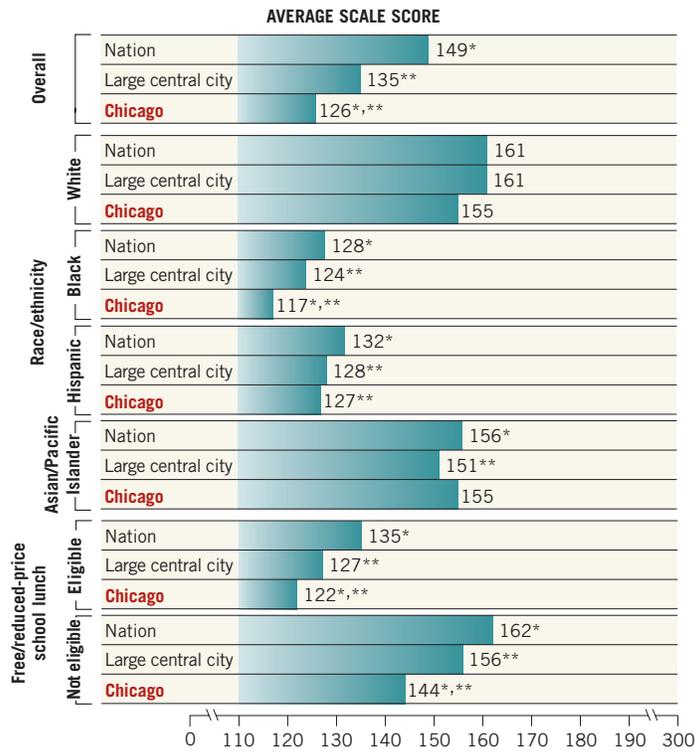


Average fourth-grade NAEP science scores in 2005, by jurisdiction and selected student groups



* Significantly different ($p < .05$) from large central city public schools.

** Significantly different ($p < .05$) from nation (public schools).

Percentage of fourth-grade student responses rated correct or "Complete" on selected NAEP science questions in 2005, by jurisdiction

NATION	LARGE CENTRAL CITY	CHICAGO	ACHIEVEMENT LEVEL	SCORE LOCATION	QUESTION DESCRIPTION
			300		
			ADVANCED	219	<i>Interpret readings from rain gauges</i>
30	26	27		205	<i>Interpret data to conclude conditions needed for seed germination</i>
33	27	18	PROFICIENT	203	Explain what can be learned from fossils
36	29	24		185	Relate air (oxygen) supply to burning time
44	32	24		174	<i>Interpret melting point data to determine which item melts first</i>
65	62	56	BASIC	165	<i>Use data table to determine which day has the most daylight</i>
66	57	50		159	Predict and explain water displacement by two objects
62	53	55	138	139	<i>Identify function of a human structure</i>
76	71	71		136	<i>Identify process fish use to obtain oxygen</i>
75	68	67		103	<i>Compare weather data to tell which city has warmer temperatures</i>
87	78	86	0		

NOTE: Groups not shown are included in overall. Results are not shown for students whose race/ethnicity was American Indian/Alaska Native or "unclassified" because of small sample sizes. Race categories exclude Hispanic origin. "Score location" is described in the footnote on page 25. Multiple-choice questions are shown in *italic* type. Score gaps mentioned in the report are calculated based on differences between unrounded average scores. Cross-jurisdiction significance results are calculated using a multiple-comparison procedure based on all participating districts. Results may vary from those obtained using single-district comparisons, such as those in the single-district snapshot reports.

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



For Chicago Fourth-Graders,

...the overall score was lower than it was in large central cities and in the nation.

...the percentages at or above *Basic* and at or above *Proficient* were lower than they were in large central cities.

Compared with their peers...

...White and Asian/Pacific Islander students had average scores that were not significantly different from those in large central cities and the nation.

...Black students scored lower than those in large central cities and the nation.

...Hispanic students had an average score that was not significantly different from the score in large central cities, but was lower than the score in the nation.

The score gap between...

...White and Black students was 38 points—which was not significantly different from the gaps in large central cities and the nation.

