

CHAPTER 1

Elementary and Secondary Mathematics and Science Education

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APPENDIX TABLE 1-1

Average scores of students in grades 4, 8, and 12 on the main NAEP mathematics assessment, by student characteristics: 1990–2015

(Average score)

Student grade and characteristic	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015
All students in grade 4	213	220	224	226	235	238	240	240	241	242	240
Sex											
Male	214	221	224	227	236	239	241	241	241	242	241
Female	213	219	223	224	233	237	239	239	240	241	239
Race or ethnicity ^a											
White	220	227	232	234	243	246	248	248	249	250	248
Black	188	193	198	203	216	220	222	222	224	224	224
Hispanic ^b	200	202	207	208	222	226	227	227	229	231	230
Asian or Pacific Islander	225	231	229	s	246	251	253	255	256	258	257
American Indian or Alaska Native	s	s	217	208	223	226	228	225	225	227	227
More than one race	s	s	s	224	237	241	241	243	245	245	245
Socioeconomic status ^c											
Eligible for free or reduced-price lunch	NA	NA	207	208	222	225	227	227	229	230	229
Not eligible for free or reduced-price lunch	NA	NA	232	235	244	248	249	250	252	254	253
Student disability status ^d											
Has a disability	s	s	204	198	214	219	220	221	218	218	218
Does not have a disability	s	s	225	228	237	240	242	242	244	245	244
English language learner status ^d											
English language learner	s	s	201	199	214	216	217	218	219	219	218
Not English language learner	s	s	225	227	237	240	242	242	243	244	243
Percentiles											
10th percentile	171	177	182	184	197	200	202	202	203	203	202
25th percentile	193	199	203	205	216	220	222	221	222	222	221
50th percentile	214	221	225	227	236	239	242	241	242	243	242

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Student grade and characteristic	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015
75th percentile	235	242	245	248	255	258	260	260	261	262	261
90th percentile	253	259	262	265	270	273	275	275	276	278	277
All students in grade 8	263	268	270	273	278	279	281	283	284	285	282
Sex											
Male	263	268	271	274	278	280	282	284	284	285	282
Female	262	269	269	272	277	278	280	282	283	284	282
Race or ethnicity ^a											
White	270	277	281	284	288	289	291	293	293	294	292
Black	237	237	240	244	252	255	260	261	262	263	260
Hispanic ^b	246	249	251	253	259	262	265	266	270	272	270
Asian or Pacific Islander	275	290	s	288	291	295	297	301	303	306	306
American Indian or Alaska Native	s	s	s	259	263	264	264	266	265	269	267
More than one race	s	260	s	270	280	280	285	286	288	288	285
Parents' highest education											
Did not finish high school	242	249	250	253	257	259	263	265	265	267	265
Graduated from high school	255	257	260	261	267	267	270	270	271	270	268
Some education after high school	267	271	277	277	280	280	283	284	285	285	282
Graduated from college	274	281	281	286	288	290	292	295	295	296	294
Unknown	241	252	252	254	259	260	263	264	265	266	263
Socioeconomic status ^c											
Eligible for free or reduced-price lunch	NA	NA	250	253	259	262	265	266	269	270	268
Not eligible for free or reduced-price lunch	NA	NA	277	283	287	288	291	294	296	297	296
Student disability status ^d											
Has a disability	s	s	231	230	242	245	246	249	250	249	247
Does not have a disability	s	s	273	276	282	283	285	287	288	289	287
English language learner status ^d											
English language learner	s	s	226	234	242	244	246	243	244	246	246

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Student grade and characteristic	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015
Not English language learner	s	s	272	274	279	281	283	285	286	287	284
Percentiles											
10th percentile	215	221	221	223	230	231	235	236	237	237	235
25th percentile	239	243	245	249	254	255	258	259	260	261	258
50th percentile	264	269	273	275	279	280	283	284	285	286	283
75th percentile	288	294	297	300	303	304	306	308	309	310	308
90th percentile	307	315	316	320	323	324	327	329	329	331	329
All students in grade 12	NA	NA	NA	NA	NA	150	NA	153	NA	153	152
Sex											
Male	NA	NA	NA	NA	NA	151	NA	155	NA	155	153
Female	NA	NA	NA	NA	NA	149	NA	152	NA	152	150
Race or ethnicity ^a											
White	NA	NA	NA	NA	NA	157	NA	161	NA	162	160
Black	NA	NA	NA	NA	NA	127	NA	131	NA	132	130
Hispanic ^b	NA	NA	NA	NA	NA	133	NA	138	NA	141	139
Asian or Pacific Islander	NA	NA	NA	NA	NA	163	NA	175	NA	172	170
American Indian or Alaska Native	NA	NA	NA	NA	NA	134	NA	144	NA	142	138
More than one race	NA	NA	NA	NA	NA	142	NA	158	NA	155	157
Parents' highest education											
Did not finish high school	NA	NA	NA	NA	NA	130	NA	135	NA	137	133
Graduated from high school	NA	NA	NA	NA	NA	138	NA	142	NA	139	139
Some education after high school	NA	NA	NA	NA	NA	148	NA	150	NA	152	149
Graduated from college	NA	NA	NA	NA	NA	161	NA	164	NA	164	163
Unknown	NA	NA	NA	NA	NA	123	NA	129	NA	127	125
Socioeconomic status ^c											
Eligible for free or reduced-price lunch	NA	NA	NA	NA	NA	132	NA	137	NA	139	137
Not eligible for free or reduced-price lunch	NA	NA	NA	NA	NA	155	NA	160	NA	162	160

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Student grade and characteristic	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015
Student disability status ^d											
Has a disability	NA	NA	NA	NA	NA	114	NA	120	NA	119	118
Does not have a disability	NA	NA	NA	NA	NA	153	NA	156	NA	157	155
English language learner status ^d											
English language learner	NA	NA	NA	NA	NA	120	NA	117	NA	109	115
Not English language learner	NA	NA	NA	NA	NA	151	NA	154	NA	155	153
Percentiles											
10th percentile	NA	NA	NA	NA	NA	105	NA	110	NA	111	107
25th percentile	NA	NA	NA	NA	NA	127	NA	130	NA	131	128
50th percentile	NA	NA	NA	NA	NA	151	NA	154	NA	154	152
75th percentile	NA	NA	NA	NA	NA	174	NA	177	NA	177	175
90th percentile	NA	NA	NA	NA	NA	194	NA	197	NA	197	196

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

^a Other racial and ethnic groups are included in the rows for All students in grade 4, All students in grade 8, and All students in grade 12 but are not shown separately in the table.

^b Hispanic may be any race. American Indian or Alaska Native, Asian or Pacific Islander, black, white, and more than one race refer to individuals who are not of Hispanic origin.

^c NAEP uses eligibility for the federal National School Lunch Program (NSLP) as a measure of socioeconomic status. NSLP is a federally assisted meal program that provides low-cost or free lunches to eligible students. It is often referred to as the free or reduced-price lunch program. Information on students' eligibility for free or reduced-price lunch was first collected in 1996.

^d From 1996 on, students with a disability and English language learners were allowed to use testing accommodation (e.g., extended time, one-on-one testing, bilingual dictionary). More information about testing accommodation is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

Note(s)

Main NAEP mathematics assessment scores range from 0 to 500 for grades 4 and 8 and from 0 to 300 for grade 12. From 1996 on, data shown here are for students allowed to use testing accommodations. Grade 12 mathematics data are presented from 2005, 2009, 2013, and 2015 only because the mathematics framework was substantially revised in 2005, making prior assessment results not comparable with those in or after 2005. Mathematics assessment was not conducted in 2007 and 2011 for grade 12.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of main NAEP 1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, and 2015 mathematics assessments, National Center for Education Statistics.



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 APPENDIX TABLE 1-2 
Students in grades 4, 8, and 12 scoring at or above the main NAEP's proficient level in mathematics for their grade, by student grade and characteristics: 1990–2015

(Percent)

Student grade and characteristic	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015
All students in grade 4	12.7	17.9	20.8	23.8	32.5	36.3	39.4	39.1	40.5	41.8	40.0
Sex											
Male	13.2	19.5	21.5	25.9	34.9	38.4	41.5	40.9	41.8	43.0	41.7
Female	12.2	16.2	20.0	21.6	29.9	34.2	37.3	37.2	39.1	40.6	38.3
Race or ethnicity ^a											
White	15.9	22.4	27.0	31.3	42.9	47.2	50.9	50.7	52.1	53.7	50.8
Black	1.1	2.5	3.1	4.7	9.9	12.8	15.4	15.9	17.4	18.2	18.6
Hispanic ^b	4.8	5.6	7.2	7.2	15.6	19.5	22.0	21.6	23.9	26.4	26.2
Asian or Pacific Islander	22.4	27.7	27.2	s	48.3	54.6	58.4	60.3	62.1	63.5	62.2
American Indian or Alaska Native	s	s	10.1	8.2	16.8	20.9	24.8	21.2	22.4	23.5	23.0
More than one race	s	s	s	15.9	32.9	40.0	39.6	42.4	45.1	45.7	44.9
Socioeconomic status ^c											
Eligible for free or reduced-price lunch	NA	NA	7.5	7.6	15.2	19.1	21.5	21.7	23.9	25.5	24.4
Not eligible for free or reduced-price lunch	NA	NA	27.5	32.0	44.7	49.4	52.8	53.9	56.7	59.2	57.8
Student disability status ^d											
Has a disability	s	s	5.1	6.4	12.6	16.0	19.3	19.1	17.1	17.8	16.4
Does not have a disability	s	s	22.1	25.5	34.8	38.8	41.8	41.6	43.4	45.1	43.5
English language learner status ^d											
English language learner	s	s	4.2	3.8	9.3	11.4	12.9	12.0	13.8	14.1	14.5
Not English language learner	s	s	21.6	25.0	34.7	38.7	42.2	41.9	43.6	44.9	43.1
All students in grade 8	15.3	20.9	23.3	25.7	28.8	29.8	32.2	33.9	34.7	35.5	33.1
Sex											
Male	16.8	21.3	24.7	27.4	30.3	31.1	34.2	35.6	35.7	36.3	33.6
Female	13.7	20.6	21.8	23.9	27.1	28.4	30.2	32.1	33.7	34.7	32.7

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Student grade and characteristic	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015
Race or ethnicity ^a											
White	18.2	26.0	30.2	33.8	37.5	38.6	41.8	43.6	44.4	45.1	42.7
Black	4.7	2.5	3.8	5.2	7.3	8.7	11.0	12.3	13.3	14.3	12.5
Hispanic ^b	7.0	6.8	7.8	8.4	11.7	13.4	15.4	17.2	20.3	21.1	19.3
Asian or Pacific Islander	28.9	43.3	s	40.6	43.0	47.3	49.6	53.8	55.3	59.8	58.7
American Indian or Alaska Native	s	s	s	9.8	14.6	13.9	16.3	18.2	17.1	21.1	19.6
More than one race	s	10.7	s	21.5	29.1	30.3	34.8	36.7	39.2	38.0	35.9
Parents' highest education											
Did not finish high school	3.3	6.2	7.0	7.6	9.0	10.9	12.2	14.5	14.9	15.8	14.0
Graduated from high school	8.5	9.9	12.8	14.9	16.7	17.0	18.8	19.2	19.9	19.4	17.5
Some education after high school	15.7	20.3	26.0	25.4	27.9	28.2	31.8	32.0	33.3	33.4	30.0
Graduated from college	23.9	32.8	33.8	38.3	40.2	41.9	44.4	46.9	47.4	48.2	45.8
Unknown	4.8	8.9	9.5	9.6	12.5	13.4	14.9	15.8	16.3	17.0	15.8
Socioeconomic status ^c											
Eligible for free or reduced-price lunch	NA	NA	8.5	9.4	12.1	13.4	15.4	16.7	18.8	19.6	18.0
Not eligible for free or reduced-price lunch	NA	NA	28.3	33.7	37.2	38.8	42.1	44.8	47.3	49.0	47.6
Student disability status ^d											
Has a disability	s	s	2.6	4.1	6.2	7.2	8.1	9.2	9.2	8.7	7.9
Does not have a disability	s	s	24.8	27.3	31.4	32.2	34.5	36.5	37.6	38.9	36.5
English language learner status ^d											
English language learner	s	s	1.5	2.0	4.7	5.9	7.0	5.0	5.0	5.3	5.7
Not English language learner	s	s	23.8	26.4	30.0	31.1	33.7	35.4	36.4	37.0	34.9
All students in grade 12	NA	NA	NA	NA	NA	23.0	NA	25.9	NA	25.7	24.5
Sex											
Male	NA	NA	NA	NA	NA	25.1	NA	28.3	NA	27.6	26.2
Female	NA	NA	NA	NA	NA	21.1	NA	23.5	NA	23.8	22.7
Race or ethnicity ^a											

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Student grade and characteristic	1990	1992	1996	2000	2003	2005	2007	2009	2011	2013	2015
White	NA	NA	NA	NA	NA	28.9	NA	32.7	NA	33.2	31.7
Black	NA	NA	NA	NA	NA	5.6	NA	6.2	NA	7.1	7.1
Hispanic ^b	NA	NA	NA	NA	NA	8.1	NA	11.0	NA	11.8	11.9
Asian or Pacific Islander	NA	NA	NA	NA	NA	36.0	NA	51.8	NA	46.8	46.2
American Indian or Alaska Native	NA	NA	NA	NA	NA	6.1	NA	11.6	NA	12.5	9.9
More than one race	NA	NA	NA	NA	NA	18.9	NA	28.2	NA	25.7	30.6
Parents' highest education											
Did not finish high school	NA	NA	NA	NA	NA	6.9	NA	8.1	NA	9.1	7.1
Graduated from high school	NA	NA	NA	NA	NA	11.5	NA	13.9	NA	12.2	12.4
Some education after high school	NA	NA	NA	NA	NA	18.2	NA	19.0	NA	19.6	18.0
Graduated from college	NA	NA	NA	NA	NA	34.3	NA	38.0	NA	37.7	36.8
Unknown	NA	NA	NA	NA	NA	5.8	NA	7.9	NA	5.6	0.0
Socioeconomic status ^c											
Eligible for free or reduced-price lunch	NA	NA	NA	NA	NA	7.7	NA	10.2	NA	11.4	11.0
Not eligible for free or reduced-price lunch	NA	NA	NA	NA	NA	26.7	NA	31.9	NA	33.7	32.3
Student disability status ^d											
Has a disability	NA	NA	NA	NA	NA	4.5	NA	6.6	NA	5.9	5.7
Does not have a disability	NA	NA	NA	NA	NA	24.4	NA	27.5	NA	27.7	26.3
English language learner status ^d											
English language learner	NA	NA	NA	NA	NA	3.1	NA	4.0	NA	2.8	5.7
Not English language learner	NA	NA	NA	NA	NA	23.8	NA	26.6	NA	26.4	25.2

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

^a Other racial and ethnic groups are included in the rows for All students in grade 4, All students in grade 8, and All students in grade 12 but are not shown separately in the table.

^b Hispanic may be any race. American Indian or Alaska Native, Asian or Pacific Islander, black, white, and more than one race refer to individuals who are not of Hispanic origin.

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^c NAEP uses eligibility for the federal National School Lunch Program (NSLP) as a measure of socioeconomic status. NSLP is a federally assisted meal program that provides low-cost or free lunches to eligible students. It is sometimes referred to as the free or reduced-price lunch program. Information on students' eligibility for free or reduced-price lunch was first collected in 1996.

^d From 1996 on, students with a disability and English language learners were allowed to use testing accommodation (e.g., extended time, one-on-one testing, bilingual dictionary). More information about testing accommodation is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

Note(s)

From 1996 on, data shown here are for students allowed to use testing accommodation. Grade 12 mathematics data are presented from 2005, 2009, 2013, and 2015 only because the mathematics framework was substantially revised in 2005, making prior assessment results not comparable with those in or after 2005. Mathematics assessment was not conducted in 2007 and 2011 for grade 12.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of main NAEP 1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, and 2015 mathematics assessments, National Center for Education Statistics.

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APPENDIX TABLE 1-3

Average scores of students in grades 4, 8, and 12 on the main NAEP science assessment, by student grade and characteristics: 2009–15

(Average score)

Student grade and characteristic	2009	2011	2015
All students in grade 4	150	NA	154
Sex			
Male	151	NA	154
Female	149	NA	154
Race or ethnicity ^a			
White	163	NA	166
Black	127	NA	133
Hispanic ^b	131	NA	139
Asian or Pacific Islander	160	NA	167
American Indian or Alaska Native	135	NA	139
More than one race	154	NA	158
Socioeconomic status ^c			
Eligible for free or reduced-price lunch	134	NA	140
Not eligible for free or reduced-price lunch	163	NA	169
Student disability status ^d			
Has a disability	129	NA	131
Does not have a disability	153	NA	157
English language learner status ^d			
English language learner	114	NA	121
Not English language learner	154	NA	158
Percentiles			
10th percentile	104	NA	108
25th percentile	128	NA	132
50th percentile	153	NA	157

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Student grade and characteristic	2009	2011	2015
75th percentile	175	NA	178
90th percentile	192	NA	196
All students in grade 8	150	152	154
Sex			
Male	152	154	155
Female	148	149	152
Race or ethnicity ^a			
White	162	163	166
Black	126	129	132
Hispanic ^b	132	137	140
Asian or Pacific Islander	160	159	164
American Indian or Alaska Native	137	141	139
More than one race	151	156	159
Parents' highest education			
Did not finish high school	131	132	137
Graduated from high school	139	140	142
Some education after high school	152	153	155
Graduated from college	161	162	165
Unknown	130	133	134
Socioeconomic status ^c			
Eligible for free or reduced-price lunch	133	137	140
Not eligible for free or reduced-price lunch	161	164	167
Student disability status ^d			
Has a disability	123	124	124
Does not have a disability	153	155	158
English language learner status ^d			
English language learner	103	106	110

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Student grade and characteristic	2009	2011	2015
Not English language learner	153	154	157
Percentiles			
10th percentile	103	106	109
25th percentile	128	131	133
50th percentile	153	155	157
75th percentile	175	176	178
90th percentile	192	193	195
All students in grade 12	150	NA	150
Sex			
Male	153	NA	153
Female	147	NA	148
Race or ethnicity ^a			
White	159	NA	160
Black	125	NA	125
Hispanic ^b	134	NA	136
Asian or Pacific Islander	164	NA	166
American Indian or Alaska Native	144	NA	135
More than one race	151	NA	156
Parents' highest education			
Did not finish high school	131	NA	131
Graduated from high school	138	NA	136
Some education after high school	147	NA	148
Graduated from college	161	NA	162
Unknown	122	NA	123
Socioeconomic status ^c			
Eligible for free or reduced-price lunch	132	NA	134
Not eligible for free or reduced-price lunch	157	NA	160

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Student grade and characteristic	2009	2011	2015
Student disability status ^d			
Has a disability	121	NA	124
Does not have a disability	153	NA	153
English language learner status ^d			
English language learner	104	NA	105
Not English language learner	151	NA	152
Percentiles			
10th percentile	104	NA	103
25th percentile	126	NA	126
50th percentile	151	NA	151
75th percentile	174	NA	176
90th percentile	194	NA	196

NA = not available.

NAEP = National Assessment of Educational Progress.

^a Other racial and ethnic groups are included in the rows for All students in grade 4, All students in grade 8, and All students in grade 12 but are not shown separately in the table.

^b Hispanic may be any race. American Indian or Alaska Native, Asian or Pacific Islander, black, white, and more than one race refer to individuals who are not of Hispanic origin.

^c NAEP uses eligibility for the federal National School Lunch Program (NSLP) as a measure of socioeconomic status. NSLP is a federally assisted meal program that provides low-cost or free lunches to eligible students. It is sometimes referred to as the free or reduced-price lunch program.

^d From 1996 on, students with a disability and English language learners were allowed to use testing accommodation (e.g., extended time, one-on-one testing, bilingual dictionary). More information about testing accommodation is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

Note(s)

Main NAEP science assessment scores range from 0 to 300 for grades 4, 8, and 12. Science data are presented beginning in 2009 only because the science framework was substantially revised in 2009, making prior assessment results not comparable with those in or after 2009. Science assessment was not conducted in 2011 for grades 4 and 12.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of main NAEP 2009, 2011, and 2015 science assessments, National Center for Education Statistics.

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APPENDIX TABLE 1-4

Students in grades 4, 8, and 12 scoring at or above the main NAEP's proficient level in science for their grade, by student grade and characteristics: 2009–15

(Percent)

Student grade and characteristic	2009	2011	2015
All students in grade 4	33.7	NA	37.7
Sex			
Male	35.0	NA	38.8
Female	32.5	NA	36.7
Race or ethnicity ^a			
White	47.1	NA	50.9
Black	10.6	NA	14.6
Hispanic ^b	13.8	NA	21.2
Asian or Pacific Islander	44.6	NA	53.2
American Indian or Alaska Native	17.4	NA	20.3
More than one race	35.4	NA	41.3
Socioeconomic status ^c			
Eligible for free or reduced-price lunch	16.1	NA	21.8
Not eligible for free or reduced-price lunch	48.0	NA	55.2
Student disability status ^d			
Has a disability	16.5	NA	18.1
Does not have a disability	35.9	NA	40.6
English language learner status ^d			
English language learner	5.1	NA	8.7
Not English language learner	36.6	NA	41.1
All students in grade 8	30.3	31.8	34.2
Sex			
Male	33.6	35.4	36.8
Female	26.9	28.2	31.5

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Student grade and characteristic	2009	2011	2015
Race or ethnicity ^a			
White	41.6	43.3	46.7
Black	8.3	9.8	11.5
Hispanic ^b	12.3	16.2	18.3
Asian or Pacific Islander	40.6	41.1	47.0
American Indian or Alaska Native	17.1	19.6	16.0
More than one race	28.6	34.6	38.5
Parents' highest education			
Did not finish high school	10.9	12.1	14.6
Graduated from high school	17.6	18.2	18.6
Some education after high school	29.0	30.3	31.6
Graduated from college	42.2	43.7	46.6
Unknown	11.9	14.8	15.2
Socioeconomic status ^c			
Eligible for free or reduced-price lunch	13.8	16.3	18.3
Not eligible for free or reduced-price lunch	40.7	44.5	49.1
Student disability status ^d			
Has a disability	11.2	11.1	11.0
Does not have a disability	32.6	34.4	37.3
English language learner status ^d			
English language learner	2.4	2.7	3.6
Not English language learner	31.8	33.5	36.1
All students in grade 12	20.9	NA	22.0
Sex			
Male	24.2	NA	25.3
Female	17.6	NA	18.5
Race or ethnicity ^a			

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Student grade and characteristic	2009	2011	2015
White	27.0	NA	29.4
Black	4.4	NA	5.5
Hispanic ^b	8.3	NA	9.4
Asian or Pacific Islander	36.2	NA	38.1
American Indian or Alaska Native	13.1	NA	11.5
More than one race	21.5	NA	24.5
Parents' highest education			
Did not finish high school	6.0	NA	6.3
Graduated from high school	9.8	NA	10.7
Some education after high school	15.2	NA	17.0
Graduated from college	31.3	NA	32.8
Unknown	4.7	NA	5.0
Socioeconomic status ^c			
Eligible for free or reduced-price lunch	8.2	NA	9.5
Not eligible for free or reduced-price lunch	25.9	NA	29.2
Student disability status ^d			
Has a disability	5.6	NA	8.8
Does not have a disability	22.3	NA	23.4
English language learner status ^d			
English language learner	1.2	NA	2.1
Not English language learner	21.5	NA	22.7

NA = not available.

