Sample Questions

General Information about The Nation’s Report Card™

Grade 4
2009

Mathematics
Reading
Science
National Assessment of Educational Progress

2009 Sample Questions Booklet

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About This Sample Questions Booklet

On behalf of the National Assessment of Educational Progress (NAEP), I want to thank you for your participation in this essential measure of student achievement in America. NAEP tells us what students in our country know and can do. In the coming year, fourth-, eighth- and twelfth-graders will participate in NAEP. Fourth-graders will participate in assessments for mathematics, reading, and science.

Assessments require about 90 minutes of a student’s time, and each student answers questions in only one subject. The test booklet contains 50 minutes of test questions and a brief section of background questions.

NAEP is voluntary and confidential. Answers to all student questions are confidential, and before the materials leave the school, student names are removed from all assessment materials. Individual student scores are not reported.

Results of the assessments will be released in The Nation’s Report Card in mathematics in the fall of 2009, and reading and science in early 2010. Assessment results are widely discussed in the press and are used by policymakers, educators, and researchers to make decisions about education policy and funding.

The usefulness of the national assessment results increases when parents, educators, and policymakers are able to study the proficiencies (or scores) along with information about student experience, the school environment, and opportunities for students to learn. Included in this booklet are all of the general student background questions for mathematics, reading, and science. The student background questions provide educators and policymakers with valuable insight into the conditions and factors that influence student learning so that decisions can be made that may maximize achievement for all students. Also included in this booklet are sample questions and selected responses to help provide a better understanding of what the assessment is like.

If you have any questions or comments regarding NAEP or would like to view previous Nation’s Report Cards, please visit the NAEP website at http://nces.ed.gov/nationsreportcard. Also available through the website is a Questions Tool (http://nces.ed.gov/nationsreportcard/itmrls) which allows you to review additional sample questions with sample answers.

Peggy G. Carr, Associate Commissioner
Education Assessment
National Center for Education Statistics

NAEP is administered by the National Center for Education Statistics, a principal component of the U.S. Department of Education’s Institute of Education Sciences. Policy for the assessment, including its content and standards, is set by the independent, bipartisan National Assessment Governing Board (www.nagb.org).
The Mathematics Assessment

The NAEP mathematics assessment at grade 4 measures students' ability to solve problems in five mathematics content strands: Number Properties and Operations; Measurement; Geometry; Data Analysis, Statistics, and Probability; and Algebra. Within each of these five content strands, students are asked questions that involve low, moderate, and high mathematical complexity. Mathematical complexity deals with what the students are asked to do in a task.

The mathematics framework for 2009 NAEP mathematics assessment includes multiple-choice questions, short-answer constructed-response questions, and extended constructed-response questions. The extended exercises allow students to communicate their ideas and demonstrate the reasoning they used to solve problems. The short-answer and extended-response questions make up approximately 50 percent of student assessment time. The assessment also incorporates the use of calculators, rulers, and ancillary materials such as spinners and geometric shapes in some parts of the assessment, but not all.

Calculator use is permitted on approximately one-fourth of the test questions (four-function calculators at Grade 4). NAEP provides calculators for all students. For more information regarding the mathematics assessment framework, please visit http://www.nagb.org.

### NAEP Mathematics Framework

<table>
<thead>
<tr>
<th>Distribution of Questions Across Content Strands</th>
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<tbody>
<tr>
<td>Number Properties and Operations</td>
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<tr>
<td>Measurement</td>
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<tr>
<td>Geometry</td>
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<tr>
<td>Data Analysis, Statistics, and Probability</td>
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<tr>
<td>Algebra</td>
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</tbody>
</table>
Mathematics Booklet Directions

This assessment uses many different booklets. Each booklet has different questions. Do not worry if the person next to you is working on questions that do not look like those you are working on.

Read each question carefully and answer it as well as you can. Do not spend too much time on any one question.

For some of the questions you may need to write or draw the answer. You can see how this is done in the example below.

![Draw a circle in the space below.](image)

You may be given a calculator to use for at least one part of your booklet. If you are given a calculator, you will have to decide when to use it in each section where its use is permitted. For some questions using the calculator is helpful, but for other questions the calculator may not be helpful. After each question you will be asked to indicate whether you used the calculator.

When you receive the calculator, make sure you know how to use it. There are instructions on the back cover of this booklet to help you. If the calculator does not work or if you do not know how to use it, raise your hand and ask for help.

**REMEMBER:**

Read each question CAREFULLY.

Fill in only ONE OVAL for each question or write your answer in the space provided.

If you change your answer, ERASE your first answer COMPLETELY.

CHECK OVER your work if you finish a section early.

Do not go past the **STOP** sign at the end of each section until you are told to do so.
1. Each boy and girl in the class voted for his or her favorite kind of music. Here are the results.

Which kind of music did most students in the class prefer?

- Classical
- Rock
- Country
- Other
2. Sam can purchase his lunch at school. Each day he wants to have juice that costs 50¢, a sandwich that costs 90¢, and fruit that costs 35¢. His mother has only $1.00 bills. What is the least number of $1.00 bills that his mother should give him so he will have enough money to buy lunch for 5 days?

