



# NATIONAL SCIENCE BOARD SCIENCE & ENGINEERING INDICATORS 2024



## K-12 Education

# Elementary and Secondary STEM Education

## Supplemental Tables

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Table SK12-1

## Average scores of 9-, 13-, and 17-year-old students on the NAEP long-term trend mathematics assessment, by student characteristic: 1978–2023

(Average score)

| Student age and characteristic               | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1996 | 1999 | 2004 | 2008 | 2012 | 2020 | 2022 | 2023 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| All 9-year-old students                      | 219  | 219  | 222  | 230  | 230  | 231  | 231  | 232  | 239  | 243  | 244  | 241  | 234  | NA   |
| Sex  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Female                                       | 220  | 221  | 222  | 230  | 228  | 230  | 229  | 231  | 240  | 243  | 244  | 239  | 231  | NA   |
| Male   | 217  | 217  | 222  | 229  | 231  | 232  | 233  | 233  | 239  | 242  | 244  | 243  | 236  | NA   |
| Race or ethnicity <sup>a,b</sup>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| American Indian or Alaska Native             | s    | s    | 205  | s    | s    | s    | s    | s    | 224  | 237  | s    | 232  | 230  | NA   |
| Asian or Pacific Islander                    | 229  | 242  | 235  | 236  | 243  | 234  | 235  | 245  | 263  | 265  | 265  | 263  | 257  | NA   |
| Black  | 192  | 195  | 202  | 208  | 208  | 212  | 212  | 211  | 221  | 224  | 226  | 225  | 212  | NA   |
| Hispanic                                     | 203  | 204  | 205  | 214  | 212  | 210  | 215  | 213  | 229  | 234  | 234  | 232  | 223  | NA   |
| Two or more races <sup>c</sup>               | s    | s    | s    | s    | s    | s    | s    | s    | 233  | 246  | 242  | 244  | 236  | NA   |
| White  | 224  | 224  | 227  | 235  | 235  | 237  | 237  | 239  | 245  | 250  | 252  | 250  | 244  | NA   |
| Socioeconomic status <sup>d</sup>            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Eligible for free or reduced-price lunch     | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 225  | 229  | 232  | 229  | 221  | NA   |
| Not eligible for free or reduced-price lunch | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 249  | 253  | 257  | 254  | 249  | NA   |
| Student disability status <sup>e</sup>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Identified as student with a disability      | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 209  | 214  | 216  | 215  | 206  | NA   |
| Not identified as student with a disability  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 243  | 246  | 247  | 245  | 238  | NA   |
| English language learner status <sup>e</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| English language learner                     | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 222  | 224  | 225  | 222  | 215  | NA   |
| Not English language learner                 | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 241  | 245  | 247  | 244  | 237  | NA   |
| U.S. region                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Midwest                                      | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 240  | 244  | 242  | 243  | 234  | NA   |
| Northeast                                    | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 244  | 250  | 248  | 248  | 240  | NA   |
| South  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 236  | 239  | 244  | 241  | 233  | NA   |
| West   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 239  | 242  | 244  | 236  | 231  | NA   |
| School location                              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| City   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 239  | 239  | 236  | 229  | NA   |
| Rural  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 243  | 244  | 242  | 237  | NA   |
| Suburb                                       | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 247  | 250  | 245  | 236  | NA   |
| Town   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 238  | 238  | 242  | 236  | NA   |
| Percentile                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10th percentile                              | 171  | 173  | 177  | 186  | 185  | 187  | 187  | 187  | 193  | 198  | 197  | 191  | 178  | NA   |
| 25th percentile                              | 195  | 196  | 199  | 208  | 208  | 209  | 208  | 209  | 218  | 222  | 223  | 219  | 208  | NA   |
| 50th percentile                              | 220  | 220  | 223  | 231  | 231  | 233  | 232  | 234  | 243  | 246  | 247  | 245  | 238  | NA   |
| 75th percentile                              | 244  | 243  | 246  | 253  | 253  | 255  | 255  | 256  | 263  | 266  | 268  | 267  | 262  | NA   |
| 90th percentile                              | 264  | 263  | 264  | 271  | 271  | 272  | 274  | 275  | 280  | 284  | 286  | 286  | 283  | NA   |

Table SK12-1

## Average scores of 9-, 13-, and 17-year-old students on the NAEP long-term trend mathematics assessment, by student characteristic: 1978–2023

(Average score)

| Student age and characteristic               | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1996 | 1999 | 2004 | 2008 | 2012 | 2020 | 2022 | 2023 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| All 13-year-old students                     | 264  | 269  | 269  | 270  | 273  | 274  | 274  | 276  | 279  | 281  | 285  | 280  | NA   | 271  |
| Sex  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Female                                       | 265  | 268  | 268  | 270  | 272  | 273  | 272  | 274  | 278  | 279  | 284  | 278  | NA   | 267  |
| Male   | 264  | 269  | 270  | 271  | 274  | 276  | 276  | 277  | 279  | 284  | 286  | 281  | NA   | 274  |
| Race or ethnicity <sup>a,b</sup>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| American Indian or Alaska Native             | s    | 257  | s    | s    | s    | s    | s    | s    | s    | 274  | s    | 275  | NA   | 255  |
| Asian  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 314  | 312  | NA   | 303  |
| Asian or Pacific Islander                    | 274  | 280  | 290  | 274  | 286  | 286  | 282  | 286  | 297  | 304  | 311  | 310  | NA   | 300  |
| Black  | 230  | 240  | 249  | 249  | 250  | 252  | 252  | 251  | 257  | 262  | 264  | 256  | NA   | 243  |
| Hispanic                                     | 238  | 252  | 254  | 255  | 259  | 256  | 256  | 259  | 264  | 268  | 271  | 267  | NA   | 257  |
| Two or more races <sup>c</sup>               | s    | s    | s    | s    | s    | s    | s    | s    | 276  | 278  | 290  | 285  | NA   | 277  |
| White  | 272  | 274  | 274  | 276  | 279  | 281  | 281  | 283  | 287  | 290  | 293  | 291  | NA   | 285  |
| Socioeconomic status <sup>d</sup>            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Eligible for free or reduced-price lunch     | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 262  | 266  | 269  | 264  | NA   | 253  |
| Not eligible for free or reduced-price lunch | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 288  | 290  | 296  | 294  | NA   | 287  |
| Student disability status <sup>e</sup>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Identified as student with a disability      | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 243  | 246  | 249  | 242  | NA   | 234  |
| Not identified as student with a disability  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 282  | 285  | 289  | 285  | NA   | 276  |
| English language learner status <sup>e</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| English language learner                     | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 245  | 252  | 250  | 242  | NA   | 236  |
| Not English language learner                 | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 280  | 283  | 287  | 283  | NA   | 274  |
| U.S. region                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Midwest                                      | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 281  | 284  | 285  | 284  | NA   | 273  |
| Northeast                                    | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 282  | 285  | 291  | 284  | NA   | 273  |
| South  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 276  | 281  | 282  | 276  | NA   | 269  |
| West   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 278  | 278  | 285  | 279  | NA   | 270  |
| School location                              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| City   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 277  | 282  | 273  | NA   | 263  |
| Rural  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 280  | 283  | 281  | NA   | 270  |
| Suburb                                       | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 286  | 291  | 285  | NA   | 277  |
| Town   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 282  | 276  | 274  | NA   | 268  |
| Percentile                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10th percentile                              | 213  | 225  | 230  | 230  | 233  | 233  | 233  | 234  | 234  | 237  | 240  | 228  | NA   | 213  |
| 25th percentile                              | 238  | 246  | 248  | 250  | 253  | 253  | 254  | 254  | 257  | 261  | 263  | 255  | NA   | 244  |
| 50th percentile                              | 265  | 269  | 269  | 271  | 274  | 276  | 275  | 276  | 280  | 283  | 287  | 282  | NA   | 274  |
| 75th percentile                              | 291  | 292  | 290  | 292  | 294  | 296  | 296  | 298  | 303  | 305  | 309  | 307  | NA   | 301  |

Table SK12-1

## Average scores of 9-, 13-, and 17-year-old students on the NAEP long-term trend mathematics assessment, by student characteristic: 1978–2023

