

Appendix table 7-4

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Correct answers to scientific terms and concept questions, by three factual knowledge-of-science scales and respondent characteristic: 1995–2006

(Percent)

Characteristic	1995 (n = 2,006)	1997 (n = 2,000)	1999 (n = 1,882)	2001 (n = 1,574)	2004 (n = 2,025)	2006 (n = 1,864)
Knowledge scale 1						
All adults	56	56	57	60	NA ^a	59
Sex						
Male.....	61	62	62	65	NA ^a	65
Female.....	51	50	53	55	NA ^a	55
Formal education						
<High school.....	41	41	42	43	NA ^a	40
High school graduate	55	56	57	58	NA ^a	57
Baccalaureate	63	70	73	76	NA ^a	70
Graduate/professional	73	76	78	78	NA ^a	78
Science/mathematics education ^b						
Low.....	47	47	48	50	NA ^a	51
Middle.....	62	59	64	65	NA ^a	64
High	76	77	77	79	NA ^a	77
Family income (quartile)						
Top	NA	NA	NA	NA	NA ^a	67
Second	NA	NA	NA	NA	NA ^a	64
Third	NA	NA	NA	NA	NA ^a	59
Bottom	NA	NA	NA	NA	NA ^a	52
Age (years)						
18–24	60	59	62	61	NA ^a	63
25–34	61	59	60	64	NA ^a	59
35–44	59	61	61	63	NA ^a	62
45–54	57	57	59	64	NA ^a	62
55–64	48	52	53	57	NA ^a	60
65+.....	45	43	44	48	NA ^a	49
Minor children at home						
Yes.....	59	57	57	61	NA ^a	59
No.....	54	55	57	59	NA ^a	60
Knowledge scale 2						
All adults	57	57	58	61	58	60
Sex						
Male.....	62	62	63	65	63	64
Female.....	52	52	54	56	54	56
Formal education						
<High school.....	42	42	44	44	40	41
High school graduate	56	56	58	59	55	58
Baccalaureate	64	71	73	76	68	70
Graduate/professional	73	77	78	79	75	77
Science/mathematics education ^b						
Low.....	48	48	49	51	48	52
Middle.....	62	59	64	66	63	64
High	76	78	77	79	74	77
Family income (quartile)						
Top	NA	NA	NA	NA	68	68
Second	NA	NA	NA	NA	61	64
Third	NA	NA	NA	NA	55	59
Bottom	NA	NA	NA	NA	49	53
Age (years)						
18–24	60	58	62	62	63	62
25–34	61	60	61	64	61	59
35–44	59	62	62	64	62	62
45–54	59	58	60	64	60	63
55–64	50	54	55	58	57	61
65+.....	47	44	47	50	47	50
Minor children at home						
Yes.....	59	58	58	62	60	59
No.....	55	56	58	60	56	60

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(Percent)

Characteristic	1995 (n = 2,006)	1997 (n = 2,000)	1999 (n = 1,882)	2001 (n = 1,574)	2004 (n = 2,025)	2006 (n = 1,864)
Knowledge scale 3						
All adults	53	53	56	58	56	NA ^c
Sex						
Male.....	58	59	60	63	61	NA ^c
Female.....	49	49	51	54	52	NA ^c
Formal education						
<High school.....	39	39	41	41	37	NA ^c
High school graduate	52	53	55	56	53	NA ^c
Baccalaureate.....	61	69	71	74	66	NA ^c
Graduate/professional	71	74	77	77	73	NA
Science/mathematics education^b						
Low.....	45	45	46	48	46	NA ^c
Middle.....	59	56	61	64	61	NA ^c
High.....	74	76	76	78	72	NA ^c
Family income (quartile)						
Top	NA	NA	NA	NA	66	NA ^c
Second	NA	NA	NA	NA	59	NA ^c
Third	NA	NA	NA	NA	52	NA ^c
Bottom.....	NA	NA	NA	NA	46	NA ^c
Age (years)						
18–24.....	57	56	59	60	62	NA ^c
25–34.....	58	57	59	62	60	NA ^c
35–44.....	56	58	59	61	60	NA ^c
45–54.....	56	55	57	62	57	NA ^c
55–64.....	46	50	52	55	54	NA ^c
65+.....	43	41	43	47	44	NA ^c
Minor children at home						
Yes.....	56	55	56	60	58	NA ^c
No.....	52	53	55	57	54	NA ^c

NA = not available

^aNot all questions for knowledge scale 1 asked in 2004.^bLow = ≤5 high school and college science/math courses; middle = 6–8 courses; high = ≥9 courses.^cNot all questions for knowledge scale 3 asked in 2006.

NOTES: Table includes all years for which data collected. Factual knowledge of science scales 1, 2, and 3 include responses to:

- *The center of the Earth is very hot.* (True)
- *All radioactivity is man-made.* (False)
- *It is the father's gene that decides whether the baby is a boy or a girl.* (True)
- *Lasers work by focusing sound waves.* (False)
- *Electrons are smaller than atoms.* (True)
- *Antibiotics kill viruses as well as bacteria.* (False)
- *The universe began with a huge explosion.* (True)
- *The continents on which we live have been moving their location for millions of years and will continue to move in the future.* (True)
- *Human beings, as we know them today, developed from earlier species of animals.* (True)
- *Does the Earth go around the Sun, or does the Sun go around the Earth?* (Earth around Sun)

Knowledge scale 1 also includes responses to: *How long does it take for the Earth to go around the sun?* (One year); asked only if respondent answered correctly that Earth goes around Sun.

Knowledge scale 3 also includes responses to a question on meaning of DNA. Knowledge scale 2 does not include either of these two questions.

SOURCES: National Science Foundation, Division of Science Resources Statistics, Survey of Public Attitudes Toward and Understanding of Science and Technology (1995–2001); University of Michigan, Survey of Consumer Attitudes (2004); and University of Chicago, National Opinion Research Center, General Social Survey (2006).