3. If both the square and the triangle above have the same perimeter, what is the length of each side of the square?

- 4
- 5
- 6
- 7
The Reading Assessment

The NAEP reading assessment measures students’ ability to understand, to interpret, and to think critically about different types of texts. Recognizing that readers vary their approach according to the demands of different types of text, the NAEP framework specifies the assessment of reading in two distinct types of text—literary and informational text. The assessment includes reading materials selected from publications and other resources typically available to students in and out of school.

The framework for the 2009 NAEP Reading Assessment replaces a framework that was first developed for the 1992 assessment. The 2009 framework honors many aspects of the previous framework but also introduces some changes that can lead to better measurement and more precise reporting of assessment results. Changes featured in the 2009 NAEP Reading Framework include

- an assessment design based on current scientific reading research,
- consistency with the No Child Left Behind legislation,
- use of international reading assessments to inform the NAEP framework,
- a more focused measurement of vocabulary,
- measurements of reading behaviors (cognitive targets) in a more objective manner,
- distinction of cognitive targets relevant to literary and informational text, and
- testing of poetry at grade 4.

The NAEP reading assessment contains multiple-choice questions, as well as short and extended constructed-response questions. Students spend approximately 50 to 60 percent of their assessment time providing written answers to constructed-response questions. For more information regarding the reading assessment framework, please visit http://www.nagb.org.

<table>
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<th>NAEP Reading Framework</th>
<th>Distribution of Question Pool Across Contexts</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Grade 4</td>
</tr>
<tr>
<td>Literary text</td>
<td>50%</td>
</tr>
<tr>
<td>Informational text</td>
<td>50%</td>
</tr>
</tbody>
</table>
Reading Booklet Directions

In each of the next two sections, you will have 25 minutes to read one or two passages and to answer questions about what you have read.

You will be asked to respond to two types of questions. The first type of question requires you to choose the best answer and fill in the oval for that answer in your booklet. Some questions of this type will ask you about the meaning of a word as it is used in the passage.

The other type of question requires you to write your answer on the blank lines in your booklet. Some questions of this type will ask you to write a short answer and some questions will ask you to write a longer answer.

Here is an example of a question that requires you to write a short answer.

Do you think “Summer Adventure” was a good title for the story? Explain why or why not using details from the story.

I think “Summer Adventure” was a good title for the story because the main character, Joe, got to go on a trip to Alaska, where he saw Mt. McKinley.
Here is an example of a question that requires you to write a longer, more detailed answer.

Joe has different feelings during his trip in Alaska. Describe two different feelings Joe had and explain what caused him to have those feelings.

Joe was lonely when he first arrived in Alaska, because he was missing his friends back home, but then he met Jerry and felt better.

When Jerry’s parents took them all to Portage Lake, Joe felt excited because they went on a boat ride across a lake filled with icebergs to see the blue glaciers.

Think carefully about each question. When you are writing your response, make your answer as complete as possible. Be sure your handwriting is clear. Use as many lines as you need.

You may go back to the passage when answering the questions.

If you finish before time is called, read over your work to be sure you have provided your best answer.
Rosa walked home from school slowly. The rows of apartment buildings and the streets full of cars looked all the same. And it was cold. Rosa missed her country. She had begun to learn some English, but she did not know what to say or what to do when other kids were around. They were friendly, but Rosa felt safer being alone.

Behind Rosa’s brick apartment building was a special place, a small creek where Rosa always stopped after school. There were ducks there, and she could speak to them in her language. The ducks seemed to understand.

Every afternoon Rosa sat on a concrete slab above the creek and watched the ducks until Mama came home from work. Rosa did not feed them. She knew that most “people food” was not right for ducks. But she watched them swim and feed and walk up to her, quacking. Once they even walked over Rosa’s tummy as she lay with her feet stretched out on the bumpy grass. They like me, Rosa said to herself.

One day after school, the ducks were not in the water. They did not waddle toward Rosa, even though she stayed very still. Something was wrong.

Gently, Rosa tiptoed to where the ducks were huddled. “Are you sick?” she whispered. They looked different. They looked greasy.

Then Rosa noticed the creek. An oily film covered it, making patches of color on the water’s surface. She looked closely at the ducks. Their feathers were stuck together. They could not swim. They could not fly.

I must get help, said Rosa to herself. But how? I don’t know anyone. Mama told me not to speak to strangers. Besides, I don’t know how to ask in English.
Rosa had an idea. She rushed back to the street, walked to the traffic light, then raced around the corner and back to the school yard.

Rosa was in luck. Boys and girls were still there, practicing baseball with the gym teacher. Rosa had never played baseball in this country.

“Please! Come!” said Rosa, breathless, “Ducks!”

“Hello, Rosa,” said the teacher. “What’s the trouble?”

“Ducks!” said Rosa again. It was one of the few English words she was sure of. “Come. Please. Ducks!”