(Average score)

| Student age and characteristic               | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1996 | 1999 | 2004 | 2008 | 2012 | 2020 | 2022 | 2023 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90th percentile                              | 313  | 311  | 309  | 310  | 312  | 315  | 314  | 317  | 322  | 323  | 329  | 329  | NA   | 322  |
| All 17-year-old students                     | 300  | 298  | 302  | 305  | 307  | 306  | 307  | 308  | 305  | 306  | 306  | NA   | NA   | NA   |
| Sex  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Female                                       | 297  | 296  | 299  | 303  | 305  | 304  | 305  | 307  | 304  | 303  | 304  | NA   | NA   | NA   |
| Male   | 304  | 301  | 305  | 306  | 309  | 309  | 310  | 310  | 307  | 309  | 308  | NA   | NA   | NA   |
| Race or ethnicity <sup>a,b</sup>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| American Indian or Alaska Native             | 297  | s    | s    | s    | s    | s    | s    | s    | s    | 305  | s    | NA   | NA   | NA   |
| Asian or Pacific Islander                    | 317  | 313  | 316  | 311  | 320  | 317  | 313  | 320  | 315  | 321  | 322  | NA   | NA   | NA   |
| Black  | 268  | 272  | 279  | 289  | 286  | 286  | 286  | 283  | 284  | 287  | 288  | NA   | NA   | NA   |
| Hispanic                                     | 276  | 277  | 283  | 284  | 292  | 291  | 292  | 293  | 292  | 293  | 294  | NA   | NA   | NA   |
| Two or more races <sup>c</sup>               | s    | s    | s    | s    | s    | s    | s    | s    | s    | 300  | 305  | NA   | NA   | NA   |
| White  | 306  | 304  | 308  | 309  | 312  | 312  | 313  | 315  | 311  | 314  | 314  | NA   | NA   | NA   |
| Socioeconomic status <sup>d</sup>            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Eligible for free or reduced-price lunch     | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 289  | 292  | 293  | NA   | NA   | NA   |
| Not eligible for free or reduced-price lunch | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 309  | 312  | 314  | NA   | NA   | NA   |
| Student disability status <sup>e</sup>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Identified as student with a disability      | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 276  | 277  | 276  | NA   | NA   | NA   |
| Not identified as student with a disability  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 308  | 309  | 310  | NA   | NA   | NA   |
| English language learner status <sup>e</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| English language learner                     | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 280  | 279  | 271  | NA   | NA   | NA   |
| Not English language learner                 | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 306  | 307  | 308  | NA   | NA   | NA   |
| U.S. region                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Midwest                                      | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 310  | 309  | 308  | NA   | NA   | NA   |
| Northeast                                    | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 308  | 307  | 312  | NA   | NA   | NA   |
| South  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 299  | 304  | 304  | NA   | NA   | NA   |
| West   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 308  | 305  | 304  | NA   | NA   | NA   |
| School location                              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| City   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 302  | 302  | NA   | NA   | NA   |
| Rural  | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 306  | 307  | NA   | NA   | NA   |
| Suburb                                       | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 310  | 311  | NA   | NA   | NA   |
| Town   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 304  | 298  | NA   | NA   | NA   |
| Percentile                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10th percentile                              | 254  | 256  | 263  | 264  | 267  | 267  | 267  | 268  | 266  | 267  | 266  | NA   | NA   | NA   |
| 25th percentile                              | 276  | 276  | 281  | 283  | 286  | 286  | 286  | 287  | 286  | 287  | 287  | NA   | NA   | NA   |
| 50th percentile                              | 301  | 299  | 301  | 305  | 308  | 306  | 308  | 309  | 306  | 307  | 307  | NA   | NA   | NA   |
| 75th percentile                              | 325  | 321  | 323  | 327  | 328  | 327  | 329  | 330  | 327  | 327  | 328  | NA   | NA   | NA   |

Table SK12-1

**Average scores of 9-, 13-, and 17-year-old students on the NAEP long-term trend mathematics assessment, by student characteristic: 1978–2023**

(Average score)

| Student age and characteristic | 1978 | 1982 | 1986 | 1990 | 1992 | 1994 | 1996 | 1999 | 2004 | 2008 | 2012 | 2020 | 2022 | 2023 |
|--------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 90th percentile                | 345  | 341  | 343  | 345  | 345  | 345  | 346  | 347  | 343  | 343  | 345  | NA   | NA   | NA   |

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

NAEP = National Assessment of Educational Progress.

<sup>a</sup> Other racial and ethnic groups are included in the rows for All 9-year-old students, All 13-year-old students, and All 17-year-old students but are not shown separately in the table.

<sup>b</sup> Hispanic may be any race; race categories exclude Hispanic origin. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian.

<sup>c</sup> Before 2011, students in the Two or more races category were categorized as unclassified.

<sup>d</sup> 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 2004.

<sup>e</sup> From 1996 to 2022, students with a disability and English language learners were allowed to use testing accommodations (e.g., extended time, one-on-one testing, bilingual dictionary). More information about testing accommodations is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

**Note(s):**

The scale for NAEP mathematics assessment scores is 0–500 for students of all ages. From 1996 to 2022, data shown are for students allowed to use testing accommodations. Mathematics data for 17-year-old students are presented from only 2005, 2009, 2013, 2015, and 2019 because the mathematics framework was substantially revised in 2005, making prior assessment results not comparable with those in or after 2005. The mathematics assessment was not conducted in 2007, 2011, 2017, or 2022 for 17-year-old students.

**Source(s):**

National Center for Science and Engineering Statistics, special tabulations (2022) of the 1978, 1982, 1986, 1990, 1992, 1994, 1996, 1999, 2004, 2008, 2012, 2020, 2022, and 2023 NAEP long-term trend mathematics assessments, National Center for Education Statistics.

*Science and Engineering Indicators*

Table SK12-2

## Average scores of students in grades 4, 8, and 12 on the NAEP mathematics assessment, by student characteristic: 1990–2022

(Average score)

| Student grade and characteristic             | 1990 | 1992 | 1996 | 2000 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | 2019 | 2022 |
|--|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| All students in grade 4                      | 213  | 220  | 224  | 226  | 235  | 238  | 240  | 240  | 241  | 242  | 240  | 240  | 241  | 236  |
| Sex  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Female                                       | 213  | 219  | 223  | 224  | 233  | 237  | 239  | 239  | 240  | 241  | 239  | 239  | 239  | 233  |
| Male   | 214  | 221  | 224  | 227  | 236  | 239  | 241  | 241  | 241  | 242  | 241  | 241  | 242  | 239  |
| Race or ethnicity <sup>a</sup>               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| American Indian or Alaska Native             | s    | s    | 217  | 208  | 223  | 226  | 228  | 225  | 225  | 227  | 227  | 227  | 227  | 221  |
| Asian or Pacific Islander                    | 225  | 231  | 229  | s    | 246  | 251  | 253  | 255  | 256  | 258  | 257  | 258  | 260  | 257  |
| Black  | 188  | 193  | 198  | 203  | 216  | 220  | 222  | 222  | 224  | 224  | 224  | 223  | 224  | 217  |
| Hispanic <sup>b</sup>                        | 200  | 202  | 207  | 208  | 222  | 226  | 227  | 227  | 229  | 231  | 230  | 229  | 231  | 224  |
| Two or more races <sup>c</sup>               | s    | s    | s    | 224  | 237  | 241  | 241  | 243  | 245  | 245  | 245  | 245  | 244  | 239  |
| White  | 220  | 227  | 232  | 234  | 243  | 246  | 248  | 248  | 249  | 250  | 248  | 248  | 249  | 246  |
| Socioeconomic status <sup>d</sup>            |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Eligible for free or reduced-price lunch     | NA   | NA   | 207  | 208  | 222  | 225  | 227  | 227  | 229  | 230  | 229  | 228  | 229  | 223  |
| Not eligible for free or reduced-price lunch | NA   | NA   | 232  | 235  | 244  | 248  | 249  | 250  | 252  | 254  | 253  | 252  | 253  | 248  |
| Student disability status <sup>e</sup>       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Identified as student with a disability      | NA   | NA   | 204  | 198  | 214  | 219  | 220  | 221  | 218  | 218  | 218  | 214  | 214  | 212  |
| Not identified as student with a disability  | NA   | NA   | 225  | 228  | 237  | 240  | 242  | 242  | 244  | 245  | 244  | 243  | 245  | 240  |
| English language learner status <sup>e</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| English language learner                     | NA   | NA   | 201  | 199  | 214  | 216  | 217  | 218  | 219  | 219  | 218  | 217  | 220  | 216  |
| Not English language learner                 | NA   | NA   | 225  | 227  | 237  | 240  | 242  | 242  | 243  | 244  | 243  | 243  | 243  | 239  |
| U.S. region                                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Midwest                                      | NA   | NA   | NA   | s    | 238  | 240  | 243  | 242  | 242  | 244  | 242  | 242  | 241  | 239  |
| Northeast                                    | NA   | NA   | NA   | s    | 238  | 241  | 245  | 244  | 244  | 244  | 242  | 242  | 243  | 235  |
| South  | NA   | NA   | NA   | s    | 234  | 238  | 239  | 239  | 240  | 241  | 241  | 240  | 241  | 237  |
| West   | NA   | NA   | NA   | s    | 231  | 234  | 234  | 235  | 238  | 238  | 236  | 236  | 237  | 233  |
| School location                              |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| City   | NA   | NA   | NA   | NA   | NA   | NA   | 235  | 235  | 236  | 237  | 237  | 235  | 236  | 231  |
| Rural  | NA   | NA   | NA   | NA   | NA   | NA   | 240  | 241  | 243  | 243  | 241  | 240  | 240  | 238  |
| Suburb                                       | NA   | NA   | NA   | NA   | NA   | NA   | 244  | 243  | 244  | 245  | 243  | 244  | 245  | 240  |
| Town   | NA   | NA   | NA   | NA   | NA   | NA   | 238  | 238  | 237  | 241  | 238  | 237  | 237  | 233  |
| Percentile                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10th percentile                              | 171  | 177  | 182  | 184  | 197  | 200  | 202  | 202  | 203  | 203  | 202  | 198  | 199  | 192  |
| 25th percentile                              | 193  | 199  | 203  | 205  | 216  | 220  | 222  | 221  | 222  | 222  | 221  | 219  | 220  | 214  |
| 50th percentile                              | 214  | 221  | 225  | 227  | 236  | 239  | 242  | 241  | 242  | 243  | 242  | 241  | 242  | 238  |
| 75th percentile                              | 235  | 242  | 245  | 248  | 255  | 258  | 260  | 260  | 261  | 262  | 261  | 262  | 262  | 259  |
| 90th percentile                              | 253  | 259  | 262  | 265  | 270  | 273  | 275  | 275  | 276  | 278  | 277  | 279  | 280  | 278  |