...White and Hispanic students was 28 points—which was not significantly different from the gaps in large central cities and the nation.

...higher- and lower-income students was 21 points—which was not significantly different from the gaps in large central cities and the nation.



For Chicago Eighth-Graders,

...the overall score was lower than it was in large central cities and in the nation.

...the percentages at or above *Basic* and at or above *Proficient* were lower than they were in large central cities.

Compared with their peers...

...White and Hispanic students had average scores that were not significantly different from those in large central cities and the nation.

...Black students scored lower than those in large central cities and the nation.

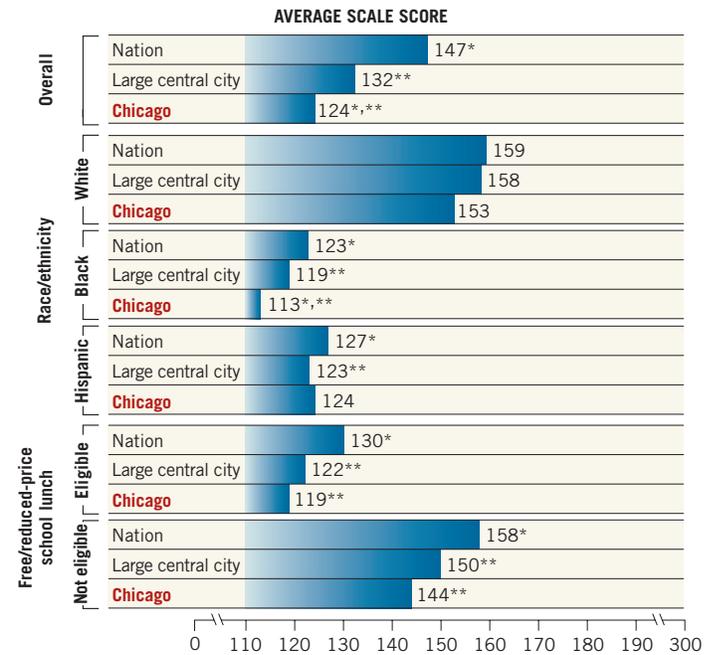
The score gap between...

...White and Black students was 40 points—which was not significantly different from the gaps in large central cities and the nation.

...White and Hispanic students was 29 points—which was not significantly different from the gaps in large central cities and the nation.

...higher- and lower-income students was 25 points—which was not significantly different from the gaps in large central cities and the nation.

Average eighth-grade NAEP science scores in 2005, by jurisdiction and selected student groups



* Significantly different ($p < .05$) from large central city public schools.
 ** Significantly different ($p < .05$) from nation (public schools).

Percentage of eighth-grade student responses rated correct or “Complete” on selected NAEP science questions in 2005, by jurisdiction

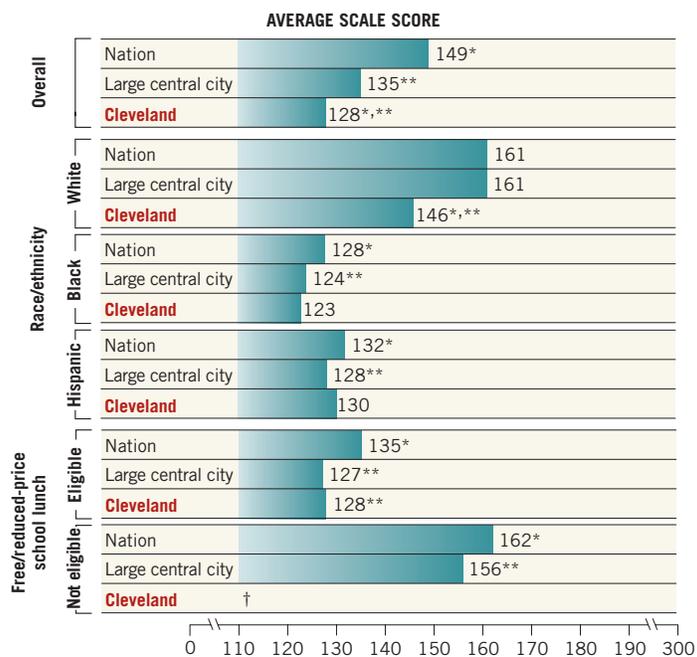
NATION	LARGE CENTRAL CITY	CHICAGO	ACHIEVEMENT LEVEL	SCORE LOCATION	QUESTION DESCRIPTION
			300		
			ADVANCED		
22	16	8	208	230	Explain how to find out if a glass contains salt water
16	9	4		218	Describe means by which plants prevent erosion
52	44	42	PROFICIENT	198	Identify location of cell's genetic material
51	42	35		188	Identify zone on a map with a temperate climate
43	32	19	170	178	Describe experiment to measure the volume of an object
53	43	35		162	Explain relative motion of two vehicles
54	44	38	BASIC	160	Describe effect of pollutant on food web
72	64	60		147	Identify an action to reduce carbon dioxide in the atmosphere
77	71	69	143	136	Identify relationship between rainfall and seed production
80	73	67		111	List three uses for human-made satellites ¹