NAEP = National Assessment of Educational Progress.

^a Other racial and ethnic groups are included in the rows for all students in grade 4, all students in grade 8, and all students in grade 12 but are not shown separately in the table.

^b Hispanic may be any race. American Indian or Alaska Native, Asian or Pacific Islander, black, white, and more than one race refer to individuals who are not of Hispanic origin.

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^c NAEP uses eligibility for the federal National School Lunch Program (NSLP) as a measure of socioeconomic status. NSLP is a federally assisted meal program that provides low-cost or free lunches to eligible students. It is sometimes referred to as the free or reduced-price lunch program.

^d From 1996 on, students with a disability and English language learners were allowed to use testing accommodation (e.g., extended time, one-on-one testing, bilingual dictionary). More information about testing accommodation is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

Note(s)

Grades 4 and 12 science data are presented in 2009 and 2015 only because the science framework was substantially revised in 2009, making prior assessment results not comparable with those in or after 2009. Science assessment was not conducted in 2011 for grades 4 and 12.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of main NAEP 2009, 2011, and 2015 science assessments, National Center for Education Statistics.

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 APPENDIX TABLE 1-5 
Average scores of students in grade 8 on the main NAEP technology and engineering literacy assessment and the percentage scoring proficient or above, by student characteristics: 2014

(Average score)

Characteristic	Average scale score	Percentage scoring proficient or above
All students in grade 8	150	43.3
Sex		
Male	149	41.8
Female	151	44.8
Race or ethnicity ^a		
White	160	55.6
Black	128	18.4
Hispanic ^b	138	27.9
Asian or Pacific Islander	159	54.0
American Indian or Alaska Native	146	41.6
More than one race	154	45.0
Parents' highest education		
Did not finish high school	133	20.4
Graduated from high school	137	27.4
Some education after high school	152	43.6
Graduated from college	159	55.2
Socioeconomic status ^c		
Eligible for free or reduced-price lunch	135	25.2
Not eligible for free or reduced-price lunch	163	59.3
Student disability status ^d		
Has a disability	116	13.0
Does not have a disability	155	47.0
English language learner status ^d		
English language learner	108	4.8

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Characteristic	Average scale score	Percentage scoring proficient or above
Not English language learner	152	45.3
Percentiles		
10th percentile	104	NA
25th percentile	127	NA
50th percentile	152	NA
75th percentile	175	NA
90th percentile	193	NA

NA = not available.

NAEP = National Assessment of Educational Progress.

^a Other racial and ethnic groups are included but are not shown separately.

^b Hispanic may be any race. American Indian or Alaska Native, Asian or Pacific Islander, black, white, and more than one race refer to individuals who are not of Hispanic origin.

^c NAEP uses eligibility for the federal National School Lunch Program (NSLP) as a measure of socioeconomic status. NSLP is a federally assisted meal program that provides low-cost or free lunches to eligible students. It is sometimes referred to as the free or reduced-price lunch program.

^d From 1996 on, students with a disability and English language learners were allowed to use testing accommodation (e.g., extended time, one-on-one testing, bilingual dictionary). More information about testing accommodation is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

Note(s)

Main NAEP technology and engineering literacy assessment scores range from 0 to 300.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of main NAEP 2014 technology and engineering literacy (TEL) assessment, National Center for Education Statistics.

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APPENDIX TABLE 1-6

Average scores of students in grade 4 on the main NAEP mathematics assessment, by race or ethnicity and sex, by state: 2000–15

(Score out of 500)

Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
White students								
United States	233	243	246	248	248	249	250	248
Alabama	227	232	235	238	237	240	242	239
Alaska	NA	242	244	247	249	248	249	246
Arizona	230	241	243	246	243	246	251	251
Arkansas	225	237	242	245	245	244	246	240
California	228	243	245	247	247	252	249	246
Colorado	NA	243	247	249	252	254	256	253
Connecticut	242	250	250	252	253	253	253	249
Delaware	NA	244	249	249	249	250	252	247
District of Columbia	254	262	266	262	270	272	276	274
Florida	NA	243	247	250	250	250	251	251
Georgia	230	241	243	246	247	249	250	245
Hawaii	227	238	241	244	247	248	253	248
Idaho	227	238	245	245	244	244	244	243
Illinois	235	244	245	248	249	249	248	248
Indiana	235	242	245	249	247	249	252	252
Iowa	233	241	242	245	245	246	249	248
Kansas	237	246	249	252	251	251	250	247
Kentucky	223	231	234	238	241	243	244	244
Louisiana	230	242	241	240	241	241	242	242
Maine	230	238	241	243	245	246	247	243
Maryland	236	244	250	251	255	258	260	252
Massachusetts	239	247	252	257	258	258	260	256

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	237	244	245	244	243	242	244	241
Minnesota	238	246	251	252	255	255	259	257
Mississippi	222	236	238	239	241	241	243	245
Missouri	233	240	240	245	245	246	245	244
Montana	231	238	243	247	247	247	248	245
Nebraska	230	241	244	244	245	247	251	251
Nevada	226	236	240	243	245	247	245	246
New Hampshire	NA	244	246	250	252	252	254	250
New Jersey	NA	248	251	255	255	256	254	254
New Mexico	227	237	238	242	245	247	246	241
New York	238	246	247	251	248	245	248	245
North Carolina	238	251	250	251	254	253	254	253
North Dakota	232	240	245	248	248	249	249	249
Ohio	235	243	248	250	249	249	252	249
Oklahoma	229	235	240	242	241	243	245	245
Oregon	227	240	243	241	243	243	245	243
Pennsylvania	NA	243	247	249	249	251	250	250
Rhode Island	232	239	241	242	247	249	250	246
South Carolina	233	246	250	248	245	248	247	247
South Dakota	NA	241	245	245	247	246	247	246
Tennessee	227	235	238	240	239	239	247	246
Texas	241	248	254	253	254	253	255	255
Utah	230	238	242	244	246	247	248	247
Vermont	232	242	244	247	248	248	249	244
Virginia	237	246	247	251	251	251	252	253
Washington	NA	242	246	248	247	249	251	251
West Virginia	224	231	231	237	233	235	238	236

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	243	247	250	250	251	252	250
Wyoming	231	243	245	246	244	246	249	250
Puerto Rico	NA	s	s	NA	NA	s	s	s
Black students								
United States	203	216	220	222	222	224	224	224
Alabama	203	208	211	213	211	215	215	217
Alaska	NA	221	226	227	225	225	228	221
Arizona	207	215	217	219	222	224	230	231
Arkansas	194	206	214	217	217	219	223	221
California	194	213	215	218	217	225	221	222
Colorado	NA	217	222	224	225	225	227	221
Connecticut	210	217	219	220	222	220	219	218
Delaware	NA	223	226	230	226	227	229	227
District of Columbia	188	202	207	209	213	215	221	223
Florida	NA	215	224	225	228	226	228	228
Georgia	204	217	221	222	221	224	226	224
Hawaii	211	221	221	230	232	233	232	s
Idaho	s	s	s	s	s	s	s	s
Illinois	202	210	212	216	216	219	220	215
Indiana	211	215	221	224	222	223	227	229
Iowa	216	215	224	224	226	224	218	222
Kansas	208	217	228	226	224	227	228	218
Kentucky	196	214	217	219	220	225	224	226
Louisiana	205	213	219	219	218	219	221	224
Maine	s	s	s	221	228	212	227	223
Maryland	202	216	220	223	228	230	227	224
Massachusetts	213	222	228	232	236	235	230	230

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	199	209	211	216	212	211	212	212
Minnesota	208	219	219	222	227	225	232	227
Mississippi	198	212	216	217	215	217	220	224
Missouri	202	216	215	218	221	216	219	220
Montana	s	s	s	s	s	s	s	s
Nebraska	193	211	211	211	213	213	215	217
Nevada	203	215	214	219	218	226	221	218
New Hampshire	NA	s	s	226	s	235	s	s
New Jersey	NA	217	224	232	228	231	229	228
New Mexico	s	216	213	220	225	226	225	s
New York	210	219	222	225	225	224	225	221
North Carolina	215	225	225	224	226	229	230	229
North Dakota	s	s	s	s	s	s	239	231
Ohio	206	217	221	225	222	226	222	220
Oklahoma	205	211	217	220	222	224	219	223
Oregon	196	223	222	219	223	215	220	217
Pennsylvania	NA	212	219	222	223	224	226	219
Rhode Island	200	210	211	219	221	225	224	222
South Carolina	203	222	223	221	220	220	222	221
South Dakota	NA	s	s	221	225	227	221	218
Tennessee	198	208	214	214	213	216	221	226
Texas	220	226	228	230	231	232	231	233
Utah	s	s	s	s	221	s	s	s
Vermont	s	s	s	s	s	s	s	s
Virginia	211	223	224	228	225	229	229	231
Washington	NA	222	231	222	227	227	231	229
West Virginia	205	221	226	223	225	227	228	218

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	209	210	212	217	217	216	212
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Hispanic students								
United States	207	221	225	227	227	229	230	230
Alabama	s	s	s	218	220	227	228	221
Alaska	NA	228	227	232	232	239	235	235
Arizona	204	217	218	220	220	227	232	229
Arkansas	s	221	229	230	233	233	234	231
California	201	216	219	218	219	222	224	222
Colorado	NA	217	223	224	228	230	233	227
Connecticut	210	223	223	223	227	222	224	224
Delaware	NA	226	229	234	231	231	234	232
District of Columbia	190	205	215	220	227	223	228	231
Florida	NA	232	233	238	238	236	238	240
Georgia	217	219	229	229	231	233	235	234
Hawaii	s	219	219	224	230	237	241	236
Idaho	207	217	226	224	225	223	225	221
Illinois	211	218	219	223	227	226	229	228
Indiana	s	226	230	233	230	234	242	240
Iowa	s	222	222	230	223	229	234	226
Kansas	213	230	234	234	233	235	235	228
Kentucky	s	s	s	221	227	236	234	234
Louisiana	s	s	s	234	230	230	232	238
Maine	s	s	s	s	s	s	s	s
Maryland	216	227	232	233	238	245	234	229
Massachusetts	203	222	225	231	232	236	234	232

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	221	224	229	228	228	228	229
Wyoming	214	229	234	229	231	235	235	234
Puerto Rico	NA	s	s	NA	NA	182	182	s
Asian and Pacific Islander students								
United States	s	246	251	254	255	256	258	256
Alabama	s	s	s	s	s	s	s	s
Alaska	NA	230	238	237	236	234	233	230
Arizona	s	244	241	253	245	249	256	252
Arkansas	s	s	s	236	s	247	258	s
California	221	246	249	251	257	256	254	252
Colorado	NA	242	242	247	246	246	255	245
Connecticut	239	249	253	255	257	255	257	259
Delaware	NA	250	260	261	258	262	270	256
District of Columbia	s	s	s	s	s	s	s	s
Florida	NA	249	259	255	261	257	264	260
Georgia	s	248	255	255	256	263	263	260
Hawaii	214	225	229	233	235	237	241	235
Idaho	s	s	s	s	s	247	s	s
Illinois	s	252	258	257	265	257	266	262
Indiana	s	s	s	s	s	s	s	s
Iowa	s	s	246	s	259	248	254	250
Kansas	s	s	262	260	258	253	261	254
Kentucky	s	s	s	s	265	261	260	258
Louisiana	s	s	s	s	s	s	s	s
Maine	s	s	s	s	s	246	s	s
Maryland	230	254	256	261	259	267	270	260
Massachusetts	237	248	258	259	264	267	266	273

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	230	236	245	240	242	247	250
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Male students								
United States	225	235	238	240	240	241	242	241
Alabama	216	223	225	229	228	231	233	231
Alaska	NA	235	236	238	238	237	237	238
Arizona	219	231	233	233	230	237	240	239
Arkansas	216	228	236	238	239	238	239	235
California	212	229	231	231	233	235	235	233
Colorado	NA	237	241	242	244	246	248	243
Connecticut	235	243	244	243	246	243	244	241
Delaware	NA	237	241	242	241	241	243	240
District of Columbia	191	204	212	213	218	220	228	230
Florida	NA	235	240	243	243	240	242	243
Georgia	220	231	234	236	237	238	241	237
Hawaii	215	227	229	233	235	238	242	238
Idaho	224	237	242	242	242	241	243	239
Illinois	224	234	234	239	240	240	239	238
Indiana	234	239	240	246	243	245	249	248
Iowa	233	240	242	244	243	244	247	244
Kansas	233	244	247	249	246	247	247	242
Kentucky	220	230	233	237	240	242	242	243
Louisiana	219	227	231	230	230	231	233	235
Maine	232	239	243	244	247	246	246	244
Maryland	223	235	240	242	244	248	246	240
Massachusetts	235	244	248	254	253	255	253	253

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	230	238	240	238	238	238	237	237
Minnesota	236	244	247	249	251	250	254	250
Mississippi	210	223	227	228	227	229	231	234
Missouri	228	235	237	240	241	240	240	241
Montana	231	236	243	245	247	245	245	243
Nebraska	225	238	239	240	239	241	245	244
Nevada	221	229	231	233	236	238	237	234
New Hampshire	NA	246	247	250	252	252	255	250
New Jersey	NA	240	246	250	248	249	248	247
New Mexico	216	224	225	229	231	234	234	232
New York	227	237	240	244	242	238	241	238
North Carolina	230	243	242	243	244	245	245	245
North Dakota	231	240	244	248	247	246	247	246
Ohio	232	239	243	246	245	245	246	244
Oklahoma	225	230	235	238	238	237	240	242
Oregon	225	237	239	238	240	237	241	239
Pennsylvania	NA	238	241	245	245	247	244	244
Rhode Island	225	231	234	236	240	242	242	238
South Carolina	221	237	238	236	236	237	236	238
South Dakota	NA	239	243	242	243	242	241	240
Tennessee	221	228	233	234	232	233	240	241
Texas	233	239	244	243	241	241	242	245
Utah	227	236	240	241	241	244	244	244
Vermont	232	244	246	248	249	248	249	243
Virginia	232	240	242	245	245	247	247	247
Washington	NA	240	242	244	242	244	247	245
West Virginia	224	232	232	238	234	235	238	235

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	238	242	245	245	245	245	244
Wyoming	230	242	244	244	243	245	247	248
Puerto Rico	NA	s	s	NA	NA	181	181	183
Female students								
United States	223	233	236	238	238	239	241	239
Alabama	219	223	225	228	228	232	232	231
Alaska	NA	231	235	237	236	235	236	235
Arizona	219	227	227	230	230	234	240	236
Arkansas	216	230	235	237	236	238	240	235
California	213	225	229	229	231	234	232	230
Colorado	NA	233	238	239	242	243	246	240
Connecticut	233	238	241	242	243	241	243	239
Delaware	NA	235	238	241	238	239	243	238
District of Columbia	192	206	211	214	221	223	229	233
Florida	NA	233	238	241	241	240	242	242
Georgia	218	229	233	234	236	239	239	236
Hawaii	217	226	231	236	236	240	244	238
Idaho	225	233	241	240	240	239	238	238
Illinois	222	232	232	235	237	238	239	237
Indiana	232	237	240	244	242	242	248	247
Iowa	230	236	238	241	242	242	244	243
Kansas	231	240	245	247	244	246	245	240
Kentucky	219	227	230	234	238	240	241	240
Louisiana	217	226	229	230	229	231	230	234
Maine	227	236	239	241	242	243	246	241
Maryland	220	232	237	239	243	246	244	239
Massachusetts	232	239	247	251	251	252	253	248

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	228	233	236	237	235	235	236	235
Minnesota	232	240	245	245	248	248	253	249
Mississippi	211	223	226	227	228	231	232	234
Missouri	228	235	233	238	240	241	239	237
Montana	226	235	239	242	242	242	242	239
Nebraska	225	235	236	236	239	239	241	244
Nevada	218	226	229	230	234	236	235	233
New Hampshire	NA	240	244	247	250	251	251	248
New Jersey	NA	237	242	247	245	247	246	244
New Mexico	211	221	223	227	229	232	232	230
New York	224	235	237	242	239	237	240	236
North Carolina	230	241	241	241	244	244	245	242
North Dakota	229	235	241	243	244	244	246	243
Ohio	228	237	241	243	242	243	245	243
Oklahoma	223	228	233	236	236	238	238	238
Oregon	222	235	238	234	236	237	239	237
Pennsylvania	NA	234	240	243	242	245	244	242
Rhode Island	223	229	233	235	237	242	241	238
South Carolina	219	234	238	238	235	238	238	237
South Dakota	NA	235	240	240	241	240	241	239
Tennessee	219	228	231	231	231	232	240	240
Texas	230	236	240	242	240	241	242	243
Utah	227	233	237	238	239	241	241	241
Vermont	231	240	241	245	247	245	247	244
Virginia	227	239	239	242	241	244	246	246
Washington	NA	237	241	241	242	242	246	245
West Virginia	223	230	229	235	232	234	237	236

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	235	239	243	242	244	244	243
Wyoming	227	240	242	243	241	243	246	246
Puerto Rico	NA	s	s	NA	NA	182	183	182

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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APPENDIX TABLE 1-7

Students in grade 4 scoring at or above the main NAEP's proficient level in mathematics, by race or ethnicity and sex, by state: 2000–15

(Percent)

Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
White students								
United States	30	42	47	51	50	52	54	51
Alabama	20	27	30	36	34	37	40	35
Alaska	NA	41	44	50	52	50	52	47
Arizona	24	39	43	48	44	49	55	56
Arkansas	18	34	42	46	46	45	47	38
California	24	42	46	52	51	57	53	48
Colorado	NA	44	49	54	57	60	62	58
Connecticut	39	53	53	57	58	60	58	52
Delaware	NA	43	50	53	50	53	57	50
District of Columbia	62	71	78	73	81	84	88	85
Florida	NA	43	49	54	53	52	54	54
Georgia	27	40	43	46	48	51	53	47
Hawaii	25	35	42	46	51	53	60	50
Idaho	21	34	44	45	44	44	44	44
Illinois	30	44	44	50	52	51	51	49
Indiana	32	40	45	52	48	51	58	57
Iowa	27	39	40	46	45	47	52	50
Kansas	34	47	52	58	55	56	53	50
Kentucky	19	24	29	34	39	41	45	44
Louisiana	22	39	38	37	37	40	40	40
Maine	23	34	39	43	46	47	49	42
Maryland	34	44	53	55	60	64	67	56
Massachusetts	36	49	57	65	67	67	68	62

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	34	43	46	44	43	41	45	39
Minnesota	36	47	54	58	61	60	67	63
Mississippi	15	30	32	34	37	38	42	44
Missouri	27	35	37	45	46	48	46	44
Montana	26	34	41	49	49	50	50	46
Nebraska	27	39	44	45	45	48	54	56
Nevada	21	32	38	43	46	48	46	49
New Hampshire	NA	43	48	53	57	59	60	53
New Jersey	NA	51	55	63	63	64	61	61
New Mexico	22	33	34	43	47	48	48	41
New York	32	45	49	56	50	46	50	47
North Carolina	34	55	52	56	59	58	60	59
North Dakota	26	37	43	49	49	52	52	50
Ohio	29	42	51	53	54	53	56	52
Oklahoma	20	29	36	39	40	41	45	44
Oregon	24	36	42	40	43	43	46	43
Pennsylvania	NA	44	50	53	53	56	52	53
Rhode Island	28	37	37	41	50	53	53	48
South Carolina	28	46	53	50	46	52	49	48
South Dakota	NA	38	45	46	47	46	48	47
Tennessee	23	30	35	36	36	36	50	48
Texas	39	49	60	59	61	60	61	60
Utah	25	35	41	45	48	49	51	49
Vermont	29	42	44	50	51	50	53	44
Virginia	32	46	50	53	54	56	56	57
Washington	NA	40	48	51	51	53	56	56
West Virginia	18	24	25	33	28	32	36	34