Table SK12-2

## Average scores of students in grades 4, 8, and 12 on the NAEP mathematics assessment, by student characteristic: 1990–2022

(Average score)

| Student grade and characteristic              | 1990 | 1992 | 1996 | 2000 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | 2019 | 2022 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| All students in grade 8                       | 263  | 268  | 270  | 273  | 278  | 279  | 281  | 283  | 284  | 285  | 282  | 283  | 282  | 274  |
| Sex   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Female  | 262  | 269  | 269  | 272  | 277  | 278  | 280  | 282  | 283  | 284  | 282  | 282  | 282  | 273  |
| Male  | 263  | 268  | 271  | 274  | 278  | 280  | 282  | 284  | 284  | 285  | 282  | 283  | 282  | 275  |
| Race or ethnicity <sup>a</sup>                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| American Indian or Alaska Native              | s    | s    | s    | 259  | 263  | 264  | 264  | 266  | 265  | 269  | 267  | 267  | 262  | 258  |
| Asian or Pacific Islander                     | 275  | 290  | s    | 288  | 291  | 295  | 297  | 301  | 303  | 306  | 306  | 310  | 310  | 304  |
| Black   | 237  | 237  | 240  | 244  | 252  | 255  | 260  | 261  | 262  | 263  | 260  | 260  | 260  | 253  |
| Hispanic <sup>b</sup>                         | 246  | 249  | 251  | 253  | 259  | 262  | 265  | 266  | 270  | 272  | 270  | 269  | 268  | 261  |
| Two or more races <sup>c</sup>                | s    | 260  | s    | 270  | 280  | 280  | 285  | 286  | 288  | 288  | 285  | 287  | 286  | 276  |
| White   | 270  | 277  | 281  | 284  | 288  | 289  | 291  | 293  | 293  | 294  | 292  | 293  | 292  | 285  |
| Parents' highest education level <sup>f</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Did not finish high school                    | 242  | 249  | 250  | 253  | 257  | 259  | 263  | 265  | 265  | 267  | 265  | 265  | 264  | 257  |
| Graduated from high school                    | 255  | 257  | 260  | 261  | 267  | 267  | 270  | 270  | 271  | 270  | 268  | 267  | 265  | 258  |
| Some education after high school              | 267  | 271  | 277  | 277  | 280  | 280  | 283  | 284  | 285  | 285  | 282  | 281  | 280  | 271  |
| Graduated from college                        | 274  | 281  | 281  | 286  | 288  | 290  | 292  | 295  | 295  | 296  | 294  | 294  | 293  | 286  |
| Unknown                                       | 241  | 252  | 252  | 254  | 259  | 260  | 263  | 264  | 265  | 266  | 263  | 264  | 263  | 257  |
| Socioeconomic status <sup>d</sup>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Eligible for free or reduced-price lunch      | NA   | NA   | 250  | 253  | 259  | 262  | 265  | 266  | 269  | 270  | 268  | 267  | 266  | 260  |
| Not eligible for free or reduced-price lunch  | NA   | NA   | 277  | 283  | 287  | 288  | 291  | 294  | 296  | 297  | 296  | 296  | 296  | 287  |
| Student disability status <sup>e</sup>        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Identified as student with a disability       | NA   | NA   | 231  | 230  | 242  | 245  | 246  | 249  | 250  | 249  | 247  | 247  | 247  | 243  |
| Not identified as student with a disability   | NA   | NA   | 273  | 276  | 282  | 283  | 285  | 287  | 288  | 289  | 287  | 288  | 287  | 279  |
| English language learner status <sup>e</sup>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| English language learner                      | NA   | NA   | 226  | 234  | 242  | 244  | 246  | 243  | 244  | 246  | 246  | 246  | 243  | 241  |
| Not English language learner                  | NA   | NA   | 272  | 274  | 279  | 281  | 283  | 285  | 286  | 287  | 284  | 285  | 285  | 277  |
| U.S. region                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Midwest                                       | NA   | NA   | NA   | s    | 283  | 283  | 284  | 287  | 287  | 288  | 285  | 286  | 286  | 277  |
| Northeast                                     | NA   | NA   | NA   | s    | 282  | 283  | 287  | 289  | 288  | 290  | 287  | 288  | 287  | 278  |
| South   | NA   | NA   | NA   | s    | 275  | 277  | 280  | 282  | 283  | 283  | 280  | 280  | 280  | 272  |
| West  | NA   | NA   | NA   | s    | 273  | 275  | 276  | 277  | 279  | 281  | 280  | 281  | 279  | 273  |
| School location                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| City  | NA   | NA   | NA   | NA   | NA   | NA   | 275  | 279  | 279  | 280  | 278  | 278  | 277  | 270  |
| Rural   | NA   | NA   | NA   | NA   | NA   | NA   | 282  | 284  | 286  | 286  | 282  | 282  | 283  | 275  |
| Suburb  | NA   | NA   | NA   | NA   | NA   | NA   | 286  | 287  | 287  | 289  | 286  | 288  | 287  | 279  |

Table SK12-2

## Average scores of students in grades 4, 8, and 12 on the NAEP mathematics assessment, by student characteristic: 1990–2022

(Average score)

