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ABSTRACT

Because education in the United States is largely determined at the state and local levels, there has been considerable interest in how the performance of students in individual states compares with each other, with the United States as a whole, and with other nations. The comparison of state performance with other states and with the nation as a whole is made possible by the National Assessment of Educational Progress (NAEP). In 1996, NAEP assessed mathematics and science in the United States as a whole. The Third International Mathematics and Science Study (TIMSS) conducted in 1995 provides the most recent information about America's progress in mathematics and science education compared with other countries in the world. This study is one of two reports about the linking of NAEP results to TIMSS results for Grade 8 mathematics and science. The study describes the types of linking approaches considered, the methods used to develop the linking functions, the sources of variability that affect the variance of the linking functions, and the validation and results obtained for Grade 8 mathematics and science achievement. (ASK)

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NATIONAL CENTER FOR EDUCATION STATISTICS

Research and Development Report

July 1998

Linking the National Assessment of Educational Progress (NAEP) and the Third International Mathematics and Science Study (TIMSS): Eighth-Grade Results

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**Linking the
National Assessment
of Educational Progress
(NAEP)
and the
Third International
Mathematics and Science
Study
(TIMSS):
Eighth-Grade Results**

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**U.S. Department of Education
Office of Educational Research and Improvement**

NCES 98-500

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Foreword

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1. To share studies and research that are developmental in nature. The results of such studies may be revised as the work continues and additional data become available.
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1. INTRODUCTION

In 1989, the Nation's President along with its governors made clear that there was a keen interest in comparing the educational performance of United States' students with that of students in other countries. That year a National Education Summit adopted six education goals, one of which stated that by the year 2000, "U.S. students will be first in the world in science and mathematics achievement" (National Education Goals Panel, 1991, p. 16).

The Third International Mathematics and Science Study (TIMSS), conducted in 1995, provides the most recent information about our country's progress toward this goal. TIMSS is the largest, most comprehensive, and most rigorous international study of the schools and student achievement ever conducted. The international project involved the testing of more than a half-million students in mathematics and science at several different grade levels in 41 countries. The TIMSS results for the United States describe student mathematics and science achievement for both the country as a whole and for various subgroups of the population. These U.S. results are directly comparable to TIMSS results from many other countries. However, with the exception of a few states that chose to participate in the state-level TIMSS program, equivalent TIMSS results are not available at the state level.

Because education in the United States is largely determined at the state and local levels, there has been considerable interest in how the performance of students in individual states compares with each other, with the United States as a whole, and with other nations. The comparison of state performance with other states and with the nation as a whole is made possible by the National Assessment of Educational Progress (NAEP). NAEP surveys the educational accomplishment of U.S. students and monitors changes in those accomplishments. NAEP tracks the educational achievements of fourth-, eighth-, eleventh-, and twelfth-grade students over time in selected content areas. For nearly 30 years, NAEP has been collecting data to provide educators and policymakers with accurate and useful information.

In 1996, NAEP assessed mathematics and science in the United States as a whole. Additionally, results for the individual states that chose to participate in the state NAEP assessment are available at grades 4 and 8 for mathematics and at grade 8 for science. While it is directly possible to compare the participating states with each other and with the nation as a whole, policymakers and the general public cannot know directly how the students in the various states would perform relative to students in other countries.

Because TIMSS and NAEP were administered within a year of each other, there has been considerable interest in attempting to link the two assessments. Such a linkage would allow states that participated in the state component of the NAEP mathematics or science assessments to compare their predicted TIMSS results with the actual results from countries participating in TIMSS at the same grade level. Specifically, predicted performance on TIMSS could be estimated for each state that participated in NAEP by applying the link to that state's NAEP data.

The success of the link between the 1992 NAEP mathematics results with those from the 1991 International Assessment of Educational Progress (IAEP) in mathematics (Pashley and Phillips 1993) provided encouragement that a link between TIMSS and NAEP was possible.

2. NAEP AND TIMSS

NAEP is an ongoing, congressionally mandated survey designed to measure what students know and can do. The goal of NAEP is to estimate educational achievement and changes in that achievement over time for American students of specified grades as well as for subpopulations defined by demographic characteristics and by specific background characteristics and experiences. In 1996, NAEP collected mathematics and science data from nationally representative samples of students in public and private schools in grades 4, 8, and 12. Additionally, directly comparable state assessments were conducted in public and private schools in participating states and jurisdictions at grade 4 for mathematics and at grade 8 for mathematics and science. (For many of the states and jurisdictions the sample of private school students was not adequate to support reporting of private school results. Accordingly, state-level results were reported by NAEP for the public school samples only.) State-level NAEP mathematics and science results are available for grade 8 public school students in 44 states and jurisdictions.

TIMSS is the largest and most ambitious study ever conducted by the International Association for the Evaluation of Educational Achievement (IEA). TIMSS is an international comparative study designed to provide information about educational achievement and learning contexts for the participating countries. Each participating country assessed mathematics and science in the two grades with the largest proportion of 13-year-olds (grades 7 and 8 in most countries, including the United States). Mathematics and science results are available for 41 countries for the higher of these grade levels--which, for convenience, will be referred to as the grade 8 level in this report. The U.S. TIMSS results are based on the sample of students from public and private schools.

In addition to the national results, three states opted to collect grade 8 data from representative samples of their students. Minnesota participated in a state-level administration of grade 8 TIMSS mathematics and science in 1995, while Missouri and Oregon participated in state-level administrations of grade 8 TIMSS in 1997. All three states also participated in the 1996 State NAEP. Thus, released public school NAEP results are available for all three states, as well as released TIMSS results for Minnesota. The TIMSS results for Missouri and Oregon have not yet been publicly released; however, preliminary data allowed some empirical verification of the linkage between NAEP and TIMSS.

3. REPORT OUTLINE

This is one of two reports about the linking of NAEP results to TIMSS results for grade 8 mathematics and science. The first, "Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report," is a technical discussion of the statistical methods employed to link NAEP and TIMSS. It describes the types of linking approaches considered, the method used to develop the linking functions, the sources of variability that affect the variance of the linking functions, and the validation and results obtained for grade 8 mathematics and science. Readers interested in the statistical aspects of this research are referred to the technical report.

