

## GRADE 4 SESSION SCRIPTS

<b>Grade 4 Regular Session Script</b> . . . . .	<b>1.1</b>
<b>NAEP Accommodations Guidelines</b> . . . . .	<b>2.1</b>
<b>Grade 4 Accommodation Script</b> . . . . .	<b>3.1</b>

# 4<sup>th</sup>

## 2009 NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

### SESSION SCRIPT: GRADE 4

---

## Introduction

Good morning/afternoon, everyone! My name is **(YOUR NAME)**. Today you are participating in a test called NAEP, also known as The Nation's Report Card. NAEP is a way to show what students like you – from all around the country – know and can do in different subjects. You and your school were especially chosen to represent other fourth-graders and schools across **(STATE NAME)** and the United States.

Here are some things to remember when you take NAEP: the test takes about 90 minutes and not everyone takes the same test; some of you will take reading, others math or science. You will also see some questions about yourself and your experiences in and out of school. Do not write your name on the work you do; no one in the school will see your answers. Your answers will be combined with information from other students across **(STATE NAME)** and the United States. Because your responses help our country's leaders and teachers to find out what students your age are learning, it is very important that you try your very best.

## Distribute Materials

### Option 1: Booklets and Materials Not Previously Distributed

---

Before I hand out your materials, please clear your desks. As I call your name, please come forward to get a booklet and pencil. After you get your booklet, place it face up on your desk and do not open it until I tell you to.

- Read students' names in Administration Schedule order to distribute booklets and NAEP pencils.
- Record a "✓" or an "A" in column A (Atten.) of the Administration Schedule.
- Double-check that each student's name and booklet ID on the Administration Schedule match the booklet label.

## Option 2: Booklets and Materials Previously Distributed

Each of you should have a booklet and a pencil on your desk. Do not open your booklets until I tell you to. If the booklet in front of you does not have your name on the label, please raise your hand.

- Assist students with incorrect booklets.
- Collect all unused booklets and materials.

## Remove Label

Now remove the label with your name on it from the booklet cover. Place the label on the upper-right corner of your desk.

## Additional Materials

The assessment you are taking today uses many different booklets, each with different questions. Some may have sections in which you will need to use something extra, like a ruler or other materials. Please look now and remove any extra materials inside the front cover of your booklet.

- Pause and wait for students to remove items.

If you have extra materials, put them on the upper-left corner of your desk. The instructions in your booklet will tell you when you need to use them.

## Code the Booklet Cover

Now, please look at the top-right corner of your booklet cover. If you have a mathematics booklet, locate the name of your **math** teacher on the board. Write your teacher's two-digit number on your booklet cover in the boxes labeled "Teacher Number."

- As you read the script, point to the teacher numbers on the board and the "Teacher #" boxes on the Booklet Cover Poster.
- Repeat instructions as necessary to make sure students understand what to do.

---

If you have a reading booklet, locate the name of your **reading** teacher on the board. Write your teacher’s two-digit number on your booklet cover in the boxes labeled “Teacher Number.”

- As you read the script, point to the teacher numbers on the board and the “Teacher #” boxes on the Booklet Cover Poster.
- Repeat instructions as necessary to make sure students understand what to do.

If you have a science booklet, locate the name of your **science** teacher on the board. Write your teacher’s two-digit number on your booklet cover in the boxes labeled “Teacher Number.”

- As you read the script, point to the teacher numbers on the board and the “Teacher #” boxes on the Booklet Cover Poster.
- Repeat instructions as necessary to make sure students understand what to do.

If the name of your math, reading, or science teacher is not listed on the board, please raise your hand.

- Point to the teacher names and teacher numbers on the board.
- Assist students whose teachers are not listed on the board. If the teacher is not listed on the Roster, write the name of the teacher on the booklet cover and follow up with your AC after the assessment.

## Booklet Directions

Now open your booklet to the directions on the first two pages. Read the directions to yourself as I read them out loud. If you have any questions, raise your hand.

- Do not admit any more students into the session.
- Read the directions, examples, and answers on the next two pages to the students.

**DIRECTIONS**

Your booklet has several sections. In each of Sections 1 and 2, you will have 25 minutes to answer questions about a school subject. Sections 3 and 4 ask questions about you and your classes. You will be told when to begin each section. Stop when you see this sign.



You should think carefully about your answers and answer every question. Use all the time available to complete each section. If you skip a question, go back and try to answer it before time is called.

Some of the questions ask you to choose the best answer and fill in the oval in your booklet. Example 1 shows a question like this. Read the question and fill in the oval beside the choice that you think is correct.

**Example 1**

How many minutes are there in an hour?
<input type="radio"/> A 12
<input type="radio"/> B 24
<input type="radio"/> C 30
<input type="radio"/> D 60

You should have filled in the oval for “60” because there are 60 minutes in an hour.

Other questions will ask you to write your answer on the blank line provided in your booklet. Now read Example 2 and write your answer on the blank line below.

**Example 2**

Add 32 and 14.
Answer _____

You should answer this question by writing 46 on the answer line provided.

**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  sign at the end of each section until you are told to do so.



## Cognitive Section

- Set timer for 4 minutes.

Now turn to the next set of directions. You will have 4 minutes to read them to yourself.

Please begin.

- Start timer.
- When all students have finished reading the directions, but after no more than 4 minutes, say:

Please stop.

### SECTION 1

Now turn to the beginning of Section 1. Some of you will need to use a calculator for at least one part of your booklet. If so, there will be a sentence at the top of the page that says, "You will need a calculator for this section." If you see this sentence, raise your hand now and I'll give you a calculator.

- Distribute blue calculators, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Set timer for 25 minutes.

If you don't know how to use the calculator, there are instructions at the beginning of the section and on the back cover of your booklet to help you. If you need help with the calculator at any time, please raise your hand.

You will have 25 minutes to complete Section 1. While you are working in this section, I can't help you answer the questions or explain words to you. You may either print or write your answers in cursive. Also, don't worry if the person next to you is working on questions that do not look like the ones you are working on. Not everyone has the same booklet.

Some questions may require 5 minutes or more for you to think about and answer. Think carefully about the question and write a complete answer. It's important to show all of your work. If you need another pencil at any time, please raise your hand.

---

Carefully read the directions at the beginning of the section and then start working. Please begin.

- Start timer.
- Monitor students, making sure they are working in the correct section of their booklets and using a calculator or ruler only in a calculator or ruler section.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work in this section only. You may not read or do other school work.

- After 10 minutes, say:

Please stop.

Raise your hand if you have a NAEP calculator and I will collect it.

- Collect calculators. Count calculators to make sure you collected all the calculators you distributed.

## **SECTION 2**

Now go to the beginning of Section 2.

If you see the sentence, “You will need a calculator for this section,” please raise your hand.

- Distribute blue calculators, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Set timer for 25 minutes.

You will have 25 minutes to complete Section 2. Carefully read the directions and then start working. Please begin.

- Start timer.
- Monitor students, making sure they are working in the correct section of their booklets and using a calculator or ruler only in a calculator or ruler section.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work in this section only. You may not read or do other school work.

- After 10 minutes, say:

Please stop.

Raise your hand if you have a NAEP calculator and I will collect it.

- Collect calculators. Count calculators to make sure you collected all the calculators you distributed.

## Background Section

### SECTION 3

Now look at the directions for Sections 3 and 4. Read them to yourself as I read them out loud.

- Read the directions, example, and answer choices on the next page to the students.

## DIRECTIONS

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  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.



Now turn to the beginning of Section 3. I am going to read each question in Section 3 to you. Be sure to listen carefully and then mark your answer in your booklet.

**IF NEW JERSEY, SAY:**

If you do not want to answer Questions 1 and 2 about your race or ethnicity, you may leave them blank.

- Read the questions and answer choices beginning on the next page to the students.

**SECTION 3**

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**. VB331330
- A No, I am not Hispanic or Latino.
  - B Yes, I am Mexican, Mexican American, or Chicano.
  - C Yes, I am Puerto Rican or Puerto Rican American.
  - D Yes, I am Cuban or Cuban American.
  - E Yes, I am from some other Hispanic or Latino background.
2. Which of the following best describes you? Fill in **one or more ovals**. VB331331
- A White
  - B Black or African American
  - C Asian
  - D American Indian or Alaska Native
  - E Native Hawaiian or other Pacific Islander

## Section 3

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? VB331333
- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.
4. Does your family get any magazines regularly? VB331334
- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.
5. About how many books are there in your home? VB331335
- Ⓐ 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? VB331336
- Ⓐ Yes
- Ⓑ No
7. Is there an encyclopedia in your home? It could be a set of books, or it could be on the computer. VB331337
- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.
8. About how many pages a day do you have to read in school and for homework? TB001101
- Ⓐ 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? VB331339
- Ⓐ 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

VB331451

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



**SECTION 4**

- Set timer for 10 minutes.

Now turn to the beginning of Section 4. You will have 10 minutes to work on this section on your own. While you work, I will collect the label from your desk. Please begin.

- Start timer.
- Walk through the room and collect the labels from every desk. Tear them up and throw them away.
- If NIES, as you collect the labels, place the NIES appointment cards on the upper-right corner of the desks of students selected for NIES.
- When all students have finished Section 4, but after no more than 10 minutes, say:

Please stop working. Now close your booklet and place it face up on your desk.

**SECTION 5 – ESBQ, If Required**

- Set timer for 5 minutes.

Now take out Section 5 from the back of your booklet.

**Remove Label**

Remove the label with your name on it from the booklet cover. Place the label on the upper-right corner of your desk. While you work, I will collect the label from your desk.

You will have 5 minutes to work on this section on your own. Please begin.

- Start timer.
- Walk through the room and collect the labels from every desk. Tear them up and throw them away.
- When all students have finished Section 5, but after no more than 5 minutes, say:

Please stop working. Now close your booklet and place it face up on top of your other booklet.

---

## Collect Materials

### Option 1: Student Comes Forward With Materials

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of your booklet cover. If you have a packet of materials, make sure to place the materials back in the bag. As I call your name, please come forward with your assessment booklet and materials, and then return to your seat.

- Allow students offered the extended time accommodation to continue working on the cognitive sections of the assessment, if necessary.
- Read students' names in Administration Schedule order to collect booklets and ancillary materials.
- Verify that each student has returned an assessment booklet with any used ancillary materials.
- If the ESBQ was administered in the school, verify that each student returned the ESBQ booklet.

### Option 2: AA Goes Around the Room to Collect Materials

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of your booklet cover. If you have a packet of materials, make sure to place the materials back in the bag. Then, place the assessment booklet on an upper corner of your desk.

- Allow students offered the extended time accommodation to continue working on the cognitive sections of the assessment, if necessary.
- Collect the booklets and the ancillary materials.
- Verify that every student has returned an assessment booklet with any used ancillary materials.
- If the ESBQ was administered in the school, verify that each student returned the ESBQ booklet.

## NIES Student Survey, If Required

### Option 1: NIES to Be Administered Immediately Following the NAEP Assessment

---

Some of you have been invited to take a special survey after the NAEP assessment. If you have an appointment card on your desk, please remain here when I dismiss the other students. The survey should only take 15–20 minutes and then you can return to class.

- When all of the other students have left and you have accounted for all of the session materials, escort those students to the location where the NIES will be administered, if necessary.

### Option 2: NIES to Be Administered at a Later Time

---

If you have an appointment card on your desk, you have been invited to take a special survey after the NAEP assessment. Please refer to your appointment card for the time and location where the survey will take place. The survey should only take 15–20 minutes and then you can return to class.

## Thank and Dismiss Students

Before you leave I have a certificate of appreciation for each of you. On your pencil you'll notice the website address for the National Assessment of Educational Progress. Visit this website if you would like more information about the assessment you just completed.

Thank you very much for your work here today.

- Distribute Student Appreciation Certificates.
- Dismiss students according to school policy.

# GRADE 4: NAEP ACCOMMODATIONS GUIDELINES

**General Guidelines:** Use the accommodation script whenever a separate session is required. The following accommodations typically require a separate session, but refer to the accommodation chart in chapter 5.

Accommodation	Guidelines for the Person Administering the Accommodation
<ul style="list-style-type: none"> <li>Bilingual booklet</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate, bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Directions read aloud in native language (Spanish)</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate, bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Test items read aloud in native language (Spanish)</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Read aloud – most or all</li> </ul>	<ul style="list-style-type: none"> <li>For mathematics booklets, use the Mathematics Read-Aloud Guidelines for details on how to read certain mathematical symbols and equations.</li> </ul>
<ul style="list-style-type: none"> <li>Test items signed</li> </ul>	<ul style="list-style-type: none"> <li>For mathematics booklets, use the Mathematics Read-Aloud Guidelines for details on how to sign certain mathematical symbols and equations.</li> </ul>
<ul style="list-style-type: none"> <li>Braille version of test</li> </ul>	<ul style="list-style-type: none"> <li>If a scribe is used, when a constructed response is required, the scribe should write exactly what the student says. A student responding orally should indicate when a sentence ends and another one begins. There is no need for a student to indicate grammar or punctuation, provided that the answer can be read and understood. The student should spell the word only when it is critical to distinguish meaning. The scribe should use the matching, regular assessment booklet to record student answers.</li> <li>Use the companion booklet to follow along with the student.</li> </ul>
<ul style="list-style-type: none"> <li>Responds in sign language</li> </ul>	<ul style="list-style-type: none"> <li>When a constructed response is required, the interpreter/scribe should write exactly what the student signs. A student should indicate when one sentence ends and another begins. There is no need for the students to indicate grammar or punctuation, provided that the answer can be read and understood.</li> </ul>
<ul style="list-style-type: none"> <li>Responds orally to scribe</li> </ul>	<ul style="list-style-type: none"> <li>When a constructed response is required, the scribe should write exactly what the student says. A student responding orally should indicate when a sentence ends and another one begins. There is no need for a student to indicate grammar or punctuation, provided that the answer can be read and understood. The student should spell the word only when it is critical to distinguish meaning.</li> <li>The scribe should show the student the written response after the student completes it, but NOT read the response to the student. The student will get one chance to make revisions, and then will need to move on to the next question.</li> </ul>
<ul style="list-style-type: none"> <li>Small group</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate accommodation session script.</li> </ul>
<ul style="list-style-type: none"> <li>School staff administers</li> </ul>	<ul style="list-style-type: none"> <li>School staff will use the grade-appropriate accommodation session script.</li> </ul>
<ul style="list-style-type: none"> <li>Breaks during test</li> </ul>	<ul style="list-style-type: none"> <li>There are no specific NAEP requirements regarding the length of time for a break, how often the breaks are taken, or whether the student has contact with other students during the breaks. The test must, however, be administered during a single day.</li> </ul>

## Mathematics Read-Aloud Guidelines

Read-aloud examples are given for the following categories: 1. Numbers; 2. Symbols; 3. Operations; 4. Expressions; and 5. Vocabulary. Information is provided about reading Figures and Graphs.

### 1. Numbers

Description	Example(s)	Read as:
General	0	Zero (not "oh")
Large whole numbers	632,407,981	"six three two comma four zero seven comma nine eight one"
	45,000,689,112	"four five comma zero zero zero comma six eight nine comma one one two"
Decimal numbers	0.056	"zero point zero five six"
	4.37	"four point three seven"
Fractions - common	$\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{2}{3}$ , $\frac{4}{5}$	"one half, one fourth, two thirds, four fifths" Other common fractions include "sixths, eighths, tenths"
Fractions - not common - read as "numerator over denominator"	$\frac{14}{25}$	"fourteen over twenty-five"
	$\frac{487}{6972}$	"four hundred eighty-seven over six thousand nine hundred seventy-two"
Mixed numbers - read with "and" between whole number and fraction	$3\frac{1}{2}$	"three and one-half"
	$57\frac{3}{4}$	"fifty-seven and three fourths"
Percents	62%	"sixty-two percent"
	7.5%	"seven point five percent"
	0.23%	"zero point two three percent"
Money - if contains a decimal point, read as "dollars AND cents"	\$4.98	"four dollars and ninety-eight cents"
	\$0.33	"thirty-three cents"
	\$5,368	"five thousand, three hundred sixty-eight dollars"
Negative numbers - do NOT read negative sign as "minus."	- 3	"negative three"
	$-\frac{5}{8}$	"negative five eighths"
	- 7.56	"negative seven point five six"
Dates (years)	1987	"nineteen eighty-seven"
	2005	"two thousand five"
Roman Numerals	I	"Roman Numeral one"
	II	"Roman Numeral two"
	III	"Roman Numeral three"
	IV	"Roman Numeral four"

## Mathematics Read-Aloud Guidelines (continued)

### 2. Symbols

Description	Example(s)	Read as:
Operation symbols	$+$ $-$ $\times$ $\div$	“plus” “minus” “times” “divided by”
Powers and roots	$7^2$ $5^3$ $2^4$ $\sqrt{6}$	“seven squared” “five cubed” “two to the fourth power” “the square root of six”
Parentheses - read as “the quantity”	$3(x + 2)$ $(y - 5) \div 6$	“three times the quantity ‘x’ plus two” “the quantity ‘y’ minus five (pause) divided by six”
Ratios	<b>the ratio 2:3</b> <b>the ratio 3:5:9</b>	“the ratio two to three” “the ratio three to five to nine”
Absolute value	$ 3 $ $ -6 $ $ x + 2 $	“the absolute value of three” “the absolute value of negative six” “the absolute value of ‘x’ plus two”
Miscellaneous	$\pi$ $=$ $\approx$ $<$ $\leq$ $>$ $\geq$ $\angle$ (as in $\angle AOB$ ) $^{\circ}\text{F}$ $^{\circ}\text{C}$	“pi” “is equal to” “approximately equal to” “is less than” “less than or equal to” “is greater than” “greater than or equal to” “angle” as in “angle ‘A’ ‘O’ ‘B’” “degrees ‘F’” “degrees ‘C’”

## Mathematics Read-Aloud Guidelines (continued)

### 3. Operations

Description	Example(s)	Read as:
Addition – Vertical	$\begin{array}{r} 13 \\ + 27 \\ \hline \end{array}$	“thirteen plus twenty-seven equals”
Horizontal	$13 + 27 =$	“thirteen plus twenty-seven equals”
Subtraction – Vertical	$\begin{array}{r} 487 \\ - 159 \\ \hline \end{array}$	“four hundred eighty-seven minus one hundred fifty-nine equals”
Horizontal	$487 - 159 =$	“four hundred eighty-seven minus one hundred fifty-nine equals”
Multiplication – Vertical	$\begin{array}{r} 63 \\ \times 49 \\ \hline \end{array}$	“sixty-three times forty-nine equals”
Horizontal	$63 \times 49 =$	“sixty-three times forty-nine equals”
Division – Vertical	$\begin{array}{r} 8 \\ 15 \overline{)120} \end{array}$	“fifteen into one hundred twenty equals eight”
Horizontal	$120 \div 15 = 8$	“one hundred twenty divided by fifteen equals eight”
The answer choices to questions such as “Divide: $4 \overline{)121}$ ”	Math division answer choices or math expressions that contain the letter “R” — such as <b>30 R1</b>	“thirty ‘R’ one” (Do NOT read “R” as “remainder”)
Operations with boxes or shapes	$3 + \square = 15$ $\square + \triangle = 26$	“three plus box equals fifteen” “box plus triangle equals twenty-six”

## Mathematics Read-Aloud Guidelines (continued)

### 4. Expressions

Description	Example(s)	Read as:
Expressions containing variables (any letter may be used as a variable)	$N + 4$ $8x - 3$ $4(y - 2) + 5 = 7$ $y = x^2 + 6x - 1$ $V = \frac{4}{3}\pi r^3$ $\frac{ t - 2 }{6} \leq 15$ $x^2 y^3 = -36$	“N’ plus four” “eight ‘x’ minus three” “four times the quantity ‘y’ minus two (pause) plus five equals seven” “y’ equals ‘x’ squared plus six ‘x’ minus one” “V’ equals four-thirds pi ‘r’ cubed” “the absolute value of ‘t’ minus two (pause) over six is less than or equal to fifteen” “x’ squared ‘y’ cubed equals negative thirty-six”
Coordinate pairs	the point $(-1, 2)$ The point A is at $(6, 3)$ . A. $(-3, -4)$	“the point (pause) negative one comma two” “The point ‘A’ is at (pause) six comma three.” “A’ (pause) negative three comma negative four”
Answer choices with no other text	B. $\left(\frac{2}{3}, \frac{1}{5}\right)$	“B’ (pause) two-thirds comma one-fifth”

## Mathematics Read-Aloud Guidelines (continued)

### 5. Vocabulary

Vocabulary	Read as:
congruent	con' gru ent
kilograms	kil' ō grams
kilometers	kil om' ě ters
isosceles	ī sōs' ě lēs
pentagonal	pen tag' ō nal
perimeter	per im' ě ter
Pythagorean	pi thag' ōr ē an
quadrilateral	qua' drī lat er al
quartile	quar' tile
theorem	thēr' um
x-intercept	“x” in ter cept
y-intercept	“y” in ter cept

### Figures and Graphs

The text and numbers in figures should be read as shown in the previous tables.

No additional description or information should be provided.

Abbreviations (e.g., units such as “cm” or “ft”) should be read letter by letter (e.g., “cm” should be read as “c” “m,” NOT as “centimeters” and “ft” should be read as “f” “t,” NOT as “feet”).

A stem-and-leaf plot such as the one shown below should be read as indicated.

1	3	5	5	9
3	1			
4	2	6	7	

Read as: “The first row is one, **bar**, three, five, five, nine.  
The second row is three, **bar**, one.  
The third row is four, **bar**, two, six, seven.”

# 4<sup>th</sup>

## 2009 NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

### SESSION SCRIPT: GRADE 4 ACCOMMODATION

#### Introduction

- Place the booklets and NAEP pencils on the desks prior to the session. If there are extra materials inside the booklet covers, remove them from the booklets and place them on the upper-left corner of the desk.
- When all students have arrived, collect all unused booklets and materials. Remove the label from each booklet cover and place it on the upper-right corner of the desk.
- **A note about students who require Extended Time:** All instructions regarding timing are printed in blue throughout the script. If a student requires extended time, skip all blue text in the script. Be sure to note the time each student begins working on the cognitive sections and the time the student finishes. When most or all students are done with the section, move on to the next section. If a student needs considerably more time than the others, tell him/her that there will be time at the end of the session to go back to that section.

Good morning/afternoon, everyone! My name is **(YOUR NAME)**. Today you are participating in a test called NAEP, also known as The Nation's Report Card. NAEP is a way to show what students like you—from all around the country—know and can do in different subjects. You and your school were especially chosen to represent other fourth-graders and schools across **(STATE NAME)** and the United States.

Here are some things to remember when you take NAEP: the test takes about 90 minutes and not everyone takes the same test; some of you will be answering questions in reading, math, or science. You will also see some questions about yourself and your experiences in and out of school. Do not write your name on the work you do; no one in the school will see your answers. Your answers will be combined with information from other students across **(STATE NAME)** and the United States. Because your responses help our country's leaders and teachers to find out what students your age are learning, it is very important that you try your very best.

## Additional Materials

- Read the next paragraph only if students have ancillaries.

Some of your booklets may have sections in which you will need to use something extra, like a ruler or other materials. If so, you will find them on the upper-left corner of your desk. The instructions in your booklet will tell you when you need to use them.

## Record Teacher Names

Now, I need to find out the name of your teacher.

- Look at each student's booklet cover to determine the subject in which the student is being assessed. Ask each student to tell you his/her teacher's name. Then, refer to the Roster of Questionnaires for the teacher number and record the appropriate teacher number on the booklet cover.
- For students whose teachers are not listed on the roster, write the teacher name on the booklet cover.

## Booklet Directions

Now open your booklet to the directions on the first two pages. Read the directions to yourself as I read them out loud. If you have any questions, raise your hand.

- Do not admit any more students into the session.
- Read the directions, examples, and answers on the next two pages to the students.

## DIRECTIONS

Your booklet has several sections. In each of Sections 1 and 2, you will have 25 minutes to answer questions about a school subject. Sections 3 and 4 ask questions about you and your classes. You will be told when to begin each section. Stop when you see this sign.



You should think carefully about your answers and answer every question. Use all the time available to complete each section. If you skip a question, go back and try to answer it before time is called.

Some of the questions ask you to choose the best answer and fill in the oval in your booklet. Example 1 shows a question like this. Read the question and fill in the oval beside the choice that you think is correct.

### Example 1

How many minutes are there in an hour?

- Ⓐ 12
- Ⓑ 24
- Ⓒ 30
- Ⓓ 60

You should have filled in the oval for “60” because there are 60 minutes in an hour.

Other questions will ask you to write your answer on the blank line provided in your booklet. Now read Example 2 and write your answer on the blank line below.

### Example 2

Add 32 and 14.

Answer \_\_\_\_\_

You should answer this question by writing 46 on the answer line provided.

**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  sign at the end of each section until you are told to do so.



---

## Cognitive Section

### Non-read aloud

- Set timer for 4 minutes.

Now turn to the next set of directions. You will read them to yourself. **You will have 4 minutes.** Please begin.

- Start timer.
- When all students have finished reading the directions, say:

### Read aloud

Now look at the next set of directions and read them to yourself as I read them out loud.

- Read the directions and example in the booklet to the students. Then, say:

## SECTION 1

Now turn to the beginning of Section 1.

- Read the next two paragraphs only if students require calculators.

Some of you will need to use a calculator for at least one part of your booklet. If so, there will be a sentence at the top of the page that says, "You will need a calculator for this section." If you see this sentence, raise your hand now and I'll give you a calculator.

If you don't know how to use the calculator, there are instructions at the beginning of the section and on the back cover of your booklet to help you. If you need help with the calculator at any time, please raise your hand.

- Distribute blue calculators, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.

While you are working in this section, I can't help you answer the questions or explain words to you. You may either print or write your answers in cursive.

Some questions may require 5 minutes or more for you to think about and answer. Think carefully about the question and write a complete answer. It's important to show all of your work.

If you have any questions or need another pencil at any time, please raise your hand.

**Non-read aloud**

- Set the timer for 25 minutes.

Carefully read the directions at the beginning of the section and then start working. You will have 25 minutes to complete this section. Please begin.

- Start timer.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read or do other school work.

- After 10 minutes, say:

Please stop.

**Read aloud**

Read the next set of directions to yourself as I read them out loud.

- Read the directions to the students.
- For each student, note the time the section begins.

Let's begin.

- Read the questions and answer choices in the booklet to the students.
- If a math session, refer to the *Mathematics Read-Aloud Guidelines* for guidance on how to read math problems aloud.

- Monitor students, making sure they are working in the correct section of their booklets and using a calculator or ruler in a calculator or ruler section. This is easily identifiable by a "C" or "R" on the booklet page.
- If a student finishes before the others in the group, prompt him/her to go back and review the current section.
- Collect calculators if any were distributed. Make sure to account for all calculators.

## SECTION 2

Now turn to the beginning of Section 2.

- Read the next sentence only if students require calculators.

If you see the sentence, “You will need a calculator for this section,” please raise your hand.

- Distribute blue calculators, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.

### Non-read aloud

- Set the timer for 25 minutes.

Carefully read the directions and then start working. You will have 25 minutes to complete this section. Please begin.

- Start timer.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read or do other school work.

- After 10 minutes, say:

Please stop.

### Read aloud

Read the next set of directions to yourself as I read them out loud.

- Read the directions in the booklet to the students.
- For each student, note the time the section begins.

Let’s begin.

- Read the questions and answer choices in the booklet to the students.
- If a math session, refer to the *Mathematics Read-Aloud Guidelines* for guidance on how to read math problems aloud.

- Monitor students, making sure they are working on the correct section of their booklets and using a calculator or ruler in a calculator or ruler section. This is easily identifiable by a “C” or “R” on the booklet page.
- If a student finishes before the others in the group, prompt him/her to go back and review the current section.
- Collect calculators if any were distributed. Make sure to account for all calculators.

## Background Section

### SECTION 3

Now look at the directions for Sections 3 and 4. Read them to yourself as I read them out loud.

- Read the directions, example, and answer choices on the next page to the students.

## DIRECTIONS

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  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.



Now turn to the beginning of Section 3. I am going to read each question in Section 3 to you. Be sure to listen carefully and then mark your answer in your booklet.

**IF NEW JERSEY, SAY:**

If you do not want to answer Questions 1 and 2 about your race or ethnicity, you may leave them blank.

- Read the questions and answer choices beginning on the next page to the students.

## SECTION 3

### Section 3

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**.

VB331330

- A No, I am not Hispanic or Latino.
- B Yes, I am Mexican, Mexican American, or Chicano.
- C Yes, I am Puerto Rican or Puerto Rican American.
- D Yes, I am Cuban or Cuban American.
- E Yes, I am from some other Hispanic or Latino background.