| Student grade and characteristic              | 1990 | 1992 | 1996 | 2000 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | 2019 | 2022 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Town  | NA   | NA   | NA   | NA   | NA   | NA   | 280  | 279  | 282  | 282  | 279  | 278  | 277  | 269  |
| Percentile                                    |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10th percentile                               | 215  | 221  | 221  | 223  | 230  | 231  | 235  | 236  | 237  | 237  | 235  | 233  | 231  | 224  |
| 25th percentile                               | 239  | 243  | 245  | 249  | 254  | 255  | 258  | 259  | 260  | 261  | 258  | 256  | 255  | 247  |
| 50th percentile                               | 264  | 269  | 273  | 275  | 279  | 280  | 283  | 284  | 285  | 286  | 283  | 283  | 282  | 274  |
| 75th percentile                               | 288  | 294  | 297  | 300  | 303  | 304  | 306  | 308  | 309  | 310  | 308  | 310  | 309  | 301  |
| 90th percentile                               | 307  | 315  | 316  | 320  | 323  | 324  | 327  | 329  | 329  | 331  | 329  | 333  | 333  | 325  |
| All students in grade 12                      | NA   | NA   | NA   | NA   | NA   | 150  | NA   | 153  | NA   | 153  | 152  | NA   | 150  | NA   |
| Sex   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Female  | NA   | NA   | NA   | NA   | NA   | 149  | NA   | 152  | NA   | 152  | 150  | NA   | 149  | NA   |
| Male  | NA   | NA   | NA   | NA   | NA   | 151  | NA   | 155  | NA   | 155  | 153  | NA   | 152  | NA   |
| Race or ethnicity <sup>a</sup>                |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| American Indian or Alaska Native              | NA   | NA   | NA   | NA   | NA   | 134  | NA   | 144  | NA   | 142  | 138  | NA   | 136  | NA   |
| Asian or Pacific Islander                     | NA   | NA   | NA   | NA   | NA   | 163  | NA   | 175  | NA   | 172  | 170  | NA   | 173  | NA   |
| Black   | NA   | NA   | NA   | NA   | NA   | 127  | NA   | 131  | NA   | 132  | 130  | NA   | 128  | NA   |
| Hispanic <sup>b</sup>                         | NA   | NA   | NA   | NA   | NA   | 133  | NA   | 138  | NA   | 141  | 139  | NA   | 138  | NA   |
| Two or more races <sup>c</sup>                | NA   | NA   | NA   | NA   | NA   | 142  | NA   | 158  | NA   | 155  | 157  | NA   | 157  | NA   |
| White   | NA   | NA   | NA   | NA   | NA   | 157  | NA   | 161  | NA   | 162  | 160  | NA   | 159  | NA   |
| Parents' highest education level <sup>f</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Did not finish high school                    | NA   | NA   | NA   | NA   | NA   | 130  | NA   | 135  | NA   | 137  | 133  | NA   | 133  | NA   |
| Graduated from high school                    | NA   | NA   | NA   | NA   | NA   | 138  | NA   | 142  | NA   | 139  | 139  | NA   | 136  | NA   |
| Some education after high school              | NA   | NA   | NA   | NA   | NA   | 148  | NA   | 150  | NA   | 152  | 149  | NA   | 147  | NA   |
| Graduated from college                        | NA   | NA   | NA   | NA   | NA   | 161  | NA   | 164  | NA   | 164  | 163  | NA   | 161  | NA   |
| Unknown                                       | NA   | NA   | NA   | NA   | NA   | 123  | NA   | 129  | NA   | 127  | 125  | NA   | 125  | NA   |
| Socioeconomic status <sup>d</sup>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Eligible for free or reduced-price lunch      | NA   | NA   | NA   | NA   | NA   | 132  | NA   | 137  | NA   | 139  | 137  | NA   | 136  | NA   |
| Not eligible for free or reduced-price lunch  | NA   | NA   | NA   | NA   | NA   | 155  | NA   | 160  | NA   | 162  | 160  | NA   | 160  | NA   |
| Student disability status <sup>e</sup>        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Identified as student with a disability       | NA   | NA   | NA   | NA   | NA   | 114  | NA   | 120  | NA   | 119  | 118  | NA   | 119  | NA   |
| Not identified as student with a disability   | NA   | NA   | NA   | NA   | NA   | 153  | NA   | 156  | NA   | 157  | 155  | NA   | 154  | NA   |
| English language learner status <sup>e</sup>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| English language learner                      | NA   | NA   | NA   | NA   | NA   | 120  | NA   | 117  | NA   | 109  | 115  | NA   | 111  | NA   |
| Not English language learner                  | NA   | NA   | NA   | NA   | NA   | 151  | NA   | 154  | NA   | 155  | 153  | NA   | 152  | NA   |
| U.S. region                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Midwest                                       | NA   | NA   | NA   | NA   | NA   | 157  | NA   | s    | NA   | 157  | 157  | NA   | 153  | NA   |

Table SK12-2

## Average scores of students in grades 4, 8, and 12 on the NAEP mathematics assessment, by student characteristic: 1990–2022

(Average score)

| Student grade and characteristic | 1990 | 1992 | 1996 | 2000 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | 2019 | 2022 |
|----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| Northeast                        | NA   | NA   | NA   | NA   | NA   | 151  | NA   | s    | NA   | 156  | 156  | NA   | 154  | NA   |
| South                            | NA   | NA   | NA   | NA   | NA   | 146  | NA   | s    | NA   | 152  | 148  | NA   | 147  | NA   |
| West                             | NA   | NA   | NA   | NA   | NA   | 148  | NA   | s    | NA   | 151  | 149  | NA   | 150  | NA   |
| School location                  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| City                             | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 152  | NA   | 149  | 148  | NA   | 149  | NA   |
| Rural                            | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 151  | NA   | 153  | 152  | NA   | 148  | NA   |
| Suburb                           | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 157  | NA   | 158  | 155  | NA   | 154  | NA   |
| Town                             | NA   | NA   | NA   | NA   | NA   | NA   | NA   | 151  | NA   | 151  | 150  | NA   | 147  | NA   |
| Percentile                       |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| 10th percentile                  | NA   | NA   | NA   | NA   | NA   | 105  | NA   | 110  | NA   | 111  | 107  | NA   | 104  | NA   |
| 25th percentile                  | NA   | NA   | NA   | NA   | NA   | 127  | NA   | 130  | NA   | 131  | 128  | NA   | 125  | NA   |
| 50th percentile                  | NA   | NA   | NA   | NA   | NA   | 151  | NA   | 154  | NA   | 154  | 152  | NA   | 150  | NA   |
| 75th percentile                  | NA   | NA   | NA   | NA   | NA   | 174  | NA   | 177  | NA   | 177  | 175  | NA   | 175  | NA   |
| 90th percentile                  | NA   | NA   | NA   | NA   | NA   | 194  | NA   | 197  | NA   | 197  | 196  | NA   | 196  | NA   |

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

NAEP = National Assessment of Educational Progress.

<sup>a</sup> 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. Black includes African American, and Pacific Islander includes Native Hawaiian.

<sup>b</sup> Hispanic may be any race; race categories exclude Hispanic origin. Hispanic includes Latino.

<sup>c</sup> Before 2011, students in the Two or more races category were categorized as unclassified.

<sup>d</sup> 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.

<sup>e</sup> From 1996 to 2022, students with a disability and English language learners were allowed to use testing accommodations (e.g., extended time, one-on-one testing, bilingual dictionary). More information about testing accommodations is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

<sup>f</sup> Parents' highest education level is defined by the highest level reported by eighth and 12th graders for either parent. Fourth graders were not asked to indicate their parents' highest level of education because their responses in previous studies were highly variable, and a large percentage of them chose the "I don't know" option.

**Note(s):**

The scale for NAEP mathematics assessment scores is 0–500 for grades 4 and 8 and 0–300 for grade 12. From 1996 to 2022, data shown are for students allowed to use testing accommodations. Grade 12 mathematics data are presented from only 2005, 2009, 2013, 2015, and 2019 because the mathematics framework was substantially revised in 2005, making prior assessment results not comparable with those in or after 2005. The mathematics assessment was not conducted in 2007, 2011, 2017, or 2022 for grade 12.

**Source(s):**

National Center for Science and Engineering Statistics, special tabulations (2022) of the 1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, and 2022 NAEP mathematics assessments, National Center for Education Statistics.

*Science and Engineering Indicators*



Table SK12-3

## Students in grades 4 and 8 scoring NAEP Proficient or above in mathematics, by student characteristic: 1990–2022

(Percent)

