

## Chapter 8. State Indicators

### 8-4F Fourth Grade Science Proficiency, Male Students

#### Description

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This indicator represents the proportion of a state's fourth grade students in public schools that met or exceeded the proficiency standard in science. The National Assessment Governing Board sets performance standards that provide a context for interpreting National Assessment of Educational Progress (NAEP) results. The standards define "proficiency," as well as "advanced" and "basic" accomplishment. For the fourth grade, the basic level (scores 131–166) denotes partial mastery of knowledge and skills that are prerequisite for proficient work. The proficient level (167–223) represents solid academic performance and demonstrates competency over challenging subject-matter knowledge. The advanced level (224–300) signifies superior performance.

The National Center for Education Statistics has determined that achievement levels are to be used on a trial basis and should be interpreted with caution. However, both the Commissioner of Education Statistics and the National Assessment Governing Board state these performance standards are useful for understanding trends in student achievement.

Approximately 151,500 fourth grade students in 8,780 schools participated in the 2009 NAEP science assessment. Students with disabilities or limited English-language proficiency are allowed to use certain accommodations (e.g., extra testing time or individual rather than group administration). All data presented here represent scores from tests taken with accommodations offered. Demographic percentages of test takers by state are included in this indicator's standard error table. For national data across all demographic groups, see indicator 8-4.

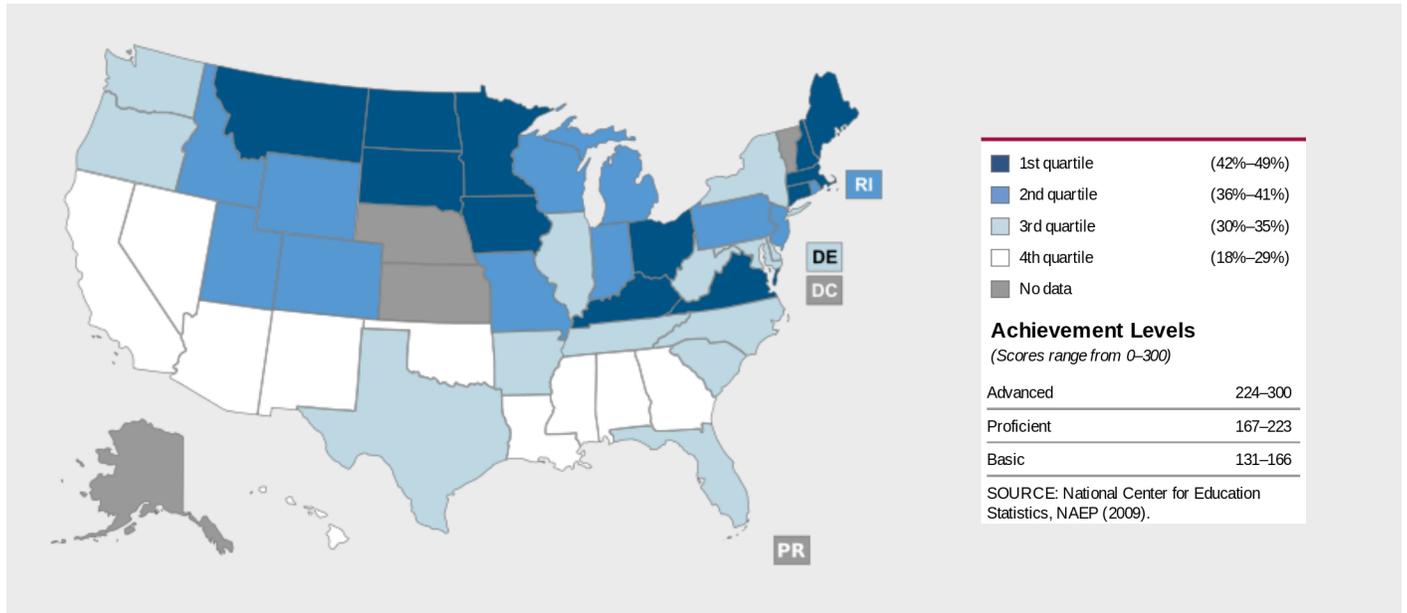
#### Findings

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- In 2009, 34% of fourth grade male students nationwide performed at or above the proficient level in science compared to 32% of fourth grade students nationwide.
- Among the states, there were significant differences in the percentage of fourth grade male students who demonstrated proficiency in science. State values ranged from 18% to 49%.
- Of the 46 states that participated in the 2009 fourth grade science assessment and that had enough data for statistical comparisons, 21 had a percentage of fourth grade male students who demonstrated proficiency in science that was higher than the national average for fourth grade male students, 11 states had a percentage similar to the national average, and 14 states had a percentage that was lower than the national average.

