

Georgia Milestones

Assessment System



Study/Resource Guide for Students and Parents Grade 3



The Study/Resource Guides are intended to serve as a resource for parents and students. They contain practice questions and learning activities for each content area. The standards identified in the Study/Resource Guides address a sampling of the state-mandated content standards.

For the purposes of day-to-day classroom instruction, teachers should consult the wide array of resources that can be found at www.georgiastandards.org.

Study/Resource Guide

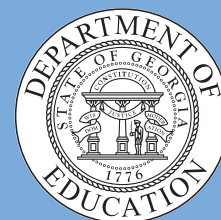


Table of Contents

THE GEORGIA MILESTONES ASSESSMENT SYSTEM	3
HOW TO USE THIS GUIDE	4
PREPARING FOR TAKING TESTS	5
OVERVIEW OF THE END-OF-GRADE ASSESSMENT	6
TYPES OF ITEMS	6
DEPTH OF KNOWLEDGE	8
ENGLISH LANGUAGE ARTS (ELA)	11
DESCRIPTION OF TEST FORMAT AND ORGANIZATION	11
CONTENT	11
ITEM TYPES	11
ENGLISH LANGUAGE ARTS (ELA) DEPTH OF KNOWLEDGE EXAMPLE ITEMS	12
ENGLISH LANGUAGE ARTS (ELA) CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS	24
ENGLISH LANGUAGE ARTS (ELA) ADDITIONAL SAMPLE ITEM KEYS	52
ENGLISH LANGUAGE ARTS (ELA) SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES	56
ENGLISH LANGUAGE ARTS (ELA) WRITING RUBRICS	61
MATHEMATICS	70
DESCRIPTION OF TEST FORMAT AND ORGANIZATION	70
CONTENT	70
ITEM TYPES	70
MATHEMATICS DEPTH OF KNOWLEDGE EXAMPLE ITEMS	71
MATHEMATICS CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS	79
MATHEMATICS ADDITIONAL SAMPLE ITEM KEYS	106
MATHEMATICS SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES	111
APPENDIX A: LANGUAGE PROGRESSIVE SKILLS, BY GRADE	130
APPENDIX B: CONDITION CODES	131

THE GEORGIA MILESTONES ASSESSMENT SYSTEM



Dear Student,

This **Georgia Milestones Grade 3 Study/Resource Guide for Students and Parents** is intended as a resource for parents and students. It contains sample questions and helpful activities to give you an idea of what test questions look like on Georgia Milestones and what the Grade 3 End-of-Grade (EOG) assessment covers.

These sample questions are fully explained and will tell you why each answer is either correct or incorrect.

Get ready—open this guide—and get started!

HOW TO USE THIS GUIDE

Let's get started!

* **Get it together!**

- This guide
- Pen or pencil
- Highlighter
- Paper



* **Gather materials**

- Classroom notebooks
- Textbooks

* **Study space**

- Find a comfortable place to sit.
- Use good lighting.
- Time to focus—no TV, games, or phones!

* **Study time**

- Set aside some time after school.
- Set a goal—how long are you going to study?
- Remember—you cannot do this all at one time.
- Study a little at a time every day.

* **Study buddy**

- Work with a friend, sister, brother, parent—anyone who can help!
- Ask questions—it is better to ask now and get answers.
- Make sure you know what you need to do—read the directions before you start.
- Ask your teacher if you need help.

* **Test-taking help**

- Read each question and all of the answer choices carefully.
- Be neat—use scratch paper.
- Check your work!

PREPARING FOR TAKING TESTS

Getting ready!



Here are some ideas to think about before you take a test.

- Get plenty of rest and eat right. Take care of your body and your mind will do the rest.
- If you are worried about a test, don't be. Talk with a teacher, parent, or friend about what is expected of you.
- Review the things you have learned all year long. Feel good about it.
- Remember that a test is just one look at what you know. Your class work, projects, and other tests will also show your teachers how much you have learned throughout the year.

Try your best!

OVERVIEW OF THE END-OF-GRADE ASSESSMENT

What is on the End-of-Grade Assessment?

- * English Language Arts (ELA)
- * Mathematics

TYPES OF ITEMS

- * **Selected-response items**—also called multiple-choice
 - English Language Arts (ELA) and Mathematics
 - There is a question, problem, or statement that is followed by four answer choices.
 - There is only ONE right answer, so read EACH answer choice carefully.
 - Start by eliminating the answers that you know are wrong.
 - Then look for the answer that is the BEST choice.
- * **Technology-enhanced items**—also called multiple-select or two-part questions
 - English Language Arts (ELA), Mathematics, Science, and Social Studies
 - There is a question, problem, or statement.
 - You may be asked to select more than one right answer.
 - You may be asked to answer the first part of the question. Then, you will answer the second part of the question based on how you answered part one.
 - Read the directions for each question carefully.
 - Start by eliminating the answers you know are wrong.
 - If the question has two parts, answer the first part before you move to the second part.
- * **Constructed-response items**
 - English Language Arts (ELA) and Mathematics
 - There is a question, problem, or statement but no answer choices.
 - You have to write your answer or work out a problem.
 - Read the question carefully and think about what you are asked to do.
 - In English Language Arts (ELA), go back to the passage to look for details and information.
 - You will be scored on accuracy and how well you support your answer with evidence.
- * **Extended constructed-response items**
 - English Language Arts (ELA) and Mathematics
 - These are similar to the constructed-response items.
 - Sometimes they have more than one part, or they require a longer answer.
 - Check that you have answered all parts of the question.