She pointed in the direction of the creek. The kids were staring at her, but she didn't care. “Ducks!” she said again, her eyes pleading.

The teacher said something in English to his team. They looked at Rosa and talked all at once. Then the teacher smiled. “OK, Rosa,” he said. “Show us.” They all grabbed their jackets and their baseball mitts and bats, and followed Rosa to the creek.

Pretty soon there were more people at Rosa’s creek than she had ever seen there before. First the police came with their squad cars and sirens. Then came the firefighters with their big trucks and Humane Society workers in their vans.

People came out from the apartment building with dishpans and towels and liquid dish detergent. Rosa did not understand all the talk, but she knew what was happening.

The ducks were too weak to fly or run away. She and the other kids rounded them up and held them in the dishpans while the Humane Society people worked. Four washes for each duck with mild detergent, and four rinses with clear water. It reminded Rosa of doing the wash.

After a while someone brought a blow-dryer. Rosa laughed as the ducks were blown fluffy-dry. One by one, they were packed carefully into cages in the Humane Society vans.

“We’ll keep them for a few days,” one of the workers said. “They need time to regain the natural oils in their feathers, so they can keep themselves warm and swim properly. A big factory upstream spilled four hundred gallons of diesel fuel into the storm sewers last night. What a mess! You got to these ducks just in time, young lady.”

Rosa did not know what the man was saying, but she saw how everyone smiled at her, and she felt proud.

By the time Rosa’s mama came home, the cars and the vans and the people were gone. Rosa was in her special place by the creek. But she was not alone. She was playing baseball with three friends. Rosa was good at baseball. She was getting better at English, too.

“Home run!” she shouted, laughing, after she slugged the ball almost to the parking lot. Rosa was happy. And the dishpan ducks were safe.
1. Which of the following lessons is most important to the story?
   - People need to work together in an emergency.
   - Oil spills need to be cleaned up by experts.
   - Animals and people need to take baths.
   - Children need to play baseball to make friends.

2. Explain why Rosa visits the ducks at the beginning of the story. Use details from the story in your answer.

   __________________________
   __________________________
   __________________________
   __________________________

3. Why does Rosa return to the school yard?
   - She has forgotten her homework assignment.
   - She wants to play baseball with her friends.
   - She needs to get help for the ducks.
   - She wants to show her teacher a duck.
4. When Rosa tiptoes to the ducks and whispers to them, it shows that she
- thinks that something might be wrong
- likes to walk and speak quietly
- does not want to wake up the ducks
- wants to tell the ducks a story

5. Why is the gym teacher important in the story? Use examples of what he says or does in your answer.


6. What does the word “pleading” mean, as it is used in the sentence below?
“Ducks,” she said again, her eyes pleading.
- Yelling
- Begging
- Looking
- Blinking
### The Science Assessment

The 2009 NAEP assessment in science for grade 4 contains multiple-choice questions, as well as short and extended constructed-response exercises. At least 50% of the assessment time is devoted to constructed-response exercises. These questions measure students’ knowledge of facts, ability to integrate this knowledge into larger constructs, and capacity to use the tools, procedures, and reasoning processes of science to develop an increased understanding of the natural world.

The 2009 Science Framework replaces a framework developed in 1996. The 2009 NAEP science assessment is organized according to science content and practices.

#### Science Content

<table>
<thead>
<tr>
<th>Physical Science</th>
<th>Life Science</th>
<th>Earth and Space Science</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Matter</strong></td>
<td><strong>Structures and Functions of Living Systems</strong></td>
<td><strong>Earth in Space and Time</strong></td>
</tr>
<tr>
<td>• Properties of Matter</td>
<td>• Organization and Development</td>
<td>• Objects in the Universe</td>
</tr>
<tr>
<td>• Changes in Matter</td>
<td>• Matter and Energy Transformations</td>
<td>• History of the Earth</td>
</tr>
<tr>
<td><strong>Energy</strong></td>
<td>• Interdependence</td>
<td></td>
</tr>
<tr>
<td>• Forms of Energy</td>
<td><strong>Changes in Living Systems</strong></td>
<td><strong>Earth Structures</strong></td>
</tr>
<tr>
<td>• Energy Transfer</td>
<td>• Heredity and Reproduction</td>
<td>• Properties of Earth Materials</td>
</tr>
<tr>
<td>• Conservation</td>
<td>• Evolution and Diversity</td>
<td>• Tectonics</td>
</tr>
<tr>
<td><strong>Motion</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Motion at the Macroscopic Level</td>
<td></td>
<td><strong>Earth Systems</strong></td>
</tr>
<tr>
<td>• Forces Affecting Motion</td>
<td></td>
<td>• Energy in Earth Systems</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Climate and Weather</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Biogeochemical Cycles</td>
</tr>
</tbody>
</table>

#### Science Practices

The frameworks reflect these four science practices:

- Identifying Science Principles
- Using Science Principles
- Using Scientific Inquiry
- Using Technological Design

The greatest emphasis is on Identifying and Using Science Principles.
Science Booklet Directions

In each of sections 1 and 2, you will have 25 minutes to answer a series of questions about science.

