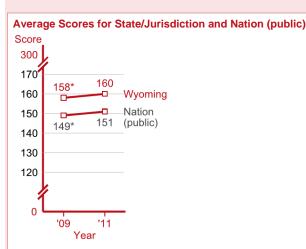
ation's Science Report Card 2011 State Snapshot Report

Overall Results

- In 2011, the average score of eighth-grade students in Wyoming was 160. This was higher than the average score of 151 for public school students in the nation.
- The average score for students in Wyoming in 2011 (160) was higher than their average score in 2009 (158).
- In 2011, the score gap between students in Wyoming at the 75th percentile and students at the 25th percentile was 35 points. This performance gap was not significantly different from that of 2009 (38 points).
- The percentage of students in Wyoming who performed at or above the NAEP *Proficient* level was 38 percent in 2011. This percentage was not significantly different from that in 2009 (36 percent).
- The percentage of students in Wyoming who performed at or above the NAEP *Basic* level was 78 percent in 2011. This percentage was greater than that in 2009 (74 percent).



* Significantly different (p < .05) from 2011. Significance tests were performed using unrounded numbers.



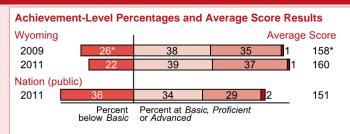
¹ Department of Defense Education Activity (overseas and domestic schools).

In 2011, the average score in Wyoming (160) was

lower than those in 5 states/jurisdictions

25 NATIONAL CENTER FOR

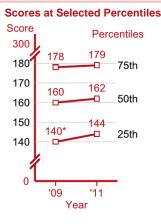
- higher than those in 36 states/jurisdictions
- not significantly different from those in 10 states/jurisdictions





* Significantly different (p < .05) from state's results in 2011. Significance tests were performed using unrounded numbers.

NOTE: Detail may not sum to totals because of rounding.



 * Significantly different (p < .05) from 2011. Significance tests were performed using unrounded numbers.

Score Gaps for Student Groups

- Data are not reported for Black students in 2011, because reporting standards were not met.
- In 2011, Hispanic students had an average score that was 21 points lower than White students. This performance gap was not significantly different from that in 2009 (24 points).
- In 2011, male students in Wyoming had an average score that was higher than female students by 6 points.
- In 2011, students who were eligible for free/reduced-price school lunch, an indicator of low family income, had an average score that was 14 points lower than students who were not eligible for free/reduced-price school lunch. This performance gap was not significantly different from that in 2009 (15 points).

NOTE: Statistical comparisons are calculated on the basis of unrounded scale scores or percentages. SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2009 and 2011 Science Assessments.

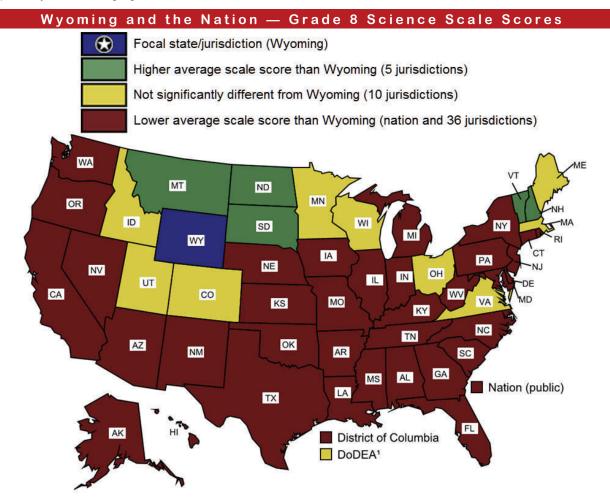
Compare the Average Score in 2011 to Other States/Jurisdictions



Grade 8 Report

National Snapshot

The National Assessment of Educational Progress (NAEP) uses both multiple choice and constructed-response test items to assess eighth graders' skills in three science areas: Physical Science, Life Science, Earth and Space Science. Scale scores range from 0 to 300, wherein a 141 denotes NAEP's *Basic* achievement benchmark (i.e., approximately a "grade level" performance); 170 reflects *Proficient* results which means competency on challenging material, and 215 is considered to be *Advanced*.



- On the 2011 science assessment, Wyoming 8th graders had an average scale score that was reliably higher than students in Alabama, Arizona, Arkansas, California, Colorado, Connecticut, District of Columbia, Delaware, Florida, Georgia, Hawaii, Illinois, Iowa, Indiana, Kansas, Kentucky, Louisiana, Maryland, Michigan, Mississippi, Missouri, Nebraska, Nevada, New Mexico, New Jersey, New York, North Carolina, Oklahoma, Oregon, Pennsylvania, Rhode Island, South Carolina, Tennessee, Texas, Washington, and West Virginia. Wyoming students also scored higher than the national average.
- Wyoming 8th graders had an average scale score that was not statistically different from students in Colorado, Department of Defense Schools, Idaho, Maine, Massachusetts, Minnesota, Ohio, Virginia, Utah, and Wisconsin.
- Wyoming 8th graders had an average scale score that was reliably than that of students in Montana, New Hampshire, North and South Dakota, and Vermont.

