

Table 131.—Average science proficiency, by age and by selected characteristics of students: 1970 to 1996

Selected characteristics of students	1970	1973	1977	1982	1986	1990	1992	1994	1996
1	2	3	4	5	6	7	8	9	10
9-year-olds ¹									
Total	225 (1.2)	220 (1.2)	220 (1.2)	221 (1.8)	224 (1.2)	229 (0.8)	231 (1.0)	231 (1.2)	230 (1.2)
Male	228 (1.3)	223 (1.3)	222 (1.3)	221 (2.3)	227 (1.4)	230 (1.1)	235 (1.2)	232 (1.3)	231 (1.7)
Female	223 (1.2)	218 (1.2)	218 (1.2)	221 (2.0)	221 (1.4)	227 (1.0)	227 (1.0)	230 (1.4)	228 (1.5)
Race/ethnicity									
White, non-Hispanic	236 (0.9)	231 (0.9)	230 (0.9)	229 (1.9)	232 (1.2)	238 (0.8)	239 (1.0)	240 (1.3)	239 (1.4)
Black, non-Hispanic	179 (1.9)	177 (1.9)	175 (1.8)	187 (3.0)	196 (1.9)	196 (2.0)	200 (2.7)	201 (1.7)	202 (3.0)
Hispanic	— —	— —	192 (2.7)	189 (4.2)	199 (3.1)	206 (2.2)	205 (2.8)	201 (2.7)	207 (2.8)
Parental education									
Not high school graduate	— —	— —	199 (2.2)	198 (6.0)	204 (2.9)	210 (2.7)	217 (2.6)	211 (3.4)	210 (2.9)
Graduated high school	— —	— —	223 (1.4)	218 (3.3)	220 (1.5)	226 (1.7)	222 (1.9)	225 (1.4)	222 (2.3)
Some college	— —	— —	237 (1.5)	229 (3.2)	236 (2.6)	238 (2.1)	237 (2.4)	239 (2.8)	242 (2.9)
Graduated college	— —	— —	232 (1.4)	231 (2.3)	235 (1.4)	236 (1.3)	239 (1.2)	239 (1.4)	240 (1.6)
Type of school									
Public	— —	— —	218 (1.4)	220 (2.0)	223 (1.4)	228 (0.9)	229 (1.0)	230 (1.4)	228 (1.3)
Private	— —	— —	235 (2.2)	232 (3.2)	233 (2.9)	237 (2.4)	240 (2.7)	242 (2.8)	238 (4.1)
Region									
Northeast	230 (2.9)	222 (2.9)	224 (1.6)	222 (2.9)	228 (3.5)	231 (2.4)	234 (2.8)	235 (2.5)	234 (2.6)
Southeast	206 (1.6)	207 (1.6)	205 (2.9)	214 (3.6)	219 (3.1)	220 (1.9)	223 (1.7)	227 (2.2)	224 (3.4)
Central	233 (3.0)	228 (3.0)	225 (2.2)	226 (3.5)	228 (2.2)	234 (1.7)	238 (1.8)	236 (2.7)	234 (2.4)
West	226 (2.2)	221 (2.2)	221 (2.2)	220 (4.1)	222 (3.2)	230 (1.8)	227 (2.2)	226 (2.7)	228 (1.9)
13-year-olds ¹									
Total	255 (1.1)	250 (1.1)	247 (1.1)	250 (1.3)	251 (1.4)	255 (0.9)	258 (0.8)	257 (1.0)	256 (1.0)
Male	257 (1.3)	252 (1.3)	251 (1.3)	256 (1.5)	256 (1.6)	259 (1.1)	260 (1.2)	259 (1.2)	260 (1.0)
Female	253 (1.2)	247 (1.2)	244 (1.2)	245 (1.3)	247 (1.5)	252 (1.1)	256 (1.0)	254 (1.2)	252 (1.3)
Race/ethnicity									
White, non-Hispanic	263 (0.8)	259 (0.8)	256 (0.8)	257 (1.1)	259 (1.4)	264 (0.9)	267 (1.0)	267 (1.0)	266 (1.1)
Black, non-Hispanic	215 (2.4)	205 (2.4)	208 (2.4)	217 (1.3)	222 (2.5)	226 (3.1)	224 (2.7)	224 (4.2)	226 (2.1)
Hispanic	— —	— —	213 (1.9)	226 (3.9)	226 (3.1)	232 (2.6)	238 (2.6)	232 (2.4)	232 (2.5)
Parental education									
Not high school graduate	— —	— —	224 (1.3)	225 (1.9)	229 (2.7)	233 (2.1)	234 (2.9)	234 (2.5)	230 (3.1)
Graduated high school	— —	— —	245 (1.1)	243 (1.3)	245 (1.4)	247 (1.3)	246 (1.4)	247 (1.2)	248 (1.7)
Some college	— —	— —	260 (1.3)	259 (1.5)	258 (1.4)	263 (1.2)	266 (1.1)	260 (2.0)	261 (1.4)
Graduated college	— —	— —	266 (1.0)	264 (1.5)	264 (1.9)	268 (1.1)	269 (1.0)	269 (1.3)	266 (1.2)
Type of school									
Public	— —	— —	245 (1.2)	249 (1.4)	251 (1.4)	254 (1.1)	257 (1.0)	255 (1.1)	254 (1.1)
Private	— —	— —	268 (2.1)	264 (3.2)	263 (6.4)	269 (1.8)	265 (2.4)	268 (2.6)	268 (5.0)
Region									
Northeast	261 (2.2)	256 (2.2)	255 (2.3)	254 (2.1)	258 (3.1)	257 (2.7)	257 (2.2)	263 (1.7)	255 (3.0)
Southeast	239 (2.4)	237 (2.4)	235 (1.8)	239 (2.3)	247 (2.2)	251 (1.9)	254 (2.8)	253 (2.6)	251 (2.7)
Central	262 (1.8)	256 (1.8)	254 (1.8)	254 (2.6)	249 (5.3)	260 (2.8)	263 (2.1)	261 (3.5)	266 (1.8)
