

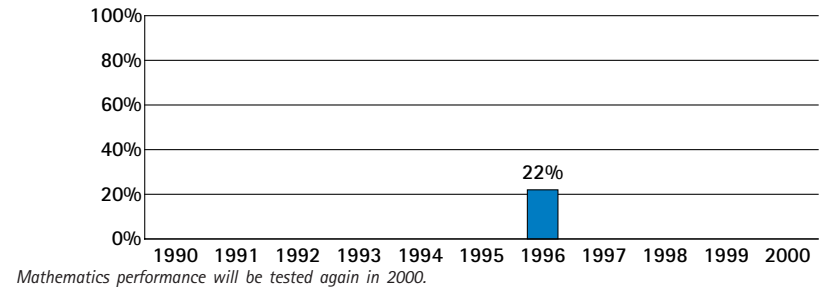
## 1. Improvement Over Time

Have Montana's 4th graders improved in mathematics achievement?

In 1996, 22% of Montana's public school 4th graders met the Goals Panel's performance standard in mathematics. The Goals Panel will report whether mathematics performance has improved over time when mathematics is assessed again in 2000.

The Goals Panel has set its performance standard at the two highest levels of achievement – Proficient or Advanced – on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 4th graders at or above Proficient on the NAEP mathematics assessment



## 2. State Comparisons<sup>†</sup>

How did Montana compare with other states in 4th grade mathematics achievement in public schools in 1996?

**2 states had significantly higher<sup>1</sup> percentages of students who were at or above Proficient on NAEP:**

Connecticut	31%	Minnesota	29%
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**24 states had similar<sup>1</sup> percentages of students who were at or above Proficient on NAEP:**

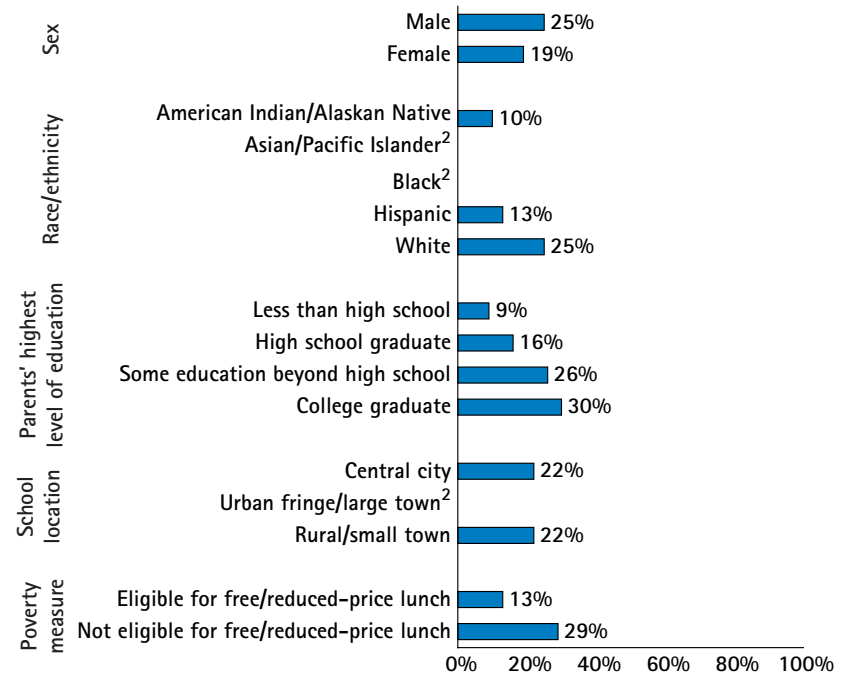
Maine, Wisconsin	27%	<b>Montana</b> , Colorado, Iowa, Maryland	<b>22%</b>
New Jersey, Texas	25%	<b>U.S.*</b> , Alaska, North Carolina, Oregon,	<b>21%</b>
Indiana, Massachusetts, Nebraska,	24%	Washington	
North Dakota		Missouri, New York, Pennsylvania	20%
Michigan, Utah, Vermont	23%	Virginia, West Virginia, Wyoming	19%

**18 states had significantly lower<sup>1</sup> percentages of students who were at or above Proficient on NAEP:**

Rhode Island, Tennessee	17%	South Carolina	12%
Delaware, Hawaii, Kentucky	16%	Alabama, California	11%
Arizona, Florida	15%	Louisiana, Mississippi	8%
Nevada	14%	District of Columbia	5%
Arkansas, Georgia, New Mexico	13%	Guam	3%

## 3. Subgroup Performance

What percentages of public school 4th graders in different subgroups<sup>1</sup> in Montana were at or above Proficient on the 1996 NAEP mathematics assessment?