The results presented in this report are based on a link of NAEP to TIMSS, thereby providing predicted TIMSS results for given NAEP results. Since a major goal of the link is to enable comparisons between states and countries, links were estimated for those grades and subjects where there are both state NAEP data and international TIMSS data. The links are based on the data from the U.S. TIMSS national sample and from the NAEP national sample. Furthermore, the links are derived from public school data, since this is the population for which NAEP state-level results have been published. The actual TIMSS results of the participating nations include both private and public school data. The results in this report are for mathematics and science at grade 8. An additional link is being attempted for grade 4 mathematics but is still undergoing NCES review.

The quality of the link between NAEP and TIMSS was evaluated using data from the few states for which representative data were available from both assessments. Specifically, the predicted TIMSS performance, based on NAEP data, was compared with the actual TIMSS results for these states. In the 1995 administration of TIMSS, one state, Minnesota, elected to participate in the grade 8 TIMSS assessments of mathematics and science. The predicted results were quite close to the actual results for the grade 8 mathematics and science assessments. In addition, two states, Missouri and Oregon, participated in a special assessment of the TIMSS in their states in 1997. While the results of these assessments have not yet been publicly released, the predicted TIMSS results for these states were reasonably close to their actual TIMSS results.

This report, "Linking the National Assessment of Educational Progress and the Third International Mathematics and Science: Eighth Grade Results," presents the results of the linking project. Comparisons are given for grade 8 mathematics and science of the states and jurisdictions which participated in NAEP in 1996 with the nations that participated in TIMSS in

1995. In addition, for each state and jurisdiction, the estimated percentage of students reaching the TIMSS International Top Half and Top Ten Percent marker levels are given for grade 8 mathematics and science.

The reader should use caution when using the results presented in this report. The results presented here are adequate for approximate comparisons of the relative rankings of individual states versus other countries, but are not adequate for extensive analyses based on the estimated scores. The results presented in this report are not appropriate for comparing performance between states or between countries.

4. COMPARISONS OF EACH NAEP STATE AND JURISDICTION WITH THE TIMSS NATIONS FOR GRADE 8 MATHEMATICS

This chapter presents one-page profiles for each state and jurisdiction participating in NAEP in grade 8 mathematics in alphabetical order. Each profile contains two tables.

- The first table displays how the state or jurisdiction would perform in comparison to the 41 nations that took TIMSS mathematics at grade 8. Each table indicates whether the **actual** scores of the participating TIMSS nations are significantly higher than, not significantly different from, or significantly lower than the **estimated** average performance of public school students in the state or jurisdiction.
- The second table displays a range of possible values for the estimated percentage of public school students in the state or jurisdiction that would perform above the TIMSS Top Ten Percent marker level and the TIMSS Top Half marker level for mathematics at grade 8. The TIMSS Top Ten Percent marker level represents the score achieved by the top ten percent of all eighth grade students in the 41 TIMSS countries combined. The TIMSS Top Half marker level represents the score achieved by the top fifty percent of all eighth grade students in the 41 TIMSS countries combined. Each table presents the estimated percentage of public school students in the state that are expected to perform above the TIMSS marker levels. The lower and upper bounds represent the range of possible values around these estimated percentages (95% confidence intervals).

A second profile is presented for the state of Minnesota. Similar tables to those described above are included. However, in this profile, the **actual** TIMSS results for Minnesota's public school students are compared with the results of the 41 nations who participated in TIMSS for grade 8 mathematics.

Readers of these profiles are reminded that the state's or jurisdiction's TIMSS performance in grade 8 mathematics is **estimated** from its NAEP score, using the linking function, and must therefore be interpreted with caution. Furthermore, the calculations for the 1996 NAEP scores and 1995 TIMSS scores for the participating states, jurisdictions, and nations are based on samples of the student populations, not entire student populations. Hence, estimates are imprecise.

The SOLE purpose of these profiles is to allow the comparison of the predicted TIMSS performance for individual states with the actual TIMSS performance of individual countries. It is NOT appropriate to use these profiles to compare performance between states or between countries. Accordingly, the profiles for the states and jurisdictions participating in NAEP grade 8 mathematics are arranged in alphabetical order. The proper between state comparisons are provided in the NAEP reports (O'Sullivan, Reese and Mazzeo 1997; Reese et al. 1997), while the proper between country comparisons are provided in the TIMSS reports (Beaton, Mullis, et al. 1997; Beaton, Martin, et al. 1997).

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Alabama

If the public school students in Alabama participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Alabama	Not significantly different from Alabama	Lower than Alabama
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Latvia-LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand) United States (average)	Cyprus (Greece) Iceland (Lithuania) Portugal (Romania) Spain	(Colombia) Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Alabama that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	0%	1%	3%
Top 50% (Half)	23%	32%	42%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Alaska)

If the public school students in Alaska participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Alaska	Not significantly different from Alaska	Lower than Alaska
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore Slovak Republic (Switzerland)	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada (Denmark) (England) France (Germany) Hungary Iceland Ireland (Israel) (Latvia – LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) (Slovenia) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Alaska that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	3%	7%	11%
Top 50% (Half)	46%	55%	64%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Arizona

If the public school students in Arizona participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Arizona	Not significantly different from Arizona	Lower than Arizona
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Arizona that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	2%	4%
Top 50% (Half)	34%	43%	52%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Arkansas)

If the public school students in Arkansas participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Arkansas	Not significantly different from Arkansas	Lower than Arkansas
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Greece) Iceland (Latvia-LSS) (Lithuania) Portugal (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
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Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Arkansas that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	0%	2%	3%
Top 50% (Half)	28%	37%	46%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: California

If the public school students in California participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than California	Not significantly different from California	Lower than California
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (Greece) Iceland (Latvia-LSS) (Lithuania) Norway Portugal (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in California that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	1%	3%	5%
Top 50 % (Half)	30%	38%	46%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Colorado