You will be asked to respond to several different types of questions. Some of the questions will require you to choose the best answer and fill in the oval for that answer in your booklet. On questions like this, be sure to mark your answers clearly and darken the oval completely. If you make a mistake or want to change your answer, be sure to erase any unwanted marks. Here is an example of a question that requires you to fill in an oval.

Example 1

How hot is it on the surface of the Sun?

.Nodes
  - Not quite as hot as boiling water
  - About as hot as fire
  - About 100°F
  - Much hotter than almost anything on Earth

For some questions, you will be asked to write short answers on the blank lines provided in your booklet. Here is an example of a question that requires you to provide a short answer.

Example 2

Describe one important difference between plants and animals.

Most plants make their own food while animals eat plants and other animals for food.

B123CDS
Also, you will be asked to answer some questions by writing longer, more detailed responses. For example, here is a question that requires you to provide a longer answer.

**Example 3**

Describe three things that animals do to survive in areas that have cold winters.

Some animals store a lot of fat so that they can go into a deep sleep all winter. Some animals grow a thick coat of fur to keep them warm. Some birds and butterflies fly away from a cold area and spend the winter in a place that is warm and has a lot of food.

When you are asked to write your response be sure that your handwriting is clear. Think carefully about each question and make your answers as complete as possible, using as many lines as you need. If you finish a section before time is called, you may go back and check your work on that section only.

Finally, in some questions you may be asked to draw a diagram or fill in a table.
Sample Science Questions
Grade 4

1. Name the parts of the plant above that are labeled 1, 2, and 3. Explain the function of each part.

<table>
<thead>
<tr>
<th>Name of Part</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td></td>
</tr>
</tbody>
</table>

2. On steep slopes along the sides of new roads, highway department workers often grow plants to prevent the soil from being eroded. Describe two ways that these plants keep the soil from eroding.

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
3. A student put some sand, clay, and water into a bottle and shook the bottle. Then he put the bottle down.

After two hours, the bottle looked like the drawing above. What can the student conclude based on what he sees in the bottle?

- The water is heavier than the grains of clay and the grains of sand.
- The grains of clay are heavier than the grains of sand and the water
- The grains of sand are heavier than the water and the grains of clay
- The water, grains of clay, and grains of sand are all of equal weight.

4. The picture below shows how a type of rock forms at the bottom of the ocean. What type of rock is this?

- Lava
- Igneous
- Sedimentary
- Metamorphic
Student Background Questionnaire

General Directions for Grade 4

In the next two sections, you will be asked questions about yourself and your education. We will read the first section together. To answer these questions, fill in the oval beside the answer that is true for you. For example, fill in the oval beside your answer to this question:

How many movies did you see last month on television and in movie theaters?

- None
- 1 to 5
- 6 to 10
- More than 10

You should have filled in the oval beside the answer that best tells how many movies you saw last month on television and in movie theaters. On questions like this, be sure to make your answer mark clear and dark in the oval. If you make a mistake or want to change your answer, be sure to completely erase any unwanted marks.

You will be told when it is time to begin and end each section.

Do not go past the STOP sign at the end of each section until you are told to do so.

If you finish before time is called, go back and check your work on that section only. Use your time carefully. Do as much as you can in each section.
In this section, please tell us about yourself and your family. The section has 11 questions. Mark your answers in your booklet.

1. Are you Hispanic or Latino? Fill in one or more ovals.
   - ☐ No, I am not Hispanic or Latino.
   - ☐ Yes, I am Mexican, Mexican American, or Chicano.
   - ☐ Yes, I am Puerto Rican or Puerto Rican American.
   - ☐ Yes, I am Cuban or Cuban American.
   - ☐ Yes, I am from some other Hispanic or Latino background.

2. Which of the following best describes you? Fill in one or more ovals.
   - ☐ White
   - ☐ Black or African American
   - ☐ Asian
   - ☐ American Indian or Alaska Native
   - ☐ Native Hawaiian or other Pacific Islander

For the rest of the questions in this section, fill in only one oval for each question.

3. Does your family get a newspaper at least four times a week?
   - ☐ Yes
   - ☐ No
   - ☐ I don’t know.

4. Does your family get any magazines regularly?
   - ☐ Yes
   - ☐ No
   - ☐ I don’t know.

5. About how many books are there in your home?
   - ☐ Few (0–10)
   - ☐ Enough to fill one shelf (11–25)
   - ☐ Enough to fill one bookcase (26–100)
   - ☐ Enough to fill several bookcases (more than 100)
6. Is there a computer at home that you use?
   ☐ Yes
   ☐ No

7. Is there an encyclopedia in your home?
   It could be a set of books, or it could be on the computer.
   ☐ Yes
   ☐ No
   ☐ I don’t know.