¹ Percentages for this question combine “Partial” and “Complete” responses to locate its position on the score scale.

NOTE: Groups not shown are included in overall. Results are not shown for students whose race/ethnicity was Asian/Pacific Islander, American Indian/Alaska Native, or “unclassified” because of small sample sizes. Race categories exclude Hispanic origin. “Score location” is described in the footnote on page 25. Multiple-choice questions are shown in *italic* type. Score gaps mentioned in the report are calculated based on differences between unrounded average scores. Cross-jurisdiction significance results are calculated using a multiple-comparison procedure based on all participating districts. Results may vary from those obtained using single-district comparisons, such as those in the single-district snapshot reports.

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

Average fourth-grade NAEP science scores in 2005, by jurisdiction and selected student groups



† Not applicable. In Cleveland, all students were categorized as eligible for free/reduced-price school lunch.
 * Significantly different ($p < .05$) from large central city public schools.
 ** Significantly different ($p < .05$) from nation (public schools).

Percentage of fourth-grade student responses rated correct or "Complete" on selected NAEP science questions in 2005, by jurisdiction

NATION	LARGE CENTRAL CITY	CLEVELAND	ACHIEVEMENT LEVEL	SCORE LOCATION	QUESTION DESCRIPTION
			ADVANCED	300	
30	26	26		219	<i>Interpret readings from rain gauges</i>
33	27	22	PROFICIENT	205	208 <i>Interpret data to conclude conditions needed for seed germination</i>
36	29	26		203 Explain what can be learned from fossils	
44	32	19	BASIC	170	185 Relate air (oxygen) supply to burning time
65	62	59		174 <i>Interpret melting point data to determine which item melts first</i>	
66	57	47	0		165 <i>Use data table to determine which day has the most daylight</i>
62	53	51		159 Predict and explain water displacement by two objects	
76	71	73		138	139 <i>Identify function of a human structure</i>
75	68	69		136 <i>Identify process fish use to obtain oxygen</i>	
87	78	83		103 <i>Compare weather data to tell which city has warmer temperatures</i>	

NOTE: Groups not shown are included in overall. Results are not shown for students whose race/ethnicity was Asian/Pacific Islander, American Indian/Alaska Native, or "unclassified" because of small sample sizes. Race categories exclude Hispanic origin. "Score location" is described in the footnote on page 25. Multiple-choice questions are shown in *italic* type. Score gaps mentioned in the report are calculated based on differences between unrounded average scores. Cross-jurisdiction significance results are calculated using a multiple-comparison procedure based on all participating districts. Results may vary from those obtained using single-district comparisons, such as those in the single-district snapshot reports.

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



For Cleveland Fourth-Graders,

...the overall score was lower than it was in large central cities and the nation.

...the percentages at or above *Basic* and at or above *Proficient* were lower than they were in large central cities.

Compared with their peers...

...White students scored lower than those in large central cities and the nation.

...Black and Hispanic students had average scores that were not significantly different from those in large central cities and the nation.

The score gap between...

...White and Black students was 23 points—which was narrower than the gap in large central cities, but not significantly different from the gap in the nation.