If the public school students in Colorado participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Colorado	Not significantly different from Colorado	Lower than Colorado
(Austria) Belgium – Flemish (Bulgaria) Czech Republic France Hong Kong Hungary Japan Korea (Netherlands) Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) Canada (Denmark) (England) (Germany) Iceland Ireland (Israel) (Latvia – LSS) New Zealand Norway Russian Federation (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Colorado that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	4%	6%
Top 50% (Half)	44%	52%	60%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Connecticut

If the public school students in Connecticut participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Connecticut	Not significantly different from Connecticut	Lower than Connecticut
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore Slovak Republic (Switzerland)	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada (Denmark) (England) France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Norway Russian Federation (Scotland) (Slovenia) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa) Spain

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Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Connecticut that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	5%	9%
Top 50% (Half)	49%	56%	64%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Delaware

If the public school students in Delaware participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Delaware	Not significantly different from Delaware	Lower than Delaware
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Delaware that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	5%
Top 50% (Half)	33%	41%	49%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Department of Defense Domestic Dependent Elementary and Secondary Schools – DDESS

If the public school students in DDESS participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than DDESS	Not significantly different from DDESS	Lower than DDESS
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain Sweden (Thailand) United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in DDESS that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	5%	8%
Top 50% (Half)	33%	43%	54%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Department of Defense Dependent Schools – DoDDS

If the public school students in the DoDDS participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than DoDDS	Not significantly different from DoDDS	Lower than DoDDS
(Austria) Belgium – Flemish (Bulgaria) Czech Republic France Hong Kong Hungary Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) Canada (Denmark) (England) (Germany) Iceland Ireland (Israel) (Latvia – LSS) New Zealand Norway (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in the DoDDS that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a “Lower bound” and an “Upper bound” that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	6%
Top 50% (Half)	42%	50%	58%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: District of Columbia

If the public school students in the District of Columbia participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than DC	Not significantly different from DC	Lower than DC
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Cyprus Czech Republic (Denmark) (England) France (Germany) (Greece) Hong Kong Hungary Iceland Iran, Islamic Republic Ireland (Israel) Japan Korea (Latvia-LSS) (Lithuania) (Netherlands) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Colombia) (Kuwait)	(South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.

Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in the District of Columbia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	0%	1%	2%
Top 50 % (Half)	9%	13%	17%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Florida

If the public school students in Florida participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Florida	Not significantly different from Florida	Lower than Florida
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Florida that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	0%	2%	3%
Top 50 % (Half)	31%	40%	49%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Georgia

If the public school students in Georgia participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Georgia	Not significantly different from Georgia	Lower than Georgia
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Greece) Iceland (Latvia-LSS) (Lithuania) Portugal (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.

Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Georgia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	2%	4%
Top 50% (Half)	30%	38%	46%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Guam

If the public school students in Guam participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Guam	Not significantly different from Guam	Lower than Guam
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Cyprus Czech Republic (Denmark) (England) France (Germany) (Greece) Hong Kong Hungary Iceland Ireland (Israel) Japan Korea (Latvia-LSS) (Lithuania) (Netherlands) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	Iran, Islamic Republic	(Colombia) (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Guam that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	0%	1%	2%
Top 50 % (Half)	13%	19%	25%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Hawaii

If the public school students in Hawaii participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Hawaii	Not significantly different from Hawaii	Lower than Hawaii
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Greece) Iceland (Latvia-LSS) (Lithuania) (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Hawaii that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	4%
Top 50% (Half)	30%	37%	44%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Indiana

If the public school students in Indiana participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Indiana	Not significantly different from Indiana	Lower than Indiana
(Austria) Belgium – Flemish Czech Republic France Hong Kong Hungary Japan Korea Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) (Bulgaria) Canada (Denmark) (England) (Germany) Iceland Ireland (Israel) (Latvia – LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Indiana that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	6%
Top 50% (Half)	42%	52%	62%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Iowa)

If the public school students in Iowa participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Iowa	Not significantly different from Iowa	Lower than Iowa
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (England) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Iowa that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	4%	7%
Top 50% (Half)	54%	63%	72%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Kentucky

If the public school students in Kentucky participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Kentucky	Not significantly different from Kentucky	Lower than Kentucky
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Kentucky that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	0%	2%	3%
Top 50% (Half)	31%	40%	48%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Louisiana

If the public school students in Louisiana participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Louisiana	Not significantly different from Louisiana	Lower than Louisiana
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) (Greece) Hong Kong Hungary Iceland Ireland (Israel) Japan Korea (Latvia-LSS) (Netherlands) New Zealand Norway (Romania) Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	Cyprus Iran, Islamic Republic (Lithuania) Portugal	(Colombia) (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Louisiana that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	0%	1%	1%
Top 50% (Half)	17%	25%	33%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Maine

If the public school students in Maine participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Maine	Not significantly different from Maine	Lower than Maine
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium - French) (Bulgaria) Canada France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (England) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia - LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Maine that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a “Lower bound” and an “Upper bound” that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	6%	9%
Top 50% (Half)	54%	62%	71%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Maryland)

If the public school students in Maryland participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Maryland	Not significantly different from Maryland	Lower than Maryland
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain Sweden (Thailand) United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Maryland that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	2%	6%	9%
Top 50 % (Half)	37%	45%	54%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Massachusetts

If the public school students in Massachusetts participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Massachusetts	Not significantly different from Massachusetts	Lower than Massachusetts
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore Slovak Republic (Switzerland)	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada (Denmark) (England) France (Germany) Hungary Ireland (Israel) (Latvia – LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) (Slovenia) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iceland Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Massachusetts that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	2%	5%	8%
Top 50 % (Half)	45%	55%	64%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Michigan)

If the public school students in Michigan participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Michigan	Not significantly different from Michigan	Lower than Michigan
(Austria) Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) (Bulgaria) Canada (Denmark) (England) France (Germany) Hungary Iceland Ireland (Israel) (Latvia – LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Michigan that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	5%	8%
Top 50% (Half)	44%	54%	63%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Minnesota

If the public school students in Minnesota participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Minnesota	Not significantly different from Minnesota	Lower than Minnesota
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (England) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Minnesota that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	3%	6%	10%
Top 50% (Half)	54%	62%	71%

Comparison of Actual TIMSS Scores from Public School Data for Minnesota with Actual TIMSS Scores for Nations: Grade 8 Mathematics (1995)

State/Jurisdiction: Minnesota*

How did the students in Minnesota perform in grade 8 mathematics in comparison to the students in the 41 nations that participated in TIMSS?