*** Extended writing prompt**

- English Language Arts (ELA) only
- There is a question, problem, or statement.
- You may be asked to do more than one thing.
- In English Language Arts (ELA), you will be asked to read two passages and then write an essay.
- You will be scored on how well you answer the question and the quality of your writing.
- Organize your ideas clearly.
- Use correct grammar, punctuation, and spelling.
- Support your answer with evidence from the text.

DEPTH OF KNOWLEDGE

Test questions are designed with a Depth of Knowledge (DOK) level in mind. As you go from Level 1 to Level 4, the questions get more and more challenging. They take more thinking and reasoning to answer. You may have experienced these types of questions in your classroom as your teachers find ways to challenge you each day.

A Level 1 item may not require as much thinking as a Level 4 item—but that does not mean it's easy.

A Level 4 item may have more than one part or ask you to write something.

Here is some information to help you understand just what a DOK level really is.

Level 1 (Recall of Information)

- * Identify, list, or define something.
- * Questions may start with *who*, *what*, *when*, and *where*.
- * Recall facts, terms, or identify information.

Level 2 (Basic Reasoning)

- * Think about things—it is more than just remembering something.
- * Describe or explain something.
- * Answer the questions “how” or “why.”

Level 3 (Complex Reasoning)

- * Go beyond explaining or describing “how and why.”
- * Explain or justify your answers.
- * Give reasons and evidence for your response.
- * Make connections and explain a concept or a “big idea.”

Level 4 (Extended Reasoning)

- * Complex thinking required!
- * Plan, investigate, or apply a deeper understanding.
- * These items will take more time to write.
- * Connect and relate ideas.
- * Show evidence by doing a task, creating a product, or writing a response.

Depth of Knowledge

Level 1—Recall of Information

Level 1 asks you to identify, list, or define. You may be asked to recall *who*, *what*, *when*, and *where*. You may also be asked to recall facts and terms or identify information in documents, quotations, maps, charts, tables, graphs, or illustrations. Items that ask you to “describe” and/or “explain” could be Level 1 or Level 2. A Level 1 item requires that you just recall, recite, or repeat information.

Skills Demonstrated	Question Cues
• Make observations • Recall information • Recognize formulas, properties, patterns, processes • Know vocabulary, definitions • Know basic concepts • Perform one-step processes • Translate from one representation to another • Identify relationships	• Tell who, what, when, or where • Find • List • Define • Identify; label; name • Choose; select • Compute; estimate • Express as • Read from data displays • Order

Level 2—Basic Reasoning

Level 2 includes some thinking that goes beyond recalling or repeating a response. A Level 2 “describe” and/or “explain” item would require that you go beyond a description or explanation of information to describe and/or explain a result or “how” or “why.”

Skills Demonstrated	Question Cues
• Apply learned information to abstract and real-life situations • Use methods, concepts, and theories in abstract and real-life situations • Perform multi-step processes • Solve problems using required skills or knowledge (requires more than habitual response) • Make a decision about how to proceed • Identify and organize components of a whole • Extend patterns • Identify/describe cause and effect • Recognize unstated assumptions; make inferences • Interpret facts • Compare or contrast simple concepts/ideas	• Apply • Calculate; solve • Complete • Describe • Explain how; demonstrate • Construct data displays • Construct; draw • Analyze • Extend • Connect • Classify • Arrange • Compare; contrast

Level 3—Complex Reasoning

Level 3 requires reasoning, using evidence, and thinking on a higher level than Level 1 and Level 2. You will go beyond explaining or describing “how and why” to justifying the “how and why” through reasons and evidence. Level 3 items often involve making connections across time and place to explain a concept or a “big idea.”

Skills Demonstrated	Question Cues
• Solve an open-ended problem with more than one correct answer • Create a pattern • Generalize from given facts • Relate knowledge from several sources • Draw conclusions • Make predictions • Translate knowledge into new contexts • Compare and discriminate between ideas • Assess value of methods, concepts, theories, processes, and formulas • Make choices based on a reasoned argument • Verify the value of evidence, information, numbers, and data	• Plan; prepare • Predict • Create; design • Ask “what if?” questions • Generalize • Justify; explain why; support; convince • Assess • Rank; grade • Test; judge • Recommend • Select • Conclude

Level 4—Extended Reasoning

Level 4 requires the complex reasoning of Level 3 with the addition of planning, investigating, applying deeper understanding, and/or developing that will require a longer period of time. You may be asked to connect and relate ideas and concepts *within* the content area or *among* content areas in order to be at this highest level. The Level 4 items would be a show of evidence—through a task, a product, or an extended response—that the higher level demands have been met.

Skills Demonstrated	Question Cues
• Analyze and synthesize information from multiple sources • Examine and explain alternative perspectives across a variety of sources • Describe and illustrate how common themes are found across texts from different cultures • Apply mathematical models to illuminate a problem or situation • Design a mathematical model to inform and solve a practical or abstract situation • Combine and synthesize ideas into new concepts	• Design • Connect • Synthesize • Apply concepts • Critique • Analyze • Create • Prove

ENGLISH LANGUAGE ARTS (ELA)

DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 3 English Language Arts (ELA) EOG assessment has a total of 60 items.

You will answer a variety of item types on the test. Some of the items are selected-response (multiple-choice), which means you choose the correct answer from four choices. Some items will ask you to write your response using details from the text. There will also be a writing prompt that will ask you to write an essay.

The test will be given in three sections.

- Section 1 will be given on Day 1. You will be given a maximum of 90 minutes to complete the section.*
- Sections 2 and 3 will be given over one or two days. You may have up to 75 minutes to complete each section.

CONTENT

The Grade 3 English Language Arts (ELA) EOG assessment will measure the Grade 3 standards that are described at www.georgiastandards.org.

The content of the assessment covers standards that are reported under these domains:

- Reading and Vocabulary
- Writing and Language

There are two kinds of texts—fiction (including stories and poems) and informational text.