8. About how many pages a day do you have to read in school and for homework?
   ☐ 5 or fewer
   ☐ 6–10
   ☐ 11–15
   ☐ 16–20
   ☐ More than 20

9. How often do you talk about things you have studied in school with someone in your family?
   ☐ Never or hardly ever
   ☐ Once every few weeks
   ☐ About once a week
   ☐ Two or three times a week
   ☐ Every day

10. How many days were you absent from school in the last month?
    ☐ None
    ☐ 1 or 2 days
    ☐ 3 or 4 days
    ☐ 5 to 10 days
    ☐ More than 10 days

11. How often do people in your home talk to each other in a language other than English?
    ☐ Never
    ☐ Once in a while
    ☐ About half of the time
    ☐ All or most of the time
Mathematics Background Questionnaire

Grade 4

This section has 24 questions. Mark your answers in your booklet. Fill in only one oval for each question.

1. How often do you use a computer for math at school?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

2. Do you use a computer for math homework at home?
   - Yes
   - No

3. Do you use the Internet at home?
   - Yes
   - No

Questions 4–24. For the following questions, think about all the times you do things for math. Include things you do at home, at school, or anywhere else.

4. Do you use a computer to practice or drill on math?
   - Yes
   - No

5. Do you use a computer to play math games?
   - Yes
   - No

6. Do you use a computer to make charts or graphs for math?
   - Yes
   - No

7. Do you use the Internet to learn things about math?
   - Yes
   - No

8. How often do you use e-mail, instant messages, blogs, or text messages to talk online with friends about math work?
   - Never or hardly ever
   - Once or twice a month
   - Once or twice a week
   - Every day or almost every day

GO ON TO THE NEXT PAGE
9. How often do you use e-mail, instant messages, blogs, or text messages to get help with math from someone other than your teacher, family, classmates, or friends?
- Never or hardly ever
- Once or twice a month
- Once or twice a week
- Every day or almost every day

10. How often do you use a calculator?
- Never or hardly ever
- Once in a while
- Almost every day

11. What kind of calculator do you normally use?
- I don’t have a calculator.
- Regular calculator (addition, subtraction, multiplication, division)
- Graphing calculator

12. Have you ever used a graphing calculator?
- Yes
- No
- I don’t know what a graphing calculator is.

13. When you take a math test or quiz, how often do you use a calculator?
- Never
- Sometimes
- Always

14. Do you study or do work for math at an after-school or tutoring program?
- Yes
- No

15. How often do you feel your math classwork is too hard?
- Never or hardly ever
- Sometimes
- Often
- Always or almost always

16. How often do you feel your math classwork is too easy?
- Never or hardly ever
- Sometimes
- Often
- Always or almost always
17. How often do you like what you do in class for math?
   • Never or hardly ever
   • Sometimes
   • Often
   • Always or almost always

18. How often do you feel you can do a good job on your math tests?
   • Never or hardly ever
   • Sometimes
   • Often
   • Always or almost always

19. How often do you feel you can do a good job on your math assignments?
   • Never or hardly ever
   • Sometimes
   • Often
   • Always or almost always

20. How often do you feel you like math?
   • Never or hardly ever
   • Sometimes
   • Often
   • Always or almost always

21. How often do you feel math is one of your favorite subjects?
   • Never or hardly ever
   • Sometimes
   • Often
   • Always or almost always

22. How hard was this test compared to most other tests you have taken this year in school?
   • Easier than other tests
   • About as hard as other tests
   • Harder than other tests
   • Much harder than other tests

23. How hard did you try on this test compared to how hard you tried on most other tests you have taken this year in school?
   • Not as hard as on other tests
   • About as hard as on other tests
   • Harder than on other tests
   • Much harder than on other tests

24. How important was it to you to do well on this test?
   • Not very important
   • Somewhat important
   • Important
   • Very important
Reading Background Questionnaire

Grade 4

This section has 28 questions. Mark your answers in your booklet. Fill in only one oval for each question.

1. How often do you feel you learn a lot when you read books?
   - Never or hardly ever
   - Sometimes
   - Often
   - Always or almost always

2. How often do you feel reading is one of your favorite subjects?
   - Never or hardly ever
   - Sometimes
   - Often
   - Always or almost always

3. How often do you use either the school library or the public library to get information for a school project or homework?
   - Never or hardly ever
   - Once or twice a month
   - Once or twice a week
   - Every day or almost every day

4. How often do you use either the school library or the public library to get information for your own use?
   - Never or hardly ever
   - Once or twice a month
   - Once or twice a week
   - Every day or almost every day

5. Do you study or do work for reading at an after-school or tutoring program?
   - Yes
   - No

6. In your school, do you go to book clubs, competitions, fairs, or exhibits for reading?
   - Yes
   - No

7. How often do you read for fun on your own time?
   - Never or hardly ever
   - Once or twice a month
   - Once or twice a week
   - Almost every day
8. How often do you talk with your friends or family about something you have read?
   ☐ Never or hardly ever
   ☐ Once or twice a month
   ☐ Once or twice a week
   ☐ Almost every day

9. How often does your teacher ask you to make a presentation to the class about something that you have read?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☐ Always or almost always

10. How often does your teacher ask you to read articles or stories in a magazine or in newspapers?
    ☐ Never or hardly ever
    ☐ Sometimes
    ☐ Often
    ☐ Always or almost always