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	43	48	54	53	55	57	54
Wyoming	27	42	45	48	44	47	52	54
Puerto Rico	NA	s	s	NA	NA	s	s	s
Black students								
United States	4	10	13	15	15	17	18	19
Alabama	4	5	7	10	7	9	9	10
Alaska	NA	15	20	22	17	15	22	14
Arizona	6	11	13	16	19	22	24	32
Arkansas	2	5	10	12	12	16	17	15
California	3	9	12	15	13	19	18	18
Colorado	NA	12	18	20	23	21	22	21
Connecticut	7	10	11	15	14	15	14	13
Delaware	NA	12	15	20	17	19	21	19
District of Columbia	2	4	5	8	9	13	19	20
Florida	NA	8	16	15	20	18	20	21
Georgia	5	11	12	13	15	18	20	19
Hawaii	6	16	16	24	33	32	34	s
Idaho	s	s	s	s	s	s	s	s
Illinois	4	7	9	9	11	14	16	12
Indiana	10	7	13	14	13	15	21	22
Iowa	11	9	15	17	17	18	16	18
Kansas	4	13	24	21	18	18	22	14
Kentucky	2	8	9	12	14	17	19	20
Louisiana	4	6	9	11	8	12	13	16
Maine	s	s	s	17	28	10	25	18
Maryland	6	11	14	17	21	23	22	21
Massachusetts	7	13	18	26	30	27	26	26

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	3	7	8	12	9	8	10	10
Minnesota	12	16	15	16	25	23	32	25
Mississippi	2	6	7	9	8	10	11	15
Missouri	4	9	9	12	17	14	13	15
Montana	s	s	s	s	s	s	s	s
Nebraska	5	7	7	9	10	7	12	12
Nevada	4	10	10	16	12	23	17	15
New Hampshire	NA	s	s	25	s	27	s	s
New Jersey	NA	11	17	25	19	24	24	21
New Mexico	s	10	6	18	19	19	24	s
New York	5	12	13	18	19	17	17	14
North Carolina	9	14	17	15	18	18	22	22
North Dakota	s	s	s	s	s	s	35	24
Ohio	2	10	16	18	14	20	16	12
Oklahoma	4	6	11	10	14	14	14	15
Oregon	6	20	12	16	18	14	16	17
Pennsylvania	NA	8	13	18	17	17	19	15
Rhode Island	3	7	9	16	15	20	19	17
South Carolina	4	13	13	14	14	13	15	16
South Dakota	NA	s	s	15	17	21	14	11
Tennessee	4	6	9	9	7	12	15	20
Texas	10	15	18	21	23	25	24	29
Utah	s	s	s	s	15	s	s	s
Vermont	s	s	s	s	s	s	s	s
Virginia	5	13	14	18	16	20	22	25
Washington	NA	17	26	17	24	20	29	24
West Virginia	5	13	17	19	20	20	25	11

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	8	7	10	11	12	12	13
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Hispanic students								
United States	7	15	19	22	21	24	26	26
Alabama	s	s	s	17	11	21	23	14
Alaska	NA	24	23	26	27	36	33	30
Arizona	5	11	14	15	15	21	28	25
Arkansas	s	15	25	22	26	28	31	25
California	4	11	14	15	14	17	19	17
Colorado	NA	13	18	19	24	26	30	22
Connecticut	6	15	15	18	18	19	19	19
Delaware	NA	17	18	25	22	25	27	25
District of Columbia	6	7	11	19	24	21	23	30
Florida	NA	27	28	33	33	31	36	38
Georgia	12	13	22	20	26	29	33	28
Hawaii	s	17	21	19	28	39	43	35
Idaho	6	11	17	18	18	17	20	15
Illinois	6	13	14	19	20	20	25	24
Indiana	s	18	21	26	23	29	39	35
Iowa	s	14	17	25	17	24	30	21
Kansas	13	19	30	29	24	26	31	23
Kentucky	s	s	s	15	22	30	30	30
Louisiana	s	s	s	31	23	20	29	35
Maine	s	s	s	s	s	s	s	s
Maryland	11	21	26	28	32	43	33	25
Massachusetts	7	13	14	23	25	32	32	28

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	13	16	27	22	22	23	23
Wyoming	9	20	31	23	22	31	29	28
Puerto Rico	NA	s	s	NA	NA	*	1	s
Asian and Pacific Islander students								
United States	s	48	54	59	61	62	64	61
Alabama	s	s	s	s	s	s	s	s
Alaska	NA	27	36	37	35	29	32	27
Arizona	s	41	43	59	45	53	61	60
Arkansas	s	s	s	41	s	53	63	s
California	19	49	51	56	61	63	58	54
Colorado	NA	44	42	53	51	55	61	49
Connecticut	36	52	57	64	65	62	64	66
Delaware	NA	59	70	70	66	69	81	63
District of Columbia	s	s	s	s	s	s	s	s
Florida	NA	53	66	59	73	64	77	65
Georgia	s	53	57	63	60	70	71	65
Hawaii	12	21	25	31	35	37	42	36
Idaho	s	s	s	s	s	52	s	s
Illinois	s	58	66	62	73	63	73	69
Indiana	s	s	s	s	s	s	s	s
Iowa	s	s	52	s	66	52	54	48
Kansas	s	s	71	67	64	59	68	56
Kentucky	s	s	s	s	69	66	68	62
Louisiana	s	s	s	s	s	s	s	s
Maine	s	s	s	s	s	48	s	s
Maryland	27	58	59	68	67	74	77	68
Massachusetts	36	49	64	66	70	76	72	81

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	26	29	50	39	42	49	52
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Male students								
United States	25	34	37	41	40	41	42	41
Alabama	14	19	22	27	25	28	31	28
Alaska	NA	33	35	38	40	38	38	38
Arizona	16	28	32	34	30	36	40	40
Arkansas	14	27	36	38	39	37	39	33
California	13	28	30	31	32	35	35	31
Colorado	NA	37	41	44	46	49	53	45
Connecticut	33	45	45	46	49	46	46	42
Delaware	NA	34	38	40	40	40	43	38
District of Columbia	6	8	11	14	17	21	28	29
Florida	NA	33	38	43	42	38	41	43
Georgia	19	29	30	33	35	37	40	36
Hawaii	15	24	26	33	37	39	45	39
Idaho	20	34	42	42	42	41	44	40
Illinois	23	34	33	40	41	39	39	38
Indiana	31	37	38	48	42	46	52	51
Iowa	28	39	40	46	43	44	49	46
Kansas	31	44	48	54	48	48	49	43
Kentucky	19	24	29	33	39	39	43	43
Louisiana	14	22	26	25	24	26	28	31
Maine	25	37	41	43	48	48	48	44
Maryland	23	33	40	43	44	50	47	41
Massachusetts	33	44	50	60	59	60	59	57

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	30	38	41	39	37	37	38	36
Minnesota	36	45	50	54	56	54	60	54
Mississippi	10	18	20	22	23	25	27	30
Missouri	24	30	34	40	43	42	40	41
Montana	27	33	42	47	49	48	48	44
Nebraska	25	36	39	40	39	41	48	47
Nevada	18	25	28	33	34	38	36	33
New Hampshire	NA	46	50	54	58	58	61	53
New Jersey	NA	41	47	55	51	53	51	49
New Mexico	14	21	21	26	27	31	33	28
New York	23	35	39	45	43	37	40	36
North Carolina	26	42	41	43	44	44	46	46
North Dakota	27	38	43	50	47	49	49	47
Ohio	28	37	45	49	48	47	49	46
Oklahoma	17	25	31	34	35	34	38	40
Oregon	25	35	37	38	40	37	42	40
Pennsylvania	NA	39	44	50	48	49	45	47
Rhode Island	25	29	32	36	43	43	44	39
South Carolina	20	34	37	36	36	36	36	37
South Dakota	NA	37	43	43	44	42	40	41
Tennessee	20	25	30	31	29	30	41	42
Texas	28	35	43	41	39	39	42	46
Utah	24	34	39	42	42	46	47	46
Vermont	29	44	47	51	53	52	52	43
Virginia	26	38	42	44	46	48	48	47
Washington	NA	39	43	46	45	46	49	47
West Virginia	19	26	28	35	30	33	36	33

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	38	42	48	47	49	49	46
Wyoming	27	41	45	46	43	46	48	51
Puerto Rico	NA	s	s	NA	NA	*	1	*
Female students								
United States	20	29	33	36	37	39	40	38
Alabama	13	18	20	25	24	27	28	24
Alaska	NA	27	32	37	36	35	36	32
Arizona	15	23	24	27	26	31	39	35
Arkansas	13	25	32	35	34	37	39	31
California	13	22	26	28	29	33	30	27
Colorado	NA	31	36	38	44	45	47	40
Connecticut	29	37	40	43	44	44	44	39
Delaware	NA	29	34	40	33	37	42	36
District of Columbia	5	7	9	13	17	22	28	32
Florida	NA	29	35	38	39	36	40	41
Georgia	16	25	29	30	32	37	38	33
Hawaii	14	22	28	34	37	40	47	37
Idaho	19	27	39	38	39	38	36	36
Illinois	17	29	30	33	35	37	39	36
Indiana	28	34	38	45	41	42	52	48
Iowa	24	32	34	40	40	42	46	43
Kansas	26	39	45	48	44	47	46	40
Kentucky	15	20	24	29	34	38	40	38
Louisiana	13	20	21	24	21	26	24	29
Maine	20	31	36	40	42	42	47	38
Maryland	20	29	36	37	43	45	46	40
Massachusetts	29	38	48	55	55	57	58	50

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	26	30	34	35	33	33	36	32
Minnesota	29	38	45	47	51	52	59	53
Mississippi	8	16	18	20	21	25	25	29
Missouri	22	29	28	37	39	41	37	35
Montana	21	29	34	42	41	43	42	38
Nebraska	23	31	33	35	37	37	41	45
Nevada	13	21	24	27	30	33	32	31
New Hampshire	NA	39	44	49	54	56	57	50
New Jersey	NA	36	43	49	46	49	48	44
New Mexico	10	14	17	23	25	28	28	25
New York	18	31	33	42	37	34	39	34
North Carolina	24	40	38	39	42	44	45	42
North Dakota	23	30	38	41	42	44	47	42
Ohio	21	34	40	43	43	44	47	43
Oklahoma	14	20	26	31	30	33	35	34
Oregon	20	31	37	32	34	36	38	34
Pennsylvania	NA	32	39	44	43	46	44	43
Rhode Island	19	27	29	32	36	42	41	36
South Carolina	15	29	35	36	32	36	35	35
South Dakota	NA	31	38	38	39	37	40	38
Tennessee	16	22	25	26	28	29	40	38
Texas	23	31	37	39	37	39	40	42
Utah	21	28	34	37	40	40	41	41
Vermont	29	39	39	47	49	46	51	44
Virginia	22	35	37	39	39	44	46	47
Washington	NA	33	41	41	42	43	48	47
West Virginia	15	22	22	30	26	29	34	33

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	32	39	46	43	45	45	45
Wyoming	22	36	40	43	38	42	47	46
Puerto Rico	NA	s	s	NA	NA	*	1	*

* = rounds to zero; NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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 APPENDIX TABLE 1-8 
Average scores of students in grade 4 on the main NAEP science assessment, by race or ethnicity and sex, by state: 2009 and 2015

(Score out of 300)

Student characteristic and state	2009	2015
White students		
United States	162	165
Alabama	155	158
Alaska	NA	NA
Arizona	155	166
Arkansas	157	159
California	157	161
Colorado	166	NA
Connecticut	167	165
Delaware	166	163
District of Columbia	NA	NA
Florida	163	169
Georgia	159	166
Hawaii	159	162
Idaho	159	161
Illinois	164	166
Indiana	158	165
Iowa	161	164
Kansas	NA	162
Kentucky	164	164
Louisiana	159	NA
Maine	161	159
Maryland	164	167
Massachusetts	169	169

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Student characteristic and state	2009	2015
Michigan	160	161
Minnesota	166	166
Mississippi	152	158
Missouri	164	164
Montana	164	164
Nebraska	NA	170
Nevada	156	155
New Hampshire	165	167
New Jersey	166	167
New Mexico	163	161
New York	161	164
North Carolina	162	167
North Dakota	165	165
Ohio	165	164
Oklahoma	156	160
Oregon	157	162
Pennsylvania	164	NA
Rhode Island	161	162
South Carolina	163	168
South Dakota	162	163
Tennessee	159	165
Texas	168	173
Utah	161	166
Vermont	NA	164
Virginia	172	175
Washington	160	167
West Virginia	150	152

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Student characteristic and state	2009	2015
Wisconsin	164	165
Wyoming	159	166
Puerto Rico	NA	NA
Black students		
United States	127	132
Alabama	121	124
Alaska	NA	NA
Arizona	129	139
Arkansas	117	129
California	122	125
Colorado	128	NA
Connecticut	129	130
Delaware	135	134
District of Columbia	NA	NA
Florida	131	138
Georgia	126	135
Hawaii	134	s
Idaho	s	s
Illinois	120	125
Indiana	129	132
Iowa	130	134
Kansas	NA	130
Kentucky	135	138
Louisiana	123	NA
Maine	139	130
Maryland	131	133
Massachusetts	138	140

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Student characteristic and state	2009	2015
Michigan	118	123
Minnesota	129	125
Mississippi	116	123
Missouri	127	123
Montana	s	s
Nebraska	NA	136
Nevada	122	125
New Hampshire	s	s
New Jersey	133	132
New Mexico	134	135
New York	127	130
North Carolina	126	135
North Dakota	s	140
Ohio	129	127
Oklahoma	125	137
Oregon	131	s
Pennsylvania	121	NA
Rhode Island	126	134
South Carolina	128	135
South Dakota	s	142
Tennessee	121	135
Texas	139	143
Utah	s	s
Vermont	NA	s
Virginia	141	144
Washington	127	136
West Virginia	130	129

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Student characteristic and state	2009	2015
Wisconsin	121	119
Wyoming	s	s
Puerto Rico	NA	NA
Hispanic students		
United States	130	138
Alabama	125	129
Alaska	NA	NA
Arizona	124	137
Arkansas	136	141
California	121	128
Colorado	134	NA
Connecticut	128	135
Delaware	142	140
District of Columbia	NA	NA
Florida	144	156
Georgia	133	143
Hawaii	134	142
Idaho	128	133
Illinois	129	137
Indiana	136	144
Iowa	134	141
Kansas	NA	139
Kentucky	150	149
Louisiana	144	NA
Maine	s	s
Maryland	143	145
Massachusetts	132	140

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Student characteristic and state	2009	2015
Michigan	138	142
Minnesota	134	139
Mississippi	142	140
Missouri	141	145
Montana	149	146
Nebraska	NA	143
Nevada	128	133
New Hampshire	139	146
New Jersey	136	139
New Mexico	134	137
New York	130	135
North Carolina	132	141
North Dakota	s	150
Ohio	140	144
Oklahoma	131	140
Oregon	128	132
Pennsylvania	125	NA
Rhode Island	124	131
South Carolina	140	148
South Dakota	145	146
Tennessee	134	146
Texas	136	146
Utah	129	134
Vermont	NA	s
Virginia	152	151
Washington	125	138
West Virginia	s	s

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Student characteristic and state	2009	2015
Wisconsin	138	140
Wyoming	140	147
Puerto Rico	NA	NA
Asian and Pacific Islander students		
United States	160	166
Alabama	s	s
Alaska	NA	NA
Arizona	156	s
Arkansas	152	s
California	160	163
Colorado	162	NA
Connecticut	164	164
Delaware	169	171
District of Columbia	NA	NA
Florida	158	s
Georgia	167	174
Hawaii	138	142
Idaho	156	s
Illinois	166	173
Indiana	s	s
Iowa	156	s
Kansas	NA	162
Kentucky	172	s
Louisiana	s	NA
Maine	s	s
Maryland	164	174
Massachusetts	167	174

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Student characteristic and state	2009	2015
Michigan	162	169
Minnesota	147	148
Mississippi	s	s
Missouri	s	s
Montana	s	s
Nebraska	NA	s
Nevada	151	151
New Hampshire	171	169
New Jersey	173	175
New Mexico	s	s
New York	156	159
North Carolina	163	164
North Dakota	s	s
Ohio	s	s
Oklahoma	s	s
Oregon	159	159
Pennsylvania	166	NA
Rhode Island	152	158
South Carolina	s	s
South Dakota	s	s
Tennessee	s	s
Texas	163	184
Utah	147	s
Vermont	NA	s
Virginia	174	181
Washington	156	164
West Virginia	s	s

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Student characteristic and state	2009	2015
Wisconsin	153	156
Wyoming	s	s
Puerto Rico	NA	NA
Male students		
United States	149	153
Alabama	144	145
Alaska	NA	NA
Arizona	137	149
Arkansas	146	151
California	136	141
Colorado	156	NA
Connecticut	156	154
Delaware	153	151
District of Columbia	NA	NA
Florida	151	158
Georgia	145	152
Hawaii	137	145
Idaho	154	157
Illinois	148	152
Indiana	153	160
Iowa	158	159
Kansas	NA	155
Kentucky	161	161
Louisiana	141	NA
Maine	161	158
Maryland	151	154
Massachusetts	162	163

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Student characteristic and state	2009	2015
Michigan	151	154
Minnesota	159	157
Mississippi	134	141
Missouri	155	155
Montana	160	159
Nebraska	NA	161
Nevada	142	141
New Hampshire	163	165
New Jersey	156	155
New Mexico	142	144
New York	148	150
North Carolina	149	154
North Dakota	164	163
Ohio	159	159
Oklahoma	148	155
Oregon	151	153
Pennsylvania	156	NA
Rhode Island	151	151
South Carolina	150	155
South Dakota	158	157
Tennessee	149	156
Texas	148	154
Utah	155	161
Vermont	NA	163
Virginia	161	164
Washington	151	158
West Virginia	149	151

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Student characteristic and state	2009	2015
Wisconsin	157	156
Wyoming	157	162
Puerto Rico	NA	NA
Female students		
United States	148	153
Alabama	142	145
Alaska	NA	NA
Arizona	138	148
Arkansas	146	149
California	137	140
Colorado	153	NA
Connecticut	155	155
Delaware	152	150
District of Columbia	NA	NA
Florida	150	158
Georgia	143	152
Hawaii	143	147
Idaho	153	155
Illinois	147	151
Indiana	152	158
Iowa	157	159
Kansas	NA	154
Kentucky	160	159
Louisiana	141	NA
Maine	158	158
Maryland	149	151
Massachusetts	159	160

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Student characteristic and state	2009	2015
Michigan	149	154
Minnesota	158	158
Mississippi	132	140
Missouri	158	155
Montana	160	159
Nebraska	NA	163
Nevada	139	142
New Hampshire	163	165
New Jersey	154	154
New Mexico	141	142
New York	147	149
North Carolina	146	153
North Dakota	160	159
Ohio	155	156
Oklahoma	148	152
Oregon	151	154
Pennsylvania	151	NA
Rhode Island	149	154
South Carolina	149	157
South Dakota	156	157
Tennessee	148	158
Texas	147	155
Utah	153	158
Vermont	NA	163
Virginia	162	166
Washington	151	157
West Virginia	147	151

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Student characteristic and state	2009	2015
Wisconsin	156	157
Wyoming	154	160
Puerto Rico	NA	NA

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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 APPENDIX TABLE 1-9 
Students in grade 4 scoring at or above the main NAEP's proficient level in science, by race or ethnicity and sex, by state: 2009 and 2015

(Percent)

Student characteristic and state	2009	2015
White students		
United States	46	50
Alabama	39	39
Alaska	NA	NA
Arizona	37	51
Arkansas	38	43
California	41	43
Colorado	53	NA
Connecticut	53	51
Delaware	50	48
District of Columbia	NA	NA
Florida	46	56
Georgia	42	51
Hawaii	43	52
Idaho	40	45
Illinois	48	51
Indiana	41	49
Iowa	45	48
Kansas	NA	46
Kentucky	49	48
Louisiana	42	NA
Maine	43	41
Maryland	48	54
Massachusetts	56	56

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Student characteristic and state	2009	2015
Michigan	43	44
Minnesota	51	51
Mississippi	31	39
Missouri	47	47
Montana	47	48
Nebraska	NA	57
Nevada	37	38
New Hampshire	49	52
New Jersey	52	54
New Mexico	48	44
New York	44	49
North Carolina	45	52
North Dakota	49	50
Ohio	50	48
Oklahoma	37	42
Oregon	40	45
Pennsylvania	48	NA
Rhode Island	44	46
South Carolina	49	55
South Dakota	46	46
Tennessee	43	50
Texas	53	61
Utah	45	52
Vermont	NA	49
Virginia	59	63
Washington	44	53
West Virginia	29	32

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Student characteristic and state	2009	2015
Wisconsin	49	50
Wyoming	41	51
Puerto Rico	NA	NA
Black students		
United States	10	14
Alabama	6	8
Alaska	NA	NA
Arizona	13	19
Arkansas	6	10
California	9	11
Colorado	12	NA
Connecticut	9	10
Delaware	11	14
District of Columbia	NA	NA
Florida	10	17
Georgia	10	16
Hawaii	16	s
Idaho	s	s
Illinois	9	10
Indiana	9	11
Iowa	14	15
Kansas	NA	13
Kentucky	15	22
Louisiana	8	NA
Maine	26	13
Maryland	12	15
Massachusetts	17	21

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Student characteristic and state	2009	2015
Michigan	6	9
Minnesota	12	14
Mississippi	4	8
Missouri	12	10
Montana	s	s
Nebraska	NA	18
Nevada	8	12
New Hampshire	s	s
New Jersey	12	14
New Mexico	16	14
New York	9	12
North Carolina	9	15
North Dakota	s	17
Ohio	10	9
Oklahoma	8	15
Oregon	12	s
Pennsylvania	7	NA
Rhode Island	10	15
South Carolina	10	17
South Dakota	s	21
Tennessee	8	18
Texas	18	23
Utah	s	s
Vermont	NA	s
Virginia	18	23
Washington	8	14
West Virginia	11	12

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Student characteristic and state	2009	2015
Wisconsin	8	8
Wyoming	s	s
Puerto Rico	NA	NA
Hispanic students		
United States	13	20
Alabama	9	9
Alaska	NA	NA
Arizona	9	20
Arkansas	15	19
California	8	12
Colorado	15	NA
Connecticut	11	15
Delaware	20	17
District of Columbia	NA	NA
Florida	23	38
Georgia	15	25
Hawaii	22	25
Idaho	10	14
Illinois	10	19
Indiana	15	22
Iowa	15	17
Kansas	NA	17
Kentucky	31	30
Louisiana	23	NA
Maine	s	s
Maryland	21	26
Massachusetts	12	20