2. Which of the following best describes you? Fill in **one or more ovals**.

VB331331

- A White
- B Black or African American
- C Asian
- D American Indian or Alaska Native
- E Native Hawaiian or other Pacific Islander

## Section 3

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? VB331333
- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.
4. Does your family get any magazines regularly? VB331334
- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.
5. About how many books are there in your home? VB331335
- Ⓐ 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? VB331336
- Ⓐ Yes
- Ⓑ No
7. Is there an encyclopedia in your home? It could be a set of books, or it could be on the computer. VB331337
- Ⓐ Yes
- Ⓑ No
- Ⓒ I don't know.
8. About how many pages a day do you have to read in school and for homework? TB001101
- Ⓐ 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? VB331339
- Ⓐ 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

VB331451

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



**SECTION 4****Non-read aloud**

- Set timer for 10 minutes.

Now turn to the beginning of Section 4. You will have 10 minutes to work on this section. You will do this section on your own. Please begin.

- Start timer.

**Read aloud**

Now turn to the beginning of Section 4 and read to yourself as I read out loud. Let's begin.

- Read the directions, questions, and answer choices in the booklet to the students.

- When all students have finished the section, move on to the next section.

**SECTION 5 – ESBQ, If Required****Non-read aloud**

- Set timer for 5 minutes.

Now take out Section 5 from the back of your booklet.

- Remove the label from the ESBQ booklet cover and place it on the upper-right corner of the desk.

You will do this section on your own. You will have 5 minutes to complete this section. Please open your booklet and begin.

- Start timer.

**Read aloud**

Now take out Section 5 from the back of your booklet.

- Remove the label from the ESBQ booklet cover and place it on the upper-right corner of the desk.

Open your booklet and read to yourself as I read out loud. Let's begin.

- Read the directions, questions, and answer choices in the booklet to the students.

- When all students have finished with the section, move on to the next section.

---

## Collect Materials

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of your booklet cover. If you have a packet of materials, make sure to place the materials back in the bag.

- Collect the booklets, ESBQs (if administered), ancillaries, and student ID labels. Tear up the ID labels and throw them away.
- If NIES, as you collect the materials, place the NIES appointment cards on the upper-right corner of the desks of students selected for NIES.
- If a student needed considerably more time than the others for the cognitive sections, allow him/her to continue working on the cognitive sections only.

## NIES Student Survey, If Required

### Option 1: NIES to Be Administered Immediately Following the NAEP Assessment

---

Some of you have been invited to take a special survey after the NAEP assessment. If you have an appointment card on your desk, please remain here when I dismiss the other students. The survey should only take 15–20 minutes and then you can return to class.

- When all of the other students have left and you have accounted for all of the session materials, escort those students to the location where the NIES will be administered, if necessary.

### Option 2: NIES to Be Administered at a Later Time

---

If you have an appointment card on your desk, you have been invited to take a special survey after the NAEP assessment. Please refer to your appointment card for the time and location where the survey will take place. The survey should only take 15–20 minutes and then you can return to class.

## Thank and Dismiss Students

On your pencil, you'll notice the website address for the National Assessment of Educational Progress. Visit this website if you would like more information about the assessment you just completed.

Thank you very much for your work here today. Before you leave, I have a certificate of appreciation for each of you.

- Distribute Student Appreciation Certificates.
- Dismiss students according to school policy.

## GRADE 4 QUESTION-BY-QUESTION SPECIFICATIONS (QXQS)

<b>General QxQs</b> .....	1.1
<b>Subject Area QxQs</b> .....	2.1
Reading .....	2.1
Mathematics .....	2.9
Science .....	2.17
<b>ESBQ QxQs</b> .....	3.1

# 4<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### GENERAL STUDENT BACKGROUND QUESTIONS: GRADE 4

*Assessment administrators may answer questions that students have about the questions in Section 3. These questions form an important part of the analysis of results, and NAEP wants to obtain the most accurate responses possible.*

*To assist you in answering students' questions, each question in the background section is repeated below, with an explanation of the information the question is attempting to obtain from the students.*

*If a student feels that a question in this section is too personal, stress confidentiality. If the student is still reluctant, tell the student she or he does not have to answer the question.*

*As a result of natural disasters or other traumatic events, some students may have been displaced from their previous homes and schools. A displaced student may ask whether he or she should answer certain questions in reference to his or her previous home and school or with regard to his or her present home and school. Your response should be that all the questions refer to the student's current situation.*

*Some of the background questions may present difficulty to students who are not living with their mother and father at home. Below are guidelines, which can be applied in these situations.*

- *Questions that refer to mother or father also apply to students' adoptive parents, guardians, or primary caregivers (i.e., the person(s) in the student's home responsible for the student's day-to-day care). Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the student's home, whether the student is living with his or her natural parents, adoptive parents, or guardians. If the student divides his or her time between two homes (e.g., between divorced parents who share physical custody), answers to questions about newspapers, encyclopedia, etc., can be based on the resources available in either home.*
- *For students living in foster homes, questions that refer to mother or father apply to their foster parents. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the foster home.*
- *For students living in an orphanage, questions that refer to mother or father should not be answered, and it should be noted by the student in the outside margin of the page that he or she is living in an orphanage. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the orphanage.*

In this section, please tell us about yourself and your family. The section has 11 questions, Mark your answer in your booklet.

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

*The student may choose more than one category if applicable.*

*Help the student as much as necessary with this question. Never tell the student his or her race or ethnicity. Help explain the options to the student.*

*The following provides some terms that Hispanics use to describe themselves:*

- Mexican, Mexicano, Mexican American, Chicano
- Puerto Rican, Boricua
- Cuban, Cubano
- Other Latin American, Latino, Hispanic, or Spanish descent

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

*The student may choose more than one category if applicable.*

- *If the student doesn't know race/ethnicity, you should ask the student which category best describes the student's background. If the student tells you he or she is from a particular group, such as "Navajo," "Irish," or "Japanese," then you may suggest the appropriate response category (e.g., American Indian, White, or Asian).*
- *If the student says that he or she is American, ask the student to select the next best category that describes him or her, in addition to being American.*

The following provides guidance for the response categories:

**White**: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

**Black or African American**: A person having origins in any of the black racial groups of Africa. Caribbean or West Indian are other terms sometimes used.

**Asian**: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

**American Indian or Alaska Native**: A person having origins in any of the original peoples of North and South America (including Central America), and who maintains a tribal affiliation or community attachment.

**Native Hawaiian or Other Pacific Islander**: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. (The term “Native Hawaiian” does not include individuals who are native to the State of Hawaii by virtue of being born there.) In addition to Native Hawaiians, Guamanians, and Samoans, this category includes the following Pacific Islander groups: Carolinian, Fijian, Melanesian, Micronesian, Northern Mariana Islander, Palauan, Papua New Guinean, Ponapean (Pohnpelan), Polynesian, Solomon Islander, Tahitian, Tarawa Islander, Tokelauan, Tongan, Trukese (Chuukese), and Yapese.

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?

- A Yes
- B No
- C I don't know.

Newspapers obtained in school are not to be included in this question.

4. Does your family get any magazines regularly?

- A Yes
- B No
- C I don't know.

Getting any magazines “regularly” is defined as currently subscribing to a weekly or monthly magazine or purchasing one “regularly”; that is, 3 out of every 4 weeks if the magazine is a weekly and at least 10 months a year if the magazine is a monthly.

5. About how many books are there in your home?
- A Few (0–10)
  - B Enough to fill one shelf (11–25)
  - C Enough to fill one bookcase (26–100)
  - D Enough to fill several bookcases (more than 100)

*The total number of books should include all books—hardback, softback, or books on tapes or CDs—that are in the home (i.e., belonging to the student or the student’s family). The total number should not include magazines, newspapers, comic books, etc.*

6. Is there a computer at home that you use?
- A Yes
  - B No

*This question refers to a computer, located in the student’s home, that the student uses for any purpose (e.g., for schoolwork, games, Internet, e-mail, etc.). Do NOT include calculators or PDAs (Personal Digital Assistants).*

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

*An encyclopedia is any reference source of a general nature. It does not have to be a whole set of books or more than one volume. It can be an electronic encyclopedia, such as one available on a computer or CD. Any single comprehensive reference source would qualify as a “Yes” response. However, a dictionary, the World Almanac, or any other yearly almanac publication should not be included.*

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

*This question refers to the number of pages of reading that is typically assigned each day across all subject areas. The total number of pages should include reading that the student completes in class and as homework.*

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

*This question refers to any kind of discussion that the student has with parent(s), sibling(s), or other family members about schoolwork or anything studied in school. It does not include conversations that are solely concerned with the student's social or interpersonal experiences at school. Neither does it include simple questions about whether the student has any homework or has completed his or her homework.*

10. How many days were you absent from school in the last month?
- A None
  - B 1 or 2 days
  - C 3 or 4 days
  - D 5 to 10 days
  - E More than 10 days

*This question refers to the number of full days the student was absent from school in the last month for any reason (e.g., illness, skipped, sports events, extracurricular events, family vacation). However, missing school days due to snow or other weather conditions when the school was closed should not be included in the answer to this question. "In the last month" is defined as the last 30 days. The student should give his or her best estimate as to the number of days missed.*

11. How often do people in your home talk to each other in a language other than English?
- A Never
  - B Once in a while
  - C About half of the time
  - D All or most of the time

*This question focuses on the language used by people in the student's home. It asks how often people in the student's home talk to each other (or to the student) in a language other than English. A student from an English-speaking home should pick the first option, "Never." The student should not count occasional use of another language by someone in his or her family who is practicing a language for school, travel, etc.*

THIS PAGE IS INTENTIONALLY LEFT BLANK.

# 4<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE READING: GRADE 4

#### Section 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?
- A Never or hardly ever
  - B Sometimes
  - C Often
  - D Always or almost always

*This question refers to the frequency with which the student feels that he or she learns a lot when he or she reads books. The question does not limit the student to books he or she has completed—acceptable responses are related to a student’s evaluation of his or her experiences when reading books. Reading may be in school or out of school, and may include books assigned by teachers and/or chosen by the student.*

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

*This question refers to the frequency with which the student feels that reading is one of his or her favorite school subjects. The question does not refer to reading as a hobby or leisure activity.*

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

*This question refers to the frequency with which the student uses the school library or public library for his or her schoolwork. Access to the library may be initiated by the student or prompted by the teacher or parent. School projects or homework is not limited to reading class.*

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

*This question refers to the frequency with which the student uses the school library or public library for his or her own personal use not related to a school project or homework.*

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

*This question refers to whether the student studies or does work for reading while attending an after-school or tutoring program. These programs would include both school-based and school-sponsored programs and/or private programs. These programs would not include informal study sessions with peers or teachers.*

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

*This question refers to whether the student has ever attended (either within his or her own school grounds or on school-sponsored field trips) book clubs, competitions, fairs, or exhibits related to reading.*

7. How often do you read for fun on your own time?
- A Never or hardly ever
  - B Once or twice a month
  - C Once or twice a week
  - D Almost every day

*This question refers to the frequency with which the student reads for his or her own enjoyment during free time (i.e., leisure time that is independent from school requirements). Reading may include a variety of materials, such as books, comic books, and articles in the newspaper or on the Internet.*

8. How often do you talk with your friends or family about something you have read?
- A Never or hardly ever
  - B Once or twice a month
  - C Once or twice a week
  - D Almost every day

*This question refers to the frequency with which the student discusses material that he or she has read with a friend or family member. This discussion can be initiated by the student or by the other participant. It can be based on material that the student has read for school or for his or her own enjoyment.*

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

*This question refers to the frequency with which the student makes a presentation to communicate to the class information about material that he or she has read. The presentation might be an individual presentation or a group presentation.*

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

*This question refers to the frequency with which the student is asked by his or her teacher to read articles or stories in a magazine or newspaper. The articles or stories may be assigned by a teacher or chosen by the student and can either be read aloud or silently, at home as homework or in school.*

11. How often does your teacher ask you to read aloud?
- A Never or hardly ever
  - B Sometimes
  - C Often
  - D Always or almost always

*This question refers to the frequency with which the student is asked by his or her teacher to read aloud in class at school.*

12. How often does your teacher ask you to read silently?

- A Never or hardly ever
- B Sometimes
- C Often
- D Always or almost always

*This question refers to the frequency with which the student is asked by his or her teacher to read silently in class.*

13. How often does your teacher ask you to read a book you have chosen yourself?

- A Never or hardly ever
- B Sometimes
- C Often
- D Always or almost always

*This question refers to the frequency with which the student is allowed to choose a book for school assignments. Books assigned by the teacher should not be included in this question.*

14. How often does your teacher ask you to write something about what you have read?

- A Never or hardly ever
- B Sometimes
- C Often
- D Always or almost always

*This question refers to the frequency with which the student has been asked to integrate reading and writing by writing on tests and/or by writing for assignments that involve reading. The writing could be in-class or out-of-class; informal or formal; writing on a test, a brief or extended entry in a journal, or other writing tasks directly related to something the student has read.*

15. For school this year, how often do you work in pairs or small groups to talk about something that you have read?

- A Never or hardly ever
- B A few times a year
- C Once or twice a month
- D At least once a week

*This question refers to the frequency with which the student engages in class-assigned, one-on-one, or small-group discussions about material that the student has read. Discussions may be in-class or out-of-class.*

16. For school this year, how often do you have a class discussion about something that the class has read?
- A Never or hardly ever
  - B A few times a year
  - C Once or twice a month
  - D At least once a week

*This question refers to the frequency with which the student's class engages in a discussion about material that they have read. This discussion may be lead by the teacher but must involve some student participation. That is, a teacher lecturing the students does not qualify. If a class discussion was held but the student did not speak, the student should nonetheless include this discussion in his or her answer.*

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

*This question refers to the frequency with which the student is allowed to choose books for school assignments. Books assigned by the teacher should not be included in this question.*

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

*This question refers to the frequency with which the student, while reading a story in class (either silently or aloud), is asked to explain the story in his or her own words. This would include explanations done orally or written.*

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

*This question refers to the frequency with which the student, while reading a story in class (either silently or aloud), is asked to talk about what the characters do or feel. This does not include times when a teacher asks students to write about characters.*

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

*This question refers to the frequency with which the student, while reading a story in class (either silently or aloud), is asked to talk about how he or she feels about the story. This does not include times when a teacher asks students to write about how they feel.*

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

*This question refers to the frequency with which the student has been asked to integrate reading and writing in school by writing on tests and/or for assignments that involve reading. "Long answers" are answers that require at least one paragraph. The phrase "tests and assignments that involved reading" refers to tests on materials that are read by the student and reading assignments that are given to the student.*

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

*This question refers to whether the student has been asked by his or her teacher to use a computer to learn new words. The work may be done on computers in a classroom, in a school library, in a school computer lab, elsewhere at school, in another library, or at home. The work could include a range of computer usages: from using a formal vocabulary program to exploring articles on the web about a student's specific interests.*

23. This school year, did your teacher ask you to use a computer to practice spelling and grammar?
- A Yes
  - B No

*This question refers to whether the student has been asked by his or her teacher to use a computer to practice spelling and grammar. The work may be done on computers in a classroom, in a school library, in a school computer lab, elsewhere at school, in another library, or at home. The work could include a range of computer usages: from using spelling/grammar software to using a computer word-processing program to work on a grammar assignment.*

24. This school year, did your teacher ask you to use a computer to write stories or reports?

- A Yes
- B No

*This question refers to whether the student has been asked by his or her teacher to use a computer to write stories or reports. The work may be done on computers in a classroom, in a school library, in a school computer lab, elsewhere at school, in another library, or at home. The student should not include using the computer to do research for a story or report.*

25. This school year, did your teacher ask you to read books on the computer?

- A Yes
- B No

*This question refers to whether the student has been asked by his or her teacher to use a computer to read books. The work may be done on computers in a classroom, in a school library, in a school computer lab, elsewhere at school, in another library, or at home.*

26. How hard was this test compared to most other tests you have taken this year in school?

- A Easier than other tests
- B About as hard as other tests
- C Harder than other tests
- D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. "Compared to most other tests" means school tests given this academic year in all subjects, including reading.*

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?

- A Not as hard as on other tests
- B About as hard as on other tests
- C Harder than on other tests
- D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test compared to his or her effort on most other school tests taken this academic year in all subjects including reading.*

28. How important was it to you to do well on this test?

- A Not very important
- B Somewhat important
- C Important
- D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

# 4<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE MATHEMATICS: GRADE 4

#### Section 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?
  - A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student uses a computer at school for mathematics-related work—including classwork, homework, and any other mathematics-related activity. The work may be done on computers in a classroom, in a school library, in a school computer lab, or elsewhere at school.*

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

*This question refers to whether the student uses a computer at home specifically for mathematics homework. The computer could be the student's personal computer or a family computer. Do NOT include calculators or PDAs (Personal Digital Assistants).*

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

*This question refers to whether the student uses the Internet at home for any purpose. This Internet usage is not limited to mathematics or any other school assignments, but is looking at Internet usage in general (e.g., e-mail, playing games, etc.).*

**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?

- A Yes
- B No

*This question refers to whether the student uses a computer to practice or drill on mathematics problems. Do NOT include calculators or PDAs (Personal Digital Assistants). Some software presents practice and drills in the form of a game; therefore, with regard to a single activity, a student could legitimately answer “yes” to both this question and the following question. Alternately, a student may consider a given activity as either practice or as a game, even though an adult would conclude that it was both. In that case, the student should answer in the way that makes sense to him or her. The computer could be at home, at school, in a library, or anywhere else.*

5. Do you use a computer to play math games?

- A Yes
- B No

*This question refers to whether the student uses a computer to play mathematics games. The games could be played during class or outside of class, and the computer could be at home, at school, in a library, or anywhere else. As noted in reference to Question 4, many mathematics “games” are a form of practice and drill, but other possibilities exist. Because new software is constantly being created, it is not possible to specify every activity that would qualify as a “math game.” Thus, if a student considers a program that he or she uses on the computer to be a math game, a “yes” answer is appropriate with the exception of calculators or PDAs (Personal Digital Assistants).*

6. Do you use a computer to make charts or graphs for math?

- A Yes
- B No

*This question refers to whether the student uses a computer at home, at school, or any other place (e.g., library) specifically for making graphs or charts for math. The mathematics charts or graphs do not need to be assigned by the student’s teacher or school (e.g., could be self-initiated). Do NOT include calculators or PDAs (Personal Digital Assistants).*

7. Do you use the Internet to learn things about math?

- A Yes
- B No

*This question refers to whether the student uses the Internet to learn things about math. This activity may be in response to an assignment and/or self-initiated. The computer could be at home, at school, in a library, or anywhere else.*

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

*This question refers to the frequency with which the student uses various electronic communication modes to talk to friends about mathematics-related work—including classwork, homework, and any other mathematics-related activity. The communication may be via computers and/or cellular phones.*

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?
- A Never or hardly ever
  - B Once or twice a month
  - C Once or twice a week
  - D Every day or almost every day

*This question refers to the frequency with which the student uses various electronic communication modes to get help with math from someone other than his or her teacher, family, classmates, or friends. The communication may be via computers and/or cellular phones.*

10. How often do you **use a calculator**?
- A Never or hardly ever
  - B Once in a while
  - C Almost everyday

*This question refers to the frequency with which the student uses a calculator. The calculator could be used during class or outside of class, at school or outside of school. It need not be used specifically for mathematics classwork. For example, the student could use the calculator in class for a science lesson, or he or she could use it at home to calculate his or her savings.*

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

*This question refers to the kind of calculator the student normally uses. The calculator could be the student's own calculator or one that is supplied by the school or by an after-school program. For fourth-grade students, anything other than a graphing calculator should be counted as a "regular calculator," even if a student happens to use a calculator that is more advanced, e.g. that can do more than add, subtract, multiply, or divide.*

**Graphing** calculators can perform graphic functions, such as drawing graphs in the viewing window; graphing calculators supplied to fourth-grade students are likely to be simpler than those used by older students.

12. Have you ever used a graphing calculator?
- A Yes
  - B No
  - C I don't know what a graphing calculator is.

*This question refers to whether the student has ever used a graphing calculator—for fun, exploration, in-class, out-of-class, or any other occasion.*

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

*This question refers to the frequency with which the student uses a calculator during tests or quizzes. The student should answer based on how he or she uses the calculator in his or her regular classroom. The calculator can be supplied by the student or by the school.*

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

*This question refers to whether the student studies or does work for math while attending an after-school or tutoring program. These programs could include school-based and school-sponsored programs, and/or private programs.*

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

*This question refers to the frequency with which the student feels that his or her math classwork is too **difficult**. This question is limited to in-class assignments, activities, and tasks.*

16. How often do you feel your math classwork is too easy?
- A Never or hardly ever
  - B Sometimes
  - C Often
  - D Always or almost always

*This question refers to the frequency with which the student feels that his or her math classwork is too **easy**. This question is limited to in-class assignments, activities, and tasks.*

17. How often do you like what you do in class for math?
- A Never or hardly ever
  - B Sometimes
  - C Often
  - D Always or almost always

*This question refers to the frequency with which the student likes what he or she does in class for math. This question is limited to in-class assignments, activities, and tasks.*

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

*This question refers to the frequency with which the student feels that he or she can do a good job on his or her math **tests**. This question would touch upon a student's assessment of his or her own preparation for and comfort with math tests and his or her evaluation of the level of difficulty of the math tests.*

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

*This question refers to the frequency with which the student feels that he or she can do a good job on his or her math **assignments**. This question would touch upon a student's assessment of his or her own preparation for and comfort with math assignments and his or her own evaluation of the level of difficulty of the math assignments.*

20. How often do you feel you like math?
- A Never or hardly ever
  - B Sometimes
  - C Often
  - D Always or almost always

*This question refers to the frequency with which the student feels that he or she likes math. Therefore, this question is **not** limited to in-class assignments, activities, and tasks, but would include a general evaluation of the student's feelings about math.*

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

*This question refers to the frequency with which the student feels that math is one of his or her favorite school subjects.*

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

*This question asks the student to evaluate how difficult this NAEP test has been. "Compared to most other tests" means school tests given this academic year in all subjects including mathematics.*

---

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?

- A Not as hard as on other tests
- B About as hard as on other tests
- C Harder than on other tests
- D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test, compared to his or her effort on most other school tests taken this academic year in all subjects including mathematics.*

24. How important was it to you to do well on this test?

- A Not very important
- B Somewhat important
- C Important
- D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

THIS PAGE IS INTENTIONALLY LEFT BLANK.

# 4<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE SCIENCE: GRADE 4

#### Section 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?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has personally participated in laboratory/experimental science activities or projects at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., writing up a report of the experiment) should be included.*

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

*This question asks the student the frequency with which the student has personally participated in activities or projects to learn about living things at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., preparing a written report about the activity or project) should be included.*

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

*This question asks the student the frequency with which the student has personally participated in activities or projects to learn about electricity at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., preparing a written science report about electricity) should be included.*

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)?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question asks the student the frequency with which the student has personally participated in activities or projects to learn about chemicals at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., preparing a written science report about chemicals) should be included.*

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)?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question asks the student the frequency with which the student has personally participated in activities or projects to learn about rocks or minerals at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., preparing a written science report about rocks or minerals) should be included.*

6. In this school year, how often have you done activities or projects using a magnifying glass or microscope (for looking at small things)?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question asks the student the frequency with which the student has personally participated in activities or projects using a magnifying glass or microscope at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., completing an activity using a magnifying glass or microscope) should be included.*

7. In this school year, how often have you done activities or projects using a thermometer or barometer (for making measurements)?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question asks the student the frequency with which the student has personally participated in activities or projects using a thermometer or barometer at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., using a thermometer or barometer for an experiment at home) should be included.*

8. In this school year, how often have you done activities or projects using simple machines (for example, pulleys and levers)?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question asks the student the frequency with which the student has personally participated in activities or projects using simple machines such as pulleys or levers at school, at home or in extracurricular activities, such as participating in a school-sponsored club. Participation in such activities or projects should be school related. Watching a demonstration, without participating, should not be included. Class assignments completed as homework (e.g., writing a report on how pulleys or levers work) should be included.*

9. In this school year, how often have you read a science textbook?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has read a science textbook. The reading could be in-class or out-of-class; at school or at any other place; assigned or unassigned reading.*

10. In this school year, how often have you read a book or magazine about science?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which a student reads a book that is NOT a textbook that contains information about science-related subjects. Reading a magazine about science refers to written pieces that may be news stories, short stories (fiction), or articles about specific topics. Paging through a magazine and looking at photographs or advertisements should NOT be included. The reading could be in-class or out-of-class; at school or at any other place; assigned or unassigned reading.*

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

*This question refers to the frequency with which the student has read about science on a computer. The reading could be in-class or out-of-class; at school or at any other place; assigned or unassigned reading. The reading could be an e-book or article from a CD or other source; Internet site; or any other media via a computer.*

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

*This question refers to the frequency with which the student has engaged with visual media about science. The viewing could be in-class or out-of-class; at school or at any other place; assigned or unassigned.*

13. In this school year, how often have you discussed news stories about science?

- A Never or hardly ever
- B Once every few weeks
- C About once a week
- D Two or three times a week
- E Every day or almost every day

*This question refers to the frequency with which a student discusses with his or her teachers, friends, family members, or classmates a newspaper, magazine or Internet article he or she has read, or a story he or she has watched on television that presents a scientific principle or method (e.g., diving for sunken treasure) or new scientific discovery (e.g., dinosaurs).*

14. In this school year, how often have you worked with other students on a science activity or project?

- A Never or hardly ever
- B Once every few weeks
- C About once a week
- D Two or three times a week
- E Every day or almost every day

*This question refers to the frequency with which the student has worked with other students on a science activity or project. The work could be in-class or out-of-class; at school or at any other place; assigned or unassigned.*

15. In this school year, how often have you been asked to solve a science problem?

- A Never or hardly ever
- B Once every few weeks
- C About once a week
- D Two or three times a week
- E Every day or almost every day

*This question refers to the frequency with which the student has been asked by his or her teacher to solve a science problem. The assignment could be in-class or out-of-class and could be completed individually or by a group.*

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

*This question refers to the frequency with which the student has presented what he or she has learned about science to his or her class. The presentation could be brief or extended; informal or formal. The presentation could be an individual presentation or one in which the student participated as part of a group. If a group presentation, the student should have had an active, speaking role in it.*

17. In this school year, how often have you taken a science test or quiz?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has taken a science test or quiz. Tests and quizzes could be in-class or take-home; oral or written.*

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

*This question refers to the frequency with which the student has talked about data gathered from his or her science activities or projects. The student can talk about his or her results in a formal presentation to the class as an individual presentation or as a group presentation. The student could also talk informally to his or her teachers, classmates, family members or friends about the results.*

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

*This question refers to the frequency with which the student has written a report on his or her science activities or projects. The report could be the student's individual work, or part of a group activity or project.*

20. In this school year, how often have you been asked to write long answers to questions on tests or assignments for science?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has been asked to compose long answers to questions on science tests and/or to complete writing assignments for science. "Long answers" are answers that require at least one paragraph.*

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

*This question refers to the frequency with which the student has talked to his or her teacher about his or her performance in science. The student may have talked to his or her teacher about performance on a particular test, assignment or lab project or performance in general.*

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

*This question refers to the frequency with which the student has used library resources for science. The library could be the student's school library, another school's library, a public library, or any other library.*

23. In this school year, how often have you used computers for science?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has used a computer for science-related work—including class work, homework, and any other science-related activity for school. The work may be done on computers in a classroom, in a school library, in a school computer lab, at home, or any other location.*

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

*This question refers to the frequency with which the student feels that he or she can understand what his or her teacher talks about **in science class**.*

25. How often do you do science activities that are not for schoolwork?
- A Never or hardly ever
  - B Sometimes
  - C Often
  - D Always or almost always

*This question refers to the frequency with which the student does science activities that are **not** for schoolwork. The activities could be done at school, but they would be self-initiated and not in response to an assignment or they could be done at home.*

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

*This question refers to the frequency with which the student feels that he or she can do a good job on his or her science **tests**. Therefore, this question would touch upon a student's assessment of his or her own preparation for and comfort with his or her science tests and an evaluation of the level of difficulty of the science tests.*

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

*This question refers to the frequency with which the student feels that he or she can do a good job on his or her science **assignments**. Therefore, this question would touch upon a student's assessment of his or her own preparation for and comfort with his or her science assignments and an evaluation of the level of difficulty of the science assignments.*

28. How much do you like studying science?
- A Very little
  - B Some
  - C Quite a bit
  - D Very much

*This question asks the student to estimate the level to which he or she likes studying science.*

29. How often do you feel science is one of your favorite subjects?
- A Never or hardly ever
  - B Sometimes
  - C Often
  - D Always or almost always

*This question refers to the frequency with which the student feels that science is one of the student's favorite subjects. This question is **not** limited to in-class assignments, activities, and tasks, but would include a general evaluation of the student's feelings about science.*

30. How hard was this test compared to most other tests you have taken this year in school?
- A Easier than other tests
  - B About as hard as other tests
  - C Harder than other tests
  - D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. "Compared to most other tests" means school tests given this academic year in all subjects including science.*

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?
- A Not as hard as on other tests
  - B About as hard as on other tests
  - C Harder than on other tests
  - D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test, compared to his or her effort on most other school tests taken this academic year in all subjects including science.*

32. How important was it to you to do well on this test?
- A Not very important
  - B Somewhat important
  - C Important
  - D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

# 4<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### EXTENDED STUDENT BACKGROUND QUESTIONNAIRE: GRADE 4

Assessment administrators may answer questions that students have about the questions in the Extended Student Background Questionnaire. These questions address important issues about the homes in which students live, and NAEP wants to obtain the most accurate responses possible.