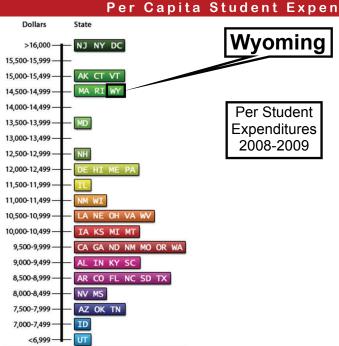
Results are based on statistical tests which account for standard errors related to NAEP's sampling procedures. For additional results and more information about Wyoming NAEP, please visit: <u>http://edu.wyoming.gov/Programs/statewide_assessment_system/naep.aspx</u>.



Grade 8 Report

Funding Snapshot

The National Assessment of Educational Progress (NAEP) uses both multiple choice and constructed-response test items to assess eighth graders' skills in three science areas: Physical Science, Life Science, Earth and Space Science. Scale scores range from 0 to 300, wherein a 141 denotes NAEP's *Basic* achievement benchmark (i.e., approximately a "grade level" performance); 170 reflects *Proficient* results which means competency on challenging material, and 215 is considered to be *Advanced*.



Per Capita Student Expenditures During 2008-2009

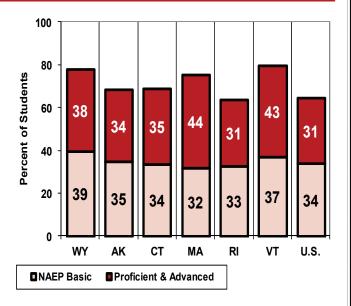
Wyoming was among six states reporting per student expenditures between \$14,500 and \$15,499 during school year 2008-2009 (most recent data available). The other states were Alaska, Connecticut, Massachusetts, Rhode Island, and Vermont.

NOTE: The prekindergarten student membership was imputed for some states, affecting the total student count and per pupil expenditures calculation. Some values were affected by redistribution of reported expenditure values to correct for missing data items, and/or to distribute state direct support expenditures.

SOURCE: U.S. Department of Education, National Center for Education Statistics, Common Core of Data (CCD), "National Public Education Financial Survey (NPEFS)," fiscal year 2009, Version 1a.

Achievement Levels

- Seventy-seven (77) percent of Wyoming 8th graders scored At or Above Basic on the 2011 science assessment. This was higher than the nation's 65 percent.
- Wyoming also had a higher percentage of 8th graders scoring At or Above Basic than Alaska, Connecticut, and Rhode Island—states with similar per-student expenditures.
- The percentage of Wyoming 8th graders scoring At or Above Basic was not reliably different from a peer expenditure states Massachusetts and Vermont.



Results are based on statistical tests which account for standard errors related to NAEP's sampling procedures.

For additional results and more information about Wyoming NAEP, please visit:

http://edu.wyoming.gov/Programs/statewide_assessment_system/naep.aspx.

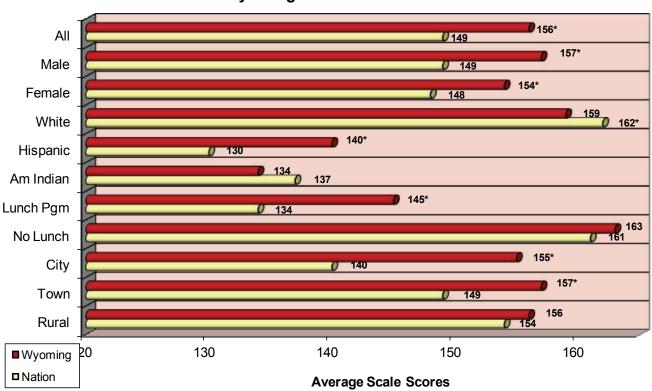


Grade 8 Report

WY-US Student Gaps Snapshot

The National Assessment of Educational Progress (NAEP) uses both multiple choice and constructed-response test items to assess eighth graders' skills in three science areas: Physical Science, Life Science, Earth and Space Science. Scale scores range from 0 to 300, wherein a 141 denotes NAEP's *Basic* achievement benchmark (i.e., approximately a "grade level" performance); 170 reflects *Proficient* results which means competency on challenging material, and 215 is considered to be *Advanced*.

Student Group Comparisons



Wyoming and National Results

▶ In 2011, Wyoming eighth graders' scale scores in science were above the average nationally.

Wyoming also had higher results in seven student groups: male and female students, Hispanic students, students from low income families (i.e., students qualifying for free or reduced price meals from the National School Lunch Program), and students in city or town schools (as defined by the Census Bureau).

► However, as in Wyoming's 2011 NAEP fourth grade science results, eighth grade average science scale scores were not reliably in Wyoming than the rest of the nation in two of the state's largest students groups:

White students (85% of Wyoming's 8th graders), and students from more affluent home (i.e., those students *Not* qualifying for free or reduced price meals from the National School Lunch Program—65% of Wyoming's 8th graders).