Nations whose performance was:

Higher than Minnesota	Not significantly different from Minnesota	Lower than Minnesota
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada (England) France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.

Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What percentage of Minnesota's students performed above the TIMSS Top Ten Percent marker level? What percentage performed above the Top Half marker level? (Below are estimates for the percentage of students who performed above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	3%	7%	11%
Top 50% (Half)	49%	57%	66%

* The comparisons and values shown in this profile represent actual TIMSS results and not estimated TIMSS results based on the link the between NAEP and TIMSS.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Mississippi

If the public school students in Mississippi participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Mississippi	Not significantly different from Mississippi	Lower than Mississippi
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Cyprus Czech Republic (Denmark) (England) France (Germany) (Greece) Hong Kong Hungary Iceland Ireland (Israel) Japan Korea (Latvia-LSS) (Lithuania) (Netherlands) New Zealand Norway (Romania) Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	Iran, Islamic Republic Portugal	(Colombia) (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.

Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Mississippi that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a “Lower bound” and an “Upper bound” that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	0%	1%	1%
Top 50 % (Half)	17%	23%	30%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Missouri

If the public school students in Missouri participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Missouri	Not significantly different from Missouri	Lower than Missouri
(Austria) Belgium – Flemish (Bulgaria) Czech Republic France Hong Kong Hungary Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) Canada (Denmark) (England) (Germany) (Greece) Iceland Ireland (Israel) (Latvia – LSS) New Zealand Norway (Romania) (Scotland) Spain Sweden (Thailand) United States (average)	(Colombia) Cyprus Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Missouri that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	5%
Top 50% (Half)	39%	49%	58%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Montana)

If the public school students in Montana participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Montana	Not significantly different from Montana	Lower than Montana
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (England) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Montana that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	2%	6%	9%
Top 50 % (Half)	53%	62%	70%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Nebraska

If the public school students in Nebraska participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Nebraska	Not significantly different from Nebraska	Lower than Nebraska
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (England) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Nebraska that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	5%	9%
Top 50% (Half)	52%	61%	69%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: New Mexico

If the public school students in New Mexico participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than New Mexico	Not significantly different from New Mexico	Lower than New Mexico
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Greece) Iceland (Latvia-LSS) (Lithuania) (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in New Mexico that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	0%	2%	3%
Top 50 % (Half)	28%	36%	45%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (New York)

If the public school students in New York participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than New York	Not significantly different from New York	Lower than New York
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia – LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain Sweden (Thailand) United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in New York that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	6%
Top 50% (Half)	38%	47%	56%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: North Carolina

If the public school students in North Carolina participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than North Carolina	Not significantly different from North Carolina	Lower than North Carolina
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in North Carolina that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	6%
Top 50% (Half)	34%	42%	51%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: North Dakota

If the public school students in North Dakota participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than North Dakota	Not significantly different from North Dakota	Lower than North Dakota
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada France (Germany) Hungary Ireland (Israel) (Netherlands) Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (England) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in North Dakota that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	2%	5%	8%
Top 50 % (Half)	56%	64%	71%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Oregon

If the public school students in Oregon participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Oregon	Not significantly different from Oregon	Lower than Oregon
(Austria) Belgium – Flemish Czech Republic France Hong Kong Hungary Japan Korea Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) (Bulgaria) Canada (Denmark) (England) (Germany) Iceland Ireland (Israel) (Latvia – LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Oregon that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	1%	4%	7%
Top 50 % (Half)	44%	53%	61%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Rhode Island

If the public school students in Rhode Island participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Rhode Island	Not significantly different from Rhode Island	Lower than Rhode Island
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Rhode Island that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	5%
Top 50% (Half)	38%	46%	53%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (South Carolina)

If the public school students in South Carolina participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than South Carolina	Not significantly different from South Carolina	Lower than South Carolina
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Greece) Iceland (Latvia-LSS) (Lithuania) Portugal (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in South Carolina that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	2%	4%
Top 50% (Half)	26%	34%	42%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Tennessee

If the public school students in Tennessee participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Tennessee	Not significantly different from Tennessee	Lower than Tennessee
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (England) France (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (Greece) Iceland (Latvia-LSS) (Lithuania) (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Tennessee that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	0%	2%	3%
Top 50 % (Half)	30%	38%	46%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Texas

If the public school students in Texas participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Texas	Not significantly different from Texas	Lower than Texas
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	(Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia – LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain Sweden (Thailand) United States (average)	(Colombia) Cyprus Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Texas that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	5%
Top 50% (Half)	37%	46%	55%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Utah

If the public school students in Utah participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Utah	Not significantly different from Utah	Lower than Utah
(Austria) Belgium – Flemish Czech Republic France Hong Kong Hungary Japan Korea Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) (Bulgaria) Canada (Denmark) (England) (Germany) Ireland (Israel) (Latvia – LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iceland Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Utah that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	1%	3%	5%
Top 50 % (Half)	45%	54%	63%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Vermont)

If the public school students in Vermont participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Vermont	Not significantly different from Vermont	Lower than Vermont
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore Slovak Republic (Switzerland)	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada (Denmark) (England) France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Norway Russian Federation (Scotland) (Slovenia) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Vermont that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	4%	7%
Top 50% (Half)	49%	57%	66%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Virginia