There are two kinds of essays—an opinion essay and an informational or explanatory essay.

Students will also write extended constructed responses that use narrative techniques such as completing a story, writing a new beginning, or adding dialogue. (Item 5 on page 31 gives an example of a prompt that requires a narrative response.)

ITEM TYPES

The English Language Arts (ELA) portion of the Grade 3 EOG assessment consists of selected-response (multiple-choice), technology-enhanced (multiple-select or two-part questions), constructed-response, extended constructed-response, and extended writing-response items.

* Beginning with the Spring 2017 administration, the extended writing-response will appear in Section 1. Prior to Spring 2017, the extended writing-response appears in Section 3.

ENGLISH LANGUAGE ARTS (ELA) DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels are provided for you on the following pages. The items and explanations of what is expected of you to answer them will help you prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

Example Item 1

Selected-Response

DOK Level 1: This is a DOK level 1 item because it requires the student to identify the correct comparative form of an irregular adjective.

English Language Arts (ELA) Grade 3 Content Domain II: Writing and Language

Standard: ELAGSE3L1g. Demonstrate command of the conventions of standard English grammar and usage when writing or speaking. g. Form and use comparative and superlative adjectives and adverbs, and choose between them depending on what is to be modified.

Read the sentence in the box.

Ashley plays basketball well, but Tina is _____.

Which word BEST completes the sentence?

- A. gooder
- B. more good
- C. better
- D. best

Correct Answer: C

Explanation of Correct Answer: The correct answer is choice (C) better. This is the correct comparative form of an irregular adjective. Choices (A) and (B) are incorrect because they follow the rule for some regular adjectives. Choice (D) is incorrect because it is the superlative form and the comparison is of only two subjects.

Read the article “Island Giants” and answer example items 2 and 3.

Island Giants

At one time, every continent in the world had giant tortoises. A tortoise is like a turtle, but tortoises live only on land. For many reasons, giant tortoises can now be found only on a few islands. Most of the giant tortoises live on the Galápagos [ga-LA-puh-gus] Islands in the Pacific Ocean. Their numbers have been going down for hundreds of years. But now people are helping them to return.

The Galápagos Islands were named after the many giant Galápagos tortoises that live there. A Galápagos tortoise can grow to be five feet long. It can weigh up to 500 pounds. There are 12 different kinds of these giant animals. The biggest difference is in the shape of their shells. They can have a high, round shell. The shell can also be flatter. Every island in the Galápagos Islands has its own kind of tortoise.

Many of the Galápagos tortoise’s problems started with people. Galápagos tortoises like to eat grass. Hundreds of years ago, people brought goats to the Galápagos Islands. The goats ate up so much grass that there was nothing for the tortoises to eat. Also, sailors took the tortoises onto their ships and used them for food.

Around 40 years ago, some people who wanted to help the tortoises took the goats away from the islands. They also brought more tortoises back onto the islands. There are now more Galápagos tortoises than there were 40 years ago. Let’s hope the number of these amazing animals continues to grow!

Example Item 2

Selected-Response

DOK Level 2: This is a DOK level 2 item because students must analyze the cause-and-effect structure of the text.

English Language Arts (ELA) Grade 3 Content Domain I: Reading and Vocabulary

Genre: Informational

Standard: ELAGSE3RI1. Ask and answer questions to demonstrate understanding of a text, referring explicitly to the text as the basis for the answers.

Which paragraph BEST explains why the number of Galápagos tortoises went down?

- A. paragraph 1
- B. paragraph 2
- C. paragraph 3
- D. paragraph 4

Correct Answer: C

Explanation of Correct Answer: The correct answer is choice (C) paragraph 3. The goats ate the grass, so the tortoises had nothing to eat. Choice (A) is incorrect because this paragraph introduces the animal. Choice (B) is incorrect because this paragraph describes the animal. Choice (D) is incorrect because this paragraph talks about how people helped the tortoises.

Scoring Rubric

Points	Description
2	The exemplar shows a full-credit response. It achieves the following: • Gives sufficient evidence of the ability to determine the main idea or to explain the support for a main idea • Includes specific examples/details that make clear reference to the text • Adequately explains the main idea or gives an explanation with clearly relevant information based on the text
1	The exemplar shows a 1-point response. It achieves the following: • Gives limited evidence of the ability to determine the main idea or to explain the support for a main idea • Includes vague/limited examples/details that make reference to the text • Explains the main idea or gives an explanation with vague/limited information based on the text
0	The exemplar shows a response that would earn no credit. It achieves the following: • Gives no evidence of the ability to determine the main idea or to explain the support for a main idea

Exemplar Response

Points Awarded	Sample Response
2	The main idea of the passage is that Galápagos tortoises were in trouble, but now they are coming back. The author says that people brought goats to the island, and sailors used tortoises for food. But people also helped the tortoises to come back by taking the goats away. Now there are more than there were 40 years ago.
1	The main idea of the passage is that Galápagos tortoises were in danger, but things are better now for them.
0	The passage is about large tortoises that live on an island.

Example Item 4

Extended Writing-Response

DOK Level 4: This is a DOK level 4 item because it requires students to connect information and write a response.

English Language Arts (ELA) Grade 3 Content Domain II: Writing and Language

Genre: Informational

Standard: ELAGSE3W2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

In this section, you will read two passages about skates. How are roller skates and in-line skates different? You will write an informational piece explaining the ways in which roller skates like Amy's grandmother's skates were different from in-line skates.

Before you begin planning and writing, read these two passages:

1. The History of Roller Skates
2. The Skates in the Closet

As you read the passages, think about what details from the passages you might use in your informational piece.

