

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 Tennessee	Student Percentages at NAEP Achievement Levels																				
<ul style="list-style-type: none"> <li>In 2005, the average scale score for fourth-grade students in Tennessee was 150. This was higher than their average score in 2000 (145).<sup>1</sup></li> <li>Tennessee's average score (150) in 2005 was not significantly different from that of the nation's public schools (149).</li> <li>Of the 44 states and one jurisdiction that participated in the 2005 fourth-grade assessment, students' average scale score in Tennessee was higher than those in 9 jurisdictions, not significantly different from those in 15 jurisdictions, and lower than those in 20 jurisdictions.<sup>2</sup></li> <li>The percentage of students in Tennessee who performed at or above the NAEP <i>Proficient</i> level was 26 percent in 2005. This percentage was not significantly different from that in 2000 (24 percent).</li> <li>The percentage of students in Tennessee who performed at or above the NAEP <i>Basic</i> level was 67 percent in 2005. This percentage was greater than that in 2000 (61 percent).</li> </ul>	<p><b>Tennessee (public)</b></p> <table border="1"> <tr> <td>2000<sup>1</sup></td> <td>37</td> <td>38</td> <td>23</td> <td>3</td> </tr> <tr> <td>2000</td> <td>39*</td> <td>37</td> <td>22</td> <td>2</td> </tr> <tr> <td>2005</td> <td>33</td> <td>41</td> <td>24</td> <td>2</td> </tr> </table> <p><b>Nation (public)</b></p> <table border="1"> <tr> <td>2005</td> <td>34</td> <td>39</td> <td>25</td> <td>2</td> </tr> </table> <p>Percent below <i>Basic</i>    Percent at <i>Basic</i>, <i>Proficient</i>, and <i>Advanced</i></p> <p>■ Below <i>Basic</i>    □ <i>Basic</i>    ■ <i>Proficient</i>    ■ <i>Advanced</i></p> <p><sup>1</sup> Accommodations were not permitted for this assessment.</p> <p>NOTE: The NAEP grade 4 science achievement levels correspond to the following scale points: <i>Below Basic</i>, 137 or lower; <i>Basic</i>, 138–169; <i>Proficient</i>, 170–204; <i>Advanced</i>, 205 or above.</p>	2000 <sup>1</sup>	37	38	23	3	2000	39*	37	22	2	2005	33	41	24	2	2005	34	39	25	2
2000 <sup>1</sup>	37	38	23	3																	
2000	39*	37	22	2																	
2005	33	41	24	2																	
2005	34	39	25	2																	

Performance of NAEP Reporting Groups in Tennessee: 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	50	152↑	32	68	29	3
Female	50	149↑	34	66	24	2
White	69	158↑	22↓	78↑	34	3
Black	27	131↑	58↓	42↑	8	#
Hispanic	3↑	137	51	49	15	#
Asian/Pacific Islander	1	‡	‡	‡	‡	‡
American Indian/Alaska Native	#	‡	‡	‡	‡	‡
Eligible for free/reduced-price school lunch	46	138↑	49↓	51↑	13	#
Not eligible for free/reduced-price school lunch	54	161↑	19	81	38	4

Average Score Gaps Between Selected Groups	Science Scale Scores at Selected Percentiles
<ul style="list-style-type: none"> <li>In 2005, male students in Tennessee had an average score that was not significantly different from that of female students. In 2000, 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 27 points. This performance gap was narrower than that of 2000 (36 points).</li> <li>In 2005, Hispanic students had an average score that was lower than that of White students by 21 points. Data are not reported for Hispanic students in 2000, because reporting standards were not met. Therefore, the performance gap results are not reported.</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 23 points. In 2000, the average score for students who were eligible for free/reduced-price school lunch was lower than the score of those not eligible by 26 points.</li> <li>In 2005, the score gap between students at the 75th percentile and students at the 25th percentile was 41 points. In 2000, the score gap between students at the 75th percentile and students at the 25th percentile was 45 points.</li> </ul>	<p>Scores at selected percentiles on the NAEP science scale indicate how well students at lower, middle, and higher levels performed.</p>

# 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 Tennessee were 3 percent and 1 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), 2000 and 2005 Science Assessments.