If the public school students in Virginia participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Virginia	Not significantly different from Virginia	Lower than Virginia
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Israel) (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain Sweden (Thailand) United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Virginia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	3%	5%
Top 50% (Half)	36%	45%	54%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Washington

If the public school students in Washington participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Washington	Not significantly different from Washington	Lower than Washington
(Austria) Belgium – Flemish Czech Republic France Hong Kong Hungary Japan Korea Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) (Bulgaria) Canada (Denmark) (England) (Germany) Iceland Ireland (Israel) (Latvia – LSS) (Netherlands) New Zealand Norway Russian Federation (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Washington that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	4%	7%
Top 50% (Half)	45%	53%	61%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress and the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: West Virginia

If the public school students in West Virginia participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Virginia	Not significantly different from West Virginia	Lower than West Virginia
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic France Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	Cyprus (Denmark) (England) (Germany) (Greece) Iceland (Latvia-LSS) (Lithuania) New Zealand Norway (Romania) (Scotland) Spain United States (average)	(Colombia) Iran, Islamic Republic (Kuwait) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in West Virginia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	0%	2%	3%
Top 50% (Half)	30%	38%	46%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: (Wisconsin)

If the public school students in Wisconsin participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Wisconsin	Not significantly different from Wisconsin	Lower than Wisconsin
Belgium – Flemish Czech Republic Hong Kong Japan Korea Singapore	(Australia) (Austria) (Belgium – French) (Bulgaria) Canada (England) France (Germany) Hungary Ireland (Israel) (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand)	(Colombia) Cyprus (Denmark) (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Wisconsin that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	2%	6%	9%
Top 50 % (Half)	52%	61%	70%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Mathematics States (1996), Nations (1995)

State/Jurisdiction: Wyoming

If the public school students in Wyoming participated in TIMSS, how would their average performance in mathematics compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Wyoming	Not significantly different from Wyoming	Lower than Wyoming
(Austria) Belgium – Flemish (Bulgaria) Czech Republic France Hong Kong Hungary Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) (Switzerland)	(Australia) (Belgium – French) Canada (Denmark) (England) (Germany) Iceland Ireland (Israel) (Latvia – LSS) New Zealand Norway (Scotland) Sweden (Thailand) United States (average)	(Colombia) Cyprus (Greece) Iran, Islamic Republic (Kuwait) (Lithuania) Portugal (Romania) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Wyoming that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	1%	3%	5%
Top 50 % (Half)	42%	52%	61%

5. COMPARISONS OF EACH NAEP STATE AND JURISDICTION WITH THE TIMSS NATIONS FOR GRADE 8 SCIENCE

This chapter presents one-page profiles for each state and jurisdiction participating in grade 8 science in alphabetical order. Each profile contains two tables.

- The first table displays how the state or jurisdiction would perform in comparison to the 41 nations that took TIMSS science at grade 8. Each table indicates whether the **actual** scores of the participating TIMSS nations are significantly higher than, not significantly different from, or significantly lower than the **estimated** average performance of the public school students in the state or jurisdiction.
- The second table displays the range of possible values for the estimated percentage of public school students in the state or jurisdiction that would perform above the TIMSS Top Ten Percent marker level and the TIMSS Top Ten Half marker level for science at grade 8. The TIMSS Top Ten Percent marker level represents the score achieved by the top ten percent of all eighth grade students in the 41 TIMSS countries combined. The TIMSS Top Half marker level represents the score achieved by the top fifty percent of all eighth grade students in the 41 TIMSS countries combined. Each table presents the estimated percentage of public school students in the state that are expected to perform above the two TIMSS marker levels. The lower and upper bounds represent the range of possible values around the estimated percentages (95% confidence intervals).

A second profile is presented for the state of Minnesota. Similar tables to those described above are included. However, in this profile, the **actual** TIMSS results for Minnesota's public school students are compared with the results of the 41 nations who participated in TIMSS for grade 8 science.

Readers of these profiles are reminded that the state's or jurisdiction's TIMSS performance in grade 8 science is **estimated** from its NAEP score, using the linking function, and must therefore be interpreted with caution. Furthermore, the calculations for the 1996 NAEP scores and 1995 TIMSS scores for the participating states, jurisdictions and nations are based on samples of the student populations, not entire student populations. Hence, estimates are imprecise.

The SOLE purpose of these profiles is to allow the comparison of predicted TIMSS performances for individual states with the actual TIMSS performances of individual countries. It is NOT appropriate to use these profiles to compare performances between states or between countries. Accordingly, the profiles for the states and jurisdictions participating in NAEP grade 8 science are arranged in alphabetical order. The proper between state comparisons are provided in the NAEP reports (O'Sullivan, Reese and Mazzeo 1997; Reese et al. 1997), while the proper between country comparisons are provided in the TIMSS reports (Beaton, Mullis, et al. 1997; Beaton, Martin, et al. 1997).

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Alabama

If the public school students in Alabama participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Alabama	Not significantly different from Alabama	Lower than Alabama
(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden United States (average)	(Denmark) France (Greece) Hong Kong Iceland (Israel) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) Spain (Switzerland) (Thailand)	(Belgium – French) (Colombia) Cyprus Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Alabama that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a “Lower bound” and an “Upper bound” that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	2%	6%	10%
Top 50 % (Half)	37%	45%	53%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Alaska)

If the public school students in Alaska participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Alaska	Not significantly different from Alaska	Lower than Alaska
Czech Republic Japan Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) Korea (Netherlands) New Zealand Norway Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (Scotland) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Alaska that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	8%	13%	18%
Top 50 % (Half)	55%	62%	70%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Arizona

If the public school students in Arizona participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Arizona	Not significantly different from Arizona	Lower than Arizona
(Austria) (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada France (Germany) (Greece) Hong Kong Iceland Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Arizona that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	4%	8%	13%
Top 50% (Half)	43%	52%	60%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Arkansas)

