

# Results from the 2019 Mathematics and Reading Assessments

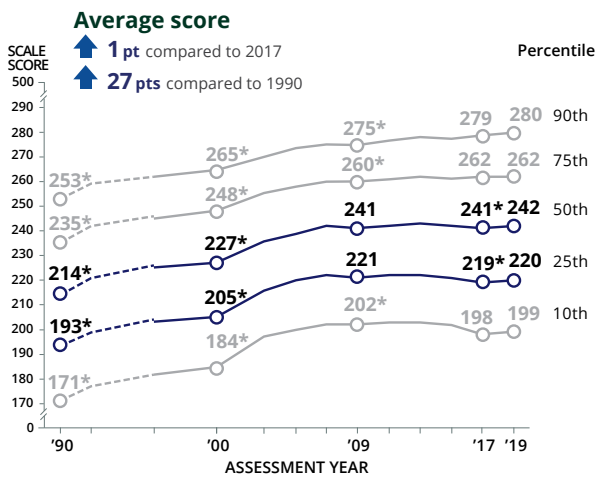
## NATIONAL AVERAGE SCORES AND PERCENTILES

### Scores lower compared to 2017 except for grade 4 mathematics

In 2019, students at grades 4 and 8 in both mathematics and reading had higher scores overall and at all five selected percentiles, except for the 10th percentile in reading, compared to the first assessments in the early 1990s. Compared to a decade ago, scores at both grades in both subjects were lower or not significantly different for lower-performing students at the 10th and 25th percentiles.