To assist you in answering students' questions, each question in the Extended Student Background Questionnaire is repeated below, with an explanation of what information the question is attempting to elicit from the students.

If a student feels that a question in this section is too personal, stress confidentiality. If the student is still reluctant, tell the student he/she does not have to answer the question.

As a result of natural disasters or other traumatic events, some students may have been displaced from their previous homes and schools. A displaced student may ask whether he or she should answer certain questions in reference to his or her *previous* home and school or with regard to his or her *present* home and school. Your response should be that *all* the questions refer to the student's *current situation*.

A student may notice that a question being asked here is similar to a question asked elsewhere. If a student raises a question about this, assure the student that he or she should answer each question as accurately as possible and not be concerned about other questions or responses.

Finally, some of the background questions may present difficulty to students who are not living with their mother and father at home. Below are guidelines that can be applied in these situations.

- *Questions that refer to mother or father also apply to students' adoptive parents, guardians, or primary caregivers (i.e., the person[s] in the student's home responsible for the student's day-to-day care).*
- *Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the student's home, whether the student is living with his or her natural parents, adoptive parents, or guardians.*
- *For students living in foster homes, questions that refer to mother or father apply to their foster parents. Answers to questions about items in the home, etc., should be based on the resources available in the foster home.*
- *For students living in an orphanage or a group home, questions that refer to mother or father should not be answered, and it should be noted by the student in the outside margin of the page that the student is living in an orphanage or a group home. Answers to questions about items in the home, etc., should be based on the resources available in the orphanage or group home.*
- *In the case of students in joint-custody situations, questions that ask about "home" refer to the home in which students spend a majority of their time. If students spend equal amounts of time in the two homes, the students should refer to the home in which they are residing on the day of the test.*

In this section, please tell us about yourself and your family. This section has 7 questions. Mark your answers in your booklet.

1. Do you live in different homes with different people during the school year? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to identify children living in shared-custody arrangements. Vacation homes should not be considered “different homes with different people” for the purpose of answering this question. Students who live in one home except when on vacation should answer “No” by filling in oval B. Students who have switched foster homes should answer “Yes” by filling in oval A.*

2. Which of the following people live in your home? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Mother/Stepmother	Y	N
b. Father/Stepfather	Y	N
c. Foster parents	Y	N
d. Grandmother or Grandfather	Y	N

*The purpose of this question is to find out who lives in the student’s home. Students should refer to only one home when answering this question. For students in joint-custody arrangements, “home” refers to the home in which the students spend a majority of their time. In the case of students in joint-custody arrangements where students spend equal amounts of time in two homes, the students should refer to the home in which they are residing on the day of the test. Students living in an orphanage or group home should skip this question and indicate in the margin that they live in an orphanage or group home.*

3. How many brothers and sisters do you have, whether they live with you or not? Include all stepbrothers and stepsisters. Fill in only **one** oval.

- A None
- B One
- C Two
- D Three
- E Four
- F Five
- G Six or more

*The purpose of this question is to determine the total number of brothers and sisters a student has, rather than just the number of brothers and sisters with whom the student currently resides. The student should include stepsiblings, half siblings, foster siblings, adopted siblings, etc.*

4. Does your mother usually have a job for pay? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to determine whether the student’s mother is participating in the labor force in either a full-time or part-time capacity, on a regular basis. Note that a volunteer job is not a “job for pay.” “Usually” is defined as at least half of a full work week. (“At least half” also includes “more than half.”) If the student has no knowledge of his or her mother’s participation in the workforce, he or she should answer “no” to this question.*

*In the absence of a biological or adoptive mother or female guardian, this question applies to the female in the student’s home who is responsible for the day-to-day care of the student—that is, a stepmother, a grandmother, some other adult female relative, or an unrelated person, such as a foster mother or other female caregiver.*

*If the student spends or has spent time living with both a biological mother and a stepmother, the student should provide the information with regard to the person with whom he or she has lived the most during his or her lifetime.*

*If no female parent figure or caregiver is currently present in the home but the student has some knowledge about the labor force status of a female parent or other caregiver with whom he or she has previously lived, the student should answer with respect to that female parent or caregiver.*

*Where there is no female present in the home and no knowledge of any female caregiver, the student should skip this question and make a note in the margin.*

5. Does your father usually have a job for pay? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to determine whether the student’s father is participating in the labor force in either a full-time or part-time capacity, on a regular basis. Note that a volunteer job is not a “job for pay.” “Usually” is defined as at least half of a full work week. (“At least half” also includes “more than half.”) If the student has no knowledge of his or her father’s participation in the workforce, he or she should answer “no” to this question.*

*In the absence of a biological or adoptive father or male guardian, this question applies to the male in the student’s home who is most responsible for the day-to-day care of the student—that is, a stepfather, a grandfather, some other adult male relative, or an unrelated person, such as a foster father or other male caregiver.*

*If the student spends or has spent time living with both a biological father and a stepfather, the student should provide the information with regard to the person with whom he or she has lived the most during his or her lifetime.*

*If no male parent figure or caregiver is currently present in the home but the student has some knowledge about the labor force status of a male parent or other male caregiver with whom he or she has previously lived, the student should answer with respect to that male parent or caregiver.*

*Where there is no male present in the home and no knowledge of any male caregiver, the student should skip this question and make a note in the margin.*

6. Which of the following items do you have in your home? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Access to the Internet	Y	N
b. Clothes dryer just for your family	Y	N
c. Electric dishwasher	Y	N
d. More than six rooms (not including bathrooms)	Y	N
e. More than one bathroom	Y	N
f. A bedroom of your own	Y	N
g. Three or more cars, trucks, or other vehicles that your family uses	Y	N

*This question asks about items in the student's home. Students should answer this item for the home they referenced in earlier questions.*

**Access to the Internet:** Refers to whether the student has access to the Internet at home. Access is for the family and by the family only (i.e., open, unsecured Wi-Fi access does not count).

**Clothes dryer just for your family:** Refers to whether the student has a gas or electric clothes dryer (not a clothesline, drying rack, etc.) in either the student's house or apartment unit that is only used by the student's family. Students who live in apartment complexes with communal washers and dryers should not include those dryers.

**Electric dishwasher:** Refers to whether the student has an electric dishwasher in the student's house or apartment unit.

**More than six rooms (not including bathrooms):** Refers to whether the student's house or apartment unit has more than six rooms, not counting bathrooms, porches, balconies, foyers, halls, and half-baths.

**More than one bathroom:** Refers to whether there is more than one bathroom in the student's house or apartment unit. Full bathrooms, half-baths, and powder rooms all count as "bathrooms."

**A bedroom of your own:** Refers to whether the student has his or her own bedroom in his or her house or apartment unit.

**Three or more cars, trucks, or other vehicles that your family uses:** Refers to the number of vehicles the student's family currently owns that run and are used by family members. Company-owned vehicles used by family members for business purposes, such as dump trucks or taxis, are not to be included in the count.

7. Do you have your own cell phone? Fill in only **one** oval.

- A Yes
- B No

*This question refers to whether the student has a cell phone for his or her own use on a daily basis. The student should answer "no" if the cell phone he or she normally uses is also used by other members of the family on a regular basis.*

## **GRADE 8 SESSION SCRIPTS**

<b>Grade 8 Regular Session Script</b> . . . . .	<b>1.1</b>
<b>NAEP Accommodations Guidelines</b> . . . . .	<b>2.1</b>
<b>Grade 8 Accommodation Script</b> . . . . .	<b>3.1</b>

# 8<sup>th</sup>

## 2009 NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

### SESSION SCRIPT: GRADE 8

---

## Introduction

Good morning/afternoon, everyone! My name is **(YOUR NAME)**. Today you will be participating in a test called the National Assessment of Educational Progress, also known as NAEP or The Nation's Report Card. NAEP is a way to show what students like you – from all around the country – know and can do in different subjects. You and your school were especially chosen to represent other eighth-graders and schools across **(STATE NAME)** and the United States.

Here are some things to remember when you take NAEP: the test takes about 90 minutes and not everyone will take the same test; some of you will take reading, others math or science. You will also see questions about yourself and your experiences in and out of school. Do not write your name on the work you do; no one in the school will see your answers. Your answers will be combined with information from other students across **(STATE NAME)** and the United States. Because your responses help our country's leaders and teachers to find out what students your age are learning, it is very important that you try your very best.

## Distribute Materials

### Option 1: Booklets and Materials Not Previously Distributed

Before I hand out your materials, please clear your desks. As I call your name, please come forward to get a booklet and pencil. After you get your booklet, place it face up on your desk and do not open it until I tell you to.

- Read students' names in Administration Schedule order to distribute booklets and NAEP pencils.
- Record a "✓" or an "A" in column A (Atten.) of the Administration Schedule.
- Double-check that each student's name and booklet ID on the Administration Schedule match the booklet label.

## Option 2: Booklets and Materials Previously Distributed

Each of you should have a booklet and a pencil on your desk. Do not open your booklets until I tell you to. If the booklet in front of you does not have your name on the label, please raise your hand.

- Assist students with incorrect booklets.
- Collect all unused booklets and materials.

## Remove Label

Now remove the label with your name on it from the booklet cover. Place the label on the upper-right corner of your desk.

## Additional Materials

The assessment you are taking today uses many different booklets, each with different questions. Some may have sections in which you will need to use something extra, like a ruler/protractor or other materials. Please look now and remove any extra materials inside the front cover of your booklet.

- Pause and wait for students to remove items.

If you have extra materials, put them on the upper-left corner of your desk. The instructions in your booklet will tell you when you need to use them.

Some of your booklets require using a calculator for at least one part of the booklet. If so, I will tell you when it's time to use one. You may use your own scientific or graphing calculator if your booklet requires one. However, you are not permitted to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device. If you require a calculator and do not have one, I will provide you with one later.

---

## Code the Booklet Cover

Now, please look at your booklet cover. You will see a group of boxes labeled “School Number.”

- Point to the “School #” boxes on the Booklet Cover Poster.

The number you are to write in these boxes is **(READ NUMBER)**.

- Point to the number on the board as you read it. Repeat the number as necessary.

Now, please look at the top-right corner of your booklet cover. If you have a math booklet, locate the name of your **math** teacher on the board. Write your teacher’s two-digit number on your booklet cover in the boxes labeled “Teacher Number.”

- As you read the script, point to the math teacher numbers on the board and the “Teacher #” boxes on the Booklet Cover Poster.
- Repeat instructions as necessary to make sure students understand what to do.

If you have a reading booklet, locate the name of your **reading** teacher on the board. Write your teacher’s two-digit number on your booklet cover in the boxes labeled “Teacher Number.”

- As you read the script, point to the reading teacher numbers on the board and the “Teacher #” boxes on the Booklet Cover Poster.
- Repeat instructions as necessary to make sure students understand what to do.

If you have a science booklet, locate the name of your **science** teacher on the board. Write your teacher’s two-digit number on your booklet cover in the boxes labeled “Teacher Number.”

- As you read the script, point to the science teacher numbers on the board and the “Teacher #” boxes on the Booklet Cover Poster.
- Repeat instructions as necessary to make sure students understand what to do.

If your math, reading, or science teacher is not listed on the board, please raise your hand.

- Assist students whose teachers are not listed on the board. If the teacher is not listed on the Roster, write the name of the teacher on the booklet cover and follow up with your AC after the assessment.

## Booklet Directions

- Set timer for 2 minutes.

Now open your booklet to the directions on the first two pages. You will have 2 minutes to read the directions to yourself. Please begin.

- Start timer.
- Do not admit any more students into the session.
- When all students have finished reading the directions, but after no more than 2 minutes, say:

Please stop.

## Cognitive Section

- Set timer for 2 minutes.

Now look at the next set of directions. You will have 2 minutes to read them to yourself. Please begin.

- Start timer.
- When all students have finished reading the directions, but after no more than 2 minutes, say:

Please stop.

---

## SECTION 1

Now turn to the beginning of Section 1. Some of you will need to use a calculator for at least one part of your booklet. If so, there will be a sentence at the top of the page that says, “You will need a calculator for this section.” If you see this sentence, take out your scientific or graphing calculator. If you didn’t bring one, raise your hand now and I’ll give you a calculator.

- Distribute gray calculators to students who need them, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, cell phone, pocket organizer, device with a typewriter-style keyboard, electronic writing pad, or pen-input device.
- Set timer for 25 minutes.

You will have 25 minutes to complete Section 1. While you are working in this section, I can’t help you answer the questions or explain words to you. Don’t worry if the person next to you is working on questions that don’t look like the ones you are working on. Not every student has the same booklet.

Some questions may require 5 minutes or more for you to think about and answer. Think carefully about the question and write a complete answer. It’s important to show all of your work. If you need another pencil at any time, please raise your hand.

Carefully read the directions at the beginning of the section and then start working. Please begin.

- Start timer.
- Monitor students, making sure they are working in the correct section of their booklets and using a calculator or ruler/protractor only in a calculator or ruler/protractor section.
- In test booklets R412, R413, R415, R416, R432, R433, R439, R440, R452, R453, R463, R464, R504, R511, R518, R525, R552, R559, and R563: If a student raises a question about Senator John Warner no longer being a senator, please give the following response:  

“Senator John Warner was a senator when this booklet was printed. When answering the question, please pretend that he is still a senator.”
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

If you are using your own calculator, please put it away now. If you have a NAEP calculator, raise your hand and I will collect it.

- Collect calculators. Count calculators to make sure you collected all the calculators you distributed.

## SECTION 2

Now turn to the beginning of Section 2.

If you see the sentence, “You will need a calculator for this section,” take out your scientific or graphing calculator. If you didn’t bring one, please raise your hand and I will give you a calculator.

- Distribute gray calculators to students who need them, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, cell phone, pocket organizer, device with a typewriter-style keyboard, electronic writing pad, or pen-input device.
- Set timer for 25 minutes.

You will have 25 minutes to complete Section 2. Carefully read the directions and then start working. Please begin.

- Start timer.
- Monitor students, making sure they are working in the correct section of their booklets and using a calculator or ruler/protractor only in a calculator or ruler/protractor section.
- When the timer shows 10 minutes left in the session, say:

---

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

If you are using your own calculator, please put it away now. If you have a NAEP calculator, raise your hand and I will collect it.

- Collect calculators. Count calculators to make sure you collected all the calculators you distributed.

## Background Section

### SECTION 3

- Set timer for 2 minutes.

Now look at the directions for Sections 3 and 4. You'll have 2 minutes to read them to yourself. Please begin.

- Start timer.
- When all students have finished reading the directions, but after no more than 2 minutes, say:

Please stop and go to Section 3. I will read the first two questions and the answer choices with you.

**IF NEW JERSEY, SAY:**

You are not required to answer Questions 1 and 2 about your race or ethnicity.

- Read the questions and answer choices for Questions 1 and 2 to the students.

1. Are you Hispanic or Latino? Fill in **one or more ovals**.
  - (A) I am not Hispanic or Latino.
  - (B) Yes, I am Mexican, Mexican American, or Chicano.
  - (C) Yes, I am Puerto Rican or Puerto Rican American.
  - (D) Yes, I am Cuban or Cuban American.
  - (E) Yes, I am from some other Hispanic or Latino background.
  
2. Which of the following best describes you? Fill in **one or more ovals**.
  - (A) White
  - (B) Black or African American
  - (C) Asian
  - (D) American Indian or Alaska Native
  - (E) Native Hawaiian or other Pacific Islander

- Set timer for 5 minutes.

You will have 5 minutes to answer the rest of the questions in Section 3 on your own. Please begin.

- Start timer.
- After 5 minutes have passed, say:

Please stop.

## SECTION 4

- Set timer for 8 minutes.

Now turn to the beginning of Section 4. You will have 8 minutes to work on this section on your own. While you work, I will collect the label from your desk. Please begin.

- Start timer.
- Walk through the room and collect the labels from every desk. Tear them up and throw them away.
- If NIES, as you collect the labels, place the NIES appointment cards on the upper-right corner of the desks of students selected for NIES.
- When all students have finished Section 4, but after no more than 8 minutes, say:

Please stop working. Now close your booklet and place it face up on your desk.

## SECTION 5 – ESBQ, IF REQUIRED

- Set timer for 5 minutes.

Now take out Section 5 from the back of your booklet.

### Remove Label

Remove the label with your name on it from the booklet cover. Place the label on the upper-right corner of your desk. While you work, I will collect the label from your desk.

You will have 5 minutes to work on this section on your own. Please begin.

- Start timer.
- Walk through the room and collect the labels from every desk. Tear them up and throw them away.
- When all students have finished Section 5, but after no more than 5 minutes, say:

Please stop working. Now close your booklet and place it face up on top of your other booklet.

## Collect Materials

### Option 1: Student Comes Forward With Materials

---

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of your booklet. If you have a packet of materials, make sure to place the materials back in the bag or envelope. As I call your name, please come forward with your assessment booklet and materials, and then return to your seat.

- Allow students offered the extended time accommodation to continue working on the cognitive sections of the assessment, if necessary.
- Read students' names in Administration Schedule order to collect booklets and ancillary materials.
- Verify that each student has returned an assessment booklet with any used ancillary materials.
- If the ESBQ was administered in the school, verify that each student returned the ESBQ booklet.

### Option 2: AA Goes Around the Room to Collect Materials

---

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of your booklet. If you have a packet of materials, make sure to place the materials back in the bag or envelope. Then, place the assessment booklet on an upper corner of your desk.

- Allow students offered the extended time accommodation to continue working on the cognitive sections of the assessment, if necessary.
- Collect the booklets and the ancillary materials.
- Verify that every student has returned an assessment booklet with any used ancillary materials.
- If the ESBQ was administered in the school, verify that each student returned the ESBQ booklet.

---

## NIES Student Survey, If Required

### Option 1: NIES to Be Administered Immediately Following the NAEP Assessment

---

Some of you have been invited to take a special survey after the NAEP assessment. If you have an appointment card on your desk, please remain here when I dismiss the other students. The survey should only take 15–20 minutes and then you can return to class.

- When all of the other students have left and you have accounted for all of the session materials, escort those students to the location where the NIES will be administered, if necessary.

### Option 2: NIES to Be Administered at a Later Time

---

If you have an appointment card on your desk, you have been invited to take a special survey after the NAEP assessment. Please refer to your appointment card for the time and location where the survey will take place. The survey should only take 15–20 minutes and then you can return to class.

## Thank and Dismiss Students

Thank you very much for your time and effort here today. On your pencil you'll notice the website address for the National Assessment of Educational Progress. Visit this website if you would like more information about the assessment you just completed.

- Dismiss students according to school policy.

**THIS PAGE IS INTENTIONALLY LEFT BLANK.**

# GRADE 8: NAEP ACCOMMODATIONS GUIDELINES

**General Guidelines:** Use the accommodation script whenever a separate session is required. The following accommodations typically require a separate session, but refer to the accommodation chart in chapter 5.

Accommodation	Guidelines for the Person Administering the Accommodation
<ul style="list-style-type: none"> <li>Bilingual booklet</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate, bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Directions read aloud in native language (Spanish)</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate, bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Test items read aloud in native language (Spanish)</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Read aloud – most or all</li> </ul>	<ul style="list-style-type: none"> <li>For mathematics booklets, use the Mathematics Read-Aloud Guidelines for details on how to read certain mathematical symbols and equations.</li> </ul>
<ul style="list-style-type: none"> <li>Test items signed</li> </ul>	<ul style="list-style-type: none"> <li>For mathematics booklets, use the Mathematics Read-Aloud Guidelines for details on how to sign certain mathematical symbols and equations.</li> </ul>
<ul style="list-style-type: none"> <li>Braille version of test</li> </ul>	<ul style="list-style-type: none"> <li>If a scribe is used, when a constructed response is required, the scribe should write exactly what the student says. A student responding orally should indicate when a sentence ends and another one begins. There is no need for a student to indicate grammar or punctuation, provided that the answer can be read and understood. The student should spell the word only when it is critical to distinguish meaning. The scribe should use the matching, regular assessment booklet to record student answers.</li> <li>Use the companion booklet to follow along with the student.</li> </ul>
<ul style="list-style-type: none"> <li>Responds in sign language</li> </ul>	<ul style="list-style-type: none"> <li>When a constructed response is required, the interpreter/scribe should write exactly what the student signs. A student should indicate when one sentence ends and another begins. There is no need for the students to indicate grammar or punctuation, provided that the answer can be read and understood.</li> </ul>
<ul style="list-style-type: none"> <li>Responds orally to scribe</li> </ul>	<ul style="list-style-type: none"> <li>When a constructed response is required, the scribe should write exactly what the student says. A student responding orally should indicate when a sentence ends and another one begins. There is no need for a student to indicate grammar or punctuation, provided that the answer can be read and understood. The student should spell the word only when it is critical to distinguish meaning.</li> <li>The scribe should show the student the written response after the student completes it, but NOT read the response to the student. The student will get one chance to make revisions, and then will need to move on to the next question.</li> </ul>
<ul style="list-style-type: none"> <li>Small group</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate accommodation session script.</li> </ul>
<ul style="list-style-type: none"> <li>School staff administers</li> </ul>	<ul style="list-style-type: none"> <li>School staff will use the grade-appropriate accommodation session script.</li> </ul>
<ul style="list-style-type: none"> <li>Breaks during test</li> </ul>	<ul style="list-style-type: none"> <li>There are no specific NAEP requirements regarding the length of time for a break, how often the breaks are taken, or whether the student has contact with other students during the breaks. The test must, however, be administered during a single day.</li> </ul>

## Mathematics Read-Aloud Guidelines

Read-aloud examples are given for the following categories: 1. Numbers; 2. Symbols; 3. Operations; 4. Expressions; and 5. Vocabulary. Information is provided about reading Figures and Graphs.

### 1. Numbers

Description	Example(s)	Read as:
General	0	Zero (not "oh")
Large whole numbers	632,407,981	"six three two comma four zero seven comma nine eight one"
	45,000,689,112	"four five comma zero zero zero comma six eight nine comma one one two"
Decimal numbers	0.056	"zero point zero five six"
	4.37	"four point three seven"
Fractions - common	$\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{2}{3}$ , $\frac{4}{5}$	"one half, one fourth, two thirds, four fifths" Other common fractions include "sixths, eighths, tenths"
Fractions - not common - read as "numerator over denominator"	$\frac{14}{25}$	"fourteen over twenty-five"
	$\frac{487}{6972}$	"four hundred eighty-seven over six thousand nine hundred seventy-two"
Mixed numbers - read with "and" between whole number and fraction	$3\frac{1}{2}$	"three and one-half"
	$57\frac{3}{4}$	"fifty-seven and three fourths"
Percents	62%	"sixty-two percent"
	7.5%	"seven point five percent"
	0.23%	"zero point two three percent"
Money - if contains a decimal point, read as "dollars AND cents"	\$4.98	"four dollars and ninety-eight cents"
	\$0.33	"thirty-three cents"
	\$5,368	"five thousand, three hundred sixty-eight dollars"
Negative numbers - do NOT read negative sign as "minus."	- 3	"negative three"
	$-\frac{5}{8}$	"negative five eighths"
	- 7.56	"negative seven point five six"
Dates (years)	1987	"nineteen eighty-seven"
	2005	"two thousand five"
Roman Numerals	I	"Roman Numeral one"
	II	"Roman Numeral two"
	III	"Roman Numeral three"
	IV	"Roman Numeral four"

## Mathematics Read-Aloud Guidelines (continued)

### 2. Symbols

Description	Example(s)	Read as:
Operation symbols	$+$ $-$ $\times$ $\div$	“plus” “minus” “times” “divided by”
Powers and roots	$7^2$ $5^3$ $2^4$ $\sqrt{6}$	“seven squared” “five cubed” “two to the fourth power” “the square root of six”
Parentheses - read as “the quantity”	$3(x + 2)$ $(y - 5) \div 6$	“three times the quantity ‘x’ plus two” “the quantity ‘y’ minus five (pause) divided by six”
Ratios	<b>the ratio 2:3</b> <b>the ratio 3:5:9</b>	“the ratio two to three” “the ratio three to five to nine”
Absolute value	$ 3 $ $ -6 $ $ x + 2 $	“the absolute value of three” “the absolute value of negative six” “the absolute value of ‘x’ plus two”
Miscellaneous	$\pi$ $=$ $\approx$ $<$ $\leq$ $>$ $\geq$ $\angle$ (as in $\angle AOB$ ) $^{\circ}\text{F}$ $^{\circ}\text{C}$	“pi” “is equal to” “approximately equal to” “is less than” “less than or equal to” “is greater than” “greater than or equal to” “angle” as in “angle ‘A’ ‘O’ ‘B’” “degrees ‘F’” “degrees ‘C’”

## Mathematics Read-Aloud Guidelines (continued)

### 3. Operations

Description	Example(s)	Read as:
Addition – Vertical	$\begin{array}{r} 13 \\ + 27 \\ \hline \end{array}$	“thirteen plus twenty-seven equals”
Horizontal	$13 + 27 =$	“thirteen plus twenty-seven equals”
Subtraction – Vertical	$\begin{array}{r} 487 \\ - 159 \\ \hline \end{array}$	“four hundred eighty-seven minus one hundred fifty-nine equals”
Horizontal	$487 - 159 =$	“four hundred eighty-seven minus one hundred fifty-nine equals”
Multiplication – Vertical	$\begin{array}{r} 63 \\ \times 49 \\ \hline \end{array}$	“sixty-three times forty-nine equals”
Horizontal	$63 \times 49 =$	“sixty-three times forty-nine equals”
Division – Vertical	$\begin{array}{r} 8 \\ 15 \overline{)120} \end{array}$	“fifteen into one hundred twenty equals eight”
Horizontal	$120 \div 15 = 8$	“one hundred twenty divided by fifteen equals eight”
The answer choices to questions such as “Divide: $4 \overline{)121}$ ”	Math division answer choices or math expressions that contain the letter “R” — such as <b>30 R1</b>	“thirty ‘R’ one” (Do NOT read “R” as “remainder”)
Operations with boxes or shapes	$3 + \square = 15$ $\square + \triangle = 26$	“three plus box equals fifteen” “box plus triangle equals twenty-six”

## Mathematics Read-Aloud Guidelines (continued)

### 4. Expressions

Description	Example(s)	Read as:
Expressions containing variables (any letter may be used as a variable)	$N + 4$ $8x - 3$ $4(y - 2) + 5 = 7$ $y = x^2 + 6x - 1$ $V = \frac{4}{3}\pi r^3$ $\frac{ t - 2 }{6} \leq 15$ $x^2 y^3 = -36$	“‘N’ plus four” “eight ‘x’ minus three” “four times the quantity ‘y’ minus two (pause) plus five equals seven” “‘y’ equals ‘x’ squared plus six ‘x’ minus one” “‘V’ equals four-thirds pi ‘r’ cubed” “the absolute value of ‘t’ minus two (pause) over six is less than or equal to fifteen” “‘x’ squared ‘y’ cubed equals negative thirty-six”
Coordinate pairs	the point $(-1, 2)$ The point A is at $(6, 3)$ . A. $(-3, -4)$	“the point (pause) negative one comma two” “The point ‘A’ is at (pause) six comma three.” “‘A’ (pause) negative three comma negative four”
Answer choices with no other text	B. $\left(\frac{2}{3}, \frac{1}{5}\right)$	“‘B’ (pause) two-thirds comma one-fifth”

## Mathematics Read-Aloud Guidelines (continued)

### 5. Vocabulary

Vocabulary	Read as:
congruent	con' gru ent
kilograms	kil' ō grams
kilometers	kil om' ě ters
isosceles	ī sōs' ě lēs
pentagonal	pen tag' ō nal
perimeter	per im' ě ter
Pythagorean	pi thag' ōr ē an
quadrilateral	qua' drī lat er al
quartile	quar' tile
theorem	thēr' um
x-intercept	“x” in ter cept
y-intercept	“y” in ter cept

### Figures and Graphs

The text and numbers in figures should be read as shown in the previous tables.

No additional description or information should be provided.

Abbreviations (e.g., units such as “cm” or “ft”) should be read letter by letter (e.g., “cm” should be read as “c” “m,” NOT as “centimeters” and “ft” should be read as “f” “t,” NOT as “feet”).

Read as: “The first row is one, **bar**, three, five, five, nine.  
The second row is three, **bar**, one.  
The third row is four, **bar**, two, six, seven.”

# 8<sup>th</sup>

## 2009 NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

### SESSION SCRIPT: GRADE 8 ACCOMMODATION

#### Introduction

- Place the booklets and NAEP pencils on the desks prior to the session. If there are extra materials inside the booklet covers, remove them from the booklets and place them on the upper-left corner of the desk.
- When all students have arrived, collect all unused booklets and materials. Remove the label from each booklet cover and place it on the upper-right corner of the desk.
- **A note about students who require Extended Time:** All instructions regarding timing are printed in blue throughout the script. If a student requires extended time, skip all blue text in the script. Be sure to note the time each student begins working on the cognitive sections and the time the student finishes. When most or all students are done with the section, move on to the next section. If a student needs considerably more time than the others, tell him/her that there will be time at the end of the session to go back to that section.

