	65.4(1.9)	75.1(1.1)	52.7(4.0)	57.0(4.4)
	1990	68.2(1.5)	73.0(1.7)	64.0(2.3)	73.7(1.4)	52.6(4.5)	51.1(3.9)
	1986	68.3(1.5)	70.9(2.1)	65.7(1.8)	73.4(1.4)	43.0(4.6)	60.9(5.5)
	1982	72.4(1.9)	72.6(2.9)	72.2(1.9)	75.5(2.2)	57.6(3.3)	57.5(2.8)
	1978	67.0(1.5)	69.3(2.0)	64.9(1.8)	70.4(1.6)	47.2(3.1)	54.2(5.9)
<b>Add integers</b>	1994	87.3(0.8)	86.9(1.3)	87.9(1.1)	89.8(1.1)	79.2(2.3)	78.7(2.8)
	1992	87.2(1.0)	88.7(0.9)	85.6(1.7)	89.8(1.0)	77.8(2.3)	76.8(4.2)
	1990	87.0(1.2)	86.3(1.6)	87.6(1.2)	89.2(1.4)	77.7(3.4)	77.9(5.0)
	1986	82.9(1.2)	83.8(1.4)	82.2(1.9)	86.8(1.0)	66.3(4.3)	70.2(5.1)
	1982	76.8(1.5)	79.1(1.6)	74.5(1.9)	82.2(1.3)	49.6(5.2)	59.4(5.1)
	1978	79.8(1.5)	79.1(1.7)	80.3(1.8)	84.7(1.4)	49.7(3.1)	60.8(5.0)
<b>Add integers</b>	1994	90.6(0.9)	92.3(1.3)	89.3(1.1)	93.6(0.9)	82.1(2.6)	81.8(4.4)
	1992	90.5(0.9)	91.6(1.3)	89.4(1.0)	92.9(0.8)	82.0(3.6)	80.0(3.6)
	1990	89.4(1.2)	88.9(1.6)	89.9(1.2)	92.6(0.9)	80.0(3.4)	70.6(XXX)
	1986	87.2(1.3)	89.5(1.4)	85.1(1.7)	90.8(1.0)	71.9(4.4)	76.4(4.7)
	1982	84.1(1.3)	84.7(1.5)	83.5(1.8)	89.0(1.3)	60.3(3.9)	61.6(5.1)
	1978	84.7(1.3)	85.8(1.5)	83.6(1.6)	88.5(1.1)	60.5(4.1)	74.4(4.6)
<b>Estimate square root</b>	1994	45.7(1.7)	51.1(2.0)	40.4(2.4)	51.6(2.1)	24.5(3.1)	32.9(5.2)
	1992	47.1(1.5)	50.7(1.7)	43.4(2.1)	52.3(1.8)	23.8(3.4)	34.6(3.5)
	1990	48.3(2.0)	51.4(2.4)	45.2(2.3)	52.7(2.1)	32.7(6.0)	26.4(4.8)
	1986	46.2(1.5)	50.1(2.1)	42.7(2.1)	50.7(1.7)	27.3(3.6)	29.7(3.2)
	1982	42.5(2.0)	48.3(2.8)	36.7(2.5)	47.3(2.2)	17.9(2.3)	27.3(3.7)
	1978	42.6(1.4)	47.6(2.0)	38.1(1.8)	47.3(1.5)	16.6(2.6)	15.0(4.0)

The standard errors of the estimated percentages appear in parenthesis.  
XXX The standard error exceeds 10.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Estimate square root</b>	1994	60.1(1.6)	62.9(2.2)	57.2(1.8)	65.4(1.9)	40.4(4.0)	50.2(5.5)
	1992	59.0(1.5)	61.2(1.8)	56.8(2.0)	63.9(1.5)	36.3(4.1)	47.9(4.7)
	1990	58.1(2.1)	60.2(2.6)	56.0(2.0)	62.6(2.2)	41.6(6.9)	39.4(5.0)
	1986	53.1(1.8)	57.9(2.7)	48.7(2.1)	58.1(1.8)	32.1(4.4)	37.5(4.7)
	1982	56.3(1.8)	59.9(2.2)	52.9(2.6)	60.6(1.7)	31.0(3.3)	44.7(4.9)
	1978	58.1(1.9)	62.8(2.0)	53.9(2.5)	62.5(2.1)	33.2(3.8)	33.4(7.2)
<b>Solve number sentence</b>	1994	65.9(1.6)	67.1(1.8)	65.0(2.5)	71.0(1.5)	49.0(3.4)	54.6(4.7)
	1992	72.7(1.3)	72.0(1.9)	73.4(1.6)	77.4(1.2)	53.1(4.3)	59.5(4.3)
	1990	72.4(1.3)	71.4(1.9)	73.5(1.4)	75.5(1.4)	59.6(2.8)	67.9(4.1)
	1986	69.9(1.7)	71.5(2.0)	68.5(2.1)	74.2(1.8)	52.3(4.6)	60.8(4.8)
	1982	60.6(1.4)	63.9(1.9)	57.6(1.7)	65.7(1.4)	35.9(3.9)	39.7(3.8)
	1978	68.2(1.5)	70.0(1.9)	66.4(2.1)	73.7(1.4)	37.5(3.3)	42.4(5.8)
<b>Estimate weight</b>	1994	58.6(1.4)	57.4(2.3)	59.7(1.8)	61.3(1.4)	50.5(3.5)	50.7(4.2)
	1992	62.3(1.2)	62.1(1.9)	62.6(1.9)	66.1(1.2)	44.5(4.0)	56.5(4.4)
	1990	63.6(1.7)	64.5(2.1)	62.7(2.1)	65.2(1.9)	57.9(4.1)	57.2(8.2)
	1986	62.9(1.3)	65.6(2.0)	60.5(1.6)	65.6(1.3)	52.1(2.9)	55.6(5.3)
	1982	45.9(1.7)	48.4(2.5)	43.5(1.6)	48.5(2.1)	30.6(3.4)	41.8(5.1)
<b>Estimate total weight</b>	1994	54.6(1.5)	57.7(2.1)	51.8(1.5)	58.7(1.5)	40.1(4.7)	46.4(4.4)
	1992	53.6(1.8)	54.9(2.3)	52.2(2.1)	57.9(1.8)	36.8(4.3)	43.8(3.4)
	1990	53.3(1.8)	56.3(2.4)	50.3(2.0)	55.8(2.1)	43.7(4.1)	45.3(5.1)
	1986	50.0(1.4)	51.6(2.1)	48.6(1.9)	53.7(1.6)	34.6(3.3)	36.1(3.5)
	1982	41.0(1.5)	44.9(1.8)	37.4(2.0)	43.0(1.5)	27.4(2.8)	40.7(2.6)
<b>Estimate cost of pencils</b>	1994	89.4(0.7)	90.6(1.0)	88.2(1.2)	91.4(0.9)	82.4(1.9)	85.4(2.2)
	1992	89.9(0.7)	91.3(0.9)	88.4(0.9)	91.6(0.8)	85.0(1.6)	82.7(3.1)
	1990	91.1(0.7)	92.1(0.9)	90.1(0.9)	91.9(0.9)	89.2(1.8)	84.0(3.6)
	1986	89.4(0.7)	89.8(1.2)	89.0(1.1)	91.8(0.7)	77.9(2.7)	85.5(3.8)
	1982	78.6(1.0)	81.8(1.3)	75.7(1.7)	80.8(1.0)	69.0(3.0)	65.9(5.8)
<b>Estimate cost using percent</b>	1994	42.0(1.7)	47.5(1.7)	36.7(2.1)	43.3(2.1)	35.1(3.0)	42.9(3.2)
	1992	44.0(1.2)	47.2(1.5)	40.6(1.9)	45.3(1.5)	36.4(3.2)	47.7(4.3)
	1990	47.0(1.2)	51.8(1.9)	42.2(1.5)	48.1(1.4)	43.1(3.3)	34.2(4.2)
	1986	44.1(1.4)	46.5(1.8)	41.9(1.8)	46.2(1.5)	37.0(3.2)	36.8(3.0)
	1982	44.0(1.6)	48.1(1.9)	40.3(1.9)	45.1(1.6)	35.7(3.6)	44.6(3.3)
<b>Estimate difference in length</b>	1994	78.1(1.3)	80.5(1.3)	76.1(1.9)	80.6(1.2)	66.7(4.5)	76.8(4.9)
	1992	81.8(1.3)	83.0(1.7)	80.6(1.6)	84.7(1.1)	68.5(4.6)	77.4(3.5)
	1990	80.7(1.2)	81.3(1.8)	80.0(1.2)	82.9(1.1)	69.8(4.6)	74.6(8.1)
	1986	82.5(0.9)	82.7(1.3)	82.2(1.1)	86.9(0.8)	65.0(2.1)	66.9(5.5)
	1982	72.6(1.4)	73.9(2.0)	71.3(1.6)	76.2(1.6)	57.0(4.2)	57.4(4.1)
<b>Use deductive reasoning</b>	1994	78.7(1.3)	78.8(1.6)	78.8(1.8)	81.3(1.2)	72.0(3.9)	69.8(6.5)
	1992	78.5(0.9)	77.8(1.4)	79.3(1.0)	81.2(0.9)	68.3(2.8)	67.4(4.8)
	1990	80.2(1.4)	79.2(1.7)	81.3(1.8)	83.6(1.3)	70.6(4.1)	66.0(6.9)
	1986	78.7(0.9)	77.8(1.3)	79.5(1.4)	81.4(1.1)	69.8(4.1)	65.2(3.5)
	1982	81.7(1.0)	80.4(1.8)	82.9(1.2)	83.1(1.1)	74.6(3.2)	75.6(4.0)
	1978	84.1(0.9)	82.7(1.6)	85.4(1.2)	86.3(0.9)	70.8(2.9)	75.2(5.6)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Determine age relationship</b>	1994	87.8(1.1)	88.7(1.2)	86.8(1.6)	90.1(1.0)	79.8(2.6)	82.3(5.2)
	1992	89.0(0.7)	90.2(1.0)	87.8(1.2)	91.1(0.7)	79.3(2.9)	84.0(2.6)
	1990	86.8(1.0)	86.9(1.4)	86.8(1.0)	89.3(1.0)	79.2(2.6)	72.1(5.4)
	1986	86.3(1.1)	87.6(1.2)	85.1(1.5)	89.4(1.0)	71.8(3.3)	82.3(4.2)
	1982	79.7(1.3)	80.8(1.5)	78.7(1.6)	82.4(1.2)	63.6(3.0)	73.9(4.3)
	1978	82.3(1.2)	81.4(1.6)	83.1(1.2)	85.8(1.1)	60.1(3.7)	72.3(4.2)
<b>Identify valid conclusion</b>	1994	84.3(1.1)	82.3(1.6)	86.7(1.2)	86.6(1.2)	79.2(2.9)	76.8(3.3)
	1992	84.7(1.1)	81.6(1.7)	87.9(1.2)	86.1(1.3)	81.4(2.6)	75.0(3.6)
	1990	81.8(1.0)	79.1(1.6)	84.5(1.3)	83.9(1.0)	78.2(2.9)	70.3(4.5)
	1986	78.3(1.4)	75.8(2.0)	80.7(1.6)	80.9(1.3)	70.4(4.4)	67.0(5.7)
	1982	69.3(1.2)	66.5(1.6)	71.9(1.4)	71.0(1.3)	63.9(4.5)	57.5(3.9)
	1978	72.0(1.4)	70.3(1.7)	73.5(1.9)	72.6(1.4)	69.8(4.2)	62.5(5.4)
<b>Identify valid conclusion</b>	1994	36.0(1.4)	39.6(1.9)	32.2(1.5)	38.3(1.5)	27.6(2.8)	29.3(4.2)
	1992	37.2(1.3)	40.6(2.1)	33.7(1.2)	39.9(1.3)	28.2(3.4)	27.9(4.1)
	1990	38.7(1.4)	40.8(1.9)	36.6(1.7)	41.1(1.6)	26.5(2.3)	36.7(3.4)
	1986	41.9(1.3)	44.8(2.1)	39.3(2.1)	44.1(1.5)	31.6(2.9)	36.8(3.8)
	1982	56.6(1.2)	61.3(1.8)	52.0(1.8)	59.4(1.1)	41.7(3.9)	49.6(3.8)
	1978	58.9(1.2)	63.4(1.6)	54.6(1.9)	60.9(1.3)	48.4(3.9)	53.9(5.0)
<b>Identify false statement</b>	1994	53.2(1.5)	55.5(2.0)	51.2(1.9)	57.0(1.3)	43.1(3.7)	36.8(5.8)
	1992	51.6(1.2)	54.2(1.9)	48.9(1.6)	55.1(1.3)	38.5(4.6)	39.6(3.8)
	1990	51.2(1.5)	51.5(2.1)	50.9(1.8)	55.2(1.5)	39.1(5.4)	32.9(5.5)
	1986	51.0(1.7)	53.1(2.2)	49.0(1.9)	55.1(1.8)	35.7(4.1)	37.0(5.1)
	1982	50.4(1.3)	51.2(1.5)	49.7(2.0)	54.8(1.4)	29.5(3.1)	33.2(3.8)
	1978	52.3(1.7)	53.9(2.1)	50.7(2.4)	56.9(1.6)	29.8(3.2)	25.4(5.5)
<b>Compute using data in table</b>	1994	30.0(1.3)	30.9(1.7)	29.1(1.5)	34.8(1.6)	14.5(2.7)	18.6(4.0)
	1992	33.8(1.3)	33.6(2.2)	34.1(1.0)	37.1(1.5)	18.4(3.1)	24.2(2.4)
	1990	32.2(1.7)	34.8(2.5)	29.5(1.8)	36.6(1.7)	16.7(2.9)	14.1(5.8)
	1986	34.6(1.4)	34.6(2.3)	34.5(1.7)	39.7(1.6)	17.2(2.7)	15.6(4.9)
	1982	43.5(1.6)	45.5(1.8)	41.6(2.2)	48.2(1.7)	21.6(4.6)	23.8(3.9)
	1978	50.9(1.4)	49.3(2.0)	52.6(1.8)	55.7(1.6)	28.5(4.1)	19.8(5.3)
<b>Interpret data in table</b>	1994	68.5(1.5)	72.5(2.3)	64.9(2.0)	75.7(1.5)	45.0(3.6)	54.9(5.3)
	1992	70.7(1.7)	74.5(2.0)	66.7(1.8)	75.7(1.6)	46.0(4.1)	65.3(5.7)
	1990	70.2(1.5)	71.9(2.0)	68.5(1.5)	75.3(1.4)	49.3(4.7)	56.0(XXX)
	1986	65.4(1.5)	69.0(2.2)	62.2(1.9)	71.7(1.9)	38.4(2.7)	53.9(3.8)
	1982	66.4(1.4)	70.2(1.6)	62.6(2.0)	72.5(1.2)	33.6(3.7)	46.5(4.5)
	1978	66.0(1.3)	69.5(1.6)	62.9(2.0)	71.4(1.2)	34.2(4.1)	45.4(6.5)
<b>Read line graph</b>	1994	88.0(0.9)	90.1(0.8)	86.3(1.6)	90.6(1.2)	81.5(2.0)	81.0(3.3)
	1992	90.4(0.7)	90.9(1.0)	89.9(0.9)	91.4(0.7)	87.3(2.1)	84.6(3.0)
	1990	89.3(0.8)	90.4(1.1)	88.1(1.1)	90.8(0.8)	83.7(2.7)	86.6(3.2)
	1986	86.8(1.0)	88.3(1.5)	85.5(1.1)	91.0(0.9)	69.9(3.4)	75.4(3.8)
	1982	86.7(1.0)	89.1(1.3)	84.5(1.2)	90.2(0.9)	71.1(2.4)	70.8(4.4)
	1978	80.4(1.2)	82.7(1.4)	78.1(1.7)	83.2(1.5)	62.9(3.1)	67.8(7.0)

The standard errors of the estimated percentages appear in parenthesis.  
XXX The standard error exceeds 10.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Interpret line graph</b>	1994	79.9(1.2)	82.3(1.4)	77.7(1.7)	83.3(1.4)	62.9(4.0)	80.2(4.6)
	1992	78.6(1.6)	79.1(2.1)	78.1(1.8)	81.2(1.3)	64.6(4.3)	76.5(4.5)
	1990	79.2(1.0)	79.9(1.7)	78.6(1.2)	83.3(1.0)	65.1(3.3)	66.7(9.2)
	1986	76.3(1.3)	77.1(2.0)	75.6(1.7)	80.3(1.4)	61.1(3.5)	64.7(5.1)
	1982	77.3(1.5)	78.6(1.9)	76.0(1.7)	80.9(1.3)	62.5(3.4)	56.3(5.4)
	1978	69.9(1.1)	74.3(1.3)	65.4(1.9)	72.1(1.2)	52.4(2.2)	69.4(4.1)
<b>Solve multi-step problem</b>	1994	24.0(1.1)	31.8(1.8)	16.3(0.9)	28.8(1.3)	4.2(1.7)	17.9(5.2)
	1992	26.7(1.1)	32.1(1.6)	20.9(1.2)	31.0(1.1)	10.5(2.4)	11.2(4.2)
	1990	26.3(1.4)	31.5(2.0)	21.0(1.5)	30.6(1.4)	10.1(3.2)	8.5(4.2)
	1986	26.9(1.5)	32.3(2.1)	21.9(1.6)	31.3(1.7)	8.8(2.6)	13.3(3.1)
	1982	27.1(1.5)	30.9(2.0)	23.4(2.2)	31.4(1.5)	6.4(1.9)	13.0(4.2)
	1978	29.6(1.2)	36.7(1.9)	22.9(1.3)	33.4(1.3)	7.2(2.1)	16.3(4.9)
<b>Solve multi-step problem</b>	1994	32.9(1.7)	39.0(2.2)	27.2(2.0)	39.9(1.9)	8.7(1.6)	15.0(3.2)
	1992	32.8(1.2)	41.2(1.8)	24.3(1.3)	39.0(1.5)	10.1(3.2)	19.8(5.2)
	1990	31.7(1.5)	37.1(1.8)	26.9(1.9)	38.8(1.4)	7.6(1.3)	14.7(2.5)
	1986	33.1(1.7)	40.7(2.1)	25.2(2.2)	37.5(1.6)	12.8(2.4)	17.4(3.3)
	1982	25.8(1.1)	30.4(2.0)	21.5(1.6)	29.3(1.3)	8.6(1.8)	12.2(1.8)
	1978	30.2(1.5)	39.2(2.3)	21.6(1.4)	34.2(1.8)	7.5(1.6)	11.7(4.3)
<b>Solve money problem</b>	1994	75.1(1.4)	75.5(2.0)	74.7(2.0)	79.8(1.4)	59.3(3.7)	61.3(5.1)
	1992	70.7(1.4)	71.0(2.1)	70.4(1.7)	75.3(1.6)	50.3(3.0)	68.4(4.3)
	1990	68.3(1.5)	66.7(2.2)	69.8(1.8)	74.4(1.2)	48.2(5.0)	51.6(6.9)
	1986	67.7(1.6)	67.7(2.5)	67.7(1.5)	73.0(1.4)	42.2(4.1)	58.9(5.1)
	1982	67.0(1.0)	65.0(1.6)	68.8(1.4)	71.0(1.1)	48.4(2.7)	48.9(6.1)
	1978	68.5(1.5)	69.4(2.1)	67.6(1.8)	71.8(1.4)	44.1(3.9)	57.1(5.4)
<b>Identify algebraic identity</b>	1994	66.1(1.4)	63.7(2.0)	68.6(1.6)	69.9(1.5)	53.4(4.7)	53.3(5.6)
	1992	67.1(1.1)	65.3(1.5)	69.0(1.4)	71.0(1.4)	52.0(4.3)	50.7(3.9)
	1990	64.8(1.9)	64.1(2.5)	65.4(1.8)	68.6(1.8)	50.7(5.3)	48.8(XXX)
	1986	63.8(1.5)	63.7(1.7)	63.9(2.4)	68.5(1.3)	44.1(4.1)	42.9(5.1)
	1982	64.2(1.9)	63.2(2.4)	65.1(2.1)	69.8(1.6)	42.4(3.5)	26.9(4.9)
	1978	69.0(1.8)	69.6(1.9)	68.5(2.3)	73.5(1.8)	43.4(2.4)	46.3(5.7)
<b>Relate meter to yard</b>	1994	73.9(1.8)	80.3(1.7)	67.8(2.5)	80.9(1.6)	51.3(4.5)	57.4(5.0)
	1992	70.6(1.6)	76.7(1.9)	64.6(2.1)	76.9(1.4)	43.5(2.4)	71.5(4.8)
	1990	67.2(1.7)	75.2(1.7)	60.1(2.3)	74.3(1.5)	42.3(4.4)	53.6(3.9)
	1986	69.3(1.4)	77.4(1.5)	61.1(2.0)	73.3(1.4)	45.5(3.6)	70.9(7.9)
	1982	71.6(1.4)	79.1(1.9)	64.3(1.6)	76.2(1.4)	47.4(3.1)	57.2(4.2)
	1978	71.4(1.6)	78.7(1.8)	64.8(2.3)	75.8(1.3)	43.9(2.9)	58.3(7.3)
<b>Estimate height of door</b>	1994	81.0(1.0)	87.9(1.6)	74.1(1.6)	85.7(1.0)	62.2(2.9)	77.6(6.0)
	1992	86.3(0.8)	90.9(0.9)	81.5(1.1)	89.2(0.8)	71.5(3.3)	83.4(2.8)
	1990	84.3(1.1)	89.2(1.5)	79.2(1.4)	88.0(1.1)	75.0(2.8)	66.7(7.5)
	1986	82.3(1.4)	89.8(1.2)	75.4(2.0)	85.0(1.6)	71.9(3.6)	71.7(3.9)
	1982	82.5(1.0)	89.6(1.3)	75.9(1.6)	85.9(0.9)	62.8(2.9)	78.7(3.3)
	1978	86.4(1.0)	92.0(1.1)	81.5(1.4)	89.4(1.0)	69.3(2.9)	78.1(6.0)

The standard errors of the estimated percentages appear in parenthesis.  
XXX The standard error exceeds 10.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Solve multi-step problem</b>	1994	27.9(1.6)	28.4(2.3)	27.4(1.7)	32.1(1.8)	14.0(2.4)	19.0(4.2)
	1992	31.9(1.2)	34.6(1.9)	29.2(1.5)	36.4(1.4)	15.4(4.0)	22.1(3.5)
	1990	30.9(1.5)	33.6(1.8)	28.5(1.8)	36.8(1.5)	13.7(2.6)	15.2(2.8)
	1986	26.4(1.8)	27.3(2.2)	25.5(2.3)	28.7(2.2)	13.1(2.8)	17.7(3.6)
	1982	25.1(1.5)	26.6(1.5)	23.7(2.1)	28.2(1.6)	9.9(2.2)	13.5(3.9)
	1978	29.0(1.5)	30.1(1.7)	28.0(1.7)	32.4(1.6)	7.2(1.9)	21.1(4.5)
<b>Estimate circumference</b>	1994	22.3(1.7)	25.2(2.3)	19.5(2.0)	25.6(2.2)	10.1(2.0)	12.8(2.3)
	1992	23.5(1.3)	26.5(1.9)	20.4(1.7)	26.3(1.4)	10.3(2.3)	14.5(2.7)
	1990	23.7(1.6)	27.8(1.7)	19.5(1.8)	26.1(1.8)	13.7(3.4)	14.5(4.7)
	1986	19.9(1.1)	23.0(1.5)	17.0(1.8)	22.9(1.4)	6.7(1.5)	14.0(4.1)
	1982	16.9(1.3)	20.4(2.1)	13.4(1.5)	19.3(1.5)	5.6(1.5)	5.6(3.6)
	1978	22.5(1.4)	27.1(2.2)	17.9(1.5)	24.7(1.5)	10.5(2.7)	12.0(4.1)
<b>Find area given perimeter</b>	1994	45.6(2.0)	47.1(2.6)	44.1(2.1)	49.7(2.4)	23.4(2.6)	47.2(8.2)
	1992	44.6(1.4)	46.8(1.5)	42.3(1.9)	47.8(1.5)	33.1(3.2)	30.2(3.6)
	1990	43.1(2.2)	44.5(2.8)	41.7(2.4)	46.5(2.3)	29.3(6.0)	27.1(5.2)
	1986	38.7(1.7)	39.4(2.2)	38.0(2.1)	42.0(1.8)	21.2(4.5)	23.8(3.4)
	1982	34.0(2.1)	36.1(2.7)	32.0(2.3)	37.2(2.4)	17.7(2.4)	19.6(3.2)
	1978	32.3(1.7)	37.8(2.6)	27.3(2.0)	34.3(1.8)	19.6(3.1)	22.4(5.0)
<b>Find area of rectangle</b>	1994	69.8(1.6)	71.7(2.1)	68.2(2.0)	72.9(1.9)	52.8(3.8)	66.9(4.4)
	1992	68.9(1.6)	70.1(2.6)	67.7(1.5)	72.5(1.6)	47.9(4.0)	68.3(4.1)
	1990	66.4(1.7)	68.9(2.2)	63.9(1.8)	69.1(1.7)	55.7(3.7)	54.2(XXX)
	1986	62.7(1.7)	63.4(2.1)	62.0(2.0)	65.7(2.0)	49.8(4.8)	50.6(4.0)
	1982	73.9(1.5)	75.3(2.1)	72.7(1.6)	76.3(1.7)	60.5(4.4)	68.3(4.0)
	1978	73.4(1.8)	73.8(2.6)	73.0(1.7)	78.3(1.7)	43.5(3.5)	65.4(6.4)
<b>Apply vertical angles</b>	1994	93.0(0.8)	92.9(1.0)	93.3(1.0)	95.2(0.6)	83.5(3.9)	93.8(2.7)
	1992	91.1(0.8)	92.3(0.8)	89.8(1.0)	92.9(0.7)	84.7(3.1)	84.8(3.6)
	1990	89.6(0.9)	89.6(1.3)	89.6(1.1)	92.0(0.7)	79.7(3.5)	82.6(4.7)
	1986	88.0(1.2)	89.1(1.6)	87.0(1.4)	90.4(1.1)	78.0(3.1)	76.6(5.9)
	1982	85.1(1.1)	86.1(1.3)	84.3(1.9)	87.7(1.3)	74.9(2.1)	68.5(4.5)
	1978	81.5(1.2)	80.9(1.5)	82.0(1.5)	85.3(1.1)	59.9(4.8)	60.0(4.8)
<b>Apply supplementary angles</b>	1994	57.8(1.3)	61.4(2.2)	54.3(1.7)	63.3(1.1)	36.6(4.0)	47.7(6.6)
	1992	55.9(1.5)	57.3(1.9)	54.4(1.6)	61.3(1.4)	30.9(3.5)	41.2(3.7)
	1990	55.2(1.9)	58.6(2.6)	51.7(1.9)	60.0(2.1)	37.2(5.9)	34.9(3.6)
	1986	48.0(1.9)	50.8(2.2)	45.4(2.2)	53.9(2.0)	24.4(3.0)	25.7(4.4)
	1982	40.0(2.6)	42.6(2.8)	37.6(2.8)	45.5(2.7)	13.3(2.3)	13.2(3.6)
	1978	39.7(1.6)	42.7(2.1)	36.6(2.4)	43.7(1.6)	15.5(4.2)	15.1(3.7)
<b>Identify sign of divisor</b>	1994	65.1(1.5)	63.7(2.1)	66.3(2.0)	70.5(1.3)	49.4(4.0)	46.3(7.3)
	1992	64.5(1.5)	65.7(2.0)	63.3(2.0)	67.7(1.6)	49.2(5.4)	58.0(5.2)
	1990	60.3(1.5)	60.5(1.7)	60.1(1.9)	64.8(1.4)	45.0(5.5)	51.6(4.2)
	1986	58.6(2.2)	61.6(3.1)	55.6(2.0)	62.2(2.4)	38.6(4.3)	50.6(7.2)
	1982	59.4(1.9)	61.2(2.6)	57.8(2.2)	61.5(2.0)	44.7(4.4)	58.6(5.9)
	1978	56.5(1.5)	57.9(2.3)	55.3(1.6)	58.7(1.5)	45.9(3.6)	43.0(7.2)

The standard errors of the estimated percentages appear in parenthesis.  
XXX The standard error exceeds 10.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Add whole numbers</b>	1994	97.6(0.4)	97.9(0.5)	97.3(0.6)	98.0(0.4)	96.1(1.4)	98.2(1.1)
	1992	98.6(0.3)	98.3(0.5)	99.0(0.3)	99.0(0.3)	96.9(1.2)	98.7(0.9)
	1990	97.9(0.3)	97.5(0.4)	98.2(0.4)	98.3(0.3)	96.7(1.4)	96.9(1.5)
	1986	98.6(0.5)	98.7(0.5)	98.4(0.6)	99.3(0.2)	95.1(3.6)	96.3(1.8)
	1982	98.1(0.4)	97.8(0.5)	98.3(0.4)	97.9(0.4)	99.2(0.6)	98.3(1.3)
<b>Add whole numbers</b>	1994	97.6(0.4)	97.8(0.5)	97.4(0.6)	98.1(0.4)	97.6(1.1)	93.1(1.8)
	1992	97.9(0.4)	97.2(0.8)	98.7(0.4)	98.3(0.4)	96.2(1.4)	98.8(0.9)
	1990	98.4(0.3)	97.7(0.6)	99.1(0.3)	98.6(0.3)	97.9(1.4)	99.4(0.6)
	1986	98.4(0.4)	98.1(0.5)	98.6(0.6)	98.7(0.3)	96.3(2.2)	98.7(1.4)
	1982	97.7(0.4)	96.6(0.7)	98.8(0.4)	97.8(0.5)	97.6(0.9)	97.1(1.4)
<b>Add whole numbers</b>	1994	94.7(0.5)	94.2(0.8)	95.2(0.6)	95.8(0.5)	91.9(1.5)	89.5(3.1)
	1992	94.3(0.5)	93.8(0.9)	94.8(0.8)	95.6(0.6)	91.2(1.7)	88.9(3.0)
	1990	95.4(0.5)	94.2(0.9)	96.5(0.5)	96.2(0.5)	95.4(1.1)	90.5(2.4)
	1986	94.7(0.8)	93.6(1.3)	95.9(0.8)	96.0(0.7)	91.6(3.0)	89.0(3.7)
	1982	92.6(0.7)	90.1(1.3)	95.0(0.7)	93.7(0.6)	88.2(2.4)	87.3(3.1)
<b>Multiply fractions</b>	1994	71.9(1.5)	71.4(2.0)	72.5(1.7)	74.5(1.7)	63.2(3.9)	64.2(4.1)
	1992	74.6(1.2)	71.2(2.0)	78.1(1.5)	76.6(1.3)	65.2(3.5)	64.2(4.0)
	1990	76.7(1.5)	73.9(1.8)	79.6(1.6)	77.7(1.7)	73.5(2.5)	65.3(9.6)
	1986	75.1(1.2)	72.9(1.5)	77.2(1.7)	78.0(1.3)	66.1(3.0)	57.6(5.7)
	1982	71.6(1.4)	71.3(1.6)	71.8(1.9)	74.8(1.3)	58.2(1.9)	46.8(5.2)
	1978	75.0(1.3)	71.8(1.8)	78.1(1.7)	78.1(1.2)	58.9(4.0)	53.7(5.2)
<b>Multiply fractions</b>	1994	62.1(1.4)	62.8(1.8)	61.9(1.8)	65.2(1.8)	50.5(4.4)	54.3(5.0)
	1992	68.1(1.2)	66.0(1.8)	70.4(1.4)	70.9(1.4)	56.3(5.0)	55.5(4.5)
	1990	72.6(1.6)	70.7(1.8)	74.5(2.0)	73.5(1.8)	69.3(2.5)	60.9(9.8)
	1986	67.4(1.6)	63.6(1.9)	70.8(2.0)	69.5(1.7)	57.0(4.3)	57.6(5.0)
	1982	59.7(1.8)	60.2(2.0)	59.3(2.4)	63.9(1.7)	40.2(2.8)	33.3(5.1)
	1978	66.9(1.7)	66.3(2.1)	67.4(2.0)	70.9(1.5)	40.8(4.0)	53.5(5.7)
<b>Multiply fractions</b>	1994	71.2(1.4)	71.1(2.1)	71.6(1.5)	74.4(1.7)	59.5(3.8)	64.2(2.7)
	1992	74.4(1.1)	72.0(1.6)	76.9(1.7)	77.0(1.2)	62.4(3.8)	63.1(3.4)
	1990	78.2(1.3)	76.4(1.4)	80.0(1.6)	79.1(1.3)	76.8(2.2)	63.4(9.3)
	1986	75.4(1.3)	73.4(1.9)	77.2(1.6)	76.7(1.6)	69.9(2.9)	68.5(6.9)
	1982	69.4(1.7)	68.1(1.9)	70.7(2.0)	72.5(1.7)	53.4(2.7)	50.5(4.4)
	1978	75.8(1.4)	73.8(2.0)	77.7(1.8)	78.4(1.2)	60.2(4.5)	60.8(7.1)
<b>Find percent given numbers</b>	1994	73.7(1.5)	79.2(1.5)	68.4(2.1)	79.0(1.6)	55.9(2.3)	61.4(6.8)
	1992	76.0(1.4)	83.6(1.4)	68.0(1.9)	80.2(1.1)	63.2(3.5)	56.5(4.9)
	1990	72.9(1.6)	79.3(1.8)	66.3(1.9)	77.0(1.8)	58.7(5.3)	54.6(5.9)
	1986	72.5(1.6)	79.9(1.6)	65.6(2.2)	77.7(1.7)	52.9(3.5)	53.2(4.6)
	1982	74.3(1.5)	80.7(2.0)	68.4(2.1)	78.6(1.2)	45.6(3.1)	71.8(4.3)
<b>Find percent of number</b>	1994	66.9(1.3)	70.8(2.2)	63.0(1.9)	72.9(1.1)	48.4(3.9)	51.1(4.9)
	1992	69.9(1.1)	75.5(1.6)	64.1(1.6)	74.8(1.1)	48.7(3.6)	58.2(4.2)
	1990	68.9(1.2)	71.5(1.8)	66.3(1.6)	71.9(1.4)	57.3(4.5)	55.9(8.3)
	1986	63.9(1.3)	68.4(2.0)	59.8(1.4)	67.6(1.4)	43.6(3.5)	60.2(4.7)
	1982	54.1(1.9)	57.4(2.9)	51.1(2.2)	56.7(2.1)	36.4(2.7)	50.4(4.9)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find percent greater than 100</b>	1994	60.7(2.1)	68.8(2.4)	52.9(2.4)	67.2(1.8)	36.8(4.9)	51.8(8.4)
	1992	63.7(0.9)	70.4(1.5)	56.7(1.6)	68.6(1.2)	41.6(3.9)	52.8(4.7)
	1990	63.3(1.8)	67.1(2.4)	59.5(1.9)	67.8(2.1)	46.2(4.6)	45.3(5.8)
	1986	56.3(1.4)	62.2(1.9)	50.8(1.7)	61.0(1.4)	34.0(3.2)	39.8(6.1)
	1982	46.4(2.6)	50.6(2.9)	42.5(2.7)	50.3(3.0)	22.5(2.9)	40.6(3.3)
<b>Find number given percent</b>	1994	39.2(1.4)	44.9(1.9)	33.4(2.0)	44.7(1.7)	22.0(2.8)	26.1(3.0)
	1992	39.7(1.5)	43.4(2.0)	35.8(1.8)	41.7(1.7)	33.1(3.7)	29.1(4.3)
	1990	37.6(1.3)	40.6(2.0)	34.6(1.7)	40.6(1.6)	21.1(2.1)	33.2(3.5)
	1986	32.0(1.2)	38.4(1.9)	26.0(1.2)	34.4(1.5)	19.7(2.6)	30.0(5.0)
	1982	36.4(2.1)	40.8(2.8)	32.4(2.1)	38.3(2.5)	24.5(2.4)	34.9(4.7)
<b>Find percent given numbers</b>	1994	69.0(1.6)	77.6(1.7)	60.9(1.9)	75.5(1.6)	46.1(3.5)	51.5(5.1)
	1992	66.4(1.4)	74.5(1.4)	58.2(2.0)	72.3(1.5)	46.3(3.7)	52.9(4.0)
	1990	62.9(1.5)	70.9(1.6)	55.8(1.8)	69.2(1.3)	43.6(3.6)	44.8(3.2)
	1986	63.4(1.7)	71.0(2.1)	55.6(1.9)	69.9(1.5)	35.7(4.1)	47.1(5.7)
	1982	60.3(1.4)	69.1(2.1)	52.2(2.1)	65.1(1.6)	32.5(2.6)	48.7(3.4)
<b>Find percent of number</b>	1994	65.9(1.6)	65.8(2.4)	65.8(1.8)	70.1(1.6)	51.4(3.9)	52.5(5.1)
	1992	66.8(1.5)	70.5(1.9)	63.1(1.8)	71.0(1.4)	49.0(4.2)	66.0(7.1)
	1990	63.1(1.7)	66.6(2.2)	59.9(2.1)	68.5(1.5)	45.9(4.7)	49.1(4.8)
	1986	63.7(1.9)	68.5(2.6)	58.7(2.1)	67.8(1.9)	43.5(4.3)	57.2(6.7)
	1982	55.5(1.8)	56.0(2.2)	55.1(2.5)	58.4(1.8)	40.1(3.7)	45.7(7.1)
<b>Find percent greater than 100</b>	1994	61.9(2.1)	65.7(2.4)	58.4(2.5)	68.5(2.2)	42.9(4.4)	36.3(5.2)
	1992	60.0(1.5)	67.0(1.9)	52.9(2.2)	65.9(1.3)	36.8(4.5)	51.2(5.6)
	1990	58.8(1.7)	65.6(1.8)	52.7(2.3)	65.5(1.5)	36.4(4.8)	42.9(6.7)
	1986	56.9(2.2)	62.7(3.0)	51.0(2.2)	61.8(2.1)	33.7(5.5)	44.5(8.5)
	1982	49.8(1.8)	54.8(2.8)	45.2(2.5)	53.4(1.9)	33.2(3.9)	33.1(4.4)
<b>Find percent given numbers</b>	1994	50.8(1.9)	54.5(2.7)	47.3(2.6)	55.0(2.2)	37.9(3.8)	32.9(3.7)
	1992	50.4(1.7)	54.4(2.0)	46.4(2.2)	53.8(1.7)	34.8(3.6)	44.9(4.6)
	1990	45.4(1.4)	50.2(2.0)	41.2(2.1)	50.2(1.4)	30.2(4.3)	27.6(4.8)
	1986	42.9(1.9)	48.5(3.1)	37.1(2.0)	46.2(2.0)	28.2(3.7)	30.6(4.9)
	1982	34.7(0.9)	40.5(1.4)	29.4(1.6)	36.4(1.1)	23.3(2.1)	29.6(2.4)
<b>Find number given percent</b>	1994	55.6(1.9)	57.2(2.5)	54.0(2.5)	61.6(2.0)	36.7(3.9)	35.7(5.1)
	1992	52.5(1.6)	56.5(2.0)	48.4(1.9)	57.2(2.0)	32.6(3.2)	45.9(4.9)
	1990	49.4(1.6)	53.0(1.9)	46.2(2.1)	54.5(1.4)	31.6(6.1)	39.8(4.6)
	1986	44.1(1.8)	47.0(2.8)	41.1(1.7)	48.8(1.8)	21.7(2.6)	33.2(6.6)
	1982	29.5(1.7)	32.6(2.2)	26.6(2.2)	32.3(2.0)	16.4(1.9)	15.0(3.5)
<b>Subtract decimals</b>	1994	69.0(1.5)	68.6(2.5)	69.9(1.7)	72.1(1.6)	52.7(4.2)	66.5(5.2)
	1992	74.3(1.2)	71.6(1.7)	77.0(1.5)	77.6(0.9)	61.2(3.7)	62.2(5.7)
	1990	74.0(1.5)	71.8(1.9)	76.3(1.7)	75.6(1.6)	66.3(2.5)	66.0(9.5)
	1986	72.2(1.1)	69.0(1.6)	75.2(1.6)	74.7(1.4)	61.3(3.7)	64.8(4.3)
	1982	73.8(1.3)	74.3(1.7)	73.3(1.7)	77.6(1.2)	52.9(4.2)	58.4(4.2)
	1978	71.0(1.8)	69.2(1.9)	72.7(2.0)	74.9(1.6)	46.8(3.7)	55.5(6.2)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Subtract decimals</b>	1994	85.6(1.1)	86.6(1.2)	84.7(1.5)	86.9(1.2)	80.5(2.2)	84.9(3.9)
	1992	86.4(0.7)	87.5(1.2)	85.3(1.3)	88.0(1.0)	81.0(3.0)	87.0(3.0)
	1990	86.9(0.8)	87.8(1.2)	86.1(1.2)	88.0(0.9)	80.7(2.2)	88.2(2.8)
	1986	85.9(1.0)	85.1(1.5)	86.6(1.5)	88.1(1.2)	76.1(3.1)	79.4(3.8)
	1982	84.7(1.1)	84.6(1.5)	84.8(1.3)	86.6(1.3)	76.0(3.0)	75.6(3.1)
	1978	86.3(1.0)	86.5(1.4)	86.1(1.6)	87.4(1.1)	77.4(2.5)	89.6(6.9)
<b>Divide decimals</b>	1994	75.7(1.2)	73.2(1.6)	77.9(1.4)	79.1(1.4)	67.4(3.8)	59.1(5.5)
	1992	78.9(1.2)	77.0(1.7)	80.9(1.6)	83.5(1.0)	59.0(4.5)	76.9(3.3)
	1990	78.6(1.5)	75.9(1.9)	81.0(1.6)	83.8(1.0)	61.1(4.8)	66.6(4.6)
	1986	77.6(1.2)	76.0(1.8)	79.2(1.6)	84.5(1.0)	48.4(5.2)	55.5(5.5)
	1982	65.1(2.1)	62.4(2.9)	67.7(1.9)	70.2(2.5)	41.8(3.8)	41.6(2.5)
	1978	77.9(1.5)	77.2(1.7)	78.7(2.1)	81.8(1.4)	50.8(4.1)	71.1(6.0)
<b>Add decimals</b>	1994	88.4(0.9)	86.2(1.5)	90.5(1.1)	91.8(0.7)	74.9(3.2)	83.1(3.5)
	1992	89.5(1.0)	87.5(1.3)	91.5(1.2)	93.1(0.9)	76.5(2.8)	81.4(7.1)
	1990	89.8(1.0)	87.3(1.5)	92.1(1.0)	93.2(0.7)	79.2(3.0)	81.5(3.8)
	1986	88.4(1.3)	85.2(2.2)	91.7(0.9)	92.2(1.1)	69.0(4.4)	84.6(2.7)
	1982	86.0(1.0)	82.5(1.5)	89.2(1.1)	89.0(1.3)	72.1(3.8)	71.9(4.4)
	1978	88.8(1.1)	87.6(1.5)	90.1(1.3)	91.9(0.8)	68.0(4.1)	82.6(4.6)
<b>Divide decimals</b>	1994	81.0(1.4)	79.1(1.7)	82.8(1.7)	83.7(1.4)	69.7(3.7)	74.0(3.9)
	1992	78.7(1.4)	77.0(1.9)	80.4(1.7)	83.2(1.6)	60.4(3.9)	74.8(4.9)
	1990	77.7(1.3)	74.6(1.6)	80.4(1.6)	82.2(1.1)	62.7(3.3)	67.4(3.7)
	1986	74.9(2.1)	71.3(3.2)	78.6(1.5)	80.4(2.2)	47.1(4.9)	67.9(2.8)
	1982	70.7(1.4)	63.6(1.6)	77.2(1.9)	74.7(1.6)	53.9(5.6)	49.3(4.5)
	1978	80.1(1.3)	77.7(1.9)	82.5(1.6)	83.5(1.3)	56.6(3.7)	76.0(5.0)
<b>Subtract decimals</b>	1994	75.0(1.7)	72.9(1.9)	76.9(2.1)	78.9(1.6)	61.6(4.3)	62.3(5.7)
	1992	74.2(1.6)	73.7(2.3)	74.7(1.4)	78.9(1.6)	56.0(6.0)	69.6(3.7)
	1990	76.5(1.3)	73.8(1.8)	78.9(1.5)	80.1(1.4)	68.2(3.9)	63.1(4.1)
	1986	74.7(1.9)	71.9(2.6)	77.5(1.9)	78.9(2.0)	55.4(5.6)	69.1(4.0)
	1982	57.5(2.4)	48.6(2.7)	65.7(2.3)	62.1(2.9)	38.5(3.1)	30.3(4.4)
	1978	70.9(1.6)	67.4(2.1)	74.2(2.0)	75.9(1.6)	41.1(3.9)	53.8(9.0)
<b>Divide decimals</b>	1994	67.7(1.8)	66.4(2.2)	68.8(2.0)	71.0(1.9)	53.1(3.9)	62.8(4.6)
	1992	65.7(2.0)	62.7(2.3)	68.7(2.1)	70.4(2.2)	48.7(5.6)	60.2(4.1)
	1990	66.3(1.6)	63.6(1.8)	68.8(1.8)	71.1(1.6)	54.3(5.1)	51.3(4.7)
	1986	64.7(2.3)	61.2(3.2)	68.4(2.3)	69.3(2.4)	42.6(4.8)	59.3(5.5)
	1982	44.9(1.5)	36.7(2.0)	52.5(2.0)	48.4(1.8)	28.4(3.7)	27.4(5.1)
	1978	61.4(1.7)	57.4(2.4)	65.3(2.1)	65.8(1.6)	35.8(3.7)	51.9(4.6)
<b>Estimate total cost</b>	1994	32.8(1.6)	37.8(2.1)	27.8(1.6)	34.8(2.0)	20.8(3.1)	35.4(4.3)
	1992	33.9(1.3)	41.1(2.0)	26.3(1.3)	37.0(1.5)	20.9(3.8)	28.9(2.8)
	1990	37.4(1.3)	42.1(1.6)	32.6(1.9)	40.9(1.5)	22.5(2.2)	30.6(4.6)
	1986	35.5(1.5)	41.6(2.0)	29.9(1.7)	36.7(1.6)	28.0(3.5)	34.8(5.1)
	1982	29.6(1.5)	34.1(2.1)	25.5(1.6)	30.9(1.7)	21.1(3.1)	26.3(3.6)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Multiply equation by constant</b>	1994	17.2(1.1)	20.5(2.0)	14.0(1.2)	18.9(1.4)	8.6(1.8)	12.5(1.8)
	1992	18.4(1.1)	21.7(1.5)	15.0(1.2)	19.7(1.1)	10.7(2.1)	11.7(3.7)
	1990	18.4(1.2)	22.1(1.8)	14.7(1.6)	18.7(1.2)	15.8(3.3)	9.7(3.0)
	1986	17.3(1.2)	19.3(1.6)	15.5(1.4)	18.3(1.4)	11.3(2.4)	14.7(3.5)
	1982	21.8(1.7)	23.9(2.2)	19.9(1.7)	22.6(2.1)	15.8(2.8)	21.7(3.3)
	1978	20.1(1.1)	25.0(1.7)	15.2(1.3)	22.4(1.2)	6.5(1.8)	7.3(2.1)
<b>Solve equation (square root)</b>	1994	58.0(1.8)	60.7(2.1)	55.3(2.4)	64.5(1.7)	36.3(4.3)	36.0(4.9)
	1992	58.4(1.7)	59.6(2.1)	57.1(2.0)	64.6(1.8)	33.7(4.9)	46.8(6.3)
	1990	53.3(1.8)	53.7(2.3)	52.9(2.1)	60.4(1.6)	31.5(4.7)	31.6(4.3)
	1986	51.2(1.8)	53.2(2.5)	49.1(2.3)	57.1(1.8)	24.0(4.3)	33.3(4.6)
	1982	45.7(2.6)	45.7(4.0)	45.8(2.1)	49.7(3.3)	27.1(3.4)	26.9(6.1)
	1978	36.8(2.0)	37.2(2.5)	36.3(2.2)	39.3(2.2)	16.6(3.4)	34.8(5.1)
<b>Identify expected value</b>	1994	63.6(1.6)	69.8(2.2)	57.4(1.7)	69.6(1.5)	42.9(2.6)	54.3(6.0)
	1992	63.7(1.4)	70.7(1.8)	56.4(1.8)	67.7(1.4)	47.4(3.6)	55.2(4.5)
	1990	62.6(1.7)	69.3(2.2)	56.0(1.8)	67.7(1.5)	44.2(3.8)	51.1(9.0)
	1986	61.2(1.6)	68.5(2.1)	54.4(1.9)	65.6(1.7)	45.9(3.9)	50.8(5.4)
	1982	78.8(1.5)	83.1(1.3)	74.7(2.5)	83.2(1.5)	59.2(3.8)	61.5(3.6)
	1978	73.6(1.5)	77.3(2.2)	69.9(1.8)	76.6(1.6)	56.5(3.4)	66.2(5.8)
<b>Compute using data in table</b>	1994	81.2(1.1)	83.2(1.6)	79.7(1.7)	84.5(1.0)	68.2(3.8)	76.2(5.1)
	1992	81.6(0.8)	83.4(1.1)	79.7(1.0)	84.5(0.8)	73.2(2.5)	69.9(4.2)
	1990	78.8(1.2)	79.9(1.5)	77.6(1.6)	80.0(1.4)	73.3(3.5)	70.4(6.3)
	1986	75.1(1.3)	77.3(1.5)	73.1(1.4)	78.6(1.3)	59.4(3.1)	68.0(5.7)
	1982	80.0(1.4)	80.0(1.8)	80.1(1.7)	84.2(1.1)	58.4(3.5)	65.8(3.6)
	1978	77.8(1.2)	78.2(1.5)	77.3(1.5)	81.2(1.1)	58.8(3.2)	66.7(6.4)
<b>Interpret data in table</b>	1994	88.5(0.9)	91.5(1.1)	85.7(1.3)	92.4(0.8)	77.9(3.3)	77.1(5.2)
	1992	88.0(0.8)	88.4(1.0)	87.6(1.4)	91.9(0.6)	73.3(3.0)	75.6(4.3)
	1990	88.6(1.0)	88.7(1.2)	88.5(1.3)	91.6(1.0)	80.5(3.4)	70.4(6.9)
	1986	87.9(1.1)	90.0(1.4)	85.9(1.3)	91.1(1.2)	76.0(2.8)	76.9(2.7)
	1982	87.8(1.0)	89.6(1.1)	86.2(1.6)	91.4(0.8)	70.4(3.5)	74.6(4.3)
	1978	87.4(1.3)	88.7(1.2)	86.0(1.8)	91.7(0.9)	62.8(3.8)	70.7(4.9)
<b>Understand decimal place value</b>	1994	76.9(1.4)	78.1(1.9)	76.0(1.7)	83.1(1.2)	53.7(3.4)	64.7(5.9)
	1992	79.4(1.4)	81.1(1.6)	77.6(1.9)	83.3(1.2)	62.8(4.8)	67.0(5.0)
	1990	76.6(1.4)	78.0(2.1)	75.3(1.5)	81.4(1.7)	58.0(4.3)	61.6(5.0)
	1986	70.5(1.3)	73.1(2.1)	68.2(1.5)	76.6(1.2)	41.8(4.9)	55.5(3.7)
	1982	73.3(1.7)	75.2(1.6)	71.6(2.0)	79.6(1.3)	41.0(3.6)	53.7(3.6)
	1978	73.2(1.8)	73.0(3.0)	73.3(2.0)	78.7(1.9)	41.1(3.6)	57.6(4.3)
<b>Understand decimal place value</b>	1994	75.7(1.2)	77.2(1.7)	74.4(1.9)	82.3(1.1)	54.3(3.4)	59.5(5.1)
	1992	76.4(1.7)	78.0(1.7)	74.8(2.1)	81.1(1.4)	57.9(4.7)	62.8(5.8)
	1990	74.1(1.5)	77.2(2.0)	70.9(1.8)	77.4(1.5)	61.8(5.6)	57.2(8.2)
	1986	69.4(1.7)	71.7(2.1)	67.4(2.1)	74.7(1.5)	48.1(4.9)	51.0(5.4)
	1982	71.6(1.7)	73.7(1.7)	69.7(2.5)	75.9(1.7)	46.7(4.5)	62.6(3.3)
	1978	72.3(2.0)	72.1(2.8)	72.5(2.1)	76.3(2.2)	52.5(4.1)	52.6(7.5)

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Mathematics Trend Assessment — Student Questionnaire: Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Divide integers</b>	1994	83.0(1.1)	80.8(1.7)	85.7(1.1)	84.8(1.3)	77.8(3.3)	76.3(3.2)
	1992	82.1(1.1)	79.6(1.6)	84.7(1.3)	83.6(1.3)	76.9(2.9)	73.0(3.3)
	1990	80.8(1.4)	78.2(1.7)	83.4(1.5)	82.2(1.5)	75.7(3.9)	69.9(6.2)
	1986	76.3(1.7)	75.0(2.4)	77.4(1.7)	78.2(1.8)	67.5(3.4)	66.3(6.1)
	1982	68.6(2.1)	70.0(2.4)	67.3(2.6)	71.2(2.5)	55.6(2.8)	55.7(3.7)
	1978	67.1(1.8)	64.5(2.6)	69.8(1.6)	69.3(2.2)	50.5(4.4)	64.5(2.9)
<b>Divide integers</b>	1994	70.3(1.5)	68.0(2.1)	73.1(1.6)	72.6(1.9)	60.5(3.1)	63.9(5.8)
	1992	69.9(1.5)	67.6(1.7)	72.3(1.9)	72.6(1.4)	59.3(4.6)	57.3(5.8)
	1990	67.4(1.6)	66.4(2.1)	68.5(1.8)	69.7(1.7)	59.1(5.8)	52.5(8.1)
	1986	61.6(1.7)	63.6(2.3)	59.8(2.1)	65.6(1.7)	43.8(3.6)	45.0(4.4)
	1982	60.2(2.2)	62.0(2.5)	58.6(2.5)	63.2(2.7)	42.8(3.6)	49.7(3.3)
	1978	56.2(2.2)	55.1(2.8)	57.4(2.0)	59.5(2.5)	36.7(4.0)	46.8(4.8)
<b>Understand opposite of integer</b>	1994	73.4(1.0)	74.0(1.7)	72.7(1.5)	76.5(1.4)	59.6(2.7)	68.8(3.9)
	1992	73.9(1.0)	71.4(1.6)	76.5(1.4)	76.6(1.2)	61.2(4.5)	63.5(2.6)
	1990	72.0(1.8)	70.8(2.4)	73.3(1.9)	74.0(2.2)	63.5(4.9)	64.5(4.0)
	1986	68.0(1.6)	69.4(1.9)	66.7(2.1)	71.6(1.5)	52.1(4.4)	54.6(4.8)
	1982	67.5(2.0)	69.1(2.5)	66.0(2.1)	72.0(1.3)	46.1(4.1)	46.2(XXX)
	1978	72.0(1.6)	72.5(1.8)	71.5(1.9)	75.7(1.8)	50.9(2.8)	53.8(5.3)
<b>Understand opposite of integer</b>	1994	78.0(1.3)	77.2(2.0)	79.4(1.4)	80.9(1.4)	67.2(4.0)	72.3(3.5)
	1992	76.0(1.1)	75.0(1.4)	77.0(1.6)	78.5(1.2)	63.5(3.6)	67.8(3.6)
	1990	73.5(1.5)	72.2(2.1)	74.8(1.7)	76.6(1.7)	62.8(4.4)	60.5(4.4)
	1986	71.2(1.5)	69.6(2.0)	72.7(1.8)	74.3(1.6)	56.7(4.4)	57.1(4.6)
	1982	70.5(1.9)	69.4(2.2)	71.6(2.2)	75.1(1.6)	48.1(3.4)	53.0(6.7)
	1978	71.7(1.7)	70.7(1.6)	72.5(2.2)	75.8(1.7)	48.0(2.7)	51.4(6.3)
<b>Convert decimal to fraction</b>	1994	45.7(1.7)	44.8(2.0)	46.8(2.2)	48.6(1.9)	38.7(4.3)	31.8(4.6)
	1992	46.5(1.6)	44.3(2.1)	48.8(1.8)	49.7(1.7)	32.2(4.7)	34.6(3.3)
	1990	52.9(1.6)	52.3(2.1)	53.5(2.0)	57.1(1.4)	37.8(4.9)	35.0(5.5)
	1986	50.2(2.1)	50.5(2.7)	49.9(2.5)	53.7(2.4)	37.2(2.5)	34.5(5.1)
	1982	59.8(2.3)	58.0(2.2)	61.4(3.0)	65.8(2.3)	33.7(3.2)	30.7(3.7)
	1978	61.7(1.9)	61.4(2.3)	62.1(2.3)	65.3(2.2)	42.9(2.8)	43.0(6.9)
<b>Convert decimal to fraction</b>	1994	28.6(1.9)	32.9(2.7)	24.5(1.9)	33.3(2.2)	13.7(2.4)	19.3(3.3)
	1992	26.6(1.6)	30.4(2.1)	22.7(1.6)	29.8(1.7)	12.5(3.4)	18.7(3.3)
	1990	24.2(2.1)	30.4(2.7)	17.9(2.1)	26.8(2.3)	11.6(5.0)	9.8(2.8)
	1986	19.0(1.9)	24.1(2.6)	14.2(1.9)	21.0(2.2)	11.5(2.5)	9.1(2.8)
	1982	20.4(1.5)	24.8(2.3)	16.3(1.2)	23.1(1.8)	7.1(1.3)	8.9(1.8)
	1978	24.7(1.5)	30.5(2.1)	19.3(1.7)	27.3(1.6)	8.7(2.1)	14.5(3.8)

The standard errors of the estimated percentages appear in parenthesis.  
XXX The standard error exceeds 10.