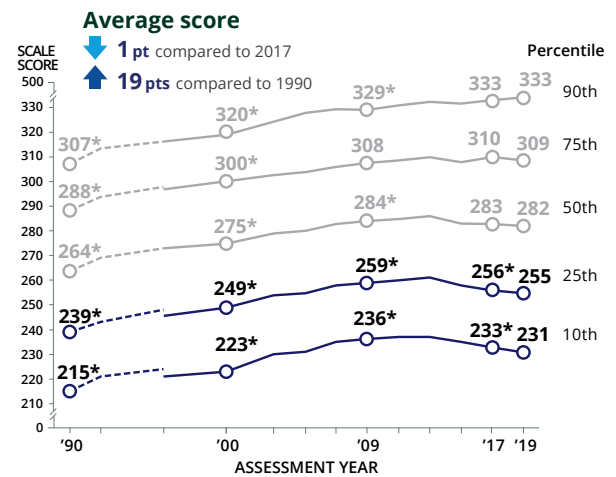
#### Grade 4 MATHEMATICS

##### Increases for the 25th and 50th percentiles



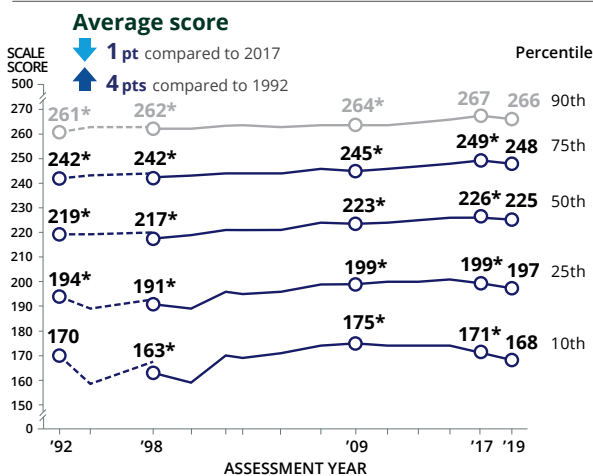
#### Grade 8 MATHEMATICS

##### Decreases at the 10th and 25th percentiles



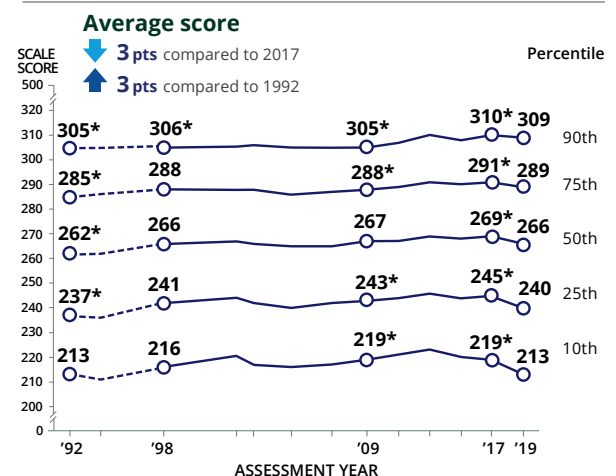
#### Grade 4 READING

##### Decreases across performance distribution except for the 90th percentile



#### Grade 8 READING

##### Decreases across performance distribution; greater decreases at the 10th and 25th percentiles



\* Significantly different ( $p < .05$ ) from 2019. --- Accommodations not permitted — Accommodations permitted

**RESULTS BY RACE/ETHNICITY**

Scores higher in 2019 for most racial/ethnic groups in both subjects and at both grades compared to the early 1990s

**MATHEMATICS**

Student Group	2019 average score	Grade 4				2019 average score	Grade 8			
		2017	2009	2000	1990		2017	2009	2000	1990
White	249	◆	◆	▲	▲	292	◆	◆	▲	▲
Black	224	◆	▲	▲	▲	260	◆	◆	▲	▲
Hispanic	231	▲	▲	▲	▲	268	◆	◆	▲	▲
Asian/Pacific Islander	260	◆	▲	‡	▲	310	◆	▲	▲	▲
American Indian/Alaska Native	227	◆	◆	▲	‡	262	▼	◆	◆	‡
Two or More Races	244	◆	◆	▲	‡	286	◆	◆	▲	‡

Average mathematics scores higher for Hispanic fourth-graders and lower for American Indian/Alaska Native eighth-graders compared to 2017

**READING**

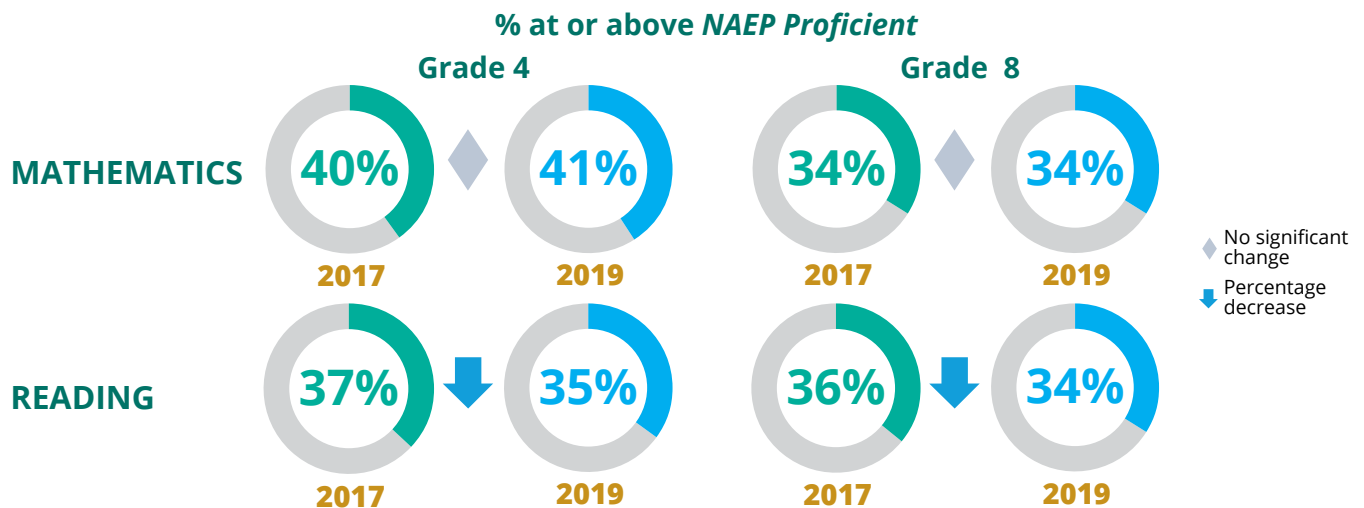
Student Group	2019 average score	Grade 4				2019 average score	Grade 8			
		2017	2009	1998	1992		2017	2009	1998	1992
White	230	▼	◆	▲	▲	272	▼	◆	◆	▲
Black	204	▼	◆	▲	▲	244	▼	▼	◆	▲
Hispanic	209	◆	▲	▲	▲	252	▼	▲	▲	▲
Asian/Pacific Islander	237	◆	◆	▲	▲	281	◆	▲	◆	▲
American Indian/Alaska Native	204	◆	◆	‡	‡	248	▼	◆	‡	‡
Two or More Races	226	◆	◆	‡	‡	267	▼	◆	‡	◆