Good morning/afternoon, everyone! My name is **(YOUR NAME)**. Today you will be participating in a test called the National Assessment of Educational Progress, also known as NAEP or The Nation's Report Card. NAEP is a way to show what students like you—from all around the country—know and can do in different subjects. You and your school were especially chosen to represent other eighth-graders and schools across **(STATE NAME)** and the United States.

Here are some things to remember when you take NAEP: the test takes about 90 minutes and not everyone will take the same test; some of you will be answering questions in reading, math, or science. You will also see questions about yourself and your experiences in and out of school. Do not write your name on the work you do; no one in the school will see your answers. Your answers will be combined with information from other students across **(STATE NAME)** and the United States. Because your responses help our country's leaders and teachers to find out what students your age are learning, it is very important that you try your very best.

## Additional Materials

- Read the next paragraph only if students have ancillaries.

Some of your booklets may have sections in which you will need to use something extra, like a ruler/protractor or other materials. If so, you will find them on the upper-left corner of your desk. The instructions in your booklet will tell you when you need to use them.

Some of your booklets require using a calculator for at least one part of the booklet. If so, I will tell you when it's time to use one. You may use your own scientific or graphing calculator if your booklet requires one. However, you are not permitted to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device. If you require a calculator and do not have one, I will provide you with one later.

- Allow time for students to separate shapes.

## Code the Booklet Cover

Now, please look at your booklet cover. You will see a group of boxes labeled "School Number." The number you are to write in these boxes is **(READ NUMBER)**.

- Point to the number on the board as you read it. Repeat the number as necessary.

Now, I need to find out the name of your teacher.

- Look at each student's booklet cover to determine the subject in which the student is being assessed. Ask each student to tell you his/her teacher's name. Then, refer to the Roster of Questionnaires for the teacher number and assist the students in recording the appropriate teacher number on the booklet cover.
- For students whose teachers are not listed on the roster, write the teacher name on the booklet cover and follow up with your AC after the assessment.

---

## Booklet Directions

### Non-read aloud

- Set timer for 2 minutes.

Now turn to the directions on the first two pages. You will have 2 minutes to read the directions. Read the directions to yourself. Please begin.

- Help students find the correct page as necessary.
- Start timer.
- Do not admit any more students into the session.
- When all students have finished reading the directions, say:

### Read aloud

Now turn to the directions on the first two pages. Read the directions to yourself as I read them out loud.

- Help students find the correct page as necessary.
- Do not admit any more students into the session.
- Read the directions and example in the booklet to the students. Then say:

## Cognitive Section

### Non-read aloud

- Set timer for 2 minutes.

Now turn to the next set of directions and read them to yourself. You will have 2 minutes to read the directions. Please begin.

- Start timer.
- When all students have finished reading the directions, say:

### Read aloud

Now turn to the next set of directions and read them to yourself as I read them out loud.

- Read the directions and example in the booklet to the students. Then, say:

**SECTION 1**

Now turn to the beginning of Section 1.

- Read the next two paragraphs only if students require calculators.

Some of you will need to use a calculator for at least one part of your booklet. If so, there will be a sentence at the top of the page that says, “You will need a calculator for this section.” If you see this sentence, take out your scientific or graphing calculator. If you did not bring one, raise your hand now and I will give you a calculator.

If you do not know how to use the calculator, there are instructions at the beginning of the section and on the back cover of your booklet to help you. If you need help with the calculator at any time, please raise your hand.

- Distribute gray calculators as necessary, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device.

While you are working in this section, I cannot help you answer the questions or explain words to you. You may print or write your answers in cursive.

Some questions may require 5 minutes or more for you to think about and answer. Think carefully about the question and write a complete answer. It is important to show all of your work.

If you have any questions or need another pencil at any time, please raise your hand.

### **Non-read aloud**

- Set timer for 25 minutes.

Carefully read the directions and then start working. You will have 25 minutes to complete this section. Please begin.

- Start timer.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

### **Read aloud**

Read the next set of directions to yourself as I read them out loud.

- Read the directions to the students.
- For each student, note the time the section begins.

Let's begin.

- Read the questions and answer choices in the booklet to the students.
- If a math session, refer to the *Mathematics Read-Aloud Guidelines* for guidance on how to read math problems aloud.

- In test booklets R412, R413, R415, R416, R432, R433, R439, R440, R452, R453, R463, R464, R504, R511, R518, R525, R552, R559, and R563: If a student raises a question about Senator John Warner no longer being a senator, please give the following response:

“Senator John Warner was a senator when this booklet was printed. When answering the question, please pretend that he is still a senator.”

- Monitor students, making sure they are working on the correct section of their booklets and using a calculator or ruler/protractor only in a calculator or ruler/protractor section. This is easily identifiable by a “P” or “C” on the booklet page.
- If a student finishes before the others in the group, prompt him/her to go back and review the current section.
- Collect calculators if any were distributed, or have the students who used their own calculators put them away. Make sure to account for all calculators.

**SECTION 2**

Now turn to the beginning of Section 2.

Read the next paragraph only if students require calculators.

If you see the sentence, “You will need a calculator for this section,” please take out your scientific or graphing calculator. If you didn’t bring one, raise your hand.

- Distribute gray calculators as needed, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device.

**Non-read aloud**

- Set timer for 25 minutes.

Carefully read the directions and then start working. *You will have 25 minutes to complete this section.* Please begin.

- Start timer.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

**Read aloud**

Read the next set of directions to yourself as I read them out loud.

- Read the directions in the booklet to the students.
- For each student, note the time the section begins.

Let’s begin.

- Read the questions and answer choices in the booklet to the students.
- If a math session, refer to the *Mathematics Read-Aloud Guidelines* for guidance on how to read math problems aloud.

- Monitor students, making sure they are working on the correct section of their booklets and using a calculator or ruler/protractor only in a calculator or ruler/protractor section. This is easily identifiable by a “P” or “C” on the booklet page.
- If a student finishes before the others in the group, prompt him/her to go back and review the current section.
- Collect calculators if any were distributed, or have the students who used their own calculators put them away. Make sure to account for all calculators.

## Background Section

### SECTION 3

#### Non-read aloud

- Set timer for 2 minutes.

Now turn to the directions for Sections 3 and 4 and read them to yourself. **You will have 2 minutes to read the directions.** Please begin.

- Start timer.
- When all students have finished reading the directions, say:

Now turn to the beginning of Section 3. I will read the first two questions and the answer choices for you.

**[IF NEW JERSEY, SAY:** You are not required to answer Questions 1 and 2 about your race or ethnicity.]

- Read the first two questions and answer choices in the booklet to the students. These can be found on the next page of this script.

#### Read aloud

Now turn to the directions for Sections 3 and 4. Read them to yourself as I read them out loud.

- Read the booklet directions to the students.

Now turn to the beginning of Section 3.

**[IF NEW JERSEY, SAY:** You are not required to answer Questions 1 and 2 about your race or ethnicity.]

Let’s begin.

- Read the questions and answer choices from Section 3 in the student booklet to the students.

1. Are you Hispanic or Latino? Fill in **one or more ovals**.
  - A No, I am not Hispanic or Latino.
  - B Yes, I am Mexican, Mexican American, or Chicano.
  - C Yes, I am Puerto Rican or Puerto Rican American.
  - D Yes, I am Cuban or Cuban American.
  - E Yes, I am from some other Hispanic or Latino background.
2. Which of the following best describes you? Fill in **one or more ovals**.
  - A White
  - B Black or African American
  - C Asian
  - D American Indian or Alaska Native
  - E Native Hawaiian or other Pacific Islander

**Non-read aloud**

- Set timer for 5 minutes.

Answer the rest of the questions in Section 3 on your own. **You will have 5 minutes to complete this section.** Please begin.

- Start timer.

**Read aloud**

- Continue reading the questions and answer choices from Section 3 in the student booklet.

- When all students have finished Section 3, move on to the next section.

## SECTION 4

### Non-read aloud

- Set timer for 8 minutes.

Now turn to the beginning of Section 4. You will do this section on your own. You will have 8 minutes to complete this section. Please begin.

- Start timer.

### Read aloud

Now turn to the beginning of Section 4 and read to yourself as I read out loud. Let's begin.

- Read the directions, questions, and answer choices in the booklet to the students.

- When all students have finished Section 4, move on to the next section.

## SECTION 5 – ESBQ, If Required

### Non-read aloud

- Set timer for 5 minutes.

Now take out Section 5 from the back of your booklet.

- Remove the label from the ESBQ booklet cover and place it on the upper-right corner of the desk.

You will do this section on your own. You will have 5 minutes to complete this section. Please open your booklet and begin.

- Start timer.

### Read aloud

Now take out Section 5 from the back of your booklet.

- Remove the label from the ESBQ booklet cover and place it on the upper-right corner of the desk.

Open your booklet and read to yourself as I read out loud. Let's begin.

- Read the directions, questions, and answer choices in the booklet to the students.

- When all students have finished Section 5, move on to the next section.

## Collect Materials

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of the booklet cover. If you have a packet of materials, make sure to place the materials back in the bag.

- Collect the booklets, ESBQs (if administered), ancillaries, and student ID labels. Tear up the ID label and throw them away.
- If NIES, as you collect the materials, place the NIES appointment cards on the upper-right corner of the desks of students selected for NIES.
- If a student needed considerably more time than the others for the cognitive sections, allow him/her to continue working on the cognitive sections only.

## NIES Student Survey, If Required

### Option 1: NIES to Be Administered Immediately Following the NAEP Assessment

Some of you have been invited to take a special survey after the NAEP assessment. If you have an appointment card on your desk, please remain here when I dismiss the other students. The survey should only take 15–20 minutes and then you can return to class.

- When all of the other students have left and you have accounted for all of the session materials, escort those students to the location where the NIES will be administered, if necessary.

### Option 2: NIES to Be Administered at a Later Time

If you have an appointment card on your desk, you have been invited to take a special survey after the NAEP assessment. Please refer to your appointment card for the time and location where the survey will take place. The survey should only take 15–20 minutes and then you can return to class.

---

## Thank and Dismiss Students

Thank you very much for your time and effort here today. On your pencil, you'll notice the website address for the National Assessment of Educational Progress. Visit this website if you would like more information about the assessment you just completed.

- Dismiss students according to school policy.

**THIS PAGE IS INTENTIONALLY LEFT BLANK.**

## GRADE 8 QUESTION-BY-QUESTION SPECIFICATIONS (QXQS)

<b>General QxQs</b> .....	1.1
<b>Subject Area QxQs</b> .....	2.1
Reading .....	2.1
Mathematics .....	2.7
Science .....	2.17
<b>ESBQ QxQs</b> .....	3.1

# 8<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### GENERAL STUDENT BACKGROUND QUESTIONS: GRADE 8

Assessment administrators may answer questions that students have about the questions in Section 3. These questions form an important part of the analysis of results, and NAEP wants to obtain the most accurate responses possible.

To assist you in answering students' questions, each question in the background section is repeated below, with an explanation of what information the question is attempting to obtain from the students.

If a student feels that a question in this section is too personal, stress confidentiality. If the student is still reluctant, tell the student she or he does not have to answer the question.

As a result of natural disasters or other traumatic events, some students may have been displaced from their previous homes and schools. A displaced student may ask whether he or she should answer certain questions in reference to his or her previous home and school or with regard to his or her present home and school. Your response should be that all the questions refer to the student's current situation.

Some of the background questions may present difficulty to students who are not living with their mother and father at home. Below are guidelines, which can be applied in these situations.

- Questions that refer to mother or father also apply to students' adoptive parents, guardians, or primary caregivers (i.e., the person(s) in the student's home responsible for the student's day-to-day care). Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the student's home, whether the student is living with his or her natural parents, adoptive parents, or guardians. If the student divides his or her time between two homes (e.g., between divorced parents who share physical custody), answers to questions about newspapers, encyclopedia, etc., can be based on the resources available in either home.
- For students living in foster homes, questions that refer to mother or father apply to their foster parents. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the foster home.
- For students living in an orphanage, questions that refer to mother or father should not be answered, and it should be noted by the student in the outside margin of the page that he or she is living in an orphanage. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the orphanage.

In this section, please tell us about yourself and your family. The section has 13 questions. Mark your answers in your booklet.

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

*The student may choose more than one category if applicable.*

*Help the student as much as necessary with this question. Never tell the student his or her race or ethnicity. Help explain the options to the student.*

*The following provides some terms that Hispanics use to describe themselves:*

- *Mexican, Mexicano, Mexican American, Chicano*
- *Puerto Rican, Boricua*
- *Cuban, Cubano*
- *Other Latin American, Latino, Hispanic, or Spanish descent*

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

*The student may choose more than one category if applicable.*

- *If the student doesn't know race/ethnicity, you should ask the student which category best describes the student's background. If the student tells you he or she is from a particular group, such as "Navajo," "Irish," or "Japanese," then you may suggest the appropriate response category (e.g., American Indian, White, or Asian).*
- *If the student says that he or she is American, ask the student to select the next best category that describes him or her, in addition to being American.*

The following provides guidance for the response categories:

**White**: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

**Black or African American**: A person having origins in any of the black racial groups of Africa. Caribbean or West Indian are other terms sometimes used.

**Asian**: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

**American Indian or Alaska Native**: A person having origins in any of the original peoples of North and South America (including Central America), and who maintains a tribal affiliation or community attachment.

**Native Hawaiian or Other Pacific Islander**: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. (The term “Native Hawaiian” does not include individuals who are native to the State of Hawaii by virtue of being born there.) In addition to Native Hawaiians, Guamanians, and Samoans, this category includes the following Pacific Islander groups: Carolinian, Fijian, Melanesian, Micronesian, Northern Mariana Islander, Palauan, Papua New Guinean, Ponapean (Pohnpelan), Polynesian, Solomon Islander, Tahitian, Tarawa Islander, Tokelauan, Tongan, Trukese (Chuukese), and Yapese.

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?

- A Yes
- B No
- C I don't know.

Newspapers obtained in school are not to be included in this question.

4. Does your family get any magazines regularly?

- A Yes
- B No
- C I don't know.

Getting any magazines “regularly” is defined as currently subscribing to a weekly or monthly magazine or purchasing one “regularly”; that is, 3 out of every 4 weeks if the magazine is a weekly and at least 10 months a year if the magazine is a monthly.

5. About how many books are there in your home?
- A Few (0–10)
  - B Enough to fill one shelf (11–25)
  - C Enough to fill one bookcase (26–100)
  - D Enough to fill several bookcases (more than 100)

*The total number of books should include all books—hardback, softback, or books on tapes or CDs— that are in the home (i.e., belonging to the student or the student’s family). The total number should not include magazines, newspapers, comic books, etc.*

6. Is there a computer at home that you use?
- A Yes
  - B No

*This question refers to a computer, located in the student’s home, that the student uses for any purpose (e.g., for schoolwork, games, Internet, e-mail, etc.). Do NOT include calculators or PDAs (Personal Digital Assistants).*

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

*An encyclopedia is any reference source of a general nature. It does not have to be a whole set of books or more than one volume. It can be an electronic encyclopedia, such as one available on a computer or CD. Any single comprehensive reference source would qualify as a “Yes” response. However, a dictionary, the World Almanac, or any other yearly almanac publication should not be included.*

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

*This question refers to the number of pages of reading that is typically assigned each day across all subject areas. The total number of pages should include reading that the student completes in class and as homework.*

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

*This question refers to any kind of discussion that the student has with parent(s), sibling(s), or other family members about schoolwork or anything studied in school. It does not include conversations that are solely concerned with the student's social or interpersonal experiences at school. Neither does it include simple questions about whether the student has any homework or has completed his or her homework.*

10. How many days were you absent from school in the last month?
- A None
  - B 1 or 2 days
  - C 3 or 4 days
  - D 5 to 10 days
  - E More than 10 days

*This question refers to the number of full days the student was absent from school in the last month for any reason (e.g., illness, skipped, sports events, extracurricular events, family vacation). However, missing school days due to snow or other weather conditions when the school was closed should not be included in the answer to this question. "In the last month" is defined as the last 30 days. The student should give his or her best estimate as to the number of days missed.*

11. How far in school did your mother go?
- A She did not finish high school.
  - B She graduated from high school.
  - C She had some education after high school.
  - D She graduated from college.
  - E I don't know.

*In the absence of a biological or adoptive mother or female guardian, this question applies to the female in the student's home who is most responsible for the day-to-day care of the student—that is, a stepmother, a grandmother, some other adult female relative, or an unrelated person, such as a foster mother or other female caregiver. If the student spends or has spent time living with both a biological mother and a stepmother, the student should provide the information with regard to the person with whom he or she has lived the most during his or her lifetime. If no female parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a female parent or other female caregiver with whom he or she has previously lived, the student should answer with respect to that female parent or caregiver. If the student has never lived with a female caregiver, the student should respond with option E, "I don't know."*

Option B, “She graduated from high school,” refers to having received a high school diploma or a GED or High School Equivalency. Option C, “She had some education after high school,” refers to participating in any type of postsecondary education (e.g., vocational, technical, or business school; 2-year or 4-year college or university; service academy). Option D, “She graduated from college,” refers to having a degree (e.g., B.A., B.S.) from a 4-year college, university, or service academy program. Students whose mother (or female parent figure or caregiver) started but did not complete a 2-year or 4-year program should fill in option C, not option D. If the student’s mother (or female parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.

12. How far in school did your father go?
- A He did not finish high school.
  - B He graduated from high school.
  - C He had some education after high school.
  - D He graduated from college.
  - E I don’t know.

*In the absence of a biological or adoptive father or male guardian, this question applies to the male in the student’s home who is most responsible for the day-to-day care of the student—that is, a stepfather, a grandfather, some other adult male relative, or an unrelated person, such as a foster father or other male caregiver. If the student spends or has spent time living with both a biological father and a stepfather, the student should provide the information with regard to the person with whom he or she has lived the most during his or her lifetime. If no male parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a male parent or other male caregiver with whom he or she has previously lived, the student should answer with respect to that male parent or caregiver. If the student has never lived with a male caregiver, the student should respond with option E, “I don’t know.”*

Option B, “He graduated from high school,” refers to having received a high school diploma or a GED or High School Equivalency. Option C, “He had some education after high school,” refers to participating in any type of postsecondary education (e.g., vocational, technical, or business school; 2-year or 4-year college or university; service academy). Option D, “He graduated from college,” refers to having a degree (e.g., B.A., B.S.) from a 4-year college, university, or service academy program. Students whose father (or male parent figure or caregiver) started but did not complete a 2-year or 4-year program should fill in option C, not option D. If the student’s father (or male parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.

13. How often do people in your home talk to each other in a language other than English?
- A Never
  - B Once in a while
  - C About half of the time
  - D All or most of the time

*This question focuses on the language used by people in the student’s home. It asks how often people in the student’s home talk to each other (or to the student) in a language other than English. A student from an English-speaking home should pick the first option, “Never.” The student should not count occasional use of another language by someone in his or her family who is practicing a language for school, travel, etc.*

# 8<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE READING: GRADE 8

#### Section 4

This section has 15 questions. Mark your answers in your booklet. Fill in only **one** oval for each question.

1. Please indicate how much you DISAGREE or AGREE with the following statements about reading and writing. Fill in **one** oval on each line.

	Strongly Disagree	Disagree	Agree	Strongly Agree
a. When I read books, I learn a lot.	A	B	C	D
b. Reading is one of my favorite activities.	A	B	C	D

*The items in this question refer to the student's attitude toward reading. Reading is asked about in general, not specifically with reference to school. The student should express his or her own opinion.*

2. How often do you do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once or twice a month	Once or twice a week	Almost every day
a. Read for fun on your own time	A	B	C	D
b. Talk with your friends or family about something you have read	A	B	C	D

*The items in this question ask the frequency with which the student engages in various reading activities outside of school.*

**Read for fun on your own time:** Refers to how often the student reads for his or her own enjoyment during free time (i.e. leisure time that is independent from school requirements). Reading may include a variety of materials, such as books, comic books, and articles in the newspaper or on the Internet.

**Talk with your friends or family about something you have read:** Refers to the frequency with which the student discusses material that he or she has read with a friend or family member. This discussion can be initiated by the student or by the other participant. It can be based on material that the student has read for school or for his or her own enjoyment.

3. Now think about reading and writing you do for school. For your **English** class this year, how often do you do each of the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>A few times a year</b>	<b>Once or twice a month</b>	<b>At least once a week</b>
a. Have a class discussion about something that the whole class has read	A	B	C	D
b. Work in pairs or small groups to talk about something that you have read	A	B	C	D

*The items in this question ask the frequency with which the student discusses what he or she has read in his or her English class. The student should only include discussions that occurred in English class since the beginning of the current school year.*

**Have a class discussion about something that the whole class has read:** Refers to the frequency with which the student’s English class has a class discussion about material that the class has read. This discussion may be led by the teacher but must involve some student participation. That is, a teacher lecturing the students does not qualify. If a class discussion was held, but the student did not speak, the student should include this discussion in his or her answer.

**Work in pairs or small groups to talk about something that you have read:** Refers to the frequency with which the student engages in class-assigned one-on-one or small-group discussions in English class about material that he or she has read. Discussions may be in-class or out-of class.

4. For your **English** class so far this year, how many times have you done each of the following? Fill in **one** oval on each line.

	<b>Never</b>	<b>Once</b>	<b>2 or 3 times</b>	<b>4 or 5 times</b>	<b>6 or more times</b>
a. Made a presentation to the class about something that you have read	A	B	C	D	E
b. Done a project about something that you have read (for example, written a play, created a website)	A	B	C	D	E

*The items in this question ask the frequency with which the student makes presentations or does projects about something he or she reads. The student should only include presentations or projects completed in English class since the beginning of the current school year.*

**Made a presentation to the class about something that you have read:** Refers to the frequency with which the student makes a presentation to communicate to the English class information about material that he or she has read. The presentation may be an individual presentation or a group presentation.

**Done a project about something that you have read (for example, written a play, created a website):** Refers to the frequency with which the student completes an English class project related to material that the student has read. The project may be an individual project or a group project. “Project” refers to a sustained activity that yields a product.

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

*This question refers to the frequency with which the student uses the school library or public library for his or her schoolwork. Access to the library may be initiated by the student or prompted by the teacher or parent. School projects or homework is not limited to English/language arts class.*

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

*This question refers to the frequency with which the student uses the school library or public library for his or her own personal use not related to a school project or homework.*

7. Do you study or do work for English/language arts at an after-school or tutoring program?
- A Yes
  - B No

*This question refers to whether the student studies or does work for English/language arts while attending an after-school or tutoring program. These programs could include school-based and school-sponsored programs and/or private programs. These programs would not include informal study sessions with peers or teachers.*

8. In your school, do you participate in extracurricular activities such as book clubs, competitions, fairs, or exhibits for reading?
- A Yes
  - B No

*This question refers to whether the student has ever attended (either within his or her own school grounds or on school-sponsored field trips) book clubs, competitions, fairs, or exhibits related to reading.*

9. For school this year, how often have you been asked to write long answers to questions on tests or assignments that involved reading?
- A Never
  - B Once or twice this year
  - C Once or twice a month
  - D At least once a week

*This question refers to the frequency with which the student has been asked to integrate reading and writing in school by writing on tests and/or for assignments that involve reading. "Long answers" are answers that require at least one paragraph. The phrase "tests and assignments that involved reading" refers to tests on materials that are read by the student and reading assignments that are given to the student.*

10. In your English/language arts class this year, how often does your class do each of the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>Once or twice a month</b>	<b>Once or twice a week</b>	<b>Everyday or almost every</b>
a. Read aloud	A	B	C	D
b. Read silently	A	B	C	D
c. Discuss new or difficult vocabulary	A	B	C	D
d. Explain what we have read	A	B	C	D
e. Do a group activity or project about what we have read	A	B	C	D
f. Read books we have chosen ourselves	A	B	C	D
g. Write something about what we have read	A	B	C	D
h. Discuss different interpretations of what we have read	A	B	C	D

*The items in this question refer only to activities that are integrated into the student's English/language arts class. The frequency estimates are based upon the class activity (as a whole or in part), not whether the student individually engaged in the various options. Items "a," "b," and "f" all refer to reading activities done individually by students. Items "c," "d," and "h" are verbal activities undertaken by students in the classroom. Item "e" refers to an activity/project that is either written or oral, or some combination of both, completed by students. Item "g" refers to an individual writing activity. The student should only include activities done in his or her English/language arts class this school year.*

11. In your English/language arts class this year, when reading a story, article, or other passage, how often does your teacher ask you to do the following? Fill in **one** oval on each line.

	Never or hardly ever	Once or twice a month	Once or twice a week	Everyday or almost every
a. Summarize the passage	A	B	C	D
b. Interpret the meaning of the passage	A	B	C	D
c. Question the motives or feelings of the characters	A	B	C	D
d. Identify the main themes of the passage	A	B	C	D

*The items in this question refer to specific activities related to the student's reading assignments. These activities could be either written or oral responses. The student should only include activities done in his or her English/language arts class this school year.*

12. In your English/language arts class this year, how often do you use a computer to do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once or twice a month	Once or twice a week	Every day or almost every day
a. Learn and practice vocabulary	A	B	C	D
b. Practice spelling and grammar	A	B	C	D
c. Write stories or reports	A	B	C	D
d. Produce multimedia reports/projects	A	B	C	D
e. Read books on the computer	A	B	C	D
f. Access reading-related websites (for example, websites with book reviews and lists of recommended books)	A	B	C	D
g. Conduct research for reading and writing projects	A	B	C	D
h. Correspond with students from other schools using e-mail	A	B	C	D

*The items in this question refer to the frequency with which the student uses a computer at school to do various activities. The work may be done on computers in a classroom, in a school library, in a school computer lab, or elsewhere at school. The student should only include use of the computer for activities associated with his or her English/language arts class this school year.*

13. How hard was this test compared to most other tests you have taken this year in school?
- A Easier than other tests
  - B About as hard as other tests
  - C Harder than other tests
  - D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. "Compared to most other tests" means school tests given this academic year, in all subjects, including English/language arts.*

14. 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?
- A Not as hard as on other tests
  - B About as hard as on other tests
  - C Harder than on other tests
  - D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test compared to his or her effort on most other school tests taken this academic year, in all subjects including English/language arts.*

15. How important was it to you to do well on this test?
- A Not very important
  - B Somewhat important
  - C Important
  - D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

# 8<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE MATHEMATICS: GRADE 8

#### Section 4

This section has 18 questions. Mark your answers in your booklet. Fill in only **one** oval for each question.

1. What math class are you taking this year?
  - A Geometry
  - B Algebra II
  - C Algebra I (one-year course)
  - D First year of a two-year Algebra I course
  - E Second year of a two-year Algebra I course
  - F Introduction to algebra or pre-algebra
  - G Basic or general eighth-grade math
  - H Integrated or sequential math
  - I Other math class

*This question asks what math class the student is taking this year. Mathematics course patterns differ from school district to school district; moreover, they are continually changing as more districts introduce traditional “high school” mathematics at earlier grade levels. Sometimes these more advanced classes are offered for all students and sometimes only for the most able students. To interpret performance on the NAEP mathematics assessment, it is helpful to know the type of course in which a student is enrolled and, thus, the mathematics content to which he or she has been exposed. However, given the wide variation in course titles, students may have difficulty in selecting the correct course descriptor from our list. The following descriptions of the mathematics content typically covered in each type of course may be helpful to students who are unsure what to answer. Encourage the student to give his or her best judgment, even if he or she is not certain of the correct answer.*

**Geometry** usually involves working with theorems and proofs involving two-dimensional figures such as rectangles, triangles, and circles.

**Algebra II** usually involves solving quadratic equations, radical expressions and equations, and rational expressions and equations, as well as working with functional notation and right-triangle trigonometry. Algebra II would be a very advanced class for an eighth-grade student because it is usually taken after both Algebra I and Geometry.

**Algebra I** usually involves simplifying expressions, finding and solving linear equations and inequalities, solving systems of equations, analyzing data, and working with powers and exponents. The content is sometimes taught in a single school year and sometimes spread over two consecutive years.

**Introduction to algebra or pre-algebra** usually involves solving equations, using positive and negative numbers, graphing equations, and understanding probability and statistics.

**Basic or general eighth-grade math** usually includes topics in number sense, measurement, and conversions. Typically, this course places much less emphasis on equations than does algebra or pre-algebra.

**Integrated or sequential math** is a multi-year curriculum used by some schools and districts. As its name implies, it refers to a specific series of topics, taught in a specific order over more than one year, in which each topic builds upon the previous one. The interdependence of the topics distinguishes integrated/sequential math from a traditional algebra/geometry sequence, in which algebra and geometry are more independent courses. At this grade level, integrated/sequential math usually includes topics in number patterns, problem solving, area and perimeter, the Pythagorean theorem, and logic.

2. What math class do you expect to take next year?

- A Geometry
- B Algebra II
- C Algebra I (one-year course)
- D First year of a two-year Algebra I course
- E Second year of a two-year Algebra I course
- F Introduction to algebra or pre-algebra
- G Basic or general math
- H Integrated or sequential math
- I Business or consumer math
- J Other math class
- K I don't know.