West	255 (1.8)	248 (1.8)	243 (2.3)	252 (2.8)	252 (2.7)	253 (2.1)	258 (1.6)	252 (2.1)	254 (1.8)
17-year-olds ¹									
Total	305 (1.0)	296 (1.0)	290 (1.0)	283 (1.2)	289 (1.4)	290 (1.1)	294 (1.3)	294 (1.6)	296 (1.2)
Male	314 (1.2)	304 (1.2)	297 (1.2)	292 (1.4)	295 (1.9)	296 (1.3)	299 (1.7)	300 (2.0)	300 (1.6)
Female	297 (1.1)	288 (1.1)	282 (1.1)	275 (1.3)	282 (1.5)	285 (1.6)	289 (1.5)	289 (1.7)	292 (1.4)
Race/ethnicity									
White, non-Hispanic	312 (0.8)	304 (0.8)	298 (0.7)	293 (1.0)	298 (1.7)	301 (1.1)	304 (1.3)	306 (1.5)	307 (1.2)
Black, non-Hispanic	258 (1.5)	250 (1.5)	240 (1.5)	235 (1.7)	253 (2.9)	253 (4.5)	256 (3.2)	257 (3.1)	260 (2.4)
Hispanic	— —	— —	262 (2.2)	249 (2.3)	259 (3.8)	262 (4.4)	270 (5.6)	261 (6.7)	269 (3.3)
Parental education									
Not high school graduate	— —	— —	265 (1.3)	259 (2.4)	258 (3.1)	261 (2.8)	262 (3.8)	256 (4.2)	259 (4.0)
Graduated high school	— —	— —	284 (0.8)	275 (1.6)	277 (2.0)	276 (1.4)	280 (2.4)	279 (1.7)	282 (2.5)
Some college	— —	— —	296 (1.1)	290 (1.7)	295 (2.5)	297 (1.6)	296 (1.7)	295 (1.9)	297 (1.9)
Graduated college	— —	— —	309 (1.0)	300 (1.7)	304 (2.1)	306 (1.7)	308 (1.3)	311 (1.6)	308 (1.5)
Type of school									
Public	— —	— —	288 (1.0)	282 (1.1)	287 (1.6)	289 (1.1)	292 (1.3)	292 (1.5)	295 (1.2)
Private	— —	— —	308 (2.4)	292 (2.9)	321 (10.1)	308 (6.6)	312 (3.7)	310 (4.8)	304 (5.5)
Region									
Northeast	308 (2.5)	298 (2.5)	296 (2.2)	284 (2.0)	292 (4.3)	293 (3.2)	300 (2.4)	299 (4.2)	296 (3.3)
Southeast	287 (2.3)	283 (2.3)	276 (1.9)	276 (2.7)	284 (2.0)	284 (2.4)	283 (2.5)	288 (2.8)	288 (3.1)
Central	308 (1.9)	300 (1.9)	294 (1.5)	289 (2.6)	294 (2.3)	300 (3.0)	304 (2.7)	298 (3.7)	307 (2.6)
West	308 (1.7)	295 (1.7)	287 (1.5)	281 (2.7)	283 (3.8)	286 (2.3)	290 (3.8)	292 (4.1)	292 (2.4)

¹ Excludes persons not enrolled in school.
—Data not available.

NOTE.—These test scores are from the National Assessment of Educational Progress (NAEP). Performers at the 150 level know some general scientific facts of the type that could be learned from everyday experiences. Performers at the 200 level are developing some understanding of simple scientific principles, particularly in the life sciences. Performers at the 250 level can interpret data from simple tables and make inferences about the outcomes of experimental procedures. They exhibit knowledge and understanding of the life sciences and also demonstrate some knowledge of basic information from the physical sciences. Performers at the 300 level can evaluate the appropriateness of the design of an experiment and have the skill to apply their scientific knowledge in interpret-

ing information from text and graphs. These students also exhibit a growing understanding of principles from the physical sciences. Performers at the 350 level can infer relationships and draw conclusions using detailed scientific knowledge from the physical sciences, particularly chemistry. They also can apply basic principles of genetics and interpret the societal implications of research in this field. Scale ranges from 0 to 500. Standard errors appear in parentheses.

SOURCE: U.S. Department of Education, National Center for Education Statistics, National Assessment of Educational Progress, *NAEP 1996 Trends in Academic Progress* (addendum), prepared by Educational Testing Service. (This table was prepared September 1998.)