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Student characteristic and state	2009	2015
Michigan	20	25
Minnesota	16	21
Mississippi	21	15
Missouri	21	26
Montana	26	26
Nebraska	NA	21
Nevada	12	15
New Hampshire	20	27
New Jersey	15	20
New Mexico	15	18
New York	13	16
North Carolina	11	19
North Dakota	s	31
Ohio	26	28
Oklahoma	12	18
Oregon	12	14
Pennsylvania	12	NA
Rhode Island	9	14
South Carolina	23	30
South Dakota	23	24
Tennessee	17	30
Texas	16	29
Utah	12	17
Vermont	NA	s
Virginia	32	32
Washington	10	19
West Virginia	s	s

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Student characteristic and state	2009	2015
Wisconsin	17	20
Wyoming	18	23
Puerto Rico	NA	NA
Asian and Pacific Islander students		
United States	45	52
Alabama	s	s
Alaska	NA	NA
Arizona	43	s
Arkansas	34	s
California	45	46
Colorado	48	NA
Connecticut	48	47
Delaware	53	63
District of Columbia	NA	NA
Florida	44	s
Georgia	50	60
Hawaii	21	26
Idaho	39	s
Illinois	51	63
Indiana	s	s
Iowa	43	s
Kansas	NA	48
Kentucky	65	s
Louisiana	s	NA
Maine	s	s
Maryland	47	64
Massachusetts	53	63

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Student characteristic and state	2009	2015
Michigan	49	57
Minnesota	31	31
Mississippi	s	s
Missouri	s	s
Montana	s	s
Nebraska	NA	s
Nevada	32	31
New Hampshire	57	54
New Jersey	63	63
New Mexico	s	s
New York	38	46
North Carolina	52	50
North Dakota	s	s
Ohio	s	s
Oklahoma	s	s
Oregon	44	46
Pennsylvania	53	NA
Rhode Island	37	38
South Carolina	s	s
South Dakota	s	s
Tennessee	s	s
Texas	47	74
Utah	28	s
Vermont	NA	s
Virginia	61	71
Washington	41	49
West Virginia	s	s

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Student characteristic and state	2009	2015
Wisconsin	37	37
Wyoming	s	s
Puerto Rico	NA	NA
Male students		
United States	34	38
Alabama	29	28
Alaska	NA	NA
Arizona	23	33
Arkansas	30	36
California	22	26
Colorado	40	NA
Connecticut	42	38
Delaware	35	34
District of Columbia	NA	NA
Florida	33	42
Georgia	29	36
Hawaii	24	29
Idaho	37	41
Illinois	34	36
Indiana	36	43
Iowa	42	43
Kansas	NA	38
Kentucky	46	46
Louisiana	26	NA
Maine	44	38
Maryland	33	39
Massachusetts	47	48

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Student characteristic and state	2009	2015
Michigan	37	39
Minnesota	45	42
Mississippi	18	25
Missouri	40	40
Montana	43	44
Nebraska	NA	46
Nevada	26	25
New Hampshire	47	51
New Jersey	41	41
New Mexico	25	26
New York	31	35
North Carolina	33	38
North Dakota	49	47
Ohio	45	43
Oklahoma	29	36
Oregon	34	37
Pennsylvania	41	NA
Rhode Island	36	35
South Carolina	34	39
South Dakota	42	40
Tennessee	33	41
Texas	30	39
Utah	39	48
Vermont	NA	49
Virginia	45	49
Washington	34	42
West Virginia	30	32

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Student characteristic and state	2009	2015
Wisconsin	41	41
Wyoming	38	47
Puerto Rico	NA	NA
Female students		
United States	31	36
Alabama	25	27
Alaska	NA	NA
Arizona	21	32
Arkansas	27	31
California	22	22
Colorado	37	NA
Connecticut	38	38
Delaware	32	31
District of Columbia	NA	NA
Florida	31	41
Georgia	25	34
Hawaii	25	32
Idaho	34	36
Illinois	30	34
Indiana	34	40
Iowa	40	40
Kansas	NA	36
Kentucky	43	43
Louisiana	24	NA
Maine	39	40
Maryland	32	35
Massachusetts	43	45

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Student characteristic and state	2009	2015
Michigan	32	37
Minnesota	41	43
Mississippi	16	21
Missouri	40	38
Montana	42	41
Nebraska	NA	48
Nevada	21	23
New Hampshire	48	51
New Jersey	37	38
New Mexico	23	23
New York	29	32
North Carolina	27	34
North Dakota	42	42
Ohio	38	39
Oklahoma	28	31
Oregon	34	37
Pennsylvania	36	NA
Rhode Island	32	36
South Carolina	33	41
South Dakota	38	39
Tennessee	33	42
Texas	28	39
Utah	36	42
Vermont	NA	48
Virginia	47	52
Washington	35	42
West Virginia	26	31

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Student characteristic and state	2009	2015
Wisconsin	40	41
Wyoming	36	43
Puerto Rico	NA	NA

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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APPENDIX TABLE 1-10

Average scores of students in grade 8 on the main NAEP mathematics assessment, by race or ethnicity and sex, by state: 2000–15

(Score out of 500)

Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
White students								
United States	283	287	288	290	292	293	293	291
Alabama	275	274	276	278	280	280	280	276
Alaska	NA	290	288	294	293	296	294	295
Arizona	281	284	288	289	292	294	294	297
Arkansas	268	275	281	282	284	287	286	283
California	277	283	284	287	289	290	291	291
Colorado	NA	292	292	296	299	302	300	297
Connecticut	291	293	293	293	298	297	297	295
Delaware	NA	287	291	294	294	294	293	291
District of Columbia	300	s	317	s	s	319	317	316
Florida	NA	286	286	289	289	287	291	285
Georgia	279	284	284	288	289	291	292	291
Hawaii	274	273	277	278	282	290	290	286
Idaho	280	284	284	287	292	291	291	288
Illinois	285	289	289	291	294	294	296	290
Indiana	285	286	286	290	291	290	293	294
Iowa	NA	287	286	288	287	288	289	291
Kansas	287	290	289	295	294	295	295	289
Kentucky	272	277	276	282	282	284	283	281
Louisiana	275	281	281	283	283	283	285	280
Maine	281	282	281	287	287	290	290	286
Maryland	286	289	292	300	303	303	299	297
Massachusetts	284	292	297	305	305	304	307	304

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	285	286	285	285	286	286	287	285
Minnesota	290	295	296	297	300	302	301	302
Mississippi	268	275	279	279	279	283	285	284
Missouri	277	284	284	288	290	288	288	285
Montana	288	289	290	291	296	297	293	292
Nebraska	285	287	289	291	291	290	292	295
Nevada	273	278	280	282	287	292	289	288
New Hampshire	NA	287	286	289	293	293	297	295
New Jersey	NA	292	295	298	302	304	303	301
New Mexico	274	282	279	285	288	290	289	285
New York	284	293	290	290	294	291	294	290
North Carolina	287	294	292	295	297	296	296	292
North Dakota	285	290	290	295	296	296	294	293
Ohio	285	287	289	291	291	295	294	291
Oklahoma	274	278	278	280	282	286	281	281
Oregon	284	284	287	289	290	287	290	289
Pennsylvania	NA	285	287	293	294	294	297	292
Rhode Island	275	280	281	284	286	292	294	290
South Carolina	277	291	294	293	293	293	292	288
South Dakota	NA	288	291	292	295	295	294	290
Tennessee	269	277	278	282	282	281	284	285
Texas	286	290	295	300	301	304	300	298
Utah	277	285	283	286	289	289	291	292
Vermont	281	286	288	292	293	295	296	291
Virginia	283	290	293	296	294	297	296	295
Washington	NA	285	289	291	295	294	296	294
West Virginia	267	271	270	271	271	274	275	272

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	290	291	292	294	295	296	296
Wyoming	278	286	284	290	289	291	290	290
Puerto Rico	NA	s	s	NA	NA	s	s	s
Black students								
United States	243	252	254	259	260	262	263	260
Alabama	240	240	240	246	248	250	250	248
Alaska	NA	263	266	271	268	273	270	269
Arizona	244	256	261	266	269	269	266	269
Arkansas	227	239	243	254	251	257	255	255
California	235	246	248	253	250	254	258	260
Colorado	NA	255	256	272	263	270	260	260
Connecticut	247	255	249	255	261	262	260	256
Delaware	NA	260	264	265	267	266	264	263
District of Columbia	231	240	241	245	249	256	261	257
Florida	NA	249	251	259	264	258	264	258
Georgia	244	250	255	261	262	262	262	264
Hawaii	s	s	s	s	271	277	s	s
Idaho	s	s	s	s	s	s	s	s
Illinois	252	249	249	253	255	260	260	261
Indiana	256	251	257	259	266	264	265	257
Iowa	NA	257	256	257	259	258	255	254
Kansas	245	252	256	267	264	269	268	263
Kentucky	250	250	255	257	258	261	260	257
Louisiana	239	250	252	258	257	259	259	255
Maine	s	s	s	s	261	265	262	s
Maryland	244	256	258	265	266	267	268	263
Massachusetts	258	260	263	264	272	275	277	268

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	239	245	247	244	246	250	251	251
Minnesota	s	251	251	260	264	266	260	262
Mississippi	237	246	247	251	251	255	255	257
Missouri	238	250	247	253	260	254	260	258
Montana	s	s	s	s	s	s	s	s
Nebraska	247	247	243	240	253	255	250	254
Nevada	244	248	247	255	256	259	263	256
New Hampshire	NA	s	s	s	s	s	s	s
New Jersey	NA	253	260	264	267	272	274	269
New Mexico	s	254	257	264	259	265	258	s
New York	251	255	259	258	262	264	262	264
North Carolina	252	260	263	266	262	267	268	263
North Dakota	s	s	s	s	s	s	272	263
Ohio	251	257	255	258	260	263	267	259
Oklahoma	245	249	249	258	261	262	256	260
Oregon	s	265	258	272	264	263	s	s
Pennsylvania	NA	247	250	257	260	257	262	253
Rhode Island	240	244	249	250	256	256	263	258
South Carolina	247	258	263	265	263	263	261	256
South Dakota	NA	s	s	s	s	270	254	s
Tennessee	235	242	246	254	254	252	257	253
Texas	250	260	264	271	272	277	273	267
Utah	s	s	s	s	s	s	s	s
Vermont	s	s	s	s	s	s	258	s
Virginia	253	262	263	268	268	268	267	265
Washington	NA	262	265	264	269	265	269	257
West Virginia	247	253	251	250	263	260	264	256

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	241	246	247	254	256	252	249
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Hispanic students								
United States	252	258	261	264	266	269	271	269
Alabama	s	s	s	249	260	255	257	260
Alaska	NA	263	272	274	275	277	277	279
Arizona	248	258	260	262	265	266	269	273
Arkansas	s	248	266	256	269	272	274	269
California	242	250	254	256	256	260	263	263
Colorado	NA	259	260	264	267	271	273	269
Connecticut	249	259	254	254	263	262	258	261
Delaware	NA	257	268	267	278	274	276	270
District of Columbia	236	246	252	251	265	261	265	265
Florida	NA	264	265	270	274	274	274	272
Georgia	s	262	258	266	270	277	276	270
Hawaii	s	263	257	264	276	263	280	271
Idaho	250	251	261	264	264	267	268	264
Illinois	258	259	265	265	269	272	272	273
Indiana	s	261	261	267	273	275	278	271
Iowa	NA	255	264	261	266	269	265	269
Kansas	263	263	266	269	274	274	276	274
Kentucky	s	s	s	s	272	269	269	274
Louisiana	s	s	s	s	s	269	277	271
Maine	s	s	s	s	s	s	s	s
Maryland	263	262	262	272	275	273	280	273
Massachusetts	246	255	265	270	271	273	277	271

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	262	265	268	268	270	273	271
Wyoming	257	265	265	274	269	271	278	273
Puerto Rico	NA	s	s	NA	NA	218	218	s
Asian and Pacific Islander students								
United States	287	289	294	296	300	302	306	305
Alabama	s	s	s	s	s	s	s	s
Alaska	NA	280	270	282	282	282	273	275
Arizona	s	s	s	303	295	302	302	305
Arkansas	s	s	s	s	s	s	s	s
California	283	287	293	293	294	298	305	303
Colorado	NA	290	s	297	301	313	303	303
Connecticut	s	296	292	307	305	307	308	309
Delaware	NA	s	306	309	312	311	313	317
District of Columbia	s	s	s	s	s	s	s	s
Florida	NA	287	299	293	302	312	310	297
Georgia	s	286	301	s	300	302	310	317
Hawaii	260	265	264	268	274	277	280	279
Idaho	s	s	s	s	s	s	s	s
Illinois	s	302	300	303	304	314	313	309
Indiana	s	s	s	s	s	s	s	s
Iowa	NA	s	s	s	s	291	299	291
Kansas	s	284	s	302	s	300	301	301
Kentucky	s	s	s	s	s	s	307	304
Louisiana	s	s	s	s	s	s	s	s
Maine	s	s	s	s	s	s	s	s
Maryland	297	302	304	313	320	311	319	314
Massachusetts	292	304	314	315	314	320	323	324

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	273	286	290	289	290	290	295
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Male students								
United States	273	277	278	281	283	283	284	281
Alabama	265	263	261	267	268	269	269	266
Alaska	NA	280	280	282	283	283	282	280
Arizona	271	271	274	277	279	282	280	283
Arkansas	256	265	270	274	275	280	277	275
California	259	268	269	270	272	273	277	275
Colorado	NA	284	281	287	289	291	289	287
Connecticut	283	285	281	282	288	288	285	284
Delaware	NA	278	283	285	284	282	284	280
District of Columbia	235	242	246	248	252	259	264	260
Florida	NA	273	276	278	281	278	282	275
Georgia	265	270	273	275	277	279	279	279
Hawaii	260	265	265	267	271	277	280	277
Idaho	277	281	280	285	288	287	287	284
Illinois	272	278	279	282	284	283	285	282
Indiana	282	282	283	286	288	285	288	288
Iowa	NA	285	283	287	285	286	286	287
Kansas	283	284	285	291	290	291	290	284
Kentucky	271	275	275	280	281	282	281	277
Louisiana	260	267	267	273	272	272	273	267
Maine	282	283	282	288	288	288	290	285
Maryland	272	279	278	287	290	289	286	282
Massachusetts	279	289	291	300	300	299	301	295

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	278	277	279	278	280	282	280	280
Minnesota	287	289	291	292	296	295	295	294
Mississippi	255	262	263	266	265	267	271	269
Missouri	272	280	278	282	287	283	283	282
Montana	284	286	286	287	292	293	289	289
Nebraska	282	284	285	285	286	284	285	287
Nevada	266	268	270	271	275	279	279	275
New Hampshire	NA	287	286	288	293	292	295	295
New Jersey	NA	282	286	290	295	294	295	294
New Mexico	259	264	264	268	271	275	273	272
New York	273	281	280	281	283	280	280	280
North Carolina	277	281	281	285	284	285	285	281
North Dakota	282	287	287	293	294	293	291	288
Ohio	281	283	284	286	287	290	290	284
Oklahoma	271	272	272	277	278	280	275	275
Oregon	282	282	284	285	287	285	285	282
Pennsylvania	NA	280	283	289	290	287	290	283
Rhode Island	268	273	272	276	278	283	284	280
South Carolina	264	280	282	281	281	280	281	275
South Dakota	NA	286	287	290	292	291	288	284
Tennessee	263	268	270	277	275	276	278	278
Texas	272	278	283	287	287	291	289	283
Utah	275	282	280	282	285	285	285	287
Vermont	279	286	287	292	294	294	295	292
Virginia	276	283	285	289	287	289	288	289
Washington	NA	282	285	285	290	288	290	287
West Virginia	265	271	268	271	271	274	274	272

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	284	285	287	289	290	289	289
Wyoming	276	284	283	288	288	290	290	286
Puerto Rico	NA	s	s	NA	NA	218	217	221
Female students								
United States	271	275	277	279	281	282	283	281
Alabama	263	261	264	265	269	269	269	267
Alaska	NA	278	278	283	283	284	281	281
Arizona	266	271	274	274	276	276	279	283
Arkansas	259	267	273	274	277	278	278	275
California	260	266	268	270	268	273	275	276
Colorado	NA	283	281	286	286	292	290	284
Connecticut	278	283	281	283	289	286	285	283
Delaware	NA	276	279	281	283	284	281	280
District of Columbia	234	244	245	248	255	262	266	266
Florida	NA	269	272	277	278	277	280	276
Georgia	265	269	272	274	278	278	279	279
Hawaii	265	266	266	270	276	279	284	282
Idaho	277	279	282	282	286	286	286	284
Illinois	278	276	276	279	280	283	285	282
Indiana	281	280	280	284	285	285	287	287
Iowa	NA	283	284	284	284	284	284	285
Kansas	283	284	283	289	287	289	289	284
Kentucky	269	274	273	277	278	281	280	279
Louisiana	257	266	268	272	273	274	273	269
Maine	281	281	280	285	284	289	287	284
Maryland	272	276	278	284	287	287	287	285
Massachusetts	278	284	292	296	298	298	300	299

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	277	276	275	275	277	279	281	277
Minnesota	287	292	289	292	293	295	294	294
Mississippi	253	260	262	264	265	272	271	273
Missouri	270	278	275	279	285	281	283	279
Montana	287	286	287	287	291	293	289	286
Nebraska	277	281	283	282	283	282	285	286
Nevada	264	268	269	270	273	277	277	275
New Hampshire	NA	286	285	287	292	292	296	293
New Jersey	NA	281	282	288	290	294	297	293
New Mexico	260	263	262	267	269	274	273	270
New York	270	279	280	280	282	281	283	280
North Carolina	275	282	282	283	284	287	286	282
North Dakota	282	287	287	290	291	291	290	288
Ohio	280	281	282	283	284	288	289	286
Oklahoma	269	272	271	273	274	278	276	274
Oregon	278	280	281	283	283	280	282	284
Pennsylvania	NA	277	279	283	287	285	289	285
Rhode Island	270	271	273	275	278	283	284	283
South Carolina	265	274	281	282	280	282	279	277
South Dakota	NA	284	287	287	289	290	287	286
Tennessee	260	268	271	271	275	272	278	278
Texas	275	276	279	285	286	290	288	284
Utah	272	280	278	280	283	281	284	285
Vermont	282	286	287	290	292	294	296	289
Virginia	274	280	283	286	285	289	289	287
Washington	NA	281	285	285	288	288	289	285
West Virginia	268	271	270	269	270	272	274	271

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	284	284	284	287	287	289	289
Wyoming	276	283	281	286	284	285	287	288
Puerto Rico	NA	s	s	NA	NA	219	218	223

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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APPENDIX TABLE 1-11

Students in grade 8 scoring at or above the main NAEP's proficient level in mathematics, by race or ethnicity and sex, by state: 2000–15

(Percent)

Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
White students								
United States	33	36	37	41	43	43	44	42
Alabama	23	23	22	27	29	28	28	23
Alaska	NA	41	38	44	44	47	46	45
Arizona	28	32	38	40	42	46	45	51
Arkansas	18	24	28	31	34	37	34	31
California	26	34	34	39	39	41	42	43
Colorado	NA	43	43	48	51	55	53	49
Connecticut	42	44	46	44	49	48	48	46
Delaware	NA	35	40	43	43	43	45	41
District of Columbia	56	s	69	s	s	76	75	74
Florida	NA	34	36	37	39	37	40	36
Georgia	27	32	34	37	39	40	42	41
Hawaii	22	25	25	28	31	41	41	34
Idaho	28	31	33	38	43	41	41	39
Illinois	35	40	39	41	44	44	48	40
Indiana	32	35	34	40	41	40	44	45
Iowa	NA	35	36	38	37	37	40	41
Kansas	36	39	39	46	45	47	47	38
Kentucky	22	25	24	29	29	33	33	30
Louisiana	18	28	25	28	29	31	31	27
Maine	31	30	30	35	36	40	40	36
Maryland	38	40	43	53	56	56	51	49
Massachusetts	34	44	49	58	59	58	63	59

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	34	35	36	35	37	35	36	34
Minnesota	41	49	49	48	53	55	54	56
Mississippi	14	22	24	24	25	30	33	34
Missouri	25	32	32	36	39	36	38	36
Montana	39	37	39	41	47	49	44	43
Nebraska	33	36	40	41	41	39	42	46
Nevada	24	27	29	32	36	43	40	38
New Hampshire	NA	35	35	39	44	45	48	47
New Jersey	NA	42	47	51	54	59	58	55
New Mexico	23	31	26	33	39	40	40	35
New York	33	44	41	39	44	40	44	40
North Carolina	37	44	42	46	49	48	48	43
North Dakota	33	39	37	44	46	47	44	44
Ohio	34	35	38	42	41	46	45	40
Oklahoma	22	25	26	25	29	34	29	29
Oregon	34	35	38	39	41	37	40	40
Pennsylvania	NA	35	36	44	45	47	49	44
Rhode Island	26	29	30	35	35	42	45	41
South Carolina	27	39	44	44	43	43	43	36
South Dakota	NA	37	40	43	46	47	45	39
Tennessee	20	26	26	30	30	28	33	34
Texas	35	38	46	53	54	58	53	48
Utah	27	34	33	36	40	41	42	43
Vermont	31	35	39	42	44	47	48	43
Virginia	32	40	43	47	44	48	47	46
Washington	NA	36	39	42	46	46	48	47
West Virginia	18	20	18	19	20	22	24	21