This question asks what math class the student expects to take next year. Because mathematics course work is highly sequential, knowing the course that will be taken next year offers a further check on what courses the student has already completed. Students should be encouraged to give their best judgment; however, if they really have no idea what mathematics to expect in ninth grade, they should select the "I don't know" option.

Refer to the previous question for descriptions of the mathematics content typically covered in each course.

**Basic or general math** would be the same as "basic or general math at ninth grade."

**Business or consumer math** usually involves topics in commission, discount, sales tax, interest, unit pricing, and markups.

3. Do you study or do work for math at an after-school or tutoring program?

- A Yes
- B No

This question refers to whether the student studies or does work for mathematics while attending an after-school or tutoring program. These programs could include school-based and school-sponsored programs, and/or private programs.

4. How often do you feel the following way in your math class? Fill in **one** oval on each line.

	Never or hardly ever	Sometimes	Often	Always or almost always
a. I have a clear understanding of what my math teacher is asking me to do.	A	B	C	D
b. The math work is too easy.	A	B	C	D
c. The math work is challenging.	A	B	C	D
d. The math work is engaging and interesting.	A	B	C	D
e. I am learning.	A	B	C	D

*The five items in this question assess the student's perceptions and attitudes regarding his or her current mathematics class. The student should express his or her own opinions.*

*Items "a," "b," and "c" assess the student's perception of the difficulty posed by the material presented in his or her current mathematics class.*

*Item "d" assesses how much the student enjoys his or her current mathematics class.*

*Item "e" assesses the student's self-perceived performance in his or her mathematics course, regardless of the material's difficulty.*

5. Please indicate how much you DISAGREE or AGREE with the following statements. Fill in **one** oval on each line.

	Strongly disagree	Disagree	Agree	Strongly agree
a. Because math is fun, I wouldn't want to give it up.	A	B	C	D
b. I like math.	A	B	C	D
c. Math is one of my favorite subjects.	A	B	C	D

*The items in this question assess the student's level of agreement about mathematics in general and mathematics as a school subject. The student should express his or her own opinions.*

6. How often do you use these different types of calculators in your math class?

	Never use	Sometimes, but not often	Usually use
a. Basic four-function (addition, subtraction, multiplication, division)	A	B	C
b. Scientific (not graphing)	A	B	C
c. Graphing	A	B	C

*The items in this question refer to the frequency with which the student uses different types of calculators while mathematics class is in session. The calculator could be supplied by the student or by the school.*

**Basic four-function** calculator performs addition, subtraction, multiplication, and division. It does not perform additional functions such as fractions, parenthetical expressions, and sine/cosine.

**Scientific** calculator performs basic arithmetic operations plus calculating exponents and performing other advanced operations.

**Graphing** calculator generally has a large graphing screen. In addition to drawing graphs in the viewing window, it may accept algebraic notation and data matrices.

7. When you take a math test or quiz, how often do you use a calculator?

- A Never
- B Sometimes
- C Always

*This question refers to the frequency with which the student uses a calculator during tests or quizzes. The student should answer based on how he or she uses the calculator in his or her regular classroom. The calculator can be supplied by the student or by the school.*

8. For each of the following activities, how often do you use a **calculator**? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. To check your work on math homework assignments	A	B	C	D	E
b. To calculate the answers to math homework problems	A	B	C	D	E
c. To work in class on math lessons led by your teacher	A	B	C	D	E

*The items in this question ask about the frequency with which the student uses a calculator on mathematics homework or in class. The calculator could be supplied by the student or by the school.*

**To check your work on math homework assignments:** Refers to the student using a calculator to confirm mathematics homework answers that he or she had previously derived without a calculator.

**To calculate the answers to math homework problems:** Refers to the student using a calculator to calculate answers on his or her mathematics homework.

**To work in class on math lessons led by your teacher:** Self-explanatory.

9. What kind of **calculator** do you usually use when you are **not in math class**?

- A None
- B Basic four-function (addition, subtraction, multiplication, division)
- C Scientific (not graphing)
- D Graphing

*This question refers to the type of calculator the student usually uses when he or she is not in mathematics class. The calculator could be used for any purpose or combination of purposes, including mathematics homework, class work or homework for some other subjects, or non-school activities.*

**Basic Four-Function** calculator performs addition, subtraction, multiplication, and division. It does not perform additional functions such as fractions, parenthetical expressions, and sine/cosine.

**Scientific** calculator performs basic arithmetic operations plus calculating exponents and performing other advanced operations.

**Graphing** calculator generally has a large graphing screen. In addition to drawing graphs in the viewing window, it may accept algebraic notation and data matrices.

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

*This question refers to the frequency with which the student uses a computer at school for mathematics-related work—including class work, homework, and any other mathematics-related activity. The work may be done on computers in a classroom, in a school library, in a school computer lab, or elsewhere at school.*

11. Do you use a computer for math homework at home?
- A Yes
  - B No

*This question refers to whether the student uses a computer at home specifically for mathematics homework. The computer could be the student's personal computer or a family computer. Do NOT include calculators or PDAs (Personal Digital Assistants).*

12. On a typical day, how much time do you spend doing work for math class on a computer? Include work you do in class and for homework.
- A None
  - B Half an hour or less
  - C About 1 hour
  - D About 2 hours
  - E More than 2 hours

*This question refers to the amount of time the student spends on any computer, performing work for his or her mathematics class. The student should include both work done during class and homework done outside of class. The computer could be at home, at school, in a library, or anywhere else.*

13. When you are doing math for school or homework, how often do you use these **different types of computer programs**? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. A spreadsheet program for math class assignments	A	B	C	D	E
b. A program to practice or drill on math facts (addition, subtraction, multiplication, division)	A	B	C	D	E
c. A program that presents new math lessons with problems to solve	A	B	C	D	E
d. The Internet to learn things for math class	A	B	C	D	E
e. A calculator program on the computer to solve or check problems for math class	A	B	C	D	E
f. A graphing program on the computer to make charts or graphs for math class	A	B	C	D	E
g. A statistical program to calculate patterns such as correlations or cross tabulations	A	B	C	D	E
h. A word processing program to write papers for math class	A	B	C	D	E
i. A program to work with geometric shapes for math class	A	B	C	D	E

The items in this question refer to the types of computer programs the student may use while studying mathematics and the frequency with which he or she uses each type of program. The student should include programs used in mathematics class and for mathematics homework. Extra credit or self-study work should be included, but not work for other classes (such as science). The computer could be at home, at school, in a library, or anywhere else.

**A spreadsheet program for mathematics class assignments:** Refers to the frequency with which the student uses spreadsheet programs for mathematics class assignments. Such programs include Excel, Lotus 1 2 3, etc. This activity may include using a spreadsheet program to create/display data in tables, in charts, or in graphs but should not include using a spreadsheet program to organize class assignments. The student also should not include times he or she uses tables in a word processing program (e.g., Word, Word Perfect, Notepad, etc.).

**A program to practice or drill on math facts (addition, subtraction, multiplication, division):** Refers to the frequency with which the student uses programs that are designed to increase mastery of basic mathematics concepts and facts, like addition, subtraction, multiplication, division, fractions, and decimals. Such programs include Math Blaster, Math Flashcards, Decimal & Fraction Maze, Math Advantage 2002, etc.

**A program that presents new math lessons with problems to solve:** Refers to the frequency with which the student uses programs that present entire lessons, from introducing a new concept through practice and

mastery. In some cases the lessons use a self-discovery model in which the student learns the concept by working through the problems; in other cases the concept is presented in an expository manner at the beginning of each lesson. Examples include the SMILE Program, 123Math.ca, Math Goodies, the Carnegie Algebra Tutor, etc.

**The Internet to learn things for math class:** Refers to the frequency with which the student uses the Internet to access websites containing substantive information about mathematics (including the application of mathematics or the history of mathematics) for mathematics class assignments. Sites might include those sponsored by encyclopedias, universities, professional societies, or museums. The student should not include his or her visits to school or to class websites for administrative purposes (e.g., to find out the day's homework assignment) or e-mail exchanges with classmates or teachers.

**A calculator program on the computer to solve or check problems for math class:** Refers to the frequency with which the student uses a calculator program on a computer (typically the basic or scientific calculator applications included with the computer operating systems) to solve or check problems for his or her mathematics class. The student should not include the use of hand-held calculators, even programmable calculators.

**A graphing program on the computer to make charts or graphs for math class:** Refers to the frequency with which the student uses a graphing program on a computer to construct charts or graphs for mathematics class. Programs include the Chart functions within Excel or Lotus, or separate programs such as CAD, DeltaGraph, Advanced Grapher, Graphmatica.

**A statistical program to calculate patterns such as correlations or cross tabulations:** Refers to the frequency with which the student uses a statistical program to calculate patterns for his or her mathematics class. Programs include Data Desk, ActivStats, Minitab, Mathematica, etc.

**A word processing program to write papers for math class:** Refers to the frequency with which the student composes a paper on the computer using word processing programs such as Microsoft Word, Word Perfect, Notepad, etc.

**A program to work with geometric shapes for math class:** Refers to the frequency with which the student uses graphics programs to construct and/or manipulate plane (two-dimensional) or solid (three-dimensional) geometric shapes. Programs include Sketchpad, Cabri, Cinderella, Hot Spot, Smart Draw, etc.

14. Do you use the Internet at home?

- A Yes
- B No

This question refers to whether the student uses the Internet at home for any purpose. This Internet usage is not limited to mathematics or any other school assignments, but is looking at Internet usage in general (e.g., e-mail, playing games, etc.).

15. How often do you use e-mail, instant messages, blogs, or text messages to do any of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. Talk online with friends about math work	A	B	C	D	E
b. Get help with math from someone other than your teacher, family, classmates, or friends	A	B	C	D	E

*This question refers to the frequency with which the student uses various electronic communication modes to talk with his or her friends about math work or to get help with mathematics from people other than teachers, family, classmates, or friends. The communication may be via computers and/or cellular phones.*

16. How hard was this test compared to most other tests you have taken this year in school?

- A Easier than other tests
- B About as hard as other tests
- C Harder than other tests
- D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. “Compared to most other tests” means school tests given this academic year in all subjects, including mathematics.*

17. 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?

- A Not as hard as on other tests
- B About as hard as on other tests
- C Harder than on other tests
- D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test, compared to his or her effort on most other school tests taken this academic year in all subjects, including mathematics.*

18. How important was it to you to do well on this test?

- A Not very important
- B Somewhat important
- C Important
- D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

THIS PAGE IS INTENTIONALLY LEFT BLANK.

# 8<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE SCIENCE: GRADE 8

#### Section 4

This section has 13 questions. Mark your answers in your booklet.

1. In your science class this year, which of the following topics have been covered? Fill in **one** oval on each line.

	Yes	No
a. Life science (for example, biology, the human body, or ecology)	A	B
b. Physical science (for example, energy, physics, or chemistry)	A	B
c. Earth and space science (for example, geology or astronomy)	A	B
d. Engineering and technology (for example, designing solutions to problems)	A	B

*This question refers to the different types of science topics that were covered in the student's science class. The examples help to clarify for the students the specific topics that may have been covered. These are examples only and not inclusive. For example, "Life science" would include botany (or the study of plants) in addition to biology, the human body and ecology.*

2. In your science class this year, have you done hands-on activities or projects with any of the following? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Living things (for example, plants, animals, bacteria)	A	B
b. Electricity (for example, batteries and light)	A	B
c. Chemicals (for example, mixing or dissolving sugar or salt in water)	A	B
d. Rocks or minerals (for example, identifying types)	A	B
e. Magnifying glass or microscope (for looking at small things)	A	B
f. Thermometer or barometer (for making measurements)	A	B
g. Simple machines (for example, pulleys and levers)	A	B

*This question asks the student to specify a variety of laboratory/experimental science activities in which he or she has personally participated at school. Watching a demonstration, without participating, should not be included. Any science activity performed outside of school (e.g., with a chemistry set at home) should not be included. However, extracurricular activities, such as participating in a school-sponsored club, should be included.*

3. In your science class this year, how often do you do each of the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>Once every few weeks</b>	<b>About once a week</b>	<b>Two or three times a week</b>	<b>Every day or almost every day</b>
a. Read a science textbook, in class or at home	A	B	C	D	E
b. Read a book or magazine about science	A	B	C	D	E
c. Read about science on the computer	A	B	C	D	E
d. Watch a movie, video, or DVD about science	A	B	C	D	E

*This question asks the student to indicate the frequency with which he or she participates in a variety of activities in his or her science class.*

**Read a science textbook, in class or at home:** Refers to the frequency with which the student has read a science textbook in-class or at home. Reading could be assigned or unassigned; printed on paper or found on the Internet.

**Read a book or magazine about science:** Refers to the frequency with which the student has read a book, other than a textbook, containing science-related information or a magazine that contains a news article or short stories about scientific topics in science class. Paging through a magazine and looking at photographs or advertisements should not be included. Reading could be assigned or unassigned; printed on paper or found on the Internet.

**Read about science on the computer:** Refers to the frequency with which the student has read an e-book or article from a CD or other source; Internet site or any other media via computer in science class. Reading could be assigned or unassigned.

**Watch a movie, video, or DVD about science:** Refers to the frequency with which the student has engaged with visual media about science during science class.

4. In your science class this year, how often do you do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. Discuss events in the news that are related to what you are learning in science class	A	B	C	D	E
b. Work with other students on a science project or activity	A	B	C	D	E
c. Figure out different ways to solve a science problem	A	B	C	D	E
d. Present what you learned about science to your class	A	B	C	D	E
e. Take a science test or quiz	A	B	C	D	E

*This question asks the student to specify the frequency with which he or she participates in various activities in his or her science class.*

**Discuss events in the news that are related to what you are learning in science class:** Refers to the frequency with which the student has discussed with his or her teachers or classmates a newspaper, magazine or Internet article he or she has read or a story he or she has watched on television that is related to what he or she is learning in science class.

**Work with other students on a science project or activity:** Refers to the frequency with which the student has worked with other students in science class on a project or activity related to science.

**Figure out different ways to solve a science problem:** Refers to the frequency with which the student has found different ways to solve a science problem during science class. This could be part of a class project involving more than one student or done independently.

**Present what you learned about science to your class:** Refers to the frequency with which the student has presented what he or she has learned about science to his or her science class. The presentation could be brief or extended; informal or formal. The presentation could be an individual presentation or one in which the student participated as part of a group. If a group presentation, the student should have an active speaking role in it.

**Take a science test or quiz:** Refers to the frequency with which the student has taken an oral or written science test or quiz in science class.

5. In your science class this year, how often do you do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. Identify questions that can be addressed through science experiments	A	B	C	D	E
b. Design a science experiment	A	B	C	D	E
c. Talk about measurements you took for your science project or activity	A	B	C	D	E
d. Talk about the results of your science project or activity	A	B	C	D	E
e. Watch your teacher do a science experiment or activity	A	B	C	D	E
f. Make graphs or charts of the results from your science project or activity	A	B	C	D	E
g. Write a report on your science project or activity	A	B	C	D	E

*This question asks the student to specify the frequency with which he or she engages in a variety of activities as part of his or her science class.*

**Identify questions that can be addressed through science experiments:** Refers to the frequency with which the student has proposed questions that could be answered by conducting a scientific experiment during his or her science class. The student does not have to conduct the experiment; only raise questions that could be answered through experimentation.

**Design a science experiment:** Refers to the frequency with which the student has designed an experiment during his or her science class. The student does not have to conduct the experiment, only design the experiment.

**Talk about measurements you took for your science project or activity:** Refers to the frequency with which the student has communicated during his or her science class about measurements he or she took for a science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

**Talk about the results of your science project or activity:** Refers to the frequency with which the student has communicated during his or her science class about the results of his or her science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

**Watch your teacher do a science experiment or activity:** Refers to the frequency with which the student has watched his or her teacher conduct a science experiment or activity. The student does not have to have participated in the experiment in any way or to have written notes or a report. All that is required is that the student watches the experiment or activity conducted by the teacher and not other students.

**Make graphs or charts of the results from your science project or activity:** Refers to the frequency with which the student has made graphs or charts during science class based on the results of his or her science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

**Write a report on your science project or activity:** Refers to the frequency with which the student has written a report during his or her science class about a science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

6. In this school year, how often have you been asked to write long answers to questions on tests or assignments for science?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has been asked to compose long answers to questions on science tests and/or to complete writing assignments for science. "Long answers" are answers that require at least one paragraph.*

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

*This question refers to the frequency with which the student has talked to his or her teacher about his or her performance in science. The student may have talked to his or her teacher about performance on a particular test, assignment or lab project or performance in general.*

8. In this school year, how often have you used library resources for science?

- A Never or hardly ever
- B Once every few weeks
- C About once a week
- D Two or three times a week
- E Every day or almost every day

*This question refers to the frequency with which the student has used library resources for science. The library could be the student's school library, another school's library, a public library, or any other library.*

9. In this school year, how often have you used computers for science?

- A Never or hardly ever
- B Once every few weeks
- C About once a week
- D Two or three times a week
- E Every day or almost every day

*This question refers to the frequency with which the student has used a computer for science-related work—including class work, homework, and any other science-related activity for school. The work may be done on computers in a classroom, in a school library, in a school computer lab, at home, or any other location.*

10. Please indicate how much you DISAGREE or AGREE with the following statements about science. Fill in **one** oval on each line.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly agree</b>	<b>[Same at:]</b>	
a. I do science-related activities that are not for schoolwork.	A	B	C	D	[8/12]	(VC305348)
b. I like science.	A	B	C	D	[8/12]	(VC305350)
c. Science is one of my favorite subjects.	A	B	C	D	[8/12]	(VC305351)
d. I take science only because I have to.	A	B	C	D	[8/12]	(VC305352)
e. I take science only because it will help me in the future.	A	B	C	D	[8/12]	(VC305353)

*In this question part "a" refers to the student's engagement in science outside of school. Parts "b," "c," "d," and "e" refer to the student's attitude toward science. The student should provide his or her opinion.*

11. How hard was this test compared to most other tests you have taken this year in school?
- A Easier than other tests
  - B About as hard as other tests
  - C Harder than other tests
  - D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. "Compared to most other tests" means school tests given this academic year in all subjects including science.*

12. 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?
- A Not as hard as on other tests
  - B About as hard as on other tests
  - C Harder than on other tests
  - D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test, compared to his or her effort on most other school tests taken this academic year in all subjects including science.*

13. How important was it to you to do well on this test?
- A Not very important
  - B Somewhat important
  - C Important
  - D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

# 8<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### EXTENDED STUDENT BACKGROUND QUESTIONNAIRE: GRADE 8

Assessment administrators may answer questions that students have about the questions in the Extended Student Background Questionnaire (ESBQ). These questions address important issues about the homes in which students live, and NAEP wants to obtain the most accurate responses possible.

To assist you in answering students' questions, each question in the ESBQ is repeated below, with an explanation of what information the question is attempting to elicit from the students.

If a student feels that a question in this section is too personal, stress confidentiality. If the student is still reluctant, tell the student he/she does not have to answer the question.

As a result of natural disasters or other traumatic events, some students may have been displaced from their previous homes and schools. A displaced student may ask whether he/she should answer certain questions in reference to his/her *previous* home and school or with regard to his/her *present* home and school. Your response should be that *all* the questions refer to the student's *current situation*.

A student may notice that a question being asked here is similar to a question asked elsewhere. If a student raises a question about this, assure the student that he/she should answer each question as accurately as possible and not be concerned about other questions or responses.

Finally, some of the background questions may present difficulty to students who are not living with their mother and father at home. Below are guidelines that can be applied in these situations.

- *Questions that refer to mother or father also apply to students' adoptive parents, guardians, or primary caregivers (i.e., the person[s] in the student's home responsible for the student's day-to-day care).*
- *Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the student's home, whether the student is living with his/her natural parents, adoptive parents, or guardians.*
- *For students living in foster homes, questions that refer to mother or father apply to their foster parents. Answers to questions about items in the home, etc., should be based on the resources available in the foster home.*
- *For students living in an orphanage or a group home, questions that refer to mother or father should not be answered, and it should be noted by the student in the outside margin of the page that the student is living in an orphanage or a group home. Answers to questions about items in the home, etc., should be based on the resources available in the orphanage or group home.*
- *In the case of students in joint-custody situations, questions that ask about "home" refer to the home in which students spend a majority of their time. If students spend equal amounts of time in the two homes, the students should refer to the home in which they are residing on the day of the test.*

In this section, please tell us about yourself and your family. This section has 10 questions. Mark your answers in your booklet.

1. Do you live in different homes with different people during the school year? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to identify children living in shared-custody arrangements. Vacation homes should not be considered “different homes with different people” for the purpose of answering this question. Students who live in one home except when on vacation should answer “No” by filling in oval B. Students who have switched foster homes should answer “Yes” by filling in oval A.*

2. Which of the following people live in your home? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Mother/Stepmother	Y	N
b. Father/Stepfather	Y	N
c. Foster parents	Y	N
d. Grandmother or Grandfather	Y	N

*The purpose of this question is to find out who lives in the student’s home. Students should refer to only one home when answering this question. For students in joint-custody arrangements, “home” refers to the home in which the students spend a majority of their time. In the case of students in joint-custody arrangements where students spend equal amounts of time in two homes, the students should refer to the home in which they are residing on the day of the test. Students living in an orphanage or group home should skip this question and indicate in the margin that they live in an orphanage or group home.*

3. How many brothers and sisters do you have, whether they live with you or not? Include all stepbrothers and stepsisters. Fill in only **one** oval.

- A None
- B One
- C Two
- D Three
- E Four
- F Five
- G Six or more

*The purpose of this question is to determine the total number of brothers and sisters a student has, rather than just the number of brothers and sisters with whom the student currently resides. The student should include stepsiblings, half siblings, foster siblings, adopted siblings, etc.*

4. Does your mother usually have a job for pay? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to determine whether the student's mother is participating in the labor force in either a full-time or part-time capacity, on a regular basis. Note that a volunteer job is not a "job for pay." "Usually" is defined as at least half of a full work week. ("At least half" also includes "more than half.") If the student has no knowledge of his/her mother's participation in the workforce, he/she should answer "No" to this question.*

*In the absence of a biological or adoptive mother or female guardian, this question applies to the female in the student's home who is responsible for the day-to-day care of the student—that is, a stepmother, a grandmother, some other adult female relative, or an unrelated person, such as a foster mother or other female caregiver.*

*If the student spends or has spent time living with both a biological mother and a stepmother, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.*

*If no female parent figure or caregiver is currently present in the home but the student has some knowledge about the labor force status of a female parent or other caregiver with whom he/she has previously lived, the student should answer with respect to that female parent or caregiver.*

*Where there is no female present in the home and no knowledge of any female caregiver, the student should skip this question and make a note in the margin.*

5. Does your father usually have a job for pay? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to determine whether the student's father is participating in the labor force in either a full-time or part-time capacity, on a regular basis. Note that a volunteer job is not a "job for pay." "Usually" is defined as at least half of a full work week. ("At least half" also includes "more than half.") If the student has no knowledge of his/her father's participation in the workforce, he/she should answer "no" to this question.*

*In the absence of a biological or adoptive father or male guardian, this question applies to the male in the student's home who is most responsible for the day-to-day care of the student—that is, a stepfather, a grandfather, some other adult male relative, or an unrelated person, such as a foster father or other male caregiver.*

*If the student spends or has spent time living with both a biological father and a stepfather, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.*

*If no male parent figure or caregiver is currently present in the home but the student has some knowledge about the labor force status of a male parent or other male caregiver with whom he/she has previously lived, the student should answer with respect to that male parent or caregiver.*

*Where there is no male present in the home and no knowledge of any male caregiver, the student should skip this question and make a note in the margin.*

6. Which of the following items do you have in your home? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Access to the Internet	Y	N
b. Clothes dryer just for your family	Y	N
c. Electric dishwasher	Y	N
d. More than six rooms (not including bathrooms)	Y	N
e. More than one bathroom	Y	N
f. A bedroom of your own	Y	N
g. Three or more cars, trucks, or other vehicles that your family uses	Y	N

*This question asks about items in the student's home. Students should answer this item for the home they referenced in earlier questions.*

**Access to the Internet:** Refers to whether the student has access to the Internet at home. Access is for the family and by the family only (i.e., open, unsecured Wi-Fi access does not count).

**Clothes dryer just for your family:** Refers to whether the student has a gas or electric clothes dryer (not a clothesline, drying rack, etc.) in either the student's house or apartment unit that is only used by the student's family. Students who live in apartment complexes with communal washers and dryers should not include those dryers.

**Electric dishwasher:** Refers to whether the student has an electric dishwasher in the student's house or apartment unit.

**More than six rooms (not including bathrooms):** Refers to whether the student's house or apartment unit has more than six rooms, not counting bathrooms, porches, balconies, foyers, halls, and half-baths.

**More than one bathroom:** Refers to whether there is more than one bathroom in the student's house or apartment unit. Full bathrooms, half-baths, and powder rooms all count as "bathrooms."

**A bedroom of your own:** Refers to whether the student has his/her own bedroom in his/her house or apartment unit.

**Three or more cars, trucks, or other vehicles that your family uses:** Refers to the number of vehicles the student's family currently owns that run and are used by family members. Company-owned vehicles used by family members for business purposes, such as dump trucks or taxis, are not to be included in the count.

7. Do you have your own cell phone? Fill in only **one** oval.

- A Yes
- B No

*This question refers to whether the student has a cell phone for his/her own use on a daily basis. The student should answer "no" if the cell phone he/she normally uses is also used by other members of the family on a regular basis.*

- 
8. Does your family own or rent your home, or have some other living arrangement? Fill in only **one** oval.
- A Own (or pay mortgage)
  - B Rent
  - C Other

*To answer this question, students should refer to the same home they referenced to answer the earlier questions. Option C, “Other,” includes living with a friend or relative, living in an emergency housing shelter, exchanging work for housing, or being homeless. If a student does not know whether his/her family owns the home or pays rent, encourage the student to give his/her best guess.*

9. How far in school did your mother go? Fill in only **one** oval.
- A She did not finish high school.
  - B She graduated from high school.
  - C She attended school after high school, but did not graduate.
  - D She graduated from a two-year college.
  - E She graduated from a four-year college.
  - F She has a master’s degree, Ph.D., M.D., law degree, or other advanced degree.

*A student may notice that this question is similar to another question asked in a different questionnaire section. If a student raises a question about this, assure the student that he/she should answer this question as accurately as possible and not be concerned about other questions or responses.*

*In the absence of a biological or adoptive mother or female guardian, this question applies to the female in the student’s home who is responsible for the day-to-day care of the student—that is, a stepmother, a grandmother, some other adult female relative, or an unrelated person, such as a foster mother or other female caregiver.*

*If the student spends or has spent time living with both a biological mother and a stepmother, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.*

*If no female parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a female parent or other caregiver with whom he/she has previously lived, the student should answer with respect to that female parent or caregiver. If there is no female parent or caregiver at all, the student should skip this question and make a note in the margin.*

*Option B. “She graduated from high school,” refers to having received a high school diploma or a GED or High School Equivalency.*

*Option C. “She attended school after high school, but did not graduate,” refers to participating in any type of post-secondary education (e.g., vocational, technical, or business school; two-year or four-year college or university; service academy) but not completing a degree in that course of study.*

*Option D. “She graduated from a two-year college,” refers to having a degree or certificate from a two-year college (e.g., A.A., A.S.). Students whose mother (or female parent figure or caregiver) started but did not complete a two-year program should fill in Option C, not Option D.*

Option E, “She graduated from a four-year college,” refers to having a degree (e.g., B.A., B.S.) from a four-year college, university, or service academy program. Students whose mother (or female parent figure or caregiver) started but did not complete a four-year program should fill in Option C, not Option E.

Option F, “She has a master’s degree, Ph.D., M.D., law degree, or other advanced degree,” refers to having completed graduate education after obtaining a bachelor’s degree that led to her receiving a master’s degree, a doctorate degree, a medical doctorate degree, a J.D., or any other advanced professional degree, such as C.P.A., D.V.M., or M.B.A. If the student’s mother (or female parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.

10. How far in school did your father go? Fill in only **one** oval.

- A He did not finish high school.
- B He graduated from high school.
- C He attended school after high school, but did not graduate.
- D He graduated from a two-year college.
- E He graduated from a four-year college.
- F He has a master’s degree, Ph.D., M.D., law degree, or other advanced degree.

A student may notice that this question is similar to another question asked in a different questionnaire section. If a student raises a question about this, assure the student that he/she should answer this question as accurately as possible and not be concerned about other questions or responses.

In the absence of a biological or adoptive father or male guardian, this question applies to the male in the student’s home who is responsible for the day-to-day care of the student—that is, a stepfather, a grandfather, some other adult male relative, or an unrelated person, such as a foster father or other male caregiver.

If the student spends or has spent time living with both a biological father and a stepfather, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.

If no male parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a male parent or other male caregiver with whom he/she has previously lived, the student should answer with respect to that male parent or caregiver. If there is no male parent or caregiver at all, the student should skip this question and make a note in the margin.

Option B, “He graduated from high school,” refers to having received a high school diploma or a GED or High School Equivalency.