If the public school students in Arkansas participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Arkansas	Not significantly different from Arkansas	Lower than Arkansas
(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore Slovak Republic (Slovenia)	Canada France (Germany) (Greece) Hong Kong Iceland Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Arkansas that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	4%	8%	12%
Top 50% (Half)	44%	52%	60%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: California

If the public school students in California participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than California	Not significantly different from California	Lower than California
(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hungary Ireland Japan Korea (Netherlands) Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden United States (average)	(Denmark) France (Greece) Hong Kong Iceland (Israel) (Latvia – LSS) (Lithuania) New Zealand Portugal (Romania) (Scotland) Spain (Switzerland) (Thailand)	(Belgium – French) (Colombia) Cyprus Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in California that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	4%	8%	11%
Top 50% (Half)	36%	44%	53%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Colorado

If the public school students in Colorado participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Colorado	Not significantly different from Colorado	Lower than Colorado
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Hong Kong Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland) (Thailand)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Colorado that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	8%	13%	18%
Top 50% (Half)	58%	65%	72%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Connecticut

If the public school students in Connecticut participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Connecticut	Not significantly different from Connecticut	Lower than Connecticut
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Russian Federation Slovak Republic (Slovenia) Sweden United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Hong Kong Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Norway Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland) (Thailand)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Connecticut that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	10%	16%	22%
Top 50 % (Half)	58%	65%	72%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Delaware

If the public school students in Delaware participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Delaware	Not significantly different from Delaware	Lower than Delaware
(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden	Canada France (Germany) (Greece) Hong Kong Iceland (Israel) New Zealand Norway (Romania) (Scotland) Spain (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Delaware that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	4%	7%	11%
Top 50% (Half)	42%	48%	55%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Department of Defense Domestic Dependent Elementary and Secondary Schools – DDESS

If the public school students in the DDESS participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than DDESS	Not significantly different from DDESS	Lower than DDESS
Czech Republic Japan Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) Korea (Netherlands) New Zealand Norway Russian Federation Slovak Republic (Slovenia) Sweden (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in the DDESS that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	5%	10%	16%
Top 50 % (Half)	53%	62%	72%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Department of Defense Dependents Schools Overseas – DoDDS

If the public school students in the DoDDS participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than DoDDS	Not significantly different from DoDDS	Lower than DoDDS
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) (Germany) Hungary Ireland Japan Korea (Netherlands) Russian Federation Slovak Republic (Slovenia) Sweden United States (average)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland) (Thailand)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in the DoDDS that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	7%	12%	17%
Top 50% (Half)	58%	65%	72%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: District of Columbia

If the public school students in the District of Columbia participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than DC	Not significantly different from DC	Lower than DC
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Cyprus Czech Republic (Denmark) (England) France (Germany) (Greece) Hong Kong Hungary Iceland Iran, Islamic Republic Ireland (Israel) Japan Korea (Latvia – LSS) (Lithuania) (Netherlands) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Colombia) (Kuwait)	(South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in the District of Columbia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	2%	3%
Top 50% (Half)	13%	17%	22%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Florida

If the public school students in Florida participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Florida	Not significantly different from Florida	Lower than Florida
(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore Slovak Republic (Slovenia)	Canada France (Germany) (Greece) Hong Kong Iceland Ireland (Israel) New Zealand Norway (Romania) Russian Federation (Scotland) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Florida that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a “Lower bound” and an “Upper bound” that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	4%	8%	12%
Top 50% (Half)	40%	48%	57%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Georgia

If the public school students in Georgia participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Georgia	Not significantly different from Georgia	Lower than Georgia
(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia)	Canada France (Germany) (Greece) Hong Kong Iceland Ireland (Israel) New Zealand Norway (Romania) (Scotland) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Georgia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	4%	8%	13%
Top 50% (Half)	39%	47%	55%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Guam

If the public school students in Guam participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Guam	Not significantly different from Guam	Lower than Guam
(Australia) (Austria) Belgium – Flemish (Belgium – French) (Bulgaria) Canada Czech Republic (Denmark) (England) France (Germany) (Greece) Hong Kong Hungary Iceland Iran, Islamic Republic Ireland (Israel) Japan Korea (Latvia – LSS) (Lithuania) (Netherlands) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	Cyprus (Kuwait)	(Colombia) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Guam that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	1%	2%	4%
Top 50% (Half)	19%	26%	32%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Hawaii

If the public school students in Hawaii participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Hawaii	Not significantly different from Hawaii	Lower than Hawaii
(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Denmark) France (Greece) Iceland Iran, Islamic Republic (Latvia – LSS) (Lithuania) Portugal (Romania) (Scotland)	(Colombia) Cyprus (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Hawaii that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	5%	7%
Top 50% (Half)	33%	40%	47%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Indiana

If the public school students in Indiana participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Indiana	Not significantly different from Indiana	Lower than Indiana
Czech Republic Japan Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) Korea (Netherlands) New Zealand Norway Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (Scotland) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Indiana that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	6%	12%	18%
Top 50% (Half)	53%	61%	70%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Iowa)

If the public school students in Iowa participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Iowa	Not significantly different from Iowa	Lower than Iowa
Singapore	(Australia) (Austria) (Bulgaria) (Netherlands) (Slovenia) Belgium – Flemish Czech Republic (England) Hungary Ireland Japan Korea Russian Federation Slovak Republic	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Iowa that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	9%	15%	20%
Top 50% (Half)	61%	69%	76%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Kentucky

If the public school students in Kentucky participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Kentucky	Not significantly different from Kentucky	Lower than Kentucky
(Austria) (Bulgaria) Czech Republic Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Kentucky that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	4%	9%	13%
Top 50% (Half)	46%	54%	63%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Louisiana

If the public school students in Louisiana participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Louisiana	Not significantly different from Louisiana	Lower than Louisiana
(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Latvia – LSS) (Lithuania) Portugal (Romania)	(Colombia) (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Louisiana that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	5%	8%
Top 50% (Half)	30%	38%	46%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Maine