## *Data Appendix*

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### **Reading**



# NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	
	207.6(1.0)	210.0(0.7)	215.0(1.0)†	210.9(0.7)†	211.8(1.1)†	209.2(1.2)	210.5(0.9)	211.0(1.2)‡	Q
<b>GENDER</b>									
<b>Male</b>	49.8(0.4)	50.0(0.4)	50.0(0.4)	49.9(0.5)	50.3(0.8)	50.8(0.9)	50.8(0.7)	49.8(0.8)	
	201.2(1.1)*	204.3(0.8)	210.0(1.1)†	207.5(0.8)†	207.5(1.4)†	204.0(1.7)	205.9(1.3)†	207.3(1.3)‡	LQ
<b>Female</b>	50.2(0.4)	50.0(0.4)	50.0(0.4)	50.1(0.5)	49.7(0.8)	49.2(0.9)	49.2(0.7)	50.2(0.8)	
	213.9(1.0)	215.8(0.8)	220.1(1.1)†*	214.2(0.8)	216.3(1.3)	214.5(1.2)	215.4(0.9)	214.7(1.4)	Q
<b>RACE/ETHNICITY</b>									
<b>White</b>	84.3(1.4)*	80.0(1.2)*	79.0(1.3)†	74.9(1.2)†	75.2(1.0)†	74.0(1.0)†	74.1(0.9)†	75.2(0.7)‡	
	214.0(0.9)	216.6(0.7)	221.3(0.8)†	218.2(0.8)†	217.7(1.4)	217.0(1.3)	217.9(1.0)†	218.0(1.3)‡	LQ
<b>Black</b>	13.5(1.3)	13.4(0.8)	14.0(1.0)	15.5(0.5)	15.9(0.7)	16.1(0.6)	15.7(0.4)	14.9(0.6)	
	170.1(1.7)*	181.2(1.2)†	189.3(1.8)†	185.7(1.1)†	188.5(2.4)†	181.8(2.9)†	184.5(2.2)†	185.4(2.3)‡	LQ
<b>Hispanic</b>	******(0.0)	4.8(0.8)	5.7(0.8)	7.3(1.4)	6.2(1.0)	6.2(0.6)	6.8(0.8)	5.8(0.4)	
	******(0.0)	182.7(2.2)	190.2(2.3)	187.2(2.1)	193.7(3.5)	189.4(2.3)	191.7(3.1)	185.9(3.9)	N
<b>Other</b>	2.2(0.6)	1.8(0.5)*	1.3(0.3)*	2.3(0.2)*	2.7(0.4)	3.6(0.7)	3.4(0.3)	3.6(0.4)‡	
	193.5(3.8)*	207.8(4.1)	218.5(3.8)†	223.8(2.5)†	228.4(5.4)†	205.5(4.4)	207.5(4.0)	210.8(4.9)‡	LQ
<b>GRADE</b>									
<b>Below Modal Grade</b>	24.3(0.8)*	22.7(0.8)*	27.7(1.5)*	34.2(0.3)†*	36.8(0.3)†*	42.0(0.5)†*	42.9(0.5)†*	39.8(0.5)‡	
	177.5(1.2)*	183.3(1.1)†*	188.9(1.3)†	186.9(0.9)†*	192.6(1.8)†	188.8(1.8)†	192.3(1.4)†	194.3(1.6)‡	LQ
<b>At Modal Grade</b>	74.7(0.8)*	75.3(0.9)*	71.4(1.4)*	65.3(0.2)†*	62.6(0.3)†*	57.7(0.5)†*	57.0(0.5)†*	59.8(0.5)‡	
	217.1(1.1)*	218.2(0.7)	225.2(0.8)†	222.8(0.8)†	222.8(1.5)†	223.8(1.5)†	224.1(1.0)†	221.8(1.3)‡	LQ
<b>Above Modal Grade</b>	1.0(0.1)*	0.5(0.1)†	0.4(0.1)†	0.4(0.1)†	0.5(0.2)	0.2(0.1)†	0.2(0.1)†	0.4(0.1)‡	
	232.3(4.1)	225.9(4.3)*	243.1(6.1)	253.5(4.7)†	262.4(11.0)	241.6(20.1)	242.9(16.7)	***(***)	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>REGION</b>									
<b>Northeast</b>	26.2(1.5)	26.9(1.1)*	22.6(2.1)	21.7(0.4)†	22.4(1.5)	22.3(1.1)	21.1(1.3)	22.4(1.0)‡	
	213.0(1.7)	214.8(1.3)	221.1(2.1)†	215.7(1.7)	215.2(2.6)	217.4(2.2)	217.6(2.6)	217.4(2.9)	N
<b>Southeast</b>	22.0(1.7)	21.9(0.8)	24.3(2.3)	23.6(1.2)	25.3(1.7)	24.2(1.2)	23.4(1.4)	24.3(1.5)	
	193.9(2.9)*	201.1(1.2)	210.3(2.3)†	204.3(1.6)†	207.2(2.1)†	197.4(3.2)	199.3(2.0)	208.4(3.0)‡	LQ
<b>Central</b>	29.3(2.0)	26.4(1.2)	25.1(3.4)	27.0(1.3)	23.8(0.6)	25.0(0.7)	28.3(1.1)	25.5(1.0)	
	214.9(1.2)	215.5(1.2)	216.7(1.4)	215.3(1.5)	218.2(2.2)	212.7(2.0)	215.8(1.6)	214.3(2.3)	N
<b>West</b>	22.6(1.9)	24.7(1.1)	28.1(2.1)	27.7(0.5)	28.5(1.1)	28.5(0.8)†	27.2(0.9)	27.8(1.0)‡	
	205.0(2.0)	207.0(2.0)	212.8(1.8)†	207.8(1.5)	207.9(2.6)	209.6(2.8)	209.3(2.3)	205.1(2.8)	Q
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	10.0(0.4)*	9.9(0.4)*	6.5(0.5)†*	5.6(0.2)†*	4.6(0.6)†	5.0(0.5)†	5.1(0.4)†	4.1(0.4)‡	
	188.6(1.5)	189.9(1.3)	194.3(1.6)	195.1(1.4)†	192.5(4.9)	192.6(3.2)	194.9(4.5)	189.1(4.0)	N
<b>Graduated H.S.</b>	22.3(0.5)*	23.8(0.4)*	25.3(0.8)†*	19.6(0.6)†*	15.9(0.6)†	17.1(0.8)†	15.5(0.8)†	15.7(0.8)‡	
	207.8(1.2)	211.3(0.9)	213.0(1.3)†	208.9(1.0)	210.8(2.2)	209.1(1.8)	207.4(1.5)	207.1(2.6)	Q
<b>Post H.S.</b>	33.0(0.9)*	34.2(0.7)*	40.1(1.5)†*	36.7(1.0)†*	45.2(1.4)†	42.4(1.3)†	44.7(0.9)†	46.3(1.2)‡	
	223.9(1.1)	221.5(0.9)	226.0(1.1)*	222.9(0.9)	220.0(1.7)	217.7(2.0)†	219.5(1.4)	221.0(1.3)	L
<b>Unknown</b>	34.7(0.7)	32.1(0.8)	28.1(1.0)†*	37.6(0.9)*	34.2(1.3)	35.5(1.1)	34.4(1.3)	33.8(0.8)	
	197.4(1.0)*	203.1(0.8)†	206.1(1.0)†	204.4(0.7)†	204.4(1.5)†	201.4(1.5)	204.1(1.2)†	202.4(1.3)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	88.8(1.4)	87.0(1.7)	87.7(2.7)	92.1(1.9)	88.2(1.7)	89.4(2.1)	
	*****(0.0)	*****(0.0)	213.5(1.1)	209.4(0.8)†	210.2(1.2)	207.5(1.4)†	208.6(1.0)†	209.4(1.4)‡	L
Non-Public	*****(0.0)	*****(0.0)	11.2(1.4)	13.0(1.7)	12.3(2.7)	7.9(1.9)	11.8(1.7)	10.6(2.1)	
	*****(0.0)	*****(0.0)	227.0(1.8)	222.8(1.6)	223.4(3.0)	228.3(3.3)	224.7(2.3)	225.0(2.7)	N
<b>QUARTILES</b>									
Upper	25.0(0.8)	25.0(0.7)	25.0(1.1)	25.0(0.8)	25.0(1.2)	25.0(1.0)	25.0(0.9)	25.0(1.1)	
	252.6(0.5)*	251.3(0.7)*	255.0(0.8)	257.9(0.4)†	259.1(1.6)†	261.3(1.1)†*	256.4(0.9)†	256.1(1.0)‡	LQ
Middle Two	50.0(0.6)	50.0(0.5)	50.0(0.6)	50.0(0.6)	50.0(1.4)	50.0(0.8)	50.0(0.9)	50.0(1.0)	
	210.6(0.4)*	213.1(0.3)†	218.0(0.3)†*	211.8(0.3)	212.8(0.7)†	209.4(0.6)*	212.0(0.7)	213.2(0.7)‡	Q
Lower	25.0(0.9)	25.0(0.8)	25.0(1.0)	25.0(0.7)	25.0(1.3)	25.0(1.0)	25.0(0.9)	25.0(1.3)	
	156.6(0.7)*	162.8(0.5)†	169.3(1.0)†*	161.6(0.6)†	162.7(1.6)†	156.5(1.5)	161.7(1.0)†	161.7(1.4)‡	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	
	255.2(0.9)	255.9(0.8)	258.5(0.9)	257.1(0.5)	257.5(1.0)	256.8(0.8)	259.8(1.2)†	257.9(0.9)‡	L
<b>GENDER</b>									
<b>Male</b>	50.0(0.4)	49.9(0.5)	49.4(0.3)	51.0(0.5)	49.5(0.8)	50.2(0.9)	49.2(0.9)	51.4(0.8)	
	249.6(1.0)	249.6(0.8)	254.3(1.1)†	252.6(0.6)†	251.8(1.3)	250.5(1.1)	254.1(1.7)	250.6(1.2)	Q
<b>Female</b>	50.0(0.4)	50.1(0.5)	50.6(0.3)	49.0(0.5)	50.5(0.8)	49.8(0.9)	50.8(0.9)	48.5(0.8)	
	260.8(0.9)*	262.3(0.9)	262.6(0.9)	261.7(0.6)*	263.0(1.0)	263.1(1.1)	265.3(1.2)†	265.7(1.2)‡	L
<b>RACE/ETHNICITY</b>									
<b>White</b>	84.2(1.4)*	80.9(1.2)*	79.7(1.8)*	76.8(0.6)†*	76.4(0.7)†*	73.5(0.8)†	73.0(0.7)†	73.8(0.5)‡	
	260.9(0.7)*	262.1(0.7)	264.4(0.7)†	262.6(0.6)	261.3(1.1)	262.3(0.9)	266.4(1.2)†	265.1(1.1)‡	L
<b>Black</b>	14.5(1.4)	12.7(0.9)	13.5(1.3)	14.1(0.2)	15.0(0.3)	15.4(0.2)	16.1(0.4)	14.7(0.5)	
	222.4(1.2)*	225.7(1.2)*	232.8(1.5)†	236.3(1.0)†	242.9(2.4)†	241.5(2.2)†	237.6(2.3)†	234.3(2.4)‡	LQ
<b>Hispanic</b>	*****(0.0)	4.9(0.8)*	5.5(1.0)	6.9(0.7)	6.1(0.6)	8.2(0.5)†	7.3(0.4)†	8.0(0.4)‡	
	*****(0.0)	232.5(3.0)	237.2(2.0)	239.6(1.7)	240.1(3.5)	237.8(2.3)	239.2(3.5)	235.1(1.9)	Q
<b>Other</b>	1.2(0.3)*	1.6(0.5)*	1.3(0.3)*	1.9(0.2)*	2.5(0.3)†	3.0(0.8)	3.5(0.3)†	3.2(0.3)‡	
	251.3(3.0)	255.6(3.4)	253.7(6.4)	260.0(2.8)	269.3(4.2)†	252.7(5.3)	268.5(3.4)†	257.4(5.0)	L
<b>GRADE</b>									
<b>Below Modal Grade</b>	27.7(0.9)*	27.6(0.9)*	27.9(1.2)*	37.3(0.2)†*	38.8(0.5)†*	39.4(0.4)†*	43.1(0.7)†	43.7(0.5)‡	
	229.5(1.0)*	232.3(0.9)*	239.5(1.5)†	239.1(0.7)†	242.8(1.4)†	242.7(1.1)†	242.8(1.9)†	243.6(1.6)‡	LQ
<b>At Modal Grade</b>	71.0(0.9)*	71.6(0.9)*	70.2(1.3)*	62.1(0.2)†*	60.5(0.3)†*	60.1(0.2)†*	55.6(0.5)†	56.3(0.5)‡	
	264.8(0.8)*	264.8(0.7)*	266.0(0.8)	266.7(0.5)	266.7(1.1)	265.8(0.9)	271.8(1.1)†	269.0(0.8)‡	L
<b>Above Modal Grade</b>	1.2(0.2)*	0.9(0.1)*	0.5(0.1)†*	0.6(0.2)†*	0.7(0.5)	0.5(0.3)	1.3(0.6)	0.0(0.0)‡	
	278.0(2.4)	277.8(4.2)*	274.2(4.9)*	294.5(7.5)*	271.8(10.8)*	289.6(16.0)*	312.1(3.9)†*	***(***)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>REGION</b>									
<b>Northeast</b>	24.4(1.5)	24.8(1.1)*	24.2(2.2)	22.6(0.4)*	22.8(2.2)	23.2(1.0)	22.2(0.8)	20.4(0.7)†	
	261.1(2.0)*	258.5(1.8)*	260.0(1.8)*	260.4(0.6)*	258.6(2.4)*	258.9(1.8)*	264.6(3.2)	269.0(2.0)†	LQ
<b>Southeast</b>	23.6(2.2)	22.2(1.1)	23.9(2.7)	23.2(1.7)	23.7(1.4)	23.3(0.8)	23.1(1.6)	21.8(1.6)	
	244.7(1.7)	249.3(1.5)	252.6(1.6)†	256.4(1.5)†	257.6(2.2)†	255.5(2.2)†	253.8(2.5)†	252.7(2.5)†	LQ
<b>Central</b>	28.6(2.2)	27.6(1.3)	26.0(3.5)	27.2(1.6)	25.6(2.0)	23.7(0.7)	26.0(1.0)	26.8(1.6)	
	260.1(1.8)	261.5(1.4)	264.5(1.4)	258.8(1.0)	255.9(2.0)	257.4(1.5)	263.5(3.0)	259.5(3.3)	N
<b>West</b>	23.4(2.3)*	25.5(1.1)*	25.8(2.3)	27.1(0.5)*	27.9(1.0)	29.8(0.9)	28.7(1.2)	31.0(1.1)†	
	253.6(1.3)	253.2(1.7)	256.4(2.0)	253.8(0.9)	257.9(2.1)	255.6(1.6)	257.5(1.6)	252.9(2.1)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	16.4(0.6)*	14.0(0.6)†*	10.2(0.6)†*	8.7(0.4)†	7.9(0.6)†	8.0(0.6)†	6.0(0.5)†	7.0(0.6)†	
	238.4(1.3)	238.7(1.2)	238.5(1.1)	240.0(0.9)	246.5(2.1)†*	240.8(1.8)	239.2(2.6)	236.7(2.4)	Q
<b>Graduated H.S.</b>	31.6(0.7)*	33.2(0.6)*	30.7(0.7)	35.7(1.0)†*	31.0(1.1)	30.9(1.2)	28.3(1.2)	27.1(1.2)†	
	255.5(0.8)	254.6(0.7)	253.5(0.9)	253.4(0.7)	252.7(1.2)	251.4(0.9)†	252.1(1.7)	251.4(1.4)†	L
<b>Post H.S.</b>	38.1(1.1)*	40.0(0.9)*	49.1(1.3)†*	45.6(1.1)†*	51.8(1.5)†	50.4(1.5)†*	56.6(1.6)†	57.3(1.5)†	
	270.2(0.8)	269.8(0.8)	270.9(0.8)	267.6(0.7)	265.3(1.4)†	266.9(1.0)	269.9(1.4)	268.5(1.2)	L
<b>Unknown</b>	14.0(0.8)*	12.7(0.6)*	10.0(0.7)†	9.8(0.4)†	9.2(0.7)†	10.7(0.6)†	9.1(0.5)†	8.6(0.7)†	
	233.1(1.0)	234.8(1.1)	233.3(1.7)	236.5(1.3)	240.4(3.0)	237.7(1.9)	236.2(2.6)	230.3(3.0)	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	88.4(1.3)	87.9(1.1)	89.1(2.5)	87.7(1.9)	86.4(1.9)	88.9(1.5)	
	*****(0.0)	*****(0.0)	256.9(1.1)	255.2(0.6)	256.1(1.0)	255.0(0.8)	257.2(1.3)	255.6(1.0)	N
Non-Public	*****(0.0)	*****(0.0)	11.6(1.3)	12.1(1.1)	10.9(2.5)	12.3(1.9)	13.6(1.9)	11.1(1.5)	
	*****(0.0)	*****(0.0)	270.6(1.5)	271.2(1.7)	268.3(2.8)	269.7(2.9)	276.3(2.6)	275.8(3.4)	N
<b>QUARTILES</b>									
Upper	25.0(0.9)	25.0(0.8)	25.0(0.8)	25.0(0.8)	25.0(0.9)	25.0(0.8)	25.0(1.2)	25.0(0.8)	
	293.2(0.4)*	296.4(0.4)†*	294.1(0.5)*	296.2(0.5)†*	295.8(1.0)*	296.8(0.8)†*	303.1(1.1)†	301.4(0.8)‡	LQ
Middle Two	50.0(0.6)	50.0(0.6)	50.0(0.6)	50.0(0.6)	50.0(0.7)	50.0(1.0)	50.0(1.1)	50.0(1.0)	
	257.6(0.4)*	258.1(0.4)	260.5(0.3)†	258.4(0.2)	258.5(0.7)	257.9(0.5)	262.0(0.6)†	260.3(0.8)‡	L
Lower	25.0(0.9)	25.0(0.8)	25.0(1.1)	25.0(0.7)	25.0(0.9)	25.0(0.9)	25.0(1.1)	25.0(0.8)	
	212.4(0.7)	211.3(0.5)	218.7(0.7)†*	214.5(0.5)*	217.2(1.0)†*	214.5(0.9)*	212.2(1.4)	209.5(0.9)‡	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0) 285.2(1.2)	100.0(0.0) 285.6(0.8)	100.0(0.0) 285.5(1.2)	100.0(0.0) 288.8(0.6)	100.0(0.0) 290.1(1.0)†	100.0(0.0) 290.2(1.1)†	100.0(0.0) 289.7(1.1)†	100.0(0.0) 288.1(1.3)	L
<b>GENDER</b>									
<b>Male</b>	49.2(0.5) 278.9(1.2)	48.8(0.5) 279.7(1.0)	50.5(0.6) 281.8(1.3)	51.1(0.7) 283.8(0.6)†	47.7(1.3) 286.0(1.5)†	50.3(0.6) 284.0(1.6)	52.1(0.9)† 284.2(1.6)	50.2(1.4) 281.7(2.2)	
<b>Female</b>	50.8(0.5) 291.3(1.3)	51.2(0.5) 291.2(1.0)	49.5(0.6) 289.2(1.2)*	48.9(0.7) 293.9(0.8)	52.1(1.4) 293.8(1.5)	49.7(0.6) 296.5(1.2)†	47.9(0.9)† 295.7(1.1)	49.6(1.4) 294.7(1.5)	L
<b>RACE/ETHNICITY</b>									
<b>White</b>	87.1(1.3)* 291.4(1.0)	84.3(1.0)* 293.0(0.6)	83.1(1.6)* 292.8(0.9)	77.4(0.6)†* 295.2(0.7)†	76.7(0.6)†* 294.7(1.2)	73.5(0.5)† 296.6(1.2)†	74.7(0.6)†* 297.4(1.4)†	71.9(0.8)‡ 295.7(1.5)‡	
<b>Black</b>	11.4(1.2)* 238.7(1.7)*	11.0(0.8)* 240.6(2.0)*	12.0(1.4) 243.1(1.8)*	14.1(0.2)* 264.3(1.0)†	15.2(0.3)† 274.4(2.4)†	15.9(0.3)† 267.3(2.3)†	14.7(0.3) 260.6(2.1)†	15.2(0.3)‡ 266.2(3.9)‡	LQ
<b>Hispanic</b>	******(0.0) ******(0.0)	3.4(0.6)* 252.4(3.6)	3.9(0.6)* 261.4(2.7)	6.6(0.7)† 268.1(2.2)†	5.8(0.5)†* 270.8(4.3)†	7.0(0.4)† 274.8(3.6)†	7.5(0.6)† 271.2(3.7)†	8.3(0.5)‡ 263.2(4.9)	LQ
<b>Other</b>	1.5(0.4)* 275.9(4.8)	1.4(0.4)* 274.3(4.4)	1.1(0.2)* 280.4(3.0)	1.9(0.1)* 284.7(3.1)	2.3(0.3)* 290.0(5.3)	3.6(0.5)† 290.1(3.5)	2.9(0.3)† 287.0(5.8)	3.3(0.2)‡ 287.0(7.6)	L
<b>GRADE</b>									
<b>Below Modal Grade</b>	14.1(0.6)* 238.4(1.5)*	15.1(0.7)* 242.1(1.8)*	13.9(0.7)* 244.3(2.1)*	22.2(0.7)†* 258.9(0.9)†	23.6(1.2)†* 265.4(1.9)†	26.2(0.6)†* 261.4(1.9)†	28.4(0.6)† 261.4(1.5)†	29.3(0.8)‡ 260.5(2.4)‡	
<b>At Modal Grade</b>	72.9(0.7)* 291.1(1.0)*	73.0(0.7)* 292.1(0.7)*	77.0(0.6)†* 291.2(1.0)*	67.7(0.2)†* 295.6(0.6)†	64.9(0.2)†* 296.5(1.1)†	65.2(0.2)†* 299.2(1.0)†	63.9(0.2)† 301.1(1.3)†	63.3(0.3)‡ 298.9(1.2)‡	LQ
<b>Above Modal Grade</b>	13.0(0.7)* 302.5(1.6)	11.6(0.4)* 301.5(1.0)	9.1(0.6)† 300.5(1.7)	10.0(0.7)† 303.8(1.2)	11.6(1.3)* 304.6(3.0)	8.7(0.6)† 309.7(2.3)	7.7(0.6)† 300.0(3.2)	7.4(0.8)‡ 305.2(5.3)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>REGION</b>									
<b>Northeast</b>	26.2(1.9)	25.5(1.2)	22.0(2.9)	24.3(0.4)	22.7(0.8)	22.6(1.1)	21.7(0.9)	22.1(1.2)	
	291.3(2.8)	289.1(1.7)	285.9(2.4)	292.2(1.9)	294.8(2.9)	295.7(1.8)	297.3(3.2)	296.8(4.2)	L
<b>Southeast</b>	20.0(1.8)	19.6(0.8)*	21.4(1.9)	22.2(1.8)	22.9(1.0)	23.2(0.9)	24.8(1.4)	24.8(1.7)†#	
	270.5(2.4)*	276.5(1.4)	280.1(2.2)†	284.7(1.6)†	285.5(2.1)†	285.1(2.5)†	278.4(2.9)	283.5(2.8)†#	LQ
<b>Central</b>	29.9(2.4)	30.1(1.2)	28.4(3.2)	27.1(1.7)	26.3(1.8)	26.6(1.0)	24.5(0.8)	26.0(1.4)	
	290.7(2.1)	291.8(1.4)	287.4(2.2)	290.0(1.4)	291.2(1.9)	293.5(2.4)	293.8(2.1)	285.7(3.7)	N
<b>West</b>	23.9(2.4)	24.9(1.1)	28.2(2.3)	26.3(0.6)	28.1(1.1)	27.6(0.9)	29.0(1.0)	27.1(0.9)	
	283.7(1.8)	281.6(1.9)	287.3(2.1)	288.4(1.1)	289.0(1.8)	286.8(2.6)	290.4(2.3)	287.8(2.8)	L
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	19.8(0.8)*	16.0(0.6)†*	12.8(0.7)†*	11.6(0.6)†*	8.9(0.8)†	8.8(0.6)†	8.1(0.8)†	7.3(0.5)†#	
	261.3(1.5)	262.5(1.3)	262.1(1.5)	269.4(1.1)†	267.4(2.0)	269.7(2.8)	270.8(3.9)	267.9(2.7)†#	L
<b>Graduated H.S.</b>	31.1(0.8)*	33.6(0.5)*	32.3(0.9)*	35.1(1.0)†*	30.3(1.2)	29.9(1.0)	28.4(0.9)	27.3(1.1)†#	
	283.0(1.2)*	281.4(1.1)	277.5(1.0)†	281.2(0.7)	282.0(1.3)	282.9(1.4)*	280.5(1.6)	276.1(1.9)†#	N
<b>Post H.S.</b>	41.9(1.3)*	46.4(0.8)†*	51.3(1.3)†*	49.9(1.2)†*	58.3(1.6)†	58.1(1.3)†	60.6(1.4)†	62.1(1.4)†#	
	302.2(1.0)	300.6(0.7)	298.9(1.0)	301.2(0.7)	299.5(1.3)	299.9(1.1)	298.6(1.4)	298.5(1.4)†#	L
<b>Unknown</b>	7.2(0.8)*	4.0(0.2)†	3.6(0.4)†	3.3(0.2)†	2.4(0.3)†	3.2(0.3)†	2.9(0.3)†	3.3(0.4)†#	
	261.1(5.0)	239.8(2.8)†	249.8(3.5)	256.5(2.0)	254.7(6.2)	245.9(5.7)	254.7(5.9)	242.9(5.2)†#	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages and average reading scale scores and jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	92.6(1.2)	88.9(1.7)	87.6(3.5)	92.9(1.5)	91.8(1.9)	89.4(2.3)	
	*****(0.0)	*****(0.0)	284.4(1.2)	287.2(0.6)	288.7(1.0)†	288.6(1.1)	287.8(1.0)	286.0(1.5)	Q
Non-Public	*****(0.0)	*****(0.0)	7.4(1.2)	11.1(1.7)	12.4(3.5)	7.1(1.5)	8.2(1.9)	10.6(2.3)	
	*****(0.0)	*****(0.0)	298.4(2.7)	303.0(2.0)	299.6(3.8)	311.0(4.2)	309.6(4.2)	306.1(5.8)	L
<b>QUARTILES</b>									
Upper	25.0(1.0)	25.0(0.6)	25.0(1.0)	25.0(0.8)	25.0(1.0)	25.0(0.8)	25.0(0.9)	25.0(1.1)	
	332.5(0.6)*	334.0(0.5)	326.8(0.8)†*	331.4(0.5)*	330.1(1.3)*	335.5(1.1)	335.3(0.9)	336.7(1.3)‡	LQ
Middle Two	50.0(0.6)	50.0(0.6)	50.0(0.8)	50.0(0.5)	50.0(1.1)	50.0(0.8)	50.1(0.9)	50.0(1.3)	
	289.0(0.5)	288.4(0.4)*	288.7(0.4)	290.7(0.3)	292.1(0.7)†	292.1(0.5)†	293.3(0.7)†	290.7(0.7)	L
Lower	25.0(1.0)	25.0(0.7)	25.0(1.1)	25.0(0.8)	25.0(1.2)	25.0(1.0)	24.9(1.0)	25.0(1.3)	
	230.2(0.8)*	231.5(1.0)	237.6(1.0)†	240.8(0.3)†*	246.0(1.1)†*	241.1(1.6)†*	236.9(1.3)†	234.4(1.3)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 150

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	90.6(0.5)	93.1(0.4)†	94.6(0.4)*	92.3(0.3)†	92.7(0.7)	90.1(0.9)	92.3(0.4)	92.1(0.7)	Q
<b>GENDER</b>									
Male	87.9(0.7)	91.0(0.5)†	92.9(0.5)†	90.4(0.5)†	90.4(0.9)	87.9(1.4)	90.2(0.8)	90.2(1.0)	Q
Female	93.2(0.5)	95.3(0.3)†	96.4(0.4)*	94.2(0.4)	94.9(1.0)	92.4(1.1)	94.4(0.6)	94.0(0.8)	Q
<b>RACE/ETHNICITY</b>									
White	94.0(0.4)	96.0(0.3)†	97.1(0.2)†	95.4(0.3)†	95.1(0.7)	93.5(0.9)	95.8(0.5)†	95.7(0.5)‡	Q
Black	69.7(1.7)*	80.7(1.1)†	84.9(1.4)†	81.3(1.0)†	83.2(2.4)†	76.9(2.7)	79.6(2.2)†	78.7(2.4)‡	LQ
Hispanic	*****(0.0)	80.8(2.5)	84.5(1.8)	82.0(2.1)	85.6(3.5)	83.7(1.8)	83.4(2.6)	80.4(4.6)	N
Other	86.0(1.9)	92.4(1.9)	96.1(1.2)†	95.4(1.1)†	96.9(1.8)†	89.3(3.1)	90.8(2.9)	91.0(3.4)	Q
<b>GRADE</b>									
Below Modal Grade	75.6(1.3)*	81.2(1.1)†	84.4(1.0)†	82.1(0.7)†	85.0(1.9)†	82.2(1.9)†	85.4(0.9)†	85.7(1.6)‡	LQ
At Modal Grade	95.4(0.4)	96.8(0.3)†	98.6(0.2)*	97.4(0.2)†	97.1(0.7)	95.8(0.6)	97.4(0.4)†	96.3(0.7)	Q
Above Modal Grade	98.0(1.3)	98.8(1.4)	97.5(1.6)	100.0(0.0)	99.1(5.2)	98.3(0.0)	100.0(0.0)	***(***)	N
<b>REGION</b>									
Northeast	93.4(0.9)	94.1(0.5)	96.4(0.7)	94.2(0.6)	92.8(1.3)	92.6(1.6)	94.8(0.9)	95.0(2.0)	N
Southeast	82.7(1.9)*	89.8(0.8)†	93.0(0.9)†	89.7(0.8)†	91.3(1.7)†	84.5(2.4)	87.1(1.1)	90.3(1.8)‡	Q
Central	93.6(0.5)	95.6(0.5)†	95.8(0.7)	94.3(0.6)	95.4(0.7)	92.7(1.4)	95.1(0.9)	94.2(1.3)	N
West	91.0(1.1)	92.4(1.0)	93.6(0.8)	90.9(0.9)	91.5(1.6)	90.6(1.3)	91.8(1.3)	89.4(1.8)	N
<b>PARENTS' EDUCATION LEVEL</b>									
Less Than H.S.	82.3(1.4)	84.4(1.2)	85.6(1.5)	86.2(1.3)	84.4(4.4)	83.0(3.8)	86.4(5.4)	82.3(3.8)	N
Graduated H.S.	92.1(0.7)	94.2(0.5)	94.9(0.6)†	92.8(0.7)	92.3(2.1)	91.2(1.3)	91.4(1.6)	91.9(1.4)	N
Post H.S.	96.1(0.4)	96.5(0.4)	97.3(0.4)	95.4(0.4)	95.1(0.8)	92.6(1.2)†	94.8(0.5)	95.3(0.7)	L
Unknown	86.7(0.7)	91.5(0.5)†	92.7(0.9)†	91.0(0.4)†	90.9(1.2)†	87.6(1.4)	91.3(0.8)†	89.2(1.5)	Q
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	94.2(0.4)*	91.7(0.4)†	92.1(0.8)	89.6(1.0)†	91.5(0.5)†	91.4(0.8)‡	LQ
Non-Public	*****(0.0)	*****(0.0)	98.1(0.4)	96.8(0.5)	96.7(1.3)	96.2(1.7)	97.9(1.2)	97.7(1.3)	N
<b>QUARTILES</b>									
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	99.6(0.1)	100.0(0.0)†	99.9(0.1)	99.9(0.1)	99.7(0.2)	99.1(0.5)	99.6(0.1)	99.6(0.3)	N
Lower	63.1(1.1)	72.6(1.0)†	78.7(1.2)*	69.7(0.9)†	71.3(2.3)†	62.2(3.0)	69.9(1.4)†	69.1(2.6)‡	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 200

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	58.7(1.0)	62.1(0.8)†	67.7(1.0)†	61.5(0.7)	62.6(1.3)	58.9(1.3)	62.0(1.1)	63.3(1.4)‡	Q
<b>GENDER</b>									
Male	52.7(1.2)*	56.2(1.0)	62.7(1.1)†	58.0(0.9)†	58.4(1.8)†	53.8(1.9)	56.9(1.6)	59.2(1.5)‡	Q
Female	64.6(1.1)	68.1(0.8)	72.7(1.0)†	65.2(0.8)	66.9(1.4)	64.2(1.2)	67.3(1.2)	67.3(1.9)	N
<b>RACE/ETHNICITY</b>									
White	65.0(1.0)*	69.0(0.8)†	74.2(0.7)†	68.6(0.8)†	68.4(1.6)	66.0(1.4)	69.3(1.2)†	70.1(1.5)‡	Q
Black	22.0(1.5)*	31.6(1.5)†	41.3(1.9)†	36.6(1.5)†	39.4(2.9)†	33.9(3.4)†	36.6(2.2)†	38.3(2.8)‡	LQ
Hispanic	*****(0.0)	34.6(3.0)	41.6(2.6)	39.6(2.2)	45.9(3.3)	40.9(2.7)	43.1(3.5)	37.1(4.6)	N
Other	42.0(5.2)*	58.8(5.3)	72.9(3.7)†	72.7(2.9)†	77.1(4.8)†	56.8(4.5)	59.7(4.9)	65.4(4.8)‡	LQ
<b>GRADE</b>									
Below Modal Grade	28.8(1.4)*	33.8(1.2)*	40.4(1.5)†	38.0(1.0)†*	43.4(2.1)†	40.1(1.8)†	43.5(1.8)†	47.1(2.5)‡	L
At Modal Grade	68.1(1.1)*	70.7(0.7)	78.3(0.8)†*	73.5(0.7)†	73.7(1.5)†	72.5(1.6)	76.0(0.9)†	73.9(1.4)‡	LQ
Above Modal Grade	81.0(4.8)	79.8(4.7)*	88.5(5.4)	93.4(3.8)	94.3(6.1)	80.9(19.5)	88.5(0.0)	***(***)	N
<b>REGION</b>									
Northeast	64.1(1.6)	66.8(1.5)	73.5(2.1)†	66.5(1.5)	65.7(2.5)	65.4(2.8)	69.3(2.8)	70.1(3.6)	N
Southeast	45.9(2.8)*	53.1(1.2)	62.6(2.4)†	54.8(1.6)†	58.0(2.6)†	48.2(3.3)*	50.6(1.9)*	60.8(2.8)‡	Q
Central	65.7(1.4)	67.4(1.3)	69.4(1.2)	66.0(1.6)	68.4(1.7)	62.6(2.0)	67.7(1.9)	65.5(2.0)	N
West	55.6(1.8)	59.5(2.1)	65.9(1.5)†	58.9(1.5)	59.5(3.5)	59.6(2.9)	60.4(3.0)	57.8(3.3)	Q
<b>PARENTS' EDUCATION LEVEL</b>									
Less Than H.S.	39.4(1.7)	41.8(1.4)	47.5(1.6)†	47.4(2.1)†	44.0(7.1)	42.8(4.1)	46.4(4.5)	43.3(6.3)	N
Graduated H.S.	59.6(1.3)	64.1(1.0)†	66.5(1.3)†	60.0(1.3)	62.7(3.4)	59.4(2.9)	60.4(2.4)	59.4(3.3)	N
Post H.S.	73.7(1.1)	73.3(1.0)	77.8(1.1)*	71.9(0.9)	69.7(1.3)	65.9(2.0)†	70.7(1.5)	72.5(1.5)	L
Unknown	49.3(1.2)*	55.1(1.0)†	59.0(1.1)†	55.9(1.0)†	56.1(1.9)†	52.7(1.9)	55.2(1.9)	55.3(1.6)‡	Q
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	66.2(1.0)	60.0(0.8)†	61.1(1.5)†	57.5(1.5)†	60.0(1.1)†	61.6(1.6)‡	LQ
Non-Public	*****(0.0)	*****(0.0)	79.3(1.8)	73.9(1.7)	73.5(2.5)	74.8(3.0)	77.1(2.5)	77.1(3.4)	N
<b>QUARTILES</b>									
Upper	98.7(0.3)*	99.2(0.2)	99.6(0.2)	99.8(0.1)†	99.7(0.3)	99.7(0.3)	99.9(0.2)†	99.8(0.1)‡	LQ
Middle Two	66.4(1.0)*	72.8(0.5)†	80.6(0.6)†*	70.2(0.6)†	72.4(1.1)†	65.8(1.3)*	71.4(1.4)†	73.5(1.6)‡	Q
Lower	3.0(0.5)	3.8(0.4)	9.9(0.9)†	5.0(0.4)†	6.0(1.2)	4.3(1.1)	5.4(0.9)	6.3(1.7)	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 250

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	15.6(0.6)	14.6(0.6)	17.7(0.8)	17.2(0.6)	17.5(1.1)	18.4(1.0)	16.2(0.8)	16.5(1.2)	L
<b>GENDER</b>									
<b>Male</b>	12.0(0.6)	11.5(0.6)*	14.6(0.9)	15.9(0.7)†	15.8(1.4)	16.1(1.2)†	14.2(1.0)	15.2(1.2)‡	LQ
<b>Female</b>	19.2(0.8)	17.7(0.8)	20.7(1.0)	18.4(0.7)	19.1(1.2)	20.8(1.2)	18.2(1.1)	17.8(1.5)	N
<b>RACE/ETHNICITY</b>									
<b>White</b>	18.0(0.7)	17.4(0.7)	21.0(0.9)	20.9(0.7)†	20.3(1.5)	22.6(1.2)†	19.6(1.0)	19.7(1.5)	LQ
<b>Black</b>	1.6(0.5)	2.0(0.3)	4.1(0.6)†	4.5(0.5)†	5.6(1.2)†	5.2(1.5)	4.6(0.8)†	4.4(1.5)	L
<b>Hispanic</b>	*****(0.0)	2.6(0.5)	5.0(1.4)	4.3(0.6)	8.6(2.3)	5.8(2.0)	7.2(2.3)	6.4(1.6)‡	L
<b>Other</b>	8.7(2.1)	14.5(3.5)	18.7(4.3)	24.7(2.6)†	29.8(6.9)†	13.1(3.9)	12.9(2.6)	15.8(3.7)	Q
<b>GRADE</b>									
<b>Below Modal Grade</b>	2.7(0.3)*	2.7(0.4)*	4.1(0.5)	5.2(0.5)†	7.4(0.8)†	7.1(0.9)†	6.6(0.7)†	7.0(1.3)‡	L
<b>At Modal Grade</b>	19.6(0.7)	18.2(0.7)*	22.9(0.9)†	23.2(0.8)†	23.0(1.8)	26.5(1.4)†	23.3(1.2)	22.5(1.4)	LQ
<b>Above Modal Grade</b>	34.2(5.4)	22.3(6.7)	46.7(10.3)	53.2(8.7)	60.4(15.7)	41.6(26.2)	51.8(26.5)	***(***)	N
<b>REGION</b>									
<b>Northeast</b>	17.9(0.9)	17.7(1.0)	21.6(2.2)	19.8(1.3)	20.8(1.9)	23.9(1.9)†	20.2(2.1)	18.9(2.1)	N
<b>Southeast</b>	10.2(1.1)	9.9(0.8)	15.3(1.5)†	13.8(0.9)	14.7(1.4)	12.8(2.7)	11.7(1.6)	15.8(2.8)	L
<b>Central</b>	19.7(0.9)	17.2(1.2)	17.9(1.1)	19.2(1.3)	20.7(3.2)	19.3(2.0)	17.6(1.3)	18.3(2.4)	N
<b>West</b>	13.0(1.4)	12.7(1.2)	16.4(1.5)	15.9(1.0)	14.5(1.1)	18.1(2.1)	15.6(1.9)	13.5(1.7)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	6.1(0.8)	5.2(0.7)	6.7(1.0)	6.6(0.7)	6.3(2.1)	9.1(2.2)	7.8(2.6)	2.8(1.8)	N
<b>Graduated H.S.</b>	13.7(0.8)	14.0(0.9)	15.0(1.1)	14.3(0.9)	16.8(2.0)	17.2(1.4)	13.0(2.0)	13.4(2.0)	N
<b>Post H.S.</b>	26.1(1.1)	22.3(0.9)	25.9(1.1)	26.3(0.8)	22.8(1.6)	24.3(1.7)	22.2(1.3)	23.3(1.8)	N
<b>Unknown</b>	9.6(0.5)	9.7(0.6)	11.0(0.8)	11.8(0.6)†	12.3(1.3)	13.2(1.5)	11.4(1.0)	10.5(1.4)	L
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	*****(0.0)	16.7(0.9)	16.3(0.6)	16.6(0.9)	17.2(1.0)	15.3(0.9)	15.7(1.3)	N
<b>Non-Public</b>	*****(0.0)	*****(0.0)	25.6(1.7)	23.6(1.7)	23.6(3.5)	32.4(4.3)	22.6(2.2)	23.6(2.8)	N
<b>QUARTILES</b>									
<b>Upper</b>	52.6(0.9)	50.5(1.6)*	58.1(1.7)†	61.0(1.0)†	63.1(3.2)†	66.0(1.9)†	59.4(2.2)†	59.6(3.0)‡	LQ
<b>Middle Two</b>	5.0(0.3)	3.9(0.3)	6.3(0.4)†*	3.6(0.3)†	3.3(0.6)	3.8(0.5)	2.7(0.4)†	3.2(0.6)‡	L
<b>Lower</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)*	0.0(0.0)	0.0(0.2)	0.0(0.0)	0.0(0.0)	0.1(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 300

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.9(0.1)	0.6(0.1)	0.6(0.1)	1.0(0.1)	1.4(0.3)	1.7(0.3)	0.7(0.2)	0.7(0.3)	N
<b>GENDER</b>									
<b>Male</b>	0.6(0.2)	0.3(0.1)	0.4(0.1)	0.8(0.2)	1.1(0.4)	1.4(0.3)	0.5(0.2)	0.7(0.4)	L
<b>Female</b>	1.3(0.2)	0.9(0.2)	0.8(0.1)	1.1(0.1)	1.6(0.4)	2.0(0.5)	0.8(0.3)	0.6(0.3)	N
<b>RACE/ETHNICITY</b>									
<b>White</b>	1.1(0.2)	0.7(0.1)	0.8(0.1)	1.2(0.2)	1.6(0.3)	2.2(0.4)	0.9(0.2)	0.8(0.3)	N
<b>Black</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.2(0.2)	0.3(0.2)	0.0(0.0)	0.1(0.2)	N
<b>Hispanic</b>	*****(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.0)	0.4(0.0)	0.2(0.3)	0.0(0.2)	0.1(0.0)	Q
<b>Other</b>	0.5(0.5)	0.9(0.9)	0.5(0.0)	1.9(0.6)	4.0(2.7)	0.7(0.8)	0.2(0.4)	0.7(0.0)	N
<b>GRADE</b>									
<b>Below Modal Grade</b>	0.0(0.0)	0.1(0.1)	0.1(0.0)	0.1(0.0)	0.3( 0.2)	0.3(0.2)	0.0(0.1)	0.1( 0.0)	N
<b>At Modal Grade</b>	1.2(0.2)	0.8(0.1)	0.8(0.1)	1.4(0.2)	1.8( 0.4)	2.7(0.5)†*	1.1(0.3)	0.9( 0.4)	N
<b>Above Modal Grade</b>	1.7(1.9)	0.7(1.2)	5.0(5.0)	8.3(3.3)	20.1(15.1)	3.1(0.0)	2.0(0.0)	***(***)	N
<b>REGION</b>									
<b>Northeast</b>	1.1(0.3)	0.9(0.3)	0.8(0.2)	1.4(0.3)	1.7(0.4)	2.7(0.7)	0.8(0.4)	1.0(0.5)	N
<b>Southeast</b>	0.4(0.2)	0.3(0.2)	0.6(0.3)	0.6(0.2)	0.8(0.4)	1.0(0.5)	0.5(0.4)	0.7(0.6)	N
<b>Central</b>	1.3(0.3)	0.7(0.2)	0.6(0.2)	1.1(0.2)	1.9(1.1)	1.6(0.5)	0.9(0.3)	0.7(0.3)	N
<b>West</b>	0.7(0.2)	0.4(0.2)	0.5(0.2)	0.8(0.2)	1.1(0.4)	1.6(0.4)	0.5(0.3)	0.4(0.2)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	0.2(0.1)	0.1(0.1)	0.1(0.1)	0.2(0.6)	0.0(0.0)	0.5(0.7)	0.0(0.0)	0.0(0.0)	N
<b>Graduated H.S.</b>	0.6(0.2)	0.5(0.2)	0.4(0.1)	0.6(0.2)	0.9(0.8)	1.3(0.7)	0.6(0.4)	0.6(0.3)	N
<b>Post H.S.</b>	2.0(0.3)	1.2(0.2)	1.1(0.2)	2.0(0.3)	2.2(0.7)	2.7(0.6)	1.1(0.3)	1.1(0.5)	N
<b>Unknown</b>	0.4(0.1)	0.2(0.1)	0.3(0.1)	0.4(0.1)	0.6(0.3)	0.8(0.4)	0.2(0.1)	0.2(0.2)	N
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	******(0.0)	0.6(0.1)	0.9(0.1)	1.2(0.3)	1.6(0.3)†	0.6(0.2)	0.6(0.3)	Q
<b>Non-Public</b>	*****(0.0)	******(0.0)	1.1(0.5)	1.4(0.4)	2.4(1.1)	2.6(1.1)	1.0(0.6)	0.8(0.5)	N
<b>QUARTILES</b>									
<b>Upper</b>	3.7(0.5)	2.4(0.3)	2.5(0.4)	3.9(0.5)	5.4(1.3)	6.7(1.2)	2.7(0.7)	2.6(1.0)	N
<b>Middle Two</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Lower</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 9

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 350

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
<b>GENDER</b>									
<b>Male</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Female</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.1(0.1)	0.0(0.0)	0.0(0.0)	N
<b>RACE/ETHNICITY</b>									
<b>White</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
<b>Black</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Hispanic</b>	*****(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Other</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>GRADE N</b>									
<b>Below Modal Grade</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>At Modal Grade</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.1(0.1)	0.0(0.0)	0.0(0.0)	N
<b>Above Modal Grade</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.5(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	***(***)	N
<b>REGION</b>									
<b>Northeast</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
<b>Southeast</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
<b>Central</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>West</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Graduated H.S.</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Post H.S.</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.1(0.1)	0.0(0.0)	0.0(0.0)	N
<b>Unknown</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	*****(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
<b>Non-Public</b>	*****(0.0)	*****(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>QUARTILES</b>									
<b>Upper</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.1(0.2)	0.0(0.0)	0.0(0.0)	N
<b>Middle Two</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Lower</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 150

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	99.8(0.0)	99.7(0.1)	99.9(0.1)*	99.8(0.0)	99.9(0.1)	99.8(0.1)	99.5(0.3)	99.3(0.2)†	L
<b>GENDER</b>									
<b>Male</b>	99.6(0.1)	99.6(0.1)	99.8(0.1)	99.7(0.1)	99.7(0.2)	99.7(0.2)	99.2(0.4)	99.1(0.3)	Q
<b>Female</b>	99.9(0.1)	99.9(0.1)	99.9(0.0)	99.9(0.1)	100.0(0.0)	99.9(0.1)	99.8(0.2)	99.6(0.2)	L
<b>RACE/ETHNICITY</b>									
<b>White</b>	99.9(0.0)	99.9(0.0)	100.0(0.0)	99.9(0.0)	99.9(0.1)	99.9(0.1)	99.8(0.1)	99.6(0.2)‡	L
<b>Black</b>	98.6(0.3)	98.4(0.3)	99.3(0.3)	99.4(0.2)	99.8(0.3)†	99.4(0.5)	98.7(1.0)	98.6(1.0)	LQ
<b>Hispanic</b>	*****(0.0)	99.6(0.3)	99.7(0.3)	99.5(0.4)	99.2(0.8)	99.1(0.5)	98.1(2.2)	98.7(0.9)	Q
<b>Other</b>	99.8(0.3)	99.5(0.0)	99.9(0.4)	99.8(0.0)	100.0(0.0)	100.0(0.0)	99.8(0.0)	99.1(1.6)	L
<b>GRADE</b>									
<b>Below Modal Grade</b>	99.2(0.2)	99.0(0.2)	99.6(0.2)	99.5(0.1)	99.7(0.2)	99.5(0.3)	98.9(0.6)	98.8(0.4)	LQ
<b>At Modal Grade</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.1)	99.8(0.1)	L
<b>Above Modal Grade</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	***(***)	N
<b>REGION</b>									
<b>Northeast</b>	99.9(0.1)	99.8(0.1)	99.9(0.1)	99.9(0.1)	99.9(0.2)	99.9(0.1)	99.4(0.8)	99.7(0.3)	LQ
<b>Southeast</b>	99.4(0.2)	99.6(0.1)	99.7(0.1)	99.8(0.1)	99.9(0.0)†	99.6(0.3)	99.1(0.6)	99.5(0.4)	LQ
<b>Central</b>	99.9(0.1)	99.8(0.1)	100.0(0.1)	99.9(0.1)	99.9(0.0)	99.9(0.1)	99.9(0.0)	99.2(0.6)	N
<b>West</b>	99.8(0.1)	99.6(0.2)	99.9(0.1)	99.7(0.1)	99.8(0.3)	99.7(0.2)	99.5(0.3)	99.1(0.4)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	99.5(0.2)	99.4(0.2)	99.7(0.2)	99.5(0.2)	99.9(0.0)	99.5(0.4)	99.4(0.0)	98.8(1.3)	Q
<b>Graduated H.S.</b>	99.9(0.0)	99.8(0.1)	99.9(0.0)	99.8(0.1)	99.8(0.2)	99.9(0.2)	99.4(0.6)	99.6(0.4)	L
<b>Post H.S.</b>	100.0(0.0)	99.9(0.0)	100.0(0.0)	99.9(0.0)	100.0(0.1)	99.9(0.1)	99.8(0.2)	99.8(0.1)	L
<b>Unknown</b>	99.2(0.2)	99.1(0.3)	99.3(0.4)	99.5(0.2)	99.5(0.5)	99.1(0.6)	98.2(1.2)	97.6(1.3)	Q
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	*****(0.0)	99.9(0.1)	99.8(0.1)	99.8(0.1)	99.7(0.1)	99.4(0.3)	99.4(0.2)	N
<b>Non-Public</b>	*****(0.0)	*****(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	98.7(0.8)	N
<b>QUARTILES</b>									
<b>Upper</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	LQ
<b>Middle Two</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	L
<b>Lower</b>	99.0(0.2)	98.8(0.2)	99.5(0.2)*	99.3(0.2)	99.4(0.4)	99.1(0.4)	98.0(1.0)	97.4(0.7)†	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 200

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	93.0(0.5)	93.2(0.4)	94.8(0.4)†*	93.9(0.3)*	94.9(0.6)*	93.8(0.6)	92.7(0.7)	91.7(0.6)	Q
<b>GENDER</b>									
Male	90.7(0.7)	90.9(0.5)	93.4(0.6)†*	92.2(0.4)*	92.8(1.0)	91.4(0.9)	90.4(1.1)	88.8(1.1)	Q
Female	95.2(0.4)	95.5(0.4)	96.1(0.4)	95.8(0.3)	96.9(0.6)	96.3(0.6)	95.0(0.7)	94.9(0.6)	Q
<b>RACE/ETHNICITY</b>									
White	96.2(0.3)	96.4(0.2)	97.1(0.2)*	96.2(0.3)	96.0(0.6)	96.0(0.6)	95.9(0.6)	95.0(0.7)	LQ
Black	74.2(1.7)	76.9(1.3)	84.1(1.7)†	85.5(1.0)†	91.3(2.2)†*	87.7(2.3)†	82.0(2.7)	80.6(2.3)	LQ
Hispanic	*****(0.0)	81.3(2.3)	86.8(2.4)	86.7(1.5)	87.4(2.6)	85.8(2.4)	83.4(3.5)	82.4(2.7)	Q
Other	92.3(2.2)	93.3(2.0)	93.4(2.6)	95.1(1.3)	99.0(1.4)	93.3(4.2)	94.8(2.0)	90.8(4.9)	N
<b>GRADE</b>									
Below Modal Grade	81.3(1.1)*	82.1(0.9)*	87.3(1.2)†	87.0(0.6)†	90.0(1.1)†	88.3(1.3)†	85.7(1.6)	86.2(1.2)‡	LQ
At Modal Grade	97.4(0.3)	97.4(0.2)	97.7(0.3)*	97.7(0.2)*	97.9(0.5)	97.4(0.3)	98.0(0.3)*	96.1(0.5)‡	Q
Above Modal Grade	98.6(1.2)	96.2(3.7)*	98.8(2.3)*	100.0(0.0)	96.7(6.2)*	100.0(0.0)	100.0(0.0)	***(***)	N
<b>REGION</b>									
Northeast	95.2(0.8)	94.0(0.7)	95.6(0.8)	95.4(0.3)	95.1(1.3)	95.1(1.1)	92.8(2.0)	95.9(0.7)	N
Southeast	87.2(1.4)	89.9(1.0)	92.0(0.8)†	92.8(0.6)†	95.9(1.1)†*	92.8(2.0)	90.1(1.9)	90.2(1.3)	LQ
Central	95.4(0.7)	95.8(0.4)	97.1(0.6)	95.5(0.5)	94.6(1.2)	95.0(0.8)	94.7(1.5)	92.3(1.7)	LQ
West	93.4(0.8)	92.4(1.0)	94.2(1.1)	92.6(0.7)	94.0(1.2)	92.7(0.9)	92.9(0.9)	89.6(1.6)‡	N
<b>PARENTS' EDUCATION LEVEL</b>									
Less Than H.S.	86.6(1.3)	85.7(1.0)	87.8(1.1)	88.0(0.9)	93.3(2.0)†*	88.3(2.6)	87.8(2.9)	83.2(2.9)	Q
Graduated H.S.	94.9(0.5)*	94.6(0.4)*	95.1(0.5)*	93.9(0.5)	95.0(0.8)*	93.7(0.9)	91.1(1.6)	90.9(1.2)‡	LQ
Post H.S.	98.0(0.2)*	97.7(0.3)*	98.2(0.3)*	97.1(0.2)†	96.5(0.6)	96.6(0.6)	96.1(0.5)†	95.8(0.6)‡	L
Unknown	82.2(1.2)	83.3(1.0)	83.9(1.5)	84.3(1.0)	87.5(2.9)	86.3(2.9)	81.1(3.1)	78.3(3.7)	Q
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	94.3(0.5)*	93.4(0.3)*	94.5(0.6)*	93.2(0.7)	91.8(0.8)†	91.1(0.7)‡	LQ
Non-Public	*****(0.0)	*****(0.0)	98.5(0.5)	98.3(0.4)	97.8(1.0)	98.6(0.5)	98.4(0.8)	96.8(1.4)	N
<b>QUARTILES</b>									
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	99.8(0.1)	100.0(0.0)	99.8(0.1)	99.9(0.1)	99.9(0.1)	99.9(0.1)	99.9(0.1)	99.7(0.2)	N
Lower	72.3(1.2)	72.7(1.0)	79.5(1.1)†*	75.2(0.7)*	79.6(1.9)†*	75.6(1.9)*	71.0(2.3)	67.5(1.7)‡	Q

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 250

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	57.8(1.1)	58.6(1.0)	60.7(1.1)	59.0(0.6)	58.7(1.3)	58.7(1.0)	61.6(1.4)	60.4(1.2)	N
<b>GENDER</b>									
<b>Male</b>	51.6(1.2)	51.7(1.1)	55.9(1.2)	54.0(0.8)	52.3(1.9)	52.4(1.5)	55.5(2.0)	53.3(1.9)	N
<b>Female</b>	64.0(1.1)	65.5(1.2)	65.4(1.1)	64.0(0.7)	65.0(1.4)	65.0(1.5)	67.5(1.4)	67.9(1.7)	N
<b>RACE/ETHNICITY</b>									
<b>White</b>	64.2(0.9)	65.5(0.9)	67.8(0.8)†	65.3(0.7)	63.7(1.5)	64.8(1.2)	68.5(1.4)	68.1(1.3)‡	N
<b>Black</b>	21.1(1.2)*	24.8(1.6)*	30.1(2.0)†	34.6(1.2)†	40.2(2.3)†	41.7(3.5)†	38.4(2.7)†	35.6(3.5)‡	LQ
<b>Hispanic</b>	*****(0.0)	32.0(3.6)	35.4(2.6)	39.0(2.1)	38.0(4.4)	37.2(2.9)	40.9(5.1)	33.9(3.9)	N
<b>Other</b>	51.3(4.6)	55.8(4.4)	55.5(7.5)	63.8(3.8)	66.9(6.1)	52.6(7.9)	68.2(4.0)†	61.9(5.5)	L
<b>GRADE</b>									
<b>Below Modal Grade</b>	27.1(1.1)*	31.2(1.2)*	38.7(1.7)†	38.5(1.0)†*	41.0(1.8)†	42.9(1.7)†	44.3(2.2)†	45.8(2.2)‡	L
<b>At Modal Grade</b>	69.4(1.0)	68.9(0.9)	69.6(1.1)	70.1(0.6)	70.0(1.5)	68.8(1.2)	74.3(1.5)†	71.6(1.0)	L
<b>Above Modal Grade</b>	84.2(2.8)	79.4(5.1)*	79.0(6.3)*	84.1(6.7)*	64.2(9.0)*	83.0(13.1)*	96.7(3.1)†*	***(***)	N
<b>REGION</b>									
<b>Northeast</b>	64.6(2.3)	62.1(2.2)	62.6(2.1)	63.2(1.1)*	59.2(2.5)*	60.8(2.6)*	65.9(3.1)	71.2(2.6)	Q
<b>Southeast</b>	46.3(2.0)	50.8(1.7)	54.5(1.9)†	57.9(1.7)†	57.7(3.5)†	57.3(2.4)†	55.7(3.1)	54.6(2.8)‡	LQ
<b>Central</b>	63.3(2.3)	64.7(1.8)	67.2(2.0)	60.8(1.4)	57.9(2.3)	59.4(2.4)	65.5(2.9)	62.8(3.9)	N
<b>West</b>	55.7(1.7)	55.2(2.1)	58.2(2.2)	55.3(0.8)	59.9(2.8)	57.5(2.0)	59.5(2.2)	55.2(2.4)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	37.9(1.5)	39.2(1.6)	37.3(1.5)	39.7(1.4)	44.9(3.5)	40.6(3.5)	38.7(3.3)	37.9(3.1)	N
<b>Graduated H.S.</b>	58.7(1.2)	57.0(1.1)	55.3(1.2)	55.6(0.9)	54.5(1.9)	52.6(1.7)†	54.5(2.0)	53.7(1.7)‡	L
<b>Post H.S.</b>	75.1(0.9)	74.3(1.0)	74.9(0.9)	70.6(0.8)†	67.5(2.2)†	70.4(1.3)†	71.8(1.7)	71.2(1.7)‡	L
<b>Unknown</b>	32.1(1.4)	34.4(1.3)	31.5(2.4)	36.1(1.8)	36.5(4.3)	35.8(2.7)	37.2(2.8)	31.8(3.2)	—
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	*****(0.0)	58.9(1.2)	57.0(0.7)	57.1(1.4)	56.7(1.2)	59.0(1.5)	58.1(1.4)	N
<b>Non-Public</b>	*****(0.0)	*****(0.0)	74.7(1.9)	74.2(1.9)	71.7(3.5)	72.9(4.7)	78.0(2.2)	78.2(3.3)	N
<b>QUARTILES</b>									
<b>Upper</b>	98.6(0.2)	99.6(0.1)†	97.7(0.2)*	99.0(0.2)	99.0(0.6)	99.2(0.3)	99.4(0.4)	99.5(0.3)‡	L
<b>Middle Two</b>	64.4(0.9)	66.6(0.9)	68.7(0.5)†	65.7(0.6)	65.7(1.8)	65.4(1.3)	70.7(1.4)†	68.8(1.6)‡	L
<b>Lower</b>	3.9(0.4)	1.4(0.2)†*	7.9(0.7)†*	4.3(0.4)	4.5(1.1)	4.6(0.9)	5.7(1.1)	4.3(0.7)	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 300

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	9.8(0.5)*	10.2(0.5)*	11.3(0.5)*	11.0(0.4)*	10.9(0.8)*	11.0(0.6)*	15.3(0.9)†	14.1(0.8)‡	LQ
<b>GENDER</b>									
Male	7.3(0.5)*	7.0(0.4)*	9.1(0.7)	9.0(0.4)†	8.6(0.9)	7.6(0.8)	12.8(1.1)†	10.1(0.7)‡	L
Female	12.3(0.6)*	13.5(0.7)*	13.5(0.6)*	13.2(0.5)*	13.2(0.9)*	14.5(0.9)*	17.7(1.1)†	18.4(1.1)‡	LQ
<b>RACE/ETHNICITY</b>									
White	11.3(0.5)*	12.1(0.5)*	13.6(0.6)†*	13.1(0.5)*	12.4(0.9)*	13.3(0.9)*	18.1(1.1)†	17.2(1.0)‡	LQ
Black	0.8(0.2)	1.5(0.3)	1.8(0.5)	2.8(0.5)†	4.6(1.2)†	4.6(0.8)†	5.7(1.4)†	3.9(1.2)‡	L
Hispanic	*****(0.0)	2.2(1.0)	2.3(0.6)	4.1(0.7)	4.4(1.9)	3.9(1.2)	6.0(1.9)	4.3(1.8)	L
Other	8.5(2.1)	11.2(2.3)	9.0(3.2)	12.2(2.9)	18.4(5.1)	8.3(3.2)	20.8(4.9)	15.9(4.1)	L
<b>GRADE</b>									
Below Modal Grade	1.4(0.3)*	2.1(0.3)*	3.6(0.5)†*	3.6(0.4)†*	4.1(0.9)†	4.8(0.5)†	6.4(0.9)†	6.9(0.8)‡	L
At Modal Grade	12.9(0.6)*	13.2(0.6)*	14.4(0.7)*	15.0(0.5)†*	15.0(1.1)*	14.9(1.0)*	20.9(1.2)†	19.8(1.0)‡	LQ
Above Modal Grade	22.4(3.9)	27.7(6.2)*	19.7(9.0)*	41.9(9.9)*	28.8(9.4)*	39.6(24.9)*	72.3(9.9)†*	***(***)	N
<b>REGION</b>									
Northeast	12.5(1.1)*	11.1(1.3)*	11.8(1.1)*	12.5(0.4)*	12.5(1.7)*	12.1(1.4)*	19.7(2.4)†	20.5(1.7)‡	LQ
Southeast	6.3(0.6)	8.1(0.7)	9.0(1.1)	11.8(1.2)†	10.8(1.8)	10.7(1.4)†	13.0(1.5)†	10.9(2.0)‡	L
Central	11.6(1.0)	12.4(0.9)	14.3(0.7)	10.5(0.6)	9.1(1.3)	10.0(1.6)	16.6(2.3)	14.2(1.7)	N
West	8.2(0.7)	8.9(0.7)	10.0(1.0)	9.5(0.8)	11.4(1.4)	11.3(1.2)	12.5(1.2)†	12.1(1.5)‡	L
<b>PARENTS' EDUCATION LEVEL</b>									
Less Than H.S.	3.0(0.5)	3.1(0.4)	2.6(0.6)	3.5(0.5)	4.9(1.7)	4.0(1.5)	3.4(2.6)	3.2(1.7)	N
Graduated H.S.	7.7(0.5)	7.8(0.5)	6.5(0.4)	7.5(0.6)	6.7(1.2)	7.1(0.9)	9.1(1.1)	8.4(1.3)	N
Post H.S.	17.0(0.8)	17.2(0.7)	18.0(0.8)	17.0(0.6)*	15.5(1.3)*	16.3(1.3)	21.4(1.5)	20.0(0.9)‡	LQ
Unknown	2.7(0.3)	2.8(0.5)	2.1(0.5)	2.9(0.6)	4.6(1.2)	3.3(1.2)	4.5(1.4)	3.3(1.5)	—
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	10.5(0.5)	10.0(0.4)*	10.1(0.8)	10.1(0.7)	13.6(1.0)†	12.6(0.8)‡	LQ
Non-Public	*****(0.0)	*****(0.0)	17.4(1.5)*	19.0(1.6)	17.3(2.1)	17.2(3.0)	26.1(3.3)	26.6(3.2)‡	LQ
<b>QUARTILES</b>									
Upper	35.3(0.8)*	39.4(1.1)†*	38.1(1.2)*	40.7(1.0)†*	39.8(2.4)*	40.9(2.0)*	54.0(2.4)†	50.2(1.9)‡	LQ
Middle Two	1.9(0.2)	0.8(0.1)†*	3.6(0.3)†	1.7(0.2)*	1.9(0.4)	1.6(0.4)*	3.6(0.6)	3.2(0.5)‡	L
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 13

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 350

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.1(0.0)	0.2(0.0)	0.2(0.0)	0.3(0.1)	0.2(0.1)	0.4(0.1)	0.6(0.3)	0.5(0.1)†	L
<b>GENDER</b>									
<b>Male</b>	0.1(0.0)	0.1(0.1)	0.2(0.1)	0.2(0.1)	0.1(0.1)	0.2(0.1)	0.4(0.3)	0.3(0.2)	N
<b>Female</b>	0.2(0.1)	0.3(0.1)	0.3(0.1)	0.4(0.1)	0.4(0.2)	0.5(0.2)	0.8(0.3)	0.7(0.2)†	L
<b>RACE/ETHNICITY</b>									
<b>White</b>	0.2(0.1)	0.3(0.1)	0.3(0.1)	0.4(0.1)	0.3(0.1)	0.5(0.2)	0.8(0.3)	0.6(0.2)†	L
<b>Black</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.3)	0.1(0.3)	0.1(0.2)	0.0(0.1)	N
<b>Hispanic</b>	*****(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.0(0.0)	0.1(0.2)	0.0(0.0)	0.1(0.2)	N
<b>Other</b>	0.2(0.0)	0.3(0.7)	0.3(0.8)	0.8(1.2)	1.2(0.0)	0.2(0.0)	1.7(0.0)	0.3(0.6)	N
<b>GRADE</b>									
<b>Below Modal Grade</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.0)†	0.2(0.0)†	0.1(0.1)	L
<b>At Modal Grade</b>	0.2(0.1)	0.3(0.1)	0.3(0.1)	0.4(0.1)	0.3(0.1)	0.5(0.2)	0.8(0.3)	0.7(0.3)†	L
<b>Above Modal Grade</b>	0.4(0.4)	1.9(1.3)*	0.7(1.4)*	11.6(8.6)*	2.5(0.0)	3.6(7.9)*	9.9(9.3)*	***(***)	N
<b>REGION</b>									
<b>Northeast</b>	0.2(0.1)	0.3(0.1)	0.2(0.1)	0.3(0.1)	0.4(0.4)	0.5(0.3)	1.3(0.8)	1.1(0.4)†	L
<b>Southeast</b>	0.1(0.1)	0.1(0.1)	0.2(0.1)	0.4(0.1)	0.3(0.3)	0.4(0.2)	0.5(0.6)	0.3(0.3)	N
<b>Central</b>	0.2(0.1)	0.3(0.1)	0.3(0.1)	0.2(0.1)	0.0(0.0)	0.3(0.2)	0.4(0.4)	0.3(0.2)	N
<b>West</b>	0.1(0.0)	0.2(0.1)	0.2(0.1)	0.3(0.1)	0.2(0.2)	0.3(0.2)	0.5(0.4)	0.3(0.2)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	0.0(0.0)*	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.0(0.0)	0.0(0.0)	0.1(0.0)	0.1(0.0)†	L
<b>Graduated H.S.</b>	0.1(0.0)	0.1(0.1)	0.0(0.0)	0.1(0.1)	0.1(0.1)	0.1(0.1)	0.1(0.1)	0.2(0.3)	N
<b>Post H.S.</b>	0.3(0.1)	0.5(0.1)	0.4(0.1)	0.5(0.1)	0.4(0.1)	0.7(0.2)	1.0(0.4)	0.7(0.2)	L
<b>Unknown</b>	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.1(0.0)	0.1(0.0)	0.1(0.0)	0.1(0.3)	0.0(0.0)	N
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	*****(0.0)	0.2(0.0)	0.3(0.1)	0.2(0.1)	0.3(0.1)	0.5(0.3)	0.3(0.1)	N
<b>Non-Public</b>	*****(0.0)	*****(0.0)	0.5(0.2)	0.4(0.2)	0.3(0.0)	0.8(0.5)	1.2(0.8)	1.5(1.0)	N
<b>QUARTILES</b>									
<b>Upper</b>	0.6(0.2)	0.9(0.2)	0.9(0.2)	1.1(0.3)	0.9(0.3)	1.5(0.4)	2.5(1.0)	1.8(0.5)†	L
<b>Middle Two</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>Lower</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\* Sample size insufficient to permit a reliable estimate.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 150

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	99.6(0.1)	99.7(0.1)	99.9(0.1)†	100.0(0.0)†	100.0(0.0)†	99.9(0.1)	99.8(0.1)	99.8(0.1)	LQ
<b>GENDER</b>									
Male	99.4(0.1)	99.5(0.2)	99.8(0.1)†	99.9(0.0)†	100.0(0.0)†	99.8(0.3)	99.7(0.2)	99.7(0.2)	Q
Female	99.8(0.1)	99.8(0.1)	99.9(0.1)	99.9(0.1)	100.0(0.0)	100.0(0.1)	99.9(0.0)	99.9(0.1)	N
<b>RACE/ETHNICITY</b>									
White	99.9(0.0)	99.9(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)†	100.0(0.0)	99.9(0.0)	100.0(0.1)	N
Black	97.6(0.4)*	97.7(0.8)	99.0(0.3)†	99.9(0.1)†	100.0(0.0)†	99.6(0.8)	99.1(0.7)	99.5(0.6)‡	LQ
Hispanic	*****(0.0)	99.3(0.4)	99.8(0.3)	99.8(0.2)	99.9(0.0)	99.7(0.0)	99.8(0.0)	99.0(1.3)	N
Other	99.6(0.7)	100.0(0.0)	99.8(0.7)	99.3(1.2)	100.0(0.0)	99.9(0.9)	99.6(1.0)	99.8(0.0)	N
<b>GRADE</b>									
Below Modal Grade	97.7(0.4)*	98.0(0.6)	99.1(0.3)	99.8(0.1)†	100.0(0.0)†	99.6(0.5)†	99.3(0.4)†	99.4(0.4)‡	LQ
At Modal Grade	99.9(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.0)†	100.0(0.0)	100.0(0.0)	99.9(0.1)	N
Above Modal Grade	100.0(0.1)	99.9(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.0)	100.0(0.0)	N
<b>REGION</b>									
Northeast	99.8(0.1)	99.7(0.2)	99.9(0.0)	100.0(0.1)*	100.0(0.0)	99.9(0.0)	99.7(0.0)	99.8(0.0)	Q
Southeast	99.1(0.2)*	99.5(0.1)	99.8(0.1)†	99.8(0.2)	100.0(0.0)†	99.8(0.2)	99.7(0.3)	99.9(0.2)‡	LQ
Central	99.8(0.1)	99.8(0.1)	99.9(0.1)	100.0(0.0)	100.0(0.0)	99.9(0.3)	99.8(0.0)	99.8(0.3)	N
West	99.7(0.1)	99.5(0.2)	99.9(0.1)	99.9(0.0)	100.0(0.0)	99.9(0.2)	99.8(0.1)	99.7(0.4)	N
<b>PARENTS' EDUCATION LEVEL</b>									
Less Than H.S.	99.2(0.2)	99.3(0.2)	99.7(0.1)	99.9(0.1)†	100.0(0.0)†	99.9(0.0)†	99.8(0.3)	99.3(0.8)	N
Graduated H.S.	99.8(0.1)	99.7(0.2)	99.8(0.1)	100.0(0.0)*	100.0(0.0)†	100.0(0.2)	99.9(0.2)	99.8(0.0)	N
Post H.S.	100.0(0.0)	99.9(0.1)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.1)	99.8(0.0)†	100.0(0.1)	N
Unknown	98.0(0.5)	97.7(0.9)	98.9(0.6)	99.8(0.2)†	100.0(0.0)†	98.5(3.0)	99.5(0.8)	98.8(1.4)	N
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	99.9(0.1)	99.9(0.0)	100.0(0.0)	99.9(0.1)	99.8(0.1)	99.8(0.2)	N
Non-Public	*****(0.0)	*****(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.0)	100.0(0.0)	N
<b>QUARTILES</b>									
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	98.4(0.2)	98.6(0.4)	99.4(0.2)†	99.8(0.1)†	100.0(0.0)†	99.5(0.6)	99.1(0.5)	99.2(0.6)	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 200

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	96.0(0.3)	96.4(0.3)	97.2(0.3)†	98.3(0.1)†*	98.9(0.3)†*	98.1(0.3)†	97.1(0.4)	96.8(0.5)	LQ
<b>GENDER</b>									
Male	94.7(0.4)	95.3(0.4)	96.3(0.5)	97.6(0.2)†	98.5(0.5)†*	97.0(0.6)†	96.3(0.7)	95.5(0.9)	LQ
Female	97.3(0.3)	97.5(0.4)	98.1(0.3)	99.0(0.1)†	99.3(0.3)†	99.2(0.3)†	97.9(0.4)	98.0(0.5)	LQ
<b>RACE/ETHNICITY</b>									
White	97.9(0.2)	98.6(0.1)†	99.1(0.1)†	99.0(0.1)†	99.3(0.3)†*	98.8(0.2)†	98.6(0.3)	98.1(0.4)	Q
Black	81.9(1.5)*	82.0(1.8)*	85.6(1.7)*	95.9(0.5)†	98.0(1.0)†	95.7(1.3)†	91.6(1.6)†	93.4(2.0)‡	LQ
Hispanic	*****(0.0)	88.7(2.4)	93.3(1.8)	95.6(0.7)†	96.3(2.4)	95.9(2.1)	93.4(2.3)	91.1(3.4)	Q
Other	95.2(1.7)	96.4(1.8)	97.9(1.5)	96.6(1.1)	98.5(1.6)	98.3(1.4)	95.1(2.0)	97.0(2.0)	N
<b>GRADE</b>									
Below Modal Grade	81.8(1.1)*	83.9(1.4)*	86.5(1.6)*	94.4(0.5)†	97.1(1.2)†	94.2(1.0)†	92.2(1.0)†	92.2(1.4)‡	LQ
At Modal Grade	98.2(0.2)	98.6(0.2)	98.9(0.2)	99.3(0.1)†	99.5(0.2)†	99.4(0.2)†	99.0(0.3)	98.8(0.3)	LQ
Above Modal Grade	99.0(0.2)	99.1(0.3)	99.3(0.2)	99.6(0.2)	99.6(0.4)	99.6(0.4)	98.6(1.1)	97.6(1.4)	—
<b>REGION</b>									
Northeast	97.3(0.4)	97.1(0.5)	97.5(0.5)	98.6(0.3)	99.3(0.5)†	98.9(0.5)	98.1(0.9)	97.1(0.8)	Q
Southeast	92.2(1.0)*	94.2(0.6)	95.6(1.0)	98.0(0.3)†	98.6(0.5)†	97.5(1.0)†	95.1(1.1)	96.8(1.0)‡	LQ
Central	97.4(0.4)	97.7(0.4)	97.8(0.6)	98.7(0.2)†	99.5(0.6)†	98.2(0.5)	98.7(0.6)	96.5(1.7)	—
West	96.1(0.6)	95.9(0.9)	97.6(0.5)	98.0(0.3)†	98.5(0.6)†	97.8(0.8)	96.6(0.8)	96.6(0.9)	Q
<b>PARENTS' EDUCATION LEVEL</b>									
Less Than H.S.	91.2(0.8)	92.3(0.8)	93.1(0.8)	96.5(0.4)†	97.6(1.2)†	96.3(1.8)	94.3(1.7)	94.3(2.1)	LQ
Graduated H.S.	96.7(0.3)	97.0(0.6)	97.0(0.4)	98.1(0.2)†	98.8(0.4)†	98.2(0.6)	96.8(0.7)	95.9(1.1)	Q
Post H.S.	99.1(0.1)	99.0(0.2)	99.2(0.2)	99.3(0.1)	99.6(0.2)*	99.2(0.3)	98.1(0.5)	98.4(0.4)	LQ
Unknown	88.0(1.6)	79.6(2.3)†	85.2(3.2)	92.8(1.4)	92.8(6.1)	84.6(4.5)	90.4(4.8)	82.2(5.3)	N
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	97.1(0.4)	98.1(0.1)†*	98.8(0.3)†*	98.0(0.3)	96.8(0.4)	96.6(0.5)	Q
Non-Public	*****(0.0)	*****(0.0)	99.0(0.4)	99.6(0.2)	99.8(0.1)	99.6(0.6)	99.3(0.7)	97.9(1.5)	N
<b>QUARTILES</b>									
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	84.1(0.8)	85.8(1.0)	89.0(1.0)†	93.2(0.5)†*	95.8(1.2)†*	92.4(1.2)†	88.3(1.5)	87.1(1.8)	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 250