Option C, “He attended school after high school, but did not graduate,” refers to participating in any type of post-secondary education (e.g., vocational, technical, or business school; two-year or four-year college or university; service academy) but not completing a degree in that course of study.

Option D, “He graduated from a two-year college,” refers to having a degree or certificate from a two-year college (e.g., A.A., A.S.). Students whose father (or male parent figure or caregiver) started but did not complete a two-year program should fill in Option C, not Option D.

---

Option E, “He graduated from a four-year college,” refers to having a degree (e.g., B.A., B.S.) from a four-year college, university, or service academy program. Students whose father (or male parent figure or caregiver) started but did not complete a four-year program should fill in Option C, not Option E.

Option F, “He has a master’s degree, Ph.D., M.D., law degree, or other advanced degree,” refers to having completed graduate education after obtaining a bachelor’s degree that led to his receiving a master’s degree, a doctorate degree, a medical doctorate degree, a J.D., or any other advanced professional degree, such as C.P.A., D.V.M., or M.B.A. If the student’s father (or male parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.

THIS PAGE IS INTENTIONALLY LEFT BLANK.

## GRADE 12 SESSION SCRIPTS

<b>Grade 12 Regular Session Script</b> .....	1.1
<b>NAEP Accommodations Guidelines</b> .....	2.1
<b>Grade 12 Accommodation Script</b> .....	3.1

# 12<sup>th</sup>

## 2009 NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

### SESSION SCRIPT: GRADE 12

---

#### Introduction

Good morning/afternoon, everyone! My name is **(YOUR NAME)**. Today you will be participating in a test called the National Assessment of Educational Progress, also known as NAEP or The Nation's Report Card. NAEP is a way to show what students like you — from all around the country — know and can do in different subjects. You and your school were selected to represent other seniors and schools across the United States.

Here are some things for you to keep in mind: the test takes about 90 minutes and you will be answering questions in math, reading, or science, along with questions about yourself and your experiences in and out of school. Do not write your name on the work you do; no one in the school will see your answers. Your answers will be combined with information from other seniors across **(IF PILOT STATE, SAY STATE NAME AND)**\* the United States. Because your responses are useful in showing our country's leaders and teachers what American high school students are learning, we ask that you try your very best. Thank you for your participation in NAEP.

#### Distribute Materials

##### Option 1: Booklets and Materials Not Previously Distributed

Before I hand out your materials, please clear your desks. As I call your name, please come forward to get a booklet and pencil. After you get your booklet, place it face up on your desk and do not open it until I tell you to.

- Read students' names in Administration Schedule order to distribute booklets and NAEP pencils.
- Record a "✓" or an "A" in column A (Atten.) of the Administration Schedule.
- Double-check that each student's name and booklet ID on the Administration Schedule match the booklet label.

---

\* Pilot states are: Arkansas, Connecticut, Florida, Idaho, Illinois, Iowa, Massachusetts, New Hampshire, New Jersey, South Dakota, and West Virginia.

## Option 2: Booklets and Materials Previously Distributed

Each of you should have a booklet and a pencil on your desk. Do not open your booklets until I tell you to. If the booklet in front of you does not have your name on the label, please raise your hand.

- Assist students with incorrect booklets.
- Collect all unused booklets and materials.

## Remove Label

Now remove the label with your name on it from the booklet cover. Place the label on the upper-right corner of your desk.

## Additional Materials

The assessment you are taking today uses many different booklets, each with different questions. Some may have sections in which you will need to use something extra, like a pamphlet, ruler/protractor, or other materials. Please look now and remove any extra materials inside the front cover of your booklet.

- Pause and wait for students to remove items.

If you have extra materials, put them on the upper-left corner of your desk. The instructions in your booklet will tell you when you need to use them.

Some of your booklets require using a calculator for at least one part of the booklet. If so, I will tell you when it's time to use one. You may use your own scientific or graphing calculator if your booklet requires one. However, you are not permitted to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device. If you require a calculator and do not have one, I will provide you with one later.

---

## Code the Booklet Cover

Now, please look at your booklet cover. You will see a group of boxes labeled “School Number.” The number you are to write in these boxes is **(READ NUMBER)**.

- Point to the number on the board as you read it. Repeat the number as necessary.

## Booklet Directions

- Set timer for 2 minutes.

Now open your booklet to the directions on the first two pages. You will have 2 minutes to read the directions to yourself. Please begin.

- Start timer.
- Do not admit any more students into the session.
- When all students have finished reading the directions, but after no more than 2 minutes, say:

Please stop.

## Cognitive Section

- Set timer for 2 minutes.

Now look at the next set of directions. You will have 2 minutes to read them to yourself. Please begin.

- Start timer.
- When all students have finished reading the directions, but after no more than 2 minutes, say:

Please stop.

## SECTION 1

Now turn to the beginning of Section 1. Some of you will need to use a calculator for at least one part of your booklet. If so, there will be a sentence at the top of the page that says, “You will need a calculator for this section.” If you see this sentence, take out your scientific or graphing calculator. If you didn’t bring one, raise your hand now and I’ll give you a calculator.

- Distribute gray calculators to students who need them, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, cell phone, pocket organizer, device with a typewriter-style keyboard, an electronic writing pad, or pen-input device.
- Set timer for 25 minutes.

You will have 25 minutes to complete Section 1. While you are working in this section, I can’t help you answer the questions or explain words to you.

Some questions may require 5 minutes or more for you to think about and answer. Think carefully about the question and write a complete answer. If you need another pencil at any time, please raise your hand.

Carefully read the directions at the beginning of the section and then start working. Please begin.

- Start timer.
- Monitor students, making sure they are working in the correct section of their booklets and using a calculator, ruler/protractor, or ancillary F only in a calculator, ruler/protractor, or ancillary F section.
- In test booklets R407M, R408S, R415, R417, R423, R426, R431, R435, R503, R505, R515, R520, R537, and R543: If a student raises a question about Senator John Warner no longer being a senator, please give the following response:  
 “Senator John Warner was a senator when this booklet was printed. When answering the question, please pretend that he is still a senator.”
- When the timer shows 10 minutes left in the session, say:

---

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

If you are using your own calculator, please put it away now. If you have a NAEP calculator, raise your hand and I will collect it.

- Collect calculators. Count calculators to make sure you collected all the calculators you distributed.

## SECTION 2

Now turn to the beginning of Section 2.

If you see the sentence, “You will need a calculator for this section,” take out your scientific or graphing calculator. If you didn’t bring one, please raise your hand and I will give you a calculator.

- Distribute gray calculators to students who need them, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, cell phone, pocket organizer, device with a typewriter-style keyboard, electronic writing pad, or pen-input device.
- Set timer for 25 minutes.

You will have 25 minutes to complete this section. Carefully read the directions and then start working. Please begin.

- Start timer.
- Monitor students, making sure they are working in the correct section of their booklets and using a calculator, ruler/protractor, or ancillary F only in a calculator, ruler/protractor, or ancillary F section.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

If you are using your own calculator, please put it away now. If you have a NAEP calculator, raise your hand and I will collect it.

- Collect calculators. Count calculators to make sure you collected all the calculators you distributed.

## Background Section

### SECTION 3

- Set timer for 2 minutes.

Now look at the directions for Sections 3 and 4. You'll have 2 minutes to read them to yourself. Please begin.

- Start timer.
- When all students have finished reading the directions, but after no more than 2 minutes, say:

Please stop and go to Section 3. I will read the first two questions and the answer choices with you.

**IF NEW JERSEY, SAY:**

You are not required to answer Questions 1 and 2 about your race or ethnicity.

- Read the questions and answer choices for Questions 1 and 2 to the students.

1. Are you Hispanic or Latino? Fill in **one or more ovals**.

- A I am not Hispanic or Latino.
- B Yes, I am Mexican, Mexican American, or Chicano.
- C Yes, I am Puerto Rican or Puerto Rican American.
- D Yes, I am Cuban or Cuban American.
- E Yes, I am from some other Hispanic or Latino background.

2. Which of the following best describes you? Fill in **one or more ovals**.

- A White
- B Black or African American
- C Asian
- D American Indian or Alaska Native
- E Native Hawaiian or other Pacific Islander

- Set timer for 5 minutes.

You will have 5 minutes to answer the rest of the questions in Section 3 on your own.  
Please begin.

- Start timer.
- After 5 minutes have passed, say:

Please stop.

**SECTION 4**

- Set timer for 8 minutes.

Now turn to the beginning of Section 4. You will have 8 minutes to work on this section on your own. While you work, I will collect the label from your desk. Please begin.

- Start timer.
- Walk through the room and collect the labels from every desk. Tear them up and throw them away.
- When all students have finished Section 4, but after no more than 8 minutes, say:

Please stop working. Now close your booklet and place it face up on your desk.

**SECTION 5 – ESBQ, IF REQUIRED**

- Set timer for 5 minutes.

Now take out Section 5 from the back of your booklet.

**Remove Label**

Remove the label with your name on it from the booklet cover. Place the label on the upper-right corner of your desk. While you work, I will collect the label from your desk.

You will have 5 minutes to work on this section on your own. Please begin.

- Start timer.
- Walk through the room and collect the labels from every desk. Tear them up and throw them away.
- When all students have finished Section 5, but after no more than 5 minutes, say:

Please stop working. Now close your booklet and place it face up on top of your other booklet.

---

## Collect Materials

### Option 1: Student Comes Forward With Materials

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of your booklet. If you have a packet of materials, make sure to place the materials back in the bag or envelope. As I call your name, please come forward with your assessment booklet and materials, and then return to your seat.

- Allow students offered the extended time accommodation to continue working on the cognitive sections of the assessment, if necessary.
- Read students' names in Administration Schedule order to collect booklets and ancillary materials.
- Verify that each student has returned an assessment booklet with any used ancillary materials.
- If the ESBQ was administered in the school, verify that each student returned the ESBQ booklet.

### Option 2: AA Goes Around the Room to Collect Materials

I'm now going to collect everything but the pencil from you. Please place any extra materials on top of your booklet. If you have a packet of materials, make sure to place the materials back in the bag or envelope. Then, place the assessment booklet on an upper corner of your desk.

- Allow students offered the extended time accommodation to continue working on the cognitive sections of the assessment, if necessary.
- Collect the booklets and the ancillary materials.
- Verify that every student has returned an assessment booklet with any used ancillary materials.
- If the ESBQ was administered in the school, verify that each student returned the ESBQ booklet.

## Thank and Dismiss Students

Thank you very much for your time and effort here today. On your pencil you'll notice the website address for the National Assessment of Educational Progress. Visit this website if you would like more information about the assessment you just completed.

- Dismiss students according to school policy.

# GRADE 12: NAEP ACCOMMODATIONS GUIDELINES

**General Guidelines:** Use the accommodation script whenever a separate session is required. The following accommodations typically require a separate session, but refer to the accommodation chart in chapter 5.

Accommodation	Guidelines for the Person Administering the Accommodation
<ul style="list-style-type: none"> <li>Bilingual booklet</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate, bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Directions read aloud in native language (Spanish)</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate, bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Test items read aloud in native language (Spanish)</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate bilingual session script to conduct the session.</li> </ul>
<ul style="list-style-type: none"> <li>Read aloud – most or all</li> </ul>	<ul style="list-style-type: none"> <li>For mathematics booklets, use the Mathematics Read-Aloud Guidelines for details on how to read certain mathematical symbols and equations.</li> </ul>
<ul style="list-style-type: none"> <li>Test items signed</li> </ul>	<ul style="list-style-type: none"> <li>For mathematics booklets, use the Mathematics Read-Aloud Guidelines for details on how to sign certain mathematical symbols and equations.</li> </ul>
<ul style="list-style-type: none"> <li>Braille version of test</li> </ul>	<ul style="list-style-type: none"> <li>If a scribe is used, when a constructed response is required, the scribe should write exactly what the student says. A student responding orally should indicate when a sentence ends and another one begins. There is no need for a student to indicate grammar or punctuation, provided that the answer can be read and understood. The student should spell the word only when it is critical to distinguish meaning. The scribe should use the matching, regular assessment booklet to record student answers.</li> <li>Use the companion booklet to follow along with the student.</li> </ul>
<ul style="list-style-type: none"> <li>Responds in sign language</li> </ul>	<ul style="list-style-type: none"> <li>When a constructed response is required, the interpreter/scribe should write exactly what the student signs. A student should indicate when one sentence ends and another begins. There is no need for the students to indicate grammar or punctuation, provided that the answer can be read and understood.</li> </ul>
<ul style="list-style-type: none"> <li>Responds orally to scribe</li> </ul>	<ul style="list-style-type: none"> <li>When a constructed response is required, the scribe should write exactly what the student says. A student responding orally should indicate when a sentence ends and another one begins. There is no need for a student to indicate grammar or punctuation, provided that the answer can be read and understood. The student should spell the word only when it is critical to distinguish meaning.</li> <li>The scribe should show the student the written response after the student completes it, but NOT read the response to the student. The student will get one chance to make revisions, and then will need to move on to the next question.</li> </ul>
<ul style="list-style-type: none"> <li>Small group</li> </ul>	<ul style="list-style-type: none"> <li>Use the grade-appropriate accommodation session script.</li> </ul>
<ul style="list-style-type: none"> <li>School staff administers</li> </ul>	<ul style="list-style-type: none"> <li>School staff will use the grade-appropriate accommodation session script.</li> </ul>
<ul style="list-style-type: none"> <li>Breaks during test</li> </ul>	<ul style="list-style-type: none"> <li>There are no specific NAEP requirements regarding the length of time for a break, how often the breaks are taken, or whether the student has contact with other students during the breaks. The test must, however, be administered during a single day.</li> </ul>

**THIS PAGE IS INTENTIONALLY LEFT BLANK.**

# 12<sup>th</sup>

## 2009 NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

### SESSION SCRIPT: GRADE 12 ACCOMMODATION

#### Introduction

- Place the booklets and NAEP pencils on the desks prior to the session. If there are extra materials inside the booklet covers, remove them from the booklets and place them on the upper-left corner of the desk.
- When all students have arrived, collect all unused booklets and materials. Remove the label from each booklet cover and place it on the upper-right corner of the desk.
- **A note about students who require Extended Time:** All instructions regarding timing are printed in blue throughout the script. If a student requires extended time, skip all blue text in the script. Be sure to note the time each student begins working on the cognitive sections and the time the student finishes. When most or all students are done with the section, move on to the next section. If a student needs considerably more time than the others, tell him/her that there will be time at the end of the session to go back to that section.

Good morning/afternoon, everyone! My name is **(YOUR NAME)**. Today you will be participating in a test called the National Assessment of Educational Progress, also known as NAEP or The Nation's Report Card. NAEP is a way to show what students like you—from all around the country—know and can do in different subjects. You and your school were selected to represent other seniors and schools across the United States.

Here are some things to remember when you take NAEP: the test takes about 90 minutes and not everyone will take the same test; some of you will be answering questions in reading, math, or science. You will also see questions about yourself and your experiences in and out of school. Do not write your name on the work you do; no one in the school will see your answers. Your answers will be combined with information from other students across **(IF PILOT STATE, SAY STATE NAME AND)**\* the United States. Because your responses help our country's leaders and teachers to find out what students your age are learning, it is very important that you try your very best.

---

\* Pilot states are: Arkansas, Connecticut, Florida, Idaho, Illinois, Iowa, Massachusetts, New Hampshire, New Jersey, South Dakota, and West Virginia.

## Additional Materials

The assessment you are taking today uses many different booklets, each with different questions. Some may have sections in which you will need to use something extra, like a ruler/protractor, pamphlet, or periodic table. If so, you will find them on the upper-left corner of your desk. The instructions in your booklet will tell you when to use them.

Some of your booklets require using a calculator for at least one part of the booklet. If so, I will tell you when it's time to use one. You may use your own scientific or graphing calculator if your booklet requires one. However, you are not permitted to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device. If you require a calculator and do not have one, I will provide you with one later.

## Code the Booklet Cover

Now, please look at the front cover of your booklet. You will see a group of boxes labeled "School Number." The number you are to write in these boxes is **(READ NUMBER)**.

- Point to the number on the board as you read it. Repeat the number as necessary.

## Booklet Directions

### Non-read aloud

- Set timer for 2 minutes.

Now turn to the directions on the first two pages. Read the directions to yourself. You will have 2 minutes to read the directions. Please begin.

- Help students find the correct page as necessary.
- Start timer.
- Do not admit any more students into the session.
- When all students have finished reading the directions, say:

### Read aloud

Now turn to the directions on the first two pages. Read the directions to yourself as I read them out loud.

- Help students find the correct page as necessary.
- Do not admit any more students into the session.
- Read the directions and examples in the booklet to the students. Then say:

---

## Cognitive Section

### Non-read aloud

- Set timer for 2 minutes.

Now turn to the next set of directions and read them to yourself. **You will have 2 minutes to read the directions.** Please begin.

- Start timer.
- When all students have finished reading the directions, say:

### Read aloud

Now turn to the next set of directions and read them to yourself as I read them out loud.

- Read the directions and examples in the booklet to the students. Then say:

## SECTION 1

Now turn to the beginning of Section 1.

- Read the next two paragraphs only if students require calculators.

Some of you will need to use a calculator for at least one part of your booklet. If so, there will be a sentence at the top of the page that says, "You will need a calculator for this section." If you see this sentence, take out your scientific or graphing calculator. If you didn't bring one, raise your hand now and I will give you a calculator.

If you don't know how to use the calculator, there are instructions at the beginning of the section and on the back cover of your booklet to help you. If you need help with the calculator at any time, please raise your hand.

- Distribute gray calculators as necessary, checking to make sure the correct students receive calculators. Make sure to keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device.

While you are working in this section, I can't help you answer the questions or explain words to you.

Some questions may require 5 minutes or more for you to think about and answer. Think carefully about the question and write a complete answer. If you have any questions or need another pencil at any time, please raise your hand.

### **Non-read aloud**

- Set timer for 25 minutes.

Carefully read the directions and then start working. You will have 25 minutes to complete this section. Please begin.

- Start timer.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

### **Read aloud**

Read the next set of directions to yourself as I read them out loud.

- Read the directions to the students.
- For each student, note the time the section begins.

Let's begin.

- Read the questions and answer choices in the booklet to the students.
- If a math session, refer to the *Mathematics Read-Aloud Guidelines* for guidance on how to read math problems aloud.

- In test booklets R407M, R408S, R415, R417, R423, R426, R431, R435, R503, R505, R515, R520, R537, and R543: If a student raises a question about Senator John Warner no longer being a senator, please give the following response:  
 “Senator John Warner was a senator when this booklet was printed. When answering the question, please pretend that he is still a senator.”
- Monitor students, making sure they are working on the correct section of their booklets and using a calculator, ruler/protractor, or ancillary F only in a section that requires one. This is easily identifiable by a “C” or “P” or an “F” on the booklet page.
- If a student finishes before the others in the group, prompt him/her to go back and review the current section.
- Collect calculators if any were distributed, or have the students who used their own calculator put them away. Make sure to account for all calculators.

## SECTION 2

Now turn to the beginning of Section 2.

- Read the next paragraph only if students require calculators.

If you see the sentence, “You will need a calculator for this section,” please take out your scientific or graphing calculator. If you didn’t bring one, raise your hand.

- Distribute gray calculators, checking to make sure the correct students receive calculators. Keep track of how many calculators are distributed.
- Check to be sure students who brought a calculator are using a scientific or graphing calculator. Students are not allowed to use a laptop or other portable computer, a cell phone, a pocket organizer, a device with a typewriter-style keyboard, an electronic writing pad, or a pen-input device.

### Non-read aloud

- Set timer for 25 minutes.

Carefully read the directions and then start working. **You will have 25 minutes to complete this section.** Please begin.

- Start timer.
- When the timer shows 10 minutes left in the session, say:

You have 10 minutes left to work on this section. If you think you are finished, you may go back and review your work on this section only. You may not read, do other school work, use a cell phone, or other electronic device.

- After 10 minutes, say:

Please stop.

### Read aloud

Read the next set of directions to yourself as I read them out loud.

- Read the questions in the booklet to the students.
- For each student, note the time the section begins.

Let’s begin.

- Read the questions and answer choices in the booklet to the students.
- If a math session, refer to the *Mathematics Read-Aloud Guidelines* for guidance on how to read math problems aloud.

- Monitor students, making sure they are working on the correct section of their booklets and using a calculator, ruler/protractor, or ancillary F only in a section that requires one. This is easily identifiable by a “C” or “P” or an “F” on the booklet page.
- If a student finishes before the others in the group, prompt him/her to go back and review the current section.
- Collect calculators if any were distributed, or have the students who used their own calculators put them away. Make sure to account for all calculators.

## Background Section

### SECTION 3

#### Non-read aloud

- Set timer for 2 minutes.

Now turn to the directions for Sections 3 and 4 and read them to yourself. *You will have 2 minutes to read the directions.* Please begin.

- Start timer.
- When all students have finished reading the directions, say:

Now turn to the beginning of Section 3. I will read the first two questions and the answer choices for you.

**IF NEW JERSEY, SAY:** You are not required to answer Questions 1 and 2 about your race or ethnicity.]

Let's begin.

- Read the first two questions and answer choices from Section 3, found on the next page, to the students.

#### Read aloud

Now turn to the directions for Sections 3 and 4. Read them to yourself as I read them out loud.

- Read the booklet directions to the students.

Now turn to the beginning of Section 3.

**IF NEW JERSEY, SAY:** You are not required to answer Questions 1 and 2 about your race or ethnicity.]

Let's begin.

- Read the questions and answer choices from Section 3 in the student booklet to the students.

1. Are you Hispanic or Latino? Fill in **one or more ovals**.

A I am not Hispanic or Latino.

B Yes, I am Mexican, Mexican American, or Chicano.

C Yes, I am Puerto Rican or Puerto Rican American.

D Yes, I am Cuban or Cuban American.

E Yes, I am from some other Hispanic or Latino background.

2. Which of the following best describes you? Fill in **one or more ovals**.

A White

B Black or African American

C Asian

D American Indian or Alaska Native

E Native Hawaiian or other Pacific Islander

### **Non-read aloud**

- Set timer for 5 minutes.

Answer the rest of the questions in Section 3 on your own. **You will have 5 minutes to complete this section.** Please begin.

- Start timer.

### **Read aloud**

- Continue reading the questions and answer choices from Section 3 in the student booklet.

- When all students have finished Section 3, move on to the next section.

**SECTION 4****Non-read aloud**

- Set timer for 8 minutes.

Now turn to the beginning of Section 4. You will do this section on your own. You will have 8 minutes to complete this section. Please begin.

- Start timer.

**Read aloud**

Now turn to the beginning of Section 4 and read to yourself as I read out loud. Let's begin.

- Read the directions, questions, and answer choices in the booklet to the students.

- When all students have finished Section 4, move on to the next section.

**SECTION 5 – ESBQ, If Required****Non-read aloud**

- Set timer for 5 minutes.

Now take out Section 5 from the back of your booklet.

- Remove the label from the ESBQ booklet cover and place it on the upper-right corner of the desk.

You will do this section on your own. You will have 5 minutes to complete this section. Please open your booklet and begin.

- Start timer.

**Read aloud**

Now take out Section 5 from the back of your booklet.

- Remove the label from the ESBQ booklet cover and place it on the upper-right corner of the desk.

Open your booklet and read to yourself as I read out loud. Let's begin.

- Read the directions, questions, and answer choices in the booklet to the students.

- When all students have finished Section 5, move on to the next section.

---

## Collect Materials

I'm now going to collect everything but the pencil from you. Please place any extra materials inside the booklet cover.

- Collect the booklets, ESBQs (if administered), ancillaries, and student ID labels. Tear up the ID labels and throw them away.
- If a student needed considerably more time than the others for the cognitive sections, allow him/her to continue working on the cognitive sections only.

## Thank and Dismiss Students

Thank you very much for your time and effort here today. On your pencil, you'll notice the website address for the National Assessment of Educational Progress. Visit this website if you would like more information about the assessment you just completed.

- Dismiss students according to school policy.

**THIS PAGE IS INTENTIONALLY LEFT BLANK.**

## GRADE 12 QUESTION-BY-QUESTION SPECIFICATIONS (QXQS)

<b>General QxQs</b> .....	1.1
<b>Subject Area QxQs</b> .....	2.1
Reading .....	2.1
Mathematics .....	2.9
Science .....	2.21
<b>ESBQ QxQs</b> .....	3.1

# 12<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### GENERAL STUDENT BACKGROUND QUESTIONS: GRADE 12

*Assessment administrators may answer questions that students have about the questions in Section 3. These questions form an important part of the analysis of results, and NAEP wants to obtain the most accurate responses possible.*

*To assist you in answering students' questions, each question in the background section is repeated below, with an explanation of what information the question is attempting to obtain from the students.*

*If a student feels that a question in this section is too personal, stress confidentiality. If the student is still reluctant, tell the student she or he does not have to answer the question.*

*Some of the background questions may present difficulty to students who are not living with their mother and father at home. Below are guidelines, which can be applied in these situations.*

- *Questions that refer to mother or father also apply to students' adoptive parents, guardians, or primary caregivers (i.e., the person(s) in the student's home responsible for the student's day-to-day care). Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the student's home, whether the student is living with his or her natural parents, adoptive parents, or guardians. If the student divides his or her time between two homes (e.g., between divorced parents who share physical custody), answers to questions about newspapers, encyclopedia, etc., can be based on the resources available in either home.*
- *For students living in foster homes, questions that refer to mother or father apply to their foster parents. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the foster home.*
- *For students living in an orphanage, questions that refer to mother or father should not be answered, and it should be noted by the student in the outside margin of the page that he or she is living in an orphanage. Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the orphanage.*

In this section, please tell us about yourself and your family. The section has 14 questions. Mark your answers in your booklet.

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

*The student may choose more than one category if applicable.*

*Help the student as much as necessary with this question. Never tell the student his or her race or ethnicity. Help explain the options to the student.*

*The following provides some terms that Hispanics use to describe themselves:*

- *Mexican, Mexicano, Mexican American, Chicano*
- *Puerto Rican, Boricua*
- *Cuban, Cubano*
- *Other Latin American, Latino, Hispanic, or Spanish descent*

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

*The student may choose more than one category if applicable.*

- *If the student doesn't know race/ethnicity, you should ask the student which category best describes the student's background. If the student tells you he or she is from a particular group, such as "Navajo," "Irish," or "Japanese," then you may suggest the appropriate response category (e.g., American Indian, White, or Asian).*
- *If the student says that he or she is American, ask the student to select the next best category that describes him or her, in addition to being American.*

---

The following provide guidance for the response categories:

**White**: A person having origins in any of the original peoples of Europe, the Middle East, or North Africa.

**Black or African American**: A person having origins in any of the Black racial groups of Africa. Caribbean or West Indian are other terms sometimes used.

**Asian**: A person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent, including, for example, Cambodia, China, India, Japan, Korea, Malaysia, Pakistan, the Philippine Islands, Thailand, and Vietnam.

**American Indian or Alaska Native**: A person having origins in any of the original peoples of North and South America (including Central America), and who maintains a tribal affiliation or community attachment.

**Native Hawaiian or Other Pacific Islander**: A person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands. (The term "Native Hawaiian" does not include individuals who are native to the state of Hawaii by virtue of being born there.) In addition to Native Hawaiians, Guamanians, and Samoans, this category includes the following Pacific Islander groups: Carolinian, Fijian, Melanesian, Micronesian, Northern Mariana Islander, Palauan, Papua New Guinean, Ponapean (Pohnpelan), Polynesian, Solomon Islander, Tahitian, Tarawa Islander, Tokelauan, Tongan, Trukese (Chuukese), and Yapese.

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?
- A Yes
  - B No
  - C I don't know.

*Newspapers obtained in school are not to be included in this question.*

4. Does your family get any magazines regularly?
- A Yes
  - B No
  - C I don't know.

*Getting any magazines "regularly" is defined as currently subscribing to a weekly or monthly magazine or purchasing one "regularly"; that is, 3 out of every 4 weeks, if the magazine is a weekly, and at least 10 months a year, if the magazine is a monthly.*

5. About how many books are there in your home?
- A Few (0–10)
  - B Enough to fill one shelf (11–25)
  - C Enough to fill one bookcase (26–100)
  - D Enough to fill several bookcases (more than 100)

*The total number of books should include all books—hardback, softback, or books on tapes or CDs—that are in the home (i.e., belonging to the student or the student's family). The total number should not include magazines, newspapers, comic books, etc.*

6. Is there a computer at home that you use?
- A Yes
  - B No

*This question refers to a computer, located in the student's home, that the student uses for any purpose (e.g., for schoolwork, games, Internet, e-mail, etc.). Do NOT include calculators or PDAs (Personal Digital Assistants).*

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

*An encyclopedia is any reference source of a general nature. It does not have to be a whole set of books or more than one volume. It can be an electronic encyclopedia, such as one available on a computer or CD. Any single comprehensive reference source would qualify as a "Yes" response. However, a dictionary, the World Almanac, or any other yearly almanac publication should not be included.*

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

*This question refers to the number of pages of reading that is typically assigned each day across all subject areas. The total number of pages should include reading that the student completes in class and as homework.*

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

*This question refers to any kind of discussion that the student has with parent(s), sibling(s), or other family members about schoolwork or anything studied in school. It does not include conversations that are solely concerned with the student's social or interpersonal experiences at school. Neither does it include simple questions about whether the student has any homework or has completed his or her homework.*

10. How many days were you absent from school in the last month?
- A None
  - B 1 or 2 days
  - C 3 or 4 days
  - D 5 to 10 days
  - E More than 10 days

*This question refers to the number of full days the student was absent from school in the last month for any reason (e.g., illness, skipped, sports events, extracurricular events, family vacation). However, missing school days due to snow or other weather conditions when the school was closed should not be included in the answer to this question. “In the last month” is defined as the last 30 days. The student should give his or her best estimate as to the number of days missed.*

11. How far in school did your mother go?
- A She did not finish high school.
  - B She graduated from high school.
  - C She had some education after high school.
  - D She graduated from college.
  - E I don't know.

