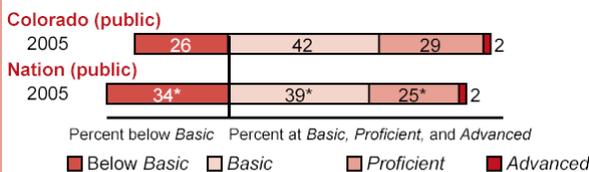


The National Assessment of Educational Progress (NAEP) assesses science in two major dimensions: Fields of Science (Earth, Physical, and Life) and Knowing and Doing Science (Conceptual Understanding, Scientific Investigation, and Practical Reasoning). The NAEP science scale ranges from 0 to 300. Scales are created separately for each grade.

Overall Science Results for Colorado

- Colorado's average score (155) in 2005 was higher than that of the nation's public schools (149).¹
- Of the 44 states and one jurisdiction that participated in the 2005 fourth-grade assessment, students' average scale score in Colorado was higher than those in 23 jurisdictions, not significantly different from those in 12 jurisdictions, and lower than those in 9 jurisdictions.²
- The percentage of students in Colorado who performed at or above the NAEP *Proficient* level was 32 percent in 2005. This percentage was greater than that in the nation (27 percent).
- The percentage of students in Colorado who performed at or above the NAEP *Basic* level was 74 percent in 2005. This percentage was greater than that in the nation (66 percent).

Student Percentages at NAEP Achievement Levels



NOTE: The NAEP grade 4 science achievement levels correspond to the following scale points: Below *Basic*, 137 or lower; *Basic*, 138–169; *Proficient*, 170–204; *Advanced*, 205 or above.

Performance of NAEP Reporting Groups in Colorado: 2005

Reporting groups	Percent of students	Average score	Percent below <i>Basic</i>	Percent of students at or above <i>Basic</i>	Percent <i>Proficient</i>	Percent <i>Advanced</i>
Male	52	157 ↑	25 ↓	75 ↑	35 ↑	3
Female	48	153 ↑	28 ↓	72 ↑	29 ↑	2
White	65 ↑	163 ↑	15 ↓	85 ↑	41	3
Black	6 ↓	139 ↑	45 ↓	55 ↑	11	1
Hispanic	26 ↑	138 ↑	50 ↓	50 ↑	13	1
Asian/Pacific Islander	3 ↓	157	21	79	32	3
American Indian/Alaska Native	1	‡	‡	‡	‡	‡
Eligible for free/reduced-price school lunch	36 ↓	139 ↑	48	52	13	#
Not eligible for free/reduced-price school lunch	64 ↑	164 ↑	14 ↓	86 ↑	42	3

Average Score Gaps Between Selected Groups

- In 2005, male students in Colorado had an average score that was higher than that of female students by 4 points. In the nation, the average score for male students was higher than that of female students by 4 points.
- In 2005, Black students had an average score that was lower than that of White students by 24 points. This performance gap was narrower than that of the nation (33 points).
- In 2005, Hispanic students had an average score that was lower than that of White students by 25 points. In the nation, the average score for Hispanic students was lower than that of White students by 29 points.
- In 2005, students who were eligible for free/reduced-price school lunch, an indicator of poverty, had an average score that was lower than that of students who were not eligible for free/reduced-price school lunch by 25 points. In the nation, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 27 points.
- In 2005, the score gap between students at the 75th percentile and students at the 25th percentile was 38 points. This performance gap was narrower than that of the nation (43 points).

Science Scale Scores at Selected Percentiles

	Scale Score Distribution		
	25 th Percentile	50 th Percentile	75 th Percentile
Colorado	137	157	175
Nation (public)	129 *	152 *	172 *

Scores at selected percentiles on the NAEP science scale indicate how well students at lower, middle, and higher levels performed. For example, the data above shows that 75 percent of students in public schools nationally scored below 172, while 75 percent of students in Colorado scored below 175.

The estimate rounds to zero.

‡ Reporting standards not met.

* Significantly different from Colorado.

↑ Significantly higher than nation (public). ↓ Significantly lower than nation (public).

¹ Comparisons (higher/lower/not different) are based on statistical tests. The .05 level was used for testing statistical significance. Comparisons across jurisdictions and comparisons with the nation or within a jurisdiction across years may be affected by differences in exclusion rates for students with disabilities (SD) and English language learners (ELL). The exclusion rates for SD and ELL in Colorado were 2 percent and 1 percent in 2005, respectively. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

² "Jurisdiction" refers to states and the Department of Defense Education Activity schools.

NOTE: Detail may not sum to totals because of rounding and because the "Information not available" category for free/reduced-price school lunch and the "Unclassified" category for race/ethnicity are not displayed. Visit <http://nces.ed.gov/nationsreportcard/states/> for additional results and detailed information.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), 2005 Science Assessment.