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	40	42	42	45	47	47	47
Wyoming	25	35	32	39	38	41	40	39
Puerto Rico	NA	s	s	NA	NA	s	s	s
Black students								
United States	5	7	8	11	12	13	14	12
Alabama	3	3	3	4	6	7	6	5
Alaska	NA	11	19	15	17	17	20	17
Arizona	7	7	15	15	23	18	19	19
Arkansas	2	3	4	9	8	9	9	10
California	4	6	7	10	10	12	11	14
Colorado	NA	9	11	21	16	17	15	15
Connecticut	4	7	6	7	10	11	13	12
Delaware	NA	8	13	10	13	14	14	13
District of Columbia	3	3	4	6	8	13	14	13
Florida	NA	7	8	11	13	11	14	11
Georgia	4	7	8	11	11	12	12	13
Hawaii	s	s	s	s	21	26	s	s
Idaho	s	s	s	s	s	s	s	s
Illinois	8	6	6	7	9	10	12	12
Indiana	7	7	9	9	14	11	15	10
Iowa	NA	11	8	11	9	11	10	8
Kansas	10	8	12	16	15	16	18	13
Kentucky	6	5	9	11	8	12	11	12
Louisiana	2	5	5	7	7	10	9	7
Maine	s	s	s	s	14	18	14	s
Maryland	6	9	11	13	15	18	18	14
Massachusetts	9	10	15	13	23	26	28	22

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	3	4	6	5	5	7	7	5
Minnesota	s	9	9	14	13	18	15	14
Mississippi	1	3	4	4	5	8	8	10
Missouri	3	6	4	6	11	8	12	11
Montana	s	s	s	s	s	s	s	s
Nebraska	6	7	2	5	10	8	8	13
Nevada	5	9	7	12	10	12	12	8
New Hampshire	NA	s	s	s	s	s	s	s
New Jersey	NA	7	11	14	17	21	24	20
New Mexico	s	5	13	12	13	16	12	s
New York	8	10	11	10	13	13	12	15
North Carolina	7	11	12	14	12	15	17	16
North Dakota	s	s	s	s	s	s	25	17
Ohio	7	8	7	9	11	12	16	11
Oklahoma	5	5	4	9	10	11	9	8
Oregon	s	17	9	28	12	18	s	s
Pennsylvania	NA	4	7	13	13	9	13	8
Rhode Island	4	5	5	9	8	12	15	14
South Carolina	4	8	10	15	12	14	13	8
South Dakota	NA	s	s	s	s	21	10	s
Tennessee	3	5	3	7	10	9	10	9
Texas	7	8	13	16	17	21	21	16
Utah	s	s	s	s	s	s	s	s
Vermont	s	s	s	s	s	s	18	s
Virginia	6	11	9	15	14	18	15	12
Washington	NA	13	15	16	16	15	23	13
West Virginia	7	6	6	4	11	10	13	8

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	5	5	6	11	11	8	7
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Hispanic students								
United States	8	11	13	15	17	20	21	19
Alabama	s	s	s	3	10	9	6	11
Alaska	NA	11	21	23	23	25	24	26
Arizona	6	9	13	12	16	18	19	23
Arkansas	s	7	15	8	15	20	20	18
California	6	8	9	10	11	13	15	13
Colorado	NA	12	10	13	18	20	23	19
Connecticut	7	11	10	10	14	13	12	14
Delaware	NA	11	16	17	22	21	25	17
District of Columbia	5	3	9	9	18	17	20	19
Florida	NA	16	16	21	22	22	24	22
Georgia	s	14	12	16	18	25	24	19
Hawaii	s	16	9	15	26	19	28	20
Idaho	7	7	11	16	15	16	15	12
Illinois	11	9	13	13	17	19	22	22
Indiana	s	9	14	20	19	21	24	23
Iowa	NA	10	9	13	15	14	13	19
Kansas	12	16	14	16	22	22	24	22
Kentucky	s	s	s	s	22	18	17	21
Louisiana	s	s	s	s	s	16	25	19
Maine	s	s	s	s	s	s	s	s
Maryland	20	15	19	21	26	27	30	24
Massachusetts	8	9	15	19	21	21	28	24

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	16	16	18	20	21	19	20
Wyoming	8	13	11	22	15	20	26	18
Puerto Rico	NA	s	s	NA	NA	*	*	s
Asian and Pacific Islander students								
United States	40	42	46	49	53	55	60	58
Alabama	s	s	s	s	s	s	s	s
Alaska	NA	29	19	33	31	32	23	25
Arizona	s	s	s	52	52	58	57	62
Arkansas	s	s	s	s	s	s	s	s
California	34	39	45	46	46	50	59	56
Colorado	NA	38	s	48	55	67	59	59
Connecticut	s	51	46	61	61	60	61	58
Delaware	NA	s	59	65	69	67	69	69
District of Columbia	s	s	s	s	s	s	s	s
Florida	NA	41	51	48	55	65	65	51
Georgia	s	40	52	s	49	52	62	68
Hawaii	15	15	17	20	25	29	31	30
Idaho	s	s	s	s	s	s	s	s
Illinois	s	58	50	55	60	67	69	59
Indiana	s	s	s	s	s	s	s	s
Iowa	NA	s	s	s	s	45	53	40
Kansas	s	34	s	52	s	53	55	59
Kentucky	s	s	s	s	s	s	58	58
Louisiana	s	s	s	s	s	s	s	s
Maine	s	s	s	s	s	s	s	s
Maryland	49	56	55	66	76	65	68	68
Massachusetts	44	57	68	74	66	72	78	73

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	17	32	40	40	43	40	44
Wyoming	s	s	s	s	s	s	s	s
Puerto Rico	NA	s	s	NA	NA	s	s	s
Male students								
United States	26	29	30	33	34	34	35	32
Alabama	17	18	15	21	21	21	21	18
Alaska	NA	32	30	33	34	36	34	32
Arizona	22	21	26	30	31	34	32	36
Arkansas	14	19	22	26	27	31	29	26
California	17	23	23	25	26	26	29	27
Colorado	NA	35	33	38	41	44	42	39
Connecticut	36	37	35	35	39	39	37	37
Delaware	NA	27	32	34	32	31	34	30
District of Columbia	6	7	7	8	12	17	18	18
Florida	NA	26	28	29	31	29	32	26
Georgia	19	24	24	26	27	29	30	29
Hawaii	16	17	19	20	24	30	31	28
Idaho	27	30	30	36	39	37	38	34
Illinois	24	31	30	33	35	33	37	34
Indiana	33	33	32	37	39	34	39	39
Iowa	NA	35	34	37	35	34	37	39
Kansas	35	34	35	41	43	41	42	34
Kentucky	22	25	24	30	30	32	31	27
Louisiana	12	19	16	20	21	22	20	19
Maine	32	31	31	37	38	38	41	35
Maryland	27	33	31	38	42	42	37	34
Massachusetts	31	42	43	53	53	52	54	49

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	29	30	31	30	32	33	31	30
Minnesota	39	43	45	44	49	47	48	48
Mississippi	10	14	15	16	15	18	22	21
Missouri	23	30	28	32	37	33	33	33
Montana	37	36	36	39	45	46	41	42
Nebraska	33	35	37	37	37	35	35	39
Nevada	20	21	23	24	26	29	29	27
New Hampshire	NA	36	36	38	45	44	46	47
New Jersey	NA	34	39	43	47	48	48	47
New Mexico	13	16	15	19	21	24	24	22
New York	27	33	31	31	36	30	31	32
North Carolina	28	32	32	36	37	37	36	33
North Dakota	31	37	36	43	45	45	41	41
Ohio	32	32	34	38	38	40	42	35
Oklahoma	20	22	22	24	26	29	25	25
Oregon	34	33	35	37	40	35	36	32
Pennsylvania	NA	33	33	42	42	40	43	35
Rhode Island	21	26	24	29	29	35	37	31
South Carolina	17	29	31	33	31	31	32	25
South Dakota	NA	35	36	41	44	42	39	33
Tennessee	19	22	21	26	26	26	28	31
Texas	23	27	33	37	38	41	39	32
Utah	26	33	32	34	37	37	38	39
Vermont	31	35	38	43	45	46	46	44
Virginia	28	33	35	40	38	40	38	39
Washington	NA	33	37	37	41	41	42	40
West Virginia	17	21	18	21	21	22	25	21

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	36	36	40	41	43	40	40
Wyoming	24	34	31	37	38	41	39	35
Puerto Rico	NA	s	s	NA	NA	*	*	*
Female students								
United States	23	26	27	29	31	33	34	32
Alabama	15	14	15	15	20	19	19	17
Alaska	NA	28	27	32	33	35	33	31
Arizona	18	21	25	23	27	29	29	33
Arkansas	13	18	22	22	27	28	27	24
California	16	21	20	23	21	25	26	27
Colorado	NA	34	31	37	38	43	41	35
Connecticut	30	33	34	34	41	37	37	35
Delaware	NA	25	27	29	31	33	31	29
District of Columbia	5	5	6	8	11	17	20	21
Florida	NA	21	23	26	27	27	30	27
Georgia	18	20	23	23	27	27	29	28
Hawaii	16	16	18	22	27	30	34	32
Idaho	25	27	30	32	37	36	35	34
Illinois	28	28	27	29	31	32	36	31
Indiana	26	29	28	33	34	34	38	38
Iowa	NA	31	33	33	33	33	35	36
Kansas	32	34	33	39	36	40	39	32
Kentucky	18	23	21	24	25	29	29	28
Louisiana	10	15	16	18	20	22	21	17
Maine	29	28	29	32	32	39	37	35
Maryland	27	27	28	35	38	38	38	35
Massachusetts	29	35	43	48	50	51	55	53

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Michigan	28	26	27	27	29	29	30	27
Minnesota	38	44	41	43	45	48	46	48
Mississippi	7	11	12	12	15	20	20	22
Missouri	19	26	24	28	34	30	32	30
Montana	36	34	36	36	42	45	39	36
Nebraska	27	30	33	32	32	31	36	37
Nevada	17	19	20	22	24	28	27	25
New Hampshire	NA	33	33	38	42	44	47	45
New Jersey	NA	33	33	38	42	46	50	46
New Mexico	12	15	13	16	19	24	22	19
New York	22	31	30	29	32	30	33	30
North Carolina	26	32	32	33	34	37	36	33
North Dakota	30	36	33	39	42	40	40	38
Ohio	29	29	32	33	34	37	39	35
Oklahoma	17	18	19	18	21	26	25	21
Oregon	28	30	32	33	33	30	32	35
Pennsylvania	NA	27	29	35	37	38	41	37
Rhode Island	22	22	23	27	26	33	35	33
South Carolina	17	23	29	31	29	32	29	27
South Dakota	NA	34	37	37	39	41	38	35
Tennessee	14	20	20	20	25	22	27	28
Texas	25	23	28	32	35	39	37	33
Utah	23	29	27	30	33	33	34	37
Vermont	30	35	38	40	42	46	48	40
Virginia	22	30	32	34	33	40	38	36
Washington	NA	31	35	35	38	40	41	38
West Virginia	17	18	18	16	18	21	22	21

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Student characteristic and state	2000	2003	2005	2007	2009	2011	2013	2015
Wisconsin	s	34	36	34	38	39	40	41
Wyoming	23	30	27	34	31	34	36	36
Puerto Rico	NA	s	s	NA	NA	*	*	*

* = rounds to zero; NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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 APPENDIX TABLE 1-12 
Average scores of students in grade 8 on the main NAEP science assessment, by race or ethnicity and sex, by state: 2009–15

(Score out of 300)

Student characteristic and state	2009	2011	2015
White students			
United States	161	163	165
Alabama	152	152	154
Alaska	NA	166	NA
Arizona	157	158	162
Arkansas	154	158	159
California	157	159	164
Colorado	166	171	NA
Connecticut	164	165	165
Delaware	159	161	162
District of Columbia	NA	174	NA
Florida	158	161	164
Georgia	161	166	165
Hawaii	153	157	163
Idaho	162	163	165
Illinois	162	161	162
Indiana	159	160	163
Iowa	160	161	163
Kansas	NA	163	163
Kentucky	159	160	160
Louisiana	155	156	NA
Maine	159	160	161
Maryland	164	167	168
Massachusetts	167	169	170

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Student characteristic and state	2009	2011	2015
Michigan	162	165	164
Minnesota	166	168	171
Mississippi	150	156	158
Missouri	161	162	165
Montana	166	167	166
Nebraska	NA	164	167
Nevada	153	157	163
New Hampshire	161	164	167
New Jersey	165	166	164
New Mexico	163	161	162
New York	164	163	164
North Carolina	158	160	163
North Dakota	166	168	166
Ohio	164	165	165
Oklahoma	155	156	158
Oregon	160	162	163
Pennsylvania	162	163	NA
Rhode Island	155	161	162
South Carolina	158	163	164
South Dakota	165	166	166
Tennessee	157	160	165
Texas	167	167	172
Utah	164	167	172
Vermont	NA	164	164
Virginia	166	169	169
Washington	161	163	168
West Virginia	146	150	150

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Student characteristic and state	2009	2011	2015
Wisconsin	165	166	166
Wyoming	162	164	164
Puerto Rico	NA	NA	NA
Black students			
United States	125	128	131
Alabama	115	118	118
Alaska	NA	133	NA
Arizona	126	128	131
Arkansas	111	119	121
California	122	124	130
Colorado	135	149	NA
Connecticut	126	128	131
Delaware	133	134	129
District of Columbia	NA	107	NA
Florida	126	127	135
Georgia	129	133	137
Hawaii	133	s	s
Idaho	s	s	s
Illinois	118	120	126
Indiana	126	125	126
Iowa	127	128	133
Kansas	NA	129	126
Kentucky	137	135	134
Louisiana	120	125	NA
Maine	126	s	s
Maryland	127	131	135
Massachusetts	132	133	134

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Student characteristic and state	2009	2011	2015
Michigan	121	124	125
Minnesota	128	129	128
Mississippi	114	119	122
Missouri	129	130	132
Montana	s	s	s
Nebraska	NA	126	138
Nevada	127	123	130
New Hampshire	s	s	s
New Jersey	127	131	136
New Mexico	s	s	s
New York	123	130	129
North Carolina	121	125	128
North Dakota	s	s	146
Ohio	126	132	127
Oklahoma	124	126	129
Oregon	135	s	131
Pennsylvania	123	120	NA
Rhode Island	125	122	130
South Carolina	124	128	131
South Dakota	141	s	s
Tennessee	122	121	130
Texas	133	137	140
Utah	s	s	s
Vermont	NA	s	s
Virginia	135	138	139
Washington	135	133	134
West Virginia	127	136	137

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Student characteristic and state	2009	2011	2015
Wisconsin	120	121	120
Wyoming	s	s	s
Puerto Rico	NA	NA	NA
Hispanic students			
United States	131	136	139
Alabama	129	136	131
Alaska	NA	147	NA
Arizona	127	132	138
Arkansas	134	138	141
California	122	128	129
Colorado	137	141	NA
Connecticut	128	129	135
Delaware	141	139	142
District of Columbia	NA	116	NA
Florida	139	144	149
Georgia	137	143	148
Hawaii	148	144	152
Idaho	137	139	141
Illinois	131	135	139
Indiana	135	136	140
Iowa	133	143	144
Kansas	NA	134	141
Kentucky	145	149	155
Louisiana	s	142	NA
Maine	s	s	s
Maryland	136	142	145
Massachusetts	131	130	136

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Student characteristic and state	2009	2011	2015
Michigan	139	146	142
Minnesota	132	137	139
Mississippi	s	s	141
Missouri	150	s	142
Montana	155	s	149
Nebraska	NA	135	144
Nevada	129	133	138
New Hampshire	131	137	141
New Jersey	138	134	139
New Mexico	135	139	138
New York	125	129	134
North Carolina	132	138	143
North Dakota	s	s	141
Ohio	140	151	142
Oklahoma	127	135	138
Oregon	130	135	138
Pennsylvania	121	118	NA
Rhode Island	119	120	127
South Carolina	129	139	143
South Dakota	135	151	142
Tennessee	139	137	145
Texas	141	146	148
Utah	129	137	144
Vermont	NA	s	s
Virginia	144	145	146
Washington	132	141	137
West Virginia	s	s	s

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Student characteristic and state	2009	2011	2015
Wisconsin	134	140	139
Wyoming	137	143	147
Puerto Rico	NA	NA	NA
Asian and Pacific Islander students			
United States	159	159	163
Alabama	s	s	s
Alaska	NA	145	NA
Arizona	159	s	166
Arkansas	s	s	s
California	154	157	161
Colorado	161	162	NA
Connecticut	169	170	170
Delaware	160	168	175
District of Columbia	NA	s	NA
Florida	163	161	169
Georgia	172	168	169
Hawaii	136	139	139
Idaho	s	s	s
Illinois	167	163	162
Indiana	s	s	s
Iowa	s	s	s
Kansas	NA	156	s
Kentucky	s	s	s
Louisiana	s	s	NA
Maine	s	s	s
Maryland	169	164	178
Massachusetts	168	170	174

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Student characteristic and state	2009	2011	2015
Michigan	s	166	167
Minnesota	141	149	147
Mississippi	s	s	s
Missouri	167	s	s
Montana	s	s	s
Nebraska	NA	s	s
Nevada	148	154	160
New Hampshire	s	s	165
New Jersey	174	173	174
New Mexico	s	s	s
New York	161	154	158
North Carolina	165	160	s
North Dakota	s	s	s
Ohio	s	s	s
Oklahoma	s	s	s
Oregon	160	159	163
Pennsylvania	159	163	NA
Rhode Island	146	151	s
South Carolina	s	s	s
South Dakota	s	s	s
Tennessee	s	s	s
Texas	170	172	177
Utah	147	153	157
Vermont	NA	s	s
Virginia	168	172	171
Washington	157	156	160
West Virginia	s	s	s

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Student characteristic and state	2009	2011	2015
Wisconsin	152	149	161
Wyoming	s	s	s
Puerto Rico	NA	NA	NA
Male students			
United States	151	153	154
Alabama	142	141	144
Alaska	NA	154	NA
Arizona	143	146	149
Arkansas	145	149	148
California	138	143	144
Colorado	158	162	NA
Connecticut	157	156	156
Delaware	151	151	150
District of Columbia	NA	110	NA
Florida	148	150	154
Georgia	150	153	153
Hawaii	140	143	144
Idaho	160	162	162
Illinois	150	150	150
Indiana	155	157	160
Iowa	158	159	161
Kansas	NA	159	158
Kentucky	159	158	159
Louisiana	141	144	NA
Maine	160	162	161
Maryland	150	152	155
Massachusetts	162	164	164

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Student characteristic and state	2009	2011	2015
Michigan	155	160	156
Minnesota	161	163	163
Mississippi	134	142	142
Missouri	158	158	161
Montana	165	166	162
Nebraska	NA	158	162
Nevada	142	148	150
New Hampshire	164	165	166
New Jersey	156	157	157
New Mexico	147	147	144
New York	150	150	150
North Carolina	145	149	149
North Dakota	166	167	163
Ohio	161	161	159
Oklahoma	149	150	153
Oregon	156	157	159
Pennsylvania	157	155	NA
Rhode Island	149	151	150
South Carolina	144	150	152
South Dakota	164	165	163
Tennessee	149	154	157
Texas	152	155	160
Utah	159	164	168
Vermont	NA	165	166
Virginia	157	161	160
Washington	156	159	158
West Virginia	148	153	151

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Student characteristic and state	2009	2011	2015
Wisconsin	160	162	161
Wyoming	162	163	161
Puerto Rico	NA	NA	NA
Female students			
United States	147	148	151
Alabama	136	139	139
Alaska	NA	153	NA
Arizona	139	142	146
Arkansas	142	147	149
California	135	138	141
Colorado	153	159	NA
Connecticut	153	153	154
Delaware	146	149	148
District of Columbia	NA	113	NA
Florida	144	147	152
Georgia	144	148	151
Hawaii	137	141	144
Idaho	155	156	158
Illinois	146	144	149
Indiana	150	149	152
Iowa	154	155	157
Kansas	NA	153	153
Kentucky	154	155	155
Louisiana	138	141	NA
Maine	156	158	158
Maryland	146	151	155
Massachusetts	158	159	160

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Student characteristic and state	2009	2011	2015
Michigan	152	154	154
Minnesota	157	158	160
Mississippi	130	133	138
Missouri	154	155	157
Montana	159	160	160
Nebraska	NA	155	158
Nevada	140	141	147
New Hampshire	157	160	163
New Jersey	153	152	154
New Mexico	140	142	142
New York	147	147	149
North Carolina	143	147	152
North Dakota	159	161	159
Ohio	154	155	155
Oklahoma	144	147	149
Oregon	152	154	154
Pennsylvania	151	147	NA
Rhode Island	143	146	151
South Carolina	142	147	150
South Dakota	157	159	158
Tennessee	146	147	155
Texas	148	151	153
Utah	156	159	164
Vermont	NA	160	160
Virginia	155	158	159
Washington	153	154	156
West Virginia	142	145	148

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Student characteristic and state	2009	2011	2015
Wisconsin	155	156	157
Wyoming	154	157	159
Puerto Rico	NA	NA	NA

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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 APPENDIX TABLE 1-13 
Students in grade 8 scoring at or above the main NAEP's proficient level in science, by race or ethnicity and sex, by state: 2009–15

(Percent)

Student characteristic and state	2009	2011	2015
White students			
United States	41	43	46
Alabama	28	28	30
Alaska	NA	47	NA
Arizona	35	37	41
Arkansas	32	36	38
California	38	39	46
Colorado	48	55	NA
Connecticut	44	45	45
Delaware	35	40	42
District of Columbia	NA	60	NA
Florida	36	39	45
Georgia	41	46	47
Hawaii	30	37	41
Idaho	42	43	46
Illinois	41	39	41
Indiana	38	40	42
Iowa	38	39	42
Kansas	NA	43	42
Kentucky	36	37	38
Louisiana	31	32	NA
Maine	36	37	38
Maryland	44	49	52
Massachusetts	48	52	53

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Student characteristic and state	2009	2011	2015
Michigan	42	45	44
Minnesota	46	49	54
Mississippi	27	33	35
Missouri	40	42	46
Montana	46	48	47
Nebraska	NA	45	49
Nevada	30	35	44
New Hampshire	40	43	48
New Jersey	44	46	43
New Mexico	39	40	41
New York	45	42	45
North Carolina	36	38	44
North Dakota	46	49	46
Ohio	43	45	45
Oklahoma	33	33	35
Oregon	40	43	43
Pennsylvania	42	43	NA
Rhode Island	33	40	43
South Carolina	35	42	45
South Dakota	45	47	46
Tennessee	36	38	45
Texas	47	50	56
Utah	45	49	57
Vermont	NA	44	45
Virginia	48	51	52
Washington	41	43	50
West Virginia	23	25	27