If the public school students in Maine participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Maine	Not significantly different from Maine	Lower than Maine
Singapore	(Austria) (Bulgaria) Czech Republic (England) Japan Korea (Netherlands) (Slovenia)	(Australia) Belgium - Flemish (Belgium - French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Hungary Iceland Iran, Islamic Republic Ireland (Israel) (Kuwait) (Latvia - LSS) (Lithuania) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) Slovak Republic (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Maine that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	12%	18%	24%
Top 50% (Half)	68%	75%	82%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Maryland)

If the public school students in Maryland participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Maryland	Not significantly different from Maryland	Lower than Maryland
(Austria) (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada France (Germany) (Greece) Hong Kong Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Maryland that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	6%	11%	16%
Top 50% (Half)	45%	53%	60%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Massachusetts

If the public school students in Massachusetts participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Massachusetts	Not significantly different from Massachusetts	Lower than Massachusetts
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) (Germany) Hungary Ireland Japan Korea (Netherlands) Russian Federation Slovak Republic (Slovenia) Sweden United States (average)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland) (Thailand)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Massachusetts that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	10%	16%	22%
Top 50% (Half)	59%	67%	74%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Michigan)

If the public school students in Michigan participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Michigan	Not significantly different from Michigan	Lower than Michigan
Czech Republic Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Slovak Republic (Slovenia) Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (Scotland) (South Africa) Spain

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Michigan that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	8%	13%	19%
Top 50% (Half)	54%	62%	70%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Minnesota

If the public school students in Minnesota participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Minnesota	Not significantly different from Minnesota	Lower than Minnesota
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Ireland Japan Korea (Netherlands) Russian Federation Slovak Republic (Slovenia)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Minnesota that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	9%	16%	23%
Top 50% (Half)	62%	69%	77%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Actual TIMSS Scores from Public School Data for Minnesota with Actual TIMSS Scores for Nations: Grade 8 Science (1995)

State/Jurisdiction: Minnesota*

How did the public school students in Minnesota perform in grade 8 science in comparison to the students in the 41 nations that participated in TIMSS?

Nations whose performance was:

Higher than Minnesota	Not significantly different from Minnesota	Lower than Minnesota
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Slovak Republic (Slovenia)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic Ireland (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What percentage of Minnesota's students performed above the TIMSS Top Ten Percent marker level? What percentage performed above the Top Half marker level? (Below are estimates for the percentage of students who performed above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	15%	20%	25%
Top 50% (Half)	61%	67%	74%

* The comparisons and values shown in this profile represent actual TIMSS results and not estimated TIMSS results based on the link between NAEP and TIMSS.

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Mississippi

If the public school students in Mississippi participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Mississippi	Not significantly different from Mississippi	Lower than Mississippi
(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hong Kong Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation (Scotland) Singapore Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Latvia – LSS) (Lithuania) Portugal (Romania)	(Colombia) (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Mississippi that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	2%	4%	7%
Top 50% (Half)	29%	37%	45%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Missouri

If the public school students in Missouri participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Missouri	Not significantly different from Missouri	Lower than Missouri
Czech Republic Japan Korea Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) (Netherlands) New Zealand Norway Russian Federation (Scotland) Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Missouri that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	6%	11%	16%
Top 50% (Half)	53%	61%	69%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Montana)

If the public school students in Montana participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Montana	Not significantly different from Montana	Lower than Montana
Singapore	(Austria) Belgium - Flemish (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) (Slovenia)	(Australia) (Belgium - French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic Ireland (Israel) (Kuwait) (Latvia - LSS) (Lithuania) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) Slovak Republic (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Montana that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	10%	16%	23%
Top 50% (Half)	68%	75%	82%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Nebraska

If the public school students in Nebraska participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Nebraska	Not significantly different from Nebraska	Lower than Nebraska
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Ireland Japan Korea (Netherlands) Russian Federation Slovak Republic (Slovenia) United States (average)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain Sweden (Switzerland) (Thailand)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Nebraska that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	9%	15%	21%
Top 50% (Half)	61%	68%	75%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: New Mexico

If the public school students in New Mexico participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than New Mexico	Not significantly different from New Mexico	Lower than New Mexico
(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Ireland Japan Korea (Netherlands) Russian Federation Singapore Slovak Republic (Slovenia) Sweden	Canada France (Germany) (Greece) Hong Kong Iceland (Israel) New Zealand Norway (Romania) (Scotland) Spain (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in New Mexico that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	4%	7%	10%
Top 50 % (Half)	40%	47%	54%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (New York)

If the public school students in New York participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than New York	Not significantly different from New York	Lower than New York
(Austria) (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada (Germany) Hong Kong Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in New York that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	7%	12%	17%
Top 50% (Half)	46%	54%	62%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: North Carolina

If the public school students in North Carolina participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than North Carolina	Not significantly different from North Carolina	Lower than North Carolina
(Austria) (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada (Germany) Hong Kong Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in North Carolina that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	6%	10%	14%
Top 50% (Half)	46%	54%	61%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: North Dakota

If the public school students in North Dakota participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than North Dakota	Not significantly different from North Dakota	Lower than North Dakota
Singapore	(Austria) (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) (Slovenia)	(Australia) Belgium - Flemish (Belgium - French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic Ireland (Israel) (Kuwait) (Latvia - LSS) (Lithuania) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) Slovak Republic (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in North Dakota that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	10%	17%	24%
Top 50% (Half)	68%	75%	82%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Oregon

If the public school students in Oregon participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Oregon	Not significantly different from Oregon	Lower than Oregon
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hungary Ireland (Israel) Japan Korea (Netherlands) New Zealand Norway Russian Federation Slovak Republic (Slovenia) Sweden (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Hong Kong Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Oregon that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	8%	13%	19%
Top 50% (Half)	57%	65%	73%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Rhode Island

If the public school students in Rhode Island participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Rhode Island	Not significantly different from Rhode Island	Lower than Rhode Island
(Austria) (Bulgaria) Czech Republic Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Rhode Island that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	6%	10%	14%
Top 50% (Half)	49%	57%	64%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (South Carolina)