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	78.6(0.9)	80.1(0.7)	80.7(0.9)	83.1(0.5)†	85.7(0.8)†*	84.1(1.0)†	82.5(0.8)†	80.8(1.0)	LQ
<b>GENDER</b>									
Male	74.4(1.0)	75.6(0.8)	77.9(1.0)	79.6(0.6)†	82.9(1.4)†*	79.7(1.4)†	78.4(1.2)	76.2(1.5)	LQ
Female	82.6(1.0)	84.3(0.9)	83.6(1.0)	86.8(0.6)†	88.2(1.1)†	88.6(1.0)†	86.8(1.1)†	85.6(1.2)	L
<b>RACE/ETHNICITY</b>									
White	83.7(0.7)	86.2(0.6)	86.9(0.6)†	88.0(0.5)†	88.7(0.9)†	88.3(1.1)†	88.0(0.9)†	86.2(1.1)	LQ
Black	40.1(1.6)*	43.0(1.6)*	44.0(2.0)*	65.7(1.2)†	75.8(2.4)†	69.1(2.8)†	61.4(2.3)†	65.7(4.1)‡	LQ
Hispanic	*****(0.0)	52.9(4.1)	62.2(3.1)	68.3(2.1)†	71.5(4.8)†	75.2(4.7)†	69.2(4.0)†	63.0(4.4)	LQ
Other	72.1(4.4)	70.4(4.8)	77.0(3.6)	77.8(2.6)	86.5(6.4)	83.0(4.5)	79.3(3.8)	77.2(6.7)	L
<b>GRADE</b>									
Below Modal Grade	40.0(1.7)*	44.3(1.9)*	45.6(2.4)*	60.2(1.2)†	66.5(2.5)†	63.5(2.5)†	62.8(1.9)†	60.5(2.4)‡	LQ
At Modal Grade	84.1(0.8)*	85.9(0.6)*	86.0(0.8)*	89.0(0.4)†	91.1(0.9)†	91.2(0.8)†	90.6(0.8)†	89.4(0.8)‡	L
Above Modal Grade	89.5(1.0)	90.1(1.0)	89.9(1.1)	92.0(0.8)	94.4(2.0)	93.4(1.8)	87.8(2.5)	87.8(3.3)	Q
<b>REGION</b>									
Northeast	82.4(2.0)	82.6(1.5)	80.9(1.9)	85.5(1.1)	88.5(1.9)	86.2(1.1)	86.1(2.0)	85.8(2.3)	L
Southeast	67.8(2.0)*	73.1(1.3)	76.2(2.3)†	80.1(1.1)†	82.6(2.1)†	80.8(2.0)†	74.4(2.5)	78.1(2.7)‡	LQ
Central	82.8(1.4)	84.9(1.2)	82.8(1.7)	84.6(1.1)	87.3(1.7)	86.9(1.6)	87.1(1.7)	80.2(3.1)	N
West	78.2(1.5)	77.2(1.7)	81.9(1.3)	83.4(0.8)†	84.4(1.6)†	82.6(2.4)	82.8(1.5)	79.9(1.7)	LQ
<b>PARENTS' EDUCATION LEVEL</b>									
Less Than H.S.	60.8(1.4)*	63.3(1.4)	63.4(1.8)	70.0(1.2)†	68.8(3.4)	71.2(2.9)†	69.1(3.1)	68.9(2.5)‡	L
Graduated H.S.	78.5(1.1)	79.3(0.9)	76.5(1.1)	79.7(0.8)	82.1(1.3)*	81.3(1.6)*	77.9(1.6)	74.0(2.0)‡	Q
Post H.S.	90.0(0.6)	89.7(0.6)	89.8(0.6)	90.6(0.4)	91.7(0.9)*	89.8(1.0)	87.9(1.0)	87.4(1.1)‡	Q
Unknown	61.4(4.3)	42.6(2.5)†	51.2(3.1)	56.7(2.3)	54.0(7.3)	47.8(5.2)	55.0(8.5)	44.3(8.0)	N
<b>TYPE OF SCHOOL</b>									
Public	*****(0.0)	*****(0.0)	79.9(1.0)	82.1(0.5)	84.6(0.8)†*	83.3(1.0)	81.3(0.8)	79.7(1.2)	Q
Non-Public	*****(0.0)	*****(0.0)	90.3(1.8)	92.3(1.3)	92.9(1.9)	95.0(1.9)	94.1(2.3)	90.0(2.9)	N
<b>QUARTILES</b>									
Upper	99.8(0.1)	100.0(0.0)	99.7(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	L
Middle Two	93.7(0.5)	96.1(0.4)†	93.5(0.4)	96.9(0.2)†	98.0(0.4)†	97.4(0.6)†	97.1(0.6)†	95.8(0.8)‡	LQ
Lower	27.1(1.0)	28.2(1.1)	36.0(1.4)†	38.7(0.8)†*	46.6(2.7)†*	41.7(3.4)†	35.6(2.1)†	31.7(1.9)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 300

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	39.0(1.0)	38.7(0.8)	37.8(1.1)	40.3(0.8)	40.9(1.5)	41.4(1.0)	43.2(1.1)†	41.0(1.2)	L
<b>GENDER</b>									
<b>Male</b>	33.9(1.1)	33.7(1.0)	35.0(1.3)	35.4(0.8)	37.1(2.3)	36.1(1.5)	38.4(1.6)	35.6(1.9)	L
<b>Female</b>	44.0(1.2)	43.6(0.9)	40.7(1.2)*	45.0(0.9)	44.4(2.0)	46.8(1.3)	48.5(1.5)	46.5(1.5)	LQ
<b>RACE/ETHNICITY</b>									
<b>White</b>	43.2(0.9)	43.9(0.8)	43.3(1.1)	46.3(0.9)	45.4(1.6)	47.5(1.2)†	50.1(1.4)†	47.7(1.4)#	L
<b>Black</b>	7.7(0.9)*	8.1(0.7)*	7.1(0.8)*	16.2(0.9)†	24.9(3.1)†	19.7(1.8)†	16.9(2.5)†	21.5(3.7)#	L
<b>Hispanic</b>	*****(0.0)	12.6(2.7)	16.5(2.1)	21.2(2.3)	23.3(3.7)	27.1(3.3)†	27.3(3.2)†	20.1(3.0)	L
<b>Other</b>	31.7(3.4)	28.1(4.1)	32.3(3.7)	38.3(3.3)	40.3(5.7)	40.4(6.1)	42.5(6.4)	39.2(7.8)	L
<b>GRADE</b>									
<b>Below Modal Grade</b>	7.4(0.8)*	7.7(0.8)*	7.8(1.0)*	13.5(0.9)†	15.7(2.5)†	14.8(1.7)†	17.8(1.7)†	17.1(1.9)#	L
<b>At Modal Grade</b>	42.6(1.0)*	43.0(0.8)*	41.6(1.2)*	46.0(0.8)	47.2(1.8)	49.4(1.1)†	53.3(1.5)†	49.9(1.4)#	LQ
<b>Above Modal Grade</b>	53.3(1.8)	52.4(1.1)	51.3(2.2)	55.5(1.5)	57.1(4.6)	61.9(3.6)	53.5(3.8)	60.2(5.2)	L
<b>REGION</b>									
<b>Northeast</b>	44.3(2.6)	41.6(1.4)	38.0(2.6)	42.9(2.3)	46.9(3.1)	46.6(2.2)	51.0(3.1)	49.0(3.7)	LQ
<b>Southeast</b>	28.2(1.6)	31.8(1.4)	33.8(1.8)	36.4(1.6)†	36.4(2.5)†	36.9(2.7)†	33.5(2.3)	35.7(2.7)#	LQ
<b>Central</b>	43.2(1.9)	43.6(1.5)	39.0(2.4)	41.4(1.6)	40.2(4.2)	44.5(2.4)	45.4(2.7)	38.7(3.0)	N
<b>West</b>	37.2(1.5)	35.4(1.5)	39.6(2.2)	40.4(1.2)	40.3(2.4)	38.0(2.8)	44.0(2.5)	41.7(2.7)	L
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	19.5(1.0)	19.0(1.2)	17.0(1.3)	21.1(1.2)	17.6(3.9)	20.4(2.6)	26.0(3.4)	21.7(3.9)	N
<b>Graduated H.S.</b>	35.9(1.1)*	33.2(0.8)	29.3(0.9)†	31.6(0.9)†	30.9(1.7)	32.3(1.6)	33.8(2.2)	28.9(2.1)#	L
<b>Post H.S.</b>	53.4(1.1)	52.1(1.0)	50.2(1.1)	53.0(1.0)	50.8(1.9)	51.1(1.2)	51.5(1.4)	50.4(1.3)	N
<b>Unknown</b>	22.6(3.3)*	9.2(1.7)†	12.4(2.1)	13.6(2.0)	14.5(5.7)	11.5(3.7)	14.0(3.6)	9.9(3.2)#	N
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	*****(0.0)	36.8(1.2)	38.7(0.7)	39.5(1.6)	39.8(1.0)	41.3(1.0)†	39.1(1.4)	L
<b>Non-Public</b>	*****(0.0)	*****(0.0)	49.9(3.3)	54.4(2.3)	50.4(5.7)	63.0(5.9)	62.6(5.3)	57.3(5.2)	L
<b>QUARTILES</b>									
<b>Upper</b>	89.0(0.8)*	93.1(0.5)†	85.2(0.7)*	90.9(0.5)	91.9(1.1)	93.6(1.4)†	93.5(1.1)†	93.9(1.1)#	LQ
<b>Middle Two</b>	33.3(0.8)	30.8(1.0)	32.5(0.8)	34.0(0.8)	35.6(2.1)	35.8(1.3)	39.5(1.5)†	34.8(1.2)	L
<b>Lower</b>	0.5(0.2)	0.1(0.1)	1.1(0.3)	0.5(0.1)	0.5(0.3)	0.6(0.4)	0.5(0.5)	0.5(0.3)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 Reading Trend Assessment — Age 17

Average reading scale scores across assessment years

Weighted percentages of observations with average reading scale scores at or above 350

	1971	1975	1980	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	6.8(0.4)	6.2(0.3)	5.3(0.4)†	5.7(0.3)	4.6(0.6)†*	7.0(0.5)	6.8(0.6)	7.3(0.7)	Q
<b>GENDER</b>									
<b>Male</b>	5.2(0.4)	5.1(0.5)	4.5(0.4)	4.8(0.4)	3.5(0.9)	5.6(0.5)	5.3(0.7)	5.4(0.9)	N
<b>Female</b>	8.4(0.5)	7.3(0.4)	6.0(0.6)†*	6.7(0.4)	5.5(0.8)†*	8.5(0.7)	8.4(0.7)	9.2(0.9)	Q
<b>RACE/ETHNICITY</b>									
<b>White</b>	7.7(0.4)	7.2(0.4)	6.2(0.4)	6.9(0.4)	5.5(0.7)†*	8.7(0.6)	8.3(0.8)	8.8(0.9)	Q
<b>Black</b>	0.4(0.1)	0.4(0.3)	0.2(0.2)	0.9(0.3)	1.4(0.7)	1.5(1.0)	1.6(0.9)	2.3(1.2)	L
<b>Hispanic</b>	*****(0.0)	1.2(0.6)	1.3(0.4)	2.0(0.4)	1.3(1.2)	2.4(1.4)	2.3(0.8)	1.9(1.1)	N
<b>Other</b>	4.0(1.9)	3.8(3.2)	3.8(2.5)	7.0(1.2)	4.2(3.0)	6.2(2.6)	7.1(2.3)	9.5(5.4)	N
<b>GRADE</b>									
<b>Below Modal Grade</b>	0.5(0.2)	0.3(0.1)	0.3(0.2)	0.6(0.2)	1.4(0.7)	1.0(0.2)	0.8(0.4)	1.2(0.7)	L
<b>At Modal Grade</b>	7.1(0.4)	6.7(0.4)	5.7(0.4)*	6.6(0.3)	5.2(0.7)*	8.4(0.6)	9.0(0.7)	9.1(1.0)	LQ
<b>Above Modal Grade</b>	12.1(1.3)	11.0(1.0)	9.5(1.7)	10.1(1.0)	7.3(2.9)	14.7(2.6)	10.9(3.1)	15.7(3.8)	Q
<b>REGION</b>									
<b>Northeast</b>	8.7(1.1)	7.6(1.0)	5.6(0.7)	6.1(0.6)	5.6(1.6)	9.5(1.2)	9.5(1.8)	11.4(2.5)	Q
<b>Southeast</b>	3.9(0.6)	4.5(0.5)	4.4(0.9)	5.3(0.5)	4.1(1.3)	5.8(1.1)	4.3(1.2)	5.5(1.5)	N
<b>Central</b>	7.8(0.8)	7.1(0.5)	5.0(0.6)†	5.6(0.5)	4.4(0.7)†	7.4(1.2)	6.2(0.7)	6.0(1.0)	Q
<b>West</b>	6.0(0.6)	5.1(0.5)	5.8(0.7)	5.8(0.7)	4.2(0.8)	5.7(1.0)	7.3(1.0)	6.7(1.1)	N
<b>PARENTS' EDUCATION LEVEL</b>									
<b>Less Than H.S.</b>	1.9(0.3)	1.6(0.3)	1.0(0.3)	1.4(0.3)	1.0(0.7)	1.8(0.8)	2.4(1.4)	1.3(0.8)	N
<b>Graduated H.S.</b>	4.9(0.4)*	3.8(0.4)	2.6(0.2)†	2.9(0.3)†	1.8(0.7)†	3.9(0.7)	3.2(0.5)	2.8(0.7)‡	LQ
<b>Post H.S.</b>	11.3(0.6)	10.1(0.6)	8.3(0.6)†	8.9(0.5)†	6.7(1.0)†	9.8(0.7)	9.4(0.8)	10.3(1.0)	Q
<b>Unknown</b>	2.6(0.4)*	0.3(0.0)†	1.1(1.1)	0.6(0.3)†	0.2(0.0)†	0.3(0.5)†	0.8(1.5)	0.4(0.0)‡	L
<b>TYPE OF SCHOOL</b>									
<b>Public</b>	*****(0.0)	*****(0.0)	5.1(0.4)	5.3(0.3)	4.4(0.6)	6.5(0.5)	6.2(0.6)	6.3(0.5)‡	L
<b>Non-Public</b>	*****(0.0)	*****(0.0)	7.7(1.3)	9.2(1.0)	5.6(2.4)	13.7(2.7)	13.1(2.9)	15.4(3.7)	L
<b>QUARTILES</b>									
<b>Upper</b>	24.9(0.9)	24.5(0.9)	18.7(1.0)†*	21.7(1.1)	17.6(2.1)†*	26.9(1.6)	26.1(2.0)	27.9(2.3)	Q
<b>Middle Two</b>	1.2(0.2)	0.2(0.1)†	1.2(0.2)	0.5(0.1)†	0.3(0.2)†	0.6(0.3)	0.6(0.3)	0.6(0.3)	N
<b>Lower</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

Significance tests for extreme percentages (either >90 or <10 percent) should be interpreted with caution.

\*\*\*\*\* No data were available.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 9

Weighted means, standard deviations, and percentiles of reading distributions  
with jackknifed standard errors

	1971	1975	1980	1984	1988	1990	1992	1994
<b>TOTAL SAMPLE</b>								
<b>Mean</b>	207.6(1.0)	210.0(0.7)	215.0(1.0)	211.0(0.9)	211.8(1.1)	209.2(1.2)	210.5(0.9)	211.0(1.2)
<b>St. Dev.</b>	42.1(0.4)	38.6(0.3)	37.9(0.4)	41.1(0.4)	41.2(1.0)	44.7(0.8)	40.3(0.6)	40.5(0.8)
<b>Percentiles</b>								
5	134.8(2.0)	143.2(1.3)	148.5(1.6)	140.5(1.2)	141.9(3.6)	134.8(3.2)	140.7(1.6)	140.1(2.6)
10	151.6(1.6)	159.2(1.1)	165.1(1.4)	156.7(1.2)	156.7(2.1)	150.1(1.9)	156.0(1.5)	155.6(2.5)
25	180.0(1.3)	185.2(0.8)	191.1(1.2)	183.7(1.2)	184.3(1.8)	178.7(1.8)	183.1(1.5)	184.1(1.9)
50	209.3(1.0)	211.9(0.8)	217.2(0.9)	212.6(1.0)	213.7(1.4)	210.3(1.5)	213.6(0.9)	214.8(1.1)
75	236.7(1.0)	236.5(0.9)	241.3(1.0)	239.6(0.9)	240.1(1.3)	240.3(1.8)	239.3(1.2)	240.0(1.5)
90	260.5(0.8)	258.1(0.8)	261.7(1.1)	262.8(0.9)	263.0(1.7)	265.7(1.8)	259.9(1.2)	260.1(1.6)
95	274.1(0.9)	270.6(1.1)	273.3(1.6)	276.5(1.4)	277.5(2.0)	280.4(1.3)	272.1(1.2)	271.7(1.5)
<b>MALE STUDENTS</b>								
<b>Mean</b>	201.2(1.1)	204.3(0.8)	210.0(1.1)	207.5(1.0)	207.5(1.4)	204.0(1.7)	205.9(1.3)	207.3(1.3)
<b>St. Dev.</b>	42.1(0.5)	39.0(0.5)	38.7(0.5)	42.3(0.5)	42.7(1.2)	45.1(1.0)	41.3(0.6)	41.9(1.0)
<b>Percentiles</b>								
5	128.9(2.0)	136.6(1.1)	141.9(2.3)	136.0(1.1)	136.5(2.9)	129.6(5.8)	136.6(2.0)	136.0(1.7)
10	145.0(1.7)	152.6(1.3)	158.7(1.4)	151.1(1.5)	151.1(2.4)	145.1(1.9)	150.5(2.1)	150.5(2.2)
25	173.6(1.4)	178.9(1.0)	185.3(1.4)	178.5(1.1)	178.4(1.8)	172.2(2.8)	176.8(1.7)	178.9(3.2)
50	202.8(1.2)	206.1(0.9)	212.5(1.2)	209.1(1.3)	209.7(1.8)	204.4(2.2)	208.3(1.6)	210.6(1.6)
75	230.4(1.1)	231.4(1.0)	237.1(1.1)	237.7(1.2)	237.1(1.9)	236.1(1.9)	235.5(1.6)	237.3(2.0)
90	254.6(1.2)	253.0(1.1)	257.5(0.8)	261.1(1.1)	260.3(2.0)	261.7(2.6)	257.3(1.0)	259.6(1.9)
95	268.4(1.5)	265.4(1.4)	268.7(1.1)	275.1(1.1)	275.1(2.3)	276.1(5.6)	269.9(2.8)	271.4(4.1)
<b>FEMALE STUDENTS</b>								
<b>Mean</b>	213.9(1.0)	215.8(0.8)	220.1(1.1)	214.4(0.9)	216.3(1.3)	214.5(1.2)	215.4(0.9)	214.7(1.4)
<b>St. Dev.</b>	41.0(0.6)	37.3(0.4)	36.5(0.5)	39.6(0.5)	39.2(1.2)	43.6(1.3)	38.8(0.9)	38.7(1.1)
<b>Percentiles</b>								
5	142.9(2.1)	151.3(1.4)	157.1(1.8)	146.4(2.1)	149.3(5.5)	140.6(3.9)	147.3(3.3)	145.9(3.0)
10	159.5(1.3)	167.1(1.1)	172.5(1.7)	162.9(1.6)	164.3(4.6)	156.8(3.2)	163.8(2.3)	162.2(2.7)
25	186.7(1.2)	192.0(1.0)	197.2(1.2)	188.7(1.0)	190.6(2.4)	185.7(1.7)	190.0(1.4)	189.4(2.1)
50	215.6(1.1)	217.2(0.9)	221.7(1.1)	215.7(1.0)	217.5(2.0)	215.9(1.3)	218.5(1.3)	218.6(1.7)
75	242.4(1.1)	241.1(1.0)	245.2(1.1)	241.6(1.0)	242.6(1.1)	244.4(1.9)	242.5(1.3)	241.9(1.7)
90	265.0(0.9)	262.3(1.0)	265.5(1.7)	264.4(1.3)	265.3(2.2)	269.4(1.9)	262.3(1.9)	260.6(1.9)
95	278.6(1.5)	274.8(1.1)	277.0(1.5)	277.8(2.0)	279.1(3.4)	284.1(2.1)	273.7(2.0)	272.0(1.3)
<b>WHITE STUDENTS</b>								
<b>Mean</b>	214.0(0.9)	216.6(0.7)	221.3(0.8)	218.2(0.9)	217.7(1.4)	217.0(1.3)	217.9(1.0)	218.0(1.3)
<b>St. Dev.</b>	39.4(0.4)	36.1(0.3)	35.2(0.3)	38.8(0.3)	39.3(1.0)	42.9(1.0)	37.5(0.7)	37.4(0.9)
<b>Percentiles</b>								
5	146.3(2.4)	154.4(1.2)	160.7(1.5)	152.0(1.3)	150.2(3.4)	144.2(3.2)	152.8(1.6)	152.4(2.0)
10	162.4(1.3)	169.8(1.1)	175.3(1.0)	167.1(1.0)	165.0(3.9)	160.0(1.5)	167.0(1.8)	167.5(2.6)
25	188.1(1.2)	193.3(0.7)	199.0(0.9)	192.4(1.0)	191.8(2.4)	188.0(2.8)	192.8(1.3)	193.7(1.8)
50	215.2(0.9)	217.9(0.7)	222.8(0.8)	219.5(1.0)	219.1(1.2)	218.4(2.1)	220.6(1.3)	221.1(1.4)
75	241.0(0.9)	241.0(0.9)	245.7(0.9)	244.9(0.9)	244.3(1.8)	246.7(2.3)	244.2(1.2)	244.0(1.5)
90	263.6(0.8)	261.6(1.0)	265.1(1.1)	267.2(1.3)	266.7(2.2)	270.9(2.1)	264.0(1.0)	263.3(1.5)
95	276.7(0.9)	273.8(1.3)	276.4(1.2)	280.2(1.3)	280.6(2.6)	285.3(2.6)	275.9(3.1)	274.9(1.8)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 9

Weighted means, standard deviations, and percentiles of reading distributions  
with jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994
<b>BLACK STUDENTS</b>								
<b>Mean</b>	170.1(1.7)	181.2(1.2)	189.3(1.8)	185.7(1.4)	188.5(2.4)	181.8(2.9)	184.5(2.2)	185.4(2.3)
<b>St. Dev.</b>	38.3(0.7)	35.8(0.6)	37.6(1.0)	38.9(0.9)	39.4(1.6)	41.7(1.7)	39.8(1.3)	40.6(2.4)
<b>Percentiles</b>								
5	106.7(2.5)	118.8(2.3)	123.1(4.1)	120.8(2.2)	124.7(6.3)	115.0(4.7)	119.3(6.1)	119.1(3.7)
10	120.0(2.0)	133.7(2.8)	139.4(4.0)	135.1(2.8)	138.3(3.4)	128.9(3.9)	132.4(3.6)	132.7(4.7)
25	143.4(2.0)	157.5(2.3)	165.3(1.9)	159.3(1.8)	161.8(3.0)	152.5(3.2)	156.3(4.4)	155.3(4.1)
50	171.0(2.1)	182.8(1.2)	191.7(2.1)	186.5(1.5)	188.3(4.0)	181.8(3.1)	185.1(2.5)	186.4(4.7)
75	196.3(1.8)	206.5(1.2)	215.6(1.9)	212.5(1.6)	216.5(2.9)	210.5(2.4)	213.5(2.6)	216.2(5.1)
90	218.9(1.6)	226.3(1.5)	236.3(1.9)	235.3(2.5)	238.2(3.8)	236.3(2.7)	235.5(2.9)	237.2(2.6)
95	232.4(1.7)	237.2(2.0)	247.1(1.8)	248.4(2.0)	252.2(4.6)	250.7(6.9)	248.7(2.5)	248.0(4.7)
<b>HISPANIC STUDENTS</b>								
<b>Mean</b>	******(0.0)	182.7(2.2)	190.2(2.3)	187.1(3.1)	193.7(3.5)	189.4(2.3)	191.7(3.1)	185.9(3.9)
<b>St. Dev.</b>	******(0.0)	36.8(1.3)	38.2(1.2)	39.2(1.5)	41.5(2.8)	39.7(1.6)	40.3(1.8)	41.4(2.0)
<b>Percentiles</b>								
5	******(0.0)	120.3(4.9)	123.4(3.1)	120.3(5.1)	121.8 (11.3)	125.4(8.9)	124.8( 6.2)	118.9 (5.5)
10	******(0.0)	133.4(5.2)	138.4(4.1)	134.7(7.2)	140.3( 7.7)	139.0(4.3)	138.7( 5.6)	133.7 (13.5)
25	******(0.0)	157.4(3.0)	164.3(3.9)	160.7(2.4)	164.9( 5.1)	160.8(1.9)	162.5( 6.0)	157.0( 4.4)
50	******(0.0)	184.2(2.9)	192.0(3.3)	189.2(2.3)	196.0( 3.4)	189.3(3.5)	192.7 (4.6)	184.1 (6.9)
75	******(0.0)	209.4(3.4)	217.6(3.0)	215.4(2.3)	222.0( 6.0)	218.9(4.0)	222.0( 2.3)	215.7( 5.3)
90	******(0.0)	228.6(3.6)	237.8(2.7)	236.1(2.2)	246.7( 8.0)	239.3(5.7)	244.7( 5.6)	242.8( 2.8)
95	******(0.0)	240.3(2.6)	249.9(4.3)	247.1(2.1)	258.6 (11.4)	253.2(6.7)	255.4 (10.4)	255.0( 6.9)

\*\*\*\*\* No data were available.

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 13

Weighted means, standard deviations, and percentiles of reading distributions  
with jackknifed standard errors

	1971	1975	1980	1984	1988	1990	1992	1994
<b>TOTAL SAMPLE</b>								
<b>Mean</b>	255.2(0.9)	255.9(0.8)	258.5(0.9)	257.1(0.6)	257.5(1.0)	256.8(0.8)	259.8(1.2)	257.9(0.9)
<b>St. Dev.</b>	35.7(0.4)	35.8(0.3)	34.9(0.4)	35.5(0.3)	34.7(0.5)	36.0(0.6)	39.4(0.8)	39.8(0.7)
<b>Percentiles</b>								
5	192.8(1.8)	193.5(1.1)	199.1(1.9)	196.7(1.1)	199.5(1.7)	195.7(1.9)	190.9(2.8)	188.2(4.9)
10	207.8(1.4)	208.7(1.0)	212.8(1.5)	210.2(0.9)	212.9(1.2)	209.8(1.8)	207.9(1.9)	205.1(1.7)
25	232.3(1.2)	232.9(1.0)	235.3(1.1)	233.9(0.8)	234.2(1.2)	233.2(1.0)	234.7(1.8)	232.5(1.2)
50	257.0(1.0)	257.7(0.9)	259.6(0.8)	258.2(0.8)	257.9(1.1)	257.3(0.9)	261.6(1.6)	260.1(1.1)
75	279.9(0.8)	280.6(0.8)	282.8(0.8)	281.6(0.6)	281.4(1.4)	281.5(0.8)	287.0(1.4)	285.2(1.1)
90	299.6(0.9)	300.5(1.0)	302.3(0.8)	301.7(0.8)	301.6(1.0)	302.0(1.0)	309.2(1.8)	307.4(1.4)
95	310.8(0.9)	311.8(1.0)	313.9(0.8)	313.7(1.0)	313.7(1.3)	314.4(1.3)	321.9(2.6)	320.3(1.4)
<b>MALE STUDENTS</b>								
<b>Mean</b>	249.6(1.0)	249.6(0.8)	254.3(1.1)	252.7(0.7)	251.8(1.3)	250.5(1.1)	254.1(1.7)	250.6(1.2)
<b>St. Dev.</b>	35.9(0.5)	35.7(0.4)	35.0(0.5)	35.8(0.4)	35.3(0.7)	36.0(0.7)	40.4(1.1)	40.0(0.8)
<b>Percentiles</b>								
5	186.7(1.6)	187.2(1.1)	194.9(1.9)	191.9(1.0)	192.6(2.5)	189.7(2.2)	184.9(3.7)	181.0(4.4)
10	201.6(1.6)	202.3(1.5)	208.5(1.5)	205.5(1.2)	206.7(1.8)	202.8(1.4)	201.0(2.8)	197.1(2.9)
25	226.3(1.2)	226.8(1.1)	230.8(1.2)	228.9(1.1)	227.7(2.1)	226.9(1.9)	227.4(2.1)	224.9(1.6)
50	251.4(0.8)	251.4(0.9)	255.4(1.1)	253.9(0.9)	252.1(2.1)	251.9(1.3)	255.6(2.4)	253.1(1.8)
75	274.5(0.8)	274.1(0.8)	278.6(1.2)	277.5(1.0)	276.5(2.0)	275.3(1.2)	282.5(1.5)	278.4(1.6)
90	294.2(1.0)	293.5(1.0)	298.5(1.2)	297.8(1.0)	297.2(1.5)	295.3(1.2)	305.0(3.4)	300.4(2.1)
95	305.9(1.3)	305.6(1.7)	309.9(0.9)	309.4(1.2)	309.4(2.8)	307.4(3.2)	317.8(3.1)	313.5(1.5)
<b>FEMALE STUDENTS</b>								
<b>Mean</b>	260.8(0.9)	262.3(0.9)	262.6(0.9)	261.8(0.7)	263.0(1.0)	263.1(1.1)	265.3(1.2)	265.7(1.2)
<b>St. Dev.</b>	34.5(0.4)	34.8(0.4)	34.2(0.4)	34.5(0.3)	33.1(0.6)	34.8(0.7)	37.5(0.8)	38.0(0.8)
<b>Percentiles</b>								
5	200.9(1.5)	202.1(1.7)	204.2(2.0)	203.0(1.3)	207.3(3.9)	205.3(3.1)	199.3(4.1)	199.6(2.6)
10	215.2(1.4)	215.9(1.4)	218.0(2.0)	216.8(1.1)	221.0(1.6)	217.9(2.0)	216.8(2.9)	216.0(3.7)
25	238.5(0.8)	239.8(1.1)	240.0(1.1)	239.1(0.8)	240.0(1.6)	240.0(1.9)	241.5(1.2)	242.0(1.5)
50	262.4(1.1)	264.2(1.0)	263.4(0.9)	262.7(0.8)	263.0(1.4)	263.0(1.6)	266.6(1.9)	267.1(1.1)
75	285.0(1.0)	286.6(1.2)	286.3(1.0)	285.4(0.7)	285.8(1.0)	286.6(1.1)	290.8(1.1)	291.9(1.3)
90	303.8(1.3)	305.4(1.0)	305.6(1.0)	305.5(0.8)	305.2(1.2)	308.1(1.5)	312.8(1.5)	313.0(2.9)
95	314.6(0.9)	316.1(1.1)	317.3(1.6)	317.5(1.6)	317.7(3.2)	319.4(2.5)	324.5(2.4)	325.1(2.4)
<b>WHITE STUDENTS</b>								
<b>Mean</b>	260.9(0.7)	262.1(0.7)	264.4(0.7)	262.5(0.6)	261.3(1.1)	262.3(0.9)	266.4(1.2)	265.1(1.1)
<b>St. Dev.</b>	32.9(0.3)	32.9(0.3)	32.7(0.3)	33.8(0.4)	33.9(0.5)	34.5(0.6)	36.6(0.7)	37.5(0.9)
<b>Percentiles</b>								
5	204.6(1.2)	206.3(1.0)	209.0(1.2)	204.9(0.9)	204.0(1.4)	204.1(2.2)	204.0(2.7)	199.8(2.4)
10	217.9(0.9)	219.2(0.7)	221.8(1.2)	218.3(0.8)	217.1(2.1)	217.3(1.7)	218.7(2.2)	217.0(3.0)
25	239.4(0.9)	240.7(0.8)	242.8(0.8)	240.6(0.8)	238.3(1.0)	239.6(1.7)	242.5(1.4)	241.9(1.0)
50	262.0(0.8)	263.1(1.0)	265.1(0.6)	263.4(0.7)	262.2(1.1)	262.6(1.4)	267.5(2.0)	266.9(1.2)
75	283.5(0.9)	284.6(0.8)	286.9(0.7)	285.6(0.7)	285.1(0.9)	285.6(1.2)	291.5(1.1)	290.4(1.4)
90	302.2(0.7)	303.5(0.9)	305.7(0.8)	305.0(0.8)	304.2(1.5)	306.0(2.4)	312.4(1.9)	311.4(1.2)
95	313.1(1.1)	314.3(0.9)	316.9(0.8)	316.8(1.3)	315.8(1.1)	318.1(2.7)	324.4(2.0)	323.7(1.3)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 13

Weighted means, standard deviations, and percentiles of reading distributions  
with jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994
<b>BLACK STUDENTS</b>								
<b>Mean</b>	222.4(1.2)	225.7(1.2)	232.8(1.5)	236.3(1.2)	242.9(2.4)	241.5(2.2)	237.6(2.3)	234.3(2.4)
<b>St. Dev.</b>	33.5(0.5)	34.9(0.7)	32.7(0.8)	34.1(0.8)	32.1(1.3)	35.3(1.5)	39.8(1.9)	38.0(1.7)
<b>Percentiles</b>								
5	166.3(1.5)	167.2(2.5)	178.6(2.4)	180.1(2.0)	190.6(3.4)	182.3(5.3)	169.6 (10.1)	170.0(3.7)
10	178.0(2.2)	180.1(2.5)	190.6(3.3)	192.4(1.9)	202.2(3.3)	194.3(7.3)	185.3( 3.3)	183.0(6.6)
25	199.1(1.9)	202.2(1.3)	210.9(1.8)	213.3(2.6)	222.0(2.4)	217.0(3.2)	210.0( 3.0)	207.8(2.3)
50	223.3(1.4)	226.0(1.7)	232.6(1.3)	236.4(1.3)	242.4(2.7)	242.5(4.0)	239.2( 2.3)	235.9(3.0)
75	245.5(1.4)	249.9(1.5)	254.8(1.9)	259.3(1.1)	263.6(4.5)	265.7(2.5)	265.6( 2.8)	261.1(4.7)
90	264.8(1.3)	270.6(1.2)	275.0(1.7)	280.3(1.9)	283.6(4.7)	285.9(4.9)	287.3( 3.1)	283.3(2.8)
95	276.8(2.3)	282.7(2.3)	286.2(1.5)	292.7(1.6)	298.9(2.2)	298.9(3.0)	302.5( 4.9)	295.2(5.4)
<b>HISPANIC STUDENTS</b>								
<b>Mean</b>	******(0.0)	232.5(3.0)	237.2(2.0)	239.6(2.0)	240.1(3.5)	237.8(2.3)	239.2(3.5)	235.1(1.9)
<b>St. Dev.</b>	******(0.0)	34.5(1.0)	32.7(0.8)	34.9(1.2)	34.6(2.4)	35.9(1.3)	40.4(2.4)	37.6(2.2)
<b>Percentiles</b>								
5	******(0.0)	173.7(6.9)	182.6(4.8)	180.8(2.9)	181.4( 6.9)	178.0(9.6)	165.0 (13.0)	174.2( 5.7)
10	******(0.0)	186.7(2.8)	194.9(4.5)	193.3(3.3)	194.6( 3.8)	191.3(4.9)	183.8( 8.0)	186.7( 6.4)
25	******(0.0)	207.8(3.0)	214.8(3.0)	216.1(2.5)	218.9( 6.1)	214.1(4.1)	213.0( 5.7)	210.7( 4.9)
50	******(0.0)	233.5(3.6)	237.5(2.4)	240.4(2.5)	240.3( 4.1)	238.6(4.1)	242.0 (10.6)	235.5( 4.2)
75	******(0.0)	256.7(4.8)	259.3(1.9)	263.5(2.3)	262.0( 5.4)	262.2(3.1)	267.0( 7.7)	259.9( 3.7)
90	******(0.0)	277.2(2.3)	279.2(2.9)	284.2(2.2)	284.0( 8.7)	283.8(6.0)	288.7( 8.0)	281.9( 8.4)
95	******(0.0)	289.1(3.5)	290.5(1.5)	295.9(3.1)	297.3(10.1)	295.9(4.5)	303.1( 7.7)	297.7 (15.6)

\*\*\*\*\* No data were available.

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 17

Weighted means, standard deviations, and percentiles of reading distributions  
with jackknifed standard errors

	1971	1975	1980	1984	1988	1990	1992	1994
<b>TOTAL SAMPLE</b>								
<b>Mean</b>	285.2(1.2)	285.6(0.8)	285.5(1.2)	288.8(0.8)	290.1(1.0)	290.2(1.1)	289.7(1.1)	288.1(1.3)
<b>St. Dev.</b>	45.8(0.5)	44.0(0.6)	41.8(0.6)	40.3(0.3)	37.1(0.7)	41.3(0.7)	43.0(0.6)	44.4(1.0)
<b>Percentiles</b>								
5	206.1(1.5)	209.3(3.0)	213.0(1.7)	219.9(1.3)	226.1(1.3)	220.0(2.3)	214.3(2.9)	210.8(3.6)
10	225.3(1.7)	228.4(1.7)	230.6(1.8)	236.0(0.9)	241.5(2.2)	236.9(3.1)	232.7(2.7)	230.0(3.1)
25	255.9(1.6)	257.8(1.1)	258.7(1.2)	262.5(1.1)	265.7(1.8)	263.5(1.3)	262.6(1.1)	259.8(1.8)
50	287.7(1.4)	287.9(0.7)	287.5(1.4)	290.3(0.9)	291.1(1.9)	291.1(1.3)	293.0(1.2)	289.9(1.8)
75	316.7(1.0)	315.7(0.7)	314.6(1.2)	316.8(0.9)	316.0(1.4)	318.6(1.5)	319.4(1.4)	318.7(1.8)
90	341.7(1.1)	340.0(0.9)	337.5(1.4)	339.6(0.7)	336.9(2.1)	342.7(2.1)	342.7(1.8)	343.0(1.8)
95	356.5(1.5)	354.3(0.7)	350.9(1.3)	352.6(1.0)	348.7(1.8)	356.0(1.7)	355.8(1.9)	357.7(1.7)
<b>MALE STUDENTS</b>								
<b>Mean</b>	278.9(1.2)	279.7(1.0)	281.8(1.3)	283.9(0.8)	286.0(1.5)	284.0(1.6)	284.2(1.6)	281.7(2.2)
<b>St. Dev.</b>	46.3(0.6)	45.1(0.6)	42.7(0.6)	40.9(0.4)	37.5(1.2)	42.6(0.8)	43.8(0.8)	45.0(1.3)
<b>Percentiles</b>								
5	198.3(1.6)	201.6(1.4)	207.2(1.9)	214.3(1.5)	222.0(2.3)	209.4(3.2)	208.1(3.7)	202.8(4.5)
10	218.2(2.0)	220.8(2.0)	225.4(2.2)	230.1(1.0)	236.3(3.7)	228.2(3.4)	226.0(3.6)	221.1(4.2)
25	249.1(1.4)	250.9(1.1)	254.4(1.5)	257.0(1.3)	261.6(1.8)	257.3(1.9)	255.4(2.6)	251.9(2.1)
50	281.6(1.4)	282.0(1.3)	284.1(1.2)	285.4(0.8)	287.0(2.3)	285.9(2.1)	287.6(1.7)	284.1(2.5)
75	310.9(1.2)	310.8(1.0)	311.9(1.2)	312.3(1.0)	312.0(3.4)	313.2(2.1)	315.0(1.6)	313.1(2.8)
90	336.1(2.0)	335.9(1.4)	335.2(1.3)	335.3(1.2)	333.4(2.1)	338.4(2.3)	338.4(3.8)	337.5(3.4)
95	350.8(1.7)	350.3(1.9)	348.3(1.2)	348.8(1.6)	345.6(4.2)	351.9(1.6)	351.2(2.9)	351.6(1.9)
<b>FEMALE STUDENTS</b>								
<b>Mean</b>	291.3(1.3)	291.2(1.0)	289.2(1.2)	294.0(0.9)	293.8(1.5)	296.5(1.2)	295.7(1.1)	294.7(1.5)
<b>St. Dev.</b>	44.5(0.6)	42.2(0.8)	40.5(0.7)	39.0(0.4)	36.3(0.9)	38.8(0.8)	41.4(0.9)	42.7(1.0)
<b>Percentiles</b>								
5	215.0(1.9)	218.9(2.7)	219.4(2.1)	227.4(1.9)	231.7(3.3)	232.3(3.8)	223.8(4.5)	223.0(3.1)
10	233.3(1.6)	236.8(2.0)	236.8(1.6)	242.9(1.2)	246.5(4.8)	247.0(2.1)	241.8(1.9)	240.3(2.8)
25	262.7(1.7)	264.9(1.4)	262.9(1.8)	268.6(1.3)	270.2(2.1)	270.5(2.3)	270.1(1.8)	267.3(1.6)
50	293.6(1.2)	293.4(0.9)	290.7(1.1)	295.2(1.0)	294.6(2.2)	296.6(1.2)	298.5(1.6)	296.4(2.3)
75	321.7(1.6)	319.7(0.7)	317.0(1.6)	320.9(0.9)	319.4(1.5)	323.5(1.5)	323.8(1.5)	324.1(2.6)
90	346.2(1.6)	343.3(1.0)	339.7(1.7)	343.1(1.0)	339.8(1.7)	346.3(2.5)	346.6(2.4)	347.9(3.1)
95	360.7(1.2)	357.0(1.3)	353.2(1.8)	355.5(1.2)	351.7(2.8)	359.4(2.7)	359.6(2.7)	362.6(2.4)
<b>WHITE STUDENTS</b>								
<b>Mean</b>	291.4(1.0)	293.0(0.6)	292.8(0.9)	295.3(0.9)	294.7(1.2)	296.6(1.2)	297.4(1.4)	295.7(1.5)
<b>St. Dev.</b>	42.5(0.4)	39.8(0.4)	37.9(0.4)	38.2(0.3)	36.0(0.8)	39.6(0.6)	39.8(0.6)	41.9(1.1)
<b>Percentiles</b>								
5	219.4(1.4)	225.9(1.2)	228.5(1.4)	229.9(1.4)	232.6(1.1)	228.5(2.5)	228.1(3.2)	221.6(3.9)
10	236.6(1.0)	241.7(0.9)	243.5(1.5)	245.6(0.9)	247.3(3.7)	246.2(2.5)	244.9(2.8)	240.5(3.8)
25	263.9(1.4)	267.0(0.9)	267.7(1.0)	270.7(1.1)	271.4(1.7)	271.1(1.4)	272.3(1.9)	269.6(3.0)
50	292.9(1.2)	294.0(0.8)	293.6(0.8)	296.7(1.1)	295.4(1.6)	297.5(1.2)	300.1(1.9)	297.6(1.5)
75	320.1(1.1)	319.9(0.7)	318.8(1.0)	321.6(0.8)	319.9(1.9)	323.8(1.9)	324.5(1.2)	324.4(1.5)
90	344.5(1.0)	343.2(0.7)	340.6(1.3)	343.2(0.8)	339.7(1.6)	347.1(1.6)	346.6(2.5)	347.1(2.5)
95	358.9(1.4)	357.0(1.2)	353.5(1.4)	355.8(0.9)	351.6(3.0)	359.7(1.7)	359.0(2.5)	361.1(2.7)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 Reading Trend Assessment — Age 17

Weighted means, standard deviations, and percentiles of reading distributions  
with jackknifed standard errors (continued)

	1971	1975	1980	1984	1988	1990	1992	1994
<b>BLACK STUDENTS</b>								
<b>Mean</b>	238.7(1.7)	240.6(2.0)	243.1(1.8)	263.6(1.2)	274.4(2.4)	267.3(2.3)	260.6(2.1)	266.2(3.9)
<b>St. Dev.</b>	43.5(0.7)	43.8(1.2)	39.5(1.2)	37.0(0.8)	35.9(1.3)	39.2(2.2)	42.2(1.7)	42.8(1.3)
<b>Percentiles</b>								
5	164.7(4.4)	164.7(3.1)	176.0(2.4)	201.9(4.1)	214.4(9.6)	201.3( 7.9)	187.9(3.3)	192.3(8.7)
10	182.1(4.2)	182.4(5.3)	191.1(3.6)	216.0(2.0)	227.8(4.3)	217.4( 4.0)	206.2(6.7)	210.1(7.7)
25	210.4(2.4)	212.1(3.0)	217.0(2.7)	239.0(1.4)	250.5(2.5)	242.4( 3.9)	235.1(4.1)	238.9(4.8)
50	239.3(1.6)	242.1(1.6)	243.9(2.6)	264.2(1.2)	274.3(3.6)	268.4( 1.9)	262.5(1.6)	267.8(2.9)
75	268.1(2.0)	271.6(1.4)	270.1(2.0)	288.3(1.6)	299.6(3.1)	293.7( 2.7)	288.3(1.9)	295.8(5.6)
90	294.1(2.4)	295.7(1.4)	293.3(1.7)	310.5(1.9)	321.0(4.0)	316.2( 4.8)	312.0(4.2)	317.5(7.0)
95	309.7(2.2)	308.3(2.7)	306.6(2.4)	323.6(3.4)	333.1(4.9)	330.5(11.0)	327.8(5.4)	334.5(4.0)
<b>HISPANIC STUDENTS</b>								
<b>Mean</b>	******(0.0)	252.4(3.6)	261.4(2.7)	268.1(2.9)	270.8(4.3)	274.8(3.6)	271.2(3.7)	263.2(4.9)
<b>St. Dev.</b>	******(0.0)	42.0(2.2)	40.1(1.4)	39.7(1.5)	37.7(2.0)	40.7(2.7)	43.7(1.8)	44.5(2.9)
<b>Percentiles</b>								
5	******(0.0)	184.4(3.7)	194.3(7.8)	201.5(2.4)	204.2 (11.7)	205.9 (11.1)	192.8(7.2)	186.9 (18.5)
10	******(0.0)	197.1(4.9)	208.2(3.7)	216.6(2.9)	218.0( 7.4)	224.3 (12.0)	213.1(9.7)	203.2( 7.9)
25	******(0.0)	225.4(5.9)	235.3(5.0)	241.5(2.6)	246.4( 5.9)	250.4( 8.3)	240.7(8.7)	235.6( 6.4)
50	******(0.0)	252.8(3.7)	262.6(3.5)	268.6(3.1)	273.6( 5.1)	276.3( 3.2)	275.0(4.7)	264.3( 6.0)
75	******(0.0)	279.4(3.0)	288.6(3.2)	295.4(3.9)	297.9( 7.1)	302.6( 4.9)	303.3(6.5)	294.0( 8.2)
90	******(0.0)	306.7(6.1)	312.6(3.0)	318.3(6.1)	315.9 (18.1)	326.5( 3.2)	326.5(4.2)	318.2( 5.9)
95	******(0.0)	320.8(6.8)	325.1(3.4)	332.3(7.7)	328.0( 8.6)	339.4 (11.2)	336.6(4.6)	331.3( 5.9)

\*\*\*\*\* No data were available.

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find picture fact</b>	1994	46.6(1.9)	59.2(3.0)	32.9(3.0)	47.4(2.1)	48.3(6.5)	***(***)
	1992	43.1(1.5)	53.9(1.9)	31.8(2.6)	41.1(1.6)	45.9(4.9)	54.3(7.7)
	1990	46.8(1.8)	52.3(3.0)	41.4(2.5)	44.2(2.1)	54.6(4.2)	54.0(7.4)
	1988	43.1(1.9)	54.6(3.0)	30.1(2.6)	41.3(2.3)	57.0(4.8)	37.5(5.6)
	1984	57.2(1.1)	65.5(1.4)	47.9(1.7)	56.5(1.2)	62.8(3.1)	52.0(5.6)
<b>Insect communication fact</b>	1994	69.9(1.8)	70.1(2.5)	69.6(3.0)	74.6(2.0)	55.0(5.4)	***(***)
	1992	67.7(2.1)	63.3(2.2)	72.3(3.1)	71.5(2.2)	51.6(4.7)	58.5(9.6)
	1990	69.2(2.3)	67.4(3.4)	71.0(2.7)	73.3(2.4)	51.8(6.5)	63.2(5.9)
	1988	67.5(2.5)	68.6(3.4)	66.3(3.0)	70.7(2.9)	53.8(5.4)	56.0(6.2)
	1984	65.4(1.4)	63.0(1.8)	68.0(1.8)	69.5(1.5)	49.5(3.2)	50.0(7.3)
<b>Insect gender fact</b>	1994	60.4(2.1)	60.2(2.6)	60.6(3.3)	63.8(2.0)	45.2(8.2)	***(***)
	1992	58.3(2.3)	54.2(2.2)	62.8(3.4)	61.1(2.7)	48.5(5.1)	51.3(6.6)
	1990	55.6(2.1)	50.4(2.8)	60.7(2.9)	60.3(2.6)	37.9(5.0)	48.5(7.9)
	1988	57.4(2.3)	56.0(2.6)	59.0(3.0)	58.3(2.6)	53.5(6.0)	50.1(4.7)
	1984	56.2(1.4)	54.0(2.1)	58.8(1.8)	58.3(1.4)	47.4(3.7)	51.6(7.5)
<b>Insect anatomy</b>	1994	65.5(2.1)	62.5(2.7)	68.7(2.9)	68.4(2.3)	55.4(6.1)	***(***)
	1992	65.6(2.3)	57.3(2.7)	74.5(3.6)	67.5(2.5)	60.3(4.2)	54.6(5.4)
	1990	65.9(2.5)	63.7(3.2)	68.2(2.9)	68.8(3.3)	56.0(5.1)	58.2(5.3)
	1988	66.7(2.3)	66.2(3.3)	67.4(2.8)	68.5(2.7)	55.0(3.4)	66.9(3.7)
	1984	62.5(1.1)	58.5(1.6)	67.0(1.5)	65.3(1.2)	53.0(3.6)	45.1(6.5)
<b>Dog picture: Best description</b>	1994	94.9(1.1)	93.9(1.7)	96.0(1.4)	95.0(1.2)	92.8(3.1)	***(***)
	1992	93.9(0.9)	91.5(1.5)	96.5(1.0)	95.5(1.0)	89.8(3.0)	86.5(4.3)
	1990	94.3(1.0)	93.6(1.4)	95.1(1.4)	95.3(1.0)	89.0(3.5)	95.2(2.5)
	1988	95.0(1.2)	95.8(1.2)	94.0(1.8)	95.2(1.4)	94.1(2.4)	93.4(3.6)
	1984	93.9(0.6)	93.2(0.7)	94.7(0.8)	94.9(0.6)	90.8(1.8)	88.5(3.8)
<b>Nut story: Plan</b>	1994	83.0(1.6)	81.2(2.0)	85.0(2.3)	86.0(1.7)	71.8(4.6)	***(***)
	1992	80.2(1.7)	75.0(2.3)	85.6(2.6)	81.9(1.9)	70.2(4.4)	78.5(5.4)
	1990	79.8(1.7)	79.6(2.7)	80.1(2.1)	85.0(1.7)	62.3(5.1)	71.5(5.6)
	1988	83.3(1.6)	80.2(2.1)	86.8(2.1)	85.6(1.9)	75.3(4.6)	74.0(4.6)
	1984	79.2(1.1)	75.0(1.6)	83.8(1.4)	82.2(1.3)	68.1(3.3)	68.6(4.7)
<b>Nut story: Problem</b>	1994	57.3(2.2)	56.7(2.9)	57.9(3.0)	61.3(2.4)	37.2(4.1)	***(***)
	1992	48.6(1.8)	45.0(2.3)	52.3(3.0)	53.0(1.9)	34.0(3.9)	33.0(4.5)
	1990	51.1(2.2)	49.1(2.9)	53.0(2.6)	56.8(2.6)	29.0(4.4)	40.1(6.4)
	1988	54.4(2.4)	52.8(3.2)	56.3(3.1)	58.1(2.8)	34.0(4.5)	50.8(7.7)
	1984	51.7(1.3)	52.2(1.6)	51.1(2.0)	56.7(1.5)	29.8(3.1)	38.0(4.7)
<b>Nut story: Goal</b>	1994	71.0(2.5)	69.6(3.1)	72.5(3.9)	74.4(2.3)	56.4(8.7)	***(***)
	1992	70.3(2.0)	66.3(2.2)	74.5(3.0)	73.2(2.3)	60.4(4.4)	55.9(7.6)
	1990	68.2(2.4)	65.6(2.9)	70.7(2.8)	72.3(2.6)	54.6(5.3)	60.2(5.4)
	1988	70.4(2.1)	67.0(3.1)	74.3(2.4)	73.2(2.4)	62.8(7.9)	50.0(5.6)
	1984	67.1(1.1)	64.3(1.6)	70.2(1.4)	69.4(1.5)	57.5(3.5)	57.7(6.5)
<b>Nut story: Outcome</b>	1994	62.9(2.0)	62.4(2.8)	63.4(3.1)	68.3(2.0)	41.8(6.2)	***(***)
	1992	59.7(2.2)	53.9(3.4)	65.7(2.5)	63.0(2.5)	49.1(5.4)	52.9(5.2)
	1990	58.1(2.4)	57.5(3.2)	58.8(2.8)	63.9(2.5)	37.8(5.6)	48.5(6.5)
	1988	60.9(2.2)	58.9(3.3)	63.3(2.4)	66.2(2.4)	37.0(4.0)	43.3(9.4)
	1984	58.7(1.3)	57.1(1.6)	60.5(2.0)	62.8(1.7)	44.5(3.5)	42.8(4.3)