...White and Hispanic students was 16 points—which was narrower than the gaps in large central cities and the nation.



For Cleveland Eighth-Graders,

- ...the overall score was lower than it was in large central cities and the nation.
- ...the percentages at or above *Basic* and at or above *Proficient* were lower than they were in large central cities.

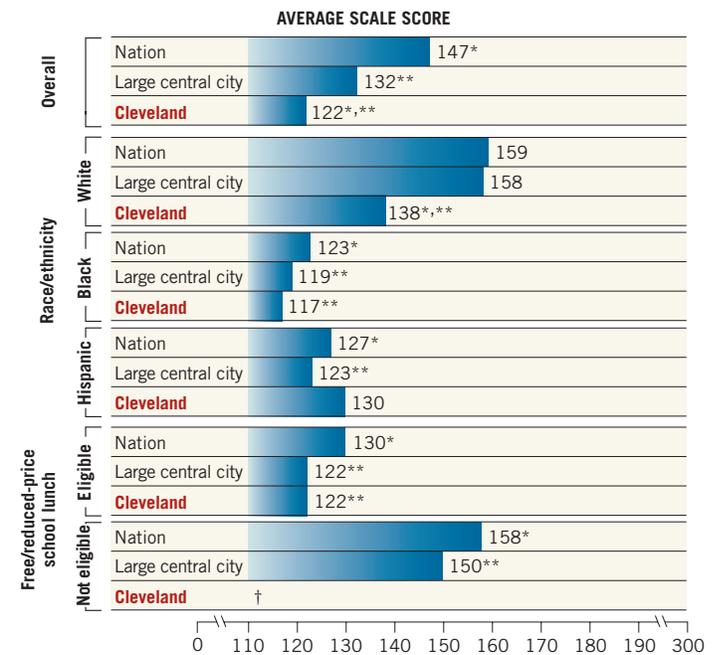
Compared with their peers...

- ...White students scored lower than those in large central cities and the nation.
- ...Black students had an average score that was not significantly different from the score in large central cities, but was lower than the score in the nation.
- ...Hispanic students' average score was not significantly different from the scores in large central cities and the nation.

The score gap between...

- ...White and Black students was 21 points—which was narrower than the gaps in large central cities and the nation.
- ...White and Hispanic students was 8 points—which was narrower than the gaps in large central cities and the nation.

Average eighth-grade NAEP science scores in 2005, by jurisdiction and selected student groups



† Not applicable. In Cleveland, all students were categorized as eligible for free/reduced-price school lunch.
 * Significantly different ($p < .05$) from large central city public schools.
 ** Significantly different ($p < .05$) from nation (public schools).

Percentage of eighth-grade student responses rated correct or "Complete" on selected NAEP science questions in 2005, by jurisdiction

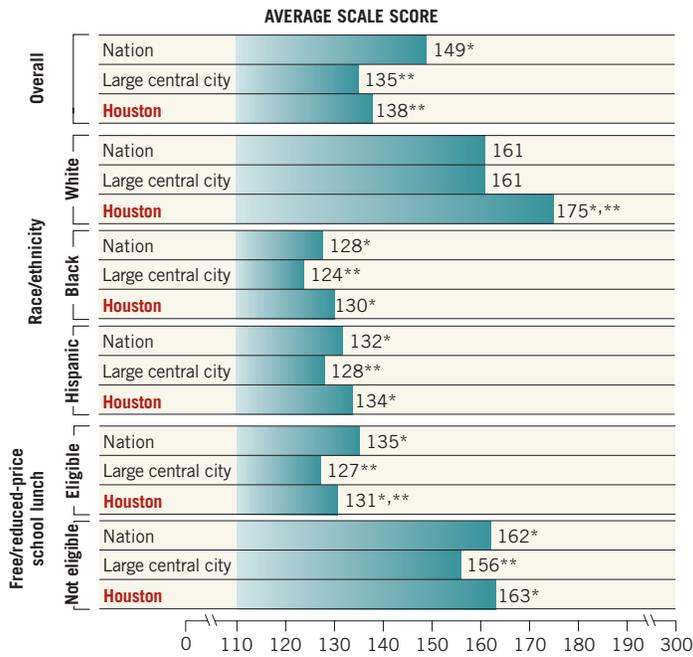
NATION	LARGE CENTRAL CITY	CLEVELAND	ACHIEVEMENT LEVEL	SCORE LOCATION	QUESTION DESCRIPTION
			300		
			208	230	Explain how to find out if a glass contains salt water
				218	Describe means by which plants prevent erosion
			170	198	Identify location of cell's genetic material
				188	Identify zone on a map with a temperate climate
				178	Describe experiment to measure the volume of an object
			143	162	Explain relative motion of two vehicles
				160	Describe effect of pollutant on food web
				147	Identify an action to reduce carbon dioxide in the atmosphere
				136	Identify relationship between rainfall and seed production
				111	List three uses for human-made satellites ¹