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Student characteristic and state	2009	2011	2015
Wisconsin	44	47	47
Wyoming	40	43	43
Puerto Rico	NA	NA	NA
Black students			
United States	8	9	11
Alabama	4	5	5
Alaska	NA	8	NA
Arizona	8	6	12
Arkansas	4	3	5
California	8	8	13
Colorado	13	26	NA
Connecticut	9	9	12
Delaware	10	10	11
District of Columbia	NA	4	NA
Florida	7	9	15
Georgia	10	12	13
Hawaii	15	s	s
Idaho	s	s	s
Illinois	4	4	6
Indiana	8	8	6
Iowa	9	10	12
Kansas	NA	9	7
Kentucky	16	12	10
Louisiana	5	8	NA
Maine	11	s	s
Maryland	8	11	14
Massachusetts	13	15	13

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Student characteristic and state	2009	2011	2015
Michigan	6	6	8
Minnesota	11	10	13
Mississippi	3	5	6
Missouri	9	10	12
Montana	s	s	s
Nebraska	NA	11	13
Nevada	9	7	9
New Hampshire	s	s	s
New Jersey	8	9	14
New Mexico	s	s	s
New York	7	11	9
North Carolina	5	7	9
North Dakota	s	s	23
Ohio	6	8	10
Oklahoma	7	9	9
Oregon	13	s	14
Pennsylvania	7	5	NA
Rhode Island	8	10	10
South Carolina	6	8	11
South Dakota	24	s	s
Tennessee	6	7	12
Texas	13	16	18
Utah	s	s	s
Vermont	NA	s	s
Virginia	11	15	14
Washington	16	15	15
West Virginia	10	11	13

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Student characteristic and state	2009	2011	2015
Wisconsin	6	8	7
Wyoming	s	s	s
Puerto Rico	NA	NA	NA
Hispanic students			
United States	12	16	18
Alabama	10	15	12
Alaska	NA	23	NA
Arizona	10	11	14
Arkansas	12	13	17
California	7	11	10
Colorado	14	18	NA
Connecticut	9	11	13
Delaware	16	13	18
District of Columbia	NA	9	NA
Florida	17	24	29
Georgia	15	21	25
Hawaii	25	18	28
Idaho	14	15	17
Illinois	10	11	14
Indiana	16	14	17
Iowa	12	15	20
Kansas	NA	12	16
Kentucky	24	27	30
Louisiana	s	22	NA
Maine	s	s	s
Maryland	12	18	24
Massachusetts	14	12	16

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Student characteristic and state	2009	2011	2015
Michigan	20	24	18
Minnesota	14	18	15
Mississippi	s	s	15
Missouri	29	s	22
Montana	33	s	22
Nebraska	NA	13	20
Nevada	10	12	15
New Hampshire	12	14	17
New Jersey	13	12	17
New Mexico	14	16	15
New York	11	12	13
North Carolina	11	15	21
North Dakota	s	s	26
Ohio	18	31	27
Oklahoma	9	14	16
Oregon	12	14	16
Pennsylvania	7	8	NA
Rhode Island	5	5	11
South Carolina	13	16	18
South Dakota	10	25	18
Tennessee	21	18	23
Texas	17	23	26
Utah	13	15	23
Vermont	NA	s	s
Virginia	20	24	23
Washington	9	17	15
West Virginia	s	s	s

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Student characteristic and state	2009	2011	2015
Wisconsin	15	24	17
Wyoming	12	16	18
Puerto Rico	NA	NA	NA
Asian and Pacific Islander students			
United States	40	41	46
Alabama	s	s	s
Alaska	NA	22	NA
Arizona	43	s	47
Arkansas	s	s	s
California	34	39	41
Colorado	41	49	NA
Connecticut	52	56	53
Delaware	40	54	62
District of Columbia	NA	s	NA
Florida	40	44	52
Georgia	58	51	51
Hawaii	14	18	18
Idaho	s	s	s
Illinois	48	42	40
Indiana	s	s	s
Iowa	s	s	s
Kansas	NA	37	s
Kentucky	s	s	s
Louisiana	s	s	NA
Maine	s	s	s
Maryland	51	48	66
Massachusetts	49	55	62

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Student characteristic and state	2009	2011	2015
Michigan	s	50	55
Minnesota	23	29	28
Mississippi	s	s	s
Missouri	48	s	s
Montana	s	s	s
Nebraska	NA	s	s
Nevada	26	31	40
New Hampshire	s	s	50
New Jersey	58	56	60
New Mexico	s	s	s
New York	43	34	39
North Carolina	44	34	s
North Dakota	s	s	s
Ohio	s	s	s
Oklahoma	s	s	s
Oregon	45	40	46
Pennsylvania	41	48	NA
Rhode Island	21	35	s
South Carolina	s	s	s
South Dakota	s	s	s
Tennessee	s	s	s
Texas	55	54	65
Utah	31	35	36
Vermont	NA	s	s
Virginia	49	56	55
Washington	39	37	43
West Virginia	s	s	s

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Student characteristic and state	2009	2011	2015
Wisconsin	28	24	43
Wyoming	s	s	s
Puerto Rico	NA	NA	NA
Male students			
United States	32	34	36
Alabama	24	22	24
Alaska	NA	35	NA
Arizona	26	26	29
Arkansas	28	30	29
California	22	25	26
Colorado	39	44	NA
Connecticut	38	38	38
Delaware	29	29	31
District of Columbia	NA	8	NA
Florida	28	31	35
Georgia	30	34	33
Hawaii	19	23	25
Idaho	42	42	44
Illinois	32	30	30
Indiana	35	38	41
Iowa	38	38	42
Kansas	NA	41	38
Kentucky	37	37	38
Louisiana	22	25	NA
Maine	38	40	40
Maryland	32	32	37
Massachusetts	44	47	47

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Student characteristic and state	2009	2011	2015
Michigan	38	42	38
Minnesota	43	46	47
Mississippi	17	22	23
Missouri	38	39	43
Montana	47	49	45
Nebraska	NA	40	44
Nevada	21	28	29
New Hampshire	44	46	48
New Jersey	37	38	37
New Mexico	24	25	22
New York	34	31	32
North Carolina	25	30	30
North Dakota	47	51	45
Ohio	41	43	41
Oklahoma	28	30	32
Oregon	37	38	40
Pennsylvania	39	38	NA
Rhode Island	30	34	32
South Carolina	24	32	34
South Dakota	45	47	44
Tennessee	32	36	39
Texas	32	35	41
Utah	43	47	54
Vermont	NA	47	48
Virginia	39	43	42
Washington	38	38	40
West Virginia	26	30	30

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Student characteristic and state	2009	2011	2015
Wisconsin	43	44	43
Wyoming	42	42	41
Puerto Rico	NA	NA	NA
Female students			
United States	26	27	31
Alabama	15	16	18
Alaska	NA	32	NA
Arizona	18	19	22
Arkansas	20	23	27
California	17	20	21
Colorado	32	40	NA
Connecticut	32	33	31
Delaware	21	26	26
District of Columbia	NA	7	NA
Florida	21	26	31
Georgia	24	27	29
Hawaii	15	20	21
Idaho	33	33	36
Illinois	25	21	26
Indiana	28	27	30
Iowa	31	33	35
Kansas	NA	30	30
Kentucky	30	31	30
Louisiana	18	19	NA
Maine	33	34	35
Maryland	25	32	35
Massachusetts	38	40	41

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Student characteristic and state	2009	2011	2015
Michigan	31	34	34
Minnesota	36	38	42
Mississippi	13	15	17
Missouri	33	33	37
Montana	38	39	38
Nebraska	NA	35	37
Nevada	19	18	24
New Hampshire	33	38	44
New Jersey	31	30	32
New Mexico	18	19	20
New York	27	27	28
North Carolina	22	23	31
North Dakota	37	38	38
Ohio	32	33	35
Oklahoma	22	23	25
Oregon	32	32	32
Pennsylvania	31	28	NA
Rhode Island	22	27	32
South Carolina	22	24	29
South Dakota	35	36	36
Tennessee	24	25	35
Texas	26	29	32
Utah	36	38	46
Vermont	NA	39	39
Virginia	33	38	38
Washington	30	33	35
West Virginia	18	19	23

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Student characteristic and state	2009	2011	2015
Wisconsin	33	36	37
Wyoming	30	34	34
Puerto Rico	NA	NA	NA

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

NAEP = National Assessment of Educational Progress.

Note(s)

The NAEP scores are for public schools only. The national value for the United States is the reported value in the NAEP reports. Black includes African American. Hispanic includes Latino. Asian and Pacific Islander includes Native Hawaiian.

Source(s)

National Center for Education Statistics, NAEP (various years).

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APPENDIX TABLE 1-14

Average mathematics assessment test scores of children who were in kindergarten for the first time in the 2010–11 school year and in third grade in the 2013–14 school year, by child and family characteristics

(Average score)

Child and family characteristic	Academic year 2010–11		Academic year 2011–12		Academic year 2012–13		Academic year 2013–14 ^a
	Fall	Spring	Fall	Spring	Fall	Spring	Spring
All children	29.3	42.0	51.5	64.0	72.9	81.9	99.2
Sex							
Male	29.4	42.0	51.6	64.6	73.9	82.9	100.9
Female	29.2	42.0	51.4	63.3	71.8	80.8	97.4
Race or ethnicity ^b							
White	31.7	44.6	54.4	67.5	76.6	85.3	102.9
Black	25.8	37.5	45.9	57.8	65.2	73.6	90.2
Hispanic ^c	24.7	37.8	47.4	58.7	67.3	77.3	94.3
Asian	34.5	46.0	56.0	68.1	78.4	87.8	104.3
American Indian or Alaska Native	26.3	40.2	48.1	62.0	69.0	78.6	99.2
Family poverty status in fall 2010 ^d							
Income below the federal poverty level	24.1	36.8	45.5	58.1	66.7	75.8	93.3
Income at or above 200% of the federal poverty level	33.3	45.9	55.6	67.9	77.0	85.9	103.2
Family type in fall 2010 ^e							
One-parent household	25.9	38.3	47.5	60.2	67.8	77.1	94.5
Two-parent household	30.6	43.4	52.8	65.5	74.7	83.6	100.8
Primary home language in fall 2010							
English	30.2	42.9	52.4	65.1	73.9	82.6	100.0
Not English	24.1	37.3	46.3	58.0	67.2	77.6	94.4
Parents' highest education in fall 2010 ^f							
Less than high school education	21.0	34.3	44.3	54.7	65.8	75.8	90.7

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Child and family characteristic	Academic year 2010–11		Academic year 2011–12		Academic year 2012–13		Academic year 2013–14 ^a
	Fall	Spring	Fall	Spring	Fall	Spring	Spring
High school diploma or equivalent	24.7	37.4	46.7	59.2	67.9	77.4	94.1
Some college, associate's degree, or career or technical education	28.4	41.1	50.3	63.2	71.9	81.2	98.2
Bachelor's degree	33.1	45.8	55.5	67.9	77.3	85.5	103.0
Graduate or professional school	35.7	48.1	58.7	70.3	80.1	88.3	105.8

^a Third grade assessments were conducted only in the spring of the academic year 2013–14.

^b Other racial and ethnic groups are included in all children but are not shown separately in the table.

^c Hispanic may be any race. American Indian or Alaska Native, Asian, black, and white refer to individuals who are not of Hispanic origin.

^d Poverty status is based on 2010 U.S. Census poverty thresholds, which identify incomes determined to meet household needs, given family size. For example, in 2010, a family of two was below the poverty threshold if its income was lower than \$14,220.

^e Two parents includes two biological parents, two adoptive parents, and one biological or adoptive parent and one other parent or partner. One parent refers to one biological or adoptive parent only.

^f The highest level of education achieved by either of the parents or guardians in a two-parent household or by the only parent or guardian in a single-parent household.

Note(s)

The mathematics assessment scale was 0 to 75 in kindergarten, 0 to 96 in first grade, 0 to 113 in second grade, and 0 to 135 in third grade.

Source(s)

Mulligan GM, Hastedt S, McCarroll JC, *First-Time Kindergartners in 2010–11: First Findings From the Kindergarten Rounds of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)*, NCES 2012-049 (2012); Mulligan GM, McCarroll JC, Flanagan KD, Potter D, *Findings From the First-Grade Rounds of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K: 2011)*, NCES 2015-109 (2014); Mulligan GM, McCarroll JC, Flanagan KD, Potter D, *Findings From the Second-Grade Rounds of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)*, NCES 2015-077 (2015); Mulligan GM, McCarroll JC, Flanagan KD, Potter D, *Findings From the Third-Grade Round of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K: 2011)*, NCES 2016-094 (2016).

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 APPENDIX TABLE 1-15 
Average science assessment test scores of children who were in kindergarten for the first time in the 2010–11 school year and in third grade in the 2013–14 school year, by child and family characteristics

(Average score)

Child and family characteristic	Academic year 2011–12 ^a		Academic year 2012–13		Academic year 2013–14 ^b
	Fall	Spring	Fall	Spring	Spring
All children	23.9	27.1	39.8	44.1	55.6
Sex					
Male	23.9	27.3	40.3	44.5	56.3
Female	23.9	26.8	39.9	43.8	55.0
Race or ethnicity ^c					
White	26.0	29.2	42.7	46.6	58.5
Black	21.0	23.9	35.9	40.3	50.0
Hispanic ^d	20.5	23.9	35.0	40.0	51.5
Asian	23.4	26.9	39.8	45.6	57.5
American Indian or Alaska Native	24.7	27.2	38.8	42.6	54.3
Family poverty status in fall 2010 ^e					
Income below the federal poverty level	20.7	23.7	35.3	39.8	51.0
Income at or above 200% of the federal poverty level	25.9	29.3	42.9	46.7	58.9
Family type in fall 2010 ^f					
One-parent household	22.2	25.4	37.6	41.8	52.5
Two-parent household	24.6	27.8	40.7	45.0	56.8
Primary home language in fall 2010					
English	24.8	28.0	41.0	45.0	56.6
Not English	18.8	22.1	33.2	39.1	50.6
Parents' highest education in fall 2010 ^g					
Less than high school education	18.7	21.2	33.0	38.2	48.1
High school diploma or equivalent	21.9	24.6	36.8	41.5	51.9

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Child and family characteristic	Academic year 2011–12 ^a		Academic year 2012–13		Academic year 2013–14 ^b
	Fall	Spring	Fall	Spring	Spring
Some college, associate's degree, or career or technical education	23.7	26.9	39.5	44.0	54.9
Bachelor's degree	25.8	29.0	42.8	46.6	58.7
Graduate or professional school	27.0	30.5	44.7	48.2	61.0

- ^a There was no science assessment in academic year 2010–11. Science assessment began in grade 1.
- ^b Third grade assessments were conducted only in the spring of the academic year 2013–14.
- ^c Other racial and ethnic groups are included in all children but are not shown separately in the table.
- ^d Hispanic may be any race. American Indian or Alaska Native, Asian, black or African American, and white refer to individuals who are not of Hispanic origin.
- ^e Poverty status is based on 2010 U.S. Census poverty thresholds, which identify incomes determined to meet household needs, given family size. For example, in 2010, a family of two was below the poverty threshold if its income was lower than \$14,220.
- ^f Two parents includes two biological parents, two adoptive parents, and one biological or adoptive parent and one other parent or partner. One parent refers to one biological or adoptive parent only.
- ^g The highest level of education achieved by either of the parents or guardians in a two-parent household or by the only parent or guardian in a single-parent household.

Note(s)

The science assessment scale was 0 to 47 in first grade, 0 to 64 in second grade, and 0 to 87 in third grade.

Source(s)

Mulligan GM, McCarroll JC, Flanagan KD, Potter D, *Findings From the First-Grade Rounds of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)*, NCES 2015-109 (2014); Mulligan GM, McCarroll JC, Flanagan KD, Potter D, *Findings From the Second-Grade Rounds of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)*, NCES 2015-077 (2015); Mulligan GM, McCarroll JC, Flanagan KD, Potter D, *Findings From the Third-Grade Round of the Early Childhood Longitudinal Study, Kindergarten Class of 2010–11 (ECLS-K:2011)*, NCES 2016-094 (2016).
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 APPENDIX TABLE 1-16 
Average TIMSS mathematics scores of students in grade 4, by education system: 2015

(Average score)

Education system	Grade 4	Comparison with U.S. score
TIMSS scale centerpoint	500	^
Singapore ^a	618	^
Hong Kong (China) ^b	615	^
South Korea	608	^
Taiwan (China)	597	^
Japan	593	^
Northern Ireland (UK) ^c	570	^
Russia	564	^
Norway (5 years of school)	549	^
Ireland	547	^
Belgium (Flemish) ^b	546	^
England (UK)	546	~
Kazakhstan	544	~
Portugal ^a	541	~
United States ^{a,b}	539	~
Denmark ^{a,b}	539	~
Lithuania ^a	535	~
Finland	535	~
Poland	535	~
Netherlands ^b	530	v
Hungary	529	v
Czech Republic	528	v
Bulgaria	524	v
Cyprus	523	v
Germany	522	v

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Education system	Grade 4	Comparison with U.S. score
Slovenia	520	v
Sweden ^a	519	v
Serbia ^d	518	v
Australia	517	v
Canada ^{a,b,e}	511	v
Italy ^a	507	v
Spain ^a	505	v
Croatia	502	v
Slovakia	498	v
New Zealand	491	v
France	488	v
Turkey	483	v
Georgia ^e	463	v
Chile	459	v
United Arab Emirates	452	v
Bahrain ^a	451	v
Qatar	439	v
Iran	431	v
Oman	425	v
Indonesia	397	v
Jordan	388	v
Saudi Arabia ^f	383	v
Morocco	377	v
Kuwait ^f	353	v

≈ = not significantly different from the U.S. score at the 0.05 level; ^ = significantly higher than the U.S. score at the 0.05 level; v = significantly lower than the U.S. score at the 0.05 level.

TIMSS = Trends in International Mathematics and Science Study; UK = United Kingdom.

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- ^a National defined population covers 90% to 95% of the national target population.
- ^b These education systems met guidelines for sample participation rates only after replacement schools were included.
- ^c These education systems nearly satisfied guidelines for sample participation rates after replacement schools were included.
- ^d National defined population covers less than 90% of the national target population (but at least 77%).
- ^e National target population does not include all of the international target population.
- ^f Reservations about reliability exist because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

Note(s)

Education systems are ordered by average score. Education systems that are not countries are designated by the appended three-letter international abbreviation for their country. The TIMSS scale centerpoint is set at 500 points and represents the mean of the overall achievement distribution in 1995. The TIMSS scale is the same in each administration; thus, a value of 500 in 2015 equals 500 in 1995. For TIMSS 2015, Norway revised its assessed population to students in their fifth and ninth years of schooling to obtain better comparisons with Sweden and Finland. However, in previous TIMSS cycles, Norway assessed students in their fourth and eighth years of schooling, which were defined as fourth and eighth grades but have been redefined as third and seventh grades because year 1 in Norway is now considered the equivalent of a year of kindergarten. To maintain trends with previous TIMSS cycles, in 2015, Norway also collected data from students in their fourth and eighth years of schooling, which is used in trend tables.

Source(s)

Provasnik S, Malley L, Stephens M, Landeros K, Perkins R, Tang JH, *Highlights from TIMSS and TIMSS Advanced 2015: Mathematics and Science Achievement of U.S. Students in Grades 4 and 8 and in Advanced Courses at the End of High School in an International Context*, NCES 2017-002 (2016).

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 APPENDIX TABLE 1-17 
Average TIMSS mathematics scores of students in grade 8, by education system: 2015

(Average score)

Education system	Grade 8	Comparison with U.S. score
TIMSS scale centerpoint	500	^
Singapore ^a	621	^
South Korea	606	^
Taiwan (China)	599	^
Hong Kong (China)	594	^
Japan	586	^
Russia	538	^
Kazakhstan	528	~
Canada ^{b,c}	527	^
Ireland	523	~
England (UK)	518	~
United States ^b	518	~
Slovenia	516	~
Hungary	514	~
Norway (9 years of school)	512	~
Lithuania ^a	511	~
Israel ^d	511	~
Australia	505	v
Sweden	501	v
Italy ^a	494	v
Malta	494	v
New Zealand ^b	493	v
Malaysia	465	v
United Arab Emirates	465	v
Turkey	458	v

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Education system	Grade 8	Comparison with U.S. score
Bahrain	454	v
Georgia ^{a,c}	453	v
Lebanon	442	v
Qatar ^e	437	v
Iran	436	v
Thailand	431	v
Chile ^e	427	v
Oman ^e	403	v
Kuwait ^e	392	v
Egypt ^e	392	v
Jordan ^f	386	v
Morocco ^f	384	v
Saudi Arabia ^f	368	v

≈ = not significantly different from the U.S. score at the 0.05 level; ^ = significantly higher than the U.S. score at the 0.05 level; v = significantly lower than the U.S. score at the 0.05 level.

TIMSS = Trends in International Mathematics and Science Study; UK = United Kingdom.

^a National defined population covers 90% to 95% of the national target population.

^b These education systems met guidelines for sample participation rates only after replacement schools were included.

^c National target population does not include all of the international target population.

^d National defined population covers less than 90% of the national target population (but at least 77%).

^e Reservations about reliability exist because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

^f Reservations about reliability because the percentage of students with achievement too low for estimation exceeds 25%.