The History of Roller Skates

Joseph Merlin was a French man who liked to make new things. He also liked to ice skate. In 1760, he decided to try to make skates that could go on dry land. He put wheels on a pair of boots. Those were the first roller skates. He wore them to a party to show them to people. He couldn't stop his skates. He crashed into a mirror!

Over the years, roller skates went through many changes. One big change was made in 1863. A man named James Plimpton made a very useful kind of roller skates. These skates had four wooden wheels. Two were attached next to each other near the toe. Two wheels were put next to each other near the heel. This made them easier to control. These skates were called "quads." People made the wheels from different materials, like metal and plastic. They became very popular.

Quads were the main kind of roller skates until 1979. That was when two ice hockey players tried something new. They wanted to try to play hockey on land. They put the four wheels in one row. They made the wheels from a kind of plastic that was soft and tough. They put these wheels on a hockey boot. The wheels were thinner than the wheels on the quads. Skaters could go faster and make turns more easily. They put a rubber piece on the front that skaters used for stopping by pointing their toes down. They are called in-line skates. People keep making in-line skates better and better. They are making the wheels out of better plastic. They are making them easier to stop. What do you think will be the next big change in roller skates?

The Skates in the Closet

Amy loved ice skating. Every Saturday she would go to the Ice House in Bayside and skate for hours. She could do turns and leaps. She could skate faster than most adults. She felt like she was in her own world when she was skating.

When she had just turned nine years old, Amy spent a week at her grandmother's house. One day her grandmother said Amy could explore her closet. Amy's grandmother kept a lot of old things in there. Amy found an old red shoebox. It was very heavy when she lifted it up. When she took off the lid, she understood why the box was so heavy. Inside were her grandmother's old roller skates! Each shoe had four wheels attached to it: two on the front near the toes, and two near the heels. She slipped her feet into the skates. Her feet fit perfectly.

She decided to try them out. She stood up and made her way slowly to the door. She stepped out onto the driveway and pushed herself off. The first thing she noticed was that the ride was very bumpy. The sound of the metal wheels rolling on the driveway was loud. It was easy to stand up, but hard to actually get going fast. She skated to the end of the driveway. Even though she was going slowly, she didn't know how to stop! She managed to scrape her heel on the ground to slow down enough to try to turn around. It was like turning a boat. Slowly, she got used to the feel of the skates. After a while, she could go a little faster. She could turn in wide circles. She could stop when she needed to, but it wasn't easy. She practiced on them for the whole week. Her grandmother let her keep the skates.

When she went back to the skating rink, she felt like she was flying. It felt so strange to be able to do all the things on the ice she wanted to do. Still, every once in a while she took the old roller skates out of the box and rolled around the neighborhood, pretending she was her grandmother in the old days.

Now that you have read “The History of Roller Skates” and “The Skates in the Closet,” create a plan for and write your informational piece.

WRITING TASK

Think about the ideas in the two passages. Then write an **informational piece** explaining the ways in which roller skates like Amy’s grandmother’s skates were different from in-line skates.

Be sure to use information from BOTH passages in your **informational piece**. **Write your answer on the lines provided.**

Be sure to:

- Introduce the topic clearly.
- Use information from the two passages so that your piece includes important details.
- Develop the topic in a clear order, with facts, definitions, and details related to the topic.
- Identify the passages by title or number when using details or facts directly from the passages.
- Develop your ideas clearly and use your own words, except when quoting directly from the passages.
- Use linking words to connect ideas.
- Use clear language and vocabulary.
- Have a strong conclusion that supports the information presented.
- Check your work for correct usage, grammar, spelling, capitalization, and punctuation.

The following is an example of a seven-point response. See the seven-point, two-trait rubric for a text-based informational response on pages 64 and 65 to see why this example would earn the maximum number of points.

Example of a Seven-Point Response:

There are many differences between older roller skates and in-line skates. For one thing, the wheels are in different places. Older roller skates had two wheels on the front and two near the heel. The wheels on in-line skates have all the wheels lined up in a row.

Their wheels are made of different kinds of materials. Amy's grandmother's skates had metal wheels. Roller skate wheels could also be made of wood or plastic. On the other hand, in-line skates all have soft plastic wheels. That is why in-line skates aren't as bumpy as roller skates. They also aren't as loud. With the older roller skates, it was harder to turn and harder to stop.

ENGLISH LANGUAGE ARTS (ELA) CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 3 English Language Arts EOG assessment. This includes key terms and important vocabulary words. This section also contains practice questions, with an explanation of the correct answer, and activities that you can do on your own or with your classmates or family to prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

Unit 1: Reading Literary Text

READING PASSAGES: LITERARY TEXT

CONTENT DESCRIPTION

The literary passages in the English Language Arts (ELA) test are used to identify main ideas and details, cite evidence, make inferences, determine themes, and understand vocabulary.

Key Ideas and Details

- Ideas and details tell you what the story or poem is about.
- Use these ideas and details when writing or speaking about the story or poem.
- Look for central ideas or themes as you read. Ask yourself—what is this about?
- Think about the characters, setting, and events in the story.
- Summarize the important details and ideas after you read.

Structure of the Text

- Make sure you understand the words and phrases as you read.
- Think about how specific words can help you understand the meaning or tone.
- Look at the structure of stories. Pay attention to how the parts of the text (e.g., a section, chapter, scene, or stanza) work with each other and the story or poem as a whole.
- Think about the point of view or purpose of a text.

Understanding What You Read

- Think about the story and visualize, or make a mental picture, as you read.
- Think about the message or what the writer is trying to say.