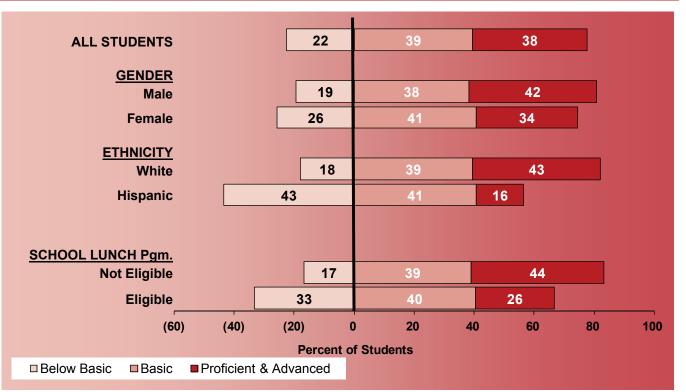


Grade 8 Report

Student Groups Snapshot

The National Assessment of Educational Progress (NAEP) uses both multiple choice and constructed-response test items to assess eighth graders' skills in three science areas: Physical Science, Life Science, Earth and Space Science. Scale scores range from 0 to 300, wherein a 141 denotes NAEP's Basic achievement benchmark (i.e., approximately a "grade level" performance); 170 reflects Proficient results which means competency on challenging material, and 215 is considered to be Advanced.

Student Groups in Wyoming



- On the NAEP 2011 science assessment, the proportion of eighth grade male students in Wyoming who • scored At or Above Basic (78 percent) was higher than female students (75 percent).
- The proportion of eighth grade White students in Wyoming scoring At or Above Basic (82 percent) was ► higher than Hispanic students (57 percent). Student sampling in Wyoming was not sufficient to permit reporting of science performance for eighth grade American Indian, Black and Asian students.
- The proportion of Wyoming eighth graders not eligible for the National School Lunch Program and ۲ scoring At or Above Basic (83 percent) was higher than students qualifying for free or reduced price meals (66 percent).

Results are based on statistical tests which account for standard errors related to NAEP's sampling procedures. For additional results and more information about Wyoming NAEP, please visit: http://edu.wyoming.gov/Programs/statewide_assessment_system/naep.aspx.

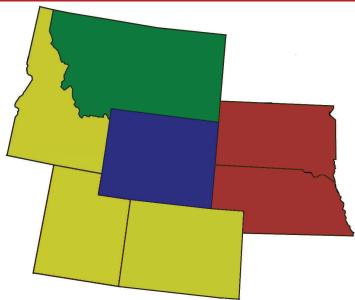


Grade 8 Report

Regional Snapshot

The National Assessment of Educational Progress (NAEP) uses both multiple choice and constructed-response test items to assess eighth graders' skills in three science areas: Physical Science, Life Science, Earth and Space Science. Scale scores range from 0 to 300, wherein a 141 denotes NAEP's *Basic* achievement benchmark (i.e., approximately a "grade level" performance); 170 reflects *Proficient* results which means competency on challenging material, and 215 is considered to be *Advanced*.



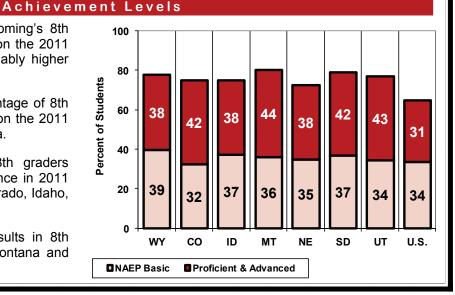


Legend: Wyoming (blue) is the focal state. States in green scored reliably higher than Wyoming. States in yellow were not statistically different from Wyoming. States in red scored reliably lower than Wyoming.

- In 2011, the average science scale score for 8th grade students in Wyoming was 161; this was reliably higher than the national average (152).
- Wyoming 8th graders also had a higher average science scale score in 2011 than students in Nebraska.
- Wyoming 8th grade average science scale score in 2011 that was not statistically different from Colorado, Idaho, or Utah.
- The average science scale score for 8th grade students in Wyoming was lower than scores in Montana and South Dakota.

Seventy-eight (77) percent of Wyoming's 8th graders scored at or above *Basic* on the 2011 science assessment. This was reliably higher than the nation's 65 percent.

- Wyoming also had a higher percentage of 8th graders scoring at or above *Basic* on the 2011 science assessment than Nebraska.
- ► The percentage of Wyoming's 8th graders scoring At or Above Basic on science in 2011 was not reliably different from Colorado, Idaho, and Utah.
- Wyoming's At or Above Basic results in 8th grade science were lower than Montana and South Dakota's.



Results are based on statistical tests which account for standard errors related to NAEP's sampling procedures.

For additional results and more information about Wyoming NAEP, please visit:

http://edu.wyoming.gov/Programs/statewide_assessment_system/naep.aspx.