*In the absence of a biological or adoptive mother or female guardian, this question applies to the female in the student's home who is responsible for the day-to-day care of the student—that is, a stepmother, a grandmother, some other adult female relative, or an unrelated person, such as a foster mother or other female caregiver. If the student spends or has spent time living with both a biological mother and a stepmother, the student should provide the information with regard to the person with whom he or she has lived the most during his or her lifetime. If no female parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a female parent or other caregiver with whom he or she has previously lived, the student should answer with respect to that female parent or caregiver. If the student has never lived with a female caregiver, the student should respond with option E, “I don't know.”*

*Option B, “She graduated from high school,” refers to having received a high school diploma or a GED or High School Equivalency. Option C, “She had some education after high school,” refers to participating in any type of post-secondary education (e.g., vocational, technical, or business school; two-year or four-year college or university; service academy). Option D, “She graduated from college,” refers to having a degree (e.g., B.A., B.S.) from a four-year college, university, or service academy program. Students whose mother (or female parent figure or caregiver) started but did not complete a two-year or four-year program should fill in Option C, not option D. If the student's mother (or female parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.*

12. How far in school did your father go?
- A He did not finish high school.
  - B He graduated from high school.
  - C He had some education after high school.
  - D He graduated from college.
  - E I don't know.

*In the absence of a biological or adoptive father or male guardian, this question applies to the male in the student's home who is most responsible for the day-to-day care of the student—that is, a stepfather, a grandfather, some other adult male relative, or an unrelated person, such as a foster father or other male caregiver. If the student spends or has spent time living with both a biological father and a stepfather, the student should provide the information with regard to the person with whom he or she has lived the most during his or her lifetime. If no male parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a male parent or other male caregiver with whom he or she has previously lived, the student should answer with respect to that male parent or caregiver. If the student has never lived with a male caregiver, the student should respond with option E, "I don't know."*

*Option B, "He graduated from high school," refers to having received a high school diploma or a GED or High School Equivalency. Option C, "He had some education after high school," refers to participating in any type of post-secondary education (e.g., vocational, technical, or business school; two-year or four-year college or university; service academy). Option D, "He graduated from college," refers to having a degree (e.g., B.A., B.S.) from a four-year college, university, or service academy program. Students whose father (or male parent figure or caregiver) started but did not complete a two-year or four-year program should fill in Option C, not option D. If the student's father (or male parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.*

13. How often do people in your home talk to each other in a language other than English?
- A Never
  - B Once in a while
  - C About half of the time
  - D All or most of the time

*This question focuses on the language used by people in the student's home. It asks how often people in the student's home talk to each other (or to the student) in a language other than English. A student from an English-speaking home should pick the first option, "Never." The student should not count occasional use of another language by someone in his or her family who is practicing a language for school, travel, etc.*

14. Which of the following best describes your high school program?

- A General
- B Academic or college preparatory
- C Vocational or technical

*This question refers to the type of high school program in which the student is currently enrolled.*

*An academic or college preparatory program prepares students for college or university study.*

*A vocational or technical program prepares students for employment immediately after completing high school by focusing on developing job-specific skills such as auto mechanics, carpentry, computer design, etc.*

# 12<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE READING: GRADE 12

#### Section 4

This section has 20 questions. Mark your answers in your booklet. Fill in only **one** oval for each question.

1. Please indicate how much you DISAGREE or AGREE with the following statements about reading and writing. Fill in **one** oval on each line.

	Strongly disagree	Disagree	Agree	Strongly agree
a. When I read books, I learn a lot.	A	B	C	D
b. Reading is one of my favorite activities.	A	B	C	D

*The items in this question refer to the student's attitude toward reading. Reading is asked about in general, not specifically with reference to school. The student should express his or her own opinion.*

2. How often do you do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once or twice a month	Once or twice a week	Almost every day
a. Read for fun on your own time	A	B	C	D
b. Talk with your friends or family about something you have read	A	B	C	D

*The items in this question asks the frequency with which the student engages in various reading activities outside of school.*

**Read for fun on your own time:** Refers to how often the student reads for his or her own enjoyment during free time (i.e., leisure time that is independent from school requirements). Reading may include a variety of materials, such as books, comic books, and articles in the newspaper or on the Internet.

**Talk with your friends or family about something you have read:** Refers to the frequency with which the student discusses material that he or she has read with a friend or family member. This discussion can be initiated by the student or by the other participant. It can be based on material that the student has read for school or for his or her own enjoyment.

3. Now think about the reading and writing you do for school. For your **English** class this year, how often do you do each of the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>A few times a year</b>	<b>Once or twice a month</b>	<b>At least once a week</b>
a. Have a class discussion about something that the whole class has read	A	B	C	D
b. Work in pairs or small groups to talk about something that you have read	A	B	C	D

*The items in this question ask about the frequency with which the student discusses what he or she has read in his or her English class. The student should only include discussions that occurred in English class since the beginning of the current school year.*

**Have a class discussion about something that the whole class has read:** Refers to the frequency with which the student’s English class has a class discussion about material that the class has read. This discussion may be led by the teacher but must involve some student participation. That is, a teacher lecturing the students does not qualify. If a class discussion was held, but the student did not speak, the student should include this discussion in his or her answer.

**Work in pairs or small groups to talk about something that you have read:** Refers to the frequency with which the student engages in class-assigned, one-on-one or small-group discussions in English class about material that he or she has read. Discussions may be in-class or out-of-class.

4. For your **English** class so far this year, how many times have you done each of the following? Fill in **one** oval on each line.

	<b>Never</b>	<b>Once</b>	<b>2 or 3 times</b>	<b>4 or 5 times</b>	<b>6 or more times</b>
a. Made a presentation to the class about something that you have read	A	B	C	D	E
b. Done a project about something that you have read (for example, written a play, created a website)	A	B	C	D	E

*The items in this question ask the frequency with which the student makes presentations or does projects about something he or she reads. The student should only include presentations or projects completed in English class since the beginning of the current school year.*

**Made a presentation to the class about something that you have read:** Refers to the frequency with which the student makes a presentation to communicate to the English class information about material that he or she has read. The presentation may be an individual presentation or a group presentation.

**Done a project about something that you have read (for example, written a play, created a website):** Refers to the frequency with which the student completes an English class project related to material that the student has read. The project may be an individual project or a group project. “Project” refers to a sustained activity that yields a product.

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

*This question refers to the frequency with which the student uses the school library or public library for his or her schoolwork. Access to the library may be initiated by the student or prompted by the teacher or parent. School projects or homework is not limited to English/language arts class.*

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

*This question refers to the frequency with which the student uses the school library or public library for his or her own personal use not related to a school project or homework.*

7. Do you study or do work for English/language arts at an after-school or tutoring program?
- A Yes
  - B No

*This question refers to whether the student studies or does work for English/language arts while attending an after-school or tutoring program. These programs could include both school-based and school-sponsored programs and/or private programs. These programs would not include informal study sessions with peers or teachers.*

8. In your school, do you participate in extracurricular activities such as book clubs, competitions, fairs, or exhibits for reading?
- A Yes
  - B No

*This question refers to whether the student has ever attended (either within his or her own school grounds or on school-sponsored field trips) book clubs, competitions, fairs, or exhibits related to reading.*

9. For school this year, how often have you been asked to write long answers to questions on tests or assignments that involved reading?
- A Never
  - B Once or twice this year
  - C Once or twice a month
  - D At least once a week

*This question refers to the frequency with which the student has been asked to integrate reading and writing in school by writing on tests and/or for assignments that involve reading. "Long answers" are answers that require at least one paragraph. The phrase "tests and assignments that involved reading" refers to tests on materials that are read by the student and reading assignments that are given to the student.*

10. In your English/language arts class this year, how often does your class do each of the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>Once or twice a month</b>	<b>Once or twice a week</b>	<b>Every day or almost every day</b>
a. Read aloud	A	B	C	D
b. Read silently	A	B	C	D
c. Discuss new or difficult vocabulary	A	B	C	D
d. Explain what we have read	A	B	C	D
e. Do a group activity or project about what we have read	A	B	C	D
f. Read books we have chosen ourselves	A	B	C	D
g. Write something about what we have read	A	B	C	D
h. Discuss different interpretations of what we have read	A	B	C	D

*The items in this question refer only to activities that are integrated into the student's English/language arts class. The frequency estimates are based upon the class activity (as a whole or in part), not whether the student individually engaged in the various options. Items "a," "b," and "f" all refer to reading activities done individually by students. Items "c," "d," and "h" are verbal activities undertaken by students in the classroom. Item "e" refers to an activity/project that is either written or oral, or some combination of both, completed by students. Item "g" refers to an individual writing activity. The student should only include activities done in his or her English/language arts class this school year.*

11. In your English/language arts class this year, when reading a story, article, or other passage, how often does your teacher ask you to do the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>Once or twice a month</b>	<b>Once or twice a week</b>	<b>Every day or almost every day</b>
a. Summarize the passage	A	B	C	D
b. Interpret the meaning of the passage	A	B	C	D
c. Question the motives or feelings of the characters	A	B	C	D
d. Identify the main themes of the passage	A	B	C	D

*The items in this question refer to specific activities related to the student's reading assignments. These activities could be either written or oral responses. The student should only include activities done in his or her English/language arts class this school year.*

12. In your English/language arts class this year, how often do you use a computer to do each of the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>Once or twice a month</b>	<b>Once or twice a week</b>	<b>Every day or almost every day</b>
a. Learn and practice vocabulary	A	B	C	D
b. Practice spelling and grammar	A	B	C	D
c. Write stories or reports	A	B	C	D
d. Produce multimedia reports/projects	A	B	C	D
e. Access reading-related websites (for example, websites with book reviews and lists of recommended books)	A	B	C	D
f. Conduct research for reading and writing projects	A	B	C	D

*The items in this question refer to the frequency with which the student uses a computer at school to do various activities. The work may be done on computers in a classroom, in a school library, in a school computer lab, or elsewhere at school. The student should only include use of the computer for activities associated with his or her English/language arts class this school year.*

13. How hard was this test compared to most other tests you have taken this year in school?
- A Easier than other tests
  - B About as hard as other tests
  - C Harder than other tests
  - D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. "Compared to most other tests" means school tests given this academic year in all subjects including English/language arts.*

14. 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?
- A Not as hard as on other tests
  - B About as hard as on other tests
  - C Harder than on other tests
  - D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test compared to his or her effort on most other school tests taken this academic year in all subjects including English/language arts.*

15. How important was it to you to do well on this test?
- A Not very important
  - B Somewhat important
  - C Important
  - D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

16. Are you currently enrolled in or have you taken International Baccalaureate courses in English/language arts?
- A Yes
  - B No

*This question asks the student if he or she is currently enrolled in or previously enrolled in an International Baccalaureate Diploma Programme course on literature (Group 1: Language A1) or previously enrolled in an International Baccalaureate Middle Years Programme course on reading, writing skills or literature (Language A).*

17. Are you currently enrolled in or have you taken an Advanced Placement course in English/language arts? Fill in ovals for **all** that apply.
- A Yes, I am enrolled in or have taken Advanced Placement English Language.
  - B Yes, I am enrolled in or have taken Advanced Placement English Literature.
  - C No, I have never taken an Advanced Placement English/language arts course.

*Advanced Placement is a specific program, offered by the College Board, which prepares students to take Advanced Placement examinations. Students who score well on the examinations may be granted college credit for the courses they complete. However, not all students who take AP courses actually take the corresponding examinations. This question only asks whether the **course** was taken; a student should answer “yes,” even if he or she did not take the examination. The student should include AP courses he or she is enrolled in during the current school year.*

18. Are you currently enrolled in or have you taken any online English/language arts courses for high school or college credit?
- A Yes
  - B No

*An online English/language arts course is an English/language arts course for which the primary mode of instruction is over the Internet. These courses cover a full syllabus and, if passed successfully, provide high school and/or college credit. The courses may or may not be offered through the student’s school.*

19. How much education do you think you will complete?
- A I will not finish high school.
  - B I will graduate from high school.
  - C I will have some education after high school.
  - D I will graduate from college.
  - E I will go to graduate school.
  - F I don’t know.

*This question asks the student to provide his or her best estimate concerning future educational attainment. If the student is considering more than one response option, he or she should select the highest level being considered. The student should only mark “I don’t know” if he or she is completely uncertain.*

20. What do you expect that your main activity will be in the year after you leave high school?
- A Working full time
  - B Attending a vocational, technical, or business school
  - C Attending a 2-year college
  - D Attending a 4-year college, service academy, or university
  - E Serving in the military
  - F Other

*This question asks the student to provide his or her best estimate concerning plans to work, serve in the military, or continue his or her education after leaving high school.*

THIS PAGE IS INTENTIONALLY LEFT BLANK.

# 12<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE MATHEMATICS: GRADE 12

#### Section 4

This section has 26 questions. Mark your answers in your booklet. Unless directed otherwise, fill in only one oval for each question.

1. Which courses have you taken from eighth grade to the present? If you have taken a course more than once, give the **most recent** year you took it. Fill in **one** oval on each line. INCLUDE courses taken in summer school, but DO NOT INCLUDE topics that were only taught as part of a longer course (such as trigonometry taught in drafting class or computer programming taught in Algebra II).

	I have never taken this course.	I took this course in or before Grade 8.	I took this course in Grade 9.	I took this course in Grade 10.	I took this course in Grade 11.	I took this course in Grade 12.
a. <b>Basic or general mathematics</b> course	A	B	C	D	E	F
b. <b>Tech-prep mathematics, business mathematics, consumer mathematics, or other applied mathematics</b> course	A	B	C	D	E	F
c. <b>Introduction to algebra or pre-algebra</b> course	A	B	C	D	E	F
d. <b>Algebra I</b> course	A	B	C	D	E	F
e. <b>Geometry</b> course	A	B	C	D	E	F
f. <b>Algebra II</b> course, <b>with or without trigonometry</b>	A	B	C	D	E	F
g. <b>Trigonometry</b> (as a separate course)	A	B	C	D	E	F
h. <b>Pre-calculus</b> course (also called third-year algebra or elementary functions and analysis)	A	B	C	D	E	F
i. <b>Unified, integrated, or sequential mathematics</b> course	A	B	C	D	E	F
j. <b>Probability or statistics</b> course	A	B	C	D	E	F
k. <b>Calculus</b> course	A	B	C	D	E	F
l. <b>Discrete or finite mathematics</b> course	A	B	C	D	E	F
m. <b>Other mathematics</b> course	A	B	C	D	E	F
n. <b>Computer programming</b> course (such as C++, Pascal, Visual Basic, etc.)	A	B	C	D	E	F

In order to interpret performance on the NAEP mathematics assessment, it is very helpful to know the sequence of mathematics courses that each student has taken and, thus, the mathematics content to which he or she has been exposed. However, given the wide variation in course titles, students may have difficulty in selecting the correct course descriptor from this list. The following descriptions of the mathematics content typically covered in each type of course may be helpful to those who are unsure what to answer. Encourage the student to give his or her best judgment even if he or she is not certain of the correct answer.

**Basic or general mathematics** usually includes topics in number sense, measurement, and conversions. Typically this course places much less emphasis on equations than does algebra or pre-algebra.

**Tech-prep or applied mathematics** usually involves topics in industry, business, and other workplace settings and uses percents, fractions, decimals, proportions, graphs, and data. **Business or consumer mathematics** usually involves topics in commission, discount, sales tax, interest, unit pricing, and mark-ups.

**Introduction to algebra or pre-algebra** usually involves solving equations, using positive and negative numbers, graphing equations, and understanding probability and statistics.

**Algebra I** usually involves simplifying expressions, finding and solving linear equations and inequalities, solving systems of equations, analyzing data, and working with powers and exponents.

**Geometry** usually involves working with theorems and proofs involving two-dimensional figures such as rectangles, triangles, and circles. Solid geometry, which extends the study to three-dimensional figures, should also be included here.

**Algebra II** usually involves solving quadratic equations, radical expressions and equations, and rational expressions and equations, as well as working with functional notation and right-triangle trigonometry.

**Trigonometry** includes the study of the theory and applications of trigonometric and circular functions (such as sine, cosine, and tangent) and trigonometric relationships in right triangles.

**Pre-calculus** usually includes the study of functions and their graphs, including polynomials, rational functions, logarithmic and exponential functions, and trigonometric functions. Topics such as polar coordinates and complex numbers may also be included in this course.

**Unified, integrated, or sequential mathematics** is a multi-year curriculum used by some schools and districts. As its name implies, it refers to a specific series of topics, taught in a specific order over more than one year, in which each topic builds upon the previous one. The interdependence of the topics distinguishes unified, integrated, or sequential mathematics from a traditional algebra/geometry sequence, in which algebra and geometry are more independent courses.

**Probability or statistics** usually includes topics in probability, data analysis (such as mean, standard deviation, and the normal distribution), the design of statistical experiments, and making inferences from data.

**Calculus** includes the study of limits, derivatives, integrals, and applications of these topics in science and other contexts.

**Discrete or finite mathematics** usually includes topics such as logic, properties of integers, counting and combinatorics, networks and graphs, and mathematical induction.

**Computer programming** includes the actual writing of software programs in any language and interpreting the code in previously written computer programs.

2. Are you currently enrolled in or have you taken an Advanced Placement (AP) course in mathematics? Fill in **one or more** ovals.
- A Yes, I am enrolled in or have taken Advanced Placement (AP) Calculus AB.
  - B Yes, I am enrolled in or have taken Advanced Placement (AP) Calculus BC.
  - C Yes, I am enrolled in or have taken Advanced Placement (AP) Statistics.
  - D No, I have never taken an Advanced Placement (AP) mathematics course.

*Advanced Placement is a specific program, offered by the College Board, which prepares students to take Advanced Placement examinations. Students who score well on the examinations may be granted college credit for the courses they complete. However, not all students who take AP courses actually take the corresponding examinations. This question only asks whether the **course** was taken; a student should answer “yes,” even if he or she did not take the examination. The student should include AP courses he or she has taken or is enrolled in during the current school year.*

3. Are you currently enrolled in or have you taken any **online** mathematics courses for **high school or college credit**?
- A Yes
  - B No

*An online mathematics course is a mathematics course for which the primary mode of instruction is over the Internet. These courses cover a full syllabus and, if passed successfully, provide high-school and/or college credit. The courses may or may not be offered in the student’s school.*

4. Are you currently enrolled in or have you taken International Baccalaureate courses in mathematics?
- A Yes
  - B No

*This question asks the student if he or she is currently enrolled in or previously enrolled in an International Baccalaureate Diploma Programme course in mathematics (Group: Mathematics and Computer Science) or previously enrolled in an International Baccalaureate Middle Years Programme course in mathematics.*

5. Was there a mathematics course that you would have liked to have taken this school year but did not take?
- A Yes, but my school does not offer the course.
  - B Yes, but the course was full.
  - C Yes, but I did not have the necessary prerequisites.
  - D Yes, but my schedule was full.
  - E No, there was no other course that I wanted to take.

*This question asks the student if there was a mathematics course he or she (a) is not taking this school year and (b) would have liked to have taken. The first four options are for the student who is not enrolled in a mathematics course that he or she would have liked to have taken. The last option is for the student who did not want to take a mathematics course during the current school year other than the course he or she is enrolled in.*

6. Please indicate how much you DISAGREE or AGREE with the following statements. Fill in **one** oval on each line.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly agree</b>
a. Because mathematics is fun, I wouldn't want to give it up.	A	B	C	D
b. I like mathematics.	A	B	C	D
c. Mathematics is one of my favorite subjects.	A	B	C	D

*The items in this question assess the student's level of agreement about mathematics in general and mathematics as a school subject. The student should express his or her own opinions.*

7. What kind of **calculator** do you usually use when you are **not in mathematics class**?

- A None
- B Basic four-function (addition, subtraction, multiplication, division)
- C Scientific (not graphing)
- D Graphing

*This question refers to the type of calculator the student usually uses when he or she is not in mathematics class. The calculator could be used for any purpose or combination of purposes, including mathematics homework, class work or homework for some other subjects, or non-school activities.*

**Basic Four-Function** calculator performs addition, subtraction, multiplication and division. It does not perform additional functions such as fractions, parenthetical expressions, and sine/cosine.

**Scientific** calculator performs basic arithmetic operations plus calculating exponents and performing other advanced operations.

**Graphing** calculator generally has a large graphing screen. In addition to drawing graphs in the viewing window, it may accept algebraic notation and data matrices.

8. Did you bring your own calculator for this test?

- A Yes
- B No

*This question asks the student if he or she brought his or her own calculator for the NAEP test. The question does not specifically ask if the student **used** his or her own calculator.*

9. What kind of calculator do you have available for this test?
- A Don't know (NAEP provided)
  - B Basic four-function (addition, subtraction, multiplication, division)
  - C Scientific (not graphing)
  - D Graphing

*This question asks the student what type of calculator he or she had available to take the NAEP test. If the student was provided a NAEP calculator and does not know the type of calculator, he or she should indicate option A. If the student brought his or her own calculator and does not know the type, the following descriptions should help him or her provide an answer.*

**Basic Four-Function** calculator performs addition, subtraction, multiplication and division. It does not perform additional functions such as fractions, parenthetical expressions, and sine/cosine.

**Scientific** calculator performs basic arithmetic operations plus calculating exponents and performing other advanced operations.

**Graphing** calculator generally has a large graphing screen. In addition to drawing graphs in the viewing window, it may accept algebraic notation and data matrices.

10. Do you use the Internet at home?
- A Yes
  - B No

*This question refers to whether the student uses the Internet at home for any purpose. This Internet usage is not limited to mathematics or any other school assignments, but is looking at Internet usage in general (e.g., e-mail, playing games, etc).*

11. Are you currently taking a mathematics course?
- A Yes → Go to Question 12
  - B No → Skip to Question 22

*Self-explanatory.*

12. Do you study or do work for mathematics at an after-school or tutoring program?
- A Yes
  - B No

*This question refers to whether the student studies or does work for mathematics while attending an after-school or tutoring program. These programs could include school-based and school-sponsored programs, and/or private programs.*

13. How often do you feel the following way in your mathematics class? Fill in **one** oval on each line.

	Never or hardly ever	Sometimes	Often	Always or almost always
a. I have a clear understanding of what my mathematics teacher is asking me to do.	A	B	C	D
b. The mathematics work is too easy.	A	B	C	D
c. The mathematics work is challenging.	A	B	C	D
d. The mathematics work is engaging and interesting.	A	B	C	D
e. I am learning.	A	B	C	D

*The five items in this question assess the student's perceptions and attitudes regarding his or her current mathematics class. The student should express his or her own opinions.*

*Items "a," "b," and "c" assess the student's perception of the difficulty posed by the material presented in his or her current mathematics class.*

*Item "d" assesses how much the student enjoys his or her current mathematics class.*

*Item "e" assesses the student's self-perceived performance in his or her current mathematics course, regardless of the material's difficulty.*

14. How often do you use these different types of calculators in your mathematics class? Fill in **one** oval on each line.

	Never use	Sometimes, but not often	Usually use
a. Basic four-function (addition, subtraction, multiplication, division)	A	B	C
b. Scientific (not graphing)	A	B	C
c. Graphing	A	B	C

*The items in this question refer to the frequency with which the student uses different types of calculators while mathematics class is in session. The calculator could be supplied by the student or by the school.*

**Basic four-function** calculator performs addition, subtraction, multiplication and division. It does not perform additional functions such as fractions, parenthetical expressions, and sine/cosine.

**Scientific** calculator performs basic arithmetic operations plus calculating exponents and performing other advanced operations.

**Graphing** calculator generally has a large graphing screen. In addition to drawing graphs in the viewing window, it may accept algebraic notation and data matrices.

15. When you take a mathematics test or quiz, how often do you use a calculator?

- A Never
- B Sometimes
- C Always

*This question refers to the frequency with which the student uses a calculator during tests or quizzes. The student should answer based on how he or she uses the calculator in his or her regular classroom. The calculator could be supplied by the student or by the school.*

16. For each of the following activities, how often do you use a **calculator**? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. To check your work on mathematics homework assignments	A	B	C	D	E
b. To calculate the answers to mathematics homework problems	A	B	C	D	E
c. To work in class on mathematics lessons led by your teacher	A	B	C	D	E

*The items in this question ask the frequency with which the student uses a calculator on mathematics homework or in class. The calculator could be supplied by the student or by the school.*

**To check your work on mathematics homework assignments:** Refers to the student's using a calculator to confirm mathematics homework answers that he or she had previously derived without a calculator.

**To calculate the answers to mathematics homework problems:** Refers to the student's using a calculator to calculate answers on his or her mathematics homework.

**To work in class on mathematics lessons led by your teacher:** Self-explanatory.

17. How often do you use a computer for mathematics at school?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student uses a computer at school for mathematics-related work—including classwork, homework, and any other mathematics-related activity. The work may be done on computers in a classroom, in a school library, in a school computer lab, or elsewhere at school.*

18. Do you use a computer for mathematics homework at home?
- A Yes
  - B No

*This question refers to whether the student uses a computer at home specifically for mathematics homework. The computer could be the student's personal computer or a family computer. Do NOT include calculators or PDAs (Personal Digital Assistants).*

19. On a typical day, how much time do you spend doing work for mathematics class on a computer? Include work you do in class and for homework.
- A None
  - B Half an hour or less
  - C About 1 hour
  - D About 2 hours
  - E More than 2 hours

*This question refers to the amount of time the student spends on any computer, performing work for his or her mathematics class. The student should include both work done during class and homework done outside of class. The computer could be at home, at school, in a library, or anywhere else.*

20. When you are doing mathematics for school or homework, how often do you use these **different types of computer programs**? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. A spreadsheet program for mathematics class assignments	A	B	C	D	E
b. A program to practice or drill on mathematics facts (addition, subtraction, multiplication, division)	A	B	C	D	E
c. A program that presents new mathematics lessons with problems to solve	A	B	C	D	E
d. The Internet to learn things for mathematics class	A	B	C	D	E
e. A calculator program on the computer to solve or check problems for mathematics class	A	B	C	D	E
f. A graphing program on the computer to make charts or graphs for mathematics class	A	B	C	D	E
g. A statistical program to calculate patterns such as correlations or cross-tabulations	A	B	C	D	E
h. A word processing program to write papers for mathematics class	A	B	C	D	E
i. A program to work with geometric shapes for mathematics class	A	B	C	D	E

*The items in this question refer to the types of computer programs the student may use while studying mathematics and the frequency with which he or she uses each type of program. The student should include programs used in mathematics class and for mathematics homework. Extra credit or self-study work should be included, but not work for other classes (such as science). The computer could be at home, at school, in a library, or anywhere else.*

**A spreadsheet program for mathematics class assignments:** Refers to the frequency with which the student uses spreadsheet programs for mathematics class assignments. Such programs include Excel, Lotus 1 2 3, etc. This activity may include using a spreadsheet program to create/display data in tables, in charts, or in graphs but should not include using a spreadsheet program to organize class assignments. The student also should not include times he or she uses tables in a word processing program (e.g., Word, Word Perfect, Notepad, etc.)

**A program to practice or drill on mathematics facts (addition, subtraction, multiplication, division):** Refers to the frequency with which the student uses programs that are designed to increase mastery of basic mathematics concepts and facts, such as addition, subtraction, multiplication, division, fractions, and decimals. Such programs include Math Blaster, Math Flashcards, Decimal & Fraction Maze, Math Advantage 2002, etc.

**A program that presents new mathematics lessons with problems to solve:** Refers to the frequency with which the student uses programs that present entire lessons, from introducing a new concept through practice and mastery. In some cases the lessons use a self-discovery model in which the student learns the concept by working through the problems; in other cases the concept is presented in an expository manner at the beginning of each lesson. Examples include the SMILE Program, 123Math.ca, Math Goodies, the Carnegie Algebra Tutor, etc.

**The Internet to learn things for mathematics class:** Refers to the frequency with which the student uses the Internet to access websites containing substantive information about mathematics (including the application of mathematics or the history of mathematics) for mathematics class assignments. Sites might include those sponsored by encyclopedias, universities, professional societies, or museums. The student should not include his or her visits to school or to class websites for administrative purposes (e.g., to find out the day's homework assignment) or e-mail exchanges with classmates or teachers.