If the public school students in South Carolina participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than South Carolina	Not significantly different from South Carolina	Lower than South Carolina
(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada Czech Republic (England) (Germany) Hungary Ireland Japan Korea (Netherlands) Norway Russian Federation Singapore Slovak Republic (Slovenia) Sweden United States (average)	(Denmark) France (Greece) Hong Kong Iceland (Israel) (Latvia – LSS) (Lithuania) New Zealand Portugal (Romania) (Scotland) Spain (Switzerland) (Thailand)	(Belgium – French) (Colombia) Cyprus Iran, Islamic Republic (Kuwait) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in South Carolina that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	3%	7%	10%
Top 50% (Half)	34%	43%	51%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Tennessee

If the public school students in Tennessee participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Tennessee	Not significantly different from Tennessee	Lower than Tennessee
(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore Slovak Republic (Slovenia)	Canada France (Germany) (Greece) Hong Kong Iceland Ireland (Israel) New Zealand Norway (Romania) Russian Federation (Scotland) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Tennessee that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	5%	9%	14%
Top 50% (Half)	42%	51%	60%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Texas

If the public school students in Texas participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Texas	Not significantly different from Texas	Lower than Texas
(Austria) (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada France (Germany) (Greece) Hong Kong Iceland Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Texas that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	5%	9%	13%
Top 50% (Half)	44%	53%	61%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Utah

If the public school students in Utah participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Utah	Not significantly different from Utah	Lower than Utah
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) (Germany) Hungary Ireland Japan Korea (Netherlands) Russian Federation Slovak Republic (Slovenia) Sweden United States (average)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland) (Thailand)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Utah that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	7%	12%	17%
Top 50% (Half)	60%	67%	74%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Vermont)

If the public school students in Vermont participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Vermont	Not significantly different from Vermont	Lower than Vermont
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) (Germany) Hungary Ireland Japan Korea (Netherlands) Russian Federation Slovak Republic (Slovenia) Sweden United States (average)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain (Switzerland) (Thailand)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Vermont that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	8%	14%	20%
Top 50% (Half)	60%	67%	75%

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Virginia

If the public school students in Virginia participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Virginia	Not significantly different from Virginia	Lower than Virginia
Czech Republic Japan Korea Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) (Netherlands) New Zealand Norway Russian Federation (Scotland) Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Virginia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	6%	11%	16%
Top 50% (Half)	48%	56%	65%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Washington

If the public school students in Washington participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Washington	Not significantly different from Washington	Lower than Washington
(Bulgaria) Czech Republic Japan Korea Singapore	(Australia) (Austria) Belgium – Flemish Canada (England) (Germany) Hong Kong Hungary Ireland (Israel) (Netherlands) New Zealand Norway Russian Federation (Scotland) Slovak Republic (Slovenia) Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Washington that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	7%	11%	16%
Top 50 % (Half)	50%	58%	66%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: West Virginia

If the public school students in West Virginia participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than West Virginia	Not significantly different from West Virginia	Lower than West Virginia
(Austria) (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Singapore (Slovenia)	(Australia) Belgium – Flemish Canada (Germany) Hong Kong Ireland (Israel) New Zealand Norway Russian Federation (Scotland) Slovak Republic Spain Sweden (Switzerland) (Thailand) United States (average)	(Belgium – French) (Colombia) Cyprus (Denmark) France (Greece) Iceland Iran, Islamic Republic (Kuwait) (Latvia – LSS) (Lithuania) Portugal (Romania) (South Africa)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in West Virginia that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10 %	4%	7%	10%
Top 50 % (Half)	46%	53%	61%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: (Wisconsin)

If the public school students in Wisconsin participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Wisconsin	Not significantly different from Wisconsin	Lower than Wisconsin
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Japan Korea (Netherlands) Slovak Republic (Slovenia)	(Belgium - French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic Ireland (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) Russian Federation (Scotland) (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Wisconsin that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	10%	17%	24%
Top 50% (Half)	63%	71%	79%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

Comparisons of Estimated TIMSS Scores from Public School NAEP Data for States and Jurisdictions with Actual TIMSS Scores for Nations: Grade 8 Science States (1996), Nations (1995)

State/Jurisdiction: Wyoming

If the public school students in Wyoming participated in TIMSS, how would their average performance in science compare to that of students in the 41 nations that took TIMSS at grade 8?

Nations whose performance is expected to be:

Higher than Wyoming	Not significantly different from Wyoming	Lower than Wyoming
Singapore	(Australia) (Austria) Belgium – Flemish (Bulgaria) Czech Republic (England) Hungary Ireland Japan Korea (Netherlands) Russian Federation Slovak Republic (Slovenia)	(Belgium – French) Canada (Colombia) Cyprus (Denmark) France (Germany) (Greece) Hong Kong Iceland Iran, Islamic Republic (Israel) (Kuwait) (Latvia – LSS) (Lithuania) New Zealand Norway Portugal (Romania) (Scotland) (South Africa) Spain Sweden (Switzerland) (Thailand) United States (average)

(Jurisdiction) indicates that the nation, state, or jurisdiction did not satisfy one or more of the sample participation guidelines.
 Latvia-LSS: Latvian-speaking schools only

Comparisons of averages tell how typical students perform, but they do not describe how well the best students perform. What is the estimated percentage of students in Wyoming that would perform above the TIMSS Top Ten Percent marker level? What is the estimated percentage that would perform above the Top Half marker level? (Below are estimates of the percentage of students expected to perform above the Top Ten Percent and Top Fifty Percent international marker levels. Each estimate is accompanied by a "Lower bound" and an "Upper bound" that reflect the range of possible values around the estimated percentage.)

	Lower bound	Estimate	Upper bound
Top 10%	8%	13%	19%
Top 50% (Half)	62%	69%	75%

SOURCE: Johnson, E.G. (1998) *Linking the National Assessment of Educational Progress with the Third International Mathematics and Science Study for Eighth Grade: A Research Report*. (Publication No. NCES 98-499). Washington, DC: GPO.

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