KEY TERMS

Summarize: To give the main events of a story in the order in which they happen. (RL2)

Character: A person or thing in a work of literature. Goldilocks is a character in “Goldilocks and the Three Bears.” (RL3)

Setting: Where and when a story takes place, including the time of day, the season, or a location. (RL3)

Plot: The events in the beginning, middle, and end of the story. (RL3)

Vocabulary: The meanings of words and phrases, and how they are used in the story. (RL4)

Inference: To infer means to come to a reasonable conclusion based on evidence found in the text.

By contrast, an **explicit** idea or message is stated by the writer. The author tells the readers exactly what they need to know. (RL1)

Theme: The theme of a literary text is its lesson or message. For example, if a story is about a student who moves to a new town and has no one to play with at first, the theme may be loneliness or not fitting in. The central message is usually a moral or lesson. (RL2)

Folktale: A traditional story that is usually shared by storytelling. (RL2)

Myth: A story that is believed by many but is untrue. Myths are often used to explain practices, beliefs or natural events. (RL2)

Non-literal Language: To understand non-literal, or figurative language, you have to do more than define the words in the phrase. You need to distinguish between literal and figurative meanings of words and phrases. Literal refers to the “primary meaning of a word or phrase.” For example, if someone describes recess by saying “It was a zoo,” he or she is using non-literal language. Recess was noisy with lots of different people running around; it was not literally a zoo.

Examples of figurative language are similes and metaphors. **Similes** make comparisons using a linking word such as *like*, *as*, or *than*. (Her shirt was as green as the grass.)

A **metaphor** makes a comparison without a linking word. If someone describes clouds by saying “They were whipped cream,” they are using a metaphor. The clouds looked like whipped cream, but they were not literally whipped cream. (RL4)

Chapter: A section of a book. Books are often divided into chapters. (RL5)

Scene: A section of a drama or play. Plays are often divided into scenes. (RL5)

Stanza: A section of a poem. Poems are often divided into stanzas. (RL5)

Illustrations: Artwork that depicts the events in a story. Illustrations can be a powerful storytelling tool. (RL7)

Compare vs. contrast: Comparing is analyzing two things such as characters or stories in relation to each other, while contrasting is specifically analyzing the *differences* between two things such as two different characters or stories. (RL9)

Important Tips

-  Use details to support ideas and to answer *what* you know and *how* you know it.
-  When responding to an item, try to answer the question being asked before you read the answer choices.
-  Look for familiar prefixes, suffixes, and word roots to help you decide the meaning of an unknown word.

Sample Items 1–5

Use this passage to answer questions 1 through 5.

The Red Shell

Sandra ran out the door of the house and down the path to the beach one last time. The wind was blowing strong off the ocean, as if to drive all people away. Sandra felt like she had a hole in her stomach. She needed something to take back home with her, something to remember the last wonderful month. A small wave of water came toward her. The water rolled up to her ankles as she scanned the sand for treasure. She picked up a flat grey rock, looked at it, and skipped it across the water. She pushed a green shiny lump with her toe, but it turned out to be the end of a long piece of seaweed. Then she saw a small red shell in the shape of a cone. She picked it up and saw that it was not broken. She held it against her heart for a moment and closed her eyes. Then she put it in her pocket and ran back to the house, having said her goodbyes to the ocean.

Two weeks later, Sandra sat on her bed pulling off her socks. She had just come home from school. She saw that her red shell was not on the windowsill by her bed.

Sandra stormed into the kitchen. Her 4-year-old sister was under the kitchen table.

“Nina, did you take my shell?” she asked.

Nina began to cry and hugged a table leg.

“Can you tell me where it is?”

“I don’t remember. I’m sorry.”

Sandra went back to the room she shared with Nina and began to look for the shell on Nina’s side of the room. She looked in her drawers and in her closet. Under Nina’s bed there was a dark rectangular shape. Sandra flattened herself and stretched out far enough to get it out with her fingertips.

It was a green wooden box that Sandra remembered. A year ago, when Sandra was 7, the box had contained a small blown glass bottle—a gift from her grandmother. Sandra opened the box, which now contained Nina’s things. Inside, there were five colored beads, a small red ball with a white heart on it, and a blue envelope with a lump in it. She turned over the envelope and her red shell fell out, along with a folded piece of paper. She flattened the paper out. It was a drawing she had made a few months before and had forgotten about. It showed a very large Sandra holding a very small Nina over her head. They both had huge smiles on their faces.

She could still barely hear Nina crying softly in the kitchen. She went and sat down next to her, took her hand, and put the shell in it.

“It’s okay, Nina. Keep it,” she said softly.

Nina took it in her hands. “But it’s yours.” She held it out to Sandra.

“Come with me,” said Sandra. She led Nina into the bedroom. She plucked the glass bottle off her desk and placed it on the table between their beds. Then she took the shell from Nina’s hand and rested it in the mouth of the bottle.

“Now it belongs to both of us,” she said.

Item 1

Selected-Response

Which word **BEST** describes Sandra at the beginning of the story?

- A. angry
- B. bored
- C. excited
- D. sad

Item 2

Selected-Response

Which word **BEST** explains the meaning of the word *stormed* in this sentence?

Sandra stormed into the kitchen.

- A. fell
- B. jumped
- C. rushed
- D. walked

Item 3**Technology-Enhanced**

This question has two parts. First, answer part A. Then, answer part B.

Part A

What is the central message of the story?

- A. It is nice to share.
- B. It is fun to play at the beach.
- C. It is good to keep your room clean.
- D. It is important to remember where you put things.

Part B

Which sentence from the story BEST supports the answer in part A?

- A. She picked up a flat grey rock, looked at it, and skipped it across the water.
- B. Sandra went back to the room she shared with Nina and began to look for the shell on Nina's side of the room.
- C. "I don't remember. I'm sorry."
- D. "Now it belongs to both of us," she said.