| Student grade and characteristic              | 1990 | 1992 | 1996 | 2000 | 2003 | 2005 | 2007 | 2009 | 2011 | 2013 | 2015 | 2017 | 2019 | 2022 |
|---|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| American Indian or Alaska Native              | s    | s    | s    | 10   | 15   | 14   | 16   | 18   | 17   | 21   | 20   | 18   | 15   | 13   |
| Asian or Pacific Islander                     | 29   | 43   | s    | 41   | 43   | 47   | 50   | 54   | 55   | 60   | 59   | 62   | 62   | 56   |
| Black   | 5    | 2    | 4    | 5    | 7    | 9    | 11   | 12   | 13   | 14   | 13   | 13   | 14   | 9    |
| Hispanic <sup>b</sup>                         | 7    | 7    | 8    | 8    | 12   | 13   | 15   | 17   | 20   | 21   | 19   | 20   | 20   | 14   |
| Two or more races <sup>c</sup>                | s    | 11   | s    | 22   | 29   | 30   | 35   | 37   | 39   | 38   | 36   | 37   | 38   | 28   |
| White   | 18   | 26   | 30   | 34   | 37   | 39   | 42   | 44   | 44   | 45   | 43   | 44   | 44   | 35   |
| Parents' highest education level <sup>f</sup> |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Did not finish high school                    | 3    | 6    | 7    | 8    | 9    | 11   | 12   | 14   | 15   | 16   | 14   | 16   | 15   | 11   |
| Graduated from high school                    | 9    | 10   | 13   | 15   | 17   | 17   | 19   | 19   | 20   | 19   | 17   | 17   | 17   | 12   |
| Some education after high school              | 16   | 20   | 26   | 25   | 28   | 28   | 32   | 32   | 33   | 33   | 30   | 30   | 29   | 20   |
| Graduated from college                        | 24   | 33   | 34   | 38   | 40   | 42   | 44   | 47   | 47   | 48   | 46   | 46   | 45   | 38   |
| Unknown                                       | 5    | 9    | 10   | 10   | 12   | 13   | 15   | 16   | 16   | 17   | 16   | 17   | 17   | 13   |
| Socioeconomic status <sup>d</sup>             |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Eligible for free or reduced-price lunch      | NA   | NA   | 8    | 9    | 12   | 13   | 15   | 17   | 19   | 20   | 18   | 18   | 18   | 13   |
| Not eligible for free or reduced-price lunch  | NA   | NA   | 28   | 34   | 37   | 39   | 42   | 45   | 47   | 49   | 48   | 48   | 48   | 38   |
| Student disability status <sup>e</sup>        |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Identified as student with a disability       | NA   | NA   | 3    | 4    | 6    | 7    | 8    | 9    | 9    | 9    | 8    | 9    | 9    | 7    |
| Not identified as student with a disability   | NA   | NA   | 25   | 27   | 31   | 32   | 34   | 37   | 38   | 39   | 37   | 38   | 38   | 30   |
| English language learner status <sup>e</sup>  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| English language learner                      | NA   | NA   | 1    | 2    | 5    | 6    | 7    | 5    | 5    | 5    | 6    | 6    | 5    | 4    |
| Not English language learner                  | NA   | NA   | 24   | 26   | 30   | 31   | 34   | 35   | 36   | 37   | 35   | 36   | 36   | 29   |
| U.S. region                                   |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| Midwest                                       | NA   | NA   | NA   | s    | 33   | 33   | 35   | 38   | 37   | 39   | 36   | 37   | 37   | 29   |
| Northeast                                     | NA   | NA   | NA   | s    | 33   | 34   | 38   | 40   | 39   | 42   | 39   | 39   | 39   | 31   |
| South   | NA   | NA   | NA   | s    | 25   | 27   | 30   | 32   | 33   | 33   | 30   | 31   | 31   | 24   |
| West  | NA   | NA   | NA   | s    | 26   | 27   | 29   | 29   | 31   | 32   | 32   | 33   | 32   | 25   |
| School location                               |      |      |      |      |      |      |      |      |      |      |      |      |      |      |
| City  | NA   | NA   | NA   | NA   | NA   | NA   | 27   | 30   | 30   | 31   | 30   | 31   | 30   | 24   |
| Rural   | NA   | NA   | NA   | NA   | NA   | NA   | 32   | 34   | 36   | 36   | 32   | 33   | 33   | 25   |
| Suburb  | NA   | NA   | NA   | NA   | NA   | NA   | 38   | 38   | 38   | 40   | 37   | 39   | 38   | 31   |
| Town  | NA   | NA   | NA   | NA   | NA   | NA   | 29   | 29   | 32   | 32   | 28   | 29   | 28   | 21   |

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

NAEP = National Assessment of Educational Progress.

<sup>a</sup> Other racial and ethnic groups are included in the rows for All students in grade 4 and All students in grade 8 but are not shown separately in the table. Black includes African American, and Pacific Islander includes Native Hawaiian.

<sup>b</sup> Hispanic may be any race; race categories exclude Hispanic origin. Hispanic includes Latino.

<sup>c</sup> Before 2011, students in the Two or more races category were categorized as unclassified.

<sup>d</sup> 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.

<sup>e</sup> 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 accommodations is available at <https://nces.ed.gov/nationsreportcard/about/inclusion.asp>.

<sup>f</sup> Parents' highest education level is defined by the highest level reported by eighth graders for either parent. Fourth graders were not asked to indicate their parents' highest level of education because their responses in previous studies were highly variable, and a large percentage of them chose the "I don't know" option.

**Note(s):**

The scale for NAEP mathematics assessment scores is 0–500 for grades 4 and 8. From 1996 to 2022, data shown are for students allowed to use testing accommodations.

**Source(s):**

National Center for Science and Engineering Statistics, special tabulations (2022) of the 1990, 1992, 1996, 2000, 2003, 2005, 2007, 2009, 2011, 2013, 2015, 2017, 2019, and 2022 NAEP mathematics assessments, National Center for Education Statistics.

*Science and Engineering Indicators*

Table SK12-4

## Average scores of students in grades 4 and 8 on the main NAEP mathematics assessment, by state and U.S. jurisdiction: 2022

(Average score)

| State                         | Grade 4 | Grade 8 |
|-------------------------------|---------|---------|
| National public average score | 235     | 273     |
| Alabama                       | 230     | 264     |
| Alaska                        | 226     | 270     |
| Arizona                       | 232     | 271     |
| Arkansas                      | 228     | 267     |
| California                    | 230     | 270     |
| Colorado                      | 236     | 275     |
| Connecticut                   | 236     | 276     |
| Delaware                      | 226     | 264     |
| District of Columbia          | 223     | 260     |
| DoDEA                         | 250     | 292     |
| Florida                       | 241     | 271     |
| Georgia                       | 235     | 271     |
| Hawaii                        | 237     | 270     |
| Idaho                         | 236     | 282     |
| Illinois                      | 237     | 275     |
| Indiana                       | 239     | 279     |
| Iowa                          | 240     | 277     |
| Kansas                        | 235     | 272     |
| Kentucky                      | 234     | 269     |
| Louisiana                     | 229     | 266     |
| Maine                         | 233     | 273     |
| Maryland                      | 229     | 269     |
| Massachusetts                 | 242     | 284     |
| Michigan                      | 232     | 273     |
| Minnesota                     | 239     | 280     |
| Mississippi                   | 234     | 266     |
| Missouri                      | 232     | 272     |
| Montana                       | 239     | 277     |
| Nebraska                      | 242     | 279     |
| Nevada                        | 229     | 269     |
| New Hampshire                 | 239     | 279     |
| New Jersey                    | 239     | 281     |
| New Mexico                    | 221     | 259     |
| New York                      | 227     | 274     |
| North Carolina                | 236     | 274     |
| North Dakota                  | 240     | 278     |
| Ohio                          | 238     | 276     |
| Oklahoma                      | 229     | 264     |
| Oregon                        | 228     | 270     |
| Pennsylvania                  | 238     | 274     |
| Puerto Rico                   | 178     | 216     |
| Rhode Island                  | 234     | 270     |
| South Carolina                | 234     | 269     |
| South Dakota                  | 239     | 281     |
| Tennessee                     | 236     | 272     |
| Texas                         | 239     | 273     |
| Utah                          | 240     | 282     |
| Vermont                       | 234     | 276     |
| Virginia                      | 236     | 279     |
| Washington                    | 235     | 276     |



**Table SK12-4****Average scores of students in grades 4 and 8 on the main NAEP mathematics assessment, by state and U.S. jurisdiction: 2022**

(Average score)

| State         | Grade 4 | Grade 8 |
|---------------|---------|---------|
| West Virginia | 226     | 260     |
| Wisconsin     | 240     | 281     |
| Wyoming       | 243     | 281     |

DoDEA = Department of Defense Education Activity; NAEP = National Assessment of Educational Progress.

**Note(s):**

The scale for NAEP mathematics assessment scores is 0–500 for grades 4 and 8. Data shown are for students allowed to use testing accommodations.

**Source(s):**

National Center for Science and Engineering Statistics, special tabulations (2022) of the 2022 main NAEP mathematics assessment, National Center for Education Statistics.

*Science and Engineering Indicators*

Table SK12-5

## Average scores of students in grades 4 and 8 on the main NAEP mathematics assessment, by large urban district: 2022

(Average score)

| U.S. district                      | Grade 4 | Grade 8 |
|------------------------------------|---------|---------|
| Large urban district average score | 227     | 266     |
| Albuquerque                        | 223     | 260     |
| Atlanta                            | 224     | 263     |
| Austin                             | 239     | 273     |
| Baltimore City                     | 201     | 245     |
| Boston                             | 227     | 270     |
| Charlotte                          | 234     | 278     |
| Chicago                            | 222     | 263     |
| Clark County (NV)                  | 225     | 267     |
| Cleveland                          | 203     | 245     |
| Dallas                             | 231     | 260     |
| Denver                             | 227     | 265     |
| Detroit                            | 194     | 238     |
| District of Columbia (DCPS)        | 224     | 257     |
| Duval County (FL)                  | 237     | 269     |
| Fort Worth (TX)                    | 226     | 259     |
| Fresno                             | NA      | NA      |
| Guilford County (NC)               | 229     | 270     |
| Hillsborough County (FL)           | 241     | 269     |
| Houston                            | 226     | 265     |
| Jefferson County (KY)              | 224     | 263     |
| Los Angeles                        | 220     | 262     |
| Miami-Dade                         | 241     | 274     |
| Milwaukee                          | 206     | 246     |
| New York City                      | 222     | 269     |
| Philadelphia                       | 209     | 252     |
| San Diego                          | 232     | 274     |
| Shelby County (TN)                 | 216     | 251     |

NA = not available.

