

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 Arizona	Student Percentages at NAEP Achievement Levels																									
<ul style="list-style-type: none"> <li>In 2005, the average scale score for eighth-grade students in Arizona was 140. This was lower than their average score in 2000 (145), and was lower than their average score in 1996 (145).<sup>1</sup></li> <li>Arizona's average score (140) in 2005 was lower than that of the nation's public schools (147).</li> <li>Of the 44 states and one jurisdiction that participated in the 2005 eighth-grade assessment, students' average scale score in Arizona was higher than those in 3 jurisdictions, not significantly different from those in 5 jurisdictions, and lower than those in 36 jurisdictions.<sup>2</sup></li> <li>The percentage of students in Arizona who performed at or above the NAEP <i>Proficient</i> level was 20 percent in 2005. This percentage was not significantly different from that in 2000 (23 percent), and was not significantly different from that in 1996 (23 percent).</li> <li>The percentage of students in Arizona who performed at or above the NAEP <i>Basic</i> level was 49 percent in 2005. This percentage was smaller than that in 2000 (55 percent), and was smaller than that in 1996 (55 percent).</li> </ul>	<p><b>Arizona (public)</b></p> <table border="1"> <tr> <td>1996<sup>1</sup></td> <td>45*</td> <td>32*</td> <td>21</td> <td>2</td> </tr> <tr> <td>2000<sup>1</sup></td> <td>43*</td> <td>33*</td> <td>22*</td> <td>2</td> </tr> <tr> <td>2000</td> <td>45*</td> <td>32</td> <td>21</td> <td>2</td> </tr> <tr> <td>2005</td> <td>51</td> <td>29</td> <td>18</td> <td>2</td> </tr> </table> <p><b>Nation (public)</b></p> <table border="1"> <tr> <td>2005</td> <td>43</td> <td>30</td> <td>24</td> <td>3</td> </tr> </table> <p>Percent below Basic    Percent at Basic, Proficient, and Advanced</p> <p>■ Below Basic    □ Basic    □ Proficient    ■ Advanced</p> <p><sup>1</sup> Accommodations were not permitted for this assessment.</p> <p>NOTE: The NAEP grade 8 science achievement levels correspond to the following scale points: Below Basic, 142 or lower; Basic, 143–169; Proficient, 170–207; Advanced, 208 or above.</p>	1996 <sup>1</sup>	45*	32*	21	2	2000 <sup>1</sup>	43*	33*	22*	2	2000	45*	32	21	2	2005	51	29	18	2	2005	43	30	24	3
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Performance of NAEP Reporting Groups in Arizona: 2005						
Reporting groups	Percent of students	Average score	Percent below Basic	Percent of students at or above Basic	Percent Proficient	Percent Advanced
Male	50	141 ↓	50 ↑	50 ↓	21 ↓	2
Female	50	139	53	47	19	2
White	49 ↓	156	32	68	33	3
Black	5	125	68	32	7	#
Hispanic	37	123	72	28	6	#
Asian/Pacific Islander	2	‡	‡	‡	‡	‡
American Indian/Alaska Native	6	121	77	23	5	#
Eligible for free/reduced-price school lunch	40 ↑	124	72	28	7	#
Not eligible for free/reduced-price school lunch	45	152	37	63	29	3

Average Score Gaps Between Selected Groups	Science Scale Scores at Selected Percentiles																
<ul style="list-style-type: none"> <li>In 2005, male students in Arizona had an average score that was not significantly different from that of female students. In 1996, there was no significant difference between the average score of male and female students.</li> <li>In 2005, Black students had an average score that was lower than that of White students by 30 points. In 1996, the average score for Black students was lower than that of White students by 33 points.</li> <li>In 2005, Hispanic students had an average score that was lower than that of White students by 32 points. In 1996, the average score for Hispanic students was lower than that of White students by 29 points.</li> <li>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 28 points. In 1996, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 29 points.</li> <li>In 2005, the score gap between students at the 75th percentile and students at the 25th percentile was 48 points. In 1996, the score gap between students at the 75th percentile and students at the 25th percentile was 44 points.</li> </ul>	<p>Score 300</p> <p>Percentiles</p> <table border="1"> <tr> <th>Year</th> <th>75th</th> <th>50th</th> <th>25th</th> </tr> <tr> <td>'96</td> <td>168</td> <td>147*</td> <td>124*</td> </tr> <tr> <td>'00</td> <td>169</td> <td>148*</td> <td>126*</td> </tr> <tr> <td>'05</td> <td>165</td> <td>142</td> <td>116</td> </tr> </table> <p>■ Accommodations were not permitted. □ Accommodations were permitted.</p> <p>Year</p> <p>Scores at selected percentiles on the NAEP science scale indicate how well students at lower, middle, and higher levels performed.</p>	Year	75th	50th	25th	'96	168	147*	124*	'00	169	148*	126*	'05	165	142	116
Year	75th	50th	25th														
'96	168	147*	124*														
'00	169	148*	126*														
'05	165	142	116														

# The estimate rounds to zero.

‡ Reporting standards not met.

\* Significantly different from 2005.

↑ Significantly higher than 2000. ↓ Significantly lower than 2000.

<sup>1</sup> 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 Arizona were 3 percent and 2 percent in 2005, respectively. Statistical comparisons are calculated on the basis of unrounded scale scores or percentages.

<sup>2</sup> "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).