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page, leaving a small margin at the top. There are no vertical lines or other markings on the page.

Unit 2: Reading Informational Text

READING PASSAGES: INFORMATIONAL TEXT

CONTENT DESCRIPTION

The informational and explanatory passages in the English Language Arts test can be used to determine central ideas, write an objective summary, analyze ideas, and provide supporting text evidence.

Key Ideas and Details

- Read closely to know exactly what the text says.
- Look for details that tell what the text is about.
- Use those details when writing or speaking about the text.
- Look for the central ideas in the text.
- Summarize the important details and ideas.
- Think about how ideas develop and work together in the text.

Structure

- Make sure you understand the words in the text.
- Use a dictionary, thesaurus, or glossary to help you with words that are new.
- Look at how the parts of the text work with each other.
- Think about the author's point of view or purpose in the text.

Understanding the Text

- Think about the story and visualize, or make a mental picture, as you read.
- Think about the text and its message.
- Look for details or evidence in the text.

KEY TERMS

Main Idea: The most important idea that the author is trying to say. (RI2)

Details: The facts and ideas that support the main idea of a passage. (RI2)

Summary: A summary contains the most important points but does not give all of the details. (RI2)

Author's Purpose: The author has a specific reason or purpose for writing the passage. Often the author's purpose is not directly stated. (RI3)

Fact and Opinion: A **fact** is a statement that can be proven. An **opinion** is a statement that cannot be proven because it states a writer's belief or judgment about something. Deciding whether or not a statement is a fact or an opinion often comes down to a single question: "Can you prove it?" If you can prove a statement, then it is a fact. If not, it's an opinion. (RI2)

Chronological Order: The order in which a series of events happened. A text that is arranged in order of time from the beginning to the end is in chronological order. (RI5)

Cause and Effect: This is a relationship where one thing causes another thing to happen. A passage may also be organized by stating the **problem and solution**. (RI3)

Point of View: The opinion of the author. Your opinion may differ from the opinion of the author writing a passage. (RI6)

Evidence: Something that proves the truth of something else. Informational texts may contain evidence in the form of key words, illustrations, maps, or photographs to prove that the information is correct. (RI7)

Important Tips

-  Try to read the questions about an informational text before you read the passage so that you know what to look out for.
-  Use evidence from a passage to help explain what is being said.
-  Use facts and details to support ideas and to answer questions about *what* you know and *how* you know it.

Sample Items 6–9

Use this passage to answer questions 6 through 9.

Horseshoe Crabs

Horseshoe crabs are very strange-looking creatures. They live on the Atlantic coast of the United States. Their name comes from their shape. Their shells have a U-shape like a horseshoe. They have a dull green color. You might think they look funny, but horseshoe crabs have been around longer than people have. In fact, horseshoe crabs are older than most other animals on Earth!

Many birds depend on the horseshoe crab for survival. Horseshoes lay their eggs on the beach and bury them in the sand. If the water is rough, many of the eggs get pushed into the open. The birds eat these eggs. That's not too bad for the horseshoes, though, because those eggs are not going to hatch.

Horseshoes provide a home for many kinds of sea creatures. Small animals stick themselves to the shells of horseshoe crabs. These small sea creatures lay their eggs on the horseshoe crab's shell. Often you will find older horseshoe crabs with hundreds of eggs stuck all over them.

Horseshoe crabs spend a lot of their lives being thrown around by the ocean and crashing into rocks. They get lots of cuts on their bodies, but they have a special kind of blood. It becomes hard very quickly and plugs up the cuts. This blood is so special that people use it for many purposes. For one thing, horseshoe crab blood can help doctors find out if their tools are clean. They put the tools in the crab's blood. If the blood changes in a certain way, they know the tool is not clean.

If you ever see a horseshoe crab, don't laugh. Say "Thank you!"

Item 6**Selected-Response**

Which sentence BEST shows how horseshoe crabs and birds live together?

- A. Birds eat the horseshoe crabs' eggs, so there are fewer horseshoes.
- B. Horseshoe crabs provide food for the birds by laying eggs.
- C. Horseshoe crabs depend on the birds' eggs for food.
- D. Birds lay their eggs on horseshoe crabs' shells.

Item 7**Selected-Response**

Which sentence explains why the blood of horseshoe crabs is special?

- A. There is a lot of blood because of the many cuts on their bodies.
- B. After a cut, the blood stops flowing very quickly.
- C. Doctors clean their tools with the blood.
- D. The blood has a strange dull green color.

Item 8**Selected-Response**

With which statement would the author MOST LIKELY agree?

- A. Horseshoe crabs are a danger to other animals.
- B. Horseshoe crabs are very beautiful to look at.
- C. Horseshoe crabs are eaten much of the time.
- D. Horseshoe crabs are unusual animals.

Item 9**Constructed-Response**

What is the main idea of the article?

Use details from the article in your answer. Write your answer on the lines provided.

Unit 3: Writing Opinion Texts

CONTENT DESCRIPTION

The opinion passages in the English Language Arts test help you develop opinions and support a point of view on a topic. In your writing, use evidence, examples, quotes, and reasons to develop and support your opinion.

Purpose

- An opinion piece takes a stand or agrees or disagrees with a point of view.
- Some common opinion words are “agree” or “disagree” or “for” or “against.”
- When you state your opinion, you need to support it with reasons, examples, and evidence.

Editing Your Writing

- Check your writing for good organization.
- Make sure your writing fits the task, purpose, and audience.
- Strengthen your writing by planning, revising, editing, rewriting, or trying a new approach.
- Use technology, including the Internet, to do research.