Note(s)

Education systems are ordered by average score. Education systems that are not countries are designated by the appended three-letter international abbreviation for their country. The TIMSS scale centerpoint is set at 500 points and represents the mean of the overall achievement distribution in 1995. The TIMSS scale is the same in each administration; thus, a value of 500 in 2015 equals 500 in 1995. For TIMSS 2015, Norway revised its assessed population to students in their fifth and ninth years of schooling to obtain better comparisons with Sweden and Finland. However, in previous TIMSS cycles, Norway assessed students in their fourth and eighth years of schooling, which were defined as fourth and eighth grades but have been redefined as third and seventh grades because year 1 in Norway is now considered the equivalent of a year of kindergarten. To maintain trends with previous TIMSS cycles, in 2015, Norway also collected data from students in their fourth and eighth years of schooling, which is used in trend tables.

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Source(s)

Provasnik S, Malley L, Stephens M, Landeros K, Perkins R, Tang JH, *Highlights From TIMSS and TIMSS Advanced 2015: Mathematics and Science Achievement of U.S. Students in Grades 4 and 8 and in Advanced Courses at the End of High School in an International Context*, NCES 2017-002 (2016).

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 APPENDIX TABLE 1-18 
Average TIMSS science scores of students in grade 4, by education system: 2015

(Average score)

Education system	Grade 4	Comparison with U.S. score
TIMSS scale centerpoint	500	^
Singapore ^a	590	^
South Korea	589	^
Japan	569	^
Russia	567	^
Hong Kong (China) ^b	557	^
Taiwan (China)	555	^
Finland	554	^
Kazakhstan	550	≈
Poland	547	≈
United States ^{a,b}	546	≈
Slovenia	543	≈
Hungary	542	≈
Sweden ^a	540	≈
Norway (5 years of school)	538	v
Bulgaria	536	≈
England (UK)	536	v
Czech Republic	534	v
Croatia	533	v
Ireland	529	v
Germany	528	v
Lithuania ^a	528	v
Denmark ^{a,b}	527	v
Canada ^{a,b,c}	525	v
Serbia ^d	525	v

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Education system	Grade 4	Comparison with U.S. score
Australia	524	v
Northern Ireland (UK) ^e	520	v
Slovakia	520	v
Spain ^a	518	v
Netherlands ^b	517	v
Italy ^a	516	v
Belgium (Flemish) ^b	512	v
Portugal ^a	508	v
New Zealand	506	v
France	487	v
Turkey	483	v
Cyprus	481	v
Chile	478	v
Bahrain ^a	459	v
Georgia ^c	451	v
United Arab Emirates	451	v
Qatar	436	v
Oman	431	v
Iran	421	v
Indonesia	397	v
Saudi Arabia	390	v
Morocco ^f	352	v
Kuwait ^f	337	v

≈ = not significantly different from the U.S. score at the 0.05 level; ^ = significantly higher than the U.S. score at the 0.05 level; v = significantly lower than the U.S. score at the 0.05 level.

TIMSS = Trends in International Mathematics and Science Study; UK = United Kingdom.

^a National defined population covers 90% to 95% of the national target population.

^b These education systems met guidelines for sample participation rates only after replacement schools were included.

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- ^c National target population does not include all of the international target population.
- ^d National defined population covers less than 90% of the national target population (but at least 77%).
- ^e Nearly satisfied guidelines for sample participation rates after replacement schools were included.
- ^f Reservations about reliability exist because the percentage of students with achievement too low for estimation exceeds 15% but does not exceed 25%.

Note(s)

Education systems are ordered by average score. Education systems that are not countries are designated by the appended three-letter international abbreviation for their country. The TIMSS scale centerpoint is set at 500 points and represents the mean of the overall achievement distribution in 1995. The TIMSS scale is the same in each administration; thus, a value of 500 in 2015 equals 500 in 1995. For TIMSS 2015, Norway revised its assessed population to students in their fifth and ninth years of schooling to obtain better comparisons with Sweden and Finland. However, in previous TIMSS cycles, Norway assessed students in their fourth and eighth years of schooling, which were defined as fourth and eighth grades but have been redefined as third and seventh grades because year 1 in Norway is now considered the equivalent of a year of kindergarten. To maintain trends with previous TIMSS cycles, in 2015, Norway also collected data from students in their fourth and eighth years of schooling, which is used in trend tables.

Source(s)

Provasnik S, Malley L, Stephens M, Landeros K, Perkins R, Tang JH, *Highlights from TIMSS and TIMSS Advanced 2015: Mathematics and Science Achievement of U.S. Students in Grades 4 and 8 and in Advanced Courses at the End of High School in an International Context*, NCES 2017-002 (2016).

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 APPENDIX TABLE 1-19 

Average TIMSS science scores of students in grade 8, by education system: 2015

(Average score)

Education system	Grade 8	Comparison with U.S. score
TIMSS scale centerpoint	500	^
Singapore ^a	597	^
Japan	571	^
Taiwan (China)	569	^
South Korea	556	^
Slovenia	551	^
Hong Kong (China)	546	^
Russia	544	^
England (UK)	537	≈
Kazakhstan	533	≈
Ireland	530	≈
United States ^b	530	≈
Hungary	527	≈
Canada ^{b,c}	526	≈
Sweden	522	≈
Lithuania ^a	519	v
New Zealand ^b	513	v
Australia	512	v
Norway (9 years of school)	509	v
Israel ^d	507	v
Italy ^a	499	v
Turkey	493	v
Malta	481	v
United Arab Emirates	477	v
Malaysia	471	v

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Education system	Grade 8	Comparison with U.S. score
Bahrain	466	v
Qatar	457	v
Iran	456	v
Thailand	456	v
Oman	455	v
Chile	454	v
Georgia ^{a,c}	443	v
Jordan	426	v
Kuwait	411	v
Lebanon	398	v
Saudi Arabia	396	v
Morocco	393	v
Egypt	371	v

≈ = not significantly different from the U.S. score at the 0.05 level; ^ = significantly higher than the U.S. score at the 0.05 level; v = significantly lower than the U.S. score at the 0.05 level.

TIMSS = Trends in International Mathematics and Science Study; UK = United Kingdom.

^a National defined population covers 90% to 95% of the national target population.

^b These education systems met guidelines for sample participation rates only after replacement schools were included.

^c National target population does not include all of the international target population.

^d National defined population covers less than 90% of the national target population (but at least 77%).

Note(s)

Education systems are ordered by average score. Education systems that are not countries are designated by the appended three-letter international abbreviation for their country. The TIMSS scale centerpoint is set at 500 points and represents the mean of the overall achievement distribution in 1995. The TIMSS scale is the same in each administration; thus, a value of 500 in 2015 equals 500 in 1995. For TIMSS 2015, Norway revised its assessed population to students in their fifth and ninth years of schooling to obtain better comparisons with Sweden and Finland. However, in previous TIMSS cycles, Norway assessed students in their fourth and eighth years of schooling, which were defined as fourth and eighth grades but have been redefined as third and seventh grades because year 1 in Norway is now considered the equivalent of a year of kindergarten. To maintain trend with previous TIMSS cycles, in 2015, Norway also collected data from students in their fourth and eighth years of schooling, which is used in trend tables.

Source(s)



CHAPTER 1 | Elementary and Secondary Mathematics and Science Education

Provasnik S, Malley L, Stephens M, Landeros K, Perkins R, Tang JH, *Highlights From TIMSS and TIMSS Advanced 2015: Mathematics and Science Achievement of U.S. Students in Grades 4 and 8 and in Advanced Courses at the End of High School in an International Context*, NCES 2017-002 (2016).

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 APPENDIX TABLE 1-20 
Average mathematics literacy assessment scores for 15-year-old students participating in PISA, by education system: 2015

(Average score)

Education system	Average score	Comparison with U.S. score	OECD country and education system
OECD average	490	^	na
Singapore	564	^	N
Hong Kong (China)	548	^	N
Macau (China)	544	^	N
Taiwan (China)	542	^	N
Japan	532	^	Y
Beijing, Shanghai, Jiangsu, and Guangdong (China)	531	^	N
South Korea	524	^	Y
Switzerland	521	^	Y
Estonia	520	^	Y
Canada	516	^	Y
Netherlands	512	^	Y
Denmark	511	^	Y
Finland	511	^	Y
Slovenia	510	^	Y
Belgium	507	^	Y
Germany	506	^	Y
Ireland	504	^	Y
Poland	504	^	Y
Norway	502	^	Y
Austria	497	^	Y
New Zealand	495	^	Y
Vietnam	495	^	N
Australia	494	^	Y

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Education system	Average score	Comparison with U.S. score	OECD country and education system
Russia	494	^	N
Sweden	494	^	Y
France	493	^	Y
Czech Republic	492	^	Y
Portugal	492	^	Y
United Kingdom	492	^	Y
Italy	490	^	Y
Iceland	488	^	Y
Luxembourg	486	^	Y
Spain	486	^	Y
Latvia	482	^	Y
Malta	479	^	N
Lithuania	478	^	N
Hungary	477	≈	Y
Slovakia	475	≈	Y
Israel	470	≈	Y
United States	470	≈	Y
Croatia	464	≈	N
Buenos Aires (Argentina)	456	≈	N
Greece	454	v	Y
Romania	444	v	N
Bulgaria	441	v	N
Cyprus	437	v	N
United Arab Emirates	427	v	N
Chile	423	v	Y
Moldova	420	v	N
Turkey	420	v	Y

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Education system	Average score	Comparison with U.S. score	OECD country and education system
Montenegro	418	v	N
Uruguay	418	v	N
Trinidad and Tobago	417	v	N
Thailand	415	v	N
Albania	413	v	N
Mexico	408	v	Y
Georgia	404	v	N
Qatar	402	v	N
Costa Rica	400	v	N
Lebanon	396	v	N
Colombia	390	v	N
Peru	387	v	N
Indonesia	386	v	N
Jordan	380	v	N
Brazil	377	v	N
Macedonia	371	v	N
Tunisia	367	v	N
Kosovo	362	v	N
Algeria	360	v	N
Dominican Republic	328	v	N

≈ = not significantly different from the U.S. score at the 0.05 level; ^ = significantly higher than the U.S. score at the 0.05 level; v = significantly lower than the U.S. score at the 0.05 level; N = no; na = not applicable; Y = yes.

OECD = Organisation for Economic Co-operation and Development; PISA = Program for International Student Assessment.

Note(s)

Education systems are ordered by 2015 average score. The OECD average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. Although Argentina, Malaysia, and Kazakhstan participated in PISA 2015, technical problems with their samples prevent results from being discussed in this report.

Source(s)



CHAPTER 1 | Elementary and Secondary Mathematics and Science Education

Kastberg D, Chan JY, Murray G, *Performance of U.S. 15-Year-Old Students in Science, Reading, and Mathematics Literacy in an International Context: First Look at PISA 2015*, NCES 2017-048 (2016).

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 APPENDIX TABLE 1-21 
Average science literacy assessment scores for 15-year-old students participating in PISA, by education system: 2015

(Average score)

Education system	Average score	Comparison with U.S. score	OECD country and education system
OECD average	493	≈	na
Singapore	556	^	N
Japan	538	^	Y
Estonia	534	^	Y
Taiwan (China)	532	^	N
Finland	531	^	Y
Macau (China)	529	^	N
Canada	528	^	Y
Vietnam	525	^	N
Hong Kong (China)	523	^	N
Beijing, Shanghai, Jiangsu, and Guangdong (China)	518	^	N
South Korea	516	^	Y
New Zealand	513	^	Y
Slovenia	513	^	Y
Australia	510	^	Y
Germany	509	^	Y
Netherlands	509	^	Y
United Kingdom	509	^	Y
Switzerland	506	^	Y
Ireland	503	≈	Y
Belgium	502	≈	Y
Denmark	502	≈	Y
Poland	501	≈	Y
Portugal	501	≈	Y

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Education system	Average score	Comparison with U.S. score	OECD country and education system
Norway	498	≈	Y
United States	496	≈	Y
Austria	495	≈	Y
France	495	≈	Y
Czech Republic	493	≈	Y
Spain	493	≈	Y
Sweden	493	≈	Y
Latvia	490	≈	Y
Russia	487	v	N
Luxembourg	483	v	N
Italy	481	v	Y
Hungary	477	v	Y
Buenos Aires (Argentina)	475	v	N
Croatia	475	v	N
Lithuania	475	v	N
Iceland	473	v	Y
Israel	467	v	Y
Malta	465	v	N
Slovakia	461	v	Y
Greece	455	v	Y
Chile	447	v	Y
Bulgaria	446	v	N
United Arab Emirates	437	v	N
Romania	435	v	N
Uruguay	435	v	N
Cyprus	433	v	N
Moldova	428	v	N

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Education system	Average score	Comparison with U.S. score	OECD country and education system
Albania	427	v	N
Trinidad and Tobago	425	v	N
Turkey	425	v	Y
Thailand	421	v	N
Costa Rica	420	v	N
Qatar	418	v	N
Colombia	416	v	N
Mexico	416	v	Y
Georgia	411	v	N
Montenegro	411	v	N
Jordan	409	v	N
Indonesia	403	v	N
Brazil	401	v	N
Peru	397	v	N
Lebanon	386	v	N
Tunisia	386	v	N
Macedonia	384	v	N
Kosovo	378	v	N
Algeria	376	v	N
Dominican Republic	332	v	N

≈ = not significantly different from the U.S. score at the 0.05 level; ^ = significantly higher than the U.S. score at the 0.05 level; v = significantly lower than the U.S. score at the 0.05 level; N = no; na = not applicable; Y = yes.

OECD = Organisation for Economic Co-operation and Development; PISA = Program for International Student Assessment.

Note(s)

Education systems are ordered by 2015 average score. The OECD average is the average of the national averages of the OECD member countries, with each country weighted equally. Scores are reported on a scale from 0 to 1,000. Although Argentina, Malaysia, and Kazakhstan participated in PISA 2015, technical problems with their samples prevent results from being discussed in this report.

Source(s)



CHAPTER 1 | Elementary and Secondary Mathematics and Science Education

Kastberg D, Chan JY, Murray G, *Performance of U.S. 15-Year-Old Students in Science, Reading, and Mathematics Literacy in an International Context: First Look at PISA 2015*, NCES 2017-048 (2016).

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 APPENDIX TABLE 1-22 
Highest-level mathematics course enrollment of high school completers, by gender and socioeconomic status within race or ethnicity: 2013

(Percentage distribution)

Student and family characteristic	Algebra 1 or lower	Geometry	Algebra 2	Trigonometry or other	Pre-calculus	Calculus or higher
All students	2.9	7.8	24.4	23.8	21.8	19.3
White						
Lowest fifth SES	8.0	8.6	37.2	23.6	14.8	7.8
Middle three-fifths SES	3.6	8.0	25.4	23.7	22.3	17.1
Highest fifth SES	0.5	2.6	10.5	18.6	30.2	37.6
Black						
Lowest fifth SES	3.5	4.1	32.4	38.5	18.5	3.1
Middle three-fifths SES	2.3	5.3	27.3	34.7	21.0	9.3
Highest fifth SES	0.5	4.8	15.2	33.4	23.9	22.2
Hispanic ^a						
Lowest fifth SES	3.2	18.6	23.7	25.6	17.0	11.9
Middle three-fifths SES	3.1	11.2	29.0	23.8	18.5	14.5
Highest fifth SES	0.6	7.2	18.6	16.6	31.9	25.1
Asian						
Lowest fifth SES	0.0	8.0	19.2	16.9	25.8	30.0
Middle three-fifths SES	1.4	1.7	12.4	18.5	20.9	45.1
Highest fifth SES	0.0	1.9	4.8	6.3	24.3	62.7
Other ^b						
Lowest fifth SES	s	s	s	s	s	s
Middle three-fifths SES	2.8	16.5	39.3	13.0	14.0	14.5
Highest fifth SES	s	s	s	s	s	s
Two or more races						
Lowest fifth SES	8.5	7.1	47.2	18.0	15.0	4.3

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Student and family characteristic	Algebra 1 or lower	Geometry	Algebra 2	Trigonometry or other	Pre-calculus	Calculus or higher
Middle three-fifths SES	2.6	8.5	32.0	26.7	17.1	13.2
Highest fifth SES	1.1	6.1	17.4	23.9	21.4	30.1
White						
Male	4.0	7.6	22.0	21.8	22.2	22.5
Female	2.3	5.6	22.5	22.6	25.6	21.4
Black						
Male	2.9	7.1	26.1	37.8	17.5	8.5
Female	1.9	3.3	30.8	32.2	22.5	9.3
Hispanic						
Male	3.9	15.0	27.3	23.6	18.2	12.0
Female	2.2	11.4	26.4	23.4	19.6	17.0
Asian						
Male	0.9	4.2	11.3	11.5	19.5	52.6
Female	0.4	0.7	9.3	15.6	25.8	48.1
Other						
Male	2.1	12.6	44.2	16.9	15.3	9.0
Female	3.4	9.0	43.4	14.7	10.1	19.4
Two or more races						
Male	3.9	9.0	26.9	24.7	17.9	17.7
Female	2.3	7.3	34.5	25.4	17.8	12.8

s = suppressed for reasons of confidentiality and/or reliability.

SES = socioeconomic status.

^a Hispanic may be any race. Asian, black or African American, white, and other races refer to individuals who are not of Hispanic origin.

^b Other includes Alaska Native, American Indian, Native Hawaiian, Pacific Islander, and those having origins in a race not listed.

Note(s)

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Percentages may not add to total because of rounding. Trigonometry or other includes trigonometry, probability and statistics, and other advanced mathematics. Calculus or higher includes calculus, Advanced Placement or International Baccalaureate (AP/IB) calculus, and other AP/IB mathematics. SES is a composite variable derived from parental education level, parental occupation, and family income. The quintile measure divides the SES distribution into five equal quintile groups. Quintile 1 corresponds to the lowest one-fifth of the population, and quintile 5 corresponds to the highest. For this report, the middle three quintiles are combined into one category.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of High School Longitudinal Study of 2009 (HLS:09), National Center for Education Statistics.

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 APPENDIX TABLE 1-23 
Highest-level mathematics course enrollment of high school completers, by student and family characteristics: 2013

(Percentage distribution)

Student and family characteristic	Algebra 1 or lower	Geometry	Algebra 2	Trigonometry or other	Pre-calculus	Calculus or higher
All students	2.9	7.8	24.4	23.8	21.8	19.3
Sex						
Male	3.7	9.1	23.7	23.7	20.4	19.5
Female	2.2	6.5	25.1	24.0	23.2	19.2
Race or ethnicity						
White	3.1	6.6	22.2	22.2	23.9	21.9
Black	2.3	4.9	28.8	34.6	20.4	9.0
Hispanic ^a	3.0	13.2	26.8	23.5	18.9	14.6
Asian	0.7	2.4	10.3	13.6	22.7	50.3
Other ^b	2.8	10.7	43.8	15.7	12.6	14.3
Two or more races	3.1	8.1	30.8	25.1	17.8	15.1
SES ^c						
Lowest fifth	4.9	12.0	31.0	26.5	16.6	9.0
Middle three-fifths	3.2	8.2	26.5	25.0	20.9	16.2
Highest fifth	0.5	3.3	11.6	18.9	28.9	36.7
Parents' highest education ^d						
Less than high school	6.5	14.3	27.4	24.2	16.6	11.0
High school diploma or equivalent	3.7	10.3	30.5	26.0	17.5	11.9
Associate's degree	3.5	8.6	28.4	24.7	21.8	13.0
Bachelor's degree or higher	1.3	4.1	15.4	21.7	26.5	31.0
Highest mathematics course in grade 9						
No mathematics	13.5	24.5	35.0	18.3	6.5	2.3

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Student and family characteristic	Algebra 1 or lower	Geometry	Algebra 2	Trigonometry or other	Pre-calculus	Calculus or higher
Basic mathematics or pre-algebra	21.4	20.9	33.5	15.5	5.1	3.6
Algebra 1	1.4	8.6	34.6	27.0	21.9	6.5
Above algebra 1	0.0	2.3	7.7	21.8	26.5	41.7
Grade 9 mathematics achievement						
Lowest fifth	9.7	15.1	41.3	24.0	8.0	1.8
Middle three-fifths	2.3	8.5	27.2	27.0	22.5	12.5
Highest fifth	0.2	1.2	6.4	15.4	28.6	48.2
Students' educational expectations in grade 9						
High school or less	8.1	13.7	34.2	27.4	11.9	4.7
Some college	3.3	14.5	31.4	24.3	18.4	8.2
Bachelor's degree	1.8	6.0	23.6	23.2	26.3	19.1
Graduate or professional degree	1.1	4.2	19.0	22.8	25.0	27.8
Don't know	4.6	11.1	28.4	24.3	17.7	13.8
School						
Public	3.0	8.1	25.5	23.9	21.1	18.4
Private	0.9	1.5	9.3	23.0	32.0	33.3

SES = socioeconomic status.

^a Hispanic may be any race. Asian, black or African American, white, and other races refer to individuals who are not of Hispanic origin.

^b Other includes Alaska Native, American Indian, Native Hawaiian, Pacific Islander, more than one race, and those having origins in a race not listed.

^c SES is a composite variable derived from parental education level, parental occupation, and family income. The quintile measure divides the SES distribution into five equal quintile groups. Quintile 1 corresponds to the lowest one-fifth of the population, and quintile 5 corresponds to the highest. For this report, the middle three quintiles are combined into one category.

^d This refers to the highest level of education achieved by either parent.

Note(s)

Trigonometry or other includes trigonometry, probability and statistics, and other advanced mathematics. Calculus or higher includes calculus, Advanced Placement or International Baccalaureate (AP/IB) calculus, and other AP/IB mathematics.

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Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of High School Longitudinal Study of 2009 (HLS:09), National Center for Education Statistics.