\*\*\* Sample size insufficient to permit a reliable estimate.  
The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>History: Definition</b>	1994	61.7(2.1)	58.1(3.4)	65.1(2.9)	66.7(2.5)	41.6(7.4)	39.6(6.5)
	1992	54.8(1.6)	51.2(2.8)	58.3(1.9)	59.3(1.9)	37.4(3.3)	47.1(4.8)
	1990	54.9(1.7)	50.8(2.1)	59.4(2.5)	62.1(2.0)	25.7(6.0)	39.2(6.5)
	1988	57.7(3.1)	52.6(4.2)	62.5(3.9)	63.1(3.6)	39.1(5.0)	35.4(9.9)
	1984	56.7(1.4)	53.6(1.9)	59.9(1.8)	62.8(1.8)	37.1(2.3)	37.2(3.9)
<b>History: Survival</b>	1994	49.1(2.2)	50.3(2.8)	48.0(3.2)	52.8(2.4)	34.1(6.4)	38.7(6.6)
	1992	49.5(1.4)	49.5(2.3)	49.4(2.1)	53.8(1.7)	31.5(3.9)	41.1(6.4)
	1990	45.1(1.9)	46.0(2.7)	44.2(2.9)	48.6(2.0)	31.4(5.4)	34.1(6.4)
	1988	46.3(2.1)	46.7(3.8)	46.0(3.0)	48.8(2.7)	32.1(3.8)	38.8(5.5)
	1984	50.3(1.6)	50.9(1.8)	49.7(1.9)	53.1(1.9)	38.9(2.4)	42.8(3.6)
<b>History: Location</b>	1994	41.0(2.6)	37.4(3.4)	44.4(3.0)	40.4(2.8)	44.0(6.6)	34.0(6.9)
	1992	40.7(2.2)	43.6(3.1)	37.9(2.6)	42.4(2.4)	34.2(5.5)	34.8(7.2)
	1990	36.8(1.8)	35.2(2.6)	38.6(3.1)	38.5(2.4)	29.3(3.7)	38.2(5.9)
	1988	36.6(2.6)	36.3(3.7)	36.9(2.8)	37.6(2.6)	27.3(6.7)	41.3(8.3)
	1984	39.2(1.3)	40.6(1.8)	37.7(1.2)	40.8(1.4)	32.2(2.2)	35.7(7.6)
<b>History: Main Purpose</b>	1994	38.3(1.9)	41.0(3.0)	35.7(2.8)	38.9(2.2)	35.0(5.3)	28.9(4.2)
	1992	35.7(2.0)	38.3(2.6)	33.2(2.4)	36.2(1.8)	31.3(5.2)	33.6(8.1)
	1990	36.0(1.8)	35.7(2.7)	36.3(2.6)	38.2(2.1)	27.4(5.4)	24.7(5.5)
	1988	38.0(2.4)	36.6(3.1)	39.3(2.8)	38.7(3.0)	28.8(3.9)	36.0(5.9)
	1984	32.1(1.1)	31.0(1.5)	33.3(1.4)	34.0(1.4)	23.4(1.6)	27.9(5.2)
<b>Reason for Yvonne's dilemma</b>	1994	84.4(1.8)	81.7(2.5)	87.0(2.3)	88.3(2.2)	61.2(4.1)	76.9(8.6)
	1992	81.5(1.5)	77.6(2.3)	85.3(1.8)	84.6(1.7)	68.5(4.5)	75.1(5.1)
	1990	82.2(1.5)	79.5(2.2)	85.0(2.2)	84.7(1.6)	69.4(4.8)	77.8(4.1)
	1988	82.4(1.9)	78.9(2.7)	85.6(2.7)	84.6(2.5)	73.9(4.1)	70.4(6.9)
	1984	83.3(1.0)	79.0(1.4)	87.7(1.0)	86.8(1.2)	72.0(2.3)	69.4(4.7)
<b>Fly story: Problem</b>	1994	9.1(1.0)	7.8(1.5)	10.3(1.8)	8.5(1.2)	14.0(4.0)	11.0(4.1)
	1992	9.9(1.0)	11.3(1.7)	8.7(1.3)	9.1(1.1)	13.3(3.3)	13.9(6.2)
	1990	9.0(1.1)	8.9(1.4)	9.1(1.6)	8.9(1.3)	10.0(2.6)	6.3(3.4)
	1988	10.9(1.5)	8.4(2.2)	13.3(2.1)	12.2(1.9)	9.2(2.2)	6.3(3.4)
	1984	9.6(0.7)	10.6(1.0)	8.6(0.9)	9.4(0.7)	7.5(1.6)	12.8(2.0)
<b>Fly story: Resolution</b>	1994	16.9(1.2)	16.6(2.0)	17.2(2.0)	18.3(1.6)	11.5(3.4)	14.7(4.8)
	1992	16.5(1.3)	20.0(2.2)	13.1(1.5)	15.7(1.5)	17.2(3.3)	21.5(5.0)
	1990	19.1(1.7)	17.1(2.2)	21.2(2.4)	20.2(1.9)	18.1(4.8)	10.2(4.7)
	1988	16.1(1.4)	16.0(2.3)	16.2(2.0)	16.2(1.7)	18.8(2.1)	10.6(4.3)
	1984	15.3(1.0)	16.4(1.3)	14.1(1.3)	14.8(1.0)	15.2(2.1)	15.2(3.0)
<b>Dog Poem: Main Idea</b>	1994	71.4(2.4)	67.0(3.8)	75.5(2.5)	76.0(2.7)	40.6(6.3)	64.2(4.8)
	1992	65.6(1.7)	61.7(2.6)	69.4(2.2)	71.7(1.8)	42.5(4.8)	54.2(5.9)
	1990	65.3(2.0)	60.9(2.9)	69.9(2.7)	72.0(2.2)	38.9(5.5)	57.2(6.4)
	1988	69.5(2.3)	65.4(3.8)	73.3(2.2)	73.7(2.9)	50.1(4.2)	54.7(8.3)
	1984	67.8(1.3)	62.5(2.0)	73.4(1.3)	73.6(1.6)	46.8(3.2)	50.8(3.4)
<b>Dog Poem: Resolution</b>	1994	69.9(2.4)	64.0(3.3)	75.3(2.8)	74.7(2.5)	45.1(7.0)	48.9(6.6)
	1992	69.7(1.6)	64.9(2.3)	74.3(2.0)	75.2(1.9)	51.1(5.2)	57.9(5.5)
	1990	67.1(2.3)	64.1(2.7)	70.4(3.6)	74.8(2.1)	38.2(5.9)	47.5(8.0)
	1988	68.4(2.8)	64.2(4.2)	72.3(3.1)	72.8(3.0)	53.1(4.7)	53.2(7.5)
	1984	69.7(1.2)	65.4(1.6)	74.1(1.3)	73.9(1.3)	53.8(2.8)	58.5(3.6)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Flying: 1st machine</b>	1994	26.3(1.9)	27.7(2.7)	25.0(2.9)	29.3(2.6)	12.7(4.0)	21.8(6.2)
	1992	29.8(1.8)	29.6(2.7)	30.1(1.9)	34.3(2.3)	13.4(2.4)	24.5(4.3)
	1990	29.3(1.9)	28.5(2.4)	30.1(2.4)	33.5(2.4)	15.8(3.3)	12.3(4.6)
	1988	29.9(1.7)	29.2(2.1)	30.5(2.9)	33.0(2.3)	17.5(4.1)	25.2(4.8)
	1984	29.3(1.3)	29.9(1.6)	28.6(1.6)	32.3(1.6)	15.1(1.7)	23.4(5.0)
<b>Flying: Types of planes</b>	1994	39.9(2.1)	37.7(3.1)	42.0(2.8)	42.5(2.8)	27.2(4.5)	35.9(5.3)
	1992	41.9(1.7)	44.2(2.3)	39.7(2.5)	44.9(2.3)	32.7(4.1)	28.5(6.1)
	1990	35.9(2.4)	32.0(2.3)	40.2(3.9)	38.6(2.6)	21.9(5.0)	40.2(6.1)
	1988	39.1(2.4)	37.9(2.7)	40.2(3.3)	41.1(2.8)	29.6(4.2)	34.3(8.4)
	1984	36.2(1.2)	37.3(1.7)	35.2(1.5)	39.5(1.5)	21.2(3.2)	30.9(4.0)
<b>Flying: Differences</b>	1994	49.5(1.9)	50.6(2.4)	48.4(2.8)	53.3(2.5)	34.4(5.8)	33.2(4.2)
	1992	44.9(1.9)	45.9(2.8)	43.8(2.6)	49.3(2.2)	26.7(5.3)	39.1(7.0)
	1990	43.3(2.2)	44.0(2.8)	42.4(3.1)	48.2(2.4)	24.2(4.8)	36.1(6.2)
	1988	45.3(2.0)	44.5(3.8)	46.0(3.0)	49.0(2.4)	30.9(4.5)	33.4(5.7)
	1984	40.5(1.5)	42.1(2.0)	39.0(1.6)	44.7(1.5)	21.7(2.2)	28.9(6.3)
<b>Folk story: Inferring detail</b>	1994	41.8(2.1)	36.2(3.3)	47.0(3.1)	45.7(2.5)	27.8(4.9)	20.6(5.6)
	1992	41.6(1.9)	39.6(2.8)	43.6(2.4)	44.8(2.0)	33.1(6.0)	32.5(5.8)
	1990	38.9(2.2)	36.3(2.6)	41.7(3.5)	42.8(2.7)	27.0(4.3)	17.6(4.8)
	1988	41.8(2.7)	37.8(3.7)	45.5(2.9)	45.5(3.1)	25.0(4.5)	26.3(6.6)
	1984	42.0(1.2)	40.5(1.5)	43.5(1.7)	45.4(1.4)	26.2(2.8)	28.3(4.3)
<b>Folk story: Character trait</b>	1994	38.5(2.2)	35.0(2.6)	41.7(3.0)	38.5(2.3)	37.4(4.7)	28.6(7.4)
	1992	38.3(1.8)	36.4(2.4)	40.3(2.6)	40.8(2.3)	29.9(3.3)	26.4(5.9)
	1990	38.9(1.9)	35.7(2.1)	42.5(2.8)	42.2(2.0)	24.6(5.1)	30.2(5.8)
	1988	43.2(1.9)	39.1(4.0)	47.1(3.7)	45.0(1.9)	36.3(4.5)	41.4(7.3)
	1984	39.9(1.5)	38.7(2.2)	41.0(1.7)	41.7(1.5)	32.2(3.2)	29.3(8.2)
<b>Folk story: Character action</b>	1994	29.8(1.6)	31.0(2.9)	28.8(2.7)	32.2(2.0)	18.8(4.2)	20.4(5.3)
	1992	32.0(1.8)	32.5(2.6)	31.6(2.6)	34.7(2.2)	24.1(4.0)	22.5(4.5)
	1990	29.9(1.7)	26.2(2.3)	34.0(3.1)	32.5(2.3)	20.3(3.6)	22.2(5.5)
	1988	27.9(2.0)	27.0(2.5)	28.8(3.6)	29.2(2.3)	21.9(3.9)	27.2(5.8)
	1984	29.8(0.9)	28.8(1.7)	30.8(1.8)	31.6(1.2)	21.0(2.5)	27.7(4.5)
<b>Folk story: Major event</b>	1994	53.4(2.4)	57.6(3.4)	49.3(2.9)	55.6(2.9)	44.2(7.9)	43.1(5.9)
	1992	48.5(2.0)	44.6(2.8)	52.4(2.7)	53.8(2.4)	31.3(5.3)	33.6(8.1)
	1990	50.1(1.9)	45.3(2.0)	55.3(3.6)	53.4(2.1)	39.1(6.1)	34.5(XXX)
	1988	50.4(2.3)	47.8(3.3)	53.0(3.2)	53.2(2.6)	34.5(5.1)	45.5(7.4)
	1984	47.5(1.3)	46.8(1.7)	48.1(2.1)	49.6(1.3)	37.4(3.4)	38.5(7.0)
<b>Define nonsense word "habbies"</b>	1994	79.9(1.7)	75.9(2.9)	83.8(2.4)	81.7(2.0)	71.5(5.1)	76.9(5.4)
	1992	73.1(1.8)	71.3(2.9)	74.8(2.2)	76.6(1.9)	58.7(5.8)	70.1(7.1)
	1990	73.5(2.0)	69.8(2.6)	77.6(2.3)	75.7(2.4)	63.4(6.2)	67.4(7.4)
	1988	73.5(2.4)	68.8(3.4)	78.0(3.1)	76.7(3.3)	60.0(4.3)	64.0(5.6)
	1984	73.1(1.1)	71.9(1.6)	74.4(1.5)	76.8(1.2)	50.4(3.3)	71.8(3.0)
<b>Puzzle: Description of bird</b>	1994	81.2(1.6)	77.8(2.4)	84.4(2.0)	84.7(1.6)	62.4(6.9)	***(***)
	1992	81.4(1.7)	77.5(2.5)	85.0(1.9)	85.7(1.9)	69.0(4.1)	68.8(6.4)
	1990	80.7(1.8)	78.2(2.6)	83.4(2.1)	85.3(1.7)	58.9(5.9)	70.9(7.8)
	1988	83.9(2.5)	83.5(3.0)	84.2(2.8)	86.3(3.1)	73.6(4.4)	76.3(8.2)
	1984	78.7(1.3)	75.4(2.0)	82.0(1.4)	82.9(1.3)	56.6(5.0)	70.4(4.2)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Science: Research</b>	1994	21.7(2.6)	17.7(3.0)	25.6(3.4)	21.7(3.0)	21.7(5.3)	***(***)
	1992	22.3(1.9)	23.4(2.9)	21.1(2.1)	22.3(2.5)	18.8(4.7)	19.7(5.7)
	1990	22.6(1.8)	21.9(2.3)	23.4(2.7)	25.1(2.1)	13.4(4.5)	15.9(4.3)
	1988	21.7(1.8)	16.9(2.8)	26.4(2.7)	22.6(2.2)	19.0(4.9)	12.0(6.9)
	1984	23.6(1.2)	23.4(2.0)	23.7(1.6)	24.4(1.4)	21.0(3.4)	19.5(4.1)
<b>Science: Evidence</b>	1994	10.8(1.5)	8.9(1.7)	12.5(2.7)	9.8(1.6)	19.1(5.7)	***(***)
	1992	9.5(1.1)	7.8(1.6)	11.2(1.7)	8.7(1.0)	15.9(4.0)	2.4(1.7)
	1990	11.4(1.3)	11.2(1.8)	11.6(1.6)	11.9(1.6)	9.4(2.8)	10.2(5.1)
	1988	10.0(1.5)	9.2(2.0)	10.7(1.8)	11.1(1.9)	9.3(2.0)	2.2(1.8)
	1984	11.4(0.9)	11.9(1.6)	10.8(1.1)	12.2(1.0)	6.3(1.6)	9.7(2.1)
<b>Science: Area of study</b>	1994	30.9(1.8)	29.2(2.7)	32.7(2.9)	35.4(2.0)	13.5(3.7)	***(***)
	1992	28.6(1.6)	26.8(2.3)	30.6(2.6)	32.1(2.1)	20.0(3.5)	17.5(3.8)
	1990	29.0(2.0)	29.2(2.6)	28.7(2.8)	31.8(2.1)	20.8(4.8)	14.1(4.3)
	1988	32.9(2.0)	33.6(3.3)	32.3(2.5)	35.4(2.2)	21.4(4.2)	23.2(8.2)
	1984	25.9(1.5)	26.7(1.7)	25.3(1.9)	27.6(1.8)	19.4(2.4)	17.5(3.2)
<b>Timothy story: Recall setting</b>	1994	81.9(2.0)	81.1(2.5)	82.9(3.0)	86.0(1.9)	63.3(6.4)	***(***)
	1992	85.1(1.4)	81.9(2.0)	88.6(1.7)	88.4(1.3)	75.9(3.1)	77.4(7.1)
	1990	83.0(1.5)	80.4(2.0)	85.6(2.1)	84.2(1.8)	82.3(4.0)	71.2(6.7)
	1988	84.8(1.5)	82.0(2.0)	87.5(1.8)	86.3(1.5)	76.1(4.8)	84.6(4.2)
	1984	85.2(0.8)	81.9(1.5)	88.2(0.9)	86.9(0.8)	80.8(2.4)	73.7(2.8)
<b>Myth: Exaggeration</b>	1994	32.3(1.9)	30.9(2.9)	34.0(3.6)	35.7(2.7)	19.0(5.2)	***(***)
	1992	35.1(2.3)	35.0(3.4)	35.1(2.7)	38.3(2.4)	21.8(4.2)	35.3(7.6)
	1990	37.5(2.2)	39.3(2.9)	35.7(3.4)	40.6(2.6)	30.3(6.1)	19.5(6.4)
	1988	36.4(2.5)	39.5(2.8)	33.4(3.5)	38.4(3.0)	26.5(5.2)	35.7(6.4)
	1984	33.6(1.4)	32.6(1.5)	34.5(1.9)	36.7(1.7)	18.7(3.2)	20.1(2.9)
<b>Two meanings of "bats"</b>	1994	76.9(2.1)	71.0(2.8)	83.3(2.7)	83.1(2.5)	51.4(7.3)	***(***)
	1992	76.5(1.5)	73.3(2.5)	79.9(1.7)	80.8(1.7)	64.7(3.8)	67.5(5.8)
	1990	76.3(1.9)	74.9(2.8)	77.8(2.6)	82.6(2.0)	53.8(5.8)	56.3(9.6)
	1988	75.9(2.4)	73.9(3.5)	77.8(2.8)	79.5(2.4)	57.9(4.9)	70.4(8.3)
	1984	73.1(1.5)	67.7(2.0)	78.1(1.6)	77.5(1.7)	53.2(3.4)	59.7(3.2)
<b>Biography: Honors</b>	1994	53.6(1.9)	46.2(2.4)	61.6(3.3)	58.9(2.3)	30.0(5.4)	***(***)
	1992	52.2(1.9)	46.0(2.1)	58.9(3.4)	57.4(2.2)	30.5(3.7)	43.7(7.3)
	1990	52.7(2.0)	48.2(3.1)	57.4(2.8)	57.5(2.7)	34.2(3.9)	30.2(5.3)
	1988	58.0(2.7)	57.1(3.9)	58.9(3.4)	62.0(2.9)	39.9(5.6)	44.1(6.5)
	1984	53.6(1.5)	48.4(2.0)	58.6(2.1)	57.3(1.8)	34.7(2.9)	42.5(6.8)
<b>Biography: Accomplishments</b>	1994	57.4(2.4)	50.5(2.9)	65.1(3.7)	61.5(2.9)	41.0(XXX)	***(***)
	1992	59.1(1.7)	53.7(2.8)	65.1(2.8)	64.4(2.0)	39.8(5.2)	43.2(7.5)
	1990	59.4(2.2)	56.2(3.0)	62.6(3.1)	63.2(2.9)	44.6(5.1)	46.5(6.6)
	1988	60.0(2.3)	59.0(2.8)	61.0(2.9)	62.7(2.6)	46.5(5.3)	52.8(4.7)
	1984	54.9(1.7)	47.7(2.2)	61.5(2.2)	59.0(2.0)	34.2(3.8)	37.8(4.2)
<b>Boxball: Fact</b>	1994	54.7(2.4)	52.9(3.4)	56.4(3.2)	57.5(3.0)	51.4(7.0)	***(***)
	1992	53.8(1.9)	50.4(2.9)	57.4(2.5)	58.0(2.3)	36.5(4.6)	45.0(7.8)
	1990	52.0(2.0)	50.8(3.0)	53.1(3.4)	53.5(2.3)	48.3(4.6)	39.0(5.9)
	1988	50.1(2.9)	46.3(3.6)	54.1(3.3)	50.9(3.0)	45.0(7.2)	46.8(XXX)
	1984	51.8(1.5)	49.0(1.9)	54.4(2.2)	55.1(1.7)	39.8(4.3)	39.3(6.8)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Boxball: Central purpose</b>	1994	53.6(2.4)	51.6(3.4)	55.6(3.2)	58.0(2.5)	44.0(4.3)	***(***)
	1992	54.3(1.6)	52.8(2.3)	55.9(2.3)	59.5(1.6)	36.2(5.1)	37.4(8.2)
	1990	50.4(2.3)	51.4(2.6)	49.4(3.2)	56.1(2.9)	32.0(3.9)	30.0(4.2)
	1988	53.2(2.9)	51.7(3.5)	54.8(3.9)	57.3(3.3)	35.8(4.5)	48.9(XXX)
	1984	49.2(1.3)	46.0(1.5)	52.2(1.7)	53.0(1.4)	35.1(2.9)	32.6(4.8)
<b>Boxball: Sequence</b>	1994	39.1(2.0)	40.9(2.9)	37.3(2.4)	42.8(2.3)	30.0(4.8)	***(***)
	1992	44.1(1.7)	48.1(2.1)	39.9(2.2)	48.5(1.9)	24.5(4.0)	30.9(7.7)
	1990	35.4(2.2)	40.5(3.3)	30.2(2.9)	39.1(2.7)	26.2(5.2)	14.9(3.8)
	1988	40.5(2.2)	44.5(3.2)	36.3(2.4)	44.6(2.9)	26.3(3.9)	27.5(5.4)
	1984	38.3(1.1)	41.0(1.7)	35.7(1.8)	42.6(1.4)	23.1(2.8)	24.9(4.1)
<b>Boxball: Main idea</b>	1994	34.9(2.0)	31.2(2.9)	38.6(3.0)	38.7(2.5)	22.4(3.7)	***(***)
	1992	36.5(1.9)	32.9(3.0)	40.5(2.5)	41.4(2.1)	17.2(5.1)	23.1(4.2)
	1990	35.9(1.7)	31.1(2.4)	40.8(2.6)	40.4(2.2)	20.4(3.8)	21.8(5.6)
	1988	35.5(1.9)	35.4(2.3)	35.6(2.7)	37.6(2.4)	26.4(4.1)	37.9(6.5)
	1984	36.8(1.2)	35.6(1.5)	38.1(1.7)	39.6(1.4)	23.2(2.4)	33.9(5.0)
<b>Boxball: Supporting idea</b>	1994	58.2(2.1)	61.0(3.1)	55.5(3.0)	62.0(2.3)	48.2(4.4)	***(***)
	1992	59.3(2.1)	59.8(2.8)	58.8(3.0)	65.3(2.3)	35.8(5.0)	47.6(5.3)
	1990	55.2(1.5)	57.7(2.5)	52.5(2.5)	59.6(1.8)	37.1(4.9)	44.8(5.9)
	1988	59.9(2.0)	63.0(2.9)	56.7(3.3)	65.9(1.8)	37.6(4.8)	45.4(XXX)
	1984	54.7(1.3)	53.1(2.2)	56.2(1.8)	59.6(1.6)	34.6(2.8)	37.2(5.3)
<b>Civics: Document description</b>	1994	17.8(2.0)	20.8(2.6)	14.9(2.3)	19.7(2.3)	16.0(5.9)	***(***)
	1992	19.4(1.9)	17.5(2.4)	21.5(2.8)	21.7(2.3)	11.9(2.6)	12.4(4.2)
	1990	17.4(1.6)	18.3(2.2)	16.5(2.3)	18.8(1.9)	14.4(3.5)	10.6(3.8)
	1988	18.8(1.4)	16.6(2.2)	21.1(2.0)	17.7(1.9)	18.4(4.2)	24.6(7.0)
	1984	16.9(1.1)	16.1(1.3)	17.7(1.4)	17.8(1.3)	14.6(2.3)	10.1(2.8)
<b>Civics: Importance of court</b>	1994	44.0(2.1)	45.4(3.1)	42.7(2.9)	44.0(2.8)	50.6(5.0)	***(***)
	1992	45.4(2.0)	40.2(2.5)	51.0(2.7)	46.6(2.5)	36.3(4.7)	47.6(7.7)
	1990	43.4(2.0)	44.2(3.0)	42.6(2.8)	43.2(2.4)	40.6(6.2)	48.5(6.0)
	1988	48.8(2.3)	44.8(3.0)	52.9(3.2)	49.7(2.4)	47.1(7.9)	41.8(8.7)
	1984	45.6(1.5)	45.8(1.9)	45.4(1.7)	46.3(1.6)	43.5(3.3)	35.9(7.6)
<b>Civics: Vocabulary</b>	1994	5.0(0.7)	2.3(0.8)	7.6(1.5)	4.3(0.8)	5.5(2.9)	***(***)
	1992	6.0(1.0)	7.7(1.7)	4.3(1.1)	5.2(1.1)	8.4(2.3)	6.2(3.3)
	1990	5.9(1.0)	7.1(1.6)	4.6(1.3)	5.5(1.2)	8.1(3.7)	4.9(2.5)
	1988	7.6(1.1)	6.6(1.3)	8.7(1.9)	5.8(1.1)	11.0(4.0)	17.3(4.2)
	1984	6.8(0.6)	7.3(1.0)	6.4(0.9)	6.5(0.6)	8.6(1.7)	6.9(3.1)
<b>Define nonsense word "tup"</b>	1994	64.0(2.3)	57.5(3.5)	70.2(3.4)	66.6(2.6)	62.9(8.3)	***(***)
	1992	62.3(2.0)	58.2(2.4)	66.8(3.0)	67.2(2.3)	40.5(5.4)	51.4(6.1)
	1990	61.7(1.9)	60.3(2.7)	63.2(2.5)	66.5(2.0)	40.1(5.8)	60.7(6.0)
	1988	62.4(2.5)	62.0(3.2)	62.8(2.8)	64.4(2.9)	52.2(6.0)	56.6(XXX)
	1984	57.9(1.6)	53.7(2.3)	61.9(1.9)	62.4(1.8)	37.9(3.5)	46.0(5.1)
<b>U.S. History: Transportation</b>	1994	60.6(2.2)	55.3(3.5)	65.6(3.2)	63.4(2.7)	57.6(4.6)	***(***)
	1992	58.0(2.1)	56.1(2.8)	60.1(2.8)	63.2(2.1)	37.1(5.9)	50.5(7.1)
	1990	53.2(2.7)	49.6(3.7)	57.0(3.4)	55.6(3.2)	43.7(7.0)	51.5(7.8)
	1988	61.1(2.2)	58.2(2.8)	64.1(2.8)	64.5(2.6)	45.7(4.7)	57.3(9.1)
	1984	53.4(1.6)	50.7(2.2)	56.0(2.1)	59.0(1.9)	32.0(3.0)	35.0(7.3)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>U.S. History: Vocabulary</b>	1994	34.2(2.5)	34.3(3.6)	34.0(3.4)	35.5(2.6)	30.6(4.9)	***(***)
	1992	32.6(2.3)	31.3(3.3)	34.0(2.4)	36.5(2.4)	17.1(4.6)	20.3(5.8)
	1990	36.5(2.0)	35.8(3.2)	37.2(2.4)	41.3(2.6)	23.9(4.1)	10.5(3.9)
	1988	33.0(2.5)	32.3(3.2)	33.8(3.2)	33.4(2.9)	27.1(4.2)	34.6(7.9)
	1984	34.7(1.5)	33.4(2.1)	36.0(1.8)	38.6(1.9)	18.3(2.9)	23.0(4.7)
<b>Puzzle: Description of chair</b>	1994	91.4(1.2)	89.9(1.7)	92.8(1.6)	92.7(1.0)	90.1(5.3)	***(***)
	1992	89.6(1.0)	85.9(1.6)	93.6(1.2)	92.9(1.1)	74.3(4.8)	83.7(4.3)
	1990	90.3(1.3)	85.6(2.2)	95.2(1.1)	91.8(1.3)	81.6(4.8)	90.1(4.2)
	1988	89.5(1.5)	88.0(2.0)	91.2(1.9)	91.6(1.7)	80.6(3.8)	86.1(6.5)
	1984	91.8(0.7)	89.7(1.0)	94.0(0.9)	92.7(0.7)	86.5(2.6)	90.8(2.2)
<b>Character trait: Toy</b>	1994	60.3(1.8)	56.8(3.2)	63.8(2.5)	64.3(2.1)	48.3(4.8)	***(***)
	1992	60.9(2.0)	56.4(2.8)	65.9(2.6)	64.4(2.2)	46.7(5.5)	52.4(5.6)
	1990	63.4(2.1)	58.0(3.5)	69.0(2.3)	69.8(2.3)	44.5(5.3)	37.8(4.3)
	1988	58.9(1.9)	53.6(3.2)	64.5(2.7)	62.6(2.2)	45.3(6.0)	51.1(XXX)
	1984	60.7(1.4)	57.4(1.6)	64.1(1.7)	63.7(1.5)	48.4(3.2)	49.0(XXX)
<b>Frontier women: Description</b>	1994	54.2(2.6)	53.0(3.4)	55.4(3.5)	58.2(2.5)	47.0(6.9)	***(***)
	1992	53.7(1.7)	49.5(2.2)	58.3(2.4)	59.6(2.0)	27.2(4.5)	42.8(5.9)
	1990	52.4(1.9)	45.9(2.5)	59.2(3.1)	56.8(2.1)	36.0(4.6)	37.4(6.4)
	1988	53.9(2.1)	50.5(3.4)	57.3(2.5)	59.6(2.5)	29.4(4.3)	43.9(6.9)
	1984	56.3(1.4)	52.5(2.0)	60.2(1.9)	60.4(1.4)	40.7(3.6)	38.9(8.4)
<b>Frontier women: Activities</b>	1994	46.4(2.5)	42.5(2.9)	50.1(3.3)	48.6(2.9)	39.2(7.1)	***(***)
	1992	49.3(1.8)	45.8(2.8)	53.1(2.5)	52.7(2.0)	33.5(5.1)	47.7(9.0)
	1990	44.8(2.0)	40.0(2.9)	49.7(2.7)	46.2(2.4)	44.8(5.7)	25.7(6.2)
	1988	42.8(1.9)	38.8(2.9)	46.9(2.6)	44.7(2.2)	36.2(4.3)	29.6(8.1)
	1984	47.1(1.1)	45.6(1.4)	48.7(1.7)	49.9(1.2)	36.1(2.8)	36.2(3.7)
<b>Frontier women: products</b>	1994	65.3(2.2)	61.6(3.2)	68.9(2.9)	70.7(2.3)	49.0(5.4)	***(***)
	1992	63.0(1.5)	58.5(2.3)	67.9(2.5)	68.5(1.4)	39.6(3.8)	52.8(9.8)
	1990	59.9(2.3)	56.0(3.4)	64.0(3.1)	65.3(2.7)	42.3(4.7)	43.2(6.2)
	1988	60.0(2.1)	56.7(2.8)	63.4(3.0)	63.6(2.5)	45.0(4.4)	43.4(XXX)
	1984	65.4(1.0)	63.7(1.5)	67.2(1.4)	70.8(1.1)	45.6(3.6)	42.5(5.2)
<b>Dog &amp; shadow fable: Inference</b>	1994	64.1(2.3)	58.5(3.2)	69.7(3.1)	68.0(2.6)	53.0(6.0)	***(***)
	1992	63.7(1.7)	59.1(2.2)	68.6(2.1)	69.2(1.7)	37.3(5.5)	57.7(4.9)
	1990	68.0(2.0)	65.8(2.8)	70.2(2.4)	74.0(2.2)	46.4(6.3)	51.5(6.6)
	1988	68.1(2.1)	65.2(3.7)	71.1(3.0)	71.6(2.2)	56.1(5.4)	48.2(9.5)
	1984	67.3(1.4)	66.3(1.7)	68.3(1.8)	72.6(1.5)	47.3(3.7)	45.2(5.7)
<b>Dog &amp; shadow fable: Moral</b>	1994	55.5(2.6)	53.6(3.8)	57.4(3.9)	57.5(2.9)	49.6(6.2)	***(***)
	1992	57.1(2.0)	54.1(2.4)	60.3(3.0)	60.2(2.3)	46.6(5.3)	43.0(7.8)
	1990	59.8(2.3)	63.5(3.6)	56.0(2.7)	65.7(2.8)	37.4(5.5)	45.3(8.2)
	1988	62.9(2.4)	61.4(2.4)	64.4(3.7)	68.3(3.0)	40.8(5.8)	47.7(XXX)
	1984	61.5(1.5)	58.9(1.8)	64.2(2.2)	66.4(1.6)	44.5(3.2)	36.6(9.2)
<b>Sandwich: Major idea</b>	1994	45.2(1.6)	42.8(2.8)	47.4(2.8)	48.5(2.1)	31.7(5.0)	***(***)
	1992	46.5(1.9)	45.8(2.7)	47.3(2.7)	49.1(2.1)	38.5(4.7)	31.4(7.5)
	1990	43.1(1.8)	42.8(2.7)	43.5(2.7)	45.9(2.3)	33.1(5.7)	32.4(6.2)
	1988	41.0(2.4)	39.8(3.2)	42.4(3.1)	42.2(2.7)	37.6(6.1)	27.3(8.4)
	1984	42.0(1.6)	43.6(2.1)	40.4(2.1)	44.5(2.0)	30.4(1.8)	31.3(3.1)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Sandwich: Supporting idea</b>	1994	61.0(2.0)	56.0(3.7)	65.7(3.4)	64.7(2.4)	50.3(6.6)	***(***)
	1992	62.3(1.8)	57.5(2.5)	67.5(2.6)	67.9(1.8)	38.6(6.1)	47.5(8.3)
	1990	61.4(1.9)	55.1(2.7)	68.2(2.7)	66.4(2.2)	46.9(6.2)	38.4(6.5)
	1988	56.5(3.0)	53.9(3.3)	59.1(3.7)	58.6(3.8)	41.9(6.2)	56.8(9.8)
	1984	65.0(1.3)	61.2(1.6)	68.9(1.5)	67.6(1.6)	53.2(3.8)	53.1(5.8)
<b>Result of food chain</b>	1994	65.9(2.1)	67.3(3.8)	64.7(2.6)	69.3(1.9)	58.3(8.7)	***(***)
	1992	66.4(2.1)	61.8(2.6)	71.5(2.4)	70.6(2.5)	48.6(6.8)	59.0(5.5)
	1990	68.1(2.1)	66.6(3.2)	69.6(2.4)	70.8(2.4)	57.7(7.1)	59.4(5.8)
	1988	68.1(1.9)	63.1(3.0)	73.1(2.7)	70.1(2.7)	55.9(5.8)	64.8(8.3)
	1984	66.3(1.2)	63.8(1.9)	68.8(1.6)	69.1(1.2)	56.0(3.4)	49.4(XXX)
<b>Food chain main idea</b>	1994	47.1(2.4)	42.3(3.3)	51.6(4.5)	49.9(3.0)	40.9(7.3)	***(***)
	1992	47.8(2.2)	44.4(2.5)	51.3(3.2)	52.3(2.4)	29.7(5.7)	35.9(8.5)
	1990	46.9(2.3)	42.3(3.6)	51.6(2.8)	49.0(2.2)	46.4(8.3)	31.4(5.4)
	1988	46.4(1.9)	45.3(2.7)	47.5(3.1)	48.3(1.9)	30.7(4.6)	43.8(XXX)
	1984	46.6(1.3)	45.8(2.0)	47.4(1.7)	49.3(1.5)	31.3(3.6)	35.2(4.6)
<b>Best title for Scott story</b>	1994	32.1(1.8)	31.3(3.6)	33.1(3.2)	32.1(2.1)	35.9(6.0)	29.8(5.6)
	1992	31.0(2.0)	31.0(2.8)	30.9(2.7)	30.8(2.2)	32.0(3.8)	30.7(8.2)
	1990	30.6(1.8)	30.5(1.9)	30.7(2.4)	31.2(2.2)	30.4(5.8)	28.0(5.9)
	1988	32.2(1.7)	26.0(1.9)	38.4(3.0)	33.7(2.3)	29.1(5.0)	27.3(7.4)
	1984	30.5(1.4)	29.8(1.7)	31.3(1.9)	31.1(1.7)	30.6(3.8)	22.1(4.7)
<b>Scott story fact</b>	1994	51.6(1.9)	50.1(2.6)	53.3(2.8)	54.2(2.2)	40.5(5.9)	40.2(7.1)
	1992	50.7(1.7)	45.1(2.5)	56.3(2.6)	52.0(1.9)	45.3(4.7)	43.3(7.0)
	1990	47.2(2.2)	42.9(2.7)	51.3(3.3)	49.6(2.5)	44.0(4.8)	41.2(5.0)
	1988	55.0(2.0)	46.8(3.0)	63.3(2.7)	56.4(2.6)	50.3(5.7)	54.2(6.6)
	1984	47.4(1.0)	43.9(1.6)	51.0(1.3)	49.0(1.3)	43.1(2.8)	39.2(4.2)
<b>Scott story definition</b>	1994	15.4(1.9)	14.6(2.1)	15.9(2.6)	17.2(2.4)	11.4(4.3)	9.6(3.1)
	1992	14.7(1.3)	14.9(1.8)	14.5(1.9)	15.0(1.6)	12.7(2.5)	14.1(6.5)
	1990	12.5(1.4)	10.7(1.8)	14.2(2.1)	13.3(1.5)	12.2(4.3)	2.0(1.9)
	1988	12.1(1.3)	11.6(1.7)	12.7(2.6)	12.4(1.6)	9.2(2.9)	19.0(5.8)
	1984	16.1(0.9)	15.6(0.9)	16.6(1.6)	16.1(0.9)	16.3(1.5)	10.8(2.3)
<b>Snowman: Best description</b>	1994	77.6(1.9)	75.5(2.9)	79.6(2.2)	81.0(1.9)	62.0(5.3)	76.7(6.1)
	1992	78.3(1.4)	73.6(2.1)	83.0(2.3)	82.1(1.7)	71.5(5.0)	59.2(5.9)
	1990	77.2(1.8)	72.8(2.5)	81.5(2.2)	79.0(2.1)	71.6(4.5)	66.9(5.0)
	1988	81.4(1.7)	80.9(2.5)	81.8(2.8)	84.2(2.2)	71.2(4.9)	68.4(6.7)
	1984	83.8(0.9)	82.0(1.1)	85.7(1.4)	85.6(1.1)	74.7(2.0)	80.4(5.8)
<b>Character trait: Clown</b>	1994	84.4(1.5)	80.0(2.5)	89.1(2.0)	87.2(1.4)	77.4(5.9)	73.2(5.9)
	1992	83.7(1.3)	79.8(2.3)	87.6(1.6)	88.4(1.6)	67.4(3.9)	70.6(4.9)
	1990	85.4(1.8)	82.1(2.8)	88.5(2.4)	86.1(2.0)	83.3(3.5)	88.4(5.2)
	1988	87.6(2.1)	81.8(4.7)	93.3(1.7)	88.4(2.4)	86.3(6.1)	76.7(8.7)
	1984	86.0(1.1)	82.1(1.8)	90.1(1.3)	87.8(1.3)	78.0(2.7)	82.1(4.7)
<b>Nonsense word 1</b>	1994	67.7(2.1)	67.0(2.3)	68.5(3.3)	72.1(1.9)	56.1(6.8)	52.5(7.5)
	1992	68.5(1.4)	68.3(2.2)	68.6(2.0)	73.2(1.6)	55.0(4.7)	47.9(7.8)
	1990	67.1(1.9)	65.7(2.6)	68.5(2.9)	70.8(2.0)	53.0(4.8)	58.0(6.1)
	1988	69.1(2.1)	67.5(3.5)	70.7(3.0)	72.0(2.7)	61.4(4.4)	44.9(8.7)
	1984	66.4(1.4)	63.9(1.5)	69.1(1.9)	69.2(1.5)	56.2(3.7)	58.9(8.1)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Fact about pet care</b>	1994	34.6(1.9)	30.7(3.4)	38.4(3.1)	38.8(2.6)	20.5(4.5)	22.2(6.1)
	1992	31.4(1.7)	27.8(2.4)	35.0(2.3)	35.9(2.4)	16.5(3.8)	26.2(5.4)
	1990	28.5(1.9)	22.3(2.4)	34.5(2.3)	32.1(2.0)	19.3(4.5)	12.6(4.2)
	1988	34.8(2.4)	29.6(3.4)	40.0(2.2)	38.0(3.1)	24.1(4.7)	14.6(5.7)
	1984	35.6(1.3)	32.5(1.4)	38.8(1.7)	40.3(1.7)	21.7(2.6)	17.8(2.5)
<b>Fact about health of pet</b>	1994	40.3(2.4)	41.5(3.8)	39.2(3.6)	45.8(3.3)	17.4(4.2)	29.0(6.4)
	1992	44.2(1.5)	41.6(2.3)	46.7(2.1)	46.5(2.0)	41.3(5.0)	39.3(5.8)
	1990	40.0(1.7)	35.1(2.1)	44.6(3.3)	45.0(2.1)	24.8(4.6)	26.5(5.4)
	1988	40.1(1.8)	36.1(2.8)	44.1(3.1)	42.1(2.3)	33.7(4.9)	25.4(4.8)
	1984	42.8(1.1)	38.9(1.6)	46.9(1.9)	46.7(1.2)	30.4(2.8)	28.3(6.3)
<b>Tooth poem: Speaker's identity</b>	1994	72.6(2.2)	67.5(3.2)	78.2(2.9)	74.8(2.2)	63.7(5.0)	62.5(6.1)
	1992	73.5(1.9)	68.4(2.9)	78.4(2.4)	75.3(2.6)	72.3(3.5)	67.8(7.6)
	1990	70.7(1.7)	62.5(2.9)	78.5(2.4)	74.0(1.9)	57.3(5.0)	61.3(8.2)
	1988	70.1(2.5)	66.8(3.6)	73.4(2.8)	71.9(3.0)	57.8(5.4)	74.1(6.1)
	1984	70.0(1.4)	62.3(2.1)	78.0(1.4)	73.2(1.3)	57.7(4.3)	58.7(XXX)
<b>Tooth poem: Major event</b>	1994	37.4(1.8)	34.5(2.8)	40.6(3.0)	38.5(2.2)	30.3(5.9)	38.3(7.7)
	1992	33.5(1.8)	29.7(2.5)	37.1(2.2)	38.2(2.2)	15.0(4.2)	27.9(6.8)
	1990	33.8(1.5)	29.4(2.4)	38.1(2.8)	36.4(1.7)	21.4(4.6)	34.6(7.7)
	1988	37.0(2.4)	35.7(3.0)	38.3(4.0)	39.1(2.8)	28.4(6.3)	21.3(4.9)
	1984	36.1(1.4)	33.3(2.0)	39.0(1.8)	40.3(1.5)	22.2(2.3)	23.3(4.7)
<b>Tooth poem: Vocabulary</b>	1994	27.7(1.8)	29.8(3.1)	25.2(2.5)	29.7(2.2)	20.7(5.5)	19.7(5.1)
	1992	27.4(1.4)	28.4(2.3)	26.5(2.4)	30.8(1.6)	18.5(3.9)	10.2(4.5)
	1990	24.7(1.7)	21.8(2.5)	27.5(2.2)	27.1(2.0)	15.5(3.7)	26.2(9.7)
	1988	28.0(2.3)	29.7(2.0)	26.2(4.1)	29.7(2.6)	17.5(4.6)	25.7(6.2)
	1984	25.0(1.1)	25.6(1.3)	24.4(1.7)	27.2(1.2)	16.9(2.3)	20.2(5.4)
<b>Advertisement for carrier</b>	1994	43.0(2.6)	38.6(3.0)	47.8(3.4)	48.8(3.4)	19.2(5.6)	***(***)
	1992	43.4(1.6)	35.8(2.7)	51.6(2.4)	48.9(2.0)	26.7(3.6)	29.5(6.9)
	1990	43.0(2.0)	36.5(2.6)	49.9(3.3)	47.0(2.2)	29.3(4.1)	27.3(6.4)
	1988	45.7(1.9)	43.2(3.6)	48.0(2.6)	50.3(2.1)	23.4(3.8)	31.9(4.4)
	1984	45.4(1.4)	43.3(1.9)	47.5(1.6)	51.2(1.7)	27.1(2.0)	25.5(3.4)
<b>Carrier job requirements</b>	1994	63.0(2.0)	59.8(2.6)	66.4(2.9)	67.8(2.3)	40.1(6.0)	***(***)
	1992	60.6(1.6)	59.9(2.6)	61.3(2.5)	66.2(2.1)	39.8(3.9)	52.9(6.1)
	1990	62.3(2.0)	66.1(2.6)	58.2(2.8)	63.1(2.2)	57.8(4.9)	57.2(6.4)
	1988	55.8(2.1)	56.4(2.5)	55.2(3.4)	58.1(2.5)	47.7(6.7)	45.0(4.8)
	1984	61.2(1.0)	60.4(1.5)	62.0(1.3)	65.0(1.1)	49.5(2.7)	46.5(2.3)
<b>Carrier job responsibilities</b>	1994	49.6(2.0)	44.9(2.7)	54.6(3.0)	54.6(2.3)	24.6(4.2)	***(***)
	1992	54.2(1.9)	49.8(3.2)	58.8(2.7)	58.6(2.3)	41.3(3.9)	45.8(5.9)
	1990	51.7(2.3)	51.4(3.7)	52.1(3.0)	54.1(2.5)	44.0(5.5)	38.2(5.0)
	1988	53.7(2.3)	50.1(3.0)	57.3(3.3)	56.5(2.1)	42.5(5.7)	44.9(8.9)
	1984	48.7(1.2)	43.4(1.8)	54.0(1.3)	53.1(1.4)	33.3(2.1)	32.5(2.8)
<b>Silky story fact</b>	1994	74.4(1.6)	71.1(1.9)	77.8(2.7)	78.6(2.2)	56.6(5.8)	***(***)
	1992	68.8(1.5)	64.3(2.5)	73.7(2.0)	72.5(1.8)	57.6(4.5)	56.3(6.4)
	1990	73.1(2.0)	70.5(2.5)	75.9(2.8)	76.9(2.1)	64.8(4.9)	56.7(6.1)
	1988	71.1(2.7)	70.8(3.0)	71.3(3.2)	72.8(3.0)	60.1(4.9)	70.5(9.7)
	1984	72.7(1.1)	69.4(1.4)	75.9(1.4)	76.2(1.1)	59.0(3.1)	61.9(2.3)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>History of gold rush fact</b>	1994	28.0(2.2)	27.6(2.2)	28.4(3.2)	29.4(2.2)	20.5(6.4)	***(***)
	1992	29.6(1.6)	27.2(1.7)	32.2(2.2)	31.9(1.8)	24.1(2.9)	16.8(6.6)
	1990	29.4(1.7)	28.5(2.5)	30.3(2.8)	32.1(1.9)	24.7(4.4)	13.1(4.4)
	1988	37.7(2.9)	37.0(4.5)	38.5(3.2)	40.3(3.5)	24.1(5.8)	33.6(6.5)
	1984	30.0(1.1)	29.5(1.3)	30.5(1.3)	32.1(1.3)	21.8(1.9)	24.4(2.7)
<b>Winnie drawing</b>	1994	86.4(1.3)	87.1(1.8)	85.6(2.0)	91.5(1.2)	61.4(5.6)	***(***)
	1992	86.6(1.3)	85.0(1.9)	88.4(1.9)	90.3(1.1)	76.8(5.0)	80.4(6.8)
	1990	85.7(1.2)	84.6(2.1)	86.9(1.9)	86.6(1.5)	86.0(3.7)	72.7(6.6)
	1988	84.7(2.2)	84.8(3.2)	84.7(2.6)	86.3(2.6)	77.8(2.9)	80.9(5.3)
	1984	87.3(0.5)	87.1(0.8)	87.4(0.7)	89.8(0.6)	77.9(2.7)	80.6(1.6)
<b>Angry poem: Resolution</b>	1994	51.1(2.4)	44.5(3.2)	58.1(4.0)	55.5(2.9)	33.8(4.6)	***(***)
	1992	52.7(2.0)	49.0(3.1)	56.7(2.9)	56.6(2.4)	40.6(4.0)	39.9(6.3)
	1990	50.1(2.2)	48.2(3.1)	52.1(3.2)	56.3(2.7)	36.3(4.5)	17.6(3.1)
	1988	52.4(2.3)	53.3(3.1)	51.4(2.8)	56.0(2.8)	35.4(5.2)	45.2(6.1)
	1984	51.9(1.0)	49.4(1.5)	54.3(1.2)	57.6(1.2)	36.3(2.0)	26.1(3.5)
<b>Stars article: Process</b>	1994	47.3(2.4)	44.5(3.4)	50.5(4.0)	48.6(2.9)	37.5(9.6)	***(***)
	1992	49.7(1.9)	46.4(3.1)	53.2(2.7)	53.9(2.6)	30.7(3.2)	42.3(7.2)
	1990	44.9(2.1)	44.6(2.8)	45.1(2.9)	49.3(2.7)	31.6(5.6)	33.5(6.4)
	1988	51.9(2.3)	53.6(2.4)	50.2(3.8)	55.6(2.7)	38.9(4.7)	33.2(9.3)
	1984	50.6(1.4)	50.4(1.7)	50.8(1.7)	54.0(1.4)	39.3(3.3)	36.2(3.6)
<b>Stars article: Central purpose</b>	1994	48.8(2.7)	43.6(3.1)	54.6(4.8)	53.4(3.0)	***(***)	***(***)
	1992	51.4(1.9)	45.7(2.9)	57.7(2.9)	55.9(2.4)	34.7(5.2)	43.1(6.0)
	1990	54.4(2.1)	56.6(2.9)	52.2(3.1)	59.3(2.7)	35.0(5.6)	38.3(8.3)
	1988	57.7(2.8)	57.1(4.1)	58.2(3.4)	62.2(3.0)	33.0(4.5)	50.3(4.8)
	1984	48.1(1.3)	46.1(2.0)	50.0(1.4)	53.3(1.4)	28.5(2.9)	31.2(6.0)
<b>Stars article: Evidence</b>	1994	40.5(2.3)	37.0(2.6)	44.5(3.7)	44.6(2.8)	***(***)	***(***)
	1992	41.2(1.9)	36.6(2.7)	46.2(2.8)	45.0(2.3)	25.7(3.8)	38.0(8.8)
	1990	41.4(2.0)	45.3(2.7)	37.5(3.1)	43.4(2.4)	35.1(6.2)	23.8(5.3)
	1988	45.7(2.7)	43.9(3.4)	47.3(3.7)	48.3(2.5)	37.2(8.2)	32.1(5.0)
	1984	42.6(1.5)	41.8(1.9)	43.3(1.6)	46.4(1.6)	29.7(2.9)	25.3(4.6)
<b>Sentence completion: "Wind"</b>	1994	58.3(2.3)	53.8(3.0)	63.2(3.8)	61.1(2.3)	***(***)	***(***)
	1992	61.4(1.8)	59.6(2.7)	63.4(2.6)	66.5(2.3)	45.1(6.3)	48.9(9.0)
	1990	60.8(2.3)	60.3(3.4)	61.3(3.0)	63.3(3.1)	51.2(5.0)	48.1(7.0)
	1988	61.1(2.2)	61.6(4.5)	60.7(2.2)	64.7(2.6)	38.3(4.7)	56.6(7.5)
	1984	64.5(0.9)	62.2(1.6)	66.7(1.0)	68.7(1.0)	47.0(2.6)	55.2(4.6)
<b>Reporter: Recall information</b>	1994	58.4(1.7)	58.9(2.3)	58.0(1.9)	62.1(1.8)	42.7(4.5)	46.6(6.1)
	1992	60.4(1.3)	58.8(1.4)	62.1(2.1)	64.4(1.3)	46.1(3.4)	46.4(4.9)
	1990	61.3(1.6)	59.8(2.4)	62.8(1.8)	65.5(1.7)	43.8(4.8)	59.1(3.5)
	1988	64.4(1.5)	61.0(1.8)	68.1(2.2)	67.1(1.8)	50.9(3.9)	56.7(7.3)
	1984	59.1(1.3)	60.1(1.5)	58.1(1.6)	63.5(1.6)	43.1(2.8)	47.4(1.8)
<b>Reporter: Change of style</b>	1994	45.8(1.9)	45.9(2.4)	45.7(2.6)	49.1(2.1)	33.4(4.2)	30.6(4.5)
	1992	44.8(1.2)	43.4(1.5)	46.2(2.2)	48.8(1.6)	29.2(3.8)	38.4(4.6)
	1990	44.1(1.6)	43.4(2.0)	44.7(2.1)	48.7(2.1)	25.6(3.3)	36.3(4.1)
	1988	44.7(1.8)	44.9(2.3)	44.6(2.3)	46.6(2.0)	35.1(3.6)	38.9(3.9)
	1984	43.8(1.2)	43.7(1.7)	43.9(1.5)	47.1(1.4)	29.8(2.8)	37.5(1.9)

\*\*\* Sample size insufficient to permit a reliable estimate.  
The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Reporter: Resolution</b>	1994	67.6(1.8)	63.9(2.8)	71.1(2.1)	72.2(1.6)	45.7(4.6)	56.6(5.9)
	1992	65.9(1.3)	62.5(1.5)	69.4(1.9)	69.9(1.4)	52.1(3.9)	49.0(4.5)
	1990	62.8(1.9)	57.2(2.6)	68.6(2.4)	67.7(2.0)	43.6(4.3)	53.4(4.2)
	1988	65.0(1.8)	58.6(2.5)	71.7(2.1)	68.9(2.4)	47.9(3.4)	52.5(5.0)
	1984	64.4(1.1)	60.6(1.4)	68.1(1.6)	69.8(1.4)	44.3(2.9)	50.9(4.1)
<b>Reporter: Reason for change</b>	1994	50.6(1.8)	51.8(2.5)	49.5(2.2)	55.6(1.8)	30.5(4.1)	37.9(7.1)
	1992	50.1(1.4)	47.9(1.6)	52.4(2.2)	54.5(1.7)	31.4(2.7)	42.0(4.5)
	1990	50.6(1.8)	47.2(2.5)	54.1(2.1)	56.5(2.2)	28.3(5.9)	38.6(4.5)
	1988	50.0(1.7)	46.9(2.8)	53.2(1.8)	54.4(2.1)	30.6(3.4)	33.4(5.7)
	1984	49.7(1.1)	47.6(1.4)	51.8(1.6)	54.2(1.4)	35.2(2.5)	35.2(2.6)
<b>Identifying science passage</b>	1994	49.3(2.1)	49.4(2.7)	49.2(2.5)	53.0(2.2)	33.2(5.2)	40.7(7.0)
	1992	48.9(1.2)	48.7(1.9)	49.2(1.8)	52.6(1.5)	34.0(3.1)	33.7(5.8)
	1990	49.6(1.6)	48.1(2.1)	51.1(2.3)	54.3(1.9)	32.4(3.3)	42.1(5.9)
	1988	50.5(1.2)	51.0(2.1)	50.1(2.3)	54.1(1.5)	35.2(4.5)	36.2(5.2)
	1984	46.6(1.4)	46.7(2.0)	46.6(1.7)	51.5(1.5)	27.8(2.6)	36.5(2.9)
<b>Author's viewpoint about dogs</b>	1994	44.0(1.7)	42.7(2.1)	45.2(2.4)	46.6(1.8)	36.9(3.6)	29.8(5.6)
	1992	49.1(1.4)	49.3(2.0)	48.8(2.4)	52.4(1.7)	37.2(3.5)	39.6(2.8)
	1990	47.0(1.6)	43.8(2.6)	50.3(1.8)	49.4(1.9)	41.3(2.9)	36.5(4.9)
	1988	49.5(1.7)	47.1(2.5)	52.1(2.1)	52.0(1.9)	45.9(3.7)	28.6(5.1)
	1984	46.0(1.0)	44.2(1.3)	47.9(1.4)	48.4(1.1)	38.9(2.6)	35.9(3.1)
<b>Skunk cabbage: Reason for name</b>	1994	56.1(1.6)	57.1(2.4)	55.0(2.4)	59.7(1.5)	39.8(5.5)	45.2(4.8)
	1992	57.1(1.5)	54.4(1.8)	59.9(2.3)	61.3(1.8)	39.4(3.9)	50.2(3.9)
	1990	58.1(1.6)	54.9(2.2)	61.3(2.0)	63.7(1.8)	34.7(3.7)	48.4(4.1)
	1988	59.1(1.9)	57.7(2.9)	60.6(2.1)	63.1(2.2)	41.1(3.6)	45.8(5.4)
	1984	57.2(1.2)	55.5(1.6)	58.8(1.5)	62.6(1.6)	35.4(1.8)	43.3(3.1)
<b>Skunk cabbage: Description</b>	1994	50.5(1.4)	49.6(2.0)	51.4(2.0)	52.6(1.9)	43.1(3.0)	40.6(4.7)
	1992	51.3(1.3)	49.4(1.9)	53.3(1.8)	53.7(1.6)	43.5(2.8)	38.2(5.3)
	1990	52.2(1.9)	51.0(2.3)	53.5(2.5)	55.9(2.3)	38.7(3.2)	41.8(4.1)
	1988	51.0(2.0)	49.2(1.9)	53.0(3.2)	52.9(2.3)	41.1(3.3)	42.7(4.0)
	1984	49.1(1.1)	47.1(1.6)	51.1(1.6)	53.8(1.4)	34.3(2.7)	32.6(2.5)
<b>Breathing: Result of breathing</b>	1994	40.0(1.7)	38.7(2.5)	41.2(2.0)	41.0(2.0)	39.4(5.1)	35.1(4.4)
	1992	38.4(1.8)	39.1(1.8)	37.7(2.3)	41.1(2.2)	33.8(3.1)	21.1(3.5)
	1990	39.9(1.4)	41.9(1.9)	37.8(1.7)	41.8(1.6)	36.2(4.3)	35.9(5.8)
	1988	39.5(1.6)	40.4(2.7)	38.4(2.0)	39.5(1.9)	38.2(5.5)	44.1(4.8)
	1984	37.8(1.4)	38.7(1.6)	36.9(1.6)	39.8(1.4)	29.9(1.9)	34.6(8.2)
<b>Breathing: Air moves to lungs</b>	1994	44.8(1.7)	48.1(1.8)	41.6(2.6)	47.2(2.1)	36.0(4.4)	29.8(6.4)
	1992	44.6(1.5)	45.6(2.4)	43.6(1.8)	48.5(2.0)	31.4(2.9)	30.7(4.8)
	1990	45.0(1.9)	45.2(2.2)	44.8(2.4)	47.9(2.0)	33.7(4.6)	36.3(6.1)
	1988	45.1(1.9)	45.4(1.9)	44.9(3.0)	47.7(2.3)	34.4(3.4)	31.3(5.0)
	1984	44.3(1.5)	45.2(1.6)	43.4(1.9)	48.4(1.7)	32.0(2.5)	29.8(5.0)
<b>Breathing: Function of sacs</b>	1994	32.5(1.9)	33.3(2.4)	31.7(2.5)	31.1(2.6)	40.0(5.0)	32.2(5.0)
	1992	31.0(1.3)	32.5(1.7)	29.5(1.8)	32.7(1.7)	21.4(2.4)	33.0(4.7)
	1990	28.7(1.4)	26.8(1.9)	30.7(2.0)	29.5(1.6)	22.1(3.7)	30.4(3.4)
	1988	32.1(2.0)	31.2(2.1)	33.0(3.0)	33.4(2.3)	27.4(3.6)	27.2(4.9)
	1984	30.4(0.7)	33.0(1.4)	27.8(1.5)	31.7(1.0)	24.8(2.2)	29.0(3.3)

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Breathing: Formation of CO<sub>2</sub></b>	1994	27.8(1.8)	28.0(2.2)	27.6(2.1)	30.8(2.0)	15.5(2.7)	20.3(4.2)
	1992	28.0(1.5)	27.6(1.7)	28.4(2.1)	30.3(1.9)	19.7(1.8)	18.5(4.7)
	1990	27.4(1.6)	25.6(2.0)	29.4(2.3)	30.7(2.0)	17.9(2.3)	21.6(3.2)
	1988	25.6(1.8)	22.4(1.7)	29.0(2.5)	27.6(2.3)	16.3(2.0)	13.0(3.1)
	1984	26.3(1.1)	24.2(1.5)	28.4(1.1)	28.9(1.4)	18.0(1.9)	16.3(3.4)
<b>Bullfight: Main idea</b>	1994	57.9(2.2)	57.5(3.1)	58.2(3.0)	64.3(2.7)	35.1(4.9)	42.5(6.7)
	1992	58.0(2.1)	61.4(2.3)	54.5(3.4)	63.0(2.3)	43.6(4.2)	37.7(5.0)
	1990	53.5(2.5)	52.6(3.6)	54.5(3.2)	59.9(3.0)	32.8(5.3)	30.8(4.3)
	1988	57.0(1.9)	55.8(3.0)	58.1(3.3)	61.5(2.2)	39.5(5.1)	36.0(9.0)
	1984	53.0(1.2)	54.8(2.0)	51.2(1.7)	57.2(1.3)	37.8(3.5)	43.0(2.5)
<b>Author's unhappy feelings</b>	1994	77.5(1.7)	71.4(3.0)	82.8(2.1)	80.7(1.8)	68.0(4.6)	63.7(6.6)
	1992	79.3(1.7)	73.6(2.7)	85.1(2.0)	83.9(2.0)	63.8(4.5)	66.5(5.4)
	1990	77.0(1.9)	70.3(2.9)	84.3(1.8)	81.2(2.1)	62.0(4.3)	66.0(6.1)
	1988	84.4(1.8)	79.4(2.8)	89.2(1.9)	87.5(2.0)	74.0(5.9)	64.8(6.3)
	1984	81.1(1.2)	79.4(1.5)	82.7(1.6)	84.8(1.2)	70.4(3.1)	68.9(5.1)
<b>Alien story: Character trait</b>	1994	43.2(2.4)	40.9(2.9)	45.2(3.1)	47.5(2.7)	26.7(6.0)	31.6(5.7)
	1992	43.9(1.9)	40.2(2.4)	47.6(2.8)	47.3(1.9)	33.1(5.8)	34.4(6.4)
	1990	39.9(2.2)	36.2(2.8)	43.8(2.7)	45.2(2.5)	21.1(4.5)	22.4(7.0)
	1988	40.1(2.1)	34.8(2.8)	45.2(4.3)	45.2(2.5)	22.0(3.6)	23.3(6.5)
	1984	38.9(1.6)	36.5(2.2)	41.3(1.6)	43.1(2.1)	28.2(2.7)	21.1(2.1)
<b>Alien story: Problem</b>	1994	64.7(2.3)	61.4(3.8)	67.5(2.7)	68.3(2.5)	50.4(4.8)	55.3(7.6)
	1992	64.0(1.8)	62.6(2.5)	65.3(2.4)	69.6(2.0)	49.4(3.9)	39.7(5.0)
	1990	56.3(2.0)	49.5(2.9)	63.8(2.3)	59.5(2.2)	45.3(5.3)	43.8(6.5)
	1988	60.1(1.6)	55.5(2.2)	64.5(2.5)	64.7(2.0)	45.2(4.0)	43.5(7.8)
	1984	59.1(1.7)	59.7(2.0)	58.5(2.0)	63.1(1.8)	44.2(4.1)	49.7(3.2)
<b>Alien story: Resolution</b>	1994	44.8(2.1)	40.5(3.1)	48.4(3.0)	48.4(2.4)	30.5(5.5)	27.3(6.4)
	1992	47.4(1.8)	46.0(2.2)	48.8(2.7)	52.7(2.1)	27.5(4.8)	36.3(5.0)
	1990	43.1(2.4)	40.8(2.7)	45.5(3.6)	46.9(2.4)	29.3(5.1)	35.2(5.3)
	1988	41.5(2.0)	35.3(2.8)	47.4(3.0)	47.7(2.0)	22.0(3.9)	16.9(5.4)
	1984	39.9(1.6)	43.0(2.0)	37.0(1.8)	43.5(2.1)	28.1(2.9)	29.6(4.5)
<b>Timothy story: Recall action</b>	1994	66.7(2.0)	65.9(3.2)	67.4(2.7)	68.3(2.1)	62.7(5.7)	51.9(6.3)
	1992	68.2(1.5)	63.0(2.3)	73.6(2.4)	71.9(1.7)	57.9(3.9)	56.0(6.9)
	1990	65.6(1.9)	58.6(3.1)	73.2(2.3)	69.2(2.4)	58.0(4.3)	41.3(6.5)
	1988	68.1(2.4)	62.0(3.4)	73.9(3.4)	69.7(2.5)	63.3(5.6)	54.0(8.3)
	1984	66.7(1.3)	63.6(1.6)	69.7(1.7)	71.0(1.4)	55.8(3.2)	46.0(3.8)
<b>Connect dots: Along a line</b>	1994	68.7(2.3)	62.1(3.6)	74.3(2.6)	70.0(2.6)	68.8(4.1)	***(***)
	1992	68.4(1.7)	68.0(3.0)	68.8(2.2)	70.8(2.1)	61.5(5.4)	54.3(6.8)
	1990	70.8(1.9)	65.2(2.6)	76.9(2.4)	74.4(2.5)	58.1(4.0)	61.9(5.8)
	1988	75.8(1.8)	71.1(3.3)	80.2(2.6)	78.8(1.9)	59.6(4.8)	74.8(7.4)
	1984	70.1(1.4)	67.3(1.7)	72.7(1.8)	72.2(1.5)	67.3(2.9)	56.9(8.1)
<b>Connect dots: Touching circles</b>	1994	66.8(2.6)	62.7(3.2)	70.3(3.4)	69.6(3.1)	59.5(6.0)	***(***)
	1992	73.6(1.7)	71.6(2.5)	75.6(2.0)	77.0(1.8)	61.7(5.4)	70.1(6.7)
	1990	71.3(2.3)	65.4(3.1)	77.6(2.6)	76.3(2.8)	51.4(4.8)	59.1(6.8)
	1988	72.5(2.0)	70.0(2.5)	74.8(2.9)	75.9(2.1)	58.4(4.2)	55.5(8.2)
	1984	86.3(1.0)	85.0(1.4)	87.6(1.3)	87.8(1.0)	81.7(2.7)	83.1(5.7)

\*\*\* Sample size insufficient to permit a reliable estimate.

The standard errors of the estimated percentages appear in parenthesis.

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## NAEP 1994 National Reading Trend Assessments — Age 9

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Connect dots: Write in circles</b>	1994	79.0(1.9)	70.9(3.1)	86.0(1.9)	81.2(2.0)	71.8(5.5)	***(***)
	1992	85.0(1.1)	82.4(2.1)	87.6(1.9)	86.5(1.4)	77.5(4.8)	84.8(5.9)
	1990	82.7(1.7)	79.0(2.4)	86.5(1.8)	86.3(2.0)	68.8(5.2)	70.3(7.7)
	1988	86.1(1.6)	82.1(2.3)	89.8(2.3)	88.2(1.6)	74.8(3.8)	83.4(5.8)
	1984	88.0(0.7)	86.2(1.4)	89.7(1.0)	89.8(0.9)	81.9(1.9)	83.1(3.6)