Scoring Rubrics

- Scoring rubrics can be found beginning on page page 61. You may find it helpful to read and discuss these with a parent or another adult.
- The rubrics show you what is needed to produce a strong piece of writing.
- Rubrics are important to understand. They tell you what to add to your writing.
- Writing on the EOG assessment will be scored using these rubrics.

KEY TERMS

Topic: What a piece of writing is about. When writing your opinion, choose topics about which you have strong feelings and a lot to say. (W1a)

Reasons: Details that support your opinion in a piece of writing. (W1a)

Purpose: The writer's reason for writing his or her essay or article. All writing has a purpose, whether it is to persuade, inform, explain, or entertain. (W1b)

Fact and opinion: A **fact** is a statement that can be proven. An **opinion** is a statement that cannot be proven because it states a writer's belief or judgment about something. Deciding whether or not a statement is a fact or an opinion often comes down to a single question: "Can you prove it?" If you can prove a statement somehow, then it is a fact. If not, it's an opinion. (W1b)

Textual evidence: You need to support your opinions with evidence. Textual evidence includes facts, opinions of experts, quotes, statistics, and definitions. (W1b)

Point of view: The opinion or perspective of the author on a specific topic. (W1c)

Audience: The people who will be reading the piece of writing. Writers should keep their audience in mind and adjust their ideas and vocabulary so that they can be best understood. (W4)

Revision: The process of editing and rewriting a piece of writing. All good writing requires a lot of revision in order to catch mistakes and make ideas clearer. (W5)

Organization: In writing, the organization helps explain ideas and information more clearly. Writers use transitions to organize information. Also, an entire piece of writing has an organizational structure to it. Writers structure their texts to match their purpose and audience. (W1a)

Important Tips

-  Use strong reasons to support your opinions in your writing.
-  Organize your writing by using chronological order, cause and effect, compare and contrast, or asking and answering questions.
-  Make sure your writing has a concluding statement that supports the information or explanation presented.
-  Always read over your writing several times to check your work and catch errors.

Sample Items 10–13

[**NOTE:** The structure of the practice items for this unit and Unit 4 is as it appears on the Georgia Milestones End-of-Grade assessment: 1) multiple-choice questions (three on the actual test); 2) a constructed-response item; and 3) an extended writing prompt. Additionally, the instructions for the extended writing prompt are in a format that is similar to the one on the End-of-Grade assessment. There is no constructed-response item in this unit. There is no extended writing prompt for Unit 4.]

In this section, you will read two passages and answer questions 10 through 13.

WRITING TASK

You will read about the idea of starting the school day earlier. What are the good and bad things about starting earlier? You will write an **opinion piece** in your own words about this idea.

Think about the ideas in the two passages. Then write an **opinion piece** explaining which opinion about school starting time you agree with: school should start later or school starting time should stay the same.

Be sure to use information from BOTH passages in your **opinion piece**. **Write your answer on the lines provided.**

Before you begin planning and writing, you will read two passages and answer three questions about what you have read. As you read the passages, think about what details from the passages you might use in your opinion piece. These are the titles of the passages you will read:

- 1. School Starts Too Early**
- 2. Don't Change!**

School Starts Too Early

School should start later in the morning. People who have studied the subject say that students do better when school starts later. Every day, students get up early. They don't get enough sleep. They come to school tired. That means they don't learn as well. By the afternoon, they are falling asleep. This is not a good situation.

If school started later in the day, students would be more interested in their classes. They would also do more homework because they wouldn't be as tired at night. Even if they didn't do more homework, they would do a better job with it. That's because they would be paying attention to it. They wouldn't be falling asleep while working on it.

Our school should try an experiment. Let half the students come at the normal time. Let the other half come an hour later. After a few months of school, who do you think would be doing better in school?

Don't Change!

Starting school later may seem like a good idea. Some students would probably like the idea. But that doesn't mean it's right. One reason is that it costs schools a lot of money to change their start times. One school district in Maryland studied how much it would cost. They found that they would have to use more buses and hire more people to drive them. There might be little money left to teach their students.

If school starts later, when does it end? If it ends at the same time, then the school day would be shorter. That can't be good for learning. If school ends later in the day, that brings more problems. There would be less time for after-school activities like sports. Students would get home from activities later, so they would have less time for homework. They also might stay up later to get their homework done.

There is an old saying that is very wise: "The early bird catches the worm." It means that getting up early, and not starting later, is the way to success.

Item 10

Selected-Response

Which idea from the first passage explains why students would do a better job with homework if school started later?

- A. "School should start later in the morning."
- B. "... students would be more interested in their classes."
- C. "... they wouldn't be as tired at night."
- D. "Let half the students come at the normal time."

Item 11

Selected-Response

Which statement from "Don't Change!" BEST supports the opinion that starting later is NOT a good thing?

- A. "Some students would probably like the idea."
- B. "There might be little money left. . . ."
- C. "... the school day would be shorter."
- D. "There is an old saying that is very wise."

Item 12

Selected-Response

With which sentence would the authors of BOTH articles agree?

- A. Most students become bored with doing their homework.
- B. What is good for students is the most important thing.
- C. Homework is more important than sports activities.
- D. Getting up early is the best thing for all students.

Item 13**Extended Writing-Response**

Now that you have read “School Starts Too Early” and “Don’t Change!” and answered some questions about what you have read, create a plan for and write your opinion piece.

WRITING TASK

You will read about the idea of starting the school day earlier. What are the good and bad things about starting earlier? You will write an **opinion piece** in your own words about this idea.

Think about the ideas in the two passages. Then write an **opinion piece** explaining which opinion about school starting time you agree with: school should start later or school starting time should stay the same.

