The Nation's Report CardTM Mathematics and Reading 2011 Frequently Asked Questions

What is The Nation's Report CardTM?

The Nation's Report Card™ presents results from the National Assessment of Educational Progress (NAEP). NAEP is the largest continuing and nationally representative assessment of what our nation's students know and can do in subjects such as mathematics, reading, science, writing, geography, U.S. history, civics, and other subjects. Standard administration practices are implemented to provide a common measure of student achievement. NAEP results can be used by teachers, principals, parents, policymakers, and researchers to assess progress and develop ways to improve education in the United States.

NAEP is a congressionally mandated project of the National Center for Education Statistics (NCES), within the Institute of Education Sciences (IES) of the U.S. Department of Education. The National Assessment Governing Board sets policy for the NAEP program.

When were mathematics and reading previously assessed in NAEP?

The NAEP Mathematics and Reading assessments are each conducted every two years. Both subjects were last assessed in 2009. The NAEP Reading assessment was first administered in 1992, while the first Mathematics assessment dates back to 1990.

What process is used to develop the assessments?

The content of each NAEP assessment is based on a subject framework developed by the National Assessment Governing Board (NAGB), in conjunction with subject area experts, school administrators, parents, policymakers, and others. Frameworks are reviewed periodically and revised or replaced, if needed, to reflect new developments in the field and to keep the assessments in line with current instructional practices.

NCES is responsible for developing NAEP questions based on framework specifications. The questions are developed in consultation with classroom teachers, curriculum specialists, and test development specialists, and are pilot-tested in schools across the country before an actual assessment is given. Frameworks are revised or replaced periodically to reflect new developments in the field and to keep the assessments in line with current instructional practices.

What subject areas are assessed?

The 2011 NAEP Mathematics assessment tests students on five main mathematics content areas. These content areas include:

Mathematics Content Areas	Grade 4	Grade 8	
Number properties and operations	40%	20%	
Measurement	20%	15%	
Geometry	15%	20%	
Data analysis, statistics, and probability	10%	15%	
Algebra	15%	30%	

In addition to the NAEP Mathematics content areas, the table above also lists the percentage of the assessment devoted to each of these areas in each grade.

The NAEP Reading assessment was also divided into three cognitive target areas, shown in the table below. The proportion of the assessment questions devoted to each of the three cognitive targets varied by grade to reflect the developmental differences of students.

Reading Cognitive Target Areas	Grade 4	Grade 8	
Locate and recall	30%	20%	
Integrate and interpret	50%	50%	
Critique and evaluate	20%	30%	

What types of questions did students answer?

In both assessments, students answered both multiple-choice and constructed-response questions. In the reading assessment, students read a passage and responded to a series of related questions.

A selection of sample questions is available in each of the report cards. Additional questions from prior assessments are available on the NAEP Questions Tool (http://nces.ed.gov/nationsreportcard/itmrls), including sample student responses, a scoring guide, and percentages of students answering correctly. These questions can be used by teachers to create classroom quizzes and compare their students' performances to the nation or their state.

How many schools and students participated?

The NAEP 2011 Mathematics and Reading assessment results are based on nationally representative samples of fourth- and eighth-grade students from schools across the country.

	Mathematics		Reading		
Grade	Students	Schools	Students	Schools	
Grade 4	209,000	8,500	213,100	8,500	
Grade 8	175,200	7,610	168,200	7,590	

NOTE: The number of schools are rounded to the nearest ten and students to the nearest hundred.

How are the results reported?

Student performance is reported in two ways – as average scale scores and as percentages of students performing at each of three achievement levels.

- Results are reported as average scores on separate scales for each grade. While both mathematics and reading are reported on a 0 500 scale, scores cannot be compared across subjects or grades.
- NAEP achievement levels are established by the National Assessment Governing Board and define a set of standards for what students *should* know and be able to do in each subject area assessed. Achievement-level results are reported as the percentages of students performing at or above the *Basic*, *Proficient*, and *Advanced* levels. The Governing Board defines *Proficient* performance as "competency over challenging subject matter" and should not be construed to be grade level performance.

What results are reported?

The mathematics and reading assessments provide national and state results for the nation's fourth- and eighth-grade students.

Results are provided for students overall and by selected demographic characteristics such as race/ethnicity, gender, and student eligibility for the National School Lunch Program. Results are also available based on information collected from the student, teacher, and school background questionnaires. NAEP does not provide individual scores for participating students or schools.