\*\*\* Sample size insufficient to permit a reliable estimate.  
The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Find picture fact</b>	1994	54.4(1.8)	63.6(2.4)	44.9(2.8)	52.0(1.8)	69.8(5.2)	***(***)
	1992	52.2(2.0)	64.1(2.7)	41.1(3.1)	49.3(2.0)	57.1(5.5)	60.9(7.1)
	1990	56.3(2.5)	65.1(3.1)	47.4(3.2)	55.9(2.8)	56.2(6.1)	58.1(7.2)
	1988	59.6(2.2)	70.8(2.6)	48.7(3.6)	59.1(2.4)	59.2(4.6)	61.4(XXX)
	1984	70.0(0.9)	74.8(1.0)	64.7(1.3)	69.6(1.1)	73.3(3.3)	69.5(3.7)
<b>Document: Phone calls</b>	1994	46.2(2.2)	38.1(2.3)	54.6(3.0)	48.0(2.5)	42.8(7.2)	***(***)
	1992	47.1(2.2)	44.6(3.3)	49.4(3.2)	49.5(2.9)	34.7(4.7)	43.5(6.9)
	1990	45.1(2.0)	44.4(2.7)	45.9(2.6)	46.7(2.8)	42.8(5.4)	36.6(6.1)
	1988	46.6(1.7)	42.3(3.1)	50.8(3.0)	48.2(1.6)	37.4(5.2)	39.2(9.4)
	1984	47.2(1.2)	44.4(1.9)	50.3(1.8)	48.4(1.5)	40.5(2.5)	45.0(2.9)
<b>Document: Phone services</b>	1994	38.8(1.9)	30.8(2.8)	47.0(2.5)	42.2(2.3)	18.8(4.7)	***(***)
	1992	39.9(2.0)	35.8(3.0)	43.7(2.5)	41.9(2.2)	34.7(5.9)	25.3(6.9)
	1990	43.0(2.0)	35.7(2.5)	50.3(2.7)	44.4(2.5)	38.3(4.8)	35.8(5.7)
	1988	42.3(1.8)	38.6(2.6)	45.8(3.1)	42.7(1.9)	39.7(5.0)	46.6(8.4)
	1984	47.1(1.1)	41.1(1.6)	53.6(1.9)	48.4(1.2)	38.3(2.5)	45.9(5.0)
<b>Coupon document: Limitations</b>	1994	66.2(2.3)	64.4(2.2)	68.1(3.1)	71.0(2.5)	46.6(6.3)	***(***)
	1992	66.5(2.2)	66.7(2.5)	66.4(3.3)	71.0(2.3)	52.9(5.1)	58.0(7.1)
	1990	67.3(1.8)	63.0(2.9)	71.5(2.0)	70.7(2.0)	56.9(5.5)	54.9(6.9)
	1988	67.7(2.0)	65.4(2.9)	69.9(3.0)	70.9(2.4)	54.2(5.9)	58.9(6.8)
	1984	63.7(1.1)	60.2(1.6)	67.7(1.8)	67.2(1.2)	51.6(3.0)	51.1(3.2)
<b>Coupon document: Expiration</b>	1994	92.9(1.2)	92.1(1.8)	93.7(1.7)	94.5(1.1)	89.3(3.8)	***(***)
	1992	92.6(1.0)	90.2(1.5)	94.8(1.3)	93.9(1.1)	88.7(3.1)	89.8(4.5)
	1990	95.2(0.9)	93.9(1.4)	96.5(1.0)	96.7(0.7)	89.0(4.4)	95.4(2.5)
	1988	95.0(0.9)	93.6(1.5)	96.4(1.1)	96.0(1.1)	90.4(2.3)	94.6(4.2)
	1984	92.6(0.5)	91.4(0.9)	94.0(0.8)	93.3(0.6)	87.6(1.4)	93.4(2.4)
<b>Coupon: Value</b>	1994	41.8(2.0)	37.0(2.7)	46.9(3.3)	45.2(2.2)	28.3(4.2)	***(***)
	1992	44.9(2.2)	44.7(2.6)	45.2(3.0)	47.5(2.6)	40.4(4.5)	28.7(6.6)
	1990	45.4(2.1)	41.1(3.0)	49.6(2.4)	49.0(2.3)	33.4(6.0)	34.8(5.0)
	1988	45.9(2.1)	45.6(3.2)	46.2(3.3)	49.4(2.4)	30.9(3.5)	27.3(8.8)
	1984	47.7(1.2)	45.9(1.8)	49.6(1.6)	50.4(1.4)	35.7(2.9)	41.3(3.5)
<b>Carad poem</b>	1994	65.3(1.8)	57.7(3.2)	73.2(3.6)	70.3(1.8)	44.9(8.1)	***(***)
	1992	61.0(2.2)	54.2(3.2)	67.4(2.7)	64.4(2.8)	50.6(4.9)	53.5(6.9)
	1990	58.8(2.0)	56.9(3.0)	60.7(3.0)	62.3(2.1)	48.6(5.3)	36.7(7.3)
	1988	59.9(1.8)	57.1(3.0)	62.6(2.6)	65.0(2.1)	41.9(4.5)	33.2(8.4)
	1984	58.6(1.1)	55.3(1.5)	62.2(1.7)	61.8(1.2)	45.4(3.9)	49.8(2.9)
<b>Nut story: Plan</b>	1994	92.6(1.3)	88.2(2.3)	97.2(0.9)	94.0(1.5)	88.7(4.0)	***(***)
	1992	94.3(1.4)	93.1(2.0)	95.5(1.5)	97.0(1.1)	85.2(5.2)	96.2(3.2)
	1990	95.6(0.7)	93.8(1.3)	97.4(0.8)	95.7(0.9)	97.6(1.6)	90.9(3.7)
	1988	97.5(0.6)	95.8(1.3)	99.2(0.5)	97.5(0.7)	96.7(1.1)	100.0(0.0)
	1984	93.4(0.7)	90.7(0.9)	96.3(0.7)	94.2(0.7)	89.1(2.3)	92.7(1.6)
<b>Nut story: Problem</b>	1994	76.3(2.0)	70.7(3.4)	82.2(2.8)	80.3(2.2)	56.9(5.5)	***(***)
	1992	81.0(2.2)	78.9(3.1)	83.0(2.4)	84.8(2.1)	66.3(6.1)	76.1(6.6)
	1990	81.9(1.6)	77.9(2.4)	86.0(2.0)	85.1(1.8)	77.1(6.4)	57.3(6.0)
	1988	79.1(1.4)	77.4(2.3)	80.7(2.2)	80.5(1.4)	68.9(4.6)	84.2(7.5)
	1984	78.5(1.1)	75.6(1.5)	81.8(1.1)	80.6(1.2)	67.0(3.5)	77.4(2.8)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Nut story: Goal</b>	1994	86.7(1.3)	82.9(1.8)	90.6(1.5)	88.8(1.3)	78.0(4.9)	***(***)
	1992	89.5(1.4)	86.2(2.5)	92.6(1.8)	91.8(1.2)	80.4(4.9)	92.7(3.8)
	1990	88.3(1.4)	84.5(2.3)	92.1(1.4)	88.3(1.6)	95.3(2.8)	80.3(5.4)
	1988	90.0(1.3)	87.0(2.0)	92.9(1.8)	90.7(1.4)	82.2(5.1)	99.3(0.9)
	1984	84.1(1.2)	81.4(1.5)	87.1(1.3)	84.8(1.4)	79.8(2.5)	84.4(3.3)
<b>Nut story: Outcome</b>	1994	77.7(1.9)	72.3(3.0)	83.2(2.4)	81.7(2.4)	61.1(6.3)	***(***)
	1992	81.4(1.7)	79.5(2.4)	83.2(2.3)	84.0(1.7)	69.4(5.6)	81.0(6.6)
	1990	81.8(1.7)	77.9(2.4)	85.7(2.0)	85.4(1.6)	71.9(7.2)	59.0(4.5)
	1988	84.7(1.7)	80.6(2.2)	88.7(2.1)	85.0(1.8)	83.2(4.5)	85.3(4.4)
	1984	80.5(1.0)	77.9(1.5)	83.4(1.3)	83.4(1.1)	65.2(3.2)	76.7(2.8)
<b>History: Definition</b>	1994	72.8(2.2)	69.1(3.7)	77.0(2.1)	75.7(2.6)	63.9(4.8)	***(***)
	1992	74.3(1.9)	70.6(2.8)	77.9(2.5)	80.3(1.9)	58.2(6.6)	44.7(6.1)
	1990	75.3(2.1)	75.8(3.0)	74.7(2.5)	79.5(2.0)	69.3(7.2)	61.2(7.5)
	1988	76.7(1.9)	71.3(2.7)	81.7(2.0)	79.9(2.2)	69.2(5.2)	53.8(8.0)
	1984	74.4(0.7)	70.7(1.1)	78.2(1.2)	78.8(0.7)	60.8(2.6)	54.7(3.0)
<b>History: Survival</b>	1994	83.9(1.6)	84.0(2.1)	83.8(2.0)	86.7(1.9)	76.5(3.3)	***(***)
	1992	84.4(1.5)	84.9(2.2)	83.8(2.5)	87.2(1.4)	70.7(6.0)	78.2(6.6)
	1990	82.6(1.6)	84.6(2.1)	80.6(2.3)	84.5(2.0)	77.0(3.9)	78.5(7.6)
	1988	84.2(1.7)	83.9(2.6)	84.5(1.9)	84.5(2.1)	81.5(4.1)	81.9(5.7)
	1984	82.4(0.9)	81.7(1.4)	83.2(0.9)	85.2(1.1)	72.1(2.3)	72.8(3.0)
<b>History: Location</b>	1994	63.6(2.2)	66.4(2.8)	60.9(2.6)	68.8(2.6)	49.7(4.5)	***(***)
	1992	66.5(2.1)	67.0(2.9)	66.0(2.8)	70.1(2.1)	50.3(7.3)	50.2(7.0)
	1990	63.9(1.9)	64.0(2.6)	63.7(2.8)	67.7(2.1)	57.9(6.4)	50.5(8.7)
	1988	63.9(2.1)	63.6(3.0)	64.1(2.9)	64.9(2.2)	59.4(5.1)	54.8(6.9)
	1984	62.1(0.9)	63.2(1.3)	60.9(1.2)	65.0(0.8)	50.1(3.0)	52.3(4.2)
<b>History: Main purpose</b>	1994	68.5(1.5)	67.5(2.6)	69.9(2.5)	74.2(2.4)	47.5(6.0)	***(***)
	1992	69.3(1.9)	67.1(3.2)	71.4(2.6)	74.4(2.3)	48.1(5.4)	45.9(6.8)
	1990	67.6(2.2)	68.6(2.8)	66.6(2.7)	70.7(2.2)	56.5(6.2)	64.1(5.7)
	1988	68.3(1.9)	69.3(3.5)	67.3(3.2)	70.7(2.4)	50.1(6.5)	75.1(7.0)
	1984	64.3(1.2)	62.6(1.7)	66.0(1.3)	68.5(1.3)	47.0(3.0)	51.6(3.6)
<b>Club document: Fees</b>	1994	73.1(2.0)	68.6(2.7)	77.9(2.9)	78.9(2.0)	55.3(6.5)	***(***)
	1992	78.5(1.5)	76.6(2.8)	80.3(2.0)	84.6(1.3)	58.6(5.5)	54.0(5.8)
	1990	76.3(1.6)	73.1(2.5)	79.5(2.2)	80.8(1.7)	68.4(5.8)	60.2(7.5)
	1988	73.5(1.7)	66.1(2.9)	80.4(2.2)	74.9(2.0)	61.1(5.7)	72.4(9.3)
	1984	70.4(1.0)	68.3(1.3)	72.5(1.5)	74.4(0.9)	56.0(3.3)	56.9(4.2)
<b>Club document: Billing</b>	1994	28.0(2.1)	30.8(2.8)	24.9(2.9)	28.9(2.5)	26.3(6.4)	***(***)
	1992	28.1(1.6)	26.0(2.2)	30.2(2.4)	28.2(2.0)	20.6(4.8)	37.9(5.8)
	1990	28.5(1.9)	23.1(2.6)	33.8(2.3)	31.3(2.8)	22.0(5.5)	21.8(6.6)
	1988	28.9(2.4)	27.7(3.3)	29.9(2.7)	28.6(2.8)	29.8(7.2)	30.9(XXX)
	1984	26.2(0.8)	24.7(1.2)	27.7(1.1)	27.5(0.8)	18.9(2.7)	25.2(3.6)
<b>Club document: Requirements</b>	1994	62.4(2.3)	55.8(3.3)	69.5(2.9)	66.8(2.3)	51.5(7.7)	***(***)
	1992	61.0(2.8)	60.1(4.1)	62.0(3.1)	63.6(3.3)	51.6(5.8)	46.9(7.0)
	1990	63.6(2.1)	58.9(3.3)	68.3(2.7)	65.0(2.3)	63.3(4.8)	48.0(7.4)
	1988	67.1(1.9)	61.7(3.1)	72.2(1.9)	66.6(2.1)	75.4(5.5)	52.6(XXX)
	1984	64.2(0.9)	60.9(1.5)	67.5(1.1)	66.9(1.1)	57.5(2.5)	46.5(4.8)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Fly story: Problem</b>	1994	7.4(1.0)	8.4(1.5)	6.2(1.3)	8.3(1.3)	5.6(3.1)	***(***)
	1992	7.3(0.9)	5.6(1.3)	8.9(1.7)	7.5(1.1)	7.9(2.3)	2.0(1.4)
	1990	6.2(0.9)	6.8(1.4)	5.7(1.4)	5.3(1.0)	8.4(3.3)	8.5(2.2)
	1988	8.3(1.0)	8.2(2.2)	8.4(1.5)	9.8(1.3)	4.3(2.6)	0.0(0.0)
	1984	8.6(0.5)	9.1(0.9)	8.2(0.7)	7.8(0.6)	11.8(1.5)	9.7(2.5)
<b>Fly story: Resolution</b>	1994	47.3(1.8)	44.0(2.8)	50.8(2.5)	52.8(2.3)	31.3(4.6)	***(***)
	1992	49.3(1.9)	46.2(2.9)	52.3(2.3)	50.8(2.3)	46.3(7.3)	32.6(4.5)
	1990	43.2(2.1)	43.0(2.4)	43.5(2.8)	46.5(2.3)	30.8(5.9)	35.2(5.0)
	1988	45.0(2.5)	41.3(3.6)	48.4(2.8)	47.1(2.6)	34.3(6.4)	40.9(XXX)
	1984	43.4(0.8)	41.1(1.1)	45.8(1.3)	45.3(1.0)	36.2(3.2)	38.3(5.0)
<b>Charley1 story: Problem</b>	1994	56.5(2.1)	53.7(2.6)	59.6(3.6)	61.2(2.7)	38.4(5.6)	***(***)
	1992	60.4(1.6)	58.6(2.3)	62.0(2.4)	64.2(2.0)	45.6(5.4)	45.3(6.2)
	1990	59.0(1.7)	51.4(2.4)	66.4(2.5)	62.4(1.8)	46.8(5.8)	51.8(6.4)
	1988	57.3(2.4)	51.7(3.2)	62.6(2.6)	60.3(2.4)	42.5(9.1)	30.3(8.0)
	1984	61.5(1.2)	56.1(1.6)	66.9(1.3)	64.0(1.3)	53.2(3.5)	46.2(4.6)
<b>Flying: 1st machine</b>	1994	63.4(2.0)	64.2(3.2)	62.7(2.7)	71.1(2.2)	35.6(4.7)	52.9(6.2)
	1992	63.9(2.0)	64.0(3.1)	63.9(2.4)	69.6(2.1)	49.7(5.6)	41.3(XXX)
	1990	61.9(1.7)	66.0(2.2)	57.9(2.3)	66.5(1.8)	47.6(6.8)	45.3(7.0)
	1988	64.7(2.0)	67.7(2.5)	61.8(3.4)	68.4(2.4)	60.0(6.8)	34.4(XXX)
	1984	62.1(1.1)	65.6(1.5)	58.4(1.5)	67.3(1.3)	41.6(3.3)	46.2(3.9)
<b>Flying: Types of planes</b>	1994	68.5(1.9)	65.2(3.2)	71.6(3.5)	74.1(2.3)	55.5(5.3)	48.4(5.2)
	1992	68.1(2.1)	70.3(2.9)	66.2(3.0)	72.4(2.4)	56.7(5.8)	50.2(8.5)
	1990	65.8(1.7)	66.0(2.5)	65.6(2.3)	69.8(2.0)	57.6(6.5)	56.7(6.6)
	1988	64.4(1.6)	63.1(2.6)	65.7(2.8)	67.4(2.0)	58.5(5.2)	42.2(7.1)
	1984	66.8(1.2)	66.3(1.2)	67.5(1.9)	69.5(1.3)	57.5(3.4)	57.2(3.0)
<b>Flying: Differences</b>	1994	76.2(1.5)	77.2(2.8)	75.2(2.3)	79.8(1.8)	62.6(6.0)	68.2(6.2)
	1992	76.9(1.6)	75.5(2.4)	78.2(2.2)	81.7(1.7)	61.1(5.4)	62.2(8.5)
	1990	73.8(1.4)	75.1(2.3)	72.5(2.3)	78.2(1.8)	59.1(6.3)	60.6(6.7)
	1988	71.7(1.9)	74.6(2.0)	69.0(3.8)	74.9(2.0)	61.9(6.6)	56.5(7.5)
	1984	73.3(1.0)	73.9(1.4)	72.6(1.5)	77.6(1.1)	53.3(3.1)	65.3(2.0)
<b>Science: Research</b>	1994	36.7(2.3)	37.3(2.8)	36.1(3.3)	38.9(2.8)	28.1(5.0)	32.7(6.1)
	1992	42.8(2.3)	39.8(2.9)	45.6(3.1)	45.5(2.9)	34.3(5.4)	35.0(XXX)
	1990	39.4(2.2)	37.8(3.2)	41.0(2.9)	40.1(2.5)	32.7(5.9)	39.3(7.5)
	1988	41.4(1.9)	38.4(2.4)	44.3(2.5)	42.2(2.4)	33.7(4.2)	50.3(7.3)
	1984	39.6(1.1)	38.7(1.4)	40.5(1.9)	41.0(1.2)	32.4(3.1)	37.8(3.2)
<b>Science: Evidence</b>	1994	33.3(1.4)	31.0(2.4)	35.5(2.3)	36.2(1.6)	22.3(4.7)	30.8(7.0)
	1992	37.6(2.6)	34.4(3.5)	40.5(3.2)	40.4(2.9)	35.6(6.2)	13.8(7.8)
	1990	34.9(1.9)	30.0(2.6)	39.6(2.4)	38.7(2.1)	30.5(7.1)	14.0(4.8)
	1988	31.5(2.5)	29.4(2.5)	33.6(3.2)	33.2(2.9)	29.5(5.7)	11.4(4.8)
	1984	31.5(1.1)	28.4(1.7)	34.8(1.3)	34.7(1.3)	19.6(2.3)	20.6(4.5)
<b>Phone call date</b>	1994	72.6(2.0)	67.3(2.5)	77.5(2.6)	76.8(2.0)	63.1(7.4)	55.4(6.0)
	1992	70.1(1.7)	65.0(3.5)	74.7(2.0)	75.0(1.9)	52.3(5.2)	64.8(6.4)
	1990	67.9(1.9)	63.9(2.6)	71.7(2.6)	73.3(2.2)	51.0(5.6)	52.5(5.1)
	1988	66.8(2.3)	61.1(3.5)	72.2(2.6)	70.6(2.7)	54.0(5.7)	51.7(6.5)
	1984	65.0(1.4)	62.7(1.8)	67.4(1.9)	69.8(1.5)	47.6(3.5)	46.3(3.1)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Document: Phone location</b>	1994	80.6(1.8)	78.8(2.7)	82.3(2.2)	84.9(1.9)	62.9(6.5)	78.9(5.3)
	1992	80.2(1.6)	79.5(2.3)	80.8(2.4)	85.4(1.6)	63.9(5.4)	63.5(XXX)
	1990	78.3(1.8)	74.0(2.5)	82.4(2.2)	82.7(1.9)	67.7(5.0)	64.7(7.0)
	1988	76.0(1.9)	71.7(2.9)	80.1(2.5)	77.7(2.2)	70.9(4.4)	69.9(4.4)
	1984	77.6(1.2)	77.0(1.5)	78.2(1.5)	79.6(1.3)	71.1(2.2)	69.3(4.2)
<b>Document: Phone charge</b>	1994	86.8(1.6)	84.3(2.7)	89.0(2.3)	88.6(1.5)	80.4(4.8)	84.0(4.3)
	1992	85.3(1.7)	81.0(2.9)	89.1(1.8)	87.0(1.8)	80.9(3.7)	80.7(7.1)
	1990	85.5(1.5)	78.1(2.4)	92.6(1.2)	87.2(1.5)	81.3(4.6)	82.1(5.1)
	1988	88.9(1.4)	86.7(2.2)	91.1(1.4)	89.8(1.5)	87.9(3.6)	78.7(8.3)
	1984	84.6(0.9)	81.7(1.1)	87.8(1.2)	86.5(1.0)	78.9(3.1)	77.5(3.4)
<b>Myth: Exaggeration</b>	1994	77.1(1.8)	77.3(2.5)	76.9(2.5)	80.6(2.0)	66.8(3.4)	61.9(8.1)
	1992	75.1(1.9)	77.4(2.4)	72.8(2.5)	77.9(2.2)	64.6(6.0)	67.4(6.2)
	1990	78.1(1.3)	76.6(1.8)	80.0(2.4)	82.3(1.6)	68.5(5.2)	61.2(5.2)
	1988	81.7(1.8)	81.3(2.4)	82.1(2.3)	83.2(1.9)	75.2(5.0)	74.3(6.0)
	1984	76.6(1.4)	75.6(2.0)	77.6(1.6)	80.0(1.3)	60.5(3.9)	67.3(5.1)
<b>Story: Prediction about Mary</b>	1994	60.2(1.8)	54.0(2.7)	66.6(2.2)	61.6(1.9)	54.6(6.7)	54.8(9.0)
	1992	58.5(2.0)	55.5(3.4)	61.8(2.5)	59.1(2.4)	57.3(7.4)	56.0(8.0)
	1990	58.4(2.1)	53.3(3.4)	64.4(2.5)	61.3(2.7)	48.5(5.9)	57.9(5.5)
	1988	63.9(2.0)	61.7(2.9)	66.2(2.6)	64.7(2.0)	63.0(5.9)	63.9(7.9)
	1984	58.5(1.2)	55.5(1.7)	61.5(1.8)	60.3(1.2)	54.7(3.0)	48.1(7.0)
<b>Science: Cue words</b>	1994	53.4(2.2)	49.4(3.5)	57.5(2.7)	55.2(2.7)	52.4(6.2)	35.4(5.1)
	1992	50.8(1.9)	46.2(3.1)	55.8(3.2)	54.7(2.2)	31.9(4.3)	49.4(7.4)
	1990	52.0(1.7)	49.8(2.5)	54.6(2.4)	52.6(2.0)	50.7(6.0)	48.4(6.7)
	1988	49.3(2.4)	46.0(2.5)	52.9(4.1)	50.9(2.8)	40.3(4.6)	55.1(7.9)
	1984	44.0(1.2)	42.0(1.6)	46.1(1.4)	46.2(1.4)	35.4(2.2)	33.6(7.1)
<b>Biography: Honors</b>	1994	84.1(2.0)	76.8(3.2)	91.9(1.8)	86.1(1.9)	77.0(6.5)	***(***)
	1992	89.5(1.6)	86.4(2.4)	92.7(1.9)	90.6(1.9)	89.9(3.2)	76.9(4.0)
	1990	84.4(1.4)	79.6(2.1)	90.1(1.8)	86.5(1.6)	79.5(5.3)	75.0(3.6)
	1988	88.1(1.6)	83.5(2.5)	93.1(1.5)	89.0(1.9)	82.2(4.9)	91.6(4.9)
	1984	85.4(1.2)	82.2(1.5)	88.5(1.5)	87.1(1.2)	74.1(3.0)	84.6(4.6)
<b>Biography: Accomplishments</b>	1994	88.7(1.5)	82.8(2.4)	94.9(1.2)	89.6(1.5)	85.7(4.0)	***(***)
	1992	91.2(1.7)	88.4(2.8)	94.1(1.8)	91.1(2.1)	91.6(3.5)	90.5(4.3)
	1990	87.7(1.4)	84.3(2.5)	91.7(1.5)	88.6(1.4)	83.8(5.1)	83.7(5.6)
	1988	90.8(1.3)	88.1(1.9)	93.7(1.2)	90.0(1.6)	91.4(4.1)	94.0(3.8)
	1984	89.5(0.7)	85.9(1.3)	93.0(0.8)	90.7(0.7)	81.4(2.5)	89.9(3.0)
<b>Sport history: Popularity</b>	1994	81.9(1.6)	85.3(2.2)	78.6(2.2)	83.7(1.7)	76.4(6.3)	75.6(6.3)
	1992	82.3(1.6)	85.7(1.6)	79.3(2.7)	83.7(1.7)	79.6(4.2)	77.2(7.9)
	1990	80.1(1.7)	79.7(2.2)	80.4(2.5)	82.1(1.7)	75.9(5.2)	74.5(5.3)
	1988	76.0(1.4)	75.6(1.7)	76.4(2.5)	80.3(1.7)	57.7(4.4)	68.6(6.1)
	1984	76.2(1.0)	73.2(1.6)	79.4(1.2)	77.9(1.3)	69.1(2.7)	71.4(3.9)
<b>Sport history: Royalty</b>	1994	80.9(1.7)	77.6(1.9)	84.1(2.0)	84.7(2.0)	66.0(5.2)	75.6(5.1)
	1992	82.1(1.8)	78.3(2.7)	85.5(2.0)	84.8(1.8)	76.1(4.9)	59.9(9.7)
	1990	77.2(1.7)	73.1(2.6)	81.1(2.3)	80.3(1.6)	70.7(6.5)	64.6(6.6)
	1988	78.7(1.7)	75.5(2.8)	81.8(2.3)	80.7(2.1)	73.8(4.8)	64.4(9.3)
	1984	78.0(1.1)	76.3(1.7)	79.9(1.1)	80.1(1.3)	69.6(2.5)	70.1(2.9)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Sport history: General</b>	1994	65.2(2.5)	60.6(2.9)	69.5(3.4)	67.6(3.3)	55.9(5.0)	61.8(5.5)
	1992	67.7(2.3)	62.9(3.1)	72.0(2.3)	68.5(2.9)	62.3(5.9)	65.1(8.3)
	1990	65.1(1.8)	61.3(2.9)	68.8(2.4)	66.7(2.2)	66.1(4.5)	54.3(5.1)
	1988	66.6(2.4)	66.0(3.4)	67.2(3.6)	67.6(2.7)	63.1(5.3)	60.6(XXX)
	1984	62.3(1.5)	59.6(2.1)	65.3(2.1)	64.4(1.7)	55.5(3.9)	57.0(4.3)
<b>Sport history: English</b>	1994	53.1(1.8)	50.6(2.5)	55.4(3.1)	57.0(2.4)	38.5(4.9)	46.4(4.7)
	1992	54.9(1.9)	54.7(2.9)	55.2(2.9)	55.3(2.5)	53.3(4.4)	44.9(8.5)
	1990	52.8(2.0)	53.1(2.8)	52.6(3.4)	52.6(2.2)	48.5(7.4)	63.4(6.3)
	1988	52.4(1.8)	55.3(2.6)	49.6(2.8)	53.0(2.2)	45.9(5.5)	57.4(6.8)
	1984	55.1(1.3)	58.0(1.8)	52.0(1.6)	57.5(1.5)	46.7(3.0)	48.5(6.4)
<b>Sport history: Contemporary</b>	1994	78.8(1.5)	82.5(2.7)	75.3(1.7)	83.9(1.9)	59.2(7.1)	69.9(7.6)
	1992	81.6(1.4)	82.8(2.0)	80.6(2.4)	87.6(1.6)	63.9(4.7)	56.7(XXX)
	1990	78.3(1.8)	80.7(2.3)	76.0(2.7)	81.5(1.9)	67.8(6.4)	66.5(7.5)
	1988	79.1(1.6)	82.2(2.5)	76.0(3.1)	82.0(1.6)	69.4(6.4)	68.3(7.3)
	1984	79.0(1.1)	82.5(1.1)	75.1(1.9)	82.6(1.4)	64.8(2.6)	67.2(2.5)
<b>Civics: Document description</b>	1994	32.3(1.9)	31.2(2.8)	33.4(2.7)	35.9(2.3)	16.0(5.1)	34.3(5.6)
	1992	34.1(2.5)	31.6(3.4)	36.4(3.2)	35.0(2.9)	27.5(5.1)	31.0(XXX)
	1990	33.0(1.9)	29.0(2.5)	36.9(2.5)	34.5(2.0)	32.1(5.3)	24.5(6.3)
	1988	33.8(2.3)	28.2(3.0)	39.1(3.5)	35.8(2.5)	31.5(4.5)	13.8(5.3)
	1984	30.1(1.1)	27.4(1.6)	33.0(1.5)	32.9(1.3)	21.5(2.5)	19.7(4.2)
<b>Civics: Importance of court</b>	1994	58.8(2.6)	57.3(3.0)	60.1(3.6)	59.1(2.8)	56.7(6.4)	59.5(8.1)
	1992	58.4(2.4)	58.5(3.8)	58.3(2.7)	60.8(2.4)	54.9(5.8)	42.1(XXX)
	1990	59.1(1.9)	55.4(3.0)	62.8(2.2)	58.3(2.3)	60.7(5.5)	71.6(5.2)
	1988	57.5(3.0)	54.3(4.2)	60.6(4.0)	58.6(3.3)	59.4(5.5)	39.9(9.2)
	1984	57.1(1.3)	55.3(1.6)	59.0(1.7)	57.8(1.4)	53.3(3.0)	57.4(2.5)
<b>Civics: Vocabulary</b>	1994	7.9(0.9)	7.7(1.4)	8.1(1.6)	9.9(1.3)	1.5(1.0)	6.0(4.0)
	1992	6.4(1.2)	7.6(1.7)	5.3(1.6)	7.5(1.6)	5.8(2.2)	0.0(0.0)
	1990	7.3(1.0)	9.0(1.8)	5.6(1.3)	8.0(1.3)	5.3(2.0)	4.2(1.7)
	1988	6.0(1.1)	6.9(1.7)	5.2(1.3)	5.8(1.1)	5.3(2.7)	7.6(4.6)
	1984	9.5(0.6)	9.9(1.0)	9.0(0.8)	9.7(0.7)	10.6(1.6)	5.3(1.3)
<b>U.S. History: Transportation</b>	1994	84.7(1.4)	79.6(2.6)	89.5(1.7)	89.0(1.5)	72.6(5.3)	***(***)
	1992	84.6(1.6)	82.0(2.5)	86.8(1.9)	88.2(1.5)	76.3(5.9)	72.5(9.9)
	1990	85.9(1.3)	84.2(1.8)	87.6(1.8)	87.6(1.5)	79.5(4.0)	81.1(7.0)
	1988	84.1(1.7)	80.0(2.3)	88.1(2.3)	86.1(1.7)	84.8(4.2)	55.0(6.9)
	1984	84.5(0.9)	81.2(1.3)	88.2(1.0)	87.1(1.0)	74.4(2.9)	74.2(4.1)
<b>U.S. History: Vocabulary</b>	1994	73.6(2.1)	73.8(2.6)	73.4(2.7)	80.5(2.0)	52.1(6.4)	***(***)
	1992	75.0(2.1)	71.2(3.2)	78.4(2.4)	78.6(2.3)	62.6(5.0)	56.7(9.6)
	1990	73.4(2.3)	72.5(3.1)	74.3(3.0)	77.1(2.6)	64.0(5.7)	61.5(7.0)
	1988	74.4(2.1)	72.2(3.0)	76.5(3.2)	79.2(2.3)	61.1(5.8)	45.5(8.1)
	1984	74.6(1.0)	73.0(1.7)	76.3(1.6)	78.8(1.2)	60.1(2.9)	56.2(5.5)
<b>Summer job: Apply for SS card</b>	1994	79.0(1.9)	75.8(3.2)	82.8(2.0)	80.9(2.1)	70.2(4.9)	***(***)
	1992	78.2(1.7)	74.9(2.4)	81.2(2.8)	80.9(2.0)	70.9(4.0)	70.7(4.6)
	1990	76.5(1.7)	71.9(2.4)	80.9(2.2)	78.9(1.9)	69.2(5.7)	65.5(6.9)
	1988	78.5(1.5)	76.1(2.8)	80.9(2.3)	81.5(1.9)	71.7(4.7)	62.5(4.6)
	1984	74.9(1.3)	70.6(1.4)	79.0(1.6)	77.7(1.2)	61.8(3.5)	70.3(4.3)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Summer job: When to look</b>	1994	55.0(1.8)	49.1(2.9)	61.8(2.6)	60.3(2.1)	40.7(3.6)	***(***)
	1992	56.7(2.0)	51.8(3.3)	61.1(2.6)	59.9(2.4)	46.8(5.8)	47.6(7.8)
	1990	56.7(1.9)	51.5(2.8)	61.6(2.4)	59.7(1.9)	52.1(5.1)	38.6(6.7)
	1988	57.1(2.1)	50.5(3.1)	63.4(3.1)	59.1(2.5)	54.9(4.6)	43.4(8.1)
	1984	57.6(1.3)	51.5(1.8)	63.5(1.6)	60.9(1.6)	39.6(2.9)	55.8(5.0)
<b>Summer job: Documents needed</b>	1994	58.1(2.5)	51.6(3.3)	65.5(3.7)	64.2(2.2)	36.8(6.6)	***(***)
	1992	61.1(2.3)	56.1(3.6)	65.4(3.1)	64.7(3.1)	42.7(5.2)	69.3(4.9)
	1990	59.6(1.9)	58.2(3.1)	60.8(2.7)	63.6(1.9)	53.4(5.0)	43.1(9.8)
	1988	54.3(1.9)	51.4(3.0)	57.2(2.3)	56.6(2.4)	50.1(3.9)	40.9(7.3)
	1984	55.7(1.5)	52.2(1.8)	59.2(1.6)	59.2(1.4)	40.3(3.0)	45.4(4.8)
<b>Summer job: Job references</b>	1994	47.5(2.5)	40.8(3.1)	55.2(3.2)	51.4(2.6)	28.6(5.4)	***(***)
	1992	51.1(2.0)	41.2(2.4)	59.8(3.2)	53.4(2.1)	41.3(4.8)	43.0(8.1)
	1990	47.7(2.0)	39.9(2.4)	55.1(2.8)	52.1(2.3)	36.4(6.0)	33.0(5.0)
	1988	50.2(2.3)	46.0(3.5)	54.3(3.0)	54.4(2.3)	32.8(5.4)	38.4(6.1)
	1984	45.2(1.1)	43.5(1.9)	46.8(1.4)	47.5(1.2)	34.1(3.8)	41.4(3.4)
<b>Bobby story fact</b>	1994	71.5(2.1)	70.2(2.9)	73.3(2.7)	75.0(2.9)	64.1(6.3)	***(***)
	1992	75.2(1.9)	65.9(2.9)	83.4(2.3)	77.3(2.0)	69.2(4.9)	68.6(6.1)
	1990	68.8(1.9)	62.8(2.5)	74.6(2.5)	71.6(1.8)	64.3(5.0)	58.5(6.6)
	1988	73.6(1.7)	70.5(3.0)	76.7(2.5)	73.8(2.0)	80.0(4.0)	58.2(7.8)
	1984	72.3(1.1)	68.0(1.4)	76.4(1.6)	75.8(1.2)	55.3(2.8)	64.2(3.5)
<b>Central Park story main idea</b>	1994	70.1(2.3)	63.0(4.1)	78.5(1.7)	72.0(2.6)	65.0(6.1)	***(***)
	1992	69.7(1.9)	66.8(3.0)	72.3(2.4)	70.4(2.4)	70.4(6.2)	65.4(6.5)
	1990	65.5(1.8)	60.3(2.9)	70.5(2.6)	69.1(2.3)	55.6(5.3)	53.2(7.8)
	1988	66.1(2.2)	61.4(3.2)	70.5(2.6)	67.6(2.3)	64.4(6.4)	48.3(7.2)
	1984	66.5(1.0)	64.2(1.5)	68.7(1.4)	68.9(1.1)	54.6(3.3)	60.9(4.9)
<b>Comparison of characteristics</b>	1994	72.5(2.5)	70.7(3.6)	74.5(2.3)	77.1(2.8)	58.9(6.3)	***(***)
	1992	69.8(2.2)	63.9(2.8)	75.0(3.0)	72.7(2.5)	57.2(6.0)	70.8(9.4)
	1990	71.6(1.8)	69.6(2.5)	73.4(2.5)	73.9(2.0)	69.9(5.0)	56.5(8.6)
	1988	67.7(2.1)	64.2(3.6)	71.0(2.4)	71.6(2.2)	58.8(5.0)	42.9(6.4)
	1984	67.7(1.4)	64.8(1.7)	70.5(2.0)	70.0(1.3)	56.7(3.4)	63.3(6.0)
<b>Steps in performing a trick</b>	1994	87.0(2.0)	82.0(3.1)	92.6(1.6)	88.1(2.5)	83.2(3.0)	***(***)
	1992	83.1(1.7)	79.5(3.0)	86.2(2.6)	85.5(1.9)	77.0(4.5)	68.5(9.9)
	1990	87.6(1.3)	84.3(1.6)	90.7(1.8)	89.3(1.5)	85.4(4.4)	81.5(5.4)
	1988	84.5(1.3)	79.0(2.7)	89.5(1.5)	84.6(1.6)	85.8(3.5)	80.6(8.8)
	1984	82.7(1.0)	77.3(1.5)	87.7(1.5)	84.9(1.0)	70.7(4.1)	79.2(4.0)
<b>Setting for a trick</b>	1994	67.3(1.8)	63.5(2.5)	71.7(2.3)	69.8(2.2)	57.1(4.6)	***(***)
	1992	66.4(1.8)	64.5(2.7)	68.0(2.8)	70.2(2.0)	50.4(6.3)	54.6(XXX)
	1990	63.4(1.8)	59.2(2.7)	67.3(2.4)	67.8(2.1)	48.0(6.7)	46.2(9.5)
	1988	69.1(1.9)	63.4(2.7)	74.4(2.4)	68.8(2.3)	70.5(3.8)	63.5(9.1)
	1984	69.2(1.6)	66.0(2.1)	72.2(1.9)	71.9(1.5)	55.8(5.1)	62.3(6.1)
<b>Result of food chain</b>	1994	79.4(1.9)	72.4(3.1)	87.4(2.0)	80.5(2.6)	76.3(4.7)	***(***)
	1992	78.6(1.9)	72.2(2.6)	83.9(2.3)	81.5(1.8)	62.1(5.9)	79.8(8.2)
	1990	75.3(2.0)	70.5(2.7)	79.9(2.2)	77.7(2.0)	66.2(5.7)	65.1(7.7)
	1988	80.7(2.1)	76.9(3.2)	84.2(2.5)	81.2(2.4)	78.4(4.9)	75.6(XXX)
	1984	78.3(1.1)	75.7(1.0)	80.7(1.7)	81.0(1.1)	62.9(3.6)	70.3(9.0)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Food chain main idea</b>	1994	69.5(2.4)	65.4(3.7)	74.0(2.8)	71.5(2.6)	68.2(5.1)	***(***)
	1992	66.2(2.3)	65.0(3.2)	67.3(3.5)	69.2(2.6)	52.3(6.2)	55.1(6.3)
	1990	66.7(2.3)	64.5(2.9)	68.9(3.0)	67.9(2.5)	57.7(5.8)	65.6(9.9)
	1988	66.0(2.0)	65.6(2.9)	66.4(2.5)	68.4(2.7)	54.2(6.7)	61.0(6.8)
	1984	62.4(1.4)	61.4(1.9)	63.3(1.5)	64.3(1.6)	53.5(4.1)	49.4(7.5)
<b>Best title for Scott story</b>	1994	43.2(2.3)	40.2(3.0)	46.6(3.1)	44.8(2.4)	41.0(8.8)	28.0(6.0)
	1992	45.5(1.9)	45.3(2.4)	45.7(3.5)	47.8(2.3)	38.8(4.2)	39.1(4.4)
	1990	42.5(2.1)	40.8(3.4)	44.1(3.1)	43.8(2.4)	37.5(6.3)	39.5(4.9)
	1988	47.2(2.1)	43.3(2.8)	51.0(3.4)	48.7(2.5)	40.4(5.2)	37.1(8.8)
	1984	41.5(1.2)	38.7(1.9)	44.4(1.4)	42.0(1.2)	39.8(3.8)	41.6(4.4)
<b>Scott story fact</b>	1994	69.7(1.9)	70.1(2.7)	69.2(2.9)	69.0(2.3)	72.0(4.4)	71.6(6.7)
	1992	71.1(1.8)	66.2(2.8)	76.6(2.4)	71.5(2.2)	74.5(4.2)	66.8(7.0)
	1990	70.6(1.7)	65.4(3.1)	75.6(2.3)	70.6(2.0)	74.4(4.9)	68.9(6.9)
	1988	70.8(2.0)	67.6(3.0)	74.0(2.9)	69.0(2.5)	73.6(3.7)	80.6(5.1)
	1984	71.1(1.3)	68.9(1.8)	73.4(1.5)	70.3(1.5)	74.6(2.5)	69.9(4.8)
<b>Scott story definition</b>	1994	29.8(2.1)	29.6(2.9)	30.1(2.9)	30.5(2.4)	26.1(4.4)	24.2(4.5)
	1992	27.7(1.8)	25.2(2.3)	30.4(2.4)	28.3(1.7)	24.0(6.2)	29.1(7.6)
	1990	32.3(1.9)	33.0(3.1)	31.7(2.5)	33.8(2.2)	26.5(4.5)	26.8(5.6)
	1988	28.5(2.0)	27.7(2.0)	29.3(3.2)	28.8(1.8)	25.8(4.9)	28.1(XXX)
	1984	28.2(1.2)	27.6(1.7)	28.8(1.6)	29.8(1.4)	25.3(2.5)	21.5(3.7)
<b>Figure name</b>	1994	89.3(1.3)	90.5(1.7)	87.9(1.8)	93.0(1.3)	72.6(5.5)	86.0(4.7)
	1992	87.1(1.9)	87.1(2.1)	87.2(2.5)	89.5(1.8)	79.4(6.0)	84.5(4.0)
	1990	85.7(1.5)	88.7(1.7)	82.8(2.7)	88.0(1.7)	78.9(3.7)	78.8(7.0)
	1988	86.6(1.3)	86.2(2.3)	87.0(2.1)	88.0(1.8)	81.8(2.8)	79.6(7.5)
	1984	81.6(1.1)	81.3(1.4)	81.8(1.3)	84.7(1.1)	68.9(3.2)	73.6(6.9)
<b>Description of person</b>	1994	97.2(0.7)	95.6(1.3)	99.1(0.5)	97.8(0.7)	96.2(2.4)	97.6(1.8)
	1992	97.4(0.8)	95.3(1.5)	99.6(0.3)	98.7(0.6)	97.0(2.4)	85.8(4.5)
	1990	95.9(0.9)	95.8(1.2)	95.9(1.1)	96.4(1.0)	95.8(2.0)	88.6(6.1)
	1988	96.3(0.9)	93.9(1.7)	98.7(0.6)	96.4(1.0)	98.6(1.0)	86.2(4.9)
	1984	97.2(0.4)	96.1(0.5)	98.4(0.6)	98.2(0.3)	94.3(1.6)	93.1(3.2)
<b>Nonsense word 1</b>	1994	90.0(1.3)	89.0(2.1)	91.2(1.7)	93.6(1.6)	73.1(5.9)	84.1(5.3)
	1992	89.4(1.3)	85.9(2.0)	93.3(1.5)	92.3(1.2)	86.5(3.3)	71.7(7.2)
	1990	88.5(1.4)	85.6(2.3)	91.4(1.4)	91.1(1.6)	78.1(3.7)	82.6(6.1)
	1988	88.6(1.5)	87.0(1.8)	90.1(2.0)	90.9(1.5)	83.0(5.9)	73.6(6.2)
	1984	87.8(0.8)	86.4(1.1)	89.3(1.2)	90.4(0.7)	79.4(2.4)	77.5(4.3)
<b>Fact about pet care</b>	1994	62.3(2.3)	58.3(3.0)	66.9(3.5)	69.3(2.2)	42.0(6.9)	***(***)
	1992	61.7(2.4)	60.6(3.7)	62.8(2.7)	67.8(2.3)	44.6(6.6)	43.7(7.8)
	1990	63.5(2.0)	58.7(2.7)	68.2(3.0)	68.0(2.2)	45.9(5.7)	61.0(XXX)
	1988	61.9(1.8)	52.1(2.7)	71.4(2.6)	66.9(2.0)	42.8(6.5)	48.5(7.6)
	1984	60.2(1.1)	54.8(1.3)	66.0(1.5)	67.0(1.1)	38.3(2.6)	39.2(4.8)
<b>Fact about health of pet</b>	1994	66.9(2.5)	65.1(3.0)	69.0(2.9)	70.8(3.2)	56.1(5.1)	***(***)
	1992	64.8(2.0)	62.8(3.4)	67.1(2.9)	68.5(2.0)	52.1(7.3)	53.2(5.4)
	1990	62.2(1.7)	58.3(2.6)	66.0(2.4)	64.9(1.9)	56.9(5.0)	47.7(XXX)
	1988	61.3(2.2)	58.9(3.6)	63.7(2.7)	66.9(2.3)	37.5(8.1)	54.2(XXX)
	1984	64.9(1.1)	63.3(1.6)	66.6(1.7)	71.4(1.2)	41.9(2.3)	43.4(5.0)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Sport: Main reason</b>	1994	54.2(1.7)	50.4(2.5)	58.6(2.7)	57.2(2.0)	43.6(6.1)	***(***)
	1992	60.5(2.3)	60.4(2.8)	60.5(3.0)	64.0(2.6)	49.9(5.1)	46.9(5.0)
	1990	59.1(1.8)	57.2(2.6)	61.0(2.6)	63.1(2.1)	45.9(5.4)	36.5(7.7)
	1988	64.0(1.9)	58.6(2.5)	69.4(2.3)	66.2(2.1)	49.1(3.2)	68.3(8.6)
	1984	56.1(1.4)	53.0(1.8)	59.3(1.8)	61.9(1.4)	33.3(2.9)	40.9(4.9)
<b>Trip length in James biography</b>	1994	95.7(0.8)	93.2(1.7)	98.4(0.8)	96.7(0.9)	92.4(4.2)	***(***)
	1992	96.8(0.8)	95.5(1.0)	98.1(1.1)	97.8(0.5)	93.0(2.9)	98.9(1.0)
	1990	96.4(0.7)	94.9(1.4)	97.8(0.7)	96.7(0.8)	96.2(2.2)	94.9(3.7)
	1988	96.7(0.9)	95.6(1.3)	97.8(1.1)	97.2(1.0)	93.0(3.3)	96.8(2.9)
	1984	98.5(0.2)	98.0(0.4)	99.0(0.4)	98.8(0.2)	97.1(1.0)	98.1(1.2)
<b>Importance of James's trip</b>	1994	65.0(1.8)	61.6(2.5)	68.9(2.6)	68.4(1.8)	57.1(7.4)	***(***)
	1992	63.4(2.3)	60.5(3.2)	66.2(2.5)	68.3(2.7)	49.1(6.5)	37.4(5.1)
	1990	62.8(1.8)	62.2(2.3)	63.4(2.7)	67.7(1.9)	54.3(7.1)	44.8(6.6)
	1988	63.7(1.4)	64.4(2.3)	63.0(2.6)	66.5(1.9)	51.6(4.9)	43.0(7.7)
	1984	67.1(1.5)	68.1(2.1)	66.0(2.0)	71.3(1.4)	50.3(4.8)	52.7(5.4)
<b>Hardships endured by James</b>	1994	91.8(1.1)	88.2(1.9)	95.7(1.0)	94.2(1.2)	82.6(4.2)	***(***)
	1992	91.6(1.5)	89.1(2.4)	94.0(1.6)	93.7(1.5)	80.0(6.7)	88.5(5.2)
	1990	92.7(1.0)	91.1(1.5)	94.4(1.4)	93.4(1.2)	92.1(2.9)	90.0(4.1)
	1988	93.4(1.0)	90.5(1.7)	96.1(1.0)	93.7(1.2)	92.9(2.4)	87.2(5.5)
	1984	95.5(0.6)	94.1(0.8)	97.0(0.7)	96.3(0.5)	92.6(1.8)	91.3(4.1)
<b>Phone document for New York</b>	1994	57.0(2.1)	56.0(2.8)	58.1(2.4)	57.9(2.0)	54.6(5.7)	***(***)
	1992	55.9(2.2)	52.9(3.1)	58.8(3.4)	60.9(3.0)	36.6(5.1)	33.3(5.7)
	1990	53.4(2.0)	54.4(2.9)	52.3(2.7)	57.5(2.0)	41.4(5.9)	35.5(6.1)
	1988	51.0(2.5)	49.4(3.2)	52.5(3.0)	53.1(2.6)	47.7(8.7)	37.0(XXX)
	1984	52.6(1.3)	52.7(2.0)	52.5(1.7)	55.0(1.4)	41.3(3.5)	49.9(4.5)
<b>Phone document for Syracuse</b>	1994	73.7(1.5)	69.1(2.1)	78.8(2.1)	76.1(1.6)	66.7(4.3)	***(***)
	1992	75.1(1.8)	72.2(2.7)	78.0(2.8)	77.1(2.3)	67.1(6.2)	62.9(6.9)
	1990	76.5(1.8)	72.2(2.7)	80.8(2.3)	80.3(1.8)	65.3(5.6)	65.6(5.5)
	1988	74.9(1.5)	67.2(2.8)	82.1(1.9)	76.2(1.9)	73.5(4.7)	53.5(XXX)
	1984	74.2(1.0)	73.3(1.8)	75.2(1.2)	77.1(1.2)	63.0(2.7)	66.5(3.2)
<b>Tiresome jobs – 1900's</b>	1994	53.6(2.2)	50.5(3.2)	56.9(3.3)	56.6(2.5)	40.1(4.5)	***(***)
	1992	53.9(2.1)	50.3(3.3)	57.4(2.3)	57.0(2.4)	33.8(5.2)	54.2(7.2)
	1990	53.4(1.9)	48.6(2.8)	58.2(2.3)	59.0(1.9)	40.7(6.1)	39.6(5.4)
	1988	57.1(2.0)	52.4(3.0)	61.5(3.1)	59.5(2.2)	42.8(6.0)	51.2(XXX)
	1984	58.0(1.6)	55.5(1.8)	60.5(2.4)	60.6(1.6)	44.8(4.1)	49.9(8.1)
<b>Jobs in the woods – 1900's</b>	1994	66.6(2.6)	63.5(3.0)	69.9(3.1)	71.6(2.7)	51.3(5.3)	***(***)
	1992	62.3(2.1)	58.5(3.4)	66.0(2.1)	66.1(2.6)	50.9(5.7)	36.9(6.2)
	1990	61.1(2.2)	56.1(2.6)	65.9(3.4)	66.2(2.5)	48.8(4.8)	48.5(6.9)
	1988	64.4(2.2)	59.3(2.8)	69.1(2.7)	69.0(2.2)	41.1(4.4)	51.8(XXX)
	1984	68.7(1.4)	64.0(2.1)	73.6(2.0)	72.4(1.5)	51.3(2.8)	63.8(6.9)
<b>Home jobs – 1900's</b>	1994	74.2(2.0)	67.3(2.9)	81.6(2.3)	77.9(2.5)	59.9(4.6)	***(***)
	1992	77.2(2.1)	67.7(3.5)	86.5(2.3)	81.0(1.8)	62.5(5.1)	59.4(9.9)
	1990	75.1(1.5)	67.3(3.0)	82.8(2.2)	79.2(1.7)	73.2(4.0)	54.4(6.4)
	1988	78.5(1.6)	70.6(2.4)	86.0(2.2)	79.9(1.7)	73.9(5.0)	61.4(8.2)
	1984	81.8(1.1)	77.2(1.6)	86.7(1.2)	84.5(1.2)	68.2(3.9)	77.3(4.5)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Advertisement for carrier</b>	1994	79.2(2.0)	70.3(3.3)	88.8(1.9)	82.6(1.9)	65.3(7.0)	73.2(6.8)
	1992	81.8(1.5)	75.4(2.4)	88.5(2.0)	87.3(1.3)	62.9(5.3)	71.4(5.0)
	1990	82.9(1.4)	79.0(2.3)	87.5(1.7)	86.0(1.5)	72.8(4.8)	77.5(4.1)
	1988	83.0(2.1)	80.0(3.1)	86.2(2.3)	84.6(2.0)	75.9(5.6)	81.8(6.2)
	1984	78.6(1.2)	76.4(1.8)	80.8(1.6)	82.2(1.1)	60.5(3.3)	69.5(6.7)
<b>Carrier job requirements</b>	1994	81.5(1.8)	78.7(2.2)	84.3(2.6)	84.6(2.2)	71.5(5.1)	72.9(6.3)
	1992	84.6(1.5)	83.5(2.0)	85.9(2.0)	86.8(1.6)	80.8(4.4)	71.9(5.3)
	1990	80.2(1.7)	78.9(2.7)	81.8(2.4)	84.5(1.9)	65.9(5.4)	69.4(5.6)
	1988	83.4(1.7)	83.3(2.2)	83.5(2.3)	86.9(1.6)	69.6(6.4)	72.4(7.4)
	1984	82.2(1.0)	80.6(1.7)	83.8(1.4)	84.6(1.1)	72.4(2.7)	71.8(3.3)
<b>Carrier job responsibilities</b>	1994	82.0(1.5)	76.7(2.1)	87.6(2.1)	83.9(1.6)	68.8(4.5)	83.7(5.3)
	1992	85.8(1.8)	83.3(2.5)	88.5(2.5)	87.7(1.7)	82.0(4.7)	80.8(6.1)
	1990	79.5(1.4)	75.0(2.2)	84.9(2.1)	82.2(1.5)	71.0(5.2)	70.7(4.7)
	1988	83.0(1.8)	79.5(2.3)	86.8(2.2)	84.8(1.9)	76.5(5.5)	79.5(XXX)
	1984	78.5(0.9)	76.0(1.2)	81.0(1.1)	81.2(0.9)	66.5(2.9)	68.9(4.4)
<b>Silky story fact</b>	1994	88.5(1.7)	83.6(2.4)	93.7(1.5)	90.1(1.7)	80.4(4.5)	86.3(6.0)
	1992	87.9(1.5)	84.1(2.5)	91.9(1.8)	89.9(1.5)	79.6(5.5)	89.2(4.5)
	1990	86.9(1.3)	82.1(2.0)	92.6(1.6)	89.2(1.1)	77.1(6.3)	84.3(3.6)
	1988	91.4(1.3)	88.7(1.8)	94.3(1.4)	92.2(1.4)	84.7(4.0)	91.6(3.8)
	1984	89.8(0.9)	86.1(1.4)	93.5(0.9)	91.3(1.0)	84.0(1.9)	83.4(3.9)
<b>History of gold rush fact</b>	1994	57.4(2.4)	50.0(3.6)	65.5(2.5)	61.5(2.4)	49.2(6.3)	35.8(6.7)
	1992	68.4(1.8)	62.8(2.5)	74.3(2.3)	71.5(1.8)	58.2(5.6)	56.2(5.8)
	1990	58.6(2.2)	51.7(3.0)	66.7(2.8)	61.4(2.8)	53.0(5.7)	47.5(6.6)
	1988	63.4(2.0)	57.4(3.1)	69.7(2.5)	68.1(2.2)	55.5(4.7)	40.0(XXX)
	1984	50.6(1.4)	47.2(1.7)	54.1(1.6)	53.5(1.6)	36.9(2.7)	42.8(7.1)
<b>Winnie drawing</b>	1994	92.2(1.5)	88.9(2.8)	95.7(1.0)	93.4(1.6)	84.5(3.6)	91.3(4.6)
	1992	93.3(1.2)	93.4(1.7)	93.2(1.4)	93.8(1.5)	90.0(3.9)	95.3(2.8)
	1990	94.1(0.8)	93.3(1.4)	95.0(1.0)	94.6(1.0)	92.7(2.6)	89.9(3.1)
	1988	95.7(0.9)	95.1(1.0)	96.3(1.2)	94.5(1.2)	98.3(1.7)	100.0(0.0)
	1984	93.3(0.5)	92.0(0.6)	94.7(0.8)	94.4(0.5)	87.7(2.1)	91.7(2.4)
<b>History of arts before 1940</b>	1994	20.8(1.7)	21.1(2.3)	20.6(2.3)	20.9(1.9)	19.0(4.6)	19.8(5.1)
	1992	22.8(1.9)	24.2(2.7)	21.3(2.2)	23.7(2.2)	23.1(4.5)	18.1(5.0)
	1990	23.6(1.9)	26.0(2.9)	20.7(2.3)	24.2(2.3)	22.4(4.4)	19.5(6.1)
	1988	23.8(1.6)	24.4(2.6)	23.2(2.2)	25.2(2.0)	25.6(3.2)	12.5(5.6)
	1984	22.1(1.0)	22.6(1.8)	21.7(1.3)	23.4(1.2)	16.3(1.9)	15.5(2.6)
<b>Historical privilege of arts</b>	1994	36.4(2.0)	36.8(2.1)	35.6(3.1)	38.2(2.3)	29.2(5.9)	33.0(5.3)
	1992	42.0(2.1)	43.0(2.9)	41.0(3.1)	42.8(2.3)	41.8(7.6)	28.1(5.6)
	1990	34.4(1.4)	33.8(2.7)	35.1(2.4)	35.7(1.8)	26.1(3.9)	34.7(5.5)
	1988	36.7(2.3)	36.1(2.7)	37.4(3.6)	39.1(3.0)	32.9(5.4)	18.5(5.8)
	1984	35.2(1.1)	35.7(1.7)	34.8(1.6)	37.9(1.3)	24.5(2.9)	24.3(3.8)
<b>Mass production of art</b>	1994	20.6(1.3)	19.0(2.4)	22.4(2.2)	22.2(1.8)	16.2(4.8)	7.3(3.3)
	1992	20.3(1.4)	17.3(1.6)	23.4(2.1)	21.5(1.6)	13.6(3.1)	23.8(6.3)
	1990	19.8(1.5)	19.8(2.3)	19.8(2.0)	19.9(1.6)	18.3(4.3)	22.7(5.2)
	1988	22.2(2.1)	20.9(2.8)	23.5(2.5)	22.5(2.7)	17.7(3.1)	22.4(4.8)
	1984	21.5(1.1)	19.0(1.7)	23.9(1.3)	21.5(1.3)	23.8(2.5)	16.7(2.9)

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Traffic violation fact</b>	1994	61.6(2.5)	61.3(3.4)	62.0(2.8)	63.9(2.7)	53.1(7.0)	***(***)
	1992	67.5(1.7)	70.6(2.7)	64.2(2.5)	67.2(2.1)	67.6(5.5)	66.0(6.6)
	1990	64.7(1.8)	65.5(2.5)	63.6(2.6)	66.0(2.0)	61.5(5.5)	65.8(5.5)
	1988	67.1(2.4)	67.6(2.8)	66.6(3.9)	67.9(2.8)	60.8(4.0)	73.0(7.5)
	1984	62.8(1.3)	60.0(2.1)	65.4(1.8)	64.8(1.3)	52.2(4.0)	55.5(6.1)
<b>Cost of traffic fine</b>	1994	57.7(2.0)	56.9(2.9)	58.6(2.8)	63.9(2.1)	40.8(4.0)	***(***)
	1992	54.5(1.8)	54.9(2.7)	54.2(2.7)	60.0(2.1)	36.2(6.6)	38.5(6.5)
	1990	50.3(2.0)	51.1(2.6)	49.5(2.9)	53.7(2.2)	45.1(5.3)	34.3(6.5)
	1988	46.8(2.2)	47.2(3.0)	46.4(2.5)	51.2(2.4)	29.0(5.3)	43.7(XXX)
	1984	49.7(1.1)	51.4(1.6)	48.0(1.5)	53.3(1.3)	37.5(3.1)	30.6(3.3)
<b>Traffic fine payment fact</b>	1994	35.6(2.4)	38.5(2.8)	32.5(3.0)	38.8(2.4)	25.4(4.8)	***(***)
	1992	33.2(2.2)	30.5(2.9)	36.0(2.9)	33.7(2.5)	37.1(5.0)	21.4(5.5)
	1990	32.6(1.7)	31.7(2.4)	33.5(2.9)	34.5(2.0)	24.7(5.4)	30.5(5.1)
	1988	32.8(2.0)	31.4(3.3)	34.3(2.4)	35.7(2.2)	14.8(5.6)	21.9(6.1)
	1984	31.8(1.2)	33.0(1.4)	30.6(1.7)	33.2(1.1)	22.8(2.6)	35.1(3.2)
<b>Seal food information</b>	1994	62.8(2.8)	57.6(2.9)	68.7(3.4)	66.3(3.0)	50.5(8.3)	***(***)
	1992	63.4(2.9)	63.2(4.0)	63.7(3.1)	66.7(3.1)	53.6(7.5)	51.5(6.9)
	1990	59.3(2.1)	56.3(3.0)	62.8(3.2)	63.8(2.2)	41.3(7.1)	47.8(8.2)
	1988	67.2(2.1)	69.4(2.5)	65.1(3.2)	69.6(2.5)	55.7(6.2)	65.8(8.7)
	1984	64.0(1.4)	64.8(1.9)	63.3(1.7)	67.8(1.5)	45.7(2.5)	44.0(5.2)
<b>Fact about seals in Mexico</b>	1994	38.7(2.8)	34.0(3.5)	44.2(3.6)	43.5(3.2)	22.5(5.7)	***(***)
	1992	47.8(2.5)	42.9(3.7)	53.0(3.0)	51.4(2.9)	32.9(4.1)	40.4(4.9)
	1990	40.8(1.9)	36.7(2.5)	45.7(2.5)	44.6(2.1)	26.8(5.9)	25.8(5.8)
	1988	46.1(2.1)	40.8(3.4)	51.4(3.0)	51.9(2.6)	26.7(5.3)	19.6(9.7)
	1984	45.3(1.3)	40.6(2.0)	49.8(1.5)	48.3(1.6)	29.0(3.3)	29.5(3.8)
<b>Describe seals</b>	1994	43.9(2.6)	39.5(3.0)	49.0(3.4)	44.0(2.9)	43.2(8.6)	***(***)
	1992	45.5(2.3)	43.6(3.3)	47.6(3.2)	47.3(2.7)	36.6(5.8)	43.0(4.6)
	1990	46.4(2.1)	44.1(3.0)	49.1(3.0)	50.3(2.7)	32.1(5.9)	36.5(5.4)
	1988	43.6(2.0)	41.4(3.0)	45.7(2.8)	47.3(2.5)	31.2(4.4)	28.7(8.5)
	1984	45.1(1.5)	41.8(1.9)	48.2(2.1)	46.1(1.6)	39.5(3.6)	40.1(6.9)
<b>Birth cycle of seals</b>	1994	52.7(3.0)	46.0(3.4)	60.6(3.3)	57.5(3.5)	36.5(4.8)	***(***)
	1992	59.4(2.9)	55.8(4.5)	63.4(3.1)	65.5(3.5)	32.5(5.7)	41.1(7.7)
	1990	52.2(1.8)	46.0(2.3)	59.4(3.1)	54.6(2.3)	42.6(4.8)	37.5(7.3)
	1988	62.6(1.7)	58.0(2.9)	67.1(2.8)	67.5(2.2)	42.0(4.9)	49.3(XXX)
	1984	60.9(1.4)	57.8(2.1)	63.9(1.4)	64.7(1.7)	38.9(3.5)	43.1(5.8)
<b>Seals: Definition</b>	1994	78.2(2.5)	73.1(3.6)	84.4(2.6)	81.2(2.9)	69.4(4.0)	***(***)
	1992	77.6(2.0)	74.3(2.8)	81.1(2.7)	80.6(2.1)	64.9(7.2)	67.9(5.9)
	1990	77.6(2.0)	71.9(2.8)	84.4(2.0)	80.2(1.9)	72.6(6.1)	58.0(7.5)
	1988	80.0(2.0)	77.8(3.0)	82.2(2.9)	82.9(2.0)	68.7(7.5)	65.2(XXX)
	1984	79.9(1.2)	77.9(1.4)	81.8(1.7)	83.0(1.2)	63.5(3.2)	63.3(5.0)
<b>Hero story: Main idea</b>	1994	80.0(1.9)	76.0(2.9)	84.1(2.1)	80.8(2.2)	75.7(5.9)	***(***)
	1992	79.6(2.5)	79.6(3.3)	79.5(3.1)	81.5(2.9)	72.1(5.1)	74.5(7.1)
	1990	76.5(1.7)	74.3(2.4)	78.7(2.5)	78.6(2.1)	70.2(6.5)	69.7(9.7)
	1988	79.3(1.8)	78.4(2.5)	80.2(2.3)	80.9(2.4)	71.1(4.5)	75.2(6.2)
	1984	75.0(0.8)	74.7(1.1)	75.3(1.3)	76.6(0.8)	67.7(2.9)	69.2(3.5)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Country of hero in story</b>	1994	89.2(1.4)	85.9(2.1)	92.6(1.8)	89.6(1.6)	84.2(3.1)	***(***)
	1992	92.8(0.9)	89.3(1.9)	96.0(1.1)	92.4(1.2)	91.5(2.7)	98.8(1.3)
	1990	90.1(1.2)	86.3(1.5)	93.9(1.3)	90.2(1.4)	92.8(4.0)	89.8(4.3)
	1988	88.3(1.4)	84.4(2.0)	92.1(1.9)	88.2(1.7)	87.3(3.7)	92.2(6.5)
	1984	89.6(0.6)	86.5(0.7)	92.9(0.8)	90.7(0.6)	85.4(2.1)	85.0(3.1)
<b>Hero story: Fact</b>	1994	64.0(2.0)	62.3(2.9)	65.7(2.4)	67.8(2.3)	55.0(6.4)	***(***)
	1992	60.3(2.0)	58.0(3.2)	62.4(2.7)	64.2(2.3)	44.6(4.7)	51.9(7.3)
	1990	59.3(1.8)	58.7(2.7)	60.0(2.6)	61.6(2.4)	47.1(5.4)	60.6(5.9)
	1988	58.4(1.9)	59.9(2.1)	56.9(3.2)	61.1(2.3)	47.2(5.3)	43.4(8.7)
	1984	59.0(1.2)	59.6(1.6)	58.3(1.5)	62.4(1.4)	44.7(2.5)	48.5(4.8)
<b>Money in hero story</b>	1994	69.0(2.5)	62.3(3.6)	75.8(2.3)	73.2(2.5)	50.8(6.0)	***(***)
	1992	73.3(2.1)	67.3(2.6)	79.0(2.8)	75.1(2.6)	65.3(5.4)	81.3(5.9)
	1990	70.2(1.5)	64.4(2.6)	76.0(2.6)	72.2(1.9)	61.5(5.2)	67.7(4.4)
	1988	69.1(2.1)	64.0(2.9)	74.1(3.1)	70.1(2.1)	64.1(5.4)	65.3(9.0)
	1984	73.3(1.0)	69.0(1.5)	77.9(1.3)	74.9(1.1)	66.9(2.1)	69.7(3.5)
<b>Hero story: Goal</b>	1994	74.9(2.5)	67.5(3.5)	82.5(2.6)	79.1(2.7)	54.0(5.9)	***(***)
	1992	77.2(2.0)	73.9(3.3)	80.2(2.4)	79.6(2.5)	68.6(4.3)	71.3(6.4)
	1990	78.6(1.5)	74.3(2.0)	82.9(2.2)	80.6(1.9)	75.0(4.8)	67.6(4.9)
	1988	77.4(1.7)	74.4(2.5)	80.3(1.6)	78.3(2.1)	71.4(5.0)	77.2(8.0)
	1984	75.2(0.8)	73.2(1.6)	77.4(1.2)	77.0(0.9)	64.6(2.8)	73.6(2.8)
<b>Purpose of business article</b>	1994	59.9(2.0)	54.7(3.5)	65.2(3.3)	63.6(2.3)	52.3(5.1)	***(***)
	1992	59.9(1.7)	54.7(3.0)	64.8(2.7)	62.4(1.9)	52.4(5.1)	54.9(8.2)
	1990	58.6(1.6)	55.9(2.2)	61.2(2.3)	60.0(1.9)	52.9(6.3)	53.4(6.5)
	1988	59.4(2.1)	55.7(2.5)	62.9(3.3)	62.5(2.5)	45.7(5.5)	51.1(9.4)
	1984	55.5(1.1)	52.5(1.4)	58.6(1.1)	58.3(1.1)	46.8(3.3)	43.5(3.5)
<b>Identify business liability</b>	1994	35.4(1.9)	31.3(2.4)	39.7(3.1)	38.8(2.3)	25.7(4.3)	***(***)
	1992	36.5(2.0)	37.5(3.1)	35.5(2.3)	39.4(2.3)	23.5(4.4)	37.5(8.0)
	1990	35.2(1.8)	31.7(2.4)	38.7(2.5)	37.6(2.0)	29.6(6.1)	23.8(6.5)
	1988	38.5(1.9)	41.8(2.7)	35.4(2.8)	40.7(2.0)	32.2(5.4)	24.2(XXX)
	1984	35.7(0.9)	36.0(1.1)	35.3(1.5)	38.1(1.0)	25.8(2.7)	29.2(2.4)
<b>Define business profit</b>	1994	82.2(2.1)	80.9(2.5)	83.5(2.8)	85.5(2.3)	73.2(4.7)	***(***)
	1992	84.8(1.6)	87.1(2.4)	82.7(2.5)	88.0(1.4)	74.6(5.7)	79.6(6.4)
	1990	83.6(1.6)	83.6(2.6)	83.5(1.8)	87.4(1.5)	77.3(6.1)	60.0(5.7)
	1988	84.6(1.8)	85.6(2.5)	83.7(2.6)	87.4(2.0)	77.5(4.2)	63.1(XXX)
	1984	85.7(0.6)	85.9(0.9)	85.5(0.9)	88.1(0.7)	76.7(2.3)	75.0(2.4)
<b>One purpose of trees</b>	1994	79.6(1.8)	76.4(2.7)	82.9(1.8)	85.6(1.9)	57.3(5.8)	***(***)
	1992	80.5(1.7)	78.8(2.7)	82.1(2.0)	83.6(1.8)	70.0(5.8)	70.0(5.4)
	1990	79.1(1.6)	76.1(1.8)	82.0(2.0)	82.6(1.7)	67.5(6.1)	64.7(9.5)
	1988	80.7(1.9)	80.5(2.4)	80.9(2.7)	82.9(2.1)	67.8(5.8)	79.5(8.3)
	1984	81.9(0.8)	81.3(1.3)	82.4(0.9)	84.4(0.9)	70.9(2.5)	75.4(2.0)
<b>Second purpose of trees</b>	1994	50.0(2.2)	47.1(3.2)	52.9(3.1)	54.8(2.4)	30.9(5.6)	***(***)
	1992	46.8(1.9)	48.9(2.5)	44.8(2.9)	54.4(2.7)	26.2(4.4)	22.3(7.0)
	1990	46.3(2.2)	46.9(2.7)	45.7(3.4)	51.7(2.6)	30.2(5.7)	21.8(5.7)
	1988	53.6(2.6)	53.9(3.6)	53.3(2.8)	57.3(2.9)	35.4(5.0)	41.2(8.9)
	1984	52.1(1.2)	51.9(1.6)	52.2(1.3)	56.3(1.4)	36.6(2.5)	34.9(3.8)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

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## NAEP 1994 National Reading Trend Assessments — Age 13

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
Purpose of green belt	1994	76.3(2.3)	74.9(3.3)	77.7(2.7)	80.5(2.4)	62.0(6.3)	***(***)
	1992	75.5(2.2)	73.8(2.8)	77.0(2.9)	79.4(2.1)	61.9(6.2)	70.4(6.9)
	1990	73.9(1.6)	75.4(2.6)	72.4(2.0)	76.2(1.9)	68.4(5.1)	61.2(8.2)
	1988	78.3(1.8)	77.1(2.7)	79.4(2.8)	81.0(1.7)	60.7(8.6)	76.4(8.1)
	1984	72.7(1.0)	70.9(1.2)	74.6(1.5)	76.5(1.0)	56.6(2.8)	59.8(3.4)

\*\*\* Sample size insufficient to permit a reliable estimate.  
The standard errors of the estimated percentages appear in parenthesis.

# NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Computer chip: Central purpose</b>	1994	67.3(2.2)	66.6(2.7)	67.8(3.4)	72.3(2.6)	49.9(6.6)	***(***)
	1992	71.8(1.7)	67.2(2.6)	75.9(1.8)	75.2(2.1)	53.9(4.9)	64.7(6.2)
	1990	71.0(2.2)	69.4(3.2)	72.7(2.5)	74.5(2.2)	55.7(4.7)	71.1(8.1)
	1988	72.5(1.6)	74.0(2.5)	71.1(2.6)	76.5(1.7)	57.7(4.7)	65.2(6.2)
	1984	68.3(1.5)	67.2(1.3)	69.4(2.1)	72.5(1.3)	51.5(4.2)	53.3(4.7)
<b>Computer chip: Supporting idea</b>	1994	48.7(2.9)	46.8(4.3)	50.6(3.7)	52.4(3.2)	36.1(6.1)	***(***)
	1992	48.3(2.3)	46.9(3.0)	49.5(2.7)	50.8(2.8)	29.7(5.0)	52.9(7.7)
	1990	52.1(2.0)	52.7(3.4)	51.6(2.2)	54.8(2.6)	40.1(4.5)	51.2(XXX)
	1988	50.4(2.3)	47.6(3.4)	53.0(3.2)	52.3(2.6)	49.3(5.6)	32.5(6.2)
	1984	47.5(0.8)	44.2(1.5)	51.0(1.5)	51.5(1.0)	30.3(2.4)	33.1(4.6)
<b>Computer chip: Vocabulary</b>	1994	30.6(2.3)	34.9(3.3)	26.3(2.5)	31.7(2.7)	30.2(5.3)	***(***)
	1992	26.1(1.7)	25.7(2.3)	26.4(2.3)	26.5(2.1)	26.9(5.8)	26.1(6.9)
	1990	29.1(1.8)	29.9(2.6)	28.2(2.6)	29.6(2.2)	22.2(5.1)	40.6(7.5)
	1988	26.1(2.3)	27.6(2.7)	24.9(2.9)	25.7(2.3)	27.7(6.0)	24.7(6.3)
	1984	28.2(1.0)	29.1(1.4)	27.3(1.6)	29.4(1.1)	21.9(2.5)	27.6(3.2)
<b>Coupon document: Limitations</b>	1994	80.2(1.6)	76.3(2.3)	84.0(2.4)	85.0(1.6)	66.0(6.4)	***(***)
	1992	77.7(2.2)	76.2(2.6)	79.1(2.6)	80.3(1.9)	66.7(5.9)	77.6(6.7)
	1990	77.5(2.2)	71.4(3.2)	83.8(2.4)	80.4(2.5)	65.2(6.0)	74.2(XXX)
	1988	81.2(1.3)	76.3(2.5)	85.2(1.8)	83.3(1.8)	71.5(5.1)	78.1(7.7)
	1984	73.7(1.1)	69.3(1.8)	78.2(1.2)	77.8(1.2)	60.5(3.0)	52.8(4.1)
<b>Coupon document: Expiration</b>	1994	96.0(0.9)	94.2(1.7)	97.8(0.8)	95.5(1.2)	97.7(1.7)	***(***)
	1992	96.2(0.8)	97.2(0.8)	95.3(1.1)	96.2(0.8)	97.5(1.8)	91.6(4.0)
	1990	96.6(0.8)	94.6(1.4)	98.7(0.6)	96.3(0.9)	98.1(0.9)	95.3(3.1)
	1988	97.5(0.6)	96.5(1.2)	98.3(0.6)	97.5(0.8)	96.0(1.5)	100.0(0.0)
	1984	95.3(0.5)	94.0(0.7)	96.6(0.8)	96.4(0.4)	91.8(1.2)	90.5(3.5)
<b>Coupon: Value</b>	1994	70.2(2.5)	68.8(3.0)	71.5(3.3)	75.1(2.9)	52.4(6.6)	***(***)
	1992	69.5(1.9)	65.8(2.8)	72.8(2.6)	74.1(2.3)	37.7(5.8)	76.9(7.0)
	1990	70.8(2.0)	69.9(2.4)	71.7(3.1)	74.9(2.0)	54.4(5.7)	66.5(XXX)
	1988	71.3(2.3)	73.0(3.9)	69.7(2.8)	72.8(2.6)	68.7(4.4)	67.3(8.3)
	1984	74.1(1.3)	72.2(1.6)	76.0(1.8)	79.3(1.2)	52.9(3.4)	55.1(5.7)
<b>Carad poem</b>	1994	79.3(1.6)	76.9(2.9)	81.6(2.0)	81.7(1.9)	75.6(6.0)	***(***)
	1992	77.2(2.1)	73.0(3.2)	81.0(2.4)	81.1(2.1)	54.9(5.5)	73.3(7.2)
	1990	78.7(1.8)	75.8(2.5)	81.8(2.2)	81.1(1.8)	69.7(5.2)	76.8(9.7)
	1988	78.5(1.7)	78.4(2.8)	78.4(2.6)	82.1(2.1)	69.0(4.7)	51.3(7.9)
	1984	77.6(0.9)	75.8(1.4)	79.6(1.1)	82.2(0.9)	58.9(3.3)	65.5(5.4)
<b>Nut story: Plan</b>	1994	95.6(1.0)	92.5(1.9)	98.5(0.7)	95.1(1.4)	97.4(2.3)	***(***)
	1992	95.7(0.9)	93.4(1.4)	97.8(1.0)	96.2(1.0)	94.5(2.7)	90.3(5.6)
	1990	96.5(0.7)	94.2(1.3)	98.8(0.6)	96.1(0.9)	97.4(1.6)	97.3(2.7)
	1988	97.4(0.8)	94.9(1.6)	99.5(0.4)	96.9(1.0)	98.4(1.7)	100.0(0.0)
	1984	96.4(0.5)	94.6(0.7)	98.3(0.6)	97.1(0.4)	95.5(1.0)	91.3(4.0)
<b>Nut story: Problem</b>	1994	87.9(1.6)	85.2(2.5)	90.7(1.7)	88.7(2.1)	84.9(5.0)	***(***)
	1992	87.8(1.6)	84.5(2.9)	90.7(1.7)	89.5(1.9)	80.2(4.4)	80.7(5.2)
	1990	87.8(1.2)	81.2(2.2)	94.6(1.4)	87.3(1.3)	85.6(3.4)	95.3(3.0)
	1988	91.6(1.2)	87.8(2.5)	94.7(1.2)	91.8(1.5)	92.7(2.4)	87.3(7.7)
	1984	88.8(0.8)	85.9(0.9)	91.8(1.3)	90.8(0.8)	79.5(3.2)	83.7(3.9)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Nut story: Goal</b>	1994	91.2(1.2)	88.0(1.8)	94.5(1.7)	90.7(1.5)	92.8(2.9)	***(***)
	1992	91.7(1.0)	89.1(1.6)	94.1(1.5)	92.9(1.2)	85.4(3.5)	88.4(6.3)
	1990	90.7(1.3)	86.5(2.2)	95.0(1.2)	91.0(1.4)	89.0(3.1)	92.9(4.6)
	1988	93.9(1.2)	92.5(1.7)	95.1(1.7)	94.9(1.4)	91.2(2.7)	92.2(3.4)
	1984	91.9(0.7)	89.5(1.0)	94.5(0.8)	93.6(0.6)	85.4(2.1)	86.5(3.7)
<b>Nut story: Outcome</b>	1994	87.4(1.9)	82.6(2.2)	92.3(2.1)	87.6(2.4)	85.6(5.6)	***(***)
	1992	87.3(1.6)	83.6(2.8)	90.6(1.7)	88.3(1.8)	82.3(4.7)	85.1(5.0)
	1990	89.1(1.5)	82.7(2.5)	95.5(1.5)	88.5(1.7)	90.1(2.6)	92.9(4.6)
	1988	91.1(1.3)	88.1(1.7)	93.7(1.8)	91.8(1.6)	89.5(3.5)	94.2(4.3)
	1984	90.0(0.7)	87.2(1.1)	92.9(0.9)	92.1(0.8)	83.1(2.0)	80.1(5.1)
<b>Club document: Fees</b>	1994	82.6(1.3)	77.5(2.2)	89.0(2.0)	86.6(1.4)	71.2(4.6)	***(***)
	1992	85.9(1.3)	84.1(2.0)	88.0(1.8)	90.5(1.3)	67.8(5.6)	82.9(5.6)
	1990	80.8(1.5)	75.9(2.4)	85.8(1.9)	84.7(1.4)	67.5(6.1)	75.0(XXX)
	1988	86.5(1.4)	87.4(2.2)	85.7(1.6)	87.7(1.5)	83.3(4.1)	80.8(6.2)
	1984	83.6(0.6)	82.6(0.9)	84.7(0.9)	86.6(0.7)	72.0(1.9)	76.5(3.9)
<b>Club document: Billing</b>	1994	33.9(2.4)	35.2(3.1)	32.0(2.5)	35.5(2.6)	30.9(4.5)	***(***)
	1992	32.3(1.9)	29.1(2.5)	35.8(2.8)	31.1(2.2)	34.2(5.5)	37.3(7.2)
	1990	36.5(2.1)	33.2(2.7)	39.8(3.2)	37.6(2.4)	29.5(4.8)	34.1(9.0)
	1988	31.4(2.3)	31.3(2.9)	31.6(3.8)	32.1(2.4)	24.1(3.5)	37.6(7.7)
	1984	39.2(0.8)	37.4(1.2)	41.0(1.3)	39.7(0.9)	37.3(2.3)	37.9(1.9)
<b>Club document: Requirements</b>	1994	77.7(1.4)	75.4(2.1)	80.5(2.6)	82.3(1.9)	68.8(5.0)	***(***)
	1992	79.0(1.9)	78.7(2.6)	79.4(2.1)	82.2(2.1)	72.5(5.2)	61.2(7.2)
	1990	77.6(1.8)	76.0(2.5)	79.3(2.7)	80.0(1.5)	68.9(6.8)	79.5(9.5)
	1988	79.8(2.1)	81.1(3.8)	79.0(2.0)	82.8(2.3)	73.0(4.9)	61.3(6.0)
	1984	79.7(0.8)	77.2(1.0)	82.3(1.0)	83.8(0.8)	65.5(2.2)	64.9(2.9)
<b>Charley1 story: Problem</b>	1994	82.5(1.8)	77.9(2.9)	88.3(2.0)	86.4(2.0)	71.8(3.8)	***(***)
	1992	85.3(1.5)	83.7(2.1)	87.1(1.9)	87.3(1.6)	75.0(5.3)	86.8(4.8)
	1990	85.2(1.5)	80.1(2.5)	90.4(1.6)	86.7(1.6)	78.7(4.2)	86.4(7.4)
	1988	85.9(1.8)	80.5(3.4)	90.6(1.6)	86.9(2.1)	79.0(5.0)	83.8(6.1)
	1984	83.7(0.7)	78.5(1.1)	89.1(0.8)	86.1(0.7)	72.0(2.2)	79.6(3.2)
<b>Flying: 1st machine</b>	1994	74.3(1.6)	72.6(2.8)	75.9(2.5)	80.9(1.8)	53.2(5.3)	52.8(5.2)
	1992	77.1(1.5)	80.0(2.1)	74.3(2.2)	82.4(1.7)	54.7(5.8)	72.0(9.1)
	1990	78.1(2.0)	82.1(2.9)	73.9(2.7)	81.6(1.7)	62.2(6.3)	76.5(7.6)
	1988	77.5(1.8)	81.0(2.6)	74.0(2.1)	80.8(1.8)	63.9(4.3)	68.5(7.5)
	1984	77.7(1.0)	80.8(1.3)	74.1(1.5)	81.3(1.0)	63.8(3.4)	67.3(4.3)
<b>Flying: Types of planes</b>	1994	79.2(2.2)	78.2(2.9)	80.2(3.1)	82.3(2.3)	75.5(6.7)	55.9(8.5)
	1992	81.5(1.6)	81.4(2.1)	81.7(2.4)	86.0(1.7)	70.8(5.3)	55.0(XXX)
	1990	81.7(1.8)	79.4(2.3)	84.2(2.3)	84.7(1.6)	72.0(5.5)	74.8(XXX)
	1988	80.8(1.3)	79.2(2.5)	82.5(2.3)	81.9(1.6)	75.5(4.3)	75.8(XXX)
	1984	81.1(1.2)	78.9(1.6)	83.6(1.2)	83.3(1.3)	72.2(3.3)	75.0(5.5)
<b>Flying: Differences</b>	1994	85.6(1.7)	84.8(2.7)	86.3(2.0)	90.3(1.7)	75.3(4.6)	63.3(8.7)
	1992	86.9(1.3)	86.1(1.7)	87.7(1.9)	88.4(1.3)	78.5(5.2)	86.0(7.2)
	1990	86.5(1.5)	84.6(2.5)	88.4(2.0)	89.7(1.4)	74.1(6.6)	86.4(4.9)
	1988	86.1(1.4)	84.5(2.2)	87.7(1.8)	86.5(1.5)	80.8(5.0)	92.2(4.7)
	1984	85.8(1.0)	84.8(1.4)	87.0(1.3)	88.4(1.1)	74.9(2.7)	78.7(3.7)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Science: Research</b>	1994	55.0(2.0)	56.3(2.9)	54.0(2.6)	59.3(2.5)	45.5(7.1)	***(***)
	1992	58.5(2.0)	55.6(3.4)	61.3(2.3)	59.2(2.3)	54.3(4.4)	49.7(7.6)
	1990	58.0(2.1)	57.0(2.9)	59.0(3.5)	61.5(2.3)	42.2(6.1)	57.7(7.0)
	1988	54.0(2.2)	47.1(3.3)	61.0(2.8)	54.7(2.4)	46.9(4.8)	57.4(8.6)
	1984	54.2(1.1)	52.9(1.8)	55.7(1.3)	56.5(1.3)	42.1(2.6)	51.5(7.3)
<b>Science: Evidence</b>	1994	58.3(2.4)	54.1(3.5)	62.4(3.0)	62.5(2.4)	50.5(8.6)	***(***)
	1992	61.8(1.7)	57.7(2.6)	66.0(2.8)	65.4(2.1)	48.1(4.9)	54.6(XXX)
	1990	57.9(1.9)	52.3(2.7)	63.9(2.5)	59.8(2.1)	54.6(5.9)	44.7(9.8)
	1988	55.9(2.4)	54.3(3.6)	57.5(2.5)	55.5(2.6)	50.3(4.9)	70.3(5.6)
	1984	55.7(1.4)	51.8(1.7)	60.0(1.8)	59.7(1.6)	38.4(3.8)	46.6(3.5)
<b>Phone call date</b>	1994	87.2(1.5)	86.6(2.2)	87.6(1.9)	90.8(1.4)	76.1(4.6)	***(***)
	1992	89.5(1.2)	86.2(2.0)	92.8(1.8)	91.4(1.4)	78.9(4.2)	90.5(4.0)
	1990	87.3(1.5)	86.8(2.5)	87.8(1.9)	91.5(1.3)	71.3(5.3)	84.4(7.3)
	1988	85.0(2.1)	86.3(2.3)	83.8(3.1)	85.8(2.6)	79.1(4.0)	88.5(4.4)
	1984	86.2(1.2)	83.1(1.5)	89.6(1.2)	89.4(1.1)	73.8(3.2)	74.0(4.0)
<b>Document: Phone location</b>	1994	90.7(1.3)	90.3(1.8)	91.1(1.7)	93.6(1.2)	80.4(5.3)	***(***)
	1992	91.6(1.1)	87.8(2.0)	95.4(1.3)	93.4(1.4)	86.1(4.0)	87.3(4.9)
	1990	90.1(1.3)	88.5(2.2)	91.8(1.2)	92.7(1.2)	81.0(4.9)	87.7(9.0)
	1988	89.2(1.5)	89.7(1.9)	88.8(2.6)	89.6(1.9)	88.4(3.7)	87.1(4.5)
	1984	89.8(0.9)	87.8(1.2)	92.0(1.0)	91.8(0.8)	81.7(3.2)	82.4(3.1)
<b>Document: Phone charge</b>	1994	93.5(1.3)	94.4(1.8)	92.5(1.9)	93.8(1.5)	94.4(2.8)	***(***)
	1992	94.4(0.9)	95.5(1.2)	93.2(1.4)	95.7(0.9)	92.7(2.1)	81.4(9.7)
	1990	92.2(1.2)	93.3(1.6)	91.0(1.7)	93.3(1.0)	84.8(4.7)	94.2(3.6)
	1988	94.3(1.3)	94.4(1.5)	94.3(2.1)	93.7(1.6)	95.3(1.9)	97.6(1.4)
	1984	91.6(1.1)	90.4(1.2)	92.9(1.4)	92.3(1.2)	88.3(1.9)	89.8(2.4)
<b>Story: Prediction about Mary</b>	1994	66.3(2.3)	59.8(3.9)	72.9(2.6)	68.6(2.7)	60.7(6.8)	***(***)
	1992	72.8(1.8)	69.8(2.4)	76.1(2.3)	76.5(2.1)	63.0(5.8)	66.2(8.7)
	1990	75.0(1.8)	73.0(2.6)	76.9(2.4)	78.0(2.1)	65.9(4.9)	59.3(9.3)
	1988	74.9(2.0)	71.3(2.8)	78.0(2.6)	79.0(2.5)	69.0(5.1)	49.7(8.3)
	1984	69.7(1.0)	65.3(1.3)	74.6(1.2)	72.7(1.2)	61.8(2.8)	61.3(3.1)
<b>Science: Cue words</b>	1994	67.9(2.4)	61.0(3.7)	75.2(2.7)	69.9(2.8)	65.9(5.8)	***(***)
	1992	67.2(1.7)	67.2(2.8)	67.3(2.9)	69.6(2.0)	58.1(4.5)	67.6(7.0)
	1990	68.9(2.1)	65.5(2.7)	72.2(2.8)	68.8(2.4)	71.4(4.8)	62.2(4.8)
	1988	68.4(3.3)	67.8(3.9)	68.9(4.8)	69.7(3.8)	63.9(7.8)	58.1(XXX)
	1984	58.4(1.4)	53.8(1.9)	63.4(1.4)	61.4(1.6)	47.9(3.5)	48.2(4.6)
<b>Science: Area of study</b>	1994	80.1(1.9)	74.9(3.1)	85.4(2.0)	83.7(1.9)	70.6(6.1)	***(***)
	1992	80.5(1.8)	79.6(2.3)	81.4(2.3)	84.5(1.9)	68.4(5.3)	70.4(5.4)
	1990	83.0(1.8)	81.0(2.4)	85.0(2.5)	85.8(2.1)	73.2(5.4)	75.4(XXX)
	1988	82.4(2.4)	81.6(2.6)	83.0(2.8)	86.8(2.2)	60.3(7.7)	75.5(9.1)
	1984	76.3(1.1)	73.8(1.6)	79.1(1.5)	79.6(1.3)	63.6(2.8)	67.0(4.0)
<b>Biography: Honors</b>	1994	94.0(1.2)	90.8(2.0)	97.2(0.9)	93.3(1.7)	94.1(2.4)	***(***)
	1992	94.5(1.0)	93.8(1.5)	95.3(1.6)	96.0(1.1)	91.5(3.2)	89.7(4.1)
	1990	96.4(0.6)	95.2(1.0)	97.6(0.8)	96.9(0.6)	95.6(1.9)	91.2(4.6)
	1988	93.6(1.2)	89.7(2.3)	97.0(0.8)	95.8(0.8)	86.8(4.4)	85.5(7.6)
	1984	94.7(0.8)	92.3(1.2)	97.2(0.6)	95.5(0.8)	91.7(1.5)	91.8(1.9)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Biography: Accomplishments</b>	1994	95.3(1.1)	92.0(1.7)	98.7(0.7)	95.3(1.3)	94.2(2.4)	***(***)
	1992	94.7(1.2)	94.0(1.4)	95.5(1.5)	96.3(1.0)	94.6(2.5)	85.3(5.7)
	1990	96.8(0.6)	95.1(1.3)	98.4(0.7)	97.2(0.6)	96.3(1.9)	95.8(3.7)
	1988	94.9(1.0)	91.6(1.9)	97.8(0.8)	95.0(1.1)	96.8(2.4)	89.3(7.0)
	1984	96.2(0.5)	94.2(0.8)	98.4(0.4)	96.3(0.5)	96.3(1.1)	96.3(1.4)
<b>Sport history: Popularity</b>	1994	86.2(1.8)	85.7(2.6)	86.7(2.1)	87.5(1.7)	84.4(5.1)	76.7(7.9)
	1992	86.8(1.3)	84.0(2.1)	89.7(1.7)	88.7(1.6)	77.9(3.4)	87.0(5.6)
	1990	85.3(1.6)	84.4(2.4)	86.3(1.8)	88.4(1.6)	78.9(4.6)	78.7(7.0)
	1988	79.0(1.6)	79.1(3.1)	78.8(2.2)	79.3(2.0)	79.4(4.9)	70.6(9.0)
	1984	82.0(1.0)	80.7(1.4)	83.3(1.1)	83.3(1.0)	75.4(2.8)	77.3(3.8)
<b>Sport history: Royalty</b>	1994	87.4(1.7)	85.9(2.3)	88.7(2.3)	88.1(1.9)	83.9(5.9)	84.6(6.9)
	1992	90.1(1.4)	87.2(2.1)	93.0(1.7)	90.9(1.6)	83.6(3.3)	94.1(3.0)
	1990	90.8(1.6)	87.5(2.6)	94.3(1.4)	91.9(1.8)	83.1(4.9)	93.4(2.9)
	1988	86.8(1.9)	85.5(2.9)	88.1(2.3)	86.8(2.2)	82.6(4.1)	92.7(4.8)
	1984	90.2(0.9)	88.9(1.2)	91.5(0.9)	91.7(0.9)	83.6(2.8)	85.5(2.9)
<b>Sport history: General</b>	1994	79.7(1.7)	76.4(2.6)	82.9(2.6)	82.4(1.7)	69.9(4.3)	69.1(7.6)
	1992	83.4(1.6)	77.1(2.6)	89.8(1.7)	84.6(1.9)	81.1(4.7)	76.0(8.0)
	1990	81.9(2.0)	76.8(2.7)	87.2(2.2)	84.7(2.0)	72.8(5.1)	79.1(7.4)
	1988	76.1(2.2)	68.9(3.5)	83.3(2.2)	74.8(2.9)	75.5(5.5)	86.5(5.3)
	1984	79.8(0.8)	75.4(1.1)	84.3(1.0)	82.0(0.8)	71.6(3.8)	67.0(2.5)
<b>Sport history: English</b>	1994	60.3(2.1)	64.7(3.2)	56.1(3.0)	64.2(2.5)	43.7(5.8)	45.0(5.2)
	1992	62.5(1.5)	65.3(2.3)	59.8(2.0)	64.3(1.6)	55.9(5.6)	57.1(XXX)
	1990	67.9(1.5)	67.1(2.5)	68.8(2.3)	69.6(1.8)	61.7(5.4)	64.2(7.5)
	1988	56.9(2.5)	57.0(3.6)	56.9(3.5)	55.4(2.9)	55.1(4.1)	73.7(8.8)
	1984	62.6(1.5)	65.9(1.7)	59.2(2.1)	65.1(1.5)	52.3(3.6)	50.5(2.6)
<b>Sport history: Contemporary</b>	1994	89.1(1.3)	91.8(1.9)	86.4(1.8)	92.1(1.6)	78.8(4.7)	80.6(4.2)
	1992	88.6(1.3)	90.3(1.9)	86.8(2.1)	91.2(1.4)	81.1(4.8)	74.8(8.7)
	1990	89.5(1.5)	90.5(2.1)	88.6(1.8)	92.7(1.5)	78.8(4.5)	82.9(7.2)
	1988	90.3(1.7)	91.0(2.3)	89.5(1.9)	91.2(2.1)	87.3(2.8)	87.0(5.6)
	1984	89.0(0.8)	90.1(1.0)	87.9(1.1)	92.1(0.8)	77.7(2.5)	77.5(5.0)
<b>Civics: Document description</b>	1994	50.4(2.4)	44.2(3.3)	56.3(2.9)	55.4(2.7)	37.3(7.5)	***(***)
	1992	50.3(1.9)	47.6(2.8)	53.0(2.6)	53.4(2.3)	39.0(4.3)	43.1(8.6)
	1990	48.8(1.8)	44.2(2.6)	53.5(2.8)	52.5(1.9)	34.4(4.5)	45.6(8.5)
	1988	46.2(1.9)	42.9(3.7)	49.6(2.6)	50.2(2.5)	32.3(5.1)	33.5(8.5)
	1984	46.8(1.4)	43.3(2.1)	50.4(1.7)	50.4(1.4)	34.2(3.2)	32.0(4.1)
<b>Civics: Importance of court</b>	1994	64.1(2.2)	62.9(3.0)	65.1(3.0)	66.0(2.4)	61.7(7.5)	***(***)
	1992	61.7(1.7)	62.1(2.2)	61.3(2.7)	66.6(2.1)	47.3(5.2)	40.4(9.0)
	1990	62.5(1.8)	63.1(3.2)	61.9(3.2)	66.4(2.0)	47.9(4.8)	51.9(8.5)
	1988	62.7(3.1)	63.6(3.8)	61.8(3.0)	63.5(4.0)	53.4(4.4)	75.3(6.5)
	1984	60.3(1.0)	60.2(1.6)	60.5(1.4)	60.9(1.1)	57.7(3.2)	56.0(5.3)
<b>Civics: Vocabulary</b>	1994	19.0(1.6)	17.7(2.0)	20.4(2.3)	22.3(1.8)	7.4(2.6)	***(***)
	1992	20.5(1.4)	18.1(2.2)	22.9(1.8)	22.3(1.6)	13.7(4.3)	9.7(5.6)
	1990	21.3(1.5)	19.7(2.0)	23.0(2.3)	24.6(1.7)	12.0(3.8)	9.3(3.6)
	1988	20.2(2.1)	20.6(3.3)	19.9(3.4)	21.2(2.5)	14.5(4.1)	15.2(4.4)
	1984	22.3(1.2)	23.5(1.6)	21.0(1.4)	25.2(1.5)	9.8(1.7)	12.5(2.5)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>U.S. History: Transportation</b>	1994	93.5(1.1)	93.6(1.1)	93.4(1.8)	94.9(1.3)	91.4(3.6)	***(***)
	1992	93.5(0.9)	93.0(1.6)	94.0(1.4)	95.4(0.9)	84.8(3.7)	89.0(6.7)
	1990	92.1(1.3)	89.4(2.0)	95.0(1.3)	93.3(1.1)	87.4(4.0)	91.9(5.0)
	1988	91.7(1.5)	91.9(1.8)	91.4(2.7)	93.3(1.8)	89.6(4.2)	76.9(6.4)
	1984	93.6(0.7)	92.4(0.8)	94.8(0.8)	95.1(0.7)	88.8(1.7)	85.2(3.2)
<b>U.S. History: Vocabulary</b>	1994	85.4(1.4)	86.3(2.2)	84.4(2.5)	89.9(1.5)	67.2(6.1)	***(***)
	1992	88.1(1.4)	91.1(1.8)	85.1(2.4)	92.5(1.2)	70.8(5.3)	78.3(XXX)
	1990	86.8(1.8)	88.9(2.5)	84.7(2.1)	88.9(1.6)	78.3(5.7)	87.5(6.8)
	1988	88.6(1.4)	88.2(2.5)	89.1(2.1)	89.9(1.4)	82.3(3.7)	86.5(5.4)
	1984	88.5(0.8)	88.5(1.2)	88.5(0.9)	90.5(0.9)	80.9(2.3)	77.7(3.2)
<b>Summer job: Apply for SS card</b>	1994	92.2(1.4)	89.6(2.1)	94.7(1.5)	95.1(1.2)	83.4(4.5)	88.1(4.4)
	1992	91.8(1.1)	88.2(1.8)	95.9(1.3)	93.9(1.2)	77.8(4.0)	95.0(2.8)
	1990	91.4(1.4)	88.7(2.0)	94.2(1.5)	92.5(1.6)	84.1(4.2)	92.8(4.2)
	1988	93.5(1.2)	90.3(2.2)	96.7(1.1)	95.0(1.4)	91.2(2.8)	75.1(5.8)
	1984	91.2(0.8)	88.1(1.1)	94.5(0.8)	92.6(0.7)	86.0(1.9)	86.2(3.8)
<b>Summer job: When to look</b>	1994	82.8(1.8)	79.3(2.3)	86.1(2.3)	84.7(2.0)	80.2(4.3)	72.4(5.0)
	1992	83.6(1.6)	80.0(2.5)	87.6(1.6)	88.0(1.6)	66.5(5.7)	71.2(7.6)
	1990	81.5(1.6)	80.7(2.0)	82.4(2.3)	85.3(1.7)	76.5(4.4)	66.9(5.8)
	1988	82.9(1.8)	78.6(2.8)	87.1(2.0)	88.0(1.8)	68.2(5.0)	63.4(7.6)
	1984	85.1(0.8)	83.1(1.1)	87.2(1.1)	87.7(0.9)	76.5(2.4)	74.3(4.2)
<b>Summer job: Documents needed</b>	1994	73.8(2.0)	72.8(3.2)	75.0(2.1)	77.6(2.4)	65.1(4.0)	62.2(7.3)
	1992	70.8(2.0)	67.1(2.5)	75.1(2.5)	74.9(2.2)	54.5(6.5)	60.8(6.2)
	1990	74.4(1.5)	68.7(2.3)	80.5(2.6)	78.2(1.8)	59.0(4.4)	67.4(6.4)
	1988	77.8(1.9)	75.5(2.5)	80.0(2.9)	82.0(1.7)	65.4(4.7)	60.3(XXX)
	1984	73.6(1.1)	72.0(1.8)	75.4(1.4)	76.4(1.3)	63.6(2.8)	63.8(3.6)
<b>Summer job: Job references</b>	1994	83.2(1.6)	77.7(2.8)	88.5(1.6)	87.1(2.3)	78.4(3.8)	66.4(5.1)
	1992	81.3(1.5)	77.1(2.1)	86.0(1.9)	86.5(1.5)	63.0(6.8)	61.0(6.0)
	1990	86.6(1.5)	83.9(2.1)	89.4(1.5)	88.7(1.4)	79.5(4.6)	87.1(4.8)
	1988	86.9(1.5)	83.6(2.4)	90.2(1.7)	89.2(1.6)	79.5(4.9)	75.8(8.6)
	1984	83.6(0.7)	80.7(1.2)	86.7(1.3)	86.4(0.9)	74.0(2.8)	71.0(2.8)
<b>Bobby story fact</b>	1994	86.5(1.2)	82.8(2.0)	90.3(2.1)	89.1(1.8)	78.3(5.8)	80.1(3.7)
	1992	87.4(1.3)	85.9(1.9)	89.2(1.8)	88.5(1.4)	84.1(5.3)	86.4(5.9)
	1990	89.2(1.4)	86.6(2.0)	92.1(1.5)	90.4(1.5)	87.7(3.6)	80.7(5.2)
	1988	87.7(1.7)	82.7(2.8)	92.7(1.5)	88.5(1.7)	85.2(4.5)	84.1(6.2)
	1984	87.7(0.7)	84.6(1.1)	91.0(0.9)	89.2(0.8)	82.4(2.0)	78.0(3.4)
<b>"Learn to read": Same meaning</b>	1994	92.5(1.3)	92.3(1.7)	93.1(1.9)	95.0(1.3)	81.5(4.7)	92.1(3.7)
	1992	93.8(1.1)	90.2(1.7)	97.8(0.6)	95.8(1.0)	88.0(4.4)	90.7(3.8)
	1990	91.2(1.4)	88.3(1.9)	94.3(1.3)	91.5(1.7)	91.5(3.1)	86.7(6.2)
	1988	93.0(1.3)	92.6(2.3)	93.5(1.6)	94.6(1.1)	86.4(5.4)	87.7(5.4)
	1984	90.7(0.6)	88.5(0.9)	93.0(0.9)	91.5(0.7)	88.7(1.8)	85.1(4.5)
<b>Comparison of characteristics</b>	1994	77.0(1.8)	73.7(2.9)	80.5(2.1)	79.4(2.1)	72.4(4.9)	69.4(5.4)
	1992	80.6(1.4)	77.1(2.7)	84.6(2.0)	83.4(1.7)	73.2(3.6)	62.9(5.2)
	1990	82.2(1.6)	77.5(2.1)	87.2(2.4)	83.9(1.7)	79.9(4.9)	70.0(5.4)
	1988	75.7(2.1)	77.2(3.2)	74.0(2.4)	77.8(2.4)	67.5(3.7)	71.0(8.3)
	1984	79.8(0.8)	77.7(1.3)	82.2(1.1)	82.2(1.0)	70.5(2.7)	72.5(2.9)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Steps in performing a trick</b>	1994	91.3(1.2)	90.4(1.7)	92.5(1.9)	94.7(1.2)	85.8(4.7)	78.4(4.2)
	1992	91.6(1.2)	87.5(1.9)	96.1(1.2)	92.8(1.1)	84.8(5.0)	88.7(5.6)
	1990	91.4(1.3)	88.6(1.9)	94.3(1.4)	91.3(1.4)	91.0(3.1)	89.7(3.7)
	1988	93.8(1.3)	90.6(2.6)	97.0(1.0)	95.6(1.0)	87.7(5.8)	83.1(6.6)
	1984	90.1(0.9)	86.6(1.3)	93.9(0.9)	91.1(1.0)	86.5(1.8)	87.0(3.8)
<b>Setting for a trick</b>	1994	80.6(1.9)	79.5(2.1)	81.8(2.5)	84.6(1.9)	63.1(4.7)	77.0(6.4)
	1992	84.4(1.5)	79.7(2.3)	89.6(1.9)	88.6(1.4)	71.0(5.7)	63.9(6.0)
	1990	84.8(1.4)	81.9(2.1)	87.9(1.7)	86.8(1.6)	80.2(4.0)	73.9(5.5)
	1988	83.8(1.8)	82.0(2.5)	85.5(2.6)	85.4(2.2)	74.7(3.9)	82.2(6.8)
	1984	83.7(1.0)	81.3(1.6)	86.4(1.2)	85.6(1.2)	77.7(2.5)	74.6(4.4)
<b>Result of food chain</b>	1994	87.0(1.4)	85.5(2.3)	88.7(1.7)	88.0(1.5)	85.5(4.1)	89.9(5.3)
	1992	84.8(1.5)	81.0(2.2)	89.0(1.6)	86.6(1.3)	77.6(5.2)	72.3(5.0)
	1990	85.9(1.2)	83.7(1.8)	88.2(1.8)	86.4(1.5)	80.0(5.0)	91.4(4.2)
	1988	80.3(1.6)	76.3(2.4)	84.1(2.6)	84.1(1.2)	70.4(6.0)	63.3(8.9)
	1984	82.0(0.9)	80.1(1.3)	83.9(1.2)	83.0(1.1)	79.3(3.8)	74.2(4.0)
<b>Food chain main idea</b>	1994	78.9(1.8)	79.1(2.4)	78.7(2.5)	83.2(2.1)	62.7(6.2)	75.3(7.1)
	1992	80.9(1.2)	78.4(2.2)	83.7(1.9)	84.7(1.4)	68.8(5.6)	61.2(6.0)
	1990	77.4(1.8)	76.4(2.8)	78.5(2.3)	79.7(2.1)	73.7(4.7)	64.3(7.6)
	1988	77.4(2.3)	77.1(3.4)	78.2(2.8)	81.3(2.6)	66.2(4.2)	67.7(XXX)
	1984	78.9(1.1)	79.1(1.9)	78.6(1.1)	81.2(1.4)	68.0(2.9)	67.3(3.9)
<b>Best title for Scott story</b>	1994	51.0(3.1)	51.9(3.4)	50.2(4.1)	54.2(3.4)	50.1(7.8)	***(***)
	1992	52.1(2.1)	52.0(2.7)	52.2(3.0)	54.9(2.7)	43.5(4.6)	46.3(6.4)
	1990	49.7(2.1)	45.9(2.9)	53.4(3.1)	52.7(2.2)	38.5(4.3)	41.9(9.6)
	1988	52.1(2.8)	49.2(4.9)	54.4(2.9)	51.4(3.4)	57.7(5.3)	41.6(7.9)
	1984	49.8(0.9)	48.9(1.4)	50.7(1.3)	51.4(1.2)	41.6(3.0)	42.6(2.7)
<b>Scott story fact</b>	1994	74.7(2.0)	77.2(2.6)	72.6(3.0)	74.7(2.4)	77.1(4.4)	***(***)
	1992	73.2(1.7)	69.9(2.4)	77.4(2.0)	71.6(1.9)	80.4(4.6)	70.8(7.0)
	1990	73.2(1.8)	73.8(2.7)	72.6(2.5)	73.5(1.7)	72.2(6.2)	70.1(7.4)
	1988	76.5(2.2)	69.8(3.1)	82.3(2.3)	75.7(2.6)	81.9(5.3)	69.7(8.4)
	1984	73.7(0.9)	70.8(1.5)	76.9(1.2)	73.3(1.1)	75.3(2.3)	73.8(4.0)
<b>Scott story definition</b>	1994	40.2(2.5)	42.6(3.3)	38.1(3.8)	42.8(3.0)	39.0(6.4)	***(***)
	1992	38.7(2.5)	38.9(3.0)	38.4(2.9)	36.7(2.3)	43.5(6.6)	44.2(8.5)
	1990	38.9(1.8)	35.7(2.2)	42.1(2.9)	43.0(2.0)	21.1(4.1)	23.3(9.2)
	1988	37.6(3.5)	35.8(5.7)	39.3(3.1)	38.7(4.2)	32.7(4.9)	35.1(9.7)
	1984	37.6(0.9)	35.8(1.4)	39.6(1.3)	38.9(1.1)	32.0(2.7)	34.8(1.9)
<b>Women's vote: Central purpose</b>	1994	81.9(1.9)	75.4(2.9)	87.6(2.7)	83.0(2.4)	81.4(4.5)	***(***)
	1992	77.4(1.4)	72.5(2.2)	83.6(2.1)	79.2(1.5)	67.6(4.3)	77.4(4.5)
	1990	81.8(1.7)	77.8(2.7)	85.8(1.9)	85.0(1.8)	62.6(5.3)	85.1(5.8)
	1988	83.3(1.4)	79.8(2.2)	86.4(2.1)	83.2(1.8)	79.7(3.4)	95.5(4.7)
	1984	79.9(1.0)	74.9(1.4)	85.2(1.3)	80.1(1.1)	80.1(2.7)	75.0(4.1)
<b>Women's vote: Vocabulary</b>	1994	64.6(2.5)	63.1(3.2)	65.9(2.9)	63.9(3.2)	66.5(5.7)	***(***)
	1992	59.2(1.8)	56.9(2.2)	62.1(2.8)	60.7(1.8)	52.6(6.9)	54.6(4.5)
	1990	59.7(1.8)	56.5(2.5)	62.8(2.9)	62.1(2.3)	48.5(4.8)	56.0(7.1)
	1988	57.6(2.1)	54.3(2.5)	60.2(3.2)	57.0(2.5)	61.8(4.6)	53.6(8.1)
	1984	59.6(1.1)	57.7(1.7)	61.6(1.1)	59.6(1.2)	63.4(3.2)	49.9(4.3)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Women's vote: Recall of fact</b>	1994	70.2(2.1)	63.5(3.0)	75.8(3.3)	72.7(2.3)	65.6(6.1)	***(***)
	1992	66.4(2.1)	61.8(2.4)	72.2(2.6)	67.7(2.3)	64.9(6.1)	52.0(5.8)
	1990	64.5(2.0)	56.1(2.4)	72.7(2.7)	65.1(2.2)	59.3(4.8)	65.4(XXX)
	1988	67.6(3.3)	61.3(5.2)	73.5(2.9)	69.3(3.9)	59.6(5.8)	56.5(9.9)
	1984	66.0(1.2)	63.0(1.7)	69.2(1.5)	66.9(1.3)	65.1(2.6)	56.7(7.4)
<b>Women's vote: Women join fight</b>	1994	77.5(2.5)	73.7(3.4)	80.8(3.0)	80.6(2.6)	73.0(6.1)	***(***)
	1992	76.1(1.8)	71.0(2.5)	82.5(2.2)	77.2(2.1)	71.3(5.3)	72.6(5.5)
	1990	76.5(1.8)	72.2(2.9)	80.6(2.3)	79.7(2.0)	67.6(5.1)	64.8(XXX)
	1988	77.7(1.7)	71.7(2.8)	83.0(2.4)	80.5(2.1)	64.5(4.7)	70.0(6.7)
	1984	74.8(1.2)	70.2(1.5)	79.8(1.5)	76.4(1.3)	68.6(3.5)	68.8(5.1)
<b>Women's vote: Woman's response</b>	1994	77.4(2.1)	69.0(3.1)	84.7(3.0)	80.4(2.1)	70.0(5.7)	***(***)
	1992	74.4(1.5)	68.1(2.3)	82.5(1.9)	74.9(1.5)	72.2(5.8)	68.3(5.1)
	1990	76.1(1.9)	67.2(2.4)	84.6(2.5)	79.3(1.8)	64.7(6.1)	66.3(7.3)
	1988	77.0(2.2)	71.3(3.8)	82.0(2.8)	79.0(2.5)	64.8(5.4)	73.8(XXX)
	1984	75.5(1.1)	66.4(1.7)	85.2(1.4)	77.4(1.4)	65.9(2.4)	69.8(3.4)
<b>Women's vote: National support</b>	1994	63.2(2.0)	60.2(3.4)	65.9(3.1)	67.6(2.1)	60.2(6.0)	***(***)
	1992	67.9(2.2)	64.4(3.1)	72.5(2.6)	70.6(2.3)	58.7(5.8)	54.1(6.6)
	1990	67.5(2.1)	64.4(2.9)	70.4(2.9)	72.1(2.1)	48.5(5.5)	58.9(9.4)
	1988	71.5(1.2)	64.2(2.9)	78.2(1.7)	71.1(1.2)	71.3(4.5)	76.6(7.5)
	1984	66.2(1.1)	63.2(1.6)	69.4(1.7)	68.1(1.3)	57.8(2.9)	57.3(3.0)
<b>Fact about pet care</b>	1994	79.9(2.0)	74.0(2.9)	84.9(2.5)	84.9(2.1)	64.0(5.1)	***(***)
	1992	79.8(1.5)	75.6(2.0)	85.1(2.1)	83.6(1.5)	70.0(5.2)	67.8(5.5)
	1990	73.1(1.4)	68.4(2.5)	77.5(2.3)	80.5(1.4)	52.8(5.2)	38.9(6.6)
	1988	76.7(2.1)	68.6(3.4)	83.8(2.4)	78.7(2.2)	69.8(3.7)	67.2(XXX)
	1984	77.6(1.2)	74.0(1.9)	81.4(1.5)	81.5(1.3)	61.9(3.7)	54.6(5.3)
<b>Fact about health of pet</b>	1994	68.1(1.9)	69.2(3.5)	67.3(3.0)	75.4(1.9)	47.8(5.2)	***(***)
	1992	72.8(1.9)	68.2(2.8)	78.6(2.6)	76.5(2.2)	57.0(5.4)	72.6(6.6)
	1990	69.5(1.8)	63.4(2.7)	75.2(2.1)	74.3(1.7)	53.5(5.4)	61.0(6.8)
	1988	74.3(2.1)	72.6(3.5)	75.6(2.8)	78.4(2.1)	53.1(7.4)	72.8(7.0)
	1984	72.6(1.2)	71.0(2.0)	74.2(1.6)	76.8(1.3)	52.4(3.4)	57.1(5.5)
<b>Sport: Main reason</b>	1994	75.1(2.2)	74.3(3.0)	75.9(3.4)	78.0(2.4)	62.1(7.3)	***(***)
	1992	76.6(1.7)	75.3(2.3)	78.1(2.1)	80.5(2.2)	63.6(6.2)	58.7(6.9)
	1990	77.6(1.9)	73.6(2.6)	81.3(2.4)	81.4(1.9)	55.3(6.6)	74.4(6.8)
	1988	73.3(2.5)	73.7(4.3)	72.8(2.3)	76.7(2.8)	54.6(5.6)	62.2(5.5)
	1984	72.9(1.2)	69.3(1.4)	76.7(1.7)	75.8(1.3)	57.3(3.3)	57.3(6.3)
<b>Survive climb: Conditions</b>	1994	72.5(2.0)	69.7(2.8)	75.8(2.9)	76.4(2.4)	60.5(7.9)	***(***)
	1992	73.5(1.9)	75.8(3.2)	70.9(2.8)	79.9(1.7)	48.2(6.7)	68.1(6.7)
	1990	74.2(1.9)	73.2(2.3)	75.2(2.7)	78.4(1.9)	61.2(4.8)	64.2(XXX)
	1988	79.6(1.5)	81.4(2.3)	78.4(2.2)	83.3(1.7)	76.6(4.1)	44.8(6.2)
	1984	71.9(0.9)	73.3(1.5)	70.4(1.7)	75.0(1.0)	61.5(4.0)	57.7(3.1)
<b>Survive climb: Character role</b>	1994	60.3(2.3)	53.4(3.6)	69.4(3.2)	64.9(2.6)	47.1(5.4)	***(***)
	1992	64.7(1.6)	61.4(2.6)	68.4(2.7)	68.1(2.0)	50.4(5.8)	63.9(6.0)
	1990	63.3(1.9)	58.8(2.7)	67.7(2.7)	67.0(2.0)	48.7(5.0)	48.1(9.5)
	1988	62.6(1.9)	54.5(3.1)	69.6(2.8)	63.0(2.1)	65.1(4.1)	62.4(8.3)
	1984	60.1(1.1)	53.6(1.2)	66.9(1.7)	62.2(1.4)	49.6(3.5)	55.9(3.4)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Survive climb: Character trait</b>	1994	73.7(2.0)	72.0(2.9)	75.6(3.6)	76.5(2.3)	58.1(4.8)	***(***)
	1992	75.6(1.7)	77.6(2.7)	73.3(2.6)	80.8(1.9)	56.7(5.4)	68.0(8.0)
	1990	75.7(1.8)	76.6(2.4)	74.8(2.5)	79.1(2.1)	63.1(4.8)	71.6(6.8)
	1988	79.4(1.9)	81.0(2.7)	77.9(3.1)	82.7(2.2)	74.4(5.3)	47.7(5.3)
	1984	74.7(1.3)	73.8(1.8)	75.6(1.7)	77.8(1.3)	64.0(3.6)	57.5(4.4)
<b>Survive climb: Resolution</b>	1994	76.2(2.4)	71.4(3.2)	82.4(2.9)	79.5(2.2)	67.3(6.9)	***(***)
	1992	76.3(1.5)	73.3(2.8)	79.6(2.2)	80.8(1.7)	58.1(4.3)	73.3(6.6)
	1990	74.8(1.8)	69.9(2.4)	79.7(2.3)	78.0(2.2)	60.2(5.0)	79.6(9.3)
	1988	74.9(1.9)	67.7(2.8)	81.5(2.6)	77.9(2.1)	68.5(4.0)	58.3(6.7)
	1984	75.2(1.0)	69.5(1.3)	81.2(1.4)	77.7(1.1)	64.8(2.4)	67.0(4.7)
<b>Phone document for New York</b>	1994	71.6(2.4)	70.6(2.5)	72.8(3.6)	75.8(2.5)	58.1(6.2)	***(***)
	1992	72.6(2.0)	75.4(2.8)	69.4(3.0)	77.5(1.5)	47.4(7.6)	73.5(7.2)
	1990	71.3(2.0)	71.1(2.9)	71.5(2.3)	72.7(2.3)	59.6(7.2)	73.3(9.1)
	1988	74.7(2.2)	75.4(3.1)	74.4(2.8)	77.9(2.4)	62.5(4.8)	63.8(7.6)
	1984	69.9(1.1)	68.8(1.6)	71.0(1.7)	72.2(1.2)	57.2(3.4)	66.8(4.8)
<b>Phone document for Syracuse</b>	1994	86.0(1.5)	84.7(1.8)	87.6(2.5)	87.3(2.0)	83.7(4.5)	***(***)
	1992	85.1(1.6)	86.3(2.1)	83.9(2.1)	87.2(1.5)	78.5(5.3)	83.4(5.0)
	1990	84.6(1.3)	86.0(2.0)	83.3(1.8)	87.0(1.4)	78.2(4.1)	80.4(7.3)
	1988	87.1(2.1)	88.9(2.4)	85.5(2.6)	88.4(2.0)	88.6(4.2)	74.8(7.5)
	1984	84.8(0.8)	82.5(1.2)	87.3(1.2)	85.8(1.0)	78.7(2.7)	84.2(2.6)
<b>Tiresome jobs – 1900's</b>	1994	63.3(2.1)	62.0(3.3)	64.6(2.3)	66.7(2.7)	44.4(5.7)	***(***)
	1992	62.1(1.7)	58.9(2.5)	65.6(2.5)	67.2(1.8)	34.3(5.6)	66.6(4.8)
	1990	66.6(1.7)	64.4(2.5)	68.9(2.6)	71.2(2.0)	47.3(5.3)	71.7(XXX)
	1988	68.9(2.4)	63.8(2.5)	73.7(3.8)	69.6(3.1)	64.1(4.5)	66.9(6.5)
	1984	70.4(1.0)	66.2(1.8)	74.9(1.3)	73.0(1.2)	58.3(3.4)	62.5(6.7)
<b>Jobs in the woods – 1900's</b>	1994	78.5(2.5)	71.8(3.1)	86.9(2.5)	84.1(2.7)	65.4(6.6)	***(***)
	1992	76.3(1.6)	74.5(2.8)	78.4(2.3)	82.0(1.7)	56.4(6.4)	64.3(5.6)
	1990	81.6(1.5)	79.3(2.0)	83.8(2.1)	84.0(1.7)	72.2(4.1)	79.3(9.6)
	1988	82.6(1.4)	81.9(2.2)	83.3(2.4)	84.9(1.6)	73.3(4.2)	78.3(5.3)
	1984	79.5(1.1)	73.3(1.9)	85.8(1.2)	81.8(1.3)	66.9(3.0)	75.0(4.9)
<b>Home jobs – 1900's</b>	1994	82.9(1.6)	75.0(2.3)	92.7(1.8)	87.2(1.8)	67.2(7.1)	***(***)
	1992	85.6(1.5)	79.9(2.6)	92.0(1.3)	89.2(1.3)	73.7(4.7)	74.8(6.7)
	1990	88.1(1.1)	81.7(2.1)	94.4(1.1)	89.8(1.5)	81.0(3.3)	82.1(8.9)
	1988	89.0(1.7)	82.4(2.9)	94.7(1.3)	90.4(2.1)	84.7(3.8)	79.5(5.6)
	1984	87.7(0.8)	82.4(1.4)	93.2(0.8)	89.1(1.0)	80.2(3.4)	86.7(3.3)
<b>History of arts before 1940</b>	1994	42.6(2.2)	41.1(3.7)	44.2(3.1)	48.0(2.8)	23.9(5.5)	***(***)
	1992	42.9(2.2)	46.2(3.4)	39.1(3.0)	49.0(3.0)	28.3(3.8)	23.3(5.4)
	1990	41.4(2.0)	41.6(2.9)	41.3(2.4)	47.0(2.2)	24.2(3.6)	21.9(6.5)
	1988	45.2(2.4)	47.1(3.0)	43.4(3.5)	49.7(3.0)	33.8(4.7)	16.1(7.1)
	1984	39.3(1.3)	39.1(1.5)	39.5(1.6)	41.8(1.5)	24.8(2.2)	38.1(6.0)
<b>Historical privilege of arts</b>	1994	51.8(2.4)	51.3(3.1)	52.5(3.2)	53.6(3.1)	52.2(5.8)	***(***)
	1992	47.8(1.9)	46.8(2.6)	48.9(2.4)	55.0(2.6)	26.6(4.6)	35.5(5.2)
	1990	48.4(2.0)	47.3(3.5)	49.5(2.7)	52.5(2.1)	32.0(5.5)	35.7(4.0)
	1988	51.9(2.8)	49.3(3.2)	54.2(3.9)	55.9(3.1)	40.9(5.0)	28.1(6.4)
	1984	50.8(1.4)	47.3(1.6)	54.3(1.7)	52.3(1.6)	41.8(2.7)	49.2(4.0)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Mass production of art</b>	1994	33.7(2.4)	27.8(3.1)	39.9(3.5)	35.4(2.5)	24.1(5.1)	***(***)
	1992	30.3(2.0)	28.6(2.8)	32.2(2.8)	33.8(2.6)	20.0(4.8)	23.8(5.6)
	1990	28.8(1.8)	31.2(2.8)	26.5(2.2)	28.7(1.9)	24.0(5.8)	34.0(8.5)
	1988	28.4(2.0)	23.2(3.6)	32.9(3.1)	28.8(2.0)	25.8(5.4)	24.7(6.9)
	1984	31.4(1.0)	28.3(1.4)	34.5(1.5)	32.3(1.3)	27.7(2.4)	25.7(8.3)
<b>History of gold rush fact</b>	1994	75.6(1.6)	72.1(2.6)	79.2(2.4)	79.5(1.6)	65.6(5.0)	***(***)
	1992	81.5(1.5)	79.4(2.4)	83.9(2.0)	85.6(2.1)	71.2(3.2)	72.4(6.4)
	1990	79.6(1.5)	79.0(2.1)	80.2(2.2)	84.0(1.6)	62.2(5.4)	69.3(5.8)
	1988	73.5(1.9)	67.7(3.1)	78.6(3.1)	74.8(2.1)	71.9(4.0)	61.1(9.9)
	1984	71.7(1.3)	66.4(1.8)	77.3(1.5)	75.2(1.2)	62.0(3.0)	50.3(7.1)
<b>Traffic violation fact</b>	1994	77.7(1.7)	77.1(2.6)	78.2(2.6)	78.2(2.3)	77.1(5.0)	***(***)
	1992	75.9(1.6)	72.7(2.7)	79.5(2.1)	76.6(1.6)	74.1(3.9)	77.8(6.3)
	1990	76.5(1.7)	73.8(2.3)	79.0(2.7)	76.4(1.9)	75.2(5.3)	73.4(4.8)
	1988	76.0(1.8)	74.1(2.9)	77.6(2.8)	78.0(2.3)	64.6(4.6)	77.4(6.6)
	1984	74.5(1.2)	73.6(1.4)	75.5(1.8)	77.2(1.3)	63.2(2.9)	67.9(3.2)
<b>Cost of traffic fine</b>	1994	60.1(2.7)	60.7(3.4)	59.5(3.0)	65.6(3.3)	41.7(4.9)	***(***)
	1992	67.2(1.9)	65.1(2.8)	69.6(2.9)	74.3(2.0)	46.8(5.2)	55.5(5.5)
	1990	64.7(2.4)	65.9(3.3)	63.5(3.3)	71.3(2.5)	43.3(5.2)	44.5(7.0)
	1988	60.3(2.6)	63.5(4.5)	57.5(3.9)	64.9(2.9)	47.0(7.3)	33.1(XXX)
	1984	64.8(1.6)	64.5(1.9)	65.0(1.9)	68.4(1.7)	50.6(3.9)	51.9(6.5)
<b>Traffic fine payment fact</b>	1994	50.3(2.3)	52.7(3.3)	47.7(3.1)	52.6(2.5)	44.6(7.0)	***(***)
	1992	48.7(2.3)	46.5(3.1)	51.1(3.4)	53.3(3.1)	39.3(5.0)	29.3(5.6)
	1990	49.3(1.9)	47.7(2.5)	50.8(3.0)	49.3(2.2)	43.4(4.2)	60.2(6.0)
	1988	46.7(2.1)	44.6(3.1)	48.4(3.6)	48.9(3.0)	41.1(4.4)	30.8(XXX)
	1984	43.9(1.3)	43.9(2.2)	43.9(1.3)	47.0(1.6)	28.7(1.9)	40.5(5.3)
<b>Frozen pizza: reason produced</b>	1994	64.4(2.3)	60.9(3.8)	68.2(2.5)	67.8(2.7)	53.3(7.6)	***(***)
	1992	70.5(2.1)	66.5(3.0)	75.0(2.6)	76.1(2.3)	46.0(4.2)	68.1(7.1)
	1990	74.5(1.8)	74.0(2.5)	75.0(2.2)	78.4(1.9)	60.2(5.3)	63.9(7.8)
	1988	71.2(2.2)	68.2(3.8)	73.8(3.1)	73.7(2.5)	65.5(4.4)	54.8(XXX)
	1984	72.4(1.4)	69.0(1.8)	75.9(1.6)	74.8(1.6)	64.6(3.2)	57.3(4.7)
<b>Frozen pizza: Middle stage</b>	1994	63.1(2.5)	58.0(3.7)	68.3(3.3)	66.1(2.3)	50.2(8.4)	***(***)
	1992	65.3(2.5)	61.2(3.3)	70.0(2.5)	70.2(2.7)	54.7(6.0)	45.6(6.9)
	1990	68.9(1.7)	65.6(3.0)	72.2(2.5)	71.0(2.0)	62.4(4.6)	59.5(5.5)
	1988	68.1(2.6)	61.7(4.0)	73.5(2.9)	71.9(3.1)	59.0(7.1)	38.3(7.4)
	1984	63.6(1.4)	58.9(2.1)	68.5(1.6)	65.6(1.7)	54.5(4.1)	55.0(6.5)
<b>Frozen pizza: Ingredients used</b>	1994	46.5(1.9)	42.7(3.0)	50.5(3.8)	51.4(2.4)	32.7(6.0)	***(***)
	1992	47.9(2.1)	46.5(2.6)	49.5(2.9)	52.8(2.6)	20.5(4.0)	49.6(7.5)
	1990	53.4(2.1)	49.4(3.4)	57.4(2.7)	55.7(2.4)	45.0(5.6)	43.7(5.0)
	1988	50.7(2.7)	47.9(3.3)	53.0(4.0)	52.7(3.5)	48.0(5.8)	26.1(6.6)
	1984	45.3(1.2)	38.5(1.6)	52.2(1.7)	48.4(1.3)	31.0(3.8)	25.5(2.9)
<b>Purpose of business article</b>	1994	68.9(2.0)	67.9(2.6)	69.9(3.4)	71.0(2.4)	60.5(5.0)	***(***)
	1992	67.6(2.7)	66.9(3.2)	68.2(3.3)	67.6(3.0)	66.5(5.1)	66.0(6.2)
	1990	69.8(1.6)	71.1(2.4)	68.4(2.5)	71.3(1.8)	63.4(4.5)	73.6(5.7)
	1988	72.5(2.6)	72.8(3.1)	72.1(3.2)	75.7(3.0)	57.5(6.0)	71.1(6.2)
	1984	66.2(0.8)	62.8(1.3)	69.6(1.2)	69.4(0.9)	54.2(2.4)	52.3(2.6)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## NAEP 1994 National Reading Trend Assessments — Age 17

Weighted percentage correct by subgroups across assessment years (continued)

ITEM DESCRIPTION	YEAR	NATION	MALE	FEMALE	WHITE	BLACK	HISPANIC
<b>Identify business liability</b>	1994	59.1(2.1)	56.7(3.4)	61.7(3.1)	63.7(2.6)	42.8(4.8)	***(***)
	1992	61.6(2.3)	59.5(3.7)	63.5(2.2)	65.4(2.9)	46.8(5.3)	43.4(8.2)
	1990	62.8(1.8)	60.0(2.7)	65.7(2.4)	64.4(2.0)	58.2(4.7)	53.4(8.7)
	1988	65.4(2.4)	64.8(2.5)	66.2(3.3)	69.5(2.9)	57.6(5.1)	39.2(8.9)
	1984	63.7(1.1)	61.1(0.9)	66.5(2.0)	68.5(1.2)	47.6(2.8)	46.2(2.6)
<b>Define business profit</b>	1994	92.5(1.0)	91.3(1.6)	93.7(1.5)	95.8(0.8)	79.7(4.4)	***(***)
	1992	92.2(1.2)	90.7(1.6)	93.6(1.5)	95.1(1.1)	81.6(4.9)	81.5(7.9)
	1990	93.4(0.9)	92.4(1.4)	94.5(1.4)	93.7(1.1)	95.0(2.4)	86.2(6.7)
	1988	95.2(1.0)	96.0(1.3)	94.4(1.6)	96.4(1.1)	90.5(3.0)	91.5(5.0)
	1984	93.2(0.4)	92.4(0.8)	93.9(0.7)	95.0(0.5)	87.1(2.0)	86.9(1.9)
<b>Sioux story: Author's view</b>	1994	65.9(2.3)	63.2(3.0)	68.6(3.4)	70.0(2.2)	53.0(8.8)	***(***)
	1992	66.6(1.8)	64.6(3.0)	68.4(2.4)	69.7(1.8)	57.2(5.5)	58.5(7.6)
	1990	64.2(2.3)	61.2(3.3)	67.2(3.1)	66.2(2.0)	55.3(6.1)	65.5(XXX)
	1988	69.1(2.4)	73.6(4.1)	65.2(2.7)	70.7(2.8)	70.4(3.9)	47.4(8.1)
	1984	69.5(0.8)	69.8(1.0)	69.1(1.1)	73.0(0.9)	53.1(2.1)	65.5(2.3)
<b>Sioux story: Inference</b>	1994	62.2(2.4)	63.5(3.6)	61.0(2.9)	66.4(2.3)	42.8(6.5)	***(***)
	1992	65.4(2.3)	63.3(3.6)	67.3(2.3)	69.3(2.6)	46.2(6.4)	58.9(6.9)
	1990	61.2(2.0)	62.7(3.1)	59.7(3.0)	65.9(2.2)	39.0(5.3)	63.9(9.5)
	1988	66.9(2.1)	71.0(3.4)	63.2(3.3)	71.4(2.2)	49.5(5.5)	59.4(7.6)
	1984	67.4(1.2)	68.8(1.2)	66.1(1.6)	72.3(1.2)	47.2(2.4)	54.0(5.1)
<b>Sioux story: Major event</b>	1994	57.2(2.4)	58.8(4.0)	55.8(3.2)	61.9(2.7)	34.6(5.6)	***(***)
	1992	59.5(2.1)	59.5(3.4)	59.5(2.7)	65.5(2.3)	34.0(6.8)	53.1(8.4)
	1990	61.0(2.1)	59.7(2.8)	62.4(3.2)	66.8(2.1)	39.1(5.6)	51.3(XXX)
	1988	62.5(2.4)	63.7(3.1)	61.7(3.7)	68.2(2.7)	44.8(4.9)	42.7(8.3)
	1984	63.4(1.0)	64.1(1.3)	62.6(1.5)	67.5(1.1)	43.0(3.2)	56.4(5.7)
<b>Sioux story: Main purpose</b>	1994	67.1(3.0)	62.7(4.7)	71.7(3.0)	71.9(3.4)	47.8(7.2)	***(***)
	1992	71.1(2.1)	68.4(3.5)	73.4(3.2)	76.1(2.1)	48.0(5.4)	66.0(8.1)
	1990	70.7(2.0)	66.8(3.2)	74.7(2.5)	73.6(2.2)	57.1(4.1)	72.6(8.8)
	1988	70.5(2.2)	74.8(3.5)	66.8(3.3)	75.1(2.4)	55.4(5.8)	50.9(6.6)
	1984	71.8(0.9)	72.2(1.2)	71.4(1.2)	76.4(0.8)	51.5(3.1)	57.3(4.4)

\*\*\* Sample size insufficient to permit a reliable estimate.

XXX The standard error exceeds 10.

The standard errors of the estimated percentages appear in parenthesis.

## *Data Appendix*

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### **Writing**



# NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0) 203.8(1.5)	100.0(0.0) 205.7(1.6)	100.0(0.0) 201.7(1.5)	100.0(0.0) 207.1(1.5)	100.0(0.0) 204.8(1.6)	N N
<b>GENDER</b>						
<b>Male</b>	53.3(1.7) 200.5(2.8)	50.4(1.0) 199.0(2.3)	51.2(1.0) 195.0(1.9)	50.4(0.6) 198.3(1.7)	50.3(0.9) 196.1(1.7)	N N
<b>Female</b>	46.7(1.7) 207.6(3.1)	49.6(1.0) 212.6(2.0)	48.8(1.0) 208.7(2.2)	49.6(0.6) 216.1(1.7)	49.7(0.9) 213.5(2.2)	N N
<b>RACE/ETHNICITY</b>						
<b>White</b>	70.9(1.0) 210.7(1.9)	70.0(0.3)* 214.9(1.9)	70.0(0.3)* 211.0(2.0)	70.8(0.3)* 216.7(1.7)	68.6(0.4)†# 214.4(1.5)	N N
<b>Black</b>	14.6(0.9) 181.6(5.0)	15.5(0.2) 173.3(4.7)	15.3(0.3) 171.4(5.4)	15.6(0.2) 175.0(3.8)	15.2(0.3) 172.7(3.2)	N N
<b>Hispanic</b>	11.4(0.7) 188.5(5.8)	10.6(0.3)* 190.3(3.5)	10.8(0.2) 184.1(4.1)	9.9(0.2)* 189.4(3.6)	11.6(0.3) 188.5(3.1)	Q N
<b>Other</b>	3.0(0.5)* 208.2(6.1)	3.9(0.2)* 211.0(4.8)	3.8(0.1)* 201.7(7.0)	3.6(0.2)* 206.9(2.6)	4.6(0.2)†# 209.1(3.7)	L N
<b>MODAL AGE</b>						
<b>Less Than Modal Age</b>	0.9( 0.3) ***(***)	0.8( 0.2) ***(***)	0.3( 0.1) ***(***)	0.3( 0.1) ***(***)	0.6( 0.2) ***(***)	N N
<b>At Modal Age</b>	62.8( 1.0) 211.6( 2.5)	61.2( 0.5) 209.8( 2.5)	59.4( 1.1) 205.1( 2.7)	55.8( 1.1)†* 212.0( 1.5)	60.0( 1.0) 208.2( 1.6)	L N
<b>Greater Than Modal Age</b>	36.3( 1.0) 190.3( 4.5)	38.1( 0.6) 198.7( 2.0)	40.3( 1.1)† 196.4( 1.7)	43.9( 1.1)†* 201.2( 1.9)	39.4( 1.0)†# 200.2( 3.0)	L L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors  
(continued)

	1984	1988	1990	1992	1994	TREND TESTS
<b>REGION</b>						
<b>Northeast</b>	20.1(0.7)	23.4(1.7)	22.1(1.0)	21.0(1.3)	21.1(1.1)	N
	212.4(4.0)	204.0(4.9)	211.1(3.6)	216.1(4.0)	209.7(4.0)	N
<b>Southeast</b>						
	24.9(1.5)	26.1(1.7)	24.4(1.2)	23.8(1.3)	24.7(1.8)	N
	203.5(3.3)	200.1(3.2)	192.3(4.0)	193.0(2.4)†	198.3(3.4)	N
<b>Central</b>						
	27.7(1.5)	22.9(0.5)†	24.8(0.7)	27.6(0.8)	25.0(1.2)	N
	200.8(2.6)	211.9(3.0)†	203.0(3.1)	213.9(3.1)†	209.0(3.3)‡	L
<b>West</b>						
	27.3(0.9)	27.5(1.1)	28.8(0.8)	27.6(0.7)	29.3(1.0)	N
	200.8(4.9)	207.3(3.4)	201.2(2.7)	205.7(2.2)	203.1(2.7)	N
<b>PARENTS' EDUCATION LEVEL</b>						
<b>Didn't Finish H.S.</b>	6.7(0.6)*	5.3(0.7)	5.5(0.5)	4.6(0.4)†	4.4(0.4)‡	L
	178.7(4.6)	194.2(5.4)	185.7(3.9)	191.2(3.2)	188.0(7.8)	N
<b>Grad From H.S.</b>	20.8(1.0)*	17.8(1.1)	18.2(0.9)	16.6(0.7)†	16.3(0.9)‡	L
	191.8(3.4)	199.4(3.0)	196.6(3.0)	202.2(3.2)	202.0(2.3)‡	L
<b>Some Educ. After H.S.</b>	4.6(0.4)	5.2(0.5)	4.8(0.4)	5.7(0.4)	5.3(0.5)	N
	208.0(6.5)	211.4(6.3)	213.9(4.0)	201.4(4.5)	212.2(4.0)	N
<b>Grad from College</b>	33.1(1.4)*	41.4(1.5)†	39.7(1.6)†	41.9(1.0)†	42.7(1.4)‡	L
	218.1(3.0)	212.4(2.2)	209.0(1.6)†	213.7(1.4)	212.3(2.1)	N
<b>Unknown</b>	34.8(1.3)	30.3(1.4)	31.8(1.1)	31.2(1.0)	31.3(1.2)‡	N
	202.8(2.5)	201.5(2.7)	196.5(2.2)	204.7(2.3)	197.3(1.9)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors  
(continued)

	1984	1988	1990	1992	1994	TREND TESTS
<b>SCHOOL TYPE</b>						
<b>Public School</b>	85.8(1.9)	87.5(3.0)	91.8(1.8)	88.0(1.7)	89.9(2.0)	N
	201.9(1.8)	204.2(2.0)	200.4(1.4)	205.2(1.6)	203.9(1.8)	N
<b>Non-Public</b>	14.2(1.9)	12.5(3.0)	8.2(1.8)	12.0(1.7)	10.1(2.0)	N
	215.4(4.6)	216.0(4.1)	216.2(5.7)	221.6(3.3)	212.6(4.3)	N
<b>QUARTILES</b>						
<b>Upper</b>	25.1(1.2)	25.0(1.4)	25.0(0.8)	25.0(0.8)	25.2(0.9)	N
	240.5(2.3)	246.7(1.7)	242.1(1.6)	245.7(1.3)	241.8(1.3)	Q
<b>Middle Two</b>	50.1(1.5)	50.0(1.0)	50.0(1.1)	49.9(1.0)	49.9(1.0)	N
	204.2(1.4)	206.9(1.5)	203.1(1.5)	208.2(1.7)	206.3(1.2)	N
<b>Lower</b>	24.8(1.6)	25.0(1.2)	25.0(1.3)	25.0(0.8)	24.9(1.1)	N
	165.9(2.6)	162.3(1.8)	158.4(2.4)	166.5(1.4)	164.3(2.7)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0) 266.7(2.0)	100.0(0.0) 263.7(1.3)	100.0(0.0) 256.6(1.2)†*	100.0(0.0) 274.4(1.3)†*	100.0(0.0) 265.3(1.3)	N Q
<b>GENDER</b>						
<b>Male</b>	50.7(1.2) 257.5(2.3)	49.4(1.1) 253.7(1.5)	50.5(0.9) 245.6(1.5)†*	49.5(0.8) 263.6(1.9)*	52.1(0.9) 254.0(1.8)	N Q
<b>Female</b>	49.3(1.2) 276.2(2.4)	50.6(1.1) 273.5(1.7)	49.5(0.9) 267.9(1.3)†*	50.5(0.8) 285.0(1.3)†*	47.9(0.9) 277.7(1.4)	N Q
<b>RACE/ETHNICITY</b>						
<b>White</b>	75.7(0.9)* 271.7(2.1)	70.6(0.2)†* 269.1(1.3)	70.2(0.2)† 262.1(1.6)†*	70.3(0.3)† 279.2(1.3)†*	69.5(0.2)‡ 272.0(1.4)	LQ Q
<b>Black</b>	12.4(0.6)* 247.1(5.7)	14.9(0.2)† 246.0(3.5)	15.1(0.2)† 239.0(2.3)	15.5(0.1)† 258.1(4.0)*	15.2(0.2)‡ 244.8(3.4)	LQ N
<b>Hispanic</b>	8.1(0.7)* 246.9(6.4)	10.3(0.1)† 250.4(2.5)	10.3(0.2)† 245.7(2.8)	10.2(0.2)† 265.0(2.2)†*	10.5(0.2)‡ 251.5(3.3)	LQ N
<b>Other</b>	3.8(0.4)* 272.5(4.3)	4.2(0.1)* 268.9(2.9)	4.4(0.1)* 255.4(2.9)†	4.0(0.1)* 275.5(4.8)	4.8(0.1)‡ 263.5(3.4)	L N
<b>MODAL AGE</b>						
<b>Less Than Modal Age</b>	1.0( 0.3) ***(***)	1.0( 0.2) ***(***)	0.7( 0.2) ***(***)	0.9( 0.2) ***(***)	0.6(0.2) ***(***)	N L
<b>At Modal Age</b>	63.7( 1.4)* 272.1( 1.8)	58.9( 0.2)† 270.6( 1.2)	59.4( 0.3)†* 261.8( 1.5)†*	58.1( 1.2)† 282.1( 1.3)†*	56.8(1.0)‡ 272.4(1.2)	L LQ
<b>Greater Than Modal Age</b>	35.3( 1.4)* 257.7( 3.2)	40.1( 0.3)† 253.8( 1.9)	39.9( 0.3)† 248.0( 1.7)†*	41.0( 1.2)† 263.1( 1.8)*	42.5(1.0)‡ 255.7(2.4)	L N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors  
(continued)

	1984	1988	1990	1992	1994	TREND TESTS
<b>REGION</b>						
<b>Northeast</b>	23.4(1.0)	22.8(2.2)	22.8(1.0)	20.9(1.0)	20.7(0.7)†	L
	273.3(3.6)	265.1(2.7)*	261.4(3.3)*	284.7(3.3)	276.6(2.2)	LQ
<b>Southeast</b>						
	23.4(1.7)	23.7(1.3)	24.6(1.1)	24.6(1.5)	23.3(1.8)	N
	266.9(3.6)	268.2(2.3)*	251.8(2.8)†	266.3(2.2)	258.9(2.1)	N
<b>Central</b>						
	26.9(1.6)	25.9(2.2)	23.2(0.7)	25.0(1.0)	25.7(1.6)	N
	263.8(2.3)	258.1(2.2)	259.1(3.9)	277.2(2.0)†	269.5(4.1)	L
<b>West</b>						
	26.3(0.8)*	27.6(1.1)	29.4(1.0)	29.4(1.2)	30.3(1.2)†	L
	263.5(3.0)	264.0(2.1)	255.0(2.6)	271.3(2.3)*	259.0(1.6)	N
<b>PARENTS' EDUCATION LEVEL</b>						
<b>Didn't Finish H.S.</b>						
	10.1(0.8)*	8.5(0.7)	7.6(0.6)	7.0(0.8)†	7.0(0.4)†	L
	257.7(4.8)	254.3(3.9)	245.6(3.7)	257.9(5.3)	250.1(4.1)	N
<b>Grad From H.S.</b>						
	35.1(1.3)*	31.5(1.2)	32.8(1.1)*	28.9(1.1)†	27.0(1.4)†	L
	260.8(1.6)	257.6(2.1)	252.5(1.4)†	267.9(1.6)†*	258.6(2.2)	N
<b>Some Educ. After H.S.</b>						
	9.6(0.8)	10.8(0.6)	11.7(0.7)	12.4(0.7)†	11.9(0.7)†	L
	271.4(3.9)	275.1(3.3)	266.9(3.0)	279.6(2.2)	270.3(3.1)	N
<b>Grad from College</b>						
	36.2(1.5)*	41.2(1.5)	38.2(1.5)*	44.0(1.8)†	46.2(1.6)†	L
	277.8(1.8)	270.5(1.8)†	264.9(1.8)†*	284.3(1.9)*	275.0(1.3)	Q
<b>Unknown</b>						
	9.0(0.8)	8.0(0.5)	9.6(0.6)	7.8(0.6)	7.9(0.6)	N
	249.2(6.7)	248.3(2.3)	235.1(2.8)	249.6(3.1)	239.7(2.8)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors  
(continued)

	1984	1988	1990	1992	1994	TREND TESTS
<b>SCHOOL TYPE</b>						
<b>Public School</b>	86.9(1.6) 264.4(2.0)	88.1(2.7) 262.1(1.5)	87.1(1.9) 253.6(1.2)†*	86.9(2.0) 272.4(1.3)†*	89.1(1.6) 263.6(1.6)	N Q
<b>Non-Public</b>	13.1(1.6) 281.8(5.5)	11.9(2.7) 275.5(3.0)	12.9(1.9) 276.7(4.4)	13.1(2.0) 287.6(3.2)	10.9(1.6) 279.3(3.8)	N N
<b>QUARTILES</b>						
<b>Upper</b>	25.0(1.4) 297.1(1.4)	25.0(1.2) 295.5(1.3)*	25.0(1.2) 294.2(1.1)*	25.0(1.1) 310.6(1.0)†*	25.1(1.1) 301.2(1.4)‡	N LQ
<b>Middle Two</b>	49.8(1.7) 268.3(2.4)	50.0(1.1) 264.5(1.0)	50.0(1.0) 256.6(1.0)†*	50.1(1.0) 275.1(1.4)*	49.7(0.9) 266.6(1.3)	N Q
<b>Lower</b>	25.2(1.3) 233.2(3.2)	25.0(1.1) 230.5(1.8)	25.0(0.9) 219.1(1.5)†*	24.9(1.0) 236.8(2.1)*	25.2(0.9) 227.2(1.8)	N N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.  
These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0) 289.7(1.6)*	100.0(0.0) 291.3(1.3)*	100.0(0.0) 287.1(1.0)	100.0(0.0) 287.3(1.4)	100.0(0.0) 284.6(1.2)†#	N L
<b>GENDER</b>						
<b>Male</b>	50.7(1.6) 281.1(1.4)	46.9(1.5) 282.2(2.0)*	50.9(0.8) 276.4(1.6)	53.1(1.1) 279.4(1.2)	48.5(1.7) 275.9(1.5)†#	N L
<b>Female</b>	49.3(1.6) 298.6(2.5)	53.1(1.5) 299.3(1.2)*	49.1(0.8) 298.2(1.5)*	46.9(1.1) 296.4(2.0)	51.5(1.7) 292.8(1.5)†#	N N
<b>RACE/ETHNICITY</b>						
<b>White</b>	74.7(1.1)* 296.8(1.8)*	73.7(0.1)* 296.2(1.3)*	71.2(0.2)†* 292.8(1.2)	71.2(0.2)†* 294.1(1.2)	68.3(0.3)†# 290.8(1.4)†#	L L
<b>Black</b>	14.6(1.0) 270.3(3.6)	14.9(0.1) 275.2(2.9)	15.5(0.2)* 268.2(2.3)	13.9(0.2)* 263.2(3.2)	14.7(0.2) 267.3(2.2)	N N
<b>Hispanic</b>	7.9(0.6)* 259.1(6.6)	8.0(0.1)* 273.8(4.4)	8.7(0.1)* 276.9(2.6)†	10.6(0.2)†* 273.6(3.8)	11.9(0.2)†# 271.3(4.0)	LQ Q
<b>Other</b>	2.8(0.3)* 288.6(5.8)	3.4(0.1)* 295.5(3.7)*	4.5(0.0)†* 282.3(5.5)	4.4(0.2)†* 287.1(3.0)	5.1(0.1)†# 283.2(3.3)	L N
<b>MODAL AGE</b>						
<b>Less Than Modal Age</b>	13.2(1.3) 294.5(3.8)	11.3(0.8) 299.3(2.1)	11.2(0.7) 295.3(4.3)	9.7(0.8) 294.8(4.0)	10.8(0.9) 290.8(3.2)	L N
<b>At Modal Age</b>	67.1(1.2)* 295.5(1.4)*	67.5(0.2)* 296.8(1.2)*	63.9(0.2)† 292.4(1.1)	64.4(0.2) 293.4(1.7)	63.7(0.3)†# 289.8(0.9)†#	L L
<b>Greater Than Modal Age</b>	19.6(1.5)* 266.8(3.1)	21.2(0.7)* 269.5(4.5)	24.9(0.7)† 269.9(2.0)	26.0(0.9)† 269.4(2.0)	25.5(0.9)†# 269.1(3.4)	L N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors  
(continued)