¹ Percentages for this question combine "Partial" and "Complete" responses to locate its position on the score scale.

NOTE: Groups not shown are included in overall. Results are not shown for students whose race/ethnicity was Asian/Pacific Islander, American Indian/Alaska Native, or "unclassified" because of small sample sizes. Race categories exclude Hispanic origin. "Score location" is described in the footnote on page 25. Multiple-choice questions are shown in *italic* type. Score gaps mentioned in the report are calculated based on differences between unrounded average scores. Cross-jurisdiction significance results are calculated using a multiple-comparison procedure based on all participating districts. Results may vary from those obtained using single-district comparisons, such as those in the single-district snapshot reports.

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

Average fourth-grade NAEP science scores in 2005, by jurisdiction and selected student groups



* Significantly different ($p < .05$) from large central city public schools.
 ** Significantly different ($p < .05$) from nation (public schools).



For Houston Fourth-Graders,

...the overall score was not significantly different from that in large central cities, but lower than it was in the nation.

...the percentages at or above *Basic* and at or above *Proficient* were not significantly different than they were in large central cities.

Compared with their peers...

...White students scored higher than those in large central cities and the nation.

...Black and Hispanic students had average scores that were higher than those in large central cities, but not significantly different from those in the nation.

The score gap between...

...White and Black students was 45 points—which was wider than the gaps in large central cities and the nation.

...White and Hispanic students was 42 points—which was wider than the gaps in large central cities and the nation.

...higher- and lower-income students was 32 points—which was not significantly different from the gaps in large central cities and the nation.

Percentage of fourth-grade student responses rated correct or “Complete” on selected NAEP science questions in 2005, by jurisdiction

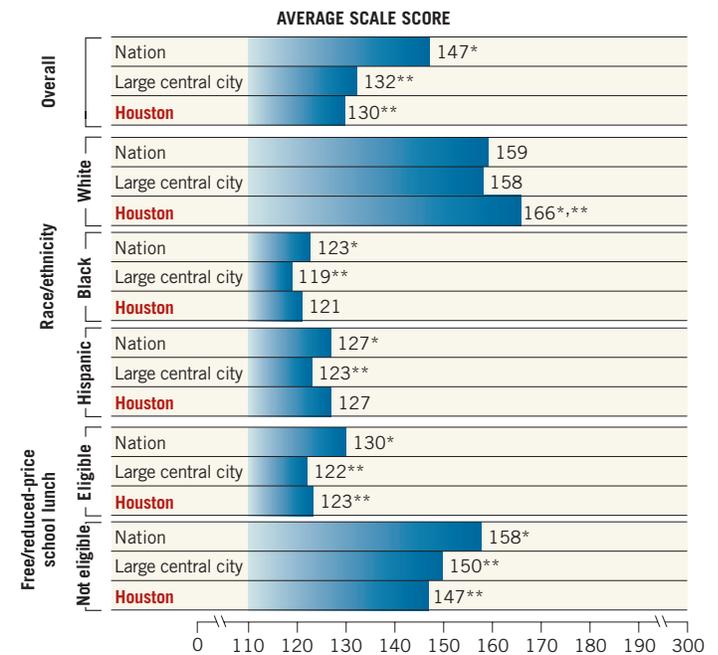
NATION	LARGE CENTRAL CITY	HOUSTON	ACHIEVEMENT LEVEL	SCORE LOCATION	QUESTION DESCRIPTION
			300		
			ADVANCED		
30	26	26	205	219	<i>Interpret readings from rain gauges</i>
33	27	25		208	<i>Interpret data to conclude conditions needed for seed germination</i>
36	29	33	PROFICIENT	203	Explain what can be learned from fossils
44	32	30		185	Relate air (oxygen) supply to burning time
65	62	68	170	174	<i>Interpret melting point data to determine which item melts first</i>
66	57	59		BASIC	165
62	53	55	159		Predict and explain water displacement by two objects
76	71	67	138	139	<i>Identify function of a human structure</i>
75	68	73		136	<i>Identify process fish use to obtain oxygen</i>
87	78	75	0	103	<i>Compare weather data to tell which city has warmer temperatures</i>