DCPS = District of Columbia Public Schools; NAEP = National Assessment of Educational Progress.

**Note(s):**

The scale for NAEP mathematics assessment scores is 0–500 for grades 4 and 8. Data shown are for students allowed to use testing accommodations.

**Source(s):**

National Center for Science and Engineering Statistics, special tabulations (2022) of the 2022 main NAEP mathematics assessment, National Center for Education Statistics.

*Science and Engineering Indicators*

Table SK12-6

**Average and percentile scores of students in grade 4 on the TIMSS mathematics scale and percentile score gaps among participating advanced economies, by education system: 2019**

(Average and percentile score)

| Education system                                | Average score | Percentile <sup>a</sup> |                       |                                |
|---|---------------|-------------------------|-----------------------|--------------------------------|
|   |               | 10th percentile score   | 90th percentile score | 90th–10th percentile score gap |
| Participating advanced economy, overall average | 541           | 442                     | 634                   | 192                            |
| Singapore                                       | 625 *         | 519                     | 720                   | 201 *                          |
| Hong Kong                                       | 602 *         | 509                     | 689                   | 179 *                          |
| South Korea                                     | 600 *         | 509                     | 687                   | 178 *                          |
| Taiwan  | 599 *         | 513                     | 681                   | 167 *                          |
| Japan   | 593 *         | 502                     | 680                   | 178 *                          |
| Russia  | 567 *         | 479                     | 653                   | 174 *                          |
| Northern Ireland                                | 566 *         | 449                     | 672                   | 223                            |
| England   | 556 *         | 445                     | 665                   | 221                            |
| Ireland   | 548 *         | 446                     | 643                   | 197 *                          |
| Latvia  | 546 *         | 454                     | 629                   | 176 *                          |
| Norway  | 543 *         | 446                     | 636                   | 191 *                          |
| Lithuania                                       | 542 *         | 442                     | 636                   | 193 *                          |
| Austria   | 539           | 455                     | 623                   | 168 *                          |
| Netherlands                                     | 538           | 457                     | 615                   | 159 *                          |
| United States                                   | 535           | 421                     | 639                   | 219                            |
| Czechia   | 533           | 435                     | 626                   | 191 *                          |
| Belgium   | 532           | 445                     | 619                   | 174 *                          |
| Cyprus  | 532           | 428                     | 632                   | 203 *                          |
| Finland   | 532           | 431                     | 628                   | 197 *                          |
| Portugal  | 525 *         | 424                     | 621                   | 196 *                          |
| Denmark   | 525 *         | 429                     | 618                   | 189 *                          |
| Sweden  | 521 *         | 425                     | 615                   | 190 *                          |
| Germany   | 521 *         | 431                     | 609                   | 178 *                          |
| Australia                                       | 516 *         | 401                     | 625                   | 224                            |
| Italy   | 515 *         | 427                     | 598                   | 170 *                          |
| Canada  | 512 *         | 412                     | 608                   | 196 *                          |
| Slovakia  | 510 *         | 406                     | 600                   | 194 *                          |
| Malta   | 509 *         | 404                     | 602                   | 197 *                          |
| Spain   | 502 *         | 405                     | 594                   | 189 *                          |
| New Zealand                                     | 487 *         | 368                     | 602                   | 234 *                          |
| France  | 485 *         | 379                     | 586                   | 206                            |

\*  $p < 0.05$ . Significantly different from the U.S. estimate at the 0.05 level of statistical significance.

TIMSS = Trends in International Mathematics and Science Study.

<sup>a</sup> These columns show the threshold (or cut) scores for the 10th percentile (the bottom 10% of students) and 90th percentile (the top 10% of students). The 90th–10th percentile score gap for each education system is the difference between its 90th and 10th percentile scores. The percentile ranges are specific to each education system's distribution of scores, enabling users to compare scores across education systems.

**Note(s):**

TIMSS participants include countries, which are complete, independent political entities, and non-national entities (e.g., Hong Kong). Advanced economies are based on the International Monetary Fund (IMF) designation of advanced economies (Table A, pg. 132 in *World Economic Outlook: Challenges to Steady Growth*, 2018). IMF does not classify Russia as an advanced economy, but it is included in this analysis because it is a large economy with high levels of student achievement.

**Source(s):**

International Association for the Evaluation of Educational Achievement, TIMSS, 2019.

*Science and Engineering Indicators*

Table SK12-7

**Average and percentile scores of students in grade 4 on the TIMSS science scale and percentile score gaps among participating advanced economies, by education system: 2019**

(Average and percentile score)

| Education system                                | Average score | Percentile <sup>a</sup> |                       |                                |
|---|---------------|-------------------------|-----------------------|--------------------------------|
|   |               | 10th percentile score   | 90th percentile score | 90th–10th percentile score gap |
| Participating advanced economy, overall average | 531           | 436                     | 619                   | 184                            |
| Singapore                                       | 595 *         | 493                     | 687                   | 194 *                          |
| South Korea                                     | 588 *         | 504                     | 671                   | 167 *                          |
| Russia  | 567 *         | 484                     | 646                   | 162 *                          |
| Japan   | 562 *         | 473                     | 645                   | 172 *                          |
| Taiwan  | 558 *         | 471                     | 639                   | 168 *                          |
| Finland   | 555 *         | 464                     | 640                   | 176 *                          |
| Latvia  | 542           | 458                     | 619                   | 162 *                          |
| Norway  | 539           | 451                     | 622                   | 171 *                          |
| United States                                   | 539           | 426                     | 641                   | 214                            |
| Lithuania                                       | 538           | 443                     | 628                   | 185 *                          |
| Sweden  | 537           | 439                     | 629                   | 190 *                          |
| England   | 537           | 444                     | 626                   | 182 *                          |
| Czechia   | 534           | 443                     | 619                   | 175 *                          |
| Australia                                       | 533           | 427                     | 629                   | 202                            |
| Hong Kong                                       | 531           | 438                     | 620                   | 182 *                          |
| Ireland   | 528 *         | 427                     | 620                   | 192 *                          |
| Canada  | 523 *         | 429                     | 613                   | 184 *                          |
| Denmark   | 522 *         | 433                     | 607                   | 174 *                          |
| Austria   | 522 *         | 424                     | 614                   | 190 *                          |
| Slovakia  | 521 *         | 415                     | 612                   | 198                            |
| Northern Ireland                                | 518 *         | 424                     | 606                   | 182 *                          |
| Netherlands                                     | 518 *         | 434                     | 599                   | 165 *                          |
| Germany   | 518 *         | 416                     | 613                   | 197 *                          |
| Cyprus  | 511 *         | 412                     | 606                   | 195 *                          |
| Spain   | 511 *         | 422                     | 595                   | 173 *                          |
| Italy   | 510 *         | 424                     | 592                   | 168 *                          |
| Portugal  | 504 *         | 416                     | 587                   | 172 *                          |
| New Zealand                                     | 503 *         | 392                     | 605                   | 214                            |
| Belgium   | 501 *         | 412                     | 584                   | 172 *                          |
| Malta   | 496 *         | 382                     | 598                   | 216                            |
| France  | 488 *         | 382                     | 583                   | 201 *                          |

\*  $p < 0.05$ . Significantly different from the U.S. estimate at the 0.05 level of statistical significance.

TIMSS = Trends in International Mathematics and Science Study.

<sup>a</sup> These columns show the threshold (or cut) scores for the 10th percentile (the bottom 10% of students) and 90th percentile (the top 10% of students). The 90th–10th percentile score gap for each education system is the difference between its 90th and 10th percentile scores. The percentile ranges are specific to each education system's distribution of scores, enabling users to compare scores across education systems.

**Note(s):**

TIMSS participants include countries, which are complete, independent political entities, and non-national entities (e.g., Hong Kong). Advanced economies are based on the International Monetary Fund (IMF) designation of advanced economies (Table A, pg. 132 in *World Economic Outlook: Challenges to Steady Growth*, 2018). IMF does not classify Russia as an advanced economy, but it is included in this analysis because it is a large economy with high levels of student achievement.