11. How often does your teacher ask you to read aloud?
    ☐ Never or hardly ever
    ☐ Sometimes
    ☐ Often
    ☐ Always or almost always

12. How often does your teacher ask you to read silently?
    ☐ Never or hardly ever
    ☐ Sometimes
    ☐ Often
    ☐ Always or almost always

13. How often does your teacher ask you to read a book you have chosen yourself?
    ☐ Never or hardly ever
    ☐ Sometimes
    ☐ Often
    ☐ Always or almost always

14. How often does your teacher ask you to write something about what you have read?
    ☐ Never or hardly ever
    ☐ Sometimes
    ☐ Often
    ☐ Always or almost always

15. For school this year, how often do you work in pairs or small groups to talk about something that you have read?
    ☐ Never or hardly ever
    ☐ A few times a year
    ☐ Once or twice a month
    ☐ At least once a week
16. For school this year, how often do you have a class discussion about something that the class has read?
   ☐ Never or hardly ever
   ☑ A few times a year
   ☐ Once or twice a month
   ☐ At least once a week

17. When you have reading assignments in school, how often does your teacher give you time to read books you have chosen yourself?
   ☐ Never or hardly ever
   ☐ Once or twice a month
   ☐ Once or twice a week
   ☑ Almost every day

18. When reading a story in class, how often does your teacher ask you to explain the story in your own words?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☑ Always or almost always

19. When reading a story in class, how often does your teacher ask you to talk about what the characters do and feel?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☑ Always or almost always

20. When reading a story in class, how often does your teacher ask you to talk about how you feel about the story?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☑ Always or almost always

21. For school this year, how often have you been asked to write long answers to questions on tests or assignments that involved reading?
   ☐ Never
   ☐ Once or twice this year
   ☐ Once or twice a month
   ☑ At least once a week

22. This school year, did your teacher ask you to use a computer to learn new words?
   ☐ Yes
   ☑ No

23. This school year, did your teacher ask you to use a computer to practice spelling and grammar?
   ☐ Yes
   ☑ No
24. This school year, did your teacher ask you to use a computer to write stories or reports?
   ☐ Yes
   ☐ No

25. This school year, did your teacher ask you to read books on the computer?
   ☐ Yes
   ☐ No

26. How hard was this test compared to most other tests you have taken this year in school?
   ☐ Easier than other tests
   ☐ About as hard as other tests
   ☐ Harder than other tests
   ☐ Much harder than other tests

27. How hard did you try on this test compared to how hard you tried on most other tests you have taken this year in school?
   ☐ Not as hard as on other tests
   ☐ About as hard as on other tests
   ☐ Harder than on other tests
   ☐ Much harder than on other tests

28. How important was it to you to do well on this test?
   ☐ Not very important
   ☐ Somewhat important
   ☐ Important
   ☐ Very important
Science Background Questionnaire

Grade 4

This section has 32 questions. Mark your answers in your booklet. Fill in only one oval for each question.

1. In this school year, how often have you done activities or projects in science?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

2. In this school year, how often have you done activities or projects to learn about living things (for example, plants, animals, bacteria)?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

3. In this school year, how often have you done activities or projects to learn about electricity (for example, batteries and light)?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

4. In this school year, how often have you done activities or projects to learn about chemicals (for example, mixing sugar or salt in water)?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day
5. In this school year, how often have you done activities or projects to learn about rocks or minerals (for example, looking at different rocks)?

- Never or hardly ever
- Once every few weeks
- About once a week
- Two or three times a week
- Every day or almost every day

6. In this school year, how often have you done activities or projects using a magnifying glass or microscope (for looking at small things)?

- Never or hardly ever
- Once every few weeks
- About once a week
- Two or three times a week
- Every day or almost every day

7. In this school year, how often have you done activities or projects using a thermometer or barometer (for making measurements)?

- Never or hardly ever
- Once every few weeks
- About once a week
- Two or three times a week
- Every day or almost every day

8. In this school year, how often have you done activities or projects using simple machines (for example, pulleys and levers)?

- Never or hardly ever
- Once every few weeks
- About once a week
- Two or three times a week
- Every day or almost every day

9. In this school year, how often have you read a science textbook?

- Never or hardly ever
- Once every few weeks
- About once a week
- Two or three times a week
- Every day or almost every day

10. In this school year, how often have you read a book or magazine about science?

- Never or hardly ever
- Once every few weeks
- About once a week
- Two or three times a week
- Every day or almost every day
11. In this school year, how often have you read about science on the computer?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

12. In this school year, how often have you watched a movie, video, or DVD about science?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

13. In this school year, how often have you discussed news stories about science?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

14. In this school year, how often have you worked with other students on a science activity or project?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

15. In this school year, how often have you been asked to solve a science problem?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

16. In this school year, how often have you presented what you learned about science to your class?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day
17. In this school year, how often have you taken a science test or quiz?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

18. In this school year, how often have you talked about measurements or results from your science activities or projects?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