	1984	1988	1990	1992	1994	TREND TESTS
<b>REGION</b>						
<b>Northeast</b>	26.4(0.8)* 290.9(3.0)	22.6(0.8)† 295.0(2.8)	22.1(1.0)† 295.4(2.5)	22.0(0.9)† 290.2(2.3)	22.2(0.8)‡ 290.8(2.4)	LQ N
<b>Southeast</b>	21.8(1.7) 287.3(4.9)	22.0(1.0) 289.4(2.2)*	23.4(0.9) 280.0(2.3)	23.6(1.4) 277.8(3.3)	22.9(1.3) 277.3(2.5)	N L
<b>Central</b>						
	27.1(1.6) 291.3(2.7)	27.1(1.7) 291.8(4.0)	26.8(1.1) 288.8(2.7)	25.8(1.1) 291.4(2.2)	26.2(1.4) 283.6(2.3)‡	N
<b>West</b>	24.8(0.8)* 288.8(3.7)	28.2(1.1)† 289.2(2.3)	27.7(0.9) 284.8(2.1)	28.7(1.0)† 289.4(2.1)	28.6(1.0)‡ 286.6(2.7)	L N
<b>PARENTS' EDUCATION LEVEL</b>						
<b>Didn't Finish H.S.</b>	10.9(1.2) 273.6(5.2)	8.2(0.8) 275.8(3.5)	8.5(0.5) 268.0(4.0)	8.2(0.8) 271.0(3.7)	7.5(0.7)‡ 268.5(4.7)	L N
<b>Grad From H.S.</b>	35.2(2.1)* 283.5(3.0)	30.4(1.2)* 284.6(2.2)	29.6(1.1) 278.2(1.9)	26.8(0.9)† 278.4(2.2)	25.9(1.1)‡ 279.2(1.7)	L N
<b>Some Educ. After H.S.</b>	15.1(0.9)* 297.6(2.5)*	17.7(0.8) 296.1(2.6)*	18.5(0.6)† 292.2(2.7)	19.7(0.8)† 292.3(2.0)	19.8(1.0)‡ 286.2(1.7)‡	L L
<b>Grad from College</b>	35.9(1.7)* 299.9(2.4)*	41.0(1.8) 299.0(2.0)*	40.5(1.4) 297.5(2.0)	42.6(1.4)† 295.7(1.4)	43.7(1.9)‡ 292.6(1.5)‡	L L
<b>Unknown</b>	2.9(0.5) ***(***)	2.7(0.3) 267.6(4.7)*	3.0(0.3) 259.0(4.1)	2.7(0.3) 259.1(6.6)	3.0(0.2) 250.6(3.2)	N N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 Writing Long-Term Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages and average writing scale scores and jackknifed standard errors  
(continued)

	1984	1988	1990	1992	1994	TREND TESTS
<b>SCHOOL TYPE</b>						
<b>Public School</b>	89.4(1.5)	86.0(3.8)	92.0(1.7)	90.6(2.2)	88.2(2.2)	N
	287.8(1.6)	289.9(1.2)*	285.5(1.1)	286.5(1.6)	283.8(1.4)	L
<b>Non-Public</b>	10.6(1.5)	14.0(3.8)	8.0(1.7)	9.4(2.2)	11.8(2.2)	N
	305.4(3.7)*	299.7(3.6)	305.8(5.2)	295.4(4.4)	290.6(3.8)#	L
<b>QUARTILES</b>						
<b>Upper</b>	24.9(1.4)	24.9(1.4)	25.0(0.8)	24.9(1.0)	25.1(1.0)	N
	321.7(1.9)	319.8(1.0)	324.5(1.6)*	319.1(2.0)	318.9(1.3)	N
<b>Middle Two</b>	50.1(1.3)	50.2(1.1)	49.9(0.8)	50.2(1.1)	49.8(1.2)	N
	291.3(1.2)*	292.6(1.2)*	287.1(0.8)†	288.7(1.1)	285.2(1.1)#	L
<b>Lower</b>	24.9(1.4)	24.9(1.2)	25.0(0.9)	25.0(1.1)	25.1(1.2)	N
	254.5(2.0)	260.0(2.4)*	249.8(2.1)	253.1(1.5)	249.1(1.8)#	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 150

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	92.6(1.3)	90.5(0.8)	88.8(1.1)	92.7(0.5)	91.8(0.9)	Q
<b>GENDER</b>						
Male	91.6(1.8)	87.9(1.2)	85.9(1.7)	89.8(0.9)	88.5(1.2)	N
Female	93.8(1.8)	93.1(1.1)	91.9(1.2)	95.7(0.8)	95.1(1.0)	N
<b>RACE/ETHNICITY</b>						
White	96.1(1.1)	95.4(1.1)	94.0(0.9)	96.9(0.3)	96.4(0.7)	N
Black	81.3(3.1)	72.9(4.4)	70.5(4.8)	76.8(2.9)	74.7(2.7)	N
Hispanic	84.3(6.3)	83.3(3.2)	81.2(2.7)	87.0(3.2)	85.7(2.4)	N
Other	96.4(2.4)	92.4(2.6)	89.1(7.1)	94.0(2.9)	94.1(1.9)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	96.2( 0.5)*	92.4(0.9)†	90.3(1.7)†	94.8( 0.5)	93.4( 0.7)‡	LQ
Greater Than Modal Age	86.4( 3.4)	87.3(1.6)	86.6(1.4)	90.2( 1.1)	89.5( 2.2)	N
<b>REGION</b>						
Northeast	96.8(1.6)	89.2(2.3)†	92.6(2.4)	95.6(1.1)	93.4(2.0)	N
Southeast	91.9(1.3)	87.8(2.2)	82.8(3.0)†	85.9(1.5)†	88.5(1.7)	LQ
Central	92.9(1.7)	94.5(2.0)	90.7(1.6)	95.4(1.3)	93.4(1.8)	N
West	90.0(3.9)	90.7(1.6)	89.4(1.6)	93.6(1.0)	92.0(1.7)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	78.5(6.6)	86.4(6.0)	80.9(4.5)	85.0(2.5)	83.7(5.3)	N
Grad From H.S.	88.9(3.2)	88.0(1.9)	86.9(1.9)	91.3(1.5)	92.1(1.8)	N
Some Educ. After H.S.	96.9(1.7)	93.3(3.7)	92.8(4.6)	92.4(2.3)	95.2(1.9)	N
Grad from College	96.5(1.3)	92.4(1.2)	91.9(1.0)†	94.6(0.9)	94.2(1.0)	Q
Unknown	94.0(1.2)	89.6(1.3)†	87.0(2.2)†	92.4(1.0)	89.0(2.0)‡	N
<b>SCHOOL TYPE</b>						
Public School	92.0(1.3)	89.8(1.0)	88.1(1.2)	92.0(0.6)	91.4(1.1)	Q
Non-Public	96.5(1.7)	95.3(1.7)	96.4(2.1)	98.0(1.0)	95.4(1.6)	N
<b>QUARTILES</b>						
Upper	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.0)	100.0(0.1)	N
Middle Two	98.7(0.5)	97.2(0.6)	96.9(0.8)	98.8(0.3)	98.6(0.4)	Q
Lower	72.9(4.5)	67.6(2.5)	61.7(3.6)	73.1(1.8)	69.8(3.2)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 200

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	54.4(2.0)	56.1(2.0)	52.7(1.7)	58.4(1.9)	56.3(2.0)	N
<b>GENDER</b>						
Male	50.1(4.1)	49.5(2.6)	46.3(2.2)	49.6(2.0)	47.2(2.5)	N
Female	59.4(3.0)	62.9(2.7)	59.4(2.7)	67.4(2.4)	65.5(2.4)	N
<b>RACE/ETHNICITY</b>						
White	62.2(2.1)	65.2(2.0)	61.8(2.3)	69.1(2.3)	66.8(2.0)	L
Black	29.3(6.9)	24.7(4.4)	24.0(5.0)	23.6(3.4)	21.5(3.9)	N
Hispanic	37.2(5.8)	40.6(4.3)	34.3(4.8)	37.6(4.1)	37.6(4.2)	N
Other	58.3(10.1)	61.4(4.8)	52.2(7.1)	57.7(3.8)	61.6(4.8)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	62.8( 3.3)	60.4( 2.6)	56.1( 2.6)	63.3( 2.1)	59.9( 2.3)	N
Greater Than Modal Age	40.0( 4.7)	49.1( 2.5)	47.4( 2.1)	52.4( 2.3)	51.5( 2.9)†	L
<b>REGION</b>						
Northeast	64.2(4.7)	54.3(4.4)	62.4(4.0)	67.1(4.2)	60.9(4.5)	N
Southeast	54.8(4.6)	51.2(3.9)	44.1(3.9)	43.7(2.9)	49.4(4.3)	N
Central	50.0(3.4)	61.1(3.7)	54.2(3.2)	66.3(3.2)†	61.5(4.6)‡	L
West	51.5(6.1)	58.3(3.8)	51.1(3.3)	56.7(2.8)	54.3(3.3)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	29.1(9.9)	43.7(6.5)	36.8(3.5)	41.2(5.0)	38.0(8.6)	N
Grad From H.S.	41.4(4.0)	50.1(4.0)	48.3(4.1)	53.7(4.1)	53.3(3.2)‡	L
Some Educ. After H.S.	60.7(9.7)	63.3(7.2)	63.1(5.1)	52.4(4.8)	64.9(5.4)	N
Grad from College	69.3(3.5)	62.7(1.9)	59.9(2.2)	65.2(1.5)	63.9(2.2)	N
Unknown	53.3(3.2)	51.9(3.2)	47.4(2.3)	55.8(3.9)	48.7(2.7)	N
<b>SCHOOL TYPE</b>						
Public School	52.4(2.5)	54.7(2.2)	51.4(1.6)	56.3(2.0)	55.4(2.4)	N
Non-Public	66.4(7.3)	66.2(4.9)	66.6(5.3)	74.1(3.9)	63.8(5.3)	N
<b>QUARTILES</b>						
Upper	94.8(1.6)	95.1(1.5)	92.9(1.5)	96.8(0.9)	95.2(1.5)	N
Middle Two	56.7(2.5)	59.6(2.8)	54.6(1.9)	62.9(3.0)	59.6(2.3)	N
Lower	9.0(2.1)	10.3(2.2)	8.6(2.6)	11.0(1.3)	10.2(2.3)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 250

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	10.1(1.0)	14.6(1.1)†	12.2(0.9)	13.0(1.1)	11.7(0.8)	Q
<b>GENDER</b>						
Male	8.6(1.3)	10.9(1.3)	8.9(0.9)	8.1(1.1)	7.1(1.1)	N
Female	11.9(2.6)	18.5(1.4)	15.6(1.4)	17.9(1.4)	16.3(1.4)	N
<b>RACE/ETHNICITY</b>						
White	12.5(1.1)	18.5(1.5)†	15.5(1.3)	16.9(1.5)	15.1(1.0)	Q
Black	2.5(2.2)	2.5(1.1)	2.5(1.5)	1.0(0.7)	1.5(0.7)	N
Hispanic	4.7(2.3)	6.5(1.5)	4.6(1.3)	4.3(1.2)	3.9(1.6)	N
Other	10.9(5.2)	16.4(5.0)	12.0(3.8)	11.5(3.0)	13.5(4.0)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	12.8( 2.0)	16.4( 1.6)	13.6( 1.5)	15.4(1.3)	12.8(1.2)	N
Greater Than Modal Age	5.5( 1.7)	11.5( 1.1)†	9.9( 1.2)	10.0(1.5)	10.1(1.5)‡	Q
<b>REGION</b>						
Northeast	12.4(3.9)	15.0(2.8)	16.7(1.9)	18.9(3.0)	14.6(1.9)	N
Southeast	9.7(3.3)	11.9(1.5)	9.3(1.4)	7.2(1.2)	9.4(1.5)	N
Central	8.3(2.0)	17.1(2.1)†	11.1(2.3)	16.0(2.4)	13.8(2.2)	N
West	10.7(2.9)	14.9(2.7)	12.0(1.3)	10.6(1.4)	9.7(1.5)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	1.2(1.4)	8.1(4.4)	5.3(2.8)	5.6(3.2)	5.7(2.9)	N
Grad From H.S.	4.2(2.4)	11.3(1.9)	8.4(2.5)	9.7(2.3)	9.2(2.2)	N
Some Educ. After H.S.	9.7(7.5)	16.9(6.1)	21.7(3.5)	8.0(2.8)	14.8(4.9)	N
Grad from College	19.2(2.7)	18.7(1.8)	15.8(1.1)	17.3(1.1)	15.8(1.8)	N
Unknown	7.1(1.8)	11.8(1.9)	9.6(1.2)	11.1(1.8)	7.8(1.1)	Q
<b>SCHOOL TYPE</b>						
Public School	9.2(1.1)	13.9(1.2)†	11.6(0.8)	12.0(1.2)	11.4(0.9)	Q
Non-Public	16.0(3.9)	19.8(3.8)	18.0(4.7)	20.5(2.8)	14.7(3.6)	N
<b>QUARTILES</b>						
Upper	34.5(3.7)	44.5(2.4)	38.2(2.7)	41.9(2.1)	37.5(2.0)	Q
Middle Two	3.0(1.0)	7.0(1.2)	5.1(0.6)	5.0(1.3)	4.4(0.9)	Q
Lower	0.0(0.0)	0.1(0.2)	0.2(0.2)	0.0(0.1)	0.1(0.1)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 300

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.5(0.4)	0.8(0.2)	0.5(0.1)	0.5(0.2)	0.4(0.2)	N
<b>GENDER</b>						
Male	0.4(0.7)	0.4(0.2)	0.3(0.1)	0.2(0.1)	0.1(0.1)	N
Female	0.5(0.3)	1.2(0.4)	0.8(0.2)	0.8(0.3)	0.6(0.3)	N
<b>RACE/ETHNICITY</b>						
White	0.5(0.5)	1.1(0.3)	0.7(0.2)	0.6(0.2)	0.5(0.2)	N
Black	0.0(0.0)	0.1(0.1)	0.1(0.2)	0.0(0.1)	0.0(0.0)	N
Hispanic	0.5(0.9)	0.2(0.2)	0.2(0.2)	0.0(0.1)	0.1(0.2)	N
Other	0.6(1.4)	0.6(1.5)	0.2(0.3)	0.4(0.6)	0.4(0.4)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	0.7(0.6)	0.9(0.3)	0.6(0.1)	0.7(0.3)	0.5(0.2)	N
Greater Than Modal Age	0.1(0.2)	0.6(0.4)	0.4(0.2)	0.2(0.2)	0.2(0.2)	N
<b>REGION</b>						
Northeast	0.4(0.4)	0.7(0.6)	0.8(0.3)	1.1(0.7)	0.6(0.6)	N
Southeast	0.6(1.2)	0.8(0.3)	0.4(0.4)	0.1(0.1)	0.2(0.3)	N
Central	0.4(0.5)	0.7(0.2)	0.4(0.3)	0.5(0.2)	0.4(0.4)	N
West	0.4(0.6)	0.9(0.6)	0.5(0.3)	0.3(0.2)	0.3(0.2)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	0.0(0.0)	0.6(0.6)	0.3(0.7)	0.1(0.2)	0.3(1.3)	N
Grad From H.S.	0.0(0.0)	0.4(0.3)	0.4(0.3)	0.2(0.3)	0.2(0.3)	N
Some Educ. After H.S.	0.0(0.0)	2.4(1.9)	1.3(1.5)	0.3(0.3)	0.3(0.8)	N
Grad from College	1.2(1.2)	1.1(0.3)	0.8(0.2)	0.8(0.3)	0.6(0.3)	N
Unknown	0.2(0.4)	0.4(0.3)	0.2(0.2)	0.2(0.2)	0.1(0.1)	N
<b>SCHOOL TYPE</b>						
Public School	0.3(0.3)	0.8(0.2)	0.5(0.1)	0.5(0.1)	0.3(0.1)	N
Non-Public	1.3(1.8)	1.0(0.7)	0.4(0.6)	0.6(0.6)	0.8(1.0)	N
<b>QUARTILES</b>						
Upper	1.8(1.7)	3.0(0.7)	2.0(0.5)	1.9(0.7)	1.4(0.6)	N
Middle Two	0.0(0.0)	0.1(0.1)	0.0(0.1)	0.0(0.0)	0.0(0.1)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 4

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 350

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>GENDER</b>						
Male	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
Female	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>RACE/ETHNICITY</b>						
White	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Black	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Hispanic	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Other	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
Greater Than Modal Age	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>REGION</b>						
Northeast	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.0(0.0)	0.0(0.0)	N
Southeast	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Central	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
West	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Grad From H.S.	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
Some Educ. After H.S.	0.0(0.0)	0.1(0.2)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Grad from College	0.0(0.0)	0.0(0.0)	0.0(0.1)	0.0(0.0)	0.0(0.0)	N
Unknown	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>SCHOOL TYPE</b>						
Public School	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Non-Public	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
<b>QUARTILES</b>						
Upper	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.0(0.0)	0.0(0.0)	N
Middle Two	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons. These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 150

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>						
<b>GENDER</b>						
Male	100.0(0.0)	99.9(0.1)	99.6(0.2)	99.9(0.2)	99.9(0.2)	N
Female	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.0)	100.0(0.1)	N
<b>RACE/ETHNICITY</b>						
White	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.0)	100.0(0.1)	N
Black	100.0(0.0)	99.9(0.2)	99.3(0.5)	99.7(0.4)	99.8(0.5)	N
Hispanic	100.0(0.0)	99.8(0.3)	99.6(0.5)	99.9(0.4)	99.7(0.3)	N
Other	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.2)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.1)	100.0(0.1)	N
Greater Than Modal Age	100.0(0.0)	99.9(0.1)	99.7(0.2)	99.9(0.1)	99.9(0.2)	N
<b>REGION</b>						
Northeast	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.0)	100.0(0.0)	N
Southeast	100.0(0.0)	99.9(0.2)	99.6(0.4)	99.9(0.3)	99.9(0.2)	N
Central	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.0)	99.9(0.4)	N
West	100.0(0.0)	99.9(0.1)	99.7(0.2)	99.9(0.2)	99.9(0.1)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	100.0(0.0)	100.0(0.1)	99.5(0.4)	99.8(0.4)	99.8(0.2)	N
Grad From H.S.	100.0(0.0)	99.9(0.1)	99.7(0.2)	100.0(0.1)	100.0(0.2)	N
Some Educ. After H.S.	100.0(0.0)	100.0(0.0)	99.9(0.3)	100.0(0.0)	100.0(0.0)	N
Grad from College	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.1)	100.0(0.0)	N
Unknown	100.0(0.0)	99.7(0.4)	99.4(0.6)	99.6(0.4)	99.4(0.7)	N
<b>SCHOOL TYPE</b>						
Public School	100.0(0.0)	99.9(0.1)	99.7(0.1)†	99.9(0.1)	99.9(0.1)	N
Non-Public	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>QUARTILES</b>						
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Lower	100.0(0.0)	99.8(0.2)	99.1(0.3)†	99.8(0.3)	99.7(0.4)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 200

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	98.3(0.9)	97.2(0.6)	93.3(0.6)†*	97.7(0.4)	95.9(0.6)‡	LQ
<b>GENDER</b>						
Male	97.2(1.2)	95.4(1.0)	89.6(1.0)†*	96.3(0.7)	93.4(1.1)‡	LQ
Female	99.5(0.7)	98.9(0.3)	97.0(0.7)†	99.1(0.5)	98.7(0.4)	N
<b>RACE/ETHNICITY</b>						
White	99.3(0.4)	98.5(0.3)	95.6(0.6)†*	98.6(0.4)	97.8(0.5)‡	LQ
Black	95.2(3.4)	92.2(2.2)	85.5(2.4)	94.7(2.2)	90.1(2.6)	N
Hispanic	92.9(6.1)	94.8(1.9)	89.3(2.2)	96.4(2.3)	92.1(2.0)	N
Other	99.7(0.8)	98.7(0.9)	92.3(1.7)†	98.6(1.1)	96.4(1.5)	L
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	99.2( 0.5)	98.6(0.3)	95.6(0.5)†*	98.7(0.4)	97.7(0.4)‡	LQ
Greater Than Modal Age	96.9( 1.6)	95.1(1.3)	89.7(1.3)†	96.4(0.9)	93.6(1.3)	N
<b>REGION</b>						
Northeast	99.2(0.7)	97.9(0.7)	95.2(1.5)	98.7(0.6)	98.4(0.6)	Q
Southeast	97.9(1.9)	97.3(1.4)	90.5(1.6)†	96.8(1.1)	95.0(1.2)	N
Central	98.8(0.6)	95.8(1.0)	94.6(1.8)	98.5(0.6)	96.3(1.7)	N
West	97.4(1.8)	97.6(0.7)*	93.1(0.7)	97.3(1.0)	94.6(0.9)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	96.3(3.2)	95.1(2.5)	90.8(2.7)	95.9(2.8)	91.0(2.0)	N
Grad From H.S.	98.4(1.0)	96.1(1.0)	93.2(1.0)†	97.7(0.6)	95.0(1.4)	N
Some Educ. After H.S.	98.8(1.2)	98.8(0.8)	95.9(1.1)	98.6(1.0)	97.7(1.1)	N
Grad from College	99.6(0.3)	98.6(0.5)	95.7(1.1)†	98.9(0.5)	98.4(0.5)‡	LQ
Unknown	94.4(3.1)	94.0(1.7)	83.3(2.7)†	92.1(2.0)	87.7(2.8)	N
<b>SCHOOL TYPE</b>						
Public School	98.1(1.0)	96.9(0.6)	92.6(0.7)†*	97.6(0.5)	95.6(0.7)‡	Q
Non-Public	99.8(0.6)	99.3(0.3)	97.9(0.9)	98.9(1.0)	98.9(1.0)	N
<b>QUARTILES</b>						
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	99.8(0.2)	98.7(0.3)†*	99.9(0.2)	99.7(0.2)	Q
Lower	93.3(3.4)	89.0(2.3)	75.8(2.1)†*	91.1(1.8)	84.4(2.3)‡	LQ

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 250

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	72.4(2.6)	67.1(1.7)	57.0(1.5)†*	75.0(1.4)*	67.2(1.3)	Q
<b>GENDER</b>						
Male	61.2(3.7)	55.5(2.1)	45.0(2.2)†*	65.7(2.5)*	55.7(2.3)	Q
Female	83.9(2.6)	78.4(2.2)	69.3(1.6)†*	84.0(1.6)	79.8(1.6)	Q
<b>RACE/ETHNICITY</b>						
White	78.9(2.6)	73.5(1.6)	63.0(1.8)†*	79.7(1.5)	74.8(1.5)	Q
Black	47.5(9.2)	45.3(5.0)	37.4(2.7)	58.3(4.3)*	43.3(4.1)	N
Hispanic	46.6(8.7)	52.3(4.1)	45.3(4.0)	67.4(3.7)*	52.0(3.9)	N
Other	78.9(5.3)	73.1(4.5)	55.5(4.2)†	75.4(5.9)	66.7(5.0)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	L
At Modal Age	79.2( 2.5)	75.1( 1.8)	63.0(1.6)†*	82.0(1.5)*	74.9( 1.3)	Q
Greater Than Modal Age	60.9( 4.4)	55.4( 2.2)	47.4(2.2)†	64.7(1.8)	56.7( 3.0)	N
<b>REGION</b>						
Northeast	80.2(5.4)	68.5(3.9)	62.2(2.9)†*	83.3(2.6)	78.9(2.1)	Q
Southeast	72.2(4.5)	71.7(2.4)*	52.2(3.1)†	67.5(3.1)	60.4(2.3)‡	L
Central	69.9(3.1)	60.6(3.3)	59.8(4.1)	78.4(2.2)	71.5(4.6)	Q
West	68.1(4.0)	68.0(2.8)	54.8(3.4)†	72.3(2.8)*	60.7(1.7)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	61.8( 6.6)	56.4(5.2)	45.1(3.7)	59.8(6.5)	52.0(6.4)	N
Grad From H.S.	66.3( 3.1)	60.2(3.0)	52.6(2.2)†	69.7(2.7)*	59.5(2.7)	N
Some Educ. After H.S.	79.4( 5.3)	79.4(3.1)	67.9(3.8)	81.0(2.9)	73.4(3.3)	N
Grad from College	84.9( 1.9)*	74.9(2.1)†	66.0(2.7)†*	83.8(1.9)*	77.5(1.2)‡	LQ
Unknown	49.4(10.2)	49.6(4.3)	33.5(4.6)	49.2(3.6)	39.0(3.3)	N
<b>SCHOOL TYPE</b>						
Public School	70.1(2.8)	65.3(1.9)	54.0(1.4)†*	73.3(1.4)*	65.5(1.5)	Q
Non-Public	87.2(3.8)	80.4(3.1)	77.0(4.7)	86.2(2.5)	81.2(3.0)	N
<b>QUARTILES</b>						
Upper	99.6(0.4)	97.9(0.6)	95.1(0.8)†*	99.5(0.2)	98.6(0.7)	Q
Middle Two	84.4(3.9)	74.6(1.9)	60.3(1.8)†*	84.3(1.4)*	75.7(2.1)‡	Q
Lower	21.6(3.6)	21.2(2.6)	12.5(1.8)*	31.6(2.5)*	19.1(1.8)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 300

	1984	1988	1990	1992	1994	TREND TESTS
TOTAL	13.0(1.8)	13.2(0.8)	12.1(0.8)*	24.7(1.5)†*	16.6(1.2)	L
<b>GENDER</b>						
Male	6.7(1.5)	6.4(1.1)	6.6(1.0)	15.3(1.6)†*	8.7(1.1)	L
Female	19.5(3.6)	19.7(1.3)*	17.8(1.3)*	33.9(1.9)†*	25.3(1.7)	L
<b>RACE/ETHNICITY</b>						
White	15.5(2.2)	16.1(1.1)	14.6(0.9)*	28.4(1.9)†*	20.6(1.5)	L
Black	2.6(1.7)	3.8(1.1)	4.0(1.1)	13.4(2.3)†*	4.9(1.6)	L
Hispanic	4.1(2.3)	5.5(1.5)	7.3(1.5)	15.8(2.4)†	8.8(2.5)	L
Other	16.3(6.7)	15.5(3.7)	12.6(2.8)	25.9(4.8)	13.8(2.8)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	L
At Modal Age	16.2(1.8)	17.2(1.2)	14.3( 1.1)*	31.3( 1.6)†*	21.0( 1.6)‡	L
Greater Than Modal Age	7.6(2.8)	7.2(1.0)	8.2( 1.1)	14.9( 2.0)	10.7( 1.4)	N
<b>REGION</b>						
Northeast	18.8(4.8)	12.9(1.4)*	14.0(1.6)*	34.4(3.8)†	24.1(3.6)	L
Southeast	13.6(3.0)	17.2(2.1)	10.3(1.5)	18.2(2.6)	11.5(1.4)	N
Central	9.6(2.3)*	10.2(1.4)*	13.1(2.4)	26.4(2.5)†	20.0(2.3)‡	L
West	10.8(2.9)	12.6(1.8)	11.5(1.9)	21.8(2.6)†*	12.7(1.7)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	7.9(2.8)	6.8(1.7)	5.4(1.8)	10.1(4.2)	6.5(3.0)	N
Grad From H.S.	7.2(1.3)	8.5(1.2)	8.7(1.1)	18.8(1.9)†*	11.9(1.5)‡	L
Some Educ. After H.S.	13.6(4.0)	21.6(3.1)	18.1(3.1)	26.9(3.2)†	18.6(3.6)	N
Grad from College	21.6(3.3)	17.4(1.9)	16.7(1.3)*	33.4(2.2)†*	22.8(1.8)	N
Unknown	4.5(2.1)	4.9(1.9)	4.2(1.2)	7.5(2.6)	3.9(1.4)	N
<b>SCHOOL TYPE</b>						
Public School	10.8(2.1)	12.0(1.0)	10.0(0.9)*	22.8(1.9)†*	15.4(1.3)	L
Non-Public	27.2(7.6)	21.7(4.1)	26.6(3.7)	37.2(3.7)	26.4(5.1)	N
<b>QUARTILES</b>						
Upper	43.7(3.9)	42.4(2.3)	40.0(1.4)*	65.9(2.2)†*	50.5(3.1)	L
Middle Two	4.1(1.7)	5.1(0.8)	4.3(0.8)	16.1(1.9)†*	7.9(1.3)	L
Lower	0.0(0.0)	0.1(0.1)	0.1(0.1)	0.8(0.6)	0.2(0.3)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (‐, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 8

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 350

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	0.1(0.1)	0.2(0.1)	0.6(0.2)†	1.6(0.3)†*	0.6(0.2)‡	L
<b>GENDER</b>						
Male	0.0(0.0)	0.1(0.1)	0.2(0.2)	0.5(0.2)	0.1(0.1)	L
Female	0.2(0.3)	0.4(0.2)	1.1(0.3)	2.7(0.6)†	1.1(0.4)	L
<b>RACE/ETHNICITY</b>						
White	0.1(0.2)	0.3(0.2)	0.8(0.2)	1.9(0.4)†	0.8(0.3)‡	L
Black	0.0(0.0)	0.0(0.1)	0.1(0.1)	0.6(0.7)	0.1(0.2)	N
Hispanic	0.0(0.0)	0.0(0.0)	0.1(0.1)	0.9(0.7)	0.2(0.4)	N
Other	0.0(0.0)	0.5(0.9)	0.7(1.0)	1.8(1.2)	0.3(0.4)	N
<b>MODAL AGE</b>						
Less Than Modal Age	***(***)	***(***)	***(***)	***(***)	***(***)	N
At Modal Age	0.1(0.2)	0.3(0.2)	0.8(0.2)	2.2(0.5)†*	0.9(0.3)‡	L
Greater Than Modal Age	0.0(0.0)	0.1(0.1)	0.3(0.2)	0.7(0.4)	0.2(0.1)‡	L
<b>REGION</b>						
Northeast	0.1(0.2)	0.3(0.3)	1.0(0.5)	3.1(0.7)†	1.1(0.4)‡	L
Southeast	0.2(0.5)	0.3(0.3)	0.5(0.3)	0.8(0.4)	0.2(0.1)	N
Central	0.0(0.0)	0.1(0.1)	0.6(0.4)	1.6(0.7)	0.8(0.4)	L
West	0.0(0.0)	0.2(0.3)	0.4(0.3)	1.2(0.7)	0.4(0.4)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	0.0(0.0)	0.1(0.3)	0.1(0.4)	0.2(0.4)	0.2(0.5)	N
Grad From H.S.	0.0(0.1)	0.0(0.0)	0.3(0.2)	0.6(0.3)	0.3(0.2)	N
Some Educ. After H.S.	0.1(0.2)	0.4(0.4)	1.2(0.6)	2.1(0.9)	0.4(0.6)	N
Grad from College	0.2(0.4)	0.4(0.2)	0.9(0.4)	2.7(0.7)†	1.0(0.3)	L
Unknown	0.0(0.0)	0.1(0.4)	0.2(0.2)	0.0(0.1)	0.2(0.4)	N
<b>SCHOOL TYPE</b>						
Public School	0.0(0.1)	0.2(0.1)	0.5(0.2)	1.4(0.4)†	0.5(0.2)‡	L
Non-Public	0.4(0.5)	0.6(0.5)	1.7(0.7)	3.0(1.3)	1.2(0.9)	N
<b>QUARTILES</b>						
Upper	0.3(0.5)	0.9(0.5)	2.5(0.6)†	6.3(1.0)†*	2.4(0.7)‡	L
Middle Two	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.1(0.2)	0.0(0.0)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 150

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.1)	N
<b>GENDER</b>						
<b>Male</b>	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.1)	99.9(0.1)	N
<b>Female</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>RACE/ETHNICITY</b>						
<b>White</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>Black</b>	99.9(0.2)	100.0(0.0)	99.9(0.3)	99.8(0.3)	100.0(0.1)	N
<b>Hispanic</b>	100.0(0.0)	99.9(0.2)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>Other</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.7(0.7)	N
<b>MODAL AGE</b>						
<b>Less Than Modal Age</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>At Modal Age</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>Greater Than Modal Age</b>	100.0(0.1)	100.0(0.1)	99.9(0.2)	99.9(0.2)	99.9(0.2)	N
<b>REGION</b>						
<b>Northeast</b>	100.0(0.0)	100.0(0.0)	100.0(0.2)	100.0(0.0)	100.0(0.1)	N
<b>Southeast</b>	100.0(0.1)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.1)	N
<b>Central</b>	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	99.9(0.1)	N
<b>West</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	99.9(0.1)	100.0(0.0)	N
<b>PARENTS' EDUCATION LEVEL</b>						
<b>Didn't Finish H.S.</b>	100.0(0.0)	100.0(0.0)	99.9(0.4)	100.0(0.0)	99.9(0.2)	N
<b>Grad From H.S.</b>	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	N
<b>Some Educ. After H.S.</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>Grad from College</b>	100.0(0.0)	100.0(0.0)	100.0(0.1)	99.9(0.1)	100.0(0.0)	N
<b>Unknown</b>	***(***)	99.8(0.5)	100.0(0.0)	100.0(0.0)	99.5(1.2)	N
<b>SCHOOL TYPE</b>						
<b>Public School</b>	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.1)	N
<b>Non-Public</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>QUARTILES</b>						
<b>Upper</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>Middle Two</b>	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
<b>Lower</b>	100.0(0.1)	100.0(0.0)	99.9(0.2)	99.9(0.2)	99.8(0.3)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 200

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	99.5(0.3)	99.7(0.3)	99.1(0.3)	99.5(0.2)	99.0(0.2)	N
<b>GENDER</b>						
Male	99.2(0.4)	99.6(0.6)	98.4(0.6)	99.2(0.4)	98.3(0.4)	N
Female	99.7(0.2)	99.8(0.1)	99.8(0.2)	99.9(0.1)	99.6(0.3)	N
<b>RACE/ETHNICITY</b>						
White	99.9(0.1)	99.8(0.3)	99.5(0.3)	99.8(0.1)	99.6(0.2)	N
Black	98.8(1.0)	99.7(0.5)	97.8(0.8)	98.4(0.8)	97.9(0.7)	N
Hispanic	96.8(1.8)	99.0(0.9)	98.4(1.6)	98.8(1.3)	97.3(1.3)	N
Other	98.8(1.8)	99.8(0.3)	98.3(1.6)	99.3(0.7)	98.1(1.0)	N
<b>MODAL AGE</b>						
Less Than Modal Age	99.9(0.3)	100.0(0.0)	99.6(0.6)	99.9(0.3)	99.4(0.6)	N
At Modal Age	99.9(0.1)	99.9(0.1)*	99.5(0.2)	99.8(0.2)	99.4(0.2)†	L
Greater Than Modal Age	97.8(0.9)	99.0(1.4)	97.6(0.9)	98.7(0.6)	97.8(0.8)	N
<b>REGION</b>						
Northeast	99.2(0.8)	99.9(0.1)	99.5(0.4)	99.5(0.3)	99.3(0.3)	N
Southeast	99.7(0.4)	99.8(0.2)	98.5(0.7)	99.4(0.5)	98.8(0.5)	N
Central	99.8(0.3)	99.5(1.1)	99.2(0.6)	99.8(0.2)	98.9(0.6)	N
West	99.3(0.5)	99.9(0.1)	99.1(0.6)	99.3(0.6)	99.1(0.6)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	99.0(0.8)	99.3(1.6)	97.9(2.1)	99.4(0.5)	98.4(1.0)	N
Grad From H.S.	99.4(0.5)	99.7(0.4)	98.3(0.7)	99.4(0.3)	99.0(0.7)	N
Some Educ. After H.S.	99.9(0.3)	99.8(0.6)	99.7(0.2)	99.6(0.2)	99.5(0.4)	N
Grad from College	99.9(0.1)	100.0(0.0)	99.7(0.3)	99.8(0.2)	99.6(0.3)	N
Unknown	***(***)	97.9(1.5)	96.6(2.4)	95.4(4.6)	92.8(3.1)	N
<b>SCHOOL TYPE</b>						
Public School	99.4(0.3)	99.7(0.3)	99.0(0.4)	99.5(0.2)	98.9(0.3)	N
Non-Public	100.0(0.0)	100.0(0.1)	99.9(0.3)	99.7(0.5)	99.5(0.5)	N
<b>QUARTILES</b>						
Upper	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	100.0(0.0)	N
Middle Two	100.0(0.0)	100.0(0.0)	100.0(0.1)	100.0(0.0)	100.0(0.0)	N
Lower	98.0(1.0)	99.0(1.1)	96.3(1.4)	98.0(0.9)	96.1(0.9)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 250

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	89.4(1.0)*	92.7(1.5)*	84.3(1.3)†	87.4(1.3)	84.5(1.2)‡	L
<b>GENDER</b>						
Male	84.2(1.6)	88.8(2.3)*	77.4(1.9)†	82.6(1.8)	78.9(1.6)‡	L
Female	94.7(1.1)*	96.1(1.3)*	91.4(1.4)	92.9(1.2)	89.9(1.2)‡	L
<b>RACE/ETHNICITY</b>						
White	94.8(1.3)*	95.7(1.4)*	88.6(1.4)†	92.6(0.8)*	89.2(1.0)‡	L
Black	76.4(5.2)	83.4(4.0)	69.5(3.6)	68.3(5.7)	70.8(3.6)	N
Hispanic	62.3(9.2)	81.3(5.1)	76.8(3.6)	77.1(5.5)	74.2(4.1)	N
Other	90.2(4.3)	94.4(2.8)	81.0(5.2)	88.5(3.5)	85.8(3.9)	N
<b>MODAL AGE</b>						
Less Than Modal Age	93.0(1.8)	97.3(1.0)*	91.0(3.2)	91.3(2.5)	88.9(2.5)	N
At Modal Age	93.8(0.9)*	96.7(0.6)†*	88.5(1.6)†	92.5(1.1)	88.7(1.2)‡	L
Greater Than Modal Age	71.8(3.8)	77.4(6.4)	70.4(2.3)	73.5(3.8)	72.4(3.1)	N
<b>REGION</b>						
Northeast	90.2(2.5)	94.9(2.1)	88.9(1.8)	89.3(1.9)	89.2(1.9)	N
Southeast	88.7(2.9)	92.1(1.6)*	78.7(2.5)†	79.9(3.4)	79.5(3.1)‡	L
Central	91.0(2.2)	92.2(2.6)	85.2(2.2)	91.0(1.8)*	83.9(2.1)‡	L
West	87.3(2.0)	91.7(2.2)	84.4(2.3)	89.0(1.9)	85.5(2.4)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	79.6(4.9)	81.4(5.4)	69.8(4.9)	74.7(5.6)	72.0(6.1)	N
Grad From H.S.	86.1(3.6)	90.6(2.4)*	78.8(2.6)	82.3(2.6)	82.1(1.9)	N
Some Educ. After H.S.	94.6(1.9)*	95.3(2.0)*	88.7(1.8)	91.5(2.1)	86.4(2.5)‡	L
Grad from College	95.6(1.5)*	96.6(1.6)*	91.1(1.2)	92.7(1.5)	89.9(1.2)‡	L
Unknown	***(***)	76.5(8.1)	60.9(7.4)	64.4(7.7)	52.4(7.0)	N
<b>SCHOOL TYPE</b>						
Public School	88.5(1.1)*	92.0(1.6)*	83.4(1.3)†	86.8(1.4)	83.8(1.2)‡	L
Non-Public	97.0(1.3)	96.7(2.1)	93.6(3.2)	93.4(2.7)	90.0(3.6)	L
<b>QUARTILES</b>						
Upper	99.9(0.2)	100.0(0.0)	99.9(0.1)	99.9(0.1)	99.9(0.1)	N
Middle Two	98.1(0.6)*	99.3(0.5)*	93.1(1.1)†	96.3(0.8)	93.7(0.9)‡	L
Lower	61.4(3.5)	72.0(5.6)*	51.1(3.3)	57.1(4.0)	50.9(3.1)‡	L

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Long-Term Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 300

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	38.6(2.4)	39.2(1.7)*	36.7(1.1)	35.8(1.9)	33.1(1.5)	L
<b>GENDER</b>						
Male	27.9(1.9)	25.8(2.3)	25.9(1.7)	26.2(1.9)	23.7(2.1)	N
Female	49.5(3.8)	51.0(2.4)*	47.9(2.1)	46.7(2.5)	42.0(2.2)	N
<b>RACE/ETHNICITY</b>						
White	46.3(2.9)	45.6(2.0)	42.5(1.4)	43.3(2.2)	39.3(2.4)	N
Black	16.3(4.4)	16.8(2.8)	18.0(2.4)	9.9(2.7)	15.6(2.6)	N
Hispanic	7.8(4.3)	19.6(6.3)	25.6(3.1)†	19.7(4.3)	20.4(4.2)‡	L
Other	34.7(7.8)	44.2(5.9)	32.0(5.8)	35.8(4.4)	30.9(5.4)	N
<b>MODAL AGE</b>						
Less Than Modal Age	42.8(6.9)	50.4(4.4)	44.1(5.4)	44.7(5.9)	39.4(4.1)	N
At Modal Age	44.9(2.4)	45.8(2.0)*	41.9(1.2)	42.5(2.9)	38.4(1.4)‡	L
Greater Than Modal Age	14.0(3.1)	12.1(3.3)	20.2(2.0)	16.0(2.1)	17.3(3.0)	N
<b>REGION</b>						
Northeast	40.2(4.3)	44.1(3.6)	45.9(2.6)	39.2(3.0)	39.6(2.6)	N
Southeast	33.8(5.8)	35.7(5.0)	30.2(3.0)	25.5(4.4)	25.0(3.2)	N
Central	40.8(3.6)	40.9(4.9)	38.5(3.1)	39.8(3.0)	31.9(2.9)	N
West	38.6(4.3)	36.3(3.3)	33.3(1.9)	38.2(2.8)	35.7(3.5)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	18.1(7.2)	20.9(4.5)	18.3(3.2)	17.1(3.5)	18.1(6.3)	N
Grad From H.S.	30.8(3.3)	28.8(2.5)	27.5(2.5)	24.4(2.5)	25.4(2.2)	N
Some Educ. After H.S.	47.9(5.7)	45.3(4.9)	41.0(3.3)	40.7(3.3)	34.3(2.3)‡	L
Grad from College	50.6(3.9)	50.0(3.6)	47.5(2.6)	46.1(2.3)	41.9(2.1)‡	L
Unknown	***(***)	9.9(4.5)	9.2(4.1)	9.1(5.7)	5.8(3.1)	N
<b>SCHOOL TYPE</b>						
Public School	36.1(2.4)	37.3(1.5)	35.0(0.9)	34.8(2.1)	32.4(1.8)	N
Non-Public	59.2(6.3)*	50.7(5.9)	56.4(7.5)	45.9(6.0)	38.2(4.8)‡	L
<b>QUARTILES</b>						
Upper	86.3(2.4)	88.3(1.8)*	83.6(2.5)	82.3(3.3)	79.2(1.9)‡	L
Middle Two	33.2(3.5)	33.6(2.4)	30.6(1.2)	29.9(2.0)	25.8(2.1)	N
Lower	1.7(1.1)	1.4(0.5)	2.2(0.7)	1.6(0.7)	1.6(1.1)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

# NAEP 1994 Writing Trend Assessment — Grade 11

Average writing scale scores across assessment years

Weighted percentages of observations with average writing scale scores at or above 350

	1984	1988	1990	1992	1994	TREND TESTS
<b>TOTAL</b>	2.1(0.7)	1.1(0.4)*	4.1(0.7)	1.9(0.4)	2.5(0.3)	N
<b>GENDER</b>						
Male	1.1(0.4)	0.3(0.3)	1.7(0.4)	0.7(0.2)	1.2(0.2)	N
Female	3.2(1.5)	1.7(0.6)*	6.5(1.4)	3.1(0.8)	3.8(0.6)	N
<b>RACE/ETHNICITY</b>						
White	2.7(0.9)	1.3(0.5)*	5.0(0.8)	2.4(0.5)	3.3(0.5)	N
Black	0.3(0.4)	0.1(0.2)	0.9(0.4)	0.1(0.2)	0.4(0.5)	N
Hispanic	0.0(0.0)	0.2(0.3)	2.7(1.5)	0.3(0.7)	1.3(1.0)	N
Other	2.3(1.8)	1.2(0.8)	3.5(1.9)	2.7(1.5)	1.9(1.2)	N
<b>MODAL AGE</b>						
Less Than Modal Age	2.9(2.5)	2.0(1.2)	6.6(2.7)	3.3(1.3)	3.7(1.7)	N
At Modal Age	2.6(0.9)	1.2(0.4)*	4.7(0.7)	2.3(0.7)	3.1(0.3)	N
Greater Than Modal Age	0.1(0.4)	0.1(0.2)	1.3(0.5)	0.3(0.4)	0.7(0.6)	N
<b>REGION</b>						
Northeast	2.2(1.3)	1.4(0.6)	6.6(1.8)	1.7(0.7)	3.6(0.9)	N
Southeast	2.1(1.4)	0.8(0.7)	2.7(1.1)	1.0(0.8)	1.4(0.6)	N
Central	2.1(1.2)	1.1(0.9)	4.1(1.0)	2.3(0.7)	2.2(0.8)	N
West	2.2(1.8)	0.9(0.3)	3.2(0.7)	2.3(0.6)	2.9(0.7)	N
<b>PARENTS' EDUCATION LEVEL</b>						
Didn't Finish H.S.	0.4(0.7)	0.2(0.7)	0.2(0.3)	0.5(0.6)	0.7(0.7)	N
Grad From H.S.	0.9(0.9)	0.3(0.2)	1.9(0.5)	0.6(0.3)	1.2(0.6)	N
Some Educ. After H.S.	3.2(1.0)	1.0(0.8)	4.6(1.4)	2.7(1.0)	1.9(0.6)	N
Grad from College	3.6(1.3)	1.9(0.6)	6.5(1.4)	2.6(0.7)	4.1(0.7)	N
Unknown	***(***)	0.0(0.0)	0.6(0.9)	0.3(0.7)	0.0(0.0)	N
<b>SCHOOL TYPE</b>						
Public School	1.9(0.7)	0.9(0.2)*	3.5(0.6)	1.9(0.5)	2.4(0.4)	N
Non-Public	4.5(2.7)	2.1(1.4)	10.7(3.0)	1.9(1.1)	3.3(1.5)	N
<b>QUARTILES</b>						
Upper	8.4(2.7)	4.2(1.5)*	15.5(2.6)	7.1(1.6)	9.8(1.4)	N
Middle Two	0.1(0.2)	0.0(0.0)	0.4(0.2)	0.2(0.2)	0.2(0.1)	N
Lower	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	0.0(0.0)	N

\* Statistically significant difference from 1994, at a 5 percent combined significance level per set of comparisons.

† Statistically significant difference between the earliest year with available data and a subsequent year, at a 5 percent combined significance level per set of comparisons.

These notations (\*, †) indicate statistical significance from a multiple comparison procedure based on the number of assessments with valid data.

# Statistically significant difference between 1994 and the earliest year with available data, at a 5 percent combined significance level per set of comparisons. This notation indicates statistical significance without application of a multiple comparison procedure.

\*\*\* Sample size insufficient to permit a reliable estimate.

L Trend tests for linear terms were significant.

Q Trend tests for quadratic terms were significant.

N Trend tests for linear and quadratic terms were not significant.

The standard errors of the estimated percentages and scale scores appear in parenthesis.

## NAEP 1994 National Writing Trend Assessment — Grade 4

Weighted means, standard deviations, and percentiles of writing distributions  
with jackknifed standard errors

	1984	1988	1990	1992	1994
<b>TOTAL SAMPLE</b>					
<b>Mean</b>	203.8(1.5)	205.7(1.6)	201.7(1.5)	207.1(1.5)	204.8(1.6)
<b>St. Dev.</b>	36.5(1.4)	42.0(0.8)	41.7(0.8)	38.2(0.6)	38.3(0.9)
<b>Percentiles</b>					
<b>5</b>	143.5(3.3)	135.4(3.3)	130.8(1.8)	142.2(1.9)	139.6(2.6)
<b>10</b>	156.8(2.7)	151.3(1.9)	147.2(2.3)	157.3(1.3)	154.7(3.3)
<b>25</b>	179.2(2.1)	177.0(1.6)	174.2(2.1)	181.9(1.4)	179.6(2.3)
<b>50</b>	204.2(2.9)	207.0(2.5)	202.9(1.7)	208.1(2.2)	206.1(1.3)
<b>75</b>	228.7(1.5)	235.0(1.8)	230.8(2.3)	233.2(1.6)	231.5(1.4)
<b>90</b>	250.5(2.2)	259.1(2.1)	254.6(2.1)	255.8(1.8)	253.2(1.3)
<b>95</b>	262.9(2.7)	273.7(2.6)	268.3(2.7)	268.8(2.9)	265.6(2.7)
<b>MALE STUDENTS</b>					
<b>Mean</b>	200.5(2.8)	199.0(2.3)	195.0(1.9)	198.3(1.7)	196.1(1.7)
<b>St. Dev.</b>	36.4(1.6)	41.5(1.0)	41.6(1.1)	37.4(0.8)	37.6(1.2)
<b>Percentiles</b>					
<b>5</b>	140.8(7.2)	129.1(4.3)	124.6(4.0)	135.0(2.3)	132.6(3.3)
<b>10</b>	153.7(4.3)	145.5(3.2)	140.4(3.1)	149.4(2.2)	146.5(2.9)
<b>25</b>	176.7(2.9)	170.7(2.5)	167.8(2.8)	173.7(1.8)	171.4(2.3)
<b>50</b>	200.0(3.1)	199.2(3.8)	195.9(1.9)	199.6(1.9)	197.4(2.1)
<b>75</b>	225.5(3.1)	228.0(2.9)	223.8(1.6)	223.5(2.3)	222.2(1.8)
<b>90</b>	246.3(2.8)	251.5(2.7)	247.7(1.9)	245.6(3.0)	242.9(1.6)
<b>95</b>	260.2(3.4)	265.7(3.5)	262.2(2.5)	258.0(3.0)	255.7(2.4)
<b>FEMALE STUDENTS</b>					
<b>Mean</b>	207.6(3.1)	212.6(2.0)	208.7(2.2)	216.1(1.7)	213.5(2.2)
<b>St. Dev.</b>	36.2(2.3)	41.4(1.2)	40.6(1.1)	36.9(0.9)	36.9(1.3)
<b>Percentiles</b>					
<b>5</b>	146.7(6.1)	143.3(2.2)	139.8(3.6)	153.0(3.1)	150.7(3.7)
<b>10</b>	161.1(5.5)	158.2(3.4)	155.4(3.6)	167.6(1.5)	164.9(5.8)
<b>25</b>	183.5(3.4)	184.9(4.5)	181.8(2.7)	191.7(2.5)	189.1(3.5)
<b>50</b>	208.7(3.0)	213.5(2.5)	209.8(2.9)	217.7(1.7)	214.9(1.7)
<b>75</b>	232.3(3.4)	241.3(1.9)	237.0(2.7)	241.6(1.5)	239.5(2.3)
<b>90</b>	253.7(7.0)	265.4(3.8)	260.2(2.0)	262.9(1.9)	259.7(2.1)
<b>95</b>	265.1(5.5)	279.7(2.5)	273.1(2.7)	275.4(2.9)	272.1(2.9)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 National Writing Trend Assessment — Grade 4

Weighted means, standard deviations, and percentiles of writing distributions  
with jackknifed standard errors (continued)

	1984	1988	1990	1992	1994
<b>WHITE STUDENTS</b>					
<b>Mean</b>	210.7(1.9)	214.9(1.9)	211.0(2.0)	216.7(1.7)	214.4(1.5)
<b>St. Dev.</b>	34.1(1.1)	38.7(1.2)	38.2(0.8)	34.7(0.7)	34.5(0.9)
<b>Percentiles</b>					
5	154.9(3.6)	151.0(4.3)	146.4(3.0)	159.0(2.3)	155.9(4.7)
10	166.6(3.3)	164.6(3.1)	161.6(3.5)	172.1(1.7)	170.2(2.9)
25	187.6(1.5)	188.5(1.8)	185.6(2.9)	193.9(1.9)	191.5(2.2)
50	211.1(2.2)	215.5(1.8)	211.4(1.9)	217.3(2.3)	215.2(1.0)
75	233.2(1.4)	241.6(2.1)	237.3(2.2)	240.4(1.6)	237.8(2.1)
90	255.0(4.5)	264.6(2.6)	260.0(1.6)	260.8(2.2)	258.1(1.4)
95	266.1(3.5)	278.4(3.3)	272.5(2.4)	273.1(2.8)	270.2(2.7)
<b>BLACK STUDENTS</b>					
<b>Mean</b>	181.6( 5.0)	173.3(4.7)	171.4( 5.4)	175.0(3.8)	172.7(3.2)
<b>St. Dev.</b>	34.8( 3.3)	39.4(2.3)	40.3( 1.6)	33.9(1.6)	35.3(1.9)
<b>Percentiles</b>					
5	123.9( 6.5)	108.9(7.6)	104.8( 5.2)	117.2(5.7)	113.5(9.2)
10	134.9( 4.5)	122.3(5.9)	119.5( 6.8)	130.5(4.2)	126.8(4.8)
25	159.5( 4.9)	147.7(5.5)	144.0( 4.9)	152.5(4.5)	149.7(4.9)
50	181.5( 5.5)	172.6(4.6)	172.0( 6.0)	175.7(4.2)	172.9(3.8)
75	205.2 (13.6)	199.7(4.6)	198.5( 7.0)	198.2(3.3)	196.3(4.0)
90	227.9 (10.2)	224.4(6.0)	222.7( 6.5)	217.9(3.6)	217.3(6.4)
95	239.6 (12.0)	237.5(5.8)	239.0(23.2)	229.2(6.4)	231.4(6.4)
<b>HISPANIC STUDENTS</b>					
<b>Mean</b>	188.5( 5.8)	190.3(3.5)	184.1(4.1)	189.4(3.6)	188.5(3.1)
<b>St. Dev.</b>	37.1( 5.3)	39.6(1.7)	38.8(1.9)	35.3(1.6)	35.5(2.0)
<b>Percentiles</b>					
5	130.0(13.1)	125.3(6.0)	120.3(7.5)	132.5(5.1)	131.0(4.9)
10	141.2(12.3)	139.4(6.1)	134.8(7.6)	143.7(5.1)	143.2(5.2)
25	161.9( 8.7)	163.2(5.1)	158.7(7.1)	166.4(3.4)	163.6(4.7)
50	188.2( 6.4)	190.8(5.1)	183.7(5.4)	188.8(4.3)	188.3(4.6)
75	214.2( 8.0)	217.5(4.5)	210.1(3.8)	213.2(5.1)	212.8(4.0)
90	234.5( 6.5)	240.7(4.3)	234.2(4.8)	234.5(5.5)	234.2(5.0)
95	247.3( 7.5)	256.5(4.8)	247.8(5.8)	247.3(3.5)	246.9(5.1)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 National Writing Trend Assessment — Grade 8

Weighted means, standard deviations, and percentiles of writing distributions  
with jackknifed standard errors

	1984	1988	1990	1992	1994
<b>TOTAL SAMPLE</b>					
<b>Mean</b>	266.7(2.0)	263.7(1.3)	256.6(1.2)	274.4(1.3)	265.3(1.3)
<b>St. Dev.</b>	29.5(1.4)	32.4(0.6)	37.5(0.7)	36.3(0.9)	35.9(0.7)
<b>Percentiles</b>					
<b>5</b>	215.7(4.3)	208.6(2.9)	194.6(2.3)	213.7(2.0)	203.9(3.4)
<b>10</b>	227.0(3.7)	221.9(2.6)	207.9(1.9)	227.2(2.9)	218.0(2.5)
<b>25</b>	247.3(3.1)	242.5(1.9)	231.4(1.4)	249.9(1.5)	241.9(2.0)
<b>50</b>	268.3(2.6)	264.1(1.4)	256.7(1.6)	275.0(1.6)	266.4(1.3)
<b>75</b>	287.5(2.1)	285.7(1.2)	281.9(1.7)	299.7(1.7)	289.8(1.5)
<b>90</b>	303.7(1.8)	305.0(1.4)	304.4(1.3)	320.4(1.7)	310.7(1.8)
<b>95</b>	312.9(2.0)	315.7(1.8)	318.4(1.8)	332.4(1.6)	323.4(1.5)
<b>MALE STUDENTS</b>					
<b>Mean</b>	257.5(2.3)	253.7(1.5)	245.6(1.5)	263.6(1.9)	254.0(1.8)
<b>St. Dev.</b>	28.9(1.7)	31.3(0.9)	36.1(1.0)	34.8(1.0)	34.5(1.0)
<b>Percentiles</b>					
<b>5</b>	208.0(4.4)	201.0(3.7)	187.0(1.7)	205.8(3.3)	195.8(3.1)
<b>10</b>	219.7(4.1)	213.0(2.5)	199.3(1.8)	218.7(2.2)	208.3(2.4)
<b>25</b>	237.8(5.7)	233.1(1.6)	220.7(2.2)	240.3(2.6)	230.8(2.8)
<b>50</b>	258.6(3.2)	254.4(1.4)	245.6(1.6)	263.7(2.3)	254.8(2.5)
<b>75</b>	278.0(2.7)	275.0(1.3)	270.0(1.8)	288.2(2.1)	278.4(2.4)
<b>90</b>	293.9(3.0)	293.6(2.1)	291.9(2.8)	307.9(1.8)	297.6(2.1)
<b>95</b>	302.9(2.4)	304.0(3.5)	304.9(2.5)	319.5(2.3)	309.1(1.4)
<b>FEMALE STUDENTS</b>					
<b>Mean</b>	276.2(2.4)	273.5(1.7)	267.9(1.3)	285.0(1.3)	277.7(1.4)
<b>St. Dev.</b>	27.0(1.4)	30.5(0.6)	35.4(1.1)	34.6(1.0)	33.2(0.7)
<b>Percentiles</b>					
<b>5</b>	229.3(4.9)	222.6(3.3)	210.1(2.6)	227.0(4.1)	221.8(4.3)
<b>10</b>	241.5(4.4)	234.3(1.5)	223.1(2.3)	239.9(3.2)	235.1(3.2)
<b>25</b>	258.7(2.7)	253.3(2.4)	244.2(1.5)	261.7(1.6)	255.5(1.5)
<b>50</b>	277.1(3.5)	274.1(2.3)	267.8(1.2)	285.7(2.5)	278.6(1.0)
<b>75</b>	295.7(3.0)	294.4(1.5)	291.7(1.7)	308.9(1.5)	300.5(1.8)
<b>90</b>	309.7(2.4)	312.3(1.2)	313.6(1.8)	328.9(1.3)	320.3(1.6)
<b>95</b>	317.6(3.5)	322.5(2.0)	327.3(2.2)	340.1(3.0)	331.5(2.5)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 National Writing Trend Assessment — Grade 8

Weighted means, standard deviations, and percentiles of writing distributions  
with jackknifed standard errors (continued)

	1984	1988	1990	1992	1994
<b>WHITE STUDENTS</b>					
<b>Mean</b>	271.7(2.1)	269.1(1.3)	262.1(1.6)	279.2(1.3)	272.0(1.4)
<b>St. Dev.</b>	27.5(1.1)	31.1(0.6)	36.4(0.7)	35.1(0.8)	34.1(0.8)
<b>Percentiles</b>					
5	224.4(5.7)	216.5(2.3)	202.1(2.3)	220.4(3.4)	214.0(3.1)
10	235.1(3.2)	229.0(1.4)	215.3(2.9)	234.0(2.6)	228.2(2.1)
25	253.4(2.3)	248.5(1.8)	237.3(1.9)	255.5(1.7)	249.7(1.7)
50	272.7(2.7)	269.9(1.5)	262.5(1.6)	280.1(1.7)	272.8(2.0)
75	291.0(2.3)	290.5(1.3)	286.9(1.8)	303.5(1.9)	295.2(1.5)
90	306.3(2.0)	308.7(1.7)	308.5(1.8)	323.7(2.4)	315.4(2.0)
95	315.0(2.5)	319.1(1.3)	322.5(1.8)	335.4(2.5)	327.2(2.3)
<b>BLACK STUDENTS</b>					
<b>Mean</b>	247.1(5.7)	246.0(3.5)	239.0(2.3)	258.1(4.0)	244.8(3.4)
<b>St. Dev.</b>	27.4(1.7)	31.0(1.1)	35.6(1.9)	36.5(2.2)	33.5(2.0)
<b>Percentiles</b>					
5	200.8(7.2)	193.6(5.2)	181.6(5.7)	200.1(8.1)	189.6(6.2)
10	212.1(6.8)	205.2(6.1)	192.9(4.0)	212.5(7.4)	200.7(4.4)
25	228.5(6.9)	226.0(3.4)	215.6(4.4)	232.2(4.7)	222.0(6.1)
50	247.6(6.7)	246.6(4.3)	239.8(2.4)	257.0(3.6)	245.1(3.8)
75	265.3(3.7)	266.3(3.3)	263.3(2.7)	282.1(4.6)	268.4(4.2)
90	281.3(5.4)	285.2(5.7)	284.5(1.6)	306.3(3.3)	287.7(7.1)
95	291.5(3.6)	295.7(4.4)	297.2(3.1)	318.9(4.7)	300.1(3.7)
<b>HISPANIC STUDENTS</b>					
<b>Mean</b>	246.9( 6.4)	250.4(2.5)	245.7(2.8)	265.0(2.2)	251.5(3.3)
<b>St. Dev.</b>	30.2( 2.9)	31.0(1.6)	36.1(1.7)	35.3(2.5)	35.9(1.6)
<b>Percentiles</b>					
5	197.2(13.9)	199.2(5.9)	186.7(5.4)	203.4(6.4)	192.3(4.9)
10	206.6(11.7)	209.8(7.1)	198.8(3.7)	218.7(5.1)	204.4(3.9)
25	225.0( 7.6)	230.5(5.3)	220.5(3.6)	242.0(5.0)	227.2(5.1)
50	247.2( 7.0)	251.2(2.9)	246.5(4.7)	265.1(2.1)	251.9(3.2)
75	268.4( 4.2)	270.9(2.4)	269.7(5.0)	288.2(4.3)	276.3(3.9)
90	286.1( 5.8)	289.5(2.4)	292.3(3.3)	310.2(3.3)	297.7(6.2)
95	298.1( 7.7)	300.6(5.4)	304.6(3.3)	323.8(3.5)	307.9(5.7)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 National Writing Trend Assessment — Grade 11

Weighted means, standard deviations, and percentiles of writing distributions  
with jackknifed standard errors

	1984	1988	1990	1992	1994
<b>TOTAL SAMPLE</b>					
<b>Mean</b>	289.7(1.6)	291.3(1.3)	287.1(1.0)	287.3(1.4)	284.6(1.2)
<b>St. Dev.</b>	31.8(0.6)	27.9(1.1)	36.5(1.1)	32.0(0.7)	34.4(0.8)
<b>Percentiles</b>					
<b>5</b>	235.7(2.3)	244.4(4.5)	226.7(2.7)	233.2(3.3)	227.2(2.0)
<b>10</b>	248.9(1.7)	255.2(2.4)	240.3(2.4)	245.7(2.1)	240.5(2.1)
<b>25</b>	268.9(1.7)	273.1(1.9)	262.3(1.8)	266.1(1.7)	262.3(1.7)
<b>50</b>	290.9(1.9)	292.4(1.3)	287.7(1.3)	288.2(1.2)	285.3(1.7)
<b>75</b>	312.1(1.7)	310.6(1.2)	311.9(1.4)	309.7(1.7)	308.0(1.5)
<b>90</b>	329.5(2.6)	326.3(1.4)	334.0(1.8)	327.6(1.5)	328.0(1.4)
<b>95</b>	340.0(2.9)	334.8(1.6)	346.6(2.7)	338.1(2.3)	340.3(1.3)
<b>MALE STUDENTS</b>					
<b>Mean</b>	281.1(1.4)	282.2(2.0)	276.4(1.6)	279.4(1.2)	275.9(1.5)
<b>St. Dev.</b>	31.5(0.8)	26.8(1.0)	35.2(0.8)	31.2(1.1)	33.8(1.1)
<b>Percentiles</b>					
<b>5</b>	227.2(3.5)	236.7(4.2)	218.2(2.8)	226.9(3.2)	219.4(3.1)
<b>10</b>	240.7(2.4)	248.2(3.5)	231.3(2.6)	239.0(2.0)	232.9(4.8)
<b>25</b>	260.3(1.4)	264.9(2.4)	252.8(2.0)	258.6(1.7)	254.3(1.7)
<b>50</b>	281.5(1.9)	282.9(2.0)	276.2(1.8)	280.5(1.2)	276.8(2.8)
<b>75</b>	303.0(2.0)	300.6(1.7)	300.9(1.6)	301.3(1.7)	298.6(2.2)
<b>90</b>	320.8(3.2)	316.0(1.9)	321.4(1.6)	318.5(1.6)	318.9(2.0)
<b>95</b>	331.4(2.6)	324.5(2.6)	333.1(1.8)	328.6(2.2)	330.9(1.9)
<b>FEMALE STUDENTS</b>					
<b>Mean</b>	298.6(2.5)	299.3(1.2)	298.2(1.5)	296.4(2.0)	292.8(1.5)
<b>St. Dev.</b>	29.5(1.1)	26.4(1.3)	34.4(1.6)	30.4(0.6)	33.0(0.9)
<b>Percentiles</b>					
<b>5</b>	249.1(4.4)	254.2(3.8)	241.2(4.0)	244.0(1.9)	237.4(2.8)
<b>10</b>	261.4(4.0)	265.4(2.7)	253.0(3.0)	256.6(3.1)	250.1(3.6)
<b>25</b>	279.3(3.1)	282.0(1.8)	274.9(1.6)	276.1(2.2)	271.0(1.6)
<b>50</b>	299.5(2.8)	300.7(1.7)	298.4(1.6)	297.4(2.3)	293.4(2.2)
<b>75</b>	318.9(2.8)	317.8(1.8)	321.8(1.5)	317.6(2.1)	314.9(0.9)
<b>90</b>	335.0(4.1)	331.7(1.7)	342.6(2.6)	334.9(1.8)	334.6(2.4)
<b>95</b>	344.8(4.9)	340.5(1.7)	354.3(4.1)	344.3(2.8)	346.3(2.3)

The standard errors of the estimated scale scores appear in parenthesis.

## NAEP 1994 National Writing Trend Assessment — Grade 11

Weighted means, standard deviations, and percentiles of writing distributions  
with jackknifed standard errors (continued)

	1984	1988	1990	1992	1994
<b>WHITE STUDENTS</b>					
<b>Mean</b>	296.8(1.8)	296.2(1.3)	292.8(1.2)	294.1(1.2)	290.8(1.4)
<b>St. Dev.</b>	28.5(1.0)	26.2(1.2)	35.2(1.2)	29.6(0.9)	32.7(0.8)
<b>Percentiles</b>					
5	249.2(3.8)	252.2(3.7)	234.7(3.4)	243.8(1.2)	237.1(2.5)
10	260.0(2.2)	262.7(2.8)	247.2(2.7)	255.6(2.0)	248.5(1.3)
25	277.0(1.4)	278.9(1.7)	268.9(1.6)	274.8(1.1)	268.9(1.5)
50	297.6(2.0)	297.1(1.2)	293.7(1.1)	295.0(1.3)	291.0(2.2)
75	316.4(2.6)	314.5(1.3)	317.0(1.3)	314.2(1.8)	313.0(1.6)
90	333.0(2.6)	329.3(1.3)	338.2(2.2)	331.4(1.4)	332.7(1.9)
95	343.0(4.0)	337.7(2.8)	349.6(2.8)	341.0(2.5)	344.3(2.1)
<b>BLACK STUDENTS</b>					
<b>Mean</b>	270.3(3.6)	275.2(2.9)	268.2(2.3)	263.2(3.2)	267.3(2.2)
<b>St. Dev.</b>	29.6(2.4)	26.0(1.4)	34.3(1.1)	28.9(1.4)	32.3(1.3)
<b>Percentiles</b>					
5	221.8(8.5)	231.7(6.2)	213.1(5.4)	216.4(5.0)	213.6(7.0)
10	231.8(6.8)	242.8(2.9)	224.7(3.0)	226.3(3.2)	225.6(5.1)
25	251.6(5.5)	257.5(3.3)	244.9(2.3)	244.7(5.8)	246.1(3.4)
50	270.0(3.3)	275.7(3.0)	268.4(3.2)	263.8(3.9)	267.4(2.6)
75	289.6(4.6)	293.8(3.0)	291.4(4.0)	282.6(4.3)	289.0(2.4)
90	308.9(7.8)	308.9(4.9)	311.0(2.3)	300.5(4.1)	308.9(2.1)
95	317.6(5.0)	318.1(3.8)	324.0(4.4)	309.3(5.1)	320.2(3.2)
<b>HISPANIC STUDENTS</b>					
<b>Mean</b>	259.1( 6.6)	273.8(4.4)	276.9( 2.6)	273.6( 3.8)	271.3(4.0)
<b>St. Dev.</b>	30.8( 2.0)	28.1(1.7)	36.2( 2.3)	31.3( 1.5)	34.8(2.2)
<b>Percentiles</b>					
5	207.5(10.8)	228.3(6.2)	217.4( 9.7)	220.4(10.6)	211.5(7.9)
10	216.5( 6.5)	235.9(8.4)	231.5( 4.1)	234.0( 2.7)	224.5(8.3)
25	238.2( 7.5)	256.1(6.2)	252.6( 4.0)	252.4( 6.0)	249.8(6.6)
50	260.3( 8.2)	274.1(3.9)	275.4( 3.2)	275.3( 4.6)	273.3(4.9)
75	281.1( 7.1)	294.3(8.7)	300.8( 6.0)	294.1( 4.9)	294.3(4.0)
90	297.3( 9.8)	309.0(5.6)	324.2( 3.9)	313.7( 3.5)	312.9(3.0)
95	305.7 (16.8)	316.3(5.4)	337.7(15.8)	323.7( 3.1)	326.7(6.8)

The standard errors of the estimated scale scores appear in parenthesis.