**Source(s):**

International Association for the Evaluation of Educational Achievement, TIMSS, 2019.

*Science and Engineering Indicators*

Table SK12-8

**U.S. students in grade 8 reaching the TIMSS Advanced International Benchmark in mathematics and science: 1995–2019**

(Percent)

| Subject     | 1995 | 1999 | 2003 | 2007 | 2011 | 2015 | 2019 |
|-------------|------|------|------|------|------|------|------|
| Mathematics | 4    | 7    | 7    | 6    | 7    | 10   | 14   |
| Science     | 11   | 12   | 11   | 10   | 10   | 12   | 15   |

TIMSS = Trends in International Mathematics and Science Study.

**Note(s):**

The Advanced International Benchmark is a score of 625 or higher.

**Source(s):**

International Association for the Evaluation of Educational Achievement, TIMSS, 1995, 1999, 2003, 2007, 2011, 2015, and 2019.

*Science and Engineering Indicators*

Table SK12-9

**Average scores of U.S. students in grade 8 on the TIMSS mathematics and science assessments, by student sex: 1995–2019**

(Average score)

| Subject and student sex | 1995 | 1999 | 2003 | 2007 | 2011 | 2015 | 2019 |
|-------------------------|------|------|------|------|------|------|------|
| Mathematics             |      |      |      |      |      |      |      |
| Female                  | 490  | 498  | 502  | 507  | 508  | 517  | 517  |
| Male                    | 495  | 505  | 507  | 510  | 511  | 519  | 514  |
| Science                 |      |      |      |      |      |      |      |
| Female                  | 505  | 505  | 519  | 514  | 519  | 527  | 525  |
| Male                    | 520  | 524  | 536  | 526  | 530  | 533  | 520  |

TIMSS = Trends in International Mathematics and Science Study.

**Note(s):**

Scores are reported on a scale from 0 to 1,000, with a TIMSS centerpoint of 500 and a standard deviation of 100.

**Source(s):**

International Association for the Evaluation of Educational Achievement, TIMSS, 1995, 1999, 2003, 2007, 2011, 2015, and 2019.

*Science and Engineering Indicators*



Table SK12-10

**High school graduates who earned Carnegie credits in STEM advanced mathematics courses, advanced science and engineering courses, and STEM-related technical courses, by STEM course: 1990–2019**

(Percent)

| STEM course                              | 1990 | 2000 | 2009 | 2019 |
|--|------|------|------|------|
| Advanced mathematics courses             | 57   | 74   | 83   | 89   |
| Algebra II                               | 56   | 71   | 80   | 85   |
| Precalculus and analysis                 | 14   | 27   | 36   | 39   |
| Calculus                                 | 7    | 13   | 18   | 16   |
| Other advanced mathematics               | 12   | 14   | 20   | 26   |
| Advanced science and engineering courses | 63   | 79   | 85   | 88   |
| Advanced biology                         | 22   | 31   | 33   | 35   |
| Chemistry                                | 51   | 65   | 72   | 75   |
| Advanced environmental and earth science | 5    | 9    | 11   | 16   |
| Physics                                  | 23   | 32   | 36   | 38   |
| Engineering                              | 0    | 3    | 4    | 12   |
| STEM-related technical courses           | 28   | 41   | 36   | 39   |
| Engineering and science technologies     | 3    | 10   | 9    | 7    |
| Health science and technology            | 3    | 10   | 10   | 17   |
| Computer science                         | 23   | 26   | 22   | 20   |

STEM = science, technology, engineering, and mathematics.

**Note(s):**

Advanced mathematics covers courses in algebra II, trigonometry, precalculus and analysis, probability and statistics, and calculus. Other advanced mathematics courses include primarily trigonometry and statistics and probability courses. Advanced biology courses include Advanced Placement (AP) and International Baccalaureate (IB) biology, physiology, anatomy, and genetics courses. Advanced environmental and earth science courses include AP and IB environmental science, college preparatory earth science, and various geology courses. Engineering and science technologies courses focus on instrumentation, equipment maintenance, and other technical tasks conducted in engineering and science-related occupations. One Carnegie credit is defined as 120 hours of class instruction over the course of a secondary school year.

**Source(s):**

Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress High School Transcript Study, 1990, 2000, 2009, and 2019.

*Science and Engineering Indicators*

Table SK12-11

**High school graduates who earned Carnegie credits in any STEM course, by student sex and race or ethnicity: 1990–2019**

(Percent)

| Characteristic            | 1990 | 2000 | 2009 | 2019 |
|---------------------------|------|------|------|------|
| All students              | 77   | 91   | 94   | 97   |
| Sex                       |      |      |      |      |
| Female                    | 78   | 92   | 95   | 97   |
| Male                      | 75   | 90   | 94   | 96   |
| Race or ethnicity         |      |      |      |      |
| Asian or Pacific Islander | 85   | 96   | 98   | 99   |
| Black                     | 70   | 91   | 93   | 96   |
| Hispanic                  | 67   | 87   | 91   | 96   |
| White                     | 78   | 91   | 95   | 97   |

STEM = science, technology, engineering, and mathematics.

**Note(s):**

Hispanic may be any race; race categories exclude Hispanic origin. Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian. High School Transcript Study (HSTS) racial or ethnic group trend reporting does not include American Indian or Alaska Native or Other categories. One Carnegie credit is defined as 120 hours of class instruction over the course of a secondary school year.

**Source(s):**

Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress HSTS, 1990, 2000, 2009, and 2019.

*Science and Engineering Indicators*

Table SK12-12

## High school completers enrolled in college in October after completing high school, by demographic characteristics and institution type: 1975–2021

(Percent)