<sup>†</sup> The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

<sup>1</sup> See explanation on pp. 3-4.

\* Figure shown for the U.S. includes both public and nonpublic school data.

<sup>1</sup> Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

<sup>2</sup> Characteristics of the sample do not permit a reliable estimate.

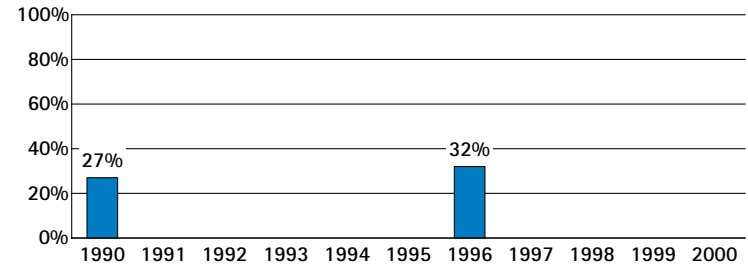
## 1. Improvement Over Time

Have Montana's 8th graders improved in mathematics achievement?

Yes. The percentage of Montana's public school 8th graders who met the Goals Panel's performance standard in mathematics increased from 27% in 1990, to 32% in 1996.

The Goals Panel has set its performance standard at the two highest levels of achievement – Proficient or Advanced – on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 8th graders at or above Proficient on the NAEP mathematics assessment



Mathematics performance will be tested again in 2000.

## 2. State Comparisons<sup>†</sup>

How did Montana compare with other states in 8th grade mathematics achievement in public schools in 1996?

### 11 states had similar<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

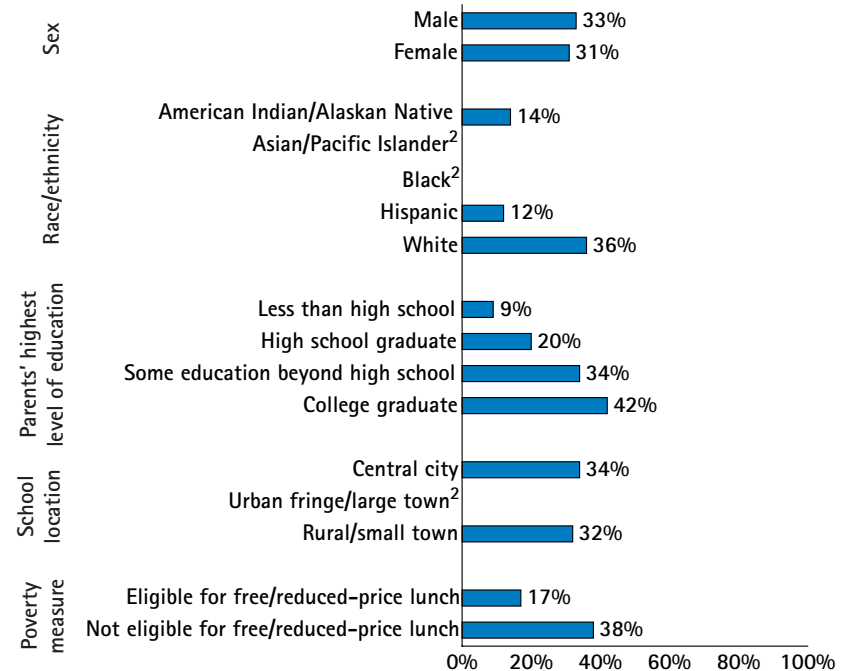
Minnesota	34%	Alaska	30%
North Dakota	33%	Massachusetts, Michigan	28%
<b>Montana</b> , Wisconsin	<b>32%</b>	Vermont	27%
Connecticut, Iowa, Maine, Nebraska	31%		

### 30 states had significantly lower<sup>1</sup> percentages of students who were at or above Proficient on NAEP:

Oregon, Washington	26%	Tennessee	15%
Colorado	25%	New Mexico, South Carolina,	14%
<b>U.S.*</b> , Indiana, Maryland, Utah	<b>24%</b>	West Virginia	
Missouri, New York, Wyoming	22%	Arkansas	13%
Texas, Virginia	21%	Alabama	12%
North Carolina, Rhode Island	20%	Louisiana, Mississippi	7%
Delaware	19%	Guam	6%
Arizona	18%	District of Columbia	5%
California, Florida	17%		
Georgia, Hawaii, Kentucky	16%		

## 3. Subgroup Performance

What percentages of public school 8th graders in different subgroups<sup>1</sup> in Montana were at or above Proficient on the 1996 NAEP mathematics assessment?