Be sure to use information from BOTH passages in your **opinion piece**. **Write your answer on the lines provided.**

Be sure to:

- Introduce your opinion.
- Support your opinion with reasons and details from the passages.
- Give your reasons and details in a clear order.
- Develop your ideas clearly and use your own words, except when quoting directly from the passages.
- Identify the passages by title or number when using details or facts directly from the passages.
- Use linking words to connect ideas.
- Use clear language and vocabulary.
- Have a strong conclusion that supports your opinion.
- Check your work for correct usage, grammar, spelling, capitalization, and punctuation.

This image shows a single page of white paper with horizontal ruling lines. The lines are evenly spaced and run across the width of the page. There are approximately 20 lines visible. The paper has a thin black border around the edges.

Unit 4: Writing Informational/Explanatory Texts

CONTENT DESCRIPTION

The informational/explanatory passages in the English Language Arts test help develop your writing. Informational writing states ideas, summarizes research, and uses information from more than one source.

Text Types and Purposes

- Write informational/explanatory texts to state ideas and information clearly and accurately.
- Use the best details, organize them, and explain them when necessary.

Production and Distribution of Writing

- Produce writing with organization and style that fits the task, purpose, and audience.
- Develop and strengthen writing by planning, revising, editing, rewriting, or trying a new approach.
- Use technology, including the Internet, to produce and share writing.

Audience, Purpose, and Voice

- As you write, remember who your audience will be.
- Make sure your writing is appropriate. Watch your tone, style, and voice.
- Remember, you are writing for a purpose—think about *what* you are writing and *why*.

Range of Writing

- Write routinely over extended time frames (time for research, reflection, and revision) and shorter time frames (a single sitting or a day or two) for a range of tasks, purposes, and audiences.

Scoring Rubrics

- Scoring rubrics can be found beginning on page 61. You may find it helpful to read and discuss these with a parent or another adult.
- The rubrics show you what is needed to produce a strong piece of writing.
- Rubrics are important to understand. They tell you what to add to your writing.
- Writing on the EOG assessment will be scored using these rubrics.

KEY TERMS

Informational/explanatory texts: A form of writing that informs the reader or explains something. (W2D)

Introduction: The beginning of a piece of writing. The introduction should let readers know what they will be reading about and set up the main idea of the writing. (W2a)

Organization: The way in which a piece of writing is structured. Similar ideas and illustrations should be grouped together and the order of the information should make sense. (W2a/W4)

Linking word: A word that links one idea to the next. Writing should not jump from one idea to the next without transitions that guide the reader along. Examples of linking words include *also*, *another*, *and*, *more*, *because*, *therefore*, *since*, and *but*. (W2c)

Conclusion: The end of a piece of writing is the conclusion. The conclusion should sum up the main idea of the writing and provide an overall message for the reader. (W2d)

Technology: Different ways of adding to your writing such as using computers, cameras, or videos. (W6)

Important Tips

-  Begin by organizing your ideas in different sections. You can use a graphic organizer such as a chart or Venn diagram. Or you can create an outline of your piece. Then it will be easier to fill in the supporting details.
-  Be sure to develop your writing with details such as facts, definitions, quotations, or other information that supports your topic.
-  Organize your writing by using chronological order, cause and effect, compare and contrast, or asking and answering questions.
-  Make sure your writing has a concluding statement that supports your central idea.
-  Strengthen your writing by planning, revising, editing, rewriting, or trying a new approach.

Sample Items 14–17

[**NOTE:** The structure of the practice items for Unit 4 is as it appears on the Georgia Milestones End-of-Grade assessment with the exception of the extended writing prompt: 1) multiple-choice questions (three on the actual test); 2) a constructed-response item; and 3) an extended writing prompt. In this unit, there is no extended writing prompt.]

Read the passage “A Moon Named Titan” and answer questions 14 through 17.

A Moon Named Titan

In 1655, a Dutch man named Christiaan Huygens discovered a moon called Titan with his telescope. Titan goes around the planet Saturn. Using telescopes, people learned some things about Titan. It is bigger than the planet Mercury. It has an orange color. In 2004, a small space probe called Huygens landed on Titan.

From Huygens, we learned many interesting things about Titan. Titan is more like Earth than any other body in the solar system. That includes the planets! Like Earth, Titan has clouds, and it even rains there. But it doesn't rain water. It rains methane. Methane is a chemical. Like water, it can be a solid, a liquid, or a gas. The surface of Titan is solid ice. The gas that surrounds a planet is called the atmosphere. On Earth, the atmosphere is made of air. On Titan, though, there is methane in the atmosphere. It is the methane and the way it interacts with sunlight that makes Titan look orange. Sunlight turns the methane in the atmosphere into liquid. It rains and that makes rivers and lakes. Then the rivers and lakes dry up fast. This leaves only the icy surface behind. You can see lines in the ice carved by rivers.

There are still many questions about Titan. There might be an ocean underground, but no one is sure. There are ice volcanoes on the surface. But we don't know if they are still active. Hopefully we'll send a spaceship back to Titan soon.

Item 14

Selected-Response

Which statement from the passage shows that Titan is like Earth?

- A. Titan goes around the planet Saturn.
- B. Using telescopes, people learned some things about Titan.
- C. . . . Titan has clouds, and it even rains there.
- D. On Titan, though, there is methane in the atmosphere.

Item 15

Selected-Response

What is the meaning of the word *carved* in the sentence?

You can see lines in the ice carved by rivers.

- A. crossed
- B. cut
- C. hidden
- D. smoothed

Item 16

Selected-Response

What is one effect of sunlight on Titan?

- A. gases
- B. oceans
- C. rivers
- D. volcanoes

Item 17

Constructed-Response

What is the main idea of the passage?

Use details from the passage in your answer. Write your answer on the lines provided.

[illegible]

Unit 5: Language

CONTENT DESCRIPTION