| Year | All graduates | Sex  |        | Family income <sup>a</sup> |        |      | Race or ethnicity <sup>b</sup> |       |          |       | Parents' highest education level <sup>c</sup> |                                   |              |                             | Institution type |        |
|------|---------------|------|--------|----------------------------|--------|------|--------------------------------|-------|----------|-------|---|-----------------------------------|--------------|-----------------------------|------------------|--------|
|      |               | Male | Female | Low                        | Middle | High | White                          | Black | Hispanic | Asian | Less than high school                         | High school diploma or equivalent | Some college | Bachelor's or higher degree | 2-year           | 4-year |
| 1975 | 51            | 53   | 49     | 31                         | 46     | 65   | 49                             | 45    | 53       | NA    | NA  | NA                                | NA           | NA                          | 18               | 33     |
| 1976 | 49            | 47   | 50     | 39                         | 41     | 63   | 50                             | 45    | 54       | NA    | NA  | NA                                | NA           | NA                          | 16               | 33     |
| 1977 | 51            | 52   | 49     | 28                         | 44     | 66   | 50                             | 47    | 49       | NA    | NA  | NA                                | NA           | NA                          | 17               | 33     |
| 1978 | 50            | 51   | 49     | 31                         | 44     | 64   | 50                             | 48    | 46       | NA    | NA  | NA                                | NA           | NA                          | 17               | 33     |
| 1979 | 49            | 50   | 48     | 31                         | 43     | 63   | 50                             | 45    | 46       | NA    | NA  | NA                                | NA           | NA                          | 18               | 32     |
| 1980 | 49            | 47   | 52     | 33                         | 43     | 65   | 52                             | 44    | 50       | NA    | NA  | NA                                | NA           | NA                          | 19               | 30     |
| 1981 | 54            | 55   | 53     | 34                         | 49     | 68   | 52                             | 40    | 49       | NA    | NA  | NA                                | NA           | NA                          | 20               | 33     |
| 1982 | 51            | 49   | 52     | 33                         | 42     | 71   | 54                             | 39    | 49       | NA    | NA  | NA                                | NA           | NA                          | 19               | 32     |
| 1983 | 53            | 52   | 53     | 35                         | 45     | 70   | 56                             | 38    | 47       | NA    | NA  | NA                                | NA           | NA                          | 19               | 34     |
| 1984 | 55            | 56   | 54     | 35                         | 48     | 74   | 58                             | 40    | 49       | NA    | NA  | NA                                | NA           | NA                          | 19               | 36     |
| 1985 | 58            | 59   | 57     | 40                         | 51     | 75   | 59                             | 40    | 46       | NA    | NA  | NA                                | NA           | NA                          | 20               | 38     |
| 1986 | 54            | 56   | 52     | 34                         | 49     | 71   | 58                             | 43    | 42       | NA    | NA  | NA                                | NA           | NA                          | 19               | 35     |
| 1987 | 57            | 58   | 55     | 37                         | 50     | 74   | 59                             | 44    | 45       | NA    | NA  | NA                                | NA           | NA                          | 19               | 38     |
| 1988 | 59            | 57   | 61     | 43                         | 55     | 73   | 60                             | 50    | 49       | NA    | NA  | NA                                | NA           | NA                          | 22               | 37     |
| 1989 | 60            | 58   | 62     | 48                         | 55     | 71   | 62                             | 48    | 53       | NA    | NA  | NA                                | NA           | NA                          | 21               | 39     |
| 1990 | 60            | 58   | 62     | 47                         | 54     | 77   | 63                             | 49    | 52       | 81    | NA  | NA                                | NA           | NA                          | 20               | 40     |
| 1991 | 63            | 58   | 67     | 40                         | 58     | 78   | 64                             | 47    | 53       | 81    | NA  | NA                                | NA           | NA                          | 25               | 38     |
| 1992 | 62            | 60   | 64     | 41                         | 57     | 79   | 64                             | 50    | 58       | 81    | 33  | 56                                | 68           | 81                          | 23               | 39     |
| 1993 | 63            | 60   | 65     | 50                         | 57     | 79   | 64                             | 51    | 56       | 83    | 47  | 52                                | 63           | 88                          | 23               | 40     |
| 1994 | 62            | 61   | 63     | 43                         | 58     | 78   | 64                             | 52    | 55       | 82    | 43  | 50                                | 65           | 83                          | 21               | 41     |
| 1995 | 62            | 63   | 61     | 34                         | 56     | 84   | 65                             | 53    | 52       | 83    | 27  | 47                                | 70           | 88                          | 22               | 40     |
| 1996 | 65            | 60   | 70     | 49                         | 63     | 78   | 67                             | 55    | 58       | 83    | 45  | 56                                | 67           | 85                          | 23               | 42     |
| 1997 | 67            | 64   | 70     | 57                         | 61     | 82   | 68                             | 59    | 55       | 83    | 51  | 62                                | 63           | 86                          | 23               | 44     |
| 1998 | 66            | 62   | 69     | 46                         | 65     | 78   | 68                             | 60    | 52       | 84    | 50  | 57                                | 68           | 82                          | 24               | 41     |
| 1999 | 63            | 61   | 64     | 48                         | 60     | 75   | 67                             | 59    | 47       | 81    | 36  | 54                                | 60           | 82                          | 21               | 42     |
| 2000 | 63            | 60   | 66     | 50                         | 60     | 77   | 65                             | 56    | 49       | 81    | 44  | 52                                | 64           | 81                          | 21               | 42     |
| 2001 | 62            | 60   | 63     | 44                         | 56     | 80   | 66                             | 56    | 53       | 78    | 39  | 52                                | 62           | 81                          | 20               | 42     |
| 2002 | 65            | 62   | 68     | 56                         | 61     | 78   | 67                             | 57    | 55       | 72    | 43  | 52                                | 66           | 83                          | 22               | 44     |
| 2003 | 64            | 61   | 67     | 53                         | 58     | 80   | 68                             | 60    | 58       | 74    | 43  | 54                                | 63           | 82                          | 21               | 42     |
| 2004 | 67            | 61   | 72     | 48                         | 63     | 80   | 69                             | 59    | 58       | 82    | 40  | 55                                | 67           | 86                          | 22               | 44     |
| 2005 | 69            | 66   | 70     | 54                         | 65     | 81   | 73                             | 58    | 58       | 81    | 43  | 62                                | 66           | 89                          | 24               | 45     |
| 2006 | 66            | 66   | 66     | 51                         | 61     | 81   | 70                             | 56    | 58       | 85    | 43  | 56                                | 67           | 78                          | 25               | 41     |
| 2007 | 67            | 66   | 68     | 58                         | 63     | 78   | 70                             | 56    | 62       | 86    | 45  | 52                                | 65           | 86                          | 24               | 43     |
| 2008 | 69            | 66   | 72     | 56                         | 65     | 82   | 71                             | 60    | 62       | 90    | 44  | 57                                | 72           | 82                          | 28               | 41     |
| 2009 | 70            | 66   | 74     | 54                         | 67     | 84   | 71                             | 62    | 61       | 88    | 40  | 58                                | 74           | 82                          | 28               | 42     |

Table SK12-12

## High school completers enrolled in college in October after completing high school, by demographic characteristics and institution type: 1975–2021

(Percent)

| Year | All graduates | Sex  |        | Family income <sup>a</sup> |        |      | Race or ethnicity <sup>b</sup> |       |          |       | Parents' highest education level <sup>c</sup> |                                   |              |                             | Institution type |        |
|------|---------------|------|--------|----------------------------|--------|------|--------------------------------|-------|----------|-------|---|-----------------------------------|--------------|-----------------------------|------------------|--------|
|      |               | Male | Female | Low                        | Middle | High | White                          | Black | Hispanic | Asian | Less than high school                         | High school diploma or equivalent | Some college | Bachelor's or higher degree | 2-year           | 4-year |
| 2010 | 68            | 63   | 74     | 51                         | 67     | 82   | 70                             | 66    | 62       | 87    | 51  | 58                                | 71           | 84                          | 27               | 41     |
| 2011 | 68            | 65   | 72     | 54                         | 66     | 82   | 68                             | 62    | 66       | 84    | s   | 54                                | 67           | 83                          | 26               | 42     |
| 2012 | 66            | 61   | 71     | 51                         | 65     | 81   | 68                             | 60    | 66       | 82    | 61  | 57                                | 66           | 77                          | 29               | 37     |
| 2013 | 66            | 64   | 68     | 46                         | 64     | 79   | 67                             | 61    | 65       | 84    | 43  | 52                                | 64           | 83                          | 24               | 42     |
| 2014 | 68            | 64   | 73     | 58                         | 64     | 84   | 69                             | 61    | 65       | 84    | 54  | 56                                | 67           | 81                          | 25               | 44     |
| 2015 | 69            | 66   | 73     | 69                         | 62     | 83   | 70                             | 61    | 69       | 88    | 56  | 57                                | 65           | 82                          | 25               | 44     |
| 2016 | 70            | 67   | 72     | 65                         | 65     | 83   | 70                             | 57    | 68       | 86    | 50  | 57                                | 67           | 84                          | 24               | 46     |
| 2017 | 67            | 61   | 72     | NA                         | NA     | NA   | 70                             | 61    | 67       | 82    | 47  | 62                                | 62           | 77                          | 23               | 44     |
| 2018 | 69            | 67   | 71     | NA                         | NA     | NA   | 69                             | 58    | 63       | 82    | 58  | 54                                | 69           | 79                          | 26               | 44     |
| 2020 | 63            | 59   | 66     | NA                         | NA     | NA   | 65                             | 55    | 59       | 86    | NA  | NA                                | NA           | NA                          | 20               | 43     |
| 2021 | 62            | 55   | 70     | NA                         | NA     | NA   | 64                             | 58    | 57       | 84    | NA  | NA                                | NA           | NA                          | 19               | 43     |

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

<sup>a</sup> 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%.

<sup>b</sup> Because of the small sample size for racial and ethnic group 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 2019, a 2-year moving average is used. Data for 1975 reflect an average of 1975 and 1976, and data for 2018 reflect an average of 2017 and 2018. Starting from 2003, data for White, Black, and Asian students exclude individuals identifying themselves as two or more races. Hispanic may be any race; race categories exclude Hispanic origin. Hispanic includes Latino. Black includes African American.

<sup>c</sup> Parents' highest education level refers to the highest level of education achieved by either parent.

**Note(s):**

The table includes 16- to 24-year-old students who completed high school in the survey year. Immediate college enrollment rates are defined as rates of high school graduates enrolled in college in October after completing high school earlier in the same calendar year. Before 1992, "high school graduates" referred to those who had completed 12 years of schooling. As of 1992, "high school graduates" refers to those who have received a high school diploma or equivalency certificate.

**Source(s):**

For parents' highest education level: National Center for Education Statistics, special tabulations (2020) of the Current Population Survey, Bureau of Labor Statistics.

All other data: American College Testing Program, unpublished tabulations, derived from statistics collected by the Census Bureau, 1960 through 1969. Department of Commerce, Census Bureau, Current Population Survey (CPS), October, 1970 through 2021.

De Brey C, Snyder TD, Zhang A, Dillow SA, *Digest of Education Statistics: 2021*, NCES 2023-009, Tables 302.10 and 302.20, Department of Education, National Center for Education Statistics (2023). [https://nces.ed.gov/programs/digest/current\\_tables.asp](https://nces.ed.gov/programs/digest/current_tables.asp).