Are results for private schools included in this report?

Both public and private school students participated in the assessment and are included as part of the national results. Results for states and other jurisdictions reflect the performance of students in public schools only.

What are the new race/ethnicity categories for the 2011 NAEP assessments?

Beginning in 2011, all of the students participating in NAEP were identified as one of the following seven racial/ethnic categories:

- 1. White
- 2. Black
- 3. Hispanic
- 4. Asian

- 5. Native Hawaiian/Other Pacific Islander
- 6. American Indian/Alaska Native
- 7. Two or more races

NOTE: Black includes African American, Hispanic includes Latino, and Pacific Islander includes Native Hawaiian.

In compliance with new standards from the U.S. Office of Management and Budget for collecting and reporting data on race/ethnicity, additional information was collected in 2011 so that results could be reported separately for Asian students, Native Hawaiian/Other Pacific Islander students, and students identifying with two or more races.

Are students with disabilities (SD) and English language learners (ELL) included in the NAEP samples?

NAEP has always endeavored to assess all students selected as a part of its sampling process, including students who are classified by their schools as SD and/or ELL. The decision to exclude any of these students is made by school personnel. School personnel are encouraged to use inclusion criteria provided by NAEP and may discuss their inclusion decisions with NAEP State Coordinators or field staff. Some students may participate with testing accommodations.

Below is a table with the percentages of students (as a percent of all students assessed) who were identified as SD and/or ELL and excluded or assessed in 2011, by subject and grade.

	Mathematics		Reading	
SD and/or ELL	Grade 4	Grade 8	Grade 4	Grade 8
Identified	22%	17%	22%	17%
Excluded	2%	2%	4%	3%
Assessed	20%	14%	18%	13%
Without accommodations	8%	4%	9%	5%
With accommodations	12%	10%	10%	9%

NOTE: Detail may not sum to totals because of rounding.

What testing accommodations were offered?

Accommodations are adaptations to standard testing procedures that remove barriers to participation in assessments without changing what is being tested. NAEP allows SD and ELL to use most of the same testing accommodations that they receive in state or district tests. There are several NAEP accommodations that are allowed on the mathematics assessment, but not on the reading. Such types of accommodations include: the use of bilingual test booklets in English and

Spanish, having the assessment questions read aloud, and signing the test questions. For mathematics and reading, allowing extra time and giving the assessment in a small-group format were the two most commonly used accommodations.

What are the Governing Board inclusion goals? Did states meet the inclusion goal in 2011?

The National Assessment Governing Board, which sets policy for NAEP, has been exploring ways to ensure that NAEP continues to appropriately include as many students as possible and to do so in a consistent manner for all jurisdictions assessed and reported. In March 2010, the Governing Board adopted a new policy, NAEP Testing and Reporting on Students with Disabilities and English Language Learners. This policy was the culmination of work with experts in testing and curriculum, and those who work with exceptional children and students learning to speak English. The policy aims to:

- Maximize participation of sampled students in NAEP;
- Reduce variation in exclusion rates for SD and ELL students across states and districts;
- Develop uniform national rules for including students in NAEP; and
- Ensure that NAEP is fully representative of SD and ELL students.

The policy defines specific inclusion goals for NAEP samples. At the national, state, and district levels, the goal is to include 95 percent of all students selected for the NAEP samples, and 85 percent of those in the NAEP samples who are identified as SD or ELL.

Forty-one of the states/jurisdictions participating in the NAEP Reading assessment met the 95 percent inclusion goal at both grades 4 and 8, and 48 met the goal in mathematics.

What additional results are available?

There are a variety of tools available on the NAEP website at http://nces.ed.gov/nationsreportcard that allow for further exploration of the results.

- The NAEP Data Explorer (http://nces.ed.gov/nationsreportcard/naepdata/) allows users to examine results by student demographic characteristics and by responses to questionnaires completed by students, teachers, and school administrators.
- The NAEP Questions Tool (http://nces.ed.gov/nationsreportcard/itmrlsx/) provides a sample of actual questions that were answered by students. The tool also has performance results on all publicly released NAEP questions.

Links to other resources:

NAEP Release Site http://nationsreportcard.gov/

NAEP Frameworks
NAEP Achievement Levels
http://www.nagb.org/publications/frameworks.htm
http://www.nagb.org/publications/achievement.htm