Average reading scores lower at grade 8 for all racial/ethnic groups compared to 2017 except for Asian/Pacific Islander students

▲ Score increase    ▼ Score decrease    ◆ No significant change  
 ‡ Reporting standards not met. Sample size insufficient to permit a reliable estimate.

**NATIONAL ACHIEVEMENT-LEVEL RESULTS**

Percentages of students at or above *NAEP Proficient* unchanged in mathematics and lower in reading since 2017



NOTE: The *NAEP Proficient* achievement level does not represent grade-level proficiency, but rather competency over challenging subject matter. NAEP achievement levels are to be used on a trial basis and should be interpreted and used with caution.

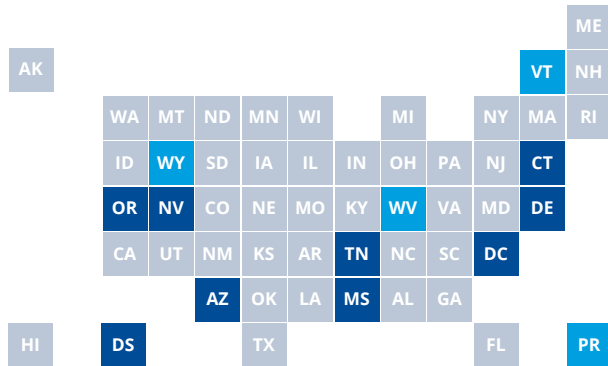
## STATE AVERAGE SCORES

# Majority of states score lower in grade 8 reading

Average mathematics scores were mainly steady across states/jurisdictions at both grades since 2017. Average reading scores decreased at grade 4 for approximately one-third of the states, while the 2019 reading scores were lower in more than half of the states at grade 8 since 2017.

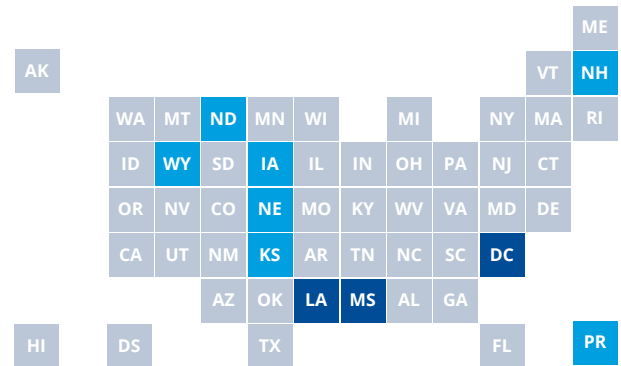
### Grade 4 MATHEMATICS

Scores steady in most states; increase in 9 and decrease in 4 states/jurisdictions