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in overall characteristics of papers

	YEAR	Percentiles			
		25th	50th	75th	90th
<b>NUMBER OF WORDS</b>					
<b>Grade 4</b>	<b>1994</b>	18.4	28.2	42.5	56.6
	<b>1992</b>	21.0	29.5	44.6	63.0
	<b>1990</b>	18.4	28.4	43.3	62.7
	<b>1988</b>	19.4	31.6	47.0	64.3
	<b>1984</b>	20.2	30.1	41.4	60.5
<b>Grade 8</b>	<b>1994</b>	43.6	65.4	91.2	121.4
	<b>1992</b>	45.9	66.9	100.7	138.6
	<b>1990</b>	40.7	66.0	100.1	131.7
	<b>1988</b>	45.1	66.6	98.0	125.8
	<b>1984</b>	40.2	58.3	89.2	120.0
<b>Grade 11</b>	<b>1994</b>	68.1	101.6	139.4	175.4
	<b>1992</b>	64.4	94.5	130.8	161.2
	<b>1990</b>	62.5	90.2	123.9	161.9
	<b>1988</b>	64.1	92.4	123.9	158.3
	<b>1984</b>	58.3	84.5	122.8	157.5
<b>WORD LENGTH</b>					
<b>Grade 4</b>	<b>1994</b>	3.8	4.2	4.6	5.2
	<b>1992</b>	3.7	4.0	4.3	4.6
	<b>1990</b>	3.7	4.0	4.3	4.5
	<b>1988</b>	3.7	4.0	4.3	4.5
	<b>1984</b>	3.7	4.0	4.3	4.5
<b>Grade 8</b>	<b>1994</b>	3.8	4.1	4.5	5.0
	<b>1992</b>	3.8	4.1	4.4	4.9
	<b>1990</b>	3.8	4.0	4.3	4.5
	<b>1988</b>	3.8	4.0	4.3	4.5
	<b>1984</b>	3.8	4.1	4.3	4.6
<b>Grade 11</b>	<b>1994</b>	3.9	4.2	4.7	5.2
	<b>1992</b>	3.9	4.2	4.7	5.2
	<b>1990</b>	3.8	4.1	4.5	5.0
	<b>1988</b>	3.8	4.2	4.6	5.1
	<b>1984</b>	3.8	4.2	4.6	5.1
<b>NUMBER OF SENTENCES</b>					
<b>Grade 4</b>	<b>1994</b>	1.1	1.9	3.1	4.4
	<b>1992</b>	1.2	2.1	3.4	5.0
	<b>1990</b>	1.1	2.0	3.6	5.1
	<b>1988</b>	1.3	2.3	3.7	5.0
	<b>1984</b>	1.3	2.2	3.4	4.8
<b>Grade 8</b>	<b>1994</b>	2.6	4.1	6.2	8.3
	<b>1992</b>	2.8	4.4	6.7	9.2
	<b>1990</b>	2.7	4.4	6.4	9.2
	<b>1988</b>	2.7	4.4	6.8	8.8
	<b>1984</b>	2.3	3.9	5.9	8.2
<b>Grade 11</b>	<b>1994</b>	4.0	5.9	8.7	11.1
	<b>1992</b>	3.8	5.8	8.1	10.8
	<b>1990</b>	3.7	5.4	7.6	9.5
	<b>1988</b>	3.8	5.5	7.3	9.7
	<b>1984</b>	3.4	5.2	7.3	9.9

## NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in overall characteristics of papers (continued)

YEAR	Percentiles			
	25th	50th	75th	90th
<b>NUMBER OF WORDS PER SENTENCE</b>				
<b>Grade 4</b>				
1994	10.0	14.1	19.2	27.7
1992	10.1	13.8	19.7	27.5
1990	9.2	12.9	18.7	28.1
1988	9.1	12.5	17.6	26.6
1984	9.5	12.7	18.0	25.5
<b>Grade 8</b>				
1994	12.3	15.2	19.2	24.7
1992	12.4	15.3	19.0	25.5
1990	11.9	15.2	19.3	25.3
1988	12.0	14.5	18.1	24.8
1984	12.5	15.3	19.0	26.5
<b>Grade 11</b>				
1994	13.3	16.1	19.8	24.1
1992	13.3	16.0	19.6	24.9
1990	14.1	16.5	19.8	25.1
1988	14.2	16.9	19.7	24.6
1984	13.9	16.2	20.3	25.5
<b>NUMBER OF ERRORS</b>				
<b>Grade 4</b>				
1994	2.4	4.2	6.9	10.7
1992	2.4	4.4	7.0	11.1
1990	2.2	4.1	6.7	9.4
1988	2.2	4.0	6.8	10.3
1984	2.0	3.8	6.3	10.0
<b>Grade 8</b>				
1994	3.4	6.0	9.6	14.2
1992	3.8	6.2	9.3	13.5
1990	3.2	5.9	9.5	13.5
1988	2.8	5.3	8.4	11.8
1984	2.4	4.4	7.8	12.0
<b>Grade 11</b>				
1994	4.1	6.9	10.3	14.8
1992	3.0	5.1	8.9	12.8
1990	3.5	5.8	9.5	13.4
1988	2.3	4.6	7.2	11.1
1984	2.9	4.8	7.5	11.4
<b>ERROR RATE</b>				
<b>Grade 4</b>				
1994	9.5	15.2	24.2	32.9
1992	8.4	14.4	24.0	32.8
1990	8.1	14.8	22.9	32.9
1988	7.5	13.2	21.0	35.0
1984	7.3	13.4	20.6	30.5
<b>Grade 8</b>				
1994	5.7	9.3	15.1	20.7
1992	5.8	8.8	13.6	18.6
1990	5.5	9.1	13.4	19.2
1988	4.6	8.2	13.5	18.1
1984	4.5	7.5	12.2	17.7
<b>Grade 11</b>				
1994	4.3	6.8	10.9	16.0
1992	3.4	5.8	9.5	15.0
1990	4.2	6.7	9.4	13.4
1988	2.8	4.9	8.1	11.9
1984	3.4	5.9	9.5	13.7

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in overall characteristics of papers (continued)

	YEAR	Percentiles			
		25th	50th	75th	90th
<b>PERCENTAGE RUN-ON SENTENCE</b>					
<b>Grade 4</b>	<b>1994</b>	0.0	0.1	0.5	99.6
	<b>1992</b>	0.0	0.1	0.4	50.4
	<b>1990</b>	0.0	0.2	16.9	99.7
	<b>1988</b>	0.0	0.2	24.7	67.2
	<b>1984</b>	0.0	0.2	20.3	50.3
<b>Grade 8</b>	<b>1994</b>	0.0	0.1	0.4	32.7
	<b>1992</b>	0.0	0.1	0.5	24.9
	<b>1990</b>	0.0	0.2	0.5	33.2
	<b>1988</b>	0.0	0.1	0.4	29.0
	<b>1984</b>	0.0	0.1	0.4	25.1
<b>Grade 11</b>	<b>1994</b>	0.0	0.1	0.4	16.6
	<b>1992</b>	0.0	0.1	0.4	16.8
	<b>1990</b>	0.0	0.1	0.4	17.3
	<b>1988</b>	0.0	0.1	0.4	12.0
	<b>1984</b>	0.0	0.1	0.4	19.9
<b>PERCENTAGE SENTENCE FRAGMENTS</b>					
<b>Grade 4</b>	<b>1994</b>	0.0	0.1	0.4	32.6
	<b>1992</b>	0.0	0.1	0.3	19.8
	<b>1990</b>	0.0	0.1	0.3	17.1
	<b>1988</b>	0.0	0.1	0.4	24.6
	<b>1984</b>	0.0	0.0	0.3	0.5
<b>Grade 8</b>	<b>1994</b>	0.0	0.1	0.4	25.1
	<b>1992</b>	0.0	0.1	0.4	19.6
	<b>1990</b>	0.0	0.1	0.4	17.0
	<b>1988</b>	0.0	0.1	0.4	14.1
	<b>1984</b>	0.0	0.1	0.4	14.1
<b>Grade 11</b>	<b>1994</b>	0.0	0.1	0.4	14.5
	<b>1992</b>	0.0	0.1	0.4	16.9
	<b>1990</b>	0.0	0.1	0.3	10.9
	<b>1988</b>	0.0	0.1	0.4	11.5
	<b>1984</b>	0.0	0.1	0.4	12.5
<b>PERCENTAGE SENTENCES WITH AGREEMENT ERRORS</b>					
<b>Grade 4</b>	<b>1994</b>	0.0	0.1	0.4	49.7
	<b>1992</b>	0.0	0.1	0.4	49.8
	<b>1990</b>	0.0	0.0	0.3	0.5
	<b>1988</b>	0.0	0.0	0.3	0.5
	<b>1984</b>	0.0	0.0	0.3	0.5
<b>Grade 8</b>	<b>1994</b>	0.0	0.3	16.6	33.4
	<b>1992</b>	0.0	0.2	11.0	29.1
	<b>1990</b>	0.0	0.1	0.4	11.8
	<b>1988</b>	0.0	0.1	0.3	8.1
	<b>1984</b>	0.0	0.1	0.3	9.0
<b>Grade 11</b>	<b>1994</b>	0.0	0.2	11.2	25.0
	<b>1992</b>	0.0	0.2	10.9	24.7
	<b>1990</b>	0.0	0.1	0.4	11.3
	<b>1988</b>	0.0	0.0	0.3	0.5
	<b>1984</b>	0.0	0.1	0.3	0.5

## NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in overall characteristics of papers (continued)

YEAR	Percentiles			
	25th	50th	75th	90th
<b>PERCENTAGE AWKWARD SENTENCES</b>				
<b>Grade 4</b>				
1994	0.0	0.3	49.9	99.9
1992	0.0	14.0	50.3	100.0
1990	0.0	20.0	66.9	100.0
1988	0.0	14.4	50.2	99.9
1984	0.0	0.4	49.6	99.8
<b>Grade 8</b>				
1994	0.2	20.4	49.5	67.4
1992	11.4	25.4	49.6	74.7
1990	17.2	33.5	59.9	99.6
1988	12.5	32.9	50.4	99.7
1984	0.3	25.4	49.9	99.6
<b>Grade 11</b>				
1994	0.2	16.6	32.7	50.0
1992	0.4	20.2	39.7	59.9
1990	17.2	33.2	50.5	75.3
1988	0.2	17.1	37.4	60.1
1984	7.8	25.0	49.8	71.5
<b>PERCENTAGE MISSPELLED WORDS</b>				
<b>Grade 4</b>				
1994	2.2	6.8	11.9	19.3
1992	2.9	6.6	13.0	21.5
1990	2.5	6.5	13.9	20.5
1988	2.4	6.4	12.0	22.5
1984	2.2	6.6	12.0	18.1
<b>Grade 8</b>				
1994	0.7	2.9	5.8	9.8
1992	0.9	2.9	5.6	9.5
1990	0.9	2.9	5.5	9.8
1988	0.7	2.8	5.7	9.2
1984	0.4	2.7	5.2	9.0
<b>Grade 11</b>				
1994	0.8	2.1	4.0	6.6
1992	0.4	1.5	3.5	5.9
1990	0.6	1.8	3.6	6.5
1988	0.2	1.3	2.8	4.6
1984	0.4	1.5	3.3	5.9
<b>PERCENTAGE WORD-CHOICE ERRORS</b>				
<b>Grade 4</b>				
1994	0.0	0.2	2.6	5.3
1992	0.0	0.1	0.4	2.8
1990	0.0	0.1	0.4	2.1
1988	0.0	0.1	0.4	2.2
1984	0.0	0.1	0.4	3.0
<b>Grade 8</b>				
1994	0.0	0.3	1.6	2.9
1992	0.0	0.2	0.9	2.2
1990	0.0	0.2	0.8	2.1
1988	0.0	0.2	0.9	2.4
1984	0.0	0.2	0.9	2.4
<b>Grade 11</b>				
1994	0.0	0.4	1.3	2.4
1992	0.0	0.2	0.9	1.7
1990	0.0	0.3	1.0	1.8
1988	0.0	0.2	0.9	2.0
1984	0.0	0.3	1.1	2.0

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in overall characteristics of papers (continued)

	YEAR	Percentiles			
		25th	50th	75th	90th
<b>PERCENTAGE CAPITALIZATION ERRORS</b>					
<b>Grade 4</b>	<b>1994</b>	0.0	0.2	1.7	6.7
	<b>1992</b>	0.0	0.1	0.4	3.9
	<b>1990</b>	0.0	0.1	0.3	1.8
	<b>1988</b>	0.0	0.0	0.3	0.5
	<b>1984</b>	0.0	0.1	0.3	0.5
<b>Grade 8</b>	<b>1994</b>	0.0	0.2	1.1	3.5
	<b>1992</b>	0.0	0.2	0.5	2.6
	<b>1990</b>	0.0	0.1	0.3	0.7
	<b>1988</b>	0.0	0.1	0.3	0.5
	<b>1984</b>	0.0	0.0	0.3	0.5
<b>Grade 11</b>	<b>1994</b>	0.0	0.3	1.1	3.0
	<b>1992</b>	0.0	0.1	0.5	1.7
	<b>1990</b>	0.0	0.0	0.3	0.5
	<b>1988</b>	0.0	0.0	0.3	0.4
	<b>1984</b>	0.0	0.0	0.3	0.4
<b>TOTAL PUNCTUATION ERRORS PER 100 WORDS</b>					
<b>Grade 4</b>	<b>1994</b>	0.0	0.4	3.9	6.7
	<b>1992</b>	0.0	1.5	4.4	7.2
	<b>1990</b>	0.0	1.6	4.5	7.8
	<b>1988</b>	0.0	1.4	4.4	7.8
	<b>1984</b>	0.0	0.5	4.3	7.2
<b>Grade 8</b>	<b>1994</b>	0.3	1.7	3.2	4.9
	<b>1992</b>	0.3	1.6	3.0	4.5
	<b>1990</b>	0.2	1.5	3.0	4.7
	<b>1988</b>	0.1	1.0	2.7	4.6
	<b>1984</b>	0.1	1.2	2.6	4.3
<b>Grade 11</b>	<b>1994</b>	0.3	1.3	2.5	3.6
	<b>1992</b>	0.1	0.9	2.1	3.4
	<b>1990</b>	0.3	1.2	2.3	3.5
	<b>1988</b>	0.3	1.2	2.3	3.8
	<b>1984</b>	0.2	1.1	2.3	4.2
<b>PUNCTUATION OMITTED PER 100 WORDS</b>					
<b>Grade 4</b>	<b>1994</b>	0.0	0.3	3.3	6.1
	<b>1992</b>	0.0	0.4	3.8	6.1
	<b>1990</b>	0.0	0.7	4.4	7.8
	<b>1988</b>	0.0	0.7	4.1	7.4
	<b>1984</b>	0.0	0.4	3.8	6.9
<b>Grade 8</b>	<b>1994</b>	0.1	1.3	2.9	4.5
	<b>1992</b>	0.1	1.1	2.5	4.0
	<b>1990</b>	0.1	1.0	2.5	4.3
	<b>1988</b>	0.0	0.5	2.1	4.0
	<b>1984</b>	0.0	0.5	2.0	3.8
<b>Grade 11</b>	<b>1994</b>	0.2	1.1	2.2	3.3
	<b>1992</b>	0.0	0.6	1.7	2.8
	<b>1990</b>	0.1	0.9	1.9	3.1
	<b>1988</b>	0.1	0.7	1.9	3.1
	<b>1984</b>	0.0	0.6	1.9	3.6

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## **NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11**

Trends in overall characteristics of papers (continued)

YEAR	Percentiles			
	25th	50th	75th	90th
<b>WRONG PUNCTUATION PER 100 WORDS</b>				
<b>Grade 4</b>				
1994	0.0	0.0	0.3	0.5
1992	0.0	0.1	0.4	1.6
1990	0.0	0.0	0.3	0.4
1988	0.0	0.0	0.3	0.5
1984	0.0	0.0	0.3	0.5
<b>Grade 8</b>				
1994	0.0	0.1	0.4	1.1
1992	0.0	0.1	0.4	1.6
1990	0.0	0.1	0.4	1.2
1988	0.0	0.1	0.4	1.5
1984	0.0	0.1	0.5	1.9
<b>Grade 11</b>				
1994	0.0	0.1	0.4	1.2
1992	0.0	0.1	0.4	1.2
1990	0.0	0.1	0.5	1.3
1988	0.0	0.2	0.5	1.5
1984	0.0	0.1	0.4	1.4

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in overall characteristics of papers for good and poor papers

YEAR	Task Accomplishment		Overall Fluency	
	Good Papers (Primary Trait) 3+4	Poor Papers (Primary Trait) 1+2	Good Papers (Holistic) 4,5+6	Poor Papers (Holistic) 1,2+3
<b>NUMBER OF WORDS</b>				
<b>Grade 4</b>				
1994	46.2(1.73)	28.6(0.75)	51.8(1.83)	27.1(0.69)
1992	47.1(1.51)	31.8(0.87)	55.8(1.61)	29.7(0.74)
1990	53.3(2.34)	27.2(0.88)	57.8(2.52)	28.2(0.92)
1988	51.4(4.22)	30.0(1.25)	67.6(5.11)	30.2(0.69)
1984	48.4(2.08)	28.4(0.82)	55.9(2.39)	29.2(0.80)
<b>Grade 8</b>				
1994	08.8(5.86)	66.5(1.72)	00.2(2.94)	56.9(1.71)
1992	08.4(4.88)	73.8(3.00)	17.3(4.18)	62.7(2.46)
1990	26.0(9.70)	68.9(1.75)	08.3(3.53)	55.5(1.67)
1988	09.4(8.01)	69.6(2.53)	99.5(2.70)	55.8(1.86)
1984	91.9(4.25)	63.7(1.88)	04.7(3.50)	54.0(1.67)
<b>Grade 11</b>				
1994	39.1(4.63)	94.5(3.65)	36.2(3.79)	82.0(2.97)
1992	38.4(4.01)	91.9(2.52)	25.9(2.62)	72.4(3.22)
1990	40.3(4.54)	89.0(2.48)	20.7(3.61)	72.5(2.64)
1988	31.9(5.24)	88.6(2.16)	20.1(3.42)	73.1(2.83)
1984	34.5(7.08)	84.0(1.61)	19.7(3.44)	64.4(1.53)
<b>WORD LENGTH</b>				
<b>Grade 4</b>				
1994	4.2(0.03)	4.3(0.02)	4.1(0.03)	4.4(0.02)
1992	4.0(0.04)	4.1(0.02)	4.1(0.03)	4.1(0.02)
1990	4.0(0.02)	4.0(0.03)	4.0(0.03)	4.0(0.02)
1988	4.0(0.03)	4.0(0.03)	4.0(0.03)	4.0(0.03)
1984	4.0(0.03)	4.0(0.03)	3.9(0.03)	4.0(0.02)
<b>Grade 8</b>				
1994	4.3(0.03)	4.3(0.02)	4.3(0.02)	4.3(0.03)
1992	4.2(0.03)	4.2(0.04)	4.2(0.03)	4.2(0.04)
1990	4.2(0.04)	4.1(0.02)	4.1(0.02)	4.1(0.02)
1988	4.2(0.06)	4.1(0.02)	4.1(0.03)	4.1(0.02)
1984	4.2(0.04)	4.1(0.02)	4.2(0.03)	4.1(0.02)
<b>Grade 11</b>				
1994	4.4(0.03)	4.4(0.03)	4.4(0.02)	4.4(0.03)
1992	4.5(0.03)	4.3(0.02)	4.4(0.02)	4.4(0.02)
1990	4.4(0.02)	4.2(0.01)	4.3(0.02)	4.2(0.02)
1988	4.4(0.03)	4.3(0.03)	4.4(0.03)	4.3(0.02)
1984	4.4(0.05)	4.3(0.02)	4.4(0.02)	4.2(0.02)
<b>NUMBER OF SENTENCES</b>				
<b>Grade 4</b>				
1994	3.4(0.22)	2.0(0.07)	3.4(0.19)	2.0(0.08)
1992	3.5(0.17)	2.3(0.08)	4.1(0.19)	2.2(0.08)
1990	3.9(0.19)	2.1(0.08)	4.3(0.25)	2.2(0.08)
1988	3.8(0.28)	2.3(0.15)	5.1(0.32)	2.3(0.10)
1984	3.8(0.26)	2.2(0.08)	4.2(0.31)	2.3(0.09)
<b>Grade 8</b>				
1994	6.8(0.52)	4.4(0.13)	6.6(0.21)	3.7(0.13)
1992	7.2(0.42)	4.8(0.23)	7.8(0.32)	4.0(0.18)
1990	7.8(0.61)	4.6(0.12)	6.8(0.22)	3.8(0.13)
1988	6.4(0.70)	4.8(0.22)	6.8(0.31)	3.8(0.16)
1984	5.9(0.31)	4.2(0.14)	6.8(0.28)	3.5(0.12)
<b>Grade 11</b>				
1994	8.3(0.37)	5.9(0.20)	8.3(0.26)	5.1(0.19)
1992	8.4(0.33)	5.7(0.19)	7.7(0.20)	4.6(0.24)
1990	8.2(0.32)	5.4(0.16)	7.2(0.23)	4.4(0.18)
1988	7.9(0.36)	5.3(0.18)	7.0(0.23)	4.5(0.18)
1984	8.3(0.43)	5.0(0.13)	7.1(0.23)	3.9(0.10)

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in overall characteristics of papers for good and poor papers (continued)

YEAR	Task Accomplishment		Overall Fluency	
	Good Papers (Primary Trait) 3+4	Poor Papers (Primary Trait) 1+2	Good Papers (Holistic) 4,5+6	Poor Papers (Holistic) 1,2+3
<b>NUMBER OF WORDS PER SENTENCE</b>				
<b>Grade 4</b>				
1994	17.5(1.31)	16.3(0.57)	20.3(2.06)	15.7(0.60)
1992	16.2(0.81)	16.3(0.38)	16.8(0.94)	16.2(0.39)
1990	17.9(1.24)	15.4(0.50)	17.3(1.72)	15.7(0.49)
1988	15.9(1.39)	14.9(0.69)	14.6(1.42)	15.3(0.61)
1984	16.0(0.69)	14.7(0.43)	17.2(1.29)	14.6(0.39)
<b>Grade 8</b>				
1994	17.4(0.97)	17.2(0.31)	16.7(0.56)	17.6(0.40)
1992	16.7(1.25)	18.2(0.88)	16.1(0.60)	18.7(1.06)
1990	17.0(0.86)	16.6(0.31)	17.2(0.46)	16.3(0.35)
1988	20.2(2.70)	16.7(0.52)	16.5(0.75)	17.1(0.69)
1984	16.7(0.76)	17.4(0.41)	16.4(0.53)	17.6(0.48)
<b>Grade 11</b>				
1994	18.4(0.70)	17.4(0.63)	17.7(0.46)	17.9(0.87)
1992	17.3(0.52)	17.5(0.44)	17.5(0.46)	17.4(0.63)
1990	18.0(0.58)	17.7(0.31)	17.5(0.24)	18.1(0.49)
1988	17.4(0.46)	18.2(0.57)	18.0(0.38)	18.1(0.72)
1984	16.5(0.34)	18.6(0.55)	18.0(0.54)	18.3(0.63)
<b>NUMBER OF ERRORS</b>				
<b>Grade 4</b>				
1994	6.1(0.40)	5.0(0.21)	7.2(0.58)	4.7(0.18)
1992	6.5(0.49)	5.2(0.22)	6.9(0.44)	5.1(0.23)
1990	7.2(0.70)	4.4(0.23)	7.1(0.66)	4.6(0.26)
1988	5.0(0.62)	5.0(0.34)	6.2(0.68)	4.8(0.33)
1984	5.9(0.38)	4.3(0.18)	6.4(0.52)	4.4(0.19)
<b>Grade 8</b>				
1994	8.0(0.68)	7.2(0.27)	8.3(0.47)	6.8(0.26)
1992	8.3(0.55)	6.9(0.21)	9.1(0.45)	6.3(0.23)
1990	8.3(0.71)	6.8(0.26)	8.9(0.38)	5.8(0.22)
1988	7.0(0.84)	6.1(0.24)	7.2(0.32)	5.6(0.25)
1984	7.6(0.68)	5.3(0.22)	7.6(0.45)	5.0(0.20)
<b>Grade 11</b>				
1994	8.5(0.53)	7.8(0.37)	8.2(0.39)	7.8(0.44)
1992	7.4(0.50)	6.2(0.25)	6.9(0.31)	5.9(0.34)
1990	8.5(0.63)	6.6(0.24)	7.6(0.39)	6.2(0.29)
1988	6.1(0.43)	5.1(0.35)	5.9(0.39)	4.7(0.37)
1984	6.6(0.59)	5.6(0.19)	6.5(0.30)	5.0(0.27)
<b>ERROR RATE</b>				
<b>Grade 4</b>				
1994	13.3(0.76)	19.2(0.81)	14.3(1.06)	19.0(0.79)
1992	14.9(1.03)	17.5(0.64)	12.7(0.77)	18.0(0.56)
1990	13.8(0.78)	18.8(0.98)	12.2(0.93)	18.8(0.93)
1988	9.9(0.59)	20.1(1.71)	9.3(0.73)	18.5(1.63)
1984	12.6(0.69)	16.5(0.74)	11.2(0.82)	16.3(0.72)
<b>Grade 8</b>				
1994	8.0(0.78)	11.3(0.31)	8.6(0.41)	12.2(0.41)
1992	8.2(0.72)	11.1(0.83)	8.3(0.38)	11.7(1.06)
1990	7.1(0.50)	11.0(0.42)	8.5(0.40)	11.9(0.55)
1988	6.6(0.90)	9.8(0.35)	7.6(0.35)	10.9(0.50)
1984	8.7(0.82)	9.2(0.41)	7.2(0.42)	9.9(0.46)
<b>Grade 11</b>				
1994	6.2(0.35)	9.2(0.35)	6.2(0.32)	10.2(0.41)
1992	5.3(0.35)	7.9(0.48)	5.6(0.25)	9.5(0.79)
1990	6.1(0.42)	8.1(0.41)	6.4(0.25)	9.3(0.69)
1988	4.7(0.30)	6.6(0.52)	5.1(0.33)	7.4(0.77)
1984	5.5(0.73)	7.2(0.16)	5.7(0.25)	8.4(0.24)

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in sentence-level errors for good and poor papers

YEAR	Task Accomplishment		Overall Fluency	
	Good Papers (Primary Trait) 3+4	Poor Papers (Primary Trait) 1+2	Good Papers (Holistic) 4,5+6	Poor Papers (Holistic) 1,2+3
<b>PERCENTAGE RUN-ON SENTENCES</b>				
<b>Grade 4</b>				
1994	13.4(3.12)	15.3(1.29)	15.8(3.02)	14.9(1.74)
1992	11.5(2.81)	13.6(1.67)	9.8(2.38)	14.1(1.80)
1990	17.1(2.78)	17.5(2.01)	13.0(2.44)	18.5(1.87)
1988	16.0(4.19)	17.3(2.80)	8.5(3.17)	18.6(2.59)
1984	17.9(2.94)	14.4(1.70)	21.6(3.74)	14.3(1.75)
<b>Grade 8</b>				
1994	7.0(2.07)	7.9(0.94)	4.5(1.08)	9.9(1.31)
1992	3.3(1.02)	8.4(1.02)	4.5(1.29)	9.1(1.18)
1990	6.8(2.50)	10.0(1.01)	7.0(1.19)	11.3(1.30)
1988	7.5(4.48)	7.8(1.30)	6.1(1.50)	8.9(1.88)
1984	4.8(1.57)	7.6(0.99)	4.4(1.07)	8.2(1.18)
<b>Grade 11</b>				
1994	3.4(1.15)	5.7(1.15)	3.6(0.78)	6.7(1.68)
1992	3.5(1.11)	5.5(0.96)	3.8(0.86)	6.6(1.25)
1990	4.5(1.64)	5.6(0.90)	4.0(0.76)	6.9(1.50)
1988	2.0(0.48)	4.4(1.24)	2.8(0.99)	5.1(1.85)
1984	2.9(0.77)	4.9(0.81)	3.3(0.74)	6.1(1.20)
<b>PERCENTAGE FRAGMENTS</b>				
<b>Grade 4</b>				
1994	4.5(1.05)	6.9(0.97)	3.8(0.79)	7.1(1.05)
1992	3.1(0.82)	4.6(0.60)	4.8(1.18)	4.0(0.59)
1990	3.6(0.82)	4.4(0.83)	4.1(1.12)	4.3(0.78)
1988	3.4(1.25)	5.4(1.49)	3.9(1.28)	5.0(1.26)
1984	2.9(0.76)	3.3(0.62)	3.0(1.01)	3.2(0.63)
<b>Grade 8</b>				
1994	5.1(1.55)	5.8(0.79)	3.2(0.54)	6.8(1.00)
1992	5.5(1.71)	4.1(0.74)	5.1(1.02)	4.0(0.90)
1990	1.0(0.51)	3.9(0.44)	2.3(0.39)	4.3(0.61)
1988	0.7(0.54)	3.9(0.58)	2.9(0.61)	4.3(0.79)
1984	6.0(2.23)	2.8(0.46)	4.0(0.69)	3.0(0.58)
<b>Grade 11</b>				
1994	2.1(0.59)	4.7(0.75)	2.3(0.38)	5.2(0.88)
1992	2.8(0.87)	4.5(0.94)	2.6(0.46)	5.8(1.54)
1990	1.3(0.38)	3.0(0.46)	1.9(0.33)	3.6(0.75)
1988	2.2(0.89)	2.7(0.64)	1.7(0.67)	3.5(0.91)
1984	3.9(1.49)	2.8(0.43)	1.9(0.44)	4.2(0.72)
<b>PERCENTAGE SENTENCES WITH AGREEMENT ERRORS</b>				
<b>Grade 4</b>				
1994	11.2(2.55)	9.3(1.38)	15.0(4.00)	8.2(1.25)
1992	7.0(1.57)	12.1(1.41)	6.8(1.74)	12.2(1.46)
1990	3.3(0.96)	3.7(0.75)	3.2(1.15)	3.7(0.68)
1988	0.9(0.49)	3.1(0.71)	1.6(0.95)	2.6(0.60)
1984	4.1(1.45)	3.2(0.63)	4.6(1.58)	3.3(0.81)
<b>Grade 8</b>				
1994	7.0(1.63)	11.4(1.31)	10.0(1.18)	11.8(1.57)
1992	4.4(1.02)	9.0(0.74)	5.2(0.87)	9.6(0.92)
1990	4.1(1.57)	3.5(0.60)	1.8(0.43)	4.5(0.81)
1988	0.9(0.53)	2.6(0.49)	1.6(0.38)	2.9(0.62)
1984	4.7(1.79)	2.9(0.66)	1.9(0.55)	3.6(0.81)
<b>Grade 11</b>				
1994	8.6(1.44)	7.8(1.11)	7.2(1.04)	8.8(1.52)
1992	4.3(0.76)	7.6(0.73)	5.5(0.66)	8.7(1.27)
1990	2.2(0.46)	2.6(0.35)	2.4(0.39)	2.7(0.46)
1988	1.3(0.43)	1.8(0.37)	1.5(0.44)	1.9(0.52)
1984	1.3(0.41)	3.0(0.60)	1.4(0.28)	3.9(0.99)

## NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in sentence-level errors for good and poor papers (continued)

YEAR	Task Accomplishment		Overall Fluency	
	Good Papers (Primary Trait) 3+4	Poor Papers (Primary Trait) 1+2	Good Papers (Holistic) 4,5+6	Poor Papers (Holistic) 1,2+3
<b>PERCENTAGE AWKWARD SENTENCES</b>				
<b>Grade 4</b>				
1994	17.4(2.87)	28.1(2.57)	24.1(4.23)	26.6(2.65)
1992	30.3(3.65)	32.7(2.01)	31.5(4.02)	32.3(2.34)
1990	31.1(3.25)	35.9(2.04)	31.0(3.88)	35.6(2.13)
1988	25.2(3.35)	33.6(3.08)	24.8(2.81)	32.3(2.84)
1984	21.4(3.24)	26.9(2.26)	21.6(4.79)	25.9(2.36)
<b>Grade 8</b>				
1994	20.6(3.11)	28.5(1.21)	20.4(1.49)	31.7(1.69)
1992	27.6(2.92)	32.1(1.46)	28.7(1.75)	32.8(1.64)
1990	35.5(2.98)	40.5(1.61)	38.6(1.41)	40.9(2.17)
1988	36.5(7.21)	38.1(2.06)	29.9(1.99)	42.7(2.51)
1984	22.8(3.45)	33.6(1.78)	20.9(2.02)	36.4(1.90)
<b>Grade 11</b>				
1994	16.2(1.46)	21.4(1.19)	17.5(1.15)	22.2(1.42)
1992	24.3(2.23)	26.8(1.59)	22.4(1.31)	30.6(2.30)
1990	36.7(2.53)	38.1(1.91)	33.3(1.44)	42.5(2.55)
1988	21.1(1.59)	25.0(1.66)	20.8(2.04)	27.9(1.68)
1984	24.8(2.07)	32.6(1.99)	28.0(2.01)	34.6(2.80)

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in word-level errors for good and poor papers

YEAR	Task Accomplishment		Overall Fluency	
	Good Papers (Primary Trait) 3+4	Poor Papers (Primary Trait) 1+2	Good Papers (Holistic) 4,5+6	Poor Papers (Holistic) 1,2+3
<b>PERCENTAGE MISSPELLED WORDS</b>				
<b>Grade 4</b>				
1994	6.6(0.57)	9.1(0.43)	7.5(0.76)	8.8(0.43)
1992	8.3(0.88)	9.0(0.49)	6.6(0.56)	9.5(0.44)
1990	7.5(0.62)	9.6(0.67)	5.9(0.67)	9.8(0.67)
1988	4.8(0.55)	10.8(0.86)	4.9(0.64)	9.8(0.86)
1984	7.0(0.59)	8.9(0.54)	5.9(0.78)	8.8(0.50)
<b>Grade 8</b>				
1994	3.0(0.53)	4.1(0.22)	3.3(0.24)	4.4(0.30)
1992	3.1(0.47)	4.0(0.20)	3.1(0.28)	4.2(0.24)
1990	2.5(0.31)	4.4(0.28)	3.2(0.32)	4.8(0.37)
1988	2.5(0.73)	4.1(0.22)	2.9(0.28)	4.6(0.31)
1984	4.0(0.62)	3.6(0.23)	2.9(0.30)	4.0(0.28)
<b>Grade 11</b>				
1994	2.1(0.19)	3.1(0.20)	2.1(0.17)	3.5(0.23)
1992	1.9(0.24)	2.5(0.19)	1.9(0.16)	3.0(0.28)
1990	1.8(0.20)	3.2(0.38)	2.0(0.13)	3.9(0.65)
1988	1.5(0.17)	2.1(0.21)	1.8(0.21)	2.2(0.28)
1984	2.0(0.47)	2.4(0.12)	1.9(0.15)	2.7(0.21)
<b>PERCENTAGE WORD CHOICE ERRORS</b>				
<b>Grade 4</b>				
1994	1.1(0.16)	1.6(0.15)	1.0(0.22)	1.7(0.14)
1992	0.6(0.14)	0.8(0.09)	0.6(0.12)	0.8(0.09)
1990	0.6(0.13)	0.5(0.10)	0.4(0.09)	0.6(0.10)
1988	0.3(0.07)	0.7(0.11)	0.3(0.13)	0.6(0.10)
1984	0.6(0.17)	0.8(0.12)	0.7(0.24)	0.8(0.11)
<b>Grade 8</b>				
1994	0.7(0.12)	0.9(0.05)	0.7(0.07)	1.0(0.09)
1992	0.6(0.08)	0.6(0.05)	0.4(0.09)	0.7(0.06)
1990	0.4(0.09)	0.6(0.06)	0.6(0.07)	0.6(0.08)
1988	0.4(0.17)	0.7(0.06)	0.6(0.06)	0.7(0.08)
1984	0.7(0.11)	0.7(0.08)	0.6(0.10)	0.7(0.10)
<b>Grade 11</b>				
1994	0.4(0.06)	0.9(0.09)	0.5(0.06)	1.0(0.10)
1992	0.3(0.05)	0.6(0.06)	0.3(0.04)	0.7(0.10)
1990	0.4(0.06)	0.5(0.05)	0.5(0.05)	0.6(0.08)
1988	0.3(0.06)	0.6(0.06)	0.4(0.06)	0.6(0.09)
1984	0.4(0.05)	0.7(0.07)	0.5(0.06)	0.7(0.11)
<b>PERCENTAGE CAPITALIZATION ERRORS</b>				
<b>Grade 4</b>				
1994	1.0(0.32)	2.3(0.34)	0.8(0.12)	2.3(0.33)
1992	0.5(0.12)	1.1(0.10)	0.5(0.12)	1.1(0.10)
1990	0.3(0.09)	0.9(0.17)	0.5(0.16)	0.8(0.16)
1988	0.2(0.08)	0.7(0.37)	0.0(0.01)	0.7(0.32)
1984	0.3(0.11)	0.5(0.14)	0.2(0.13)	0.5(0.12)
<b>Grade 8</b>				
1994	0.5(0.16)	1.1(0.12)	0.7(0.13)	1.2(0.14)
1992	0.6(0.17)	1.1(0.43)	0.4(0.05)	1.3(0.53)
1990	0.2(0.11)	0.3(0.06)	0.1(0.04)	0.4(0.07)
1988	0.2(0.10)	0.2(0.02)	0.1(0.03)	0.2(0.03)
1984	0.2(0.14)	0.3(0.06)	0.2(0.04)	0.3(0.07)
<b>Grade 11</b>				
1994	0.7(0.15)	1.2(0.17)	0.5(0.08)	1.5(0.23)
1992	0.2(0.04)	0.6(0.13)	0.3(0.04)	0.8(0.21)
1990	0.1(0.03)	0.1(0.03)	0.1(0.03)	0.2(0.04)
1988	0.0(0.01)	0.1(0.05)	0.0(0.03)	0.2(0.08)
1984	0.1(0.06)	0.1(0.03)	0.1(0.02)	0.1(0.05)

# NAEP 1994 National Writing Trend Assessment — Grades 4, 8, and 11

Trends in punctuation-level errors for good and poor papers

YEAR	Task Accomplishment		Overall Fluency	
	Good Papers (Primary Trait) 3+4	Poor Papers (Primary Trait) 1+2	Good Papers (Holistic) 4,5+6	Poor Papers (Holistic) 1,2+3
<b>TOTAL PUNCTUATION ERRORS PER 100 WORDS</b>				
<b>Grade 4</b>				
1994	2.2(0.31)	2.3(0.19)	2.3(0.30)	2.3(0.19)
1992	2.4(0.24)	2.6(0.17)	2.1(0.24)	2.7(0.16)
1990	2.4(0.20)	3.4(0.37)	2.5(0.31)	3.3(0.33)
1988	1.7(0.20)	3.7(0.53)	1.3(0.24)	3.5(0.45)
1984	1.8(0.24)	2.9(0.26)	1.7(0.29)	2.8(0.23)
<b>Grade 8</b>				
1994	1.6(0.28)	2.2(0.11)	1.8(0.13)	2.2(0.12)
1992	1.5(0.18)	2.0(0.11)	1.7(0.11)	2.0(0.13)
1990	1.4(0.16)	2.1(0.13)	1.7(0.10)	2.2(0.17)
1988	1.3(0.23)	1.8(0.12)	1.5(0.15)	1.9(0.17)
1984	1.5(0.19)	1.8(0.14)	1.6(0.10)	1.9(0.14)
<b>Grade 11</b>				
1994	1.5(0.16)	1.7(0.08)	1.4(0.10)	1.9(0.12)
1992	1.0(0.12)	1.4(0.10)	1.2(0.09)	1.5(0.16)
1990	1.3(0.18)	1.5(0.07)	1.4(0.09)	1.6(0.10)
1988	1.3(0.15)	1.9(0.36)	1.3(0.08)	2.2(0.55)
1984	0.9(0.14)	1.7(0.10)	1.2(0.09)	2.1(0.24)
<b>PUNCTUATION OMITTED PER 100 WORDS</b>				
<b>Grade 4</b>				
1994	1.9(0.31)	2.0(0.17)	2.1(0.30)	2.0(0.17)
1992	1.9(0.21)	2.2(0.17)	1.7(0.23)	2.3(0.16)
1990	2.3(0.20)	3.2(0.35)	2.3(0.31)	3.1(0.32)
1988	1.6(0.19)	3.5(0.52)	1.3(0.24)	3.3(0.44)
1984	1.6(0.25)	2.6(0.24)	1.5(0.28)	2.5(0.22)
<b>Grade 8</b>				
1994	1.4(0.28)	1.9(0.10)	1.6(0.14)	1.9(0.10)
1992	1.2(0.19)	1.6(0.11)	1.3(0.12)	1.6(0.13)
1990	1.0(0.11)	1.8(0.13)	1.3(0.10)	2.0(0.17)
1988	1.0(0.19)	1.4(0.13)	1.0(0.10)	1.5(0.19)
1984	1.2(0.19)	1.4(0.10)	1.2(0.10)	1.4(0.11)
<b>Grade 11</b>				
1994	1.2(0.15)	1.4(0.08)	1.2(0.09)	1.6(0.12)
1992	0.7(0.10)	1.1(0.08)	0.9(0.07)	1.2(0.13)
1990	1.1(0.14)	1.2(0.07)	1.1(0.08)	1.3(0.08)
1988	1.0(0.13)	1.5(0.37)	1.0(0.08)	1.9(0.56)
1984	0.6(0.10)	1.3(0.09)	0.8(0.07)	1.8(0.23)
<b>WRONG PUNCTUATION PER 100 WORDS</b>				
<b>Grade 4</b>				
1994	0.2(0.07)	0.3(0.08)	0.2(0.07)	0.3(0.08)
1992	0.5(0.10)	0.4(0.08)	0.4(0.08)	0.4(0.07)
1990	0.1(0.05)	0.2(0.04)	0.2(0.06)	0.2(0.04)
1988	0.1(0.04)	0.2(0.05)	0.1(0.04)	0.2(0.04)
1984	0.2(0.06)	0.3(0.09)	0.2(0.09)	0.3(0.08)
<b>Grade 8</b>				
1994	0.1(0.05)	0.3(0.03)	0.2(0.04)	0.3(0.05)
1992	0.2(0.06)	0.4(0.05)	0.3(0.05)	0.4(0.06)
1990	0.3(0.09)	0.3(0.04)	0.4(0.05)	0.2(0.04)
1988	0.2(0.11)	0.4(0.05)	0.4(0.08)	0.4(0.07)
1984	0.4(0.10)	0.5(0.07)	0.4(0.06)	0.5(0.08)
<b>Grade 11</b>				
1994	0.3(0.07)	0.3(0.05)	0.2(0.04)	0.3(0.06)
1992	0.2(0.07)	0.3(0.03)	0.2(0.04)	0.3(0.04)
1990	0.2(0.06)	0.3(0.03)	0.3(0.04)	0.3(0.05)
1988	0.3(0.06)	0.4(0.07)	0.3(0.05)	0.4(0.09)
1984	0.3(0.08)	0.4(0.05)	0.4(0.05)	0.4(0.07)

## NAEP 1994 Writing Trend Assessment — Grade 4

Percentages of students at each score point, means, and standard errors for items scored by primary trait and holistic methods

	<b>Not Rated</b>	<b>Unsatisfactory</b>	<b>Minimal</b>	<b>Adequate</b>	<b>Elaborated</b>	<b>Minimal or Better</b>	<b>Adequate or Better</b>	
<b>PRIMARY TRAIT</b>								
<b>Plants</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	1.4(0.4)	14.7(1.4)	43.8(2.3)	40.0(2.2)		83.9(1.6)		2.22(0.03)
1988	1.3(0.6)	16.0(1.4)	42.5(1.6)	40.2(1.8)		82.7(1.7)		2.22(0.03)
1990	0.8(0.2)	23.3(1.5)*	39.3(1.6)*	36.7(1.7)		75.9(1.5)*		2.12(0.03)
1992	1.0(0.3)	16.1(1.0)	42.7(1.6)	40.2(1.6)		82.9(1.1)		2.22(0.02)
1994	1.1(0.3)	15.4(1.2)	47.5(1.5)	36.1(1.6)		83.6(1.1)		2.19(0.02)
<b>XYZ Company</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	3.8(1.2)	50.1(2.6)	8.6(1.2)	37.5(2.3)		46.1(2.4)		1.80(0.05)
1988	2.8(0.4)	52.8(1.8)	8.7(0.9)	35.6(1.9)		44.3(1.8)		1.77(0.04)
1990	1.7(0.4)	55.4(1.5)	4.4(0.6)*	38.5(1.5)		42.9(1.4)		1.80(0.03)
1992	2.2(0.4)	50.7(1.4)	11.6(0.9)*	35.4(1.4)		47.0(1.4)		1.80(0.03)
1994	2.7(0.6)	52.3(1.5)	7.4(0.7)	37.5(1.6)		45.0(1.5)		1.80(0.03)
<b>Spaceship</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	6.9(1.1)	30.0(1.8)	43.1(2.2)	19.7(1.4)	0.3(0.2)	63.1(2.2)	20.0(1.4)	1.77(0.04)
1988	5.2(0.6)	33.2(1.3)	36.7(1.6)	23.7(1.7)	1.2(0.4)*	61.6(1.1)	24.9(1.7)	1.82(0.02)
1990	2.8(0.5)	31.1(1.6)	42.1(1.6)	23.3(1.4)	0.6(0.2)	66.1(1.5)	24.0(1.4)	1.88(0.03)
1992	4.7(0.5)	31.4(1.2)	43.9(1.3)	19.6(1.3)	0.4(0.2)	63.9(1.2)	20.0(1.3)	1.80(0.02)
1994	3.9(0.6)	33.8(1.4)	41.2(1.3)	20.9(1.3)	0.2(0.1)	62.3(1.6)	21.1(1.3)	1.80(0.03)
<b>Radio Station</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	6.9(1.0)*	50.0(1.9)	31.7(2.2)	11.3(1.6)	0.1(0.1)	43.1(2.0)	11.4(1.6)	1.48(0.03)
1988	4.8(0.7)	46.6(1.4)	33.5(1.3)	15.1(1.2)	0.0(0.0)	48.6(1.6)	15.1(1.2)	1.59(0.03)
1990	2.3(0.5)	49.7(1.8)	35.1(1.6)	12.6(1.0)	0.2(0.2)	47.9(1.8)	12.8(1.1)	1.59(0.03)
1992	3.9(0.5)	45.6(1.5)	32.8(1.2)	17.4(1.0)	0.3(0.2)	50.5(1.5)	17.7(1.0)	1.65(0.02)
1994	3.4(0.5)	49.5(1.9)	31.3(1.6)	15.8(1.5)	0.0(0.0)	47.1(2.0)	15.8(1.5)	1.60(0.03)
<b>Appleby House</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	4.3(1.1)	28.7(2.1)*	50.8(2.2)*	16.2(1.3)	0.0(0.0)	67.0(2.5)*	16.2(1.3)	1.79(0.04)*
1988	2.2(0.6)	24.6(1.3)	49.5(1.4)*	23.7(1.7)*	0.0(0.0)	73.2(1.1)	23.7(1.7)*	1.95(0.02)
1990	1.8(0.5)	22.4(1.3)	63.9(1.7)	11.7(1.1)*	0.2(0.1)	75.7(1.3)	11.8(1.1)*	1.86(0.02)
1992	1.7(0.4)	22.8(1.3)	53.0(2.0)*	22.4(1.7)*	0.1(0.1)	75.5(1.3)	22.5(1.7)*	1.97(0.02)
1994	2.0(0.5)	21.7(1.4)	59.1(1.3)	17.2(1.2)	0.1(0.1)	76.4(1.5)	17.2(1.2)	1.92(0.03)
<b>Flashlight</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	0.9(0.3)	35.9(2.3)*	54.6(2.0)	8.5(1.5)*	0.1(0.2)	63.2(2.4)*	8.6(1.5)	1.71(0.03)*
1988	1.7(0.6)	33.2(2.5)	50.9(2.5)	13.8(2.0)	0.4(0.4)	65.1(2.7)	14.3(2.0)	1.78(0.04)
1990	2.1(0.7)	32.3(2.6)	53.8(2.5)	11.2(1.4)	0.6(0.3)	65.6(2.6)	11.8(1.5)	1.76(0.04)*
1992	0.8(0.4)	28.7(1.7)	58.3(1.7)	11.9(1.2)	0.3(0.1)	70.5(1.7)	12.2(1.2)	1.82(0.02)
1994	0.5(0.3)	26.9(1.7)	58.1(2.2)	14.5(1.3)	0.0(0.0)	72.6(1.9)	14.5(1.3)	1.87(0.03)
<b>HOLISTIC</b>								
<b>Spaceship</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>Mean</b>
1984	4.6(0.8)	13.3(1.7)*	26.1(1.9)	44.5(1.7)	10.8(1.4)*	0.7(0.4)*	0.0(0.0)	11.4(1.4)*
1988	5.9(0.7)	11.0(0.9)*	27.2(1.1)	43.9(1.3)	10.6(1.3)*	1.0(0.3)	0.3(0.2)	11.9(1.4)*
1990	5.5(0.6)	10.3(1.0)*	23.0(1.4)	42.6(1.6)	16.8(1.3)	1.7(0.4)	0.1(0.1)	18.6(1.5)
1992	7.4(0.8)	5.9(0.8)	22.3(1.3)	45.3(1.4)	17.6(1.2)	1.3(0.3)	0.2(0.1)	19.0(1.3)
1994	7.3(0.8)	7.0(1.0)	23.5(1.3)	42.2(1.7)	17.6(1.3)	2.3(0.5)	0.2(0.1)	20.1(1.4)
<b>Flashlight</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>Mean</b>
1984	6.1(1.1)	7.4(1.1)	25.1(2.2)	37.7(1.7)	18.5(1.6)	3.9(1.1)	1.3(0.4)	23.6(2.1)
1988	4.1(1.0)	6.2(1.1)	23.7(1.3)	41.4(2.4)	19.7(2.3)	4.3(1.2)	0.6(0.4)	24.6(2.5)
1990	3.2(0.7)	8.2(1.3)	22.8(2.2)	37.0(2.2)	21.5(1.5)	5.5(0.9)	1.8(0.5)	28.8(2.0)*
1992	4.7(0.7)	4.8(1.0)	23.2(1.6)	39.2(2.0)	20.3(1.5)	6.5(0.9)	1.3(0.5)	28.1(1.6)
1994	4.6(0.9)	6.9(1.2)	22.8(1.8)	42.7(2.5)	18.6(1.5)	3.8(0.8)	0.5(0.3)	23.0(1.5)

\* Significant difference from the 1994 result.  
The standard errors appear in parenthesis.

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Percentages of students at each score point, means, and standard errors for items scored by primary trait and holistic methods

	Not Rated	Unsatisfactory	Minimal	Adequate	Elaborated	Minimal or Better	Adequate or Better	
<b>PRIMARY TRAIT</b>								
<b>Recreation Opportunity</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	2.2(0.7)	47.6(2.5)	40.5(2.6)	9.6(1.4)	0.2(0.2)	50.2(2.7)	9.7(1.4)	1.58(0.04)
1988	3.1(0.6)*	52.3(1.7)	37.4(1.2)	7.2(0.9)*	0.1(0.1)	44.6(1.7)	7.2(0.9)	1.49(0.02)
1990	1.3(0.4)	59.4(1.9)*	30.2(1.6)*	8.5(0.9)	0.6(0.2)	39.3(1.9)	9.1(1.0)	1.48(0.03)
1992	1.2(0.4)	50.4(1.9)	33.8(1.5)	13.8(1.1)*	0.8(0.4)	48.4(1.9)	14.5(1.1)	1.63(0.03)
1994	1.4(0.3)	51.7(1.5)	36.2(1.4)	10.2(0.9)	0.5(0.2)	46.8(1.5)	10.7(0.8)	1.57(0.02)
<b>Food on the Frontier</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	0.8(0.4)	19.2(1.8)	71.3(1.7)*	8.5(1.4)	0.2(0.1)	80.0(1.9)	8.7(1.4)	1.88(0.03)
1988	0.6(0.3)	20.9(1.7)	65.7(1.8)	12.5(1.3)	0.3(0.1)	78.5(1.7)	12.8(1.3)	1.91(0.03)
1990	1.4(0.4)	30.1(1.2)*	52.3(1.3)*	15.7(1.1)*	0.4(0.2)	68.5(1.2)*	16.1(1.1)*	1.84(0.02)
1992	0.4(0.2)*	21.1(1.4)	64.8(1.3)	13.1(1.1)	0.6(0.2)	78.4(1.4)	13.6(1.1)	1.92(0.02)
1994	1.9(0.5)	22.0(1.6)	63.9(1.9)	12.0(0.8)	0.2(0.1)	76.1(1.8)	12.2(0.9)	1.87(0.02)
<b>Dissecting Frogs</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	1.0(0.4)	14.4(1.4)*	73.9(1.8)*	10.4(1.2)*	0.2(0.2)	84.6(1.4)*	10.6(1.2)*	1.94(0.02)
1988	0.8(0.2)	16.9(1.7)	65.9(1.9)	15.9(1.1)	0.4(0.2)	82.2(1.7)	16.3(1.1)	1.98(0.02)
1990	1.2(0.3)*	23.7(1.2)	63.3(1.3)	11.2(0.9)*	0.6(0.2)	75.1(1.2)*	11.8(0.9)*	1.86(0.02)*
1992	0.9(0.2)	11.6(1.1)*	67.2(1.6)*	19.1(1.7)	1.2(0.4)	87.5(1.1)*	20.4(1.8)	2.08(0.03)*
1994	0.4(0.2)	19.9(1.4)	61.9(1.6)	17.4(1.5)	0.4(0.2)	79.7(1.5)	17.8(1.5)	1.98(0.03)
<b>XYZ Company</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	0.0(0.0)	15.7(1.4)*	11.9(1.5)*	72.5(1.9)		84.3(1.4)*		2.57(0.03)
1988	0.3(0.2)	21.4(1.4)	7.5(0.8)	70.7(1.4)		78.3(1.4)		2.49(0.03)
1990	0.3(0.1)	22.6(1.4)	7.1(0.6)	70.1(1.4)		77.2(1.4)		2.47(0.03)
1992	0.2(0.1)	21.4(1.4)	6.1(0.7)	72.3(1.6)		78.4(1.4)		2.51(0.03)
1994	0.2(0.1)	20.1(1.2)	6.7(0.6)	73.1(1.4)		79.8(1.3)		2.53(0.03)
<b>Radio Station</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	0.2(0.2)	27.2(1.7)	41.8(1.8)	30.2(1.9)	0.6(0.2)	72.6(1.7)	30.7(1.9)	2.04(0.03)
1988	0.6(0.2)	33.4(1.5)	40.8(1.6)	24.8(1.0)	0.4(0.2)	66.1(1.5)	25.3(1.0)*	1.91(0.02)*
1990	0.7(0.3)	34.1(1.5)*	40.7(1.3)	23.5(1.3)*	1.1(0.3)	65.2(1.5)*	24.5(1.3)*	1.90(0.03)*
1992	0.8(0.2)	27.5(1.5)	40.2(1.8)	30.0(1.5)	1.4(0.4)	71.6(1.6)	31.4(1.4)	2.04(0.03)
1994	0.4(0.2)	29.0(1.4)	41.2(1.6)	28.3(1.3)	1.1(0.3)	70.6(1.4)	29.4(1.3)	2.01(0.02)
<b>Appleby House</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	0.4(0.3)	9.6(1.5)	44.2(2.4)	44.3(2.4)	1.6(0.5)	90.0(1.5)	45.8(2.4)	2.37(0.03)
1988	0.3(0.2)	10.2(1.1)*	40.9(1.8)*	47.4(1.6)	1.3(0.3)	89.5(1.1)*	48.7(1.6)	2.39(0.02)
1990	0.4(0.2)	9.0(0.8)*	51.3(1.5)	36.9(1.5)	2.4(0.5)*	90.6(0.8)*	39.3(1.5)	2.32(0.02)
1992	0.3(0.2)	7.9(0.8)	33.1(1.5)*	57.3(1.5)*	1.3(0.3)	91.8(0.8)	58.6(1.4)*	2.51(0.02)*
1994	0.2(0.1)	6.7(0.7)	49.7(1.9)	42.8(2.1)	0.7(0.3)	93.2(0.7)	43.5(2.2)	2.37(0.03)

### HOLISTIC

	(0)	(1)	(2)	(3)	(4)	(5)	(6)	(4,5,6)	Mean
<b>Recreation Opportunity</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(4,5,6)</b>	<b>Mean</b>
1984	6.2(1.2)	7.5(0.9)	13.9(1.4)	48.4(3.0)	21.0(2.0)*	2.9(0.8)	0.1(0.1)	24.1(2.2)*	2.80(0.05)
1988	1.7(0.4)*	6.6(0.8)	12.8(0.9)	42.9(1.7)	30.3(1.3)	4.8(0.9)	0.8(0.3)	36.0(1.6)	3.11(0.04)
1990	4.3(0.6)	6.0(0.7)	15.1(1.0)	40.9(1.3)	28.4(1.2)	4.2(0.5)	1.0(0.2)	33.7(1.4)	3.00(0.04)
1992	3.6(0.6)	4.8(0.7)	16.7(1.1)	47.8(1.9)	23.6(1.5)	3.0(0.5)*	0.6(0.3)	27.2(1.7)*	2.94(0.04)
1994	5.0(0.9)	5.1(0.8)	13.2(1.0)	43.5(1.5)	27.6(1.1)	5.0(0.7)	0.6(0.2)	33.2(1.2)	3.01(0.04)
<b>Food on the Frontier</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(4,5,6)</b>	<b>Mean</b>
1984	5.5(1.1)	3.3(0.7)	20.7(1.5)	36.2(1.9)	23.1(1.9)	9.3(1.2)	1.9(0.6)	34.3(2.2)	3.04(0.06)
1988	2.8(0.7)	4.4(0.9)	21.5(1.4)	39.5(1.4)	24.0(1.6)	6.4(0.8)	1.4(0.4)	31.8(2.0)	3.02(0.05)
1990	3.7(0.5)	4.3(0.6)*	25.1(1.4)*	36.7(1.5)	22.3(1.6)*	6.6(0.7)	1.4(0.3)	30.3(1.8)*	2.95(0.04)
1992	4.4(0.8)	2.4(0.4)	16.4(1.4)	41.1(1.5)	24.4(1.2)	8.3(1.0)	2.9(0.4)	35.7(1.7)	3.16(0.05)
1994	5.3(0.8)	2.1(0.5)	18.9(1.1)	37.6(1.3)	27.2(1.0)	6.8(0.7)	2.2(0.6)	36.1(1.3)	3.08(0.04)

\* Significant difference from the 1994 result.  
The standard errors appear in parenthesis.

## NAEP 1994 Writing Trend Assessment — Grade 11

Percentages of students at each score point, means, and standard errors for items scored by primary trait and holistic methods

	Not Rated	Unsatisfactory	Minimal	Adequate	Elaborated	Minimal or Better	Adequate or Better	
<b>PRIMARY TRAIT</b>								
<b>Recreation Opportunity</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	0.6(0.4)	26.0(2.4)*	56.8(3.0)*	16.3(2.2)	0.3(0.3)*	73.5(2.5)*	16.6(2.0)*	1.90(0.04)
1988	2.9(0.4)*	29.3(1.6)	47.3(1.5)*	19.7(1.7)	0.8(0.2)	67.8(1.6)	20.5(1.7)	1.86(0.03)
1990	1.3(0.4)	33.0(1.7)	45.2(1.7)	19.5(1.1)	0.9(0.3)	65.7(1.9)	20.4(1.1)	1.86(0.03)
1992	1.3(0.4)	31.6(1.5)	52.4(1.3)*	14.5(1.1)*	0.2(0.1)*	67.1(1.6)	14.7(1.1)*	1.81(0.03)
1994	1.4(0.4)	34.7(1.7)	40.4(1.4)	21.6(1.5)	2.0(0.5)	63.9(1.7)	23.5(1.5)	1.88(0.03)
<b>Food on the Frontier</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	1.6(0.7)	13.6(1.5)	71.4(1.7)*	12.8(1.3)*	0.6(0.4)	84.8(1.6)	13.4(1.3)*	1.97(0.03)
1988	1.5(0.4)	8.7(1.2)*	75.7(1.6)*	13.7(1.1)*	0.5(0.2)	89.9(1.2)*	14.2(1.2)*	2.03(0.02)
1990	1.1(0.3)	17.3(1.3)	63.1(1.4)	17.8(1.1)	0.7(0.2)	81.6(1.3)	18.5(1.2)	2.00(0.02)
1992	1.2(0.3)	13.9(1.0)	68.0(1.3)*	16.1(1.0)*	0.7(0.2)	84.8(1.1)	16.8(1.1)*	2.01(0.02)
1994	2.0(0.5)	17.3(1.3)	59.0(1.9)	20.1(1.3)	1.6(0.5)	80.7(1.4)	21.7(1.4)	2.02(0.02)
<b>Space Program</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	5.8(1.1)	14.6(1.8)*	54.7(2.4)*	23.6(1.8)*	1.3(0.4)	79.6(2.2)	24.8(1.8)*	2.00(0.04)
1988	3.2(0.5)	17.5(1.5)	51.5(2.0)*	26.9(1.6)	1.0(0.3)*	79.4(1.6)	27.9(1.6)	2.05(0.03)
1990	4.4(0.5)	13.6(1.0)*	54.3(1.3)*	26.5(1.3)	1.2(0.3)	81.9(1.0)*	27.6(1.3)	2.06(0.02)
1992	3.1(0.5)	14.3(1.3)*	55.7(1.7)*	25.6(1.4)	1.3(0.3)	82.6(1.4)*	26.9(1.4)	2.08(0.03)
1994	4.2(0.7)	20.0(1.2)	44.6(1.6)	28.9(1.1)	2.3(0.4)	75.8(1.5)	31.2(1.3)	2.05(0.03)
<b>Job Application</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	1.4(0.4)	14.4(1.7)	16.2(2.0)	65.4(2.1)	2.7(0.6)	84.3(1.6)	68.0(2.1)	2.54(0.03)
1988	1.3(0.4)	12.8(0.8)*	17.5(1.4)	64.4(1.9)	4.1(0.9)	85.9(1.0)	68.4(1.7)	2.57(0.03)
1990	1.3(0.3)	14.4(1.1)	16.8(1.3)	66.6(1.2)*	1.0(0.3)*	84.3(1.2)	67.5(1.2)	2.52(0.02)
1992	0.3(0.2)	16.9(1.3)	11.4(0.9)*	70.9(1.4)*	0.6(0.2)*	82.8(1.3)	71.5(1.4)*	2.55(0.03)
1994	0.5(0.2)	16.4(1.2)	19.3(1.5)	60.5(2.0)	3.3(0.5)	83.1(1.2)	63.8(1.9)	2.50(0.03)
<b>Appleby House</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	1.6(0.5)	10.0(1.3)	35.8(2.0)	50.5(1.7)	2.1(0.7)	88.3(1.3)	52.6(1.9)	2.41(0.03)
1988	0.8(0.3)	8.9(1.1)	37.0(1.8)	52.0(2.1)	1.3(0.4)	90.3(1.2)	53.3(2.2)	2.44(0.03)
1990	0.8(0.3)	8.7(0.9)	40.1(1.7)	48.8(1.7)	1.6(0.4)	90.5(0.9)	50.4(1.7)	2.42(0.02)
1992	1.0(0.4)	9.5(1.0)	36.4(1.8)	50.9(2.1)	2.1(0.5)	89.4(1.0)	53.0(1.9)	2.44(0.03)
1994	1.2(0.4)	10.3(1.0)	25.4(1.8)	59.6(1.9)	3.5(0.7)	88.5(1.2)	63.1(2.0)	2.54(0.03)
<b>Bike Lane</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(2,3,4)</b>	<b>(3,4)</b>	<b>Mean</b>
1984	1.7(0.5)	30.7(1.8)*	42.7(2.7)	24.3(2.1)*	0.6(0.3)	67.6(1.7)*	24.9(2.1)*	1.91(0.03)*
1988	0.9(0.4)	29.7(2.1)*	48.1(2.0)*	21.0(1.5)*	0.3(0.1)*	69.4(2.1)*	21.4(1.5)*	1.90(0.03)*
1990	1.1(0.3)	35.1(1.2)*	43.7(1.2)*	18.9(0.9)*	1.3(0.4)	63.9(1.2)*	20.2(1.0)*	1.84(0.02)*
1992	1.7(0.4)	33.7(1.4)*	43.1(1.5)*	19.8(1.3)*	1.7(0.4)	64.6(1.4)*	21.5(1.4)*	1.86(0.02)*
1994	1.5(0.5)	48.2(1.7)	37.0(1.4)	11.2(1.2)	2.0(0.5)	50.2(1.7)	13.3(1.4)	1.64(0.03)

### HOLISTIC

<b>Food on the Frontier</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(4,5,6)</b>	<b>Mean</b>
1984	5.5(0.8)	2.4(0.6)	16.0(1.9)	35.4(1.9)	31.6(2.2)	8.8(1.2)	0.4(0.2)*	40.7(2.4)	3.13(0.06)
1988	2.4(0.5)	3.1(0.5)	16.4(1.3)	40.9(1.7)	27.8(1.9)	8.1(0.9)*	1.3(0.3)*	37.2(2.1)	3.18(0.04)
1990	3.7(0.7)	2.1(0.5)	14.9(1.3)	39.8(1.4)	28.3(1.4)	9.4(0.9)	1.8(0.4)	39.5(1.7)	3.22(0.04)
1992	3.0(0.5)	2.4(0.5)	16.8(1.2)	35.7(1.4)	26.3(1.4)	12.2(1.2)	3.6(0.6)	42.1(2.1)	3.31(0.05)
1994	4.4(0.7)	3.3(0.8)	15.3(1.2)	35.7(1.6)	26.1(1.4)	12.3(1.1)	2.9(0.5)	41.3(1.7)	3.24(0.05)
<b>Recreation Opportunity</b>	<b>(0)</b>	<b>(1)</b>	<b>(2)</b>	<b>(3)</b>	<b>(4)</b>	<b>(5)</b>	<b>(6)</b>	<b>(4,5,6)</b>	<b>mean</b>
1984	3.1(0.8)	1.8(0.6)	9.5(1.4)	32.0(1.8)*	43.0(2.0)*	8.9(1.6)	1.6(0.6)	53.6(2.0)*	3.43(0.05)
1988	1.0(0.3)*	2.9(0.8)	10.5(0.9)	35.4(1.7)*	39.4(1.6)	9.3(1.1)	1.5(0.3)	50.2(1.7)*	3.43(0.03)
1990	3.8(0.6)	2.9(0.6)	8.1(0.9)	32.5(1.4)*	41.0(1.4)*	9.6(0.8)*	2.0(0.6)	52.6(1.7)*	3.41(0.04)
1992	3.9(0.7)	1.8(0.4)	8.7(0.8)	34.4(1.4)*	41.0(1.3)*	9.1(0.7)*	1.1(0.3)	51.3(1.6)*	3.39(0.04)
1994	4.5(0.8)	2.1(0.5)	10.9(0.9)	41.4(1.6)	33.7(2.1)	5.9(0.9)	1.5(0.4)	41.1(2.0)	3.21(0.05)

\* Significant difference from the 1994 result.

The standard errors appear in parenthesis.