19. In this school year, how often have you written a report on your science activities or projects?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

20. In this school year, how often have you been asked to write answers of more than one sentence to questions on tests or assignments for science?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

21. In this school year, how often have you talked with your teacher about how you are doing in science?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day

22. In this school year, how often have you used library resources for science?
   - Never or hardly ever
   - Once every few weeks
   - About once a week
   - Two or three times a week
   - Every day or almost every day
23. In this school year, how often have you used computers for science?
   ☐ Never or hardly ever
   ☐ Once every few weeks
   ☐ About once a week
   ☐ Two or three times a week
   ☐ Every day or almost every day

24. How often do you feel you can understand what the teacher talks about in science class?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☐ Always or almost always

25. How often do you do science activities that are not for schoolwork?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☐ Always or almost always

26. How often do you feel you can do a good job on your science tests?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☐ Always or almost always

27. How often do you feel you can do a good job on your science assignments?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☐ Always or almost always

28. How much do you like studying science?
   ☐ Very little
   ☐ Some
   ☐ Quite a bit
   ☐ Very much

29. How often do you feel science is one of your favorite subjects?
   ☐ Never or hardly ever
   ☐ Sometimes
   ☐ Often
   ☐ Always or almost always
30. How hard was this test compared to most other tests you have taken this year in school?
   - Easier than other tests
   - About as hard as other tests
   - Harder than other tests
   - Much harder than other tests

31. How hard did you try on this test compared to how hard you tried on most other tests you have taken this year in school?
   - Not as hard as on other tests
   - About as hard as other tests
   - Harder than other tests
   - Much harder than other tests

32. How important was it to you to do well on this test?
   - Not very important
   - Somewhat important
   - Important
   - Very important
NAEP Questions Tool

Introduction

After every assessment cycle, NAEP releases a portion of the main assessment to the public. The NAEP Questions Tool allows users to view those questions, as well as their associated scoring guides, keys, classification information, performance data, student group data, and student responses (for constructed-response questions only). The purpose of the tool is to provide teachers, researchers, and educators with greater access to NAEP assessment exercises.

The tool also allows users to print selected questions and all their relevant information.

How to Access

The direct URL link to the NAEP Questions Tool is http://nces.ed.gov/nationsreportcard/itmrls, or click NAEP Questions on The Nation’s Report Card™ home page.

What information can I get about each question?

When you select a question to view, a screen similar to the one below will be displayed.

Information related to a selected question is available by clicking the tabs at the top of the screen. A description of these tabs follows.
**Question:** When the screen first appears, the question will be displayed, and the **Question** tab will be highlighted. When you are viewing related information other than the question itself, click on this tab to re-display the question.

*Links within the question:* The question and related graphics or text passages may not fit on the screen area without scrolling. Some questions have associated content such as reading passages or maps. To see these materials, click on the link labeled “View reading passage” or “additional materials.” This text varies depending on the subject.

Note that the questions have been formatted to display on the screen and may not be presented in the same way as they were to the student.
Performance Data: Shows information about how students scored on the question.

For Multiple-Choice Questions: Shows the percentage of students who answered the question incorrectly or correctly, or who omitted the item.

![2007 National Performance Results](image)

Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

For Constructed-Response Questions: Shows the percent correct by score level.

![2007 National Performance Results](image)

Note:
- These results are for public and nonpublic school students.
- Percentages may not add to 100 due to rounding.

The scoring criteria will vary depending on the subject and type of question. Click on the Scoring Guide/Key tab to see a description of the score levels used for each constructed-response question, and the Student Response Tab to see sample student responses at each score level.
**Content Classification**: Shows information about how the question relates to the subject area framework. This includes a description of the content domain—what is being assessed—and the cognitive skills within that domain.

<table>
<thead>
<tr>
<th>Historical Theme</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gathering of People, Cultures, Ideas</td>
</tr>
</tbody>
</table>

Use the links on the upper right of the Content Classification screen to move between the sections of the screen. Note that the name of the links will vary depending on subject and question type.
**Scoring Guide/Key:** Shows information about how the question was scored.

*For Multiple-Choice Questions:* Shows the “key” or correct answer for the question.

**Key**

3. The first permanent English settlement in North America was

A) St. Augustine  
B) Santa Fe  
C) Jamestown  
D) New Amsterdam

*For Constructed-Response Questions:* Shows the scoring guide used to determine the score for the student’s answer.

**Scoring Guide**

<table>
<thead>
<tr>
<th>Score &amp; Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Appropriate</strong></td>
</tr>
<tr>
<td>The response indicates that the Civil War was a threat to the nation by specifically referring to the split between the North and the South.</td>
</tr>
<tr>
<td><strong>Partial</strong></td>
</tr>
</tbody>
</table>
| The response mentions the Civil War, but does not fully make the link between the war and the threat to the nation.  
OR response mentions Civil War but contains a significant inaccuracy.  
OR the response mentions split but does not mention Civil War. |
| **Inappropriate**   |
| The response does not explain why the nation was in danger. |

Note that the scoring criteria will vary depending on the subject and type of question.
**Student Responses:** Shows *actual* student responses to the question for each score level.