<sup>†</sup> The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

<sup>1</sup> See explanation on pp. 3-4.

\* Figure shown for the U.S. includes both public and nonpublic school data.

<sup>1</sup> Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

<sup>2</sup> Characteristics of the sample do not permit a reliable estimate.

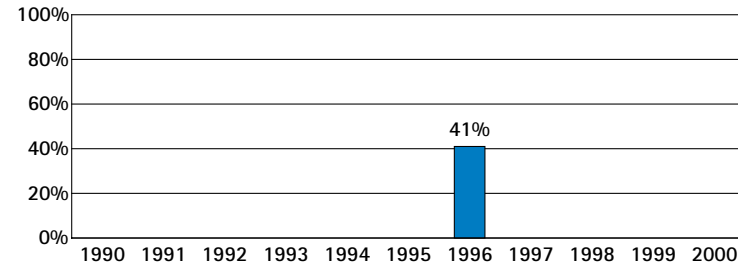
## 1. Improvement Over Time

Have Montana's 8th graders improved in science achievement?

In 1996, 41% of Montana's public school 8th graders met the Goals Panel's performance standard in science. The Goals Panel will report whether science performance has improved over time when science is assessed again in 2000.

The Goals Panel has set its performance standard at the two highest levels of achievement – Proficient or Advanced – on the National Assessment of Educational Progress, or NAEP.

Percentage of public school 8th graders at or above Proficient on the NAEP science assessment



Science performance will be tested again in 2000.

## 2. State Comparisons<sup>†</sup>

How did Montana compare with other states in 8th grade science achievement in public schools in 1996?

**8 states had similar<sup>1</sup> percentages of students who were at or above Proficient on NAEP:**

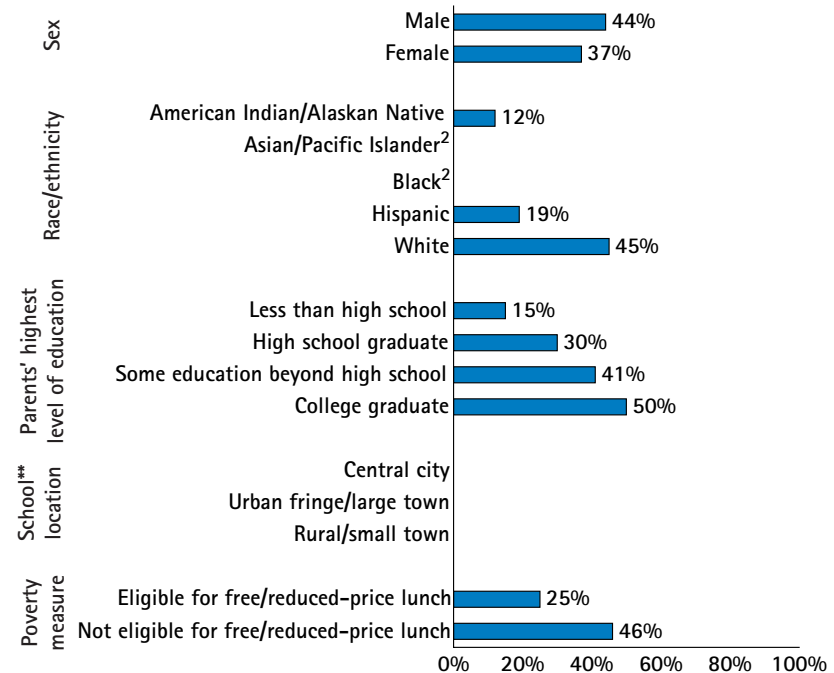
<b>Montana</b> , Maine, North Dakota	<b>41%</b>	Connecticut, Iowa	36%
Wisconsin	39%	Nebraska	35%
Massachusetts, Minnesota	37%		