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Year: 2009

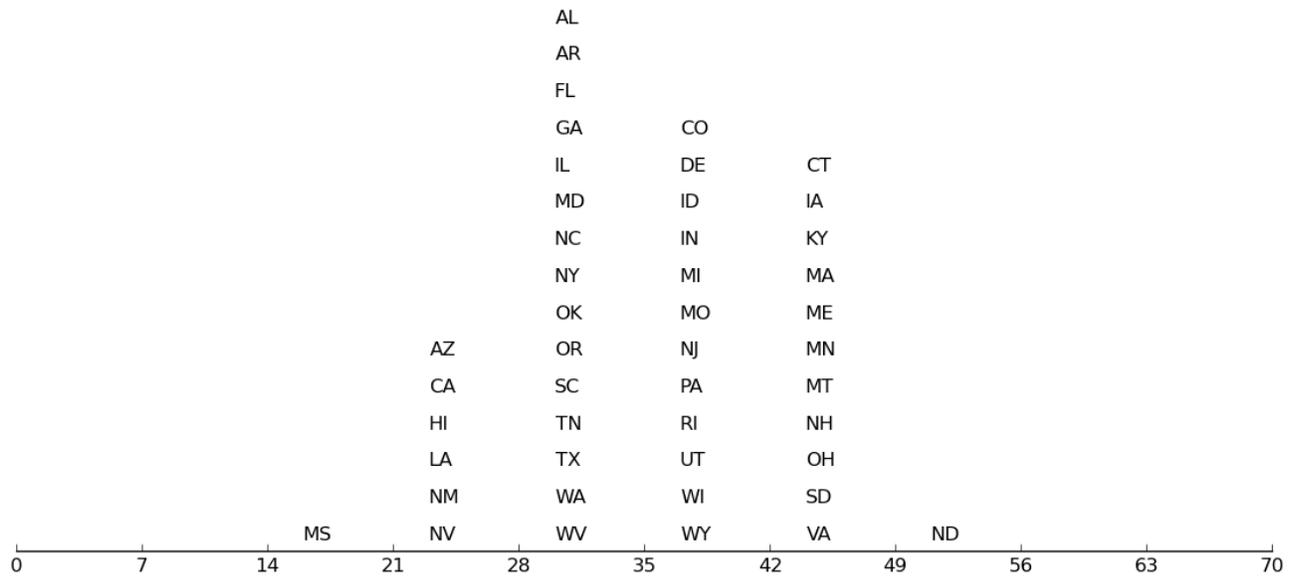


## 8-4F Fourth Grade Science Proficiency, Male Students

Year: 2009

Distribution of states across indicator values

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**Table 8-4F** Fourth Grade Science Proficiency, Male Students

State	4th grade math proficiency, male students (Percent)	
	2009	
United States		34
Alabama		29
Alaska		NA
Arizona		23
Arkansas		30
California		22
Colorado		40
Connecticut		42
Delaware		35
District of Columbia		NA
Florida		33
Georgia		29
Hawaii		24
Idaho		37
Illinois		34
Indiana		36
Iowa		42
Kansas		NA
Kentucky		46
Louisiana		26
Maine		44
Maryland		33
Massachusetts		47
Michigan		37
Minnesota		45

4th grade math proficiency, male students (Percent)

State	2009
Mississippi	18
Missouri	40
Montana	43
Nebraska	NA
Nevada	26
New Hampshire	47
New Jersey	41
New Mexico	25
New York	31
North Carolina	33
North Dakota	49
Ohio	45
Oklahoma	29
Oregon	34
Pennsylvania	41
Rhode Island	36
South Carolina	34
South Dakota	42
Tennessee	33
Texas	30
Utah	39
Vermont	NA
Virginia	45
Washington	34
West Virginia	30
Wisconsin	41
Wyoming	38
Puerto Rico	NA



4th grade math proficiency, male students (Percent)

State

2009

NA = not available.

NOTES: The National Assessment of Educational Progress (NAEP) scores are for public schools only. The national value for the United States is the reported value in the NAEP reports.

SOURCE: National Center for Education Statistics, NAEP (2009).

*Science and Engineering Indicators 2016*