Use the scroll bar to move between the sections of the screen. Note that student responses are available only for constructed-response questions.

In some subjects, you will find a **Scorer’s Commentary** button after the student responses. Each subject offers a different model for the scorer’s commentary—some provide one for every response, others for both responses. The scorer’s commentary gives you additional information on why the response received the score that it did and often refers back to the scoring guide.

---

<table>
<thead>
<tr>
<th>Appropriate - Student Response</th>
</tr>
</thead>
<tbody>
<tr>
<td>6. Look carefully at the painting of a western town shown above. Describe three specific things you see in the painting that could have made people want to become settlers in the West.</td>
</tr>
<tr>
<td>1. The vast open space would bring settlers who wanted to own land.</td>
</tr>
<tr>
<td>2. The peaceful lake would bring settlers who wanted peace and quiet.</td>
</tr>
<tr>
<td>3. The train would bring settlers who wanted an easier way to travel.</td>
</tr>
</tbody>
</table>
**More Data:** Provides question-level data that indicates how students across the nation performed on individual questions. The “more data” tab can also be used to explore student group performance (males and females) on individual items.

### All students

<table>
<thead>
<tr>
<th></th>
<th>Inappropriate</th>
<th>Partial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avg. Score (S.E.)</strong></td>
<td>192 (2.1)</td>
<td>210 (1.4)</td>
</tr>
<tr>
<td><strong>Row Pct. (S.E.)</strong></td>
<td>14 (0.9)</td>
<td>6</td>
</tr>
</tbody>
</table>

### Gender

<table>
<thead>
<tr>
<th></th>
<th>Inappropriate</th>
<th>Partial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avg. Score (S.E.)</strong></td>
<td>191 (3.1)</td>
<td>214 (2.0)</td>
</tr>
<tr>
<td><strong>Row Pct. (S.E.)</strong></td>
<td>13 (1.2)</td>
<td>56</td>
</tr>
<tr>
<td>Male</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>194 (2.8)</td>
<td>205 (1.6)</td>
</tr>
<tr>
<td><strong>Row Pct. (S.E.)</strong></td>
<td>14 (1.2)</td>
<td>56</td>
</tr>
</tbody>
</table>

### Region of the country (2003 and later)

<table>
<thead>
<tr>
<th></th>
<th>Inappropriate</th>
<th>Partial</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Avg. Score (S.E.)</strong></td>
<td>13 (1.9)</td>
<td>214 (2.0)</td>
</tr>
<tr>
<td><strong>Avg. Score (S.E.)</strong></td>
<td>9 (1.7)</td>
<td>217 (3.4)</td>
</tr>
</tbody>
</table>

Information about the performance of the following student groups is included on the More Data screen:

- All students
- Gender
- Region of the Country
- Race/Ethnicity
- Type of School (public/nonpublic)
- Type of Location
- National School Lunch Program
Where can I find more information about the subjects NAEP assesses?

The NAEP website contains a wealth of information about the subjects NAEP assesses. Just click on one of the subject area links to find out more. The URL for the site is http://nces.ed.gov/nationsreportcard/.

Additional Help

For more help with features on the NAEP website, click Help in the banner.

For additional help, write to us via Contact Us, or e-mail Sherran.Osborne@ed.gov.
Information About
National Assessment of Educational Progress
2009 Assessments
Mathematics, Reading, and Science

PROJECT MISSION. NAEP is administered by the U.S. Department of Education to report on the achievement of American students in key academic subjects. For more information about the NAEP program, visit the NAEP website at http://nces.ed.gov/nationsreportcard or call 202–502–7420.

PARTICIPATION. States and districts that receive Title I funds are required to participate in biennial NAEP reading and mathematics assessments at grades 4 and 8. Student participation is always voluntary. Contact your school’s NAEP coordinator for more information.

NAEP CONTENT. The National Assessment Governing Board develops frameworks detailing what students reasonably might be expected to know and do for each subject assessed by NAEP. For additional information on framework development, see the Governing Board’s website at http://www.nagb.org.

SAMPLE NAEP QUESTIONS. For each assessment, some of the test questions, along with performance data, are made available to the public to provide concrete samples of NAEP contents and results. For every assessment, NAEP distributes to participating schools sample questions booklets that provide more detailed information about the assessment design and questions. Released questions and student performance data may be viewed on and downloaded from the NCES website at http://nces.ed.gov/nationsreportcard/itmrls.

SECURE NAEP QUESTIONS. On written request, adults may review NAEP questions and instruments still in use. These arrangements must be made in advance, and persons reviewing the assessment may not remove the booklets from the room, copy them, or take notes. Contact your school’s NAEP coordinator for more information.

NAEP REPORTS. NAEP publications can be searched and downloaded from the NAEP website at http://nces.ed.gov/nationsreportcard.

FOR FURTHER INFORMATION. For prompt field staff support on these or other matters, call the NAEP Help Desk at 800–283–6237.

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