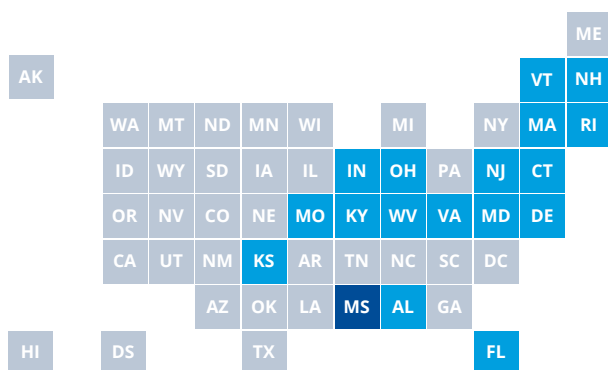
### Grade 8 MATHEMATICS

Scores steady in most states; increase in 3 and decrease in 7 states/jurisdictions



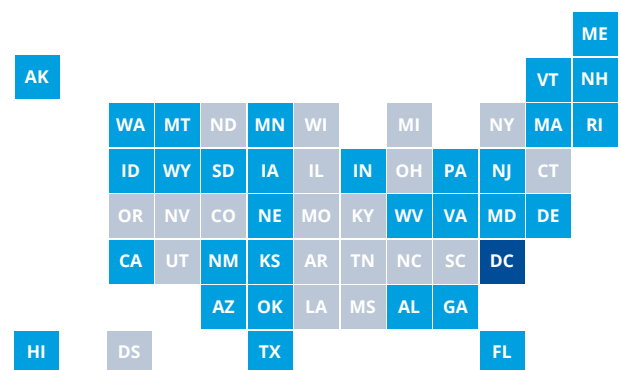
### Grade 4 READING

Scores decrease in 17 states and increase in 1 state



### Grade 8 READING

Scores decrease in 31 states and increase in 1 jurisdiction



Score increase since 2017
  No significant score change since 2017
  Score decrease since 2017

NOTE: DS = Department of Defense Education Activity (DoDEA), a federally-operated nonpublic school system responsible for educating children of military families.

**DISTRICT-LEVEL RESULTS**

## Participating TUDA districts in 2019

The Trial Urban District Assessment (TUDA) is intended to focus attention on urban education and measure educational progress within participating large urban districts. Fourth- and eighth-graders in 27 urban districts participated in the mathematics and reading assessments in 2019. TUDA district results are compared to results of public school students in large cities with a population of 250,000 or more.



## Few changes among the 27 TUDA districts compared to 2017 except for grade 8 reading

Average mathematics and reading scores across the TUDA districts were relatively stable since 2017. Across both grades, 7 districts had higher mathematics scores as opposed to 1 increase in reading at grade 8 only. Most score declines were seen for grade 8 reading.

### MATHEMATICS

Grade 4	Score Changes Since 2017	
Higher than Large City	↑	†
	↓	†
Not Significantly Different from Large City	↑	Clark County (NV), Denver, District of Columbia (DCPS)
	↓	Guilford County (NC)
Lower than Large City	↑	Cleveland, Detroit
	↓	†

Grade 8	Score Changes Since 2017	
Higher than Large City	↑	Guilford County (NC)
	↓	†
Not Significantly Different from Large City	↑	Denver
	↓	†
Lower than Large City	↑	District of Columbia (DCPS), Shelby County (TN)
	↓	Dallas, Fort Worth, Los Angeles

### READING

Grade 4	Score Changes Since 2017	
Higher than Large City	↑	†
	↓	Miami-Dade
Not Significantly Different from Large City	↑	†
	↓	Jefferson County (KY)
Lower than Large City	↑	†
	↓	Milwaukee

Grade 8	Score Changes Since 2017	
Higher than Large City	↑	†
	↓	Hillsborough County (FL)
Not Significantly Different from Large City	↑	†
	↓	Austin, Boston, Chicago, Duval County (FL)
Lower than Large City	↑	District of Columbia (DCPS)
	↓	Albuquerque, Dallas, Fort Worth, Los Angeles, Milwaukee, Philadelphia

† Not applicable.

NOTE: Results are not shown for districts with 2017 scores that were not significantly different from 2019. DCPS = District of Columbia Public Schools.

SOURCE: U.S. Department of Education, Institute of Education Sciences, National Center for Education Statistics, National Assessment of Educational Progress (NAEP), various years, 1990–2019 Mathematics and Reading Assessments.