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APPENDIX TABLE 1-24

Science course enrollment of high school completers, by sex and socioeconomic status within race or ethnicity: 2013

(Percentage distribution)

Student and family characteristic	General science	AP/IB or advanced science	No biology	General biology	AP/IB or advanced biology	No chemistry	General chemistry	AP/IB or advanced chemistry	No physics	General physics	AP/IB or advanced physics
All students	78.6	21.3	2.5	86.1	11.5	24.4	67.9	7.7	58.5	36.4	5.1
White											
Lowest fifth SES	89.7	10.1	2.7	91.9	5.4	40.2	55.4	4.4	72.3	26.7	1.0
Middle three-fifths SES	80.9	18.9	2.4	87.0	10.6	26.8	66.3	6.9	62.7	33.2	4.0
Highest fifth SES	62.2	37.8	2.2	79.2	18.6	11.4	73.8	14.7	44.0	46.2	9.8
Black											
Lowest fifth SES	89.2	10.1	2.3	90.9	6.9	25.0	69.9	5.1	66.6	28.9	4.5
Middle three-fifths SES	85.5	14.5	0.6	90.2	9.2	25.7	71.5	2.8	61.8	37.0	1.3
Highest fifth SES	69.3	30.7	1.9	80.8	17.3	14.9	80.6	4.5	51.5	43.5	5.0
Hispanic ^a											
Lowest fifth SES	88.9	10.7	4.3	88.5	7.2	32.5	65.3	2.2	65.8	33.1	1.1

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Student and family characteristic	General science	AP/IB or advanced science	No biology	General biology	AP/IB or advanced biology	No chemistry	General chemistry	AP/IB or advanced chemistry	No physics	General physics	AP/IB or advanced physics
Male	92.8	7.2	4.0	91.6	4.3	39.0	58.9	2.1	68.6	30.5	0.9
Female	90.3	8.2	1.5	90.7	7.8	27.3	67.4	5.3	80.0	20.0	0.0
Two or more races											
Male	79.6	20.4	4.0	86.8	9.2	28.7	63.8	7.5	58.4	35.5	6.1
Female	82.5	17.5	1.8	87.0	11.2	27.5	67.1	5.4	65.3	31.2	3.5

s = suppressed for reasons of confidentiality and/or reliability.

AP/IB = Advanced Placement/International Baccalaureate; SES = socioeconomic status.

^a Hispanic may be any race. Asian, black, white, and other races refer to individuals who are not of Hispanic origin.

^b Other includes Alaska Native, American Indian, Native Hawaiian, Pacific Islander, more than one race, and those having origins in a race not listed.

Note(s)

Percentages may not add to total because of rounding. SES is a composite variable derived from parental education level, parental occupation, and family income. The quintile measure divides the SES distribution into five equal quintile groups. Quintile 1 corresponds to the lowest one-fifth of the population, and quintile 5 corresponds to the highest. For this report, the middle three quintiles are combined into one category.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of High School Longitudinal Study of 2009 (HSL:09), National Center for Education Statistics.

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APPENDIX TABLE 1-25

Science course enrollment of high school completers, by student and family characteristics: 2013

(Percentage distribution)

Student and family characteristic	General science	AP/IB or advanced science	No biology	General biology	AP/IB or advanced biology	No chemistry	General chemistry	AP/IB or advanced chemistry	No physics	General physics	AP/IB or advanced physics
All students	78.6	21.3	2.5	86.1	11.5	24.4	67.9	7.7	58.5	36.4	5.1
Sex											
Male	80.2	19.7	2.7	87.7	9.7	27.1	65.4	7.5	56.7	36.8	6.6
Female	77.1	22.8	2.2	84.5	13.2	21.9	70.2	7.9	60.3	36.0	3.7
Race or ethnicity											
White	76.6	23.3	2.4	85.2	12.4	23.9	67.3	8.8	58.3	36.3	5.4
Black	85.4	14.4	1.2	89.8	9.0	23.8	72.8	3.4	62.8	34.8	2.4
Hispanic ^a	84.0	15.9	2.9	89.2	7.9	27.1	68.0	4.8	59.6	36.9	3.5
Asian	48.5	51.5	3.8	66.1	30.1	10.1	65.2	24.7	32.8	47.4	19.8
Other ^b	91.5	7.7	2.7	91.1	6.1	33.0	63.2	3.7	74.4	25.1	0.4
Two or more races	81.1	18.9	2.8	86.9	10.3	28.1	65.6	6.4	62.0	33.2	4.7
SES ^c											
Lowest fifth	89.1	10.5	3.3	90.3	6.4	34.1	62.4	3.5	68.1	30.1	1.9
Middle three-fifths	81.2	18.6	2.1	87.5	10.4	25.8	68.0	6.2	60.8	35.2	4.0
Highest fifth	62.0	38.0	2.4	78.6	19.0	11.8	72.8	15.4	43.6	45.9	10.5

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Student and family characteristic	General science	AP/IB or advanced science	No biology	General biology	AP/IB or advanced biology	No chemistry	General chemistry	AP/IB or advanced chemistry	No physics	General physics	AP/IB or advanced physics
Parents' highest education ^d											
Less than high school	87.0	12.5	3.1	89.6	7.3	36.6	59.3	4.1	62.8	36.4	0.8
High school diploma or equivalent	85.7	14.0	2.5	89.8	7.7	29.9	65.4	4.7	65.1	31.5	3.4
Associate's degree	84.0	15.9	2.3	87.8	9.9	28.4	66.9	4.7	65.0	32.3	2.7
Bachelor's degree or higher	67.5	32.4	2.2	81.2	16.6	15.0	72.3	12.7	47.8	43.7	8.5
Highest mathematics course in grade 9											
No mathematics	93.9	5.6	4.8	91.4	3.8	53.3	46.0	0.7	82.4	17.4	0.2
Basic mathematics or pre-algebra	92.4	7.1	4.4	90.5	5.1	58.2	40.2	1.6	78.6	20.6	0.7
Algebra 1	87.2	12.8	2.0	90.7	7.3	25.4	70.8	3.9	63.2	34.7	2.1
Above algebra 1	62.9	36.9	2.5	78.3	19.3	13.6	72.1	14.3	46.5	43.0	10.5
Grade 9 mathematics achievement											
Lowest fifth	93.9	5.8	3.3	92.6	4.2	46.3	52.4	1.3	77.8	21.9	0.3

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Student and family characteristic	General science	AP/IB or advanced science	No biology	General biology	AP/IB or advanced biology	No chemistry	General chemistry	AP/IB or advanced chemistry	No physics	General physics	AP/IB or advanced physics
Middle three-fifths	83.9	16.0	2.5	88.4	9.1	25.4	70.0	4.6	62.1	35.3	2.6
Highest fifth	55.3	44.7	1.8	75.9	22.3	8.1	72.1	19.8	37.1	48.2	14.7
Students' educational expectations in grade 9											
High school or less	91.4	8.5	3.0	91.4	5.7	41.7	56.4	1.8	73.0	26.3	0.8
Some college	88.9	10.7	4.4	89.0	6.6	34.6	60.2	5.2	68.6	30.0	1.4
Bachelor's degree	78.6	21.3	1.8	88.2	10.1	21.5	70.7	7.8	54.9	39.7	5.5
Graduate or professional degree	70.0	29.8	2.0	81.7	16.3	14.7	74.0	11.3	52.3	40.1	7.7
Don't know	85.7	14.1	3.1	89.3	7.6	34.2	61.6	4.2	63.5	33.4	3.1
School											
Public	78.7	21.2	2.2	86.2	11.6	25.3	67.1	7.6	59.8	35.2	5.0
Private	74.5	25.5	3.1	85.4	11.5	8.5	81.4	10.1	38.5	54.2	7.3

AP/IB = Advanced Placement/International Baccalaureate; SES = socioeconomic status.

^a Hispanic may be any race. Asian, black, white, and other races refer to individuals who are not of Hispanic origin.

^b Other includes Alaska Native, American Indian, Native Hawaiian, Pacific Islander, more than one race, and those having origins in a race not listed.

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^c SES is a composite variable derived from parental education level, parental occupation, and family income. The quintile measure divides the SES distribution into five equal quintile groups. Quintile 1 corresponds to the lowest one-fifth of the population, and quintile 5 corresponds to the highest. For this report, the middle three quintiles are combined into one category.

^d This represents the highest level of education achieved by either parent.

Source(s)

National Science Foundation, National Center for Science and Engineering Statistics, special tabulations (2016) of High School Longitudinal Study of 2009 (HSL:09), National Center for Education Statistics.

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APPENDIX TABLE 1-26

Average high school credits earned in technology-related courses, and percentage earning any credit, for fall 2009 ninth graders, by student, family, and school characteristics: 2013

(Number and percent)

Characteristic	Computer and information sciences		Engineering and technology	
	Average credits	Earned any credit	Average credits	Earned any credit
Total	1.0	47.1	1.3	14.7
Sex				
Male	1.1	49.0	1.4	21.1
Female	1.0	45.1	1.0	8.3
Race or ethnicity				
Asian	1.2	38.1	1.1	11.5
Black	1.1	47.8	1.4	10.8
Hispanic ^a	1.0	46.7	1.1	12.0
White	1.0	48.3	1.3	17.3
More than one race	1.0	44.8	1.2	14.5
Other ^b	0.9	33.3	1.0	8.7
SES ^c				
Lowest fifth	1.0	47.4	1.2	12.1
Middle three-fifths	1.1	47.3	1.3	15.5
Highest fifth	1.0	45.9	1.3	15.1

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Characteristic	Computer and information sciences		Engineering and technology	
	Average credits	Earned any credit	Average credits	Earned any credit
Parent's highest education				
Less than high school	1.0	40.6	0.9	9.5
High school	1.1	48.5	1.2	14.4
Associate's degree	1.0	48.5	1.3	15.5
Bachelor's degree	1.0	46.6	1.4	16.1
Master's degree or higher	1.0	45.6	1.3	14.8
Mathematics achievement				
Lowest fifth	1.0	43.8	1.3	12.1
Middle three-fifths	1.0	48.6	1.2	14.5
Highest fifth	1.1	45.7	1.4	17.5
School sector				
Public	1.1	46.6	1.3	15.3
Private	0.8	52.6	0.8	7.6

SES = socioeconomic status.

^a Hispanic may be any race. Asian, black, white, and other races refer to individuals who are not of Hispanic origin.

^b Other includes Alaska Native, American Indian, Native Hawaiian, Pacific Islander, more than one race, and those having origins in a race not listed.

^c SES is a composite variable derived from parental education level, parental occupation, and family income. The quintile measure divides the SES distribution into five equal quintile groups. Quintile 1 corresponds to the lowest one-fifth of the population, and quintile 5 corresponds to the highest. For this report, the middle three quintiles are combined into one category.



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Source(s)

Dalton B, Ingels SJ, Fritch L, *High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcript Study: A First Look at Fall 2009 Ninth-Graders in 2013*, NCES 2015-037rev (2016).

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APPENDIX TABLE 1-27

High school graduates enrolled in college in October after completing high school, by demographic characteristics and institution type: 1975–2015

(Percent)

Year	All graduates	Sex		Family income ^a			Race or ethnicity ^b				Parents' highest education ^c				Institution type	
		Male	Female	Low	Middle	High	White	Black	Hispanic ^d	Asian	Less than high school	High school diploma or equivalent	Some college	Bachelor's or higher degree	2-year	4-year
1975	50.7	52.6	49.0	31.2	46.2	64.5	49.1	44.5	52.7	NA	NA	NA	NA	NA	18.2	32.6
1976	48.8	47.2	50.3	39.1	40.5	63.0	50.3	45.3	53.6	NA	NA	NA	NA	NA	15.6	33.3
1977	50.6	52.1	49.3	27.7	44.2	66.3	50.1	46.8	48.8	NA	NA	NA	NA	NA	17.5	33.1
1978	50.1	51.1	49.3	31.4	44.3	64.0	50.4	47.5	46.1	NA	NA	NA	NA	NA	17.0	33.1
1979	49.3	50.4	48.4	30.5	43.2	63.2	50.1	45.2	46.3	NA	NA	NA	NA	NA	17.5	31.8
1980	49.3	46.7	51.8	32.5	42.5	65.2	51.5	44.0	49.6	NA	NA	NA	NA	NA	19.4	29.9
1981	53.9	54.8	53.1	33.6	49.2	67.6	52.4	40.3	48.7	NA	NA	NA	NA	NA	20.5	33.5
1982	50.6	49.1	52.0	32.8	41.7	70.9	54.2	38.8	49.4	NA	NA	NA	NA	NA	19.1	31.5
1983	52.7	51.9	53.4	34.6	45.2	70.3	55.5	38.0	46.7	NA	NA	NA	NA	NA	19.2	33.5
1984	55.2	56.0	54.5	34.5	48.4	74.0	57.9	39.9	49.3	NA	NA	NA	NA	NA	19.4	35.8
1985	57.7	58.6	56.8	40.2	50.6	74.6	58.6	39.5	46.1	NA	NA	NA	NA	NA	19.6	38.1
1986	53.8	55.8	51.9	33.9	48.5	71.0	58.5	43.5	42.3	NA	NA	NA	NA	NA	19.3	34.5
1987	56.8	58.3	55.3	36.9	50.0	73.8	58.8	44.2	45.0	NA	NA	NA	NA	NA	18.9	37.9
1988	58.9	57.1	60.7	42.5	54.7	72.8	60.1	49.7	48.5	NA	NA	NA	NA	NA	21.9	37.1
1989	59.6	57.6	61.6	48.1	55.4	70.7	61.6	48.0	52.7	NA	NA	NA	NA	NA	20.7	38.9

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Year	All graduates	Sex		Family income ^a			Race or ethnicity ^b				Parents' highest education ^c				Institution type	
		Male	Female	Low	Middle	High	White	Black	Hispanic ^d	Asian	Less than high school	High school diploma or equivalent	Some college	Bachelor's or higher degree	2-year	4-year
1990	60.1	58.0	62.2	46.7	54.4	76.6	63.0	48.9	52.5	NA	NA	NA	NA	NA	20.1	40.0
1991	62.5	57.9	67.1	39.5	58.4	78.2	64.2	47.2	52.6	NA	NA	NA	NA	NA	24.9	37.7
1992	61.9	60.0	63.8	40.9	57.0	79.0	64.2	50.0	58.2	NA	33.0	56.0	68.0	81.0	23.0	38.9
1993	62.6	59.9	65.2	50.4	56.9	79.3	63.9	51.3	55.7	NA	47.0	52.0	63.0	88.0	22.8	39.8
1994	61.9	60.6	63.2	43.3	57.8	77.9	64.0	52.4	55.0	NA	43.0	50.0	65.0	83.0	21.0	40.9
1995	61.9	62.6	61.3	34.2	56.0	83.5	65.4	52.9	51.6	NA	27.0	47.0	70.0	88.0	21.5	40.4
1996	65.0	60.1	69.7	48.6	62.7	78.0	66.6	55.4	57.6	NA	45.0	56.0	67.0	85.0	23.1	41.9
1997	67.0	63.6	70.3	57.0	60.7	82.2	68.1	58.8	55.3	NA	51.0	62.0	63.0	86.0	22.8	44.3
1998	65.6	62.4	69.1	46.4	64.7	77.5	67.7	59.8	51.9	NA	50.0	57.0	68.0	82.0	24.4	41.3
1999	62.9	61.4	64.4	47.6	60.2	75.4	66.8	58.6	47.4	NA	36.0	54.0	60.0	82.0	21.0	41.9
2000	63.3	59.9	66.2	49.7	59.5	76.9	65.4	56.4	48.6	NA	44.0	52.0	64.0	81.0	21.4	41.9
2001	61.8	60.1	63.5	43.8	56.4	80.0	66.3	56.4	52.8	NA	39.0	52.0	62.0	81.0	19.6	42.1
2002	65.2	62.1	68.4	56.3	60.9	78.2	66.5	57.3	54.8	NA	43.0	52.0	66.0	83.0	21.6	43.6
2003	63.9	61.2	66.5	52.8	57.6	80.1	68.0	59.9	57.7	80.0	43.0	54.0	63.0	82.0	21.5	42.5
2004	66.7	61.4	71.5	47.8	63.3	80.1	69.4	58.8	57.7	81.6	40.0	55.0	67.0	86.0	22.4	44.2
2005	68.6	66.5	70.4	53.5	65.1	81.2	70.2	58.2	57.5	80.9	43.0	62.0	66.0	89.0	24.0	44.6
2006	66.0	65.8	66.1	50.9	61.4	80.7	70.4	55.6	58.5	85.1	43.0	56.0	67.0	78.0	24.7	41.3
2007	67.2	66.1	68.3	58.4	63.3	78.2	70.0	55.7	62.0	85.8	45.0	52.0	65.0	86.0	24.1	43.1

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Year	All graduates	Sex		Family income ^a			Race or ethnicity ^b				Parents' highest education ^c				Institution type	
		Male	Female	Low	Middle	High	White	Black	Hispanic ^d	Asian	Less than high school	High school diploma or equivalent	Some college	Bachelor's or higher degree	2-year	4-year
2008	68.6	65.9	71.6	55.9	65.2	81.9	70.8	60.3	62.3	90.1	44.0	57.0	72.0	82.0	27.7	40.9
2009	70.1	66.0	73.8	53.9	66.7	84.2	71.2	62.4	60.9	88.1	39.9	57.9	74.4	82.2	27.7	42.4
2010	68.1	62.8	74.0	50.7	66.7	82.2	70.1	66.1	62.3	87.4	50.8	58.0	70.5	83.7	26.7	41.4
2011	68.2	64.7	72.2	53.5	66.2	82.4	68.2	62.1	66.1	83.9	s	54.2	66.8	83.1	25.9	42.3
2012	66.2	61.3	71.3	50.9	64.7	80.7	67.6	60.5	65.9	82.3	60.6	57.1	66.2	76.8	28.8	37.5
2013	65.9	63.5	68.4	45.5	63.8	78.5	67.4	60.7	65.5	83.6	42.9	51.7	64.2	82.9	23.8	42.1
2014	68.4	64.0	72.6	57.8	63.6	83.6	69.3	60.6	64.7	84.2	53.9	56.2	67.0	81.3	24.6	43.7
2015	69.2	65.8	72.5	69.2	62.2	83.2	69.5	62.6	67.1	86.7	56.3	56.9	65.0	82.4	25.2	44.0

NA = not available; s = suppressed for reasons of confidentiality and/or reliability.

^a Family income is categorized as follows: low income includes families in the lowest 20% of income distribution, middle income includes families in the middle 60%, and high income includes families in the highest 20%.

^b Because of the small sample size for racial and ethnic categories, data are subject to relatively large sampling errors. Therefore, 3-year moving averages are used to produce more stable estimates. The 3-year moving average is an arithmetic average of the rates in the year indicated, the year immediately preceding, and the year immediately following. For 1975 and 2013, a 2-year moving average is used. Data for 1975 reflect an average of 1975 and 1976, and data for 2013 reflect an average of 2012 and 2013. Starting from 2003, data for white, black, and Asian students exclude individuals identifying themselves as two or more races.

^c This refers to the highest level of education achieved by either parent.

^d Hispanic may be any race. Asian, black, and white refer to individuals who are not of Hispanic origin.

Note(s)

The table includes students ages 16–24 completing high school in the survey year. Before 1992, high school graduates referred to those who had completed 12 years of schooling. As of 1992, high school graduates refer to those who have received a high school diploma or equivalency certificate.

Source(s)



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Parents' education: National Center for Education Statistics special tabulations (2017) of Current Population Survey, Bureau of Labor Statistics. All other data: The Condition of Education, tables 302.10, 302.20, and 302.30, https://nces.ed.gov/programs/coe/indicator_cpa.asp, accessed 3 May 2017.

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 APPENDIX TABLE 1-28 
Fall 2009 ninth graders considering a STEM major (among those with an identified major), by program level and student, family, and school characteristics: 2013

(Percent)

Characteristic	Overall	Bachelor's degree program	Associate's degree program	Other programs ^a
All students	23.3	31.9	17.4	15.3
Sex				
Male	33.3	41.4	28.2	25.3
Female	14.5	23.6	7.9	6.5
Race or ethnicity				
White	24.8	31.9	17.9	15.8
Black	15.5	22.9	12.3	11.1
Hispanic ^b	19.8	27.9	16.2	17.6
Asian	41.9	52.5	26.9	28.8
Other ^c	25.3	43.6	s	s
Two or more races	22.7	32.7	19.6	10.1
SES ^d				
Lowest fifth	16.8	28.6	15.1	11.6
Middle three-fifths	21.7	29.6	17.1	16.0
Highest fifth	30.3	35.4	20.4	19.2
Parents' highest education ^e				
Less than high school	18.0	31.8	16.6	14.1
High school diploma or equivalent	18.2	27.4	14.5	14.8
Associate's degree	19.7	29.6	15.2	12.6
Bachelor's degree or higher	27.5	31.5	23.3	20.7
Master's degree or higher	30.3	36.4	18.6	14.4
Grade 11 mathematics achievement				
Lowest fifth	11.8	17.1	10.2	11.8
Middle three-fifths	17.1	20.9	15.5	14.0

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Characteristic	Overall	Bachelor's degree program	Associate's degree program	Other programs ^a
Highest fifth	39.9	44.5	30.9	26.5
School				
Public	23.2	32.7	17.3	15.4
Private	25.2	28.6	19.1	13.7

s = suppressed for reasons of confidentiality and/or reliability.

SES = socioeconomic status; STEM = science, technology, engineering, or mathematics.

^a Other programs include “certificate or diploma program (occupational training),” “no program, just taking courses,” “other,” and “don’t know.”

^b Hispanic may be any race. Asian, black, white, and other races refer to individuals who are not of Hispanic origin.

^c Other includes Alaska Native, American Indian, Native Hawaiian, Pacific Islander, more than one race, and those having origins in a race not listed.

^d SES is a composite variable derived from parental education level, parental occupation, and family income. The quintile measure divides the SES distribution into five equal quintile groups. Quintile 1 corresponds to the lowest one-fifth of the population, and quintile 5 corresponds to the highest. For this report, the middle three quintiles are combined into one category.

^e This refers to the highest level of education achieved by either parent.

Note(s)

About 10% of fall 2009 ninth graders who were taking or planning to take postsecondary classes in 2013 indicated that they did not have a major they were considering.

Source(s)

Dalton B, Ingels SJ, Fritch L, *High School Longitudinal Study of 2009 (HSL:09) 2013 Update and High School Transcript Study: A First Look at Fall 2009 Ninth-Graders in 2013*, NCES 2015-037rev (2016).

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