**A calculator program on the computer to solve or check problems for mathematics class:** Refers to the frequency with which the student uses a calculator program on a computer (typically the basic or scientific calculator applications included with the computer operating systems) to solve or check problems for his or her mathematics class. The student should not include the use of hand-held calculators, even programmable calculators.

**A graphing program on the computer to make charts or graphs for mathematics class:** Refers to the frequency with which the student uses a graphing program on a computer to construct charts or graphs for mathematics class. Programs include the Chart functions within Excel or Lotus or separate programs, such as CAD, DeltaGraph, Advanced Grapher, Graphmatica.

**A statistical program to calculate patterns such as correlations or cross tabulations:** Refers to the frequency with which the student uses a statistical program to calculate patterns for his or her mathematics class. Programs include Data Desk, ActivStats, Minitab, Mathematica, etc.

**A word processing program to write papers for mathematics class:** Refers to the frequency with which the student composes a paper on the computer using word processing programs, such as Microsoft Word, Word Perfect, Notepad, etc.

**A program to work with geometric shapes for mathematics class:** Refers to the frequency with which the student uses graphics programs to construct and/or manipulate plane (two-dimensional) or solid (three-dimensional) geometric shapes. Programs include Sketchpad, Cabri, Cinderella, Hot Spot, Smart Draw, etc.

21. How often do you use e-mail, instant messages, blogs, or text messages to do any of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. Talk online with friends about mathematics work	A	B	C	D	E
b. Get help with mathematics from someone other than your teacher, family, classmates, or friends	A	B	C	D	E

*This question refers to the frequency with which the student uses various electronic communication modes to talk with his or her friends about math work or to get help with mathematics from people other than teachers, family, classmates, or friends. The communication may be via computers and/or cellular phones.*

22. How hard was this test compared to most other tests you have taken this year in school?

- A Easier than other tests
- B About as hard as other tests
- C Harder than other tests
- D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. “Compared to most other tests” means school tests given this academic year in all subjects, including mathematics.*

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?

- A Not as hard as on other tests
- B About as hard as on other tests
- C Harder than on other tests
- D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test compared to his or her effort on most other school tests taken this academic year, in all subjects including mathematics.*

24. How important was it to you to do well on this test?

- A Not very important
- B Somewhat important
- C Important
- D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

25. How much education do you think you will complete?

- A I will not finish high school.
- B I will graduate from high school.
- C I will have some education after high school.
- D I will graduate from college.
- E I will go to graduate school.
- F I don't know.

*This question asks the student to provide his or her best estimate concerning future educational attainment. If the student is considering more than one response option, he or she should select the highest level being considered. The student should only mark "I don't know" if he or she is completely uncertain.*

26. What do you expect that your main activity will be in the year after you leave high school?

- A Working full time
- B Attending a vocational, technical, or business school
- C Attending a 2-year college
- D Attending a 4-year college, service academy, or university
- E Serving in the military
- F Other

*This question asks the student to provide his or her best estimate concerning plans to work, serve in the military, or continue his or her education after leaving high school.*

# 12<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### STUDENT QUESTIONNAIRE SCIENCE: GRADE 12

#### Section 4

This section has 19 questions. Mark your answers in your booklet.

1. Which courses have you taken from eighth grade to the present? If you have taken a course more than once, give the most recent year you took it. Fill in **one** oval on each line. INCLUDE courses taken in summer school, but DO NOT INCLUDE topics that were only taught as part of a longer course.

	I did not take course.	I took this course in Grade 8.	I took this course in Grade 9.	I took this course in Grade 10.	I took this course in Grade 11.	I am taking or have taken this course in Grade 12.
a. Earth and space science	A	B	C	D	E	F
b. Life science (other than biology)	A	B	C	D	E	F
c. Physical science (other than chemistry or physics)	A	B	C	D	E	F
d. General science	A	B	C	D	E	F
e. First-year biology	A	B	C	D	E	F
f. Second-year biology	A	B	C	D	E	F
g. First-year chemistry	A	B	C	D	E	F
h. Second-year chemistry	A	B	C	D	E	F
i. First-year physics	A	B	C	D	E	F
j. Second-year physics	A	B	C	D	E	F
k. Engineering and technology	A	B	C	D	E	F
l. Other science course	A	B	C	D	E	F

*In order to interpret performance on the NAEP science assessment, it is very helpful to know the sequence of science courses that each student has taken and, thus, the science content to which he or she has been exposed.*

**Earth and space science** usually includes a discussion of such topics as geology, geologic processes, Earth history, atmosphere and weather, oceanography, the solar system, and the universe.

**Life science (other than biology), Physical science (other than chemistry or physics) and General science** all tend to be introductory level courses. A **general science** course is likely to cover both life science and physical science broadly, whereas, **life science** would focus on biology and **physical science** more on chemistry and physics.

**First-year biology and Second-year biology courses** both include the study of living organisms and how they interact with their environment. However, the topic areas and depth of coverage will vary greatly from school to school. A student should include “First-year biology” if he or she has taken or is currently enrolled in one year of biology. A student enrolled in or having completed a second year of biology should indicate “Second-year biology.” If a student’s school only offers one year of biology, and the student has taken or is currently enrolled in the biology class, the student should indicate “First-year biology.”

**First-year chemistry and Second-year chemistry** would involve the study of the matter and energy in terms of atomic theory, including the structure, composition, and properties of matter and its transformations during chemical reactions. However, the topic areas and depth of coverage will vary greatly from school to school. A student should include “First-year chemistry” if he or she has taken or is currently enrolled in one year of chemistry. A student enrolled in or having completed a second year of chemistry should indicate “Second-year chemistry.” If a student’s school only offers one year of chemistry, and the student has taken or is currently enrolled in the chemistry class, the student should indicate “First-year chemistry”.

**First-year physics and Second-year physics** could include the study of motion, heat and energy, electricity, magnetism, optics, atoms and nuclei, and aspects of quantum phenomena. However, the topic areas and depth of coverage will vary greatly from school to school. A student should include “First-year physics” if he or she has taken or is currently enrolled in one year of physics. A student enrolled in or having completed a second year of physics should indicate “Second-year physics.” If a student’s school only offers one year of physics and the student has taken or is currently enrolled in the physics class, the student should indicate “First-year physics.”

**Engineering and technology** is usually a course for more advanced students and would involve the application of scientific knowledge learned in previous classes.

**Other science course** would be selected by the student only if he or she had a class covering science topics that weren’t covered by any of the other courses listed.

2. Are you currently enrolled in or have you taken International Baccalaureate courses in science?
- A Yes
  - B No

*This question asks the student if he or she is currently enrolled in or previously enrolled in an International Baccalaureate Diploma Programme course in science (Group 4: Experimental Sciences) or previously enrolled in an International Baccalaureate Middle Years Programme course in science.*

3. Are you currently enrolled in or have you taken any online science courses for high school or college credit?
- A Yes
  - B No

*An online science course is a science course for which the primary mode of instruction is over the Internet. These courses cover a full syllabus and, if passed successfully, provide high school and/or college credit. The courses may or may not be offered in the student's school.*

4. Are you currently enrolled in or have you taken an Advanced Placement course in science? Fill in ovals for **all** that apply.
- A Yes, I am enrolled in or have taken Advanced Placement Biology.
  - B Yes, I am enrolled in or have taken Advanced Placement Environmental Science.
  - C Yes, I am enrolled in or have taken Advanced Placement Chemistry.
  - D Yes, I am enrolled in or have taken Advanced Placement Physics B or C.
  - E Yes, I am enrolled in or have taken Advanced Placement Computer Science A or AB.
  - F No, I have never taken an Advanced Placement science course.

*Advanced Placement is a specific program, offered by the College Board, which prepares students to take Advanced Placement examinations. Students who score well on the examinations may be granted college credit for the courses they complete. However, not all students who take AP courses actually take the corresponding examinations. This question only asks whether the **course** was taken; a student should answer "yes," even if he or she did not take the examination. The student should include AP courses he or she has taken or is enrolled in during the current school year.*

5. Please indicate how much you DISAGREE or AGREE with the following statements about science. Fill in **one** oval on each line.

	<b>Strongly disagree</b>	<b>Disagree</b>	<b>Agree</b>	<b>Strongly agree</b>	
a. I do science-related activities that are not for schoolwork.	A	B	C	D	(VC305348)
b. I like science.	A	B	C	D	(VC305350)
c. Science is one of my favorite subjects.	A	B	C	D	(VC305351)
d. I take science only because I have to.	A	B	C	D	(VC305352)
e. I take science only because it will help me in the future.	A	B	C	D	(VC305353)
f. When I graduate from high school, I would like to have a job related to science.	A	B	C	D	(NEW)

*In this question, part “a” refers to the student’s engagement in science outside of school. Parts “b,” “c,” “d,” “e” and “f” refer to the student’s attitude toward science. The student should provide his or her opinion.*

6. Are you currently taking a science course?

- A Yes → Go to Question 7.  
B No → Skip to Question 15.

*Self-explanatory*

7. In your science class this year, have you done hands-on activities or projects with any of the following? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Living things (for example, plants, animals, bacteria)	A	B
b. Electricity (for example, batteries and light)	A	B
c. Chemicals (for example, mixing or dissolving sugar or salt in water)	A	B
d. Rocks or minerals (for example, identifying types)	A	B
e. Magnifying glass or microscope (for looking at small things)	A	B
f. Thermometer or barometer (for making measurements)	A	B
g. Simple machines (for example, pulleys and levers)	A	B

*This question asks the student to specify a variety of laboratory/experimental science activities in which he or she has personally participated at school. Watching a demonstration, without participating, should not be included. Any science activity performed outside of school (e.g., with a chemistry set at home) should not be included. However, extracurricular activities, such as participating in a school-sponsored club, should be included.*

8. In your science class this year, how often do you do each of the following? Fill in **one** oval on each line.

	<b>Never or hardly ever</b>	<b>Once every few weeks</b>	<b>About once a week</b>	<b>Two or three times a week</b>	<b>Every day or almost every day</b>
a. Read a science textbook, in class or at home	A	B	C	D	E
b. Read a book or magazine about science	A	B	C	D	E
c. Read about science on the computer	A	B	C	D	E
d. Watch a movie, video, or DVD about science	A	B	C	D	E

*This question asks the student to indicate the frequency with which he or she participates in a variety of activities in his or her science class.*

**Read a science textbook, in class or at home:** Refers to the frequency with which the student has read a science textbook in class or at home. Reading could be assigned or unassigned, printed on paper or found on the Internet.

**Read a book or magazine about science:** Refers to the frequency with which the student has read a book, other than a textbook, containing science-related information or a magazine that contains a news article or short stories about scientific topics in science class. Paging through a magazine and looking at photographs or advertisements should not be included. Reading could be assigned or unassigned, printed on paper or found on the Internet.

**Read about science on the computer:** Refers to the frequency with which the student has read an e-book or article from a CD or other source, Internet site, or any other media via computer in science class. Reading could be assigned or unassigned.

**Watch a movie, video, or DVD about science:** Refers to the frequency with which the student has engaged with visual media about science during science class.

9. In your science class this year, how often do you do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. Discuss events in the news that are related to what you are learning in science class	A	B	C	D	E
b. Work with other students on a science project or activity	A	B	C	D	E
c. Figure out different ways to solve a science problem	A	B	C	D	E
d. Present what you learned about science to your class	A	B	C	D	E
e. Take a science test or quiz	A	B	C	D	E

*This question asks the student to specify the frequency with which he or she participates in various activities in his or her science class.*

**Discuss events in the news that are related to what you are learning in science class:** Refers to the frequency with which the student has discussed with his or her teachers or classmates a newspaper, magazine or Internet article he or she has read or a story he or she has watched on television that is related to what he or she is learning in science class.

**Work with other students on a science project or activity:** Refers to the frequency with which the student has worked with other students in science class on a project or activity related to science.

**Figure out different ways to solve a science problem:** Refers to the frequency with which the student has found different ways to solve a science problem during science class. This could be part of a class project involving more than one student or done independently.

**Present what you learned about science to your class:** Refers to the frequency with which the student has presented what he or she has learned about science to his or her science class. The presentation could be brief or extended; informal or formal. The presentation could be an individual presentation or one in which the student participated as part of a group. If a group presentation, the student should have an active speaking role in it.

**Take a science test or quiz:** Refers to the frequency with which the student has taken an oral or written science test or quiz in science class.

10. In your science class this year, how often do you do each of the following? Fill in **one** oval on each line.

	Never or hardly ever	Once every few weeks	About once a week	Two or three times a week	Every day or almost every day
a. Identify questions that can be addressed through science experiments	A	B	C	D	E
b. Design a science experiment	A	B	C	D	E
c. Talk about measurements you took for your science project or activity	A	B	C	D	E
d. Talk about the results of your science project or activity	A	B	C	D	E
e. Watch your teacher do a science experiment or activity	A	B	C	D	E
f. Make graphs or charts of the results from your science project or activity	A	B	C	D	E
g. Write a report on your science project or activity	A	B	C	D	E

*This question asks the student to specify the frequency with which he or she engages in a variety of activities as part of his or her science class.*

**Identify questions that can be addressed through science experiments:** Refers to the frequency with which the student has proposed questions that could be answered by conducting a scientific experiment during his or her science class. The student does not have to conduct the experiment; only raise questions that could be answered through experimentation.

**Design a science experiment:** Refers to the frequency with which the student has designed an experiment during his or her science class. The student does not have to conduct the experiment, only design the experiment.

**Talk about measurements you took for your science project or activity:** Refers to the frequency with which the student has communicated during his or her science class about measurements he or she took for a science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

**Talk about the results of your science project or activity:** Refers to the frequency with which the student has communicated during his or her science class about the results of his or her science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

**Watch your teacher do a science experiment or activity:** Refers to the frequency with which the student has watched his or her teacher conduct a science experiment or activity. The student does not have to have participated in the experiment in any way or to have written notes or a report. All that is required is that the student watches the experiment or activity conducted by the teacher and not other students.

**Make graphs or charts of the results from your science project or activity:** Refers to the frequency with which the student has made graphs or charts during science class based on the results of his or her science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

**Write a report on your science project or activity:** Refers to the frequency with which the student has written a report during his or her science class about a science project or activity. The project or activity could be completed by the individual student or be a group project or activity. If a group project or activity, the student should have played a role in the presentation.

11. In this school year, how often have you been asked to write long answers to questions on tests or assignments for science?

- A Never or hardly ever
- B Once every few weeks
- C About once a week
- D Two or three times a week
- E Every day or almost every day

*This question refers to the frequency with which the student has been asked to compose long answers to questions on science tests and/or to complete writing assignments for science. "Long answers" are answers that require at least one paragraph.*

12. In this school year, how often have you talked with your teacher about how you are doing in science?

- A Never or hardly ever
- B Once every few weeks
- C About once a week
- D Two or three times a week
- E Every day or almost every day

*This question refers to the frequency with which the student has talked to his or her teacher about his or her performance in science. The student may have talked to his or her teacher about performance on a particular test, assignment or lab project or performance in general.*

13. In this school year, how often have you used library resources for science?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has used library resources for science. The library could be the student's school library, another school's library, a public library, or any other library.*

14. In this school year, how often have you used computers for science?
- A Never or hardly ever
  - B Once every few weeks
  - C About once a week
  - D Two or three times a week
  - E Every day or almost every day

*This question refers to the frequency with which the student has used a computer for science-related work—including class work, homework, and any other science-related activity for school. The work may be done on computers in a classroom, in a school library, in a school computer lab, at home, or any other location.*

15. How hard was this test compared to most other tests you have taken this year in school?
- A Easier than other tests
  - B About as hard as other tests
  - C Harder than other tests
  - D Much harder than other tests

*This question asks the student to evaluate how difficult this NAEP test has been. "Compared to most other tests" means school tests given this academic year in all subjects including science.*

16. 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?
- A Not as hard as on other tests
  - B About as hard as on other tests
  - C Harder than on other tests
  - D Much harder than on other tests

*This question asks the student to evaluate his or her effort on this NAEP test, compared to his or her effort on most other school tests taken this academic year in all subjects including science.*

17. How important was it to you to do well on this test?
- A Not very important
  - B Somewhat important
  - C Important
  - D Very important

*This question asks the student how much he or she cared about doing well on this NAEP test.*

18. How much education do you think you will complete?
- A I will not finish high school.
  - B I will graduate from high school.
  - C I will have some education after high school.
  - D I will graduate from college.
  - E I will go to graduate school.
  - F I don't know.

*This question asks the student to provide his or her best estimate concerning future educational attainment. If the student is considering more than one response option, he or she should select the highest level being considered. The student should only mark "I don't know" if he or she is completely uncertain.*

19. What do you expect that your main activity will be in the year after you leave high school?
- A Working full time
  - B Attending a vocational, technical, or business school
  - C Attending a two-year college
  - D Attending a four-year college, service academy, or university
  - E Serving in the military
  - F Other

*This question asks the student to provide his or her best estimate concerning plans to work, serve in the military, or continue his or her education after leaving high school.*

# 12<sup>th</sup>

## QUESTION-BY-QUESTION SPECIFICATIONS

### EXTENDED STUDENT BACKGROUND QUESTIONNAIRE: GRADE 12

Assessment administrators may answer questions that students have about the questions in the Extended Student Background Questionnaire (ESBQ). These questions address important issues about the homes in which students live, and NAEP wants to obtain the most accurate responses possible.

To assist you in answering students' questions, each question in the ESBQ is repeated below, with an explanation of what information the question is attempting to elicit from the students.

If a student feels that a question in this section is too personal, stress confidentiality. If the student is still reluctant, tell the student he/she does not have to answer the question.

As a result of natural disasters or other traumatic events, some students may have been displaced from their previous homes and schools. A displaced student may ask whether he/she should answer certain questions in reference to his/her *previous* home and school or with regard to his/her *present* home and school. Your response should be that *all* the questions refer to the student's *current situation*.

A student may notice that a question being asked here is similar to a question asked elsewhere. If a student raises a question about this, assure the student that he/she should answer each question as accurately as possible and not be concerned about other questions or responses.

Finally, some of the background questions may present difficulty to students who are not living with their mother and father at home. Below are guidelines that can be applied in these situations.

- *Questions that refer to mother or father also apply to students' adoptive parents, guardians, or primary caregivers (i.e., the person[s] in the student's home responsible for the student's day-to-day care).*
- *Answers to questions about newspapers, encyclopedia, etc., should be based on the resources available in the student's home, whether the student is living with his/her natural parents, adoptive parents, or guardians.*
- *For students living in foster homes, questions that refer to mother or father apply to their foster parents. Answers to questions about items in the home, etc., should be based on the resources available in the foster home.*
- *For students living in an orphanage or a group home, questions that refer to mother or father should not be answered, and it should be noted by the student in the outside margin of the page that the student is living in an orphanage or a group home. Answers to questions about items in the home, etc., should be based on the resources available in the orphanage or group home.*
- *In the case of students in joint-custody situations, questions that ask about "home" refer to the home in which students spend a majority of their time. If students spend equal amounts of time in the two homes, the students should refer to the home in which they are residing on the day of the test.*

In this section, please tell us about yourself and your family. This section has 10 questions. Mark your answers in your booklet.

1. Do you live in different homes with different people during the school year? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to identify children living in shared-custody arrangements. Vacation homes should not be considered “different homes with different people” for the purpose of answering this question. Students who live in one home except when on vacation should answer “No” by filling in oval B. Students who have switched foster homes should answer “Yes” by filling in oval A.*

2. Which of the following people live in your home? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Mother/Stepmother	Y	N
b. Father/Stepfather	Y	N
c. Foster parents	Y	N
d. Grandmother or Grandfather	Y	N

*The purpose of this question is to find out who lives in the student’s home. Students should refer to only one home when answering this question. For students in joint-custody arrangements, “home” refers to the home in which the students spend a majority of their time. In the case of students in joint-custody arrangements where students spend equal amounts of time in two homes, the students should refer to the home in which they are residing on the day of the test. Students living in an orphanage or group home should skip this question and indicate in the margin that they live in an orphanage or group home.*

3. How many brothers and sisters do you have, whether they live with you or not? Include all stepbrothers and stepsisters. Fill in only **one** oval.

- A None
- B One
- C Two
- D Three
- E Four
- F Five
- G Six or more

*The purpose of this question is to determine the total number of brothers and sisters a student has, rather than just the number of brothers and sisters with whom the student currently resides. The student should include stepsiblings, half siblings, foster siblings, adopted siblings, etc.*

4. Does your mother usually have a job for pay? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to determine whether the student's mother is participating in the labor force in either a full-time or part-time capacity, on a regular basis. Note that a volunteer job is not a "job for pay." "Usually" is defined as at least half of a full work week. ("At least half" also includes "more than half.") If the student has no knowledge of his/her mother's participation in the workforce, he/she should answer "No" to this question.*

*In the absence of a biological or adoptive mother or female guardian, this question applies to the female in the student's home who is responsible for the day-to-day care of the student—that is, a stepmother, a grandmother, some other adult female relative, or an unrelated person, such as a foster mother or other female caregiver.*

*If the student spends or has spent time living with both a biological mother and a stepmother, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.*

*If no female parent figure or caregiver is currently present in the home but the student has some knowledge about the labor force status of a female parent or other caregiver with whom he/she has previously lived, the student should answer with respect to that female parent or caregiver.*

*Where there is no female present in the home and no knowledge of any female caregiver, the student should skip this question and make a note in the margin.*

5. Does your father usually have a job for pay? Fill in only **one** oval.

- A Yes
- B No

*The purpose of this question is to determine whether the student's father is participating in the labor force in either a full-time or part-time capacity, on a regular basis. Note that a volunteer job is not a "job for pay." "Usually" is defined as at least half of a full work week. ("At least half" also includes "more than half.") If the student has no knowledge of his/her father's participation in the workforce, he/she should answer "no" to this question.*

*In the absence of a biological or adoptive father or male guardian, this question applies to the male in the student's home who is most responsible for the day-to-day care of the student—that is, a stepfather, a grandfather, some other adult male relative, or an unrelated person, such as a foster father or other male caregiver.*

*If the student spends or has spent time living with both a biological father and a stepfather, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.*

*If no male parent figure or caregiver is currently present in the home but the student has some knowledge about the labor force status of a male parent or other male caregiver with whom he/she has previously lived, the student should answer with respect to that male parent or caregiver.*

*Where there is no male present in the home and no knowledge of any male caregiver, the student should skip this question and make a note in the margin.*

6. Which of the following items do you have in your home? Fill in **one** oval on each line.

	<b>Yes</b>	<b>No</b>
a. Access to the Internet	Y	N
b. Clothes dryer just for your family	Y	N
c. Electric dishwasher	Y	N
d. More than six rooms (not including bathrooms)	Y	N
e. More than one bathroom	Y	N
f. A bedroom of your own	Y	N
g. Three or more cars, trucks, or other vehicles that your family uses	Y	N

*This question asks about items in the student's home. Students should answer this item for the home they referenced in earlier questions.*

**Access to the Internet:** Refers to whether the student has access to the Internet at home. Access is for the family and by the family only (i.e., open, unsecured Wi-Fi access does not count).

**Clothes dryer just for your family:** Refers to whether the student has a gas or electric clothes dryer (not a clothesline, drying rack, etc.) in either the student's house or apartment unit that is only used by the student's family. Students who live in apartment complexes with communal washers and dryers should not include those dryers.

**Electric dishwasher:** Refers to whether the student has an electric dishwasher in the student's house or apartment unit.

**More than six rooms (not including bathrooms):** Refers to whether the student's house or apartment unit has more than six rooms, not counting bathrooms, porches, balconies, foyers, halls, and half-baths.

**More than one bathroom:** Refers to whether there is more than one bathroom in the student's house or apartment unit. Full bathrooms, half-baths, and powder rooms all count as "bathrooms."

**A bedroom of your own:** Refers to whether the student has his/her own bedroom in his/her house or apartment unit.

**Three or more cars, trucks, or other vehicles that your family uses:** Refers to the number of vehicles the student's family currently owns that run and are used by family members. Company-owned vehicles used by family members for business purposes, such as dump trucks or taxis, are not to be included in the count.

7. Do you have your own cell phone? Fill in only **one** oval.

- A Yes
- B No

*This question refers to whether the student has a cell phone for his/her own use on a daily basis. The student should answer "no" if the cell phone he/she normally uses is also used by other members of the family on a regular basis.*

- 
8. Does your family own or rent your home, or have some other living arrangement? Fill in only **one** oval.
- A Own (or pay mortgage)
  - B Rent
  - C Other

*To answer this question, students should refer to the same home they referenced to answer the earlier questions. Option C, “Other,” includes living with a friend or relative, living in an emergency housing shelter, exchanging work for housing, or being homeless. If a student does not know whether his/her family owns the home or pays rent, encourage the student to give his/her best guess.*

9. How far in school did your mother go? Fill in only **one** oval.
- A She did not finish high school.
  - B She graduated from high school.
  - C She attended school after high school, but did not graduate.
  - D She graduated from a two-year college.
  - E She graduated from a four-year college.
  - F She has a master’s degree, Ph.D., M.D., law degree, or other advanced degree.

*A student may notice that this question is similar to another question asked in a different questionnaire section. If a student raises a question about this, assure the student that he/she should answer this question as accurately as possible and not be concerned about other questions or responses.*

*In the absence of a biological or adoptive mother or female guardian, this question applies to the female in the student’s home who is responsible for the day-to-day care of the student—that is, a stepmother, a grandmother, some other adult female relative, or an unrelated person, such as a foster mother or other female caregiver.*

*If the student spends or has spent time living with both a biological mother and a stepmother, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.*

*If no female parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a female parent or other caregiver with whom he/she has previously lived, the student should answer with respect to that female parent or caregiver. If there is no female parent or caregiver at all, the student should skip this question and make a note in the margin.*

*Option B. “She graduated from high school,” refers to having received a high school diploma or a GED or High School Equivalency.*

*Option C. “She attended school after high school, but did not graduate,” refers to participating in any type of post-secondary education (e.g., vocational, technical, or business school; two-year or four-year college or university; service academy) but not completing a degree in that course of study.*

*Option D. “She graduated from a two-year college,” refers to having a degree or certificate from a two-year college (e.g., A.A., A.S.). Students whose mother (or female parent figure or caregiver) started but did not complete a two-year program should fill in Option C, not Option D.*

Option E, “She graduated from a four-year college,” refers to having a degree (e.g., B.A., B.S.) from a four-year college, university, or service academy program. Students whose mother (or female parent figure or caregiver) started but did not complete a four-year program should fill in Option C, not Option E.

Option F, “She has a master’s degree, Ph.D., M.D., law degree, or other advanced degree,” refers to having completed graduate education after obtaining a bachelor’s degree that led to her receiving a master’s degree, a doctorate degree, a medical doctorate degree, a J.D., or any other advanced professional degree, such as C.P.A., D.V.M., or M.B.A. If the student’s mother (or female parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.

10. How far in school did your father go? Fill in only **one** oval.

- A He did not finish high school.
- B He graduated from high school.
- C He attended school after high school, but did not graduate.
- D He graduated from a two-year college.
- E He graduated from a four-year college.
- F He has a master’s degree, Ph.D., M.D., law degree, or other advanced degree.

A student may notice that this question is similar to another question asked in a different questionnaire section. If a student raises a question about this, assure the student that he/she should answer this question as accurately as possible and not be concerned about other questions or responses.

In the absence of a biological or adoptive father or male guardian, this question applies to the male in the student’s home who is responsible for the day-to-day care of the student—that is, a stepfather, a grandfather, some other adult male relative, or an unrelated person, such as a foster father or other male caregiver.

If the student spends or has spent time living with both a biological father and a stepfather, the student should provide the information with regard to the person with whom he/she has lived the most during his/her lifetime.

If no male parent figure or caregiver is currently present in the home but the student has some knowledge about the education level of a male parent or other male caregiver with whom he/she has previously lived, the student should answer with respect to that male parent or caregiver. If there is no male parent or caregiver at all, the student should skip this question and make a note in the margin.

Option B, “He graduated from high school,” refers to having received a high school diploma or a GED or High School Equivalency.

Option C, “He attended school after high school, but did not graduate,” refers to participating in any type of post-secondary education (e.g., vocational, technical, or business school; two-year or four-year college or university; service academy) but not completing a degree in that course of study.

Option D, “He graduated from a two-year college,” refers to having a degree or certificate from a two-year college (e.g., A.A., A.S.). Students whose father (or male parent figure or caregiver) started but did not complete a two-year program should fill in Option C, not Option D.

---

Option E, “He graduated from a four-year college,” refers to having a degree (e.g., B.A., B.S.) from a four-year college, university, or service academy program. Students whose father (or male parent figure or caregiver) started but did not complete a four-year program should fill in Option C, not Option E.

Option F, “He has a master’s degree, Ph.D., M.D., law degree, or other advanced degree,” refers to having completed graduate education after obtaining a bachelor’s degree that led to his receiving a master’s degree, a doctorate degree, a medical doctorate degree, a J.D., or any other advanced professional degree, such as C.P.A., D.V.M., or M.B.A. If the student’s father (or male parent figure or caregiver) is currently in school, the student should code the category for the highest level of schooling this person has completed at the time of the assessment.

THIS PAGE IS INTENTIONALLY LEFT BLANK.