**33 states had significantly lower<sup>1</sup> percentages of students who were at or above Proficient on NAEP:**

Vermont, Wyoming	34%	Delaware, Florida, Georgia,	21%
Colorado, Michigan, Oregon, Utah	32%	West Virginia	
Alaska	31%	California	20%
Indiana	30%	New Mexico	19%
<b>U.S.*</b>	<b>29%</b>	Alabama	18%
Missouri	28%	South Carolina	17%
New York, Virginia, Washington	27%	Hawaii	15%
Rhode Island	26%	Louisiana	13%
Maryland	25%	Mississippi	12%
North Carolina	24%	Guam	7%
Arizona, Kentucky, Texas	23%	District of Columbia	5%
Arkansas, Tennessee	22%		

## 3. Subgroup Performance

What percentages of public school 8th graders in different subgroups<sup>1</sup> in Montana were at or above Proficient on the 1996 NAEP science assessment?



<sup>†</sup> The term "state" is used to refer to the 50 states, the District of Columbia, and the territories.

<sup>1</sup> See explanation on pp. 3-4.

\* Figure shown for the U.S. includes both public and nonpublic school data.

<sup>1</sup> Interpret differences between subgroups with caution. See pp. 3-4 and Appendix D.

<sup>2</sup> Characteristics of the sample do not permit a reliable estimate.

\*\* No school location data for science in 1996.

## Mathematics Grade 8

Forty-one nations<sup>†</sup> participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade mathematics in 1995. If public school 8th graders in Montana participated in the TIMSS mathematics assessment, how would their average performance compare to that of students who took TIMSS in these nations?

**6 nations<sup>†</sup> would be expected to perform significantly higher:<sup>1</sup>**

Belgium – Flemish <sup>2</sup>	Japan
Czech Republic	Korea
Hong Kong	Singapore

**18 nations<sup>†</sup> would be expected to perform similarly:<sup>1</sup>**

(Australia)	<b>Montana</b>
(Austria)	(Netherlands)
(Belgium – French) <sup>2</sup>	New Zealand
(Bulgaria)	Russian Federation
Canada	Slovak Republic
France	(Slovenia)
(Germany)	Sweden
Hungary	(Switzerland)
Ireland	(Thailand)
(Israel)	

**17 nations<sup>†</sup> would be expected to perform significantly lower:<sup>1</sup>**

(Colombia)	(Lithuania)
Cyprus	Norway
(Denmark)	Portugal
(England)	(Romania)
(Greece)	(Scotland)
Iceland	(South Africa)
Iran, Islamic Republic	Spain
(Kuwait)	<b>United States</b>
(Latvia – LSS) <sup>3</sup>	

<sup>†</sup> The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

<sup>1</sup> See explanation on pp. 3–4.

<sup>2</sup> The Flemish and French educational systems in Belgium participated separately.

<sup>3</sup> Latvia is designated LSS because only Latvian-speaking schools were tested, which represent less than 65% of the population.

## Science Grade 8

Forty-one nations<sup>†</sup> participated in the Third International Mathematics and Science Study (TIMSS) in 8th grade science in 1995. If public school 8th graders in Montana participated in the TIMSS science assessment, how would their average performance compare to that of students who took TIMSS in these nations?

**1 nation<sup>†</sup> would be expected to perform significantly higher:<sup>1</sup>**

Singapore

**10 nations<sup>†</sup> would be expected to perform similarly:<sup>1</sup>**

(Austria)	Japan
Belgium – Flemish <sup>2</sup>	Korea
(Bulgaria)	<b>Montana</b>
Czech Republic	(Netherlands)
(England)	(Slovenia)
Hungary	

**30 nations<sup>†</sup> would be expected to perform significantly lower:<sup>1</sup>**

(Australia)	(Latvia – LSS) <sup>3</sup>
(Belgium – French) <sup>2</sup>	(Lithuania)
Canada	New Zealand
(Colombia)	Norway
Cyprus	Portugal
(Denmark)	(Romania)
France	Russian Federation
(Germany)	(Scotland)
(Greece)	Slovak Republic
Hong Kong	(South Africa)
Iceland	Spain
Iran, Islamic Republic	Sweden
Ireland	(Switzerland)
(Israel)	(Thailand)
(Kuwait)	<b>United States</b>

<sup>†</sup> The term "nation" is used to refer to nations, states, or jurisdictions. Performance for nations is based on public school data only. Nations not meeting international guidelines are shown in parentheses.

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