NOTE: Groups not shown are included in overall. Results are not shown for students whose race/ethnicity was Asian/Pacific Islander, American Indian/Alaska Native, or “unclassified” because of small sample sizes. Race categories exclude Hispanic origin. “Score location” is described in the footnote on page 25. Multiple-choice questions are shown in *italic* type. Score gaps mentioned in the report are calculated based on differences between unrounded average scores. Cross-jurisdiction significance results are calculated using a multiple-comparison procedure based on all participating districts. Results may vary from those obtained using single-district comparisons, such as those in the single-district snapshot reports.

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Average eighth-grade NAEP science scores in 2005, by jurisdiction and selected student groups



* Significantly different ($p < .05$) from large central city public schools.
 ** Significantly different ($p < .05$) from nation (public schools).

For Houston Eighth-Graders,

- ...the overall science score was not significantly different from that in large central cities, but lower than it was in the nation.
- ...the percentages at or above *Basic* and at or above *Proficient* were lower than they were in large central cities.

Compared with their peers...

- ...White students scored higher than those in large central cities and the nation.
- ...Black and Hispanic students had average scores that were not significantly different from those in large central cities and the nation.

The score gap between...

- ...White and Black students was 46 points—which was not significantly different from the gap in large central cities, but wider than the gap in the nation.
- ...White and Hispanic students was 39 points—which was not significantly different from the gaps in large central cities and the nation.
- ...higher- and lower-income students was 24 points—which was not significantly different from the gaps in large central cities and the nation.

Percentage of eighth-grade student responses rated correct or “Complete” on selected NAEP science questions in 2005, by jurisdiction

NATION	LARGE CENTRAL CITY	HOUSTON	ACHIEVEMENT LEVEL	SCORE LOCATION	QUESTION DESCRIPTION
			300		
			ADVANCED	230	Explain how to find out if a glass contains salt water
22	16	14		218	Describe means by which plants prevent erosion
			208		
52	44	41	PROFICIENT	198	<i>Identify location of cell's genetic material</i>
51	42	34		188	<i>Identify zone on a map with a temperate climate</i>
43	32	34		178	Describe experiment to measure the volume of an object
53	43	39	BASIC	162	Explain relative motion of two vehicles
54	44	41		160	Describe effect of pollutant on food web
72	64	61		147	<i>Identify an action to reduce carbon dioxide in the atmosphere</i>
77	71	70		136	<i>Identify relationship between rainfall and seed production</i>
80	73	70	143		
			0	111	List three uses for human-made satellites ¹

¹ Percentages for this question combine “Partial” and “Complete” responses to locate its position on the score scale.

NOTE: Groups not shown are included in overall. Results are not shown for students whose race/ethnicity was Asian/Pacific Islander, American Indian/Alaska Native, or “unclassified” because of small sample sizes. Race categories exclude Hispanic origin. “Score location” is described in the footnote on page 25. Multiple-choice questions are shown in *italic* type. Score gaps mentioned in the report are calculated based on differences between unrounded average scores. Cross-jurisdiction significance results are calculated using a multiple-comparison procedure based on all participating districts. Results may vary from those obtained using single-district comparisons, such as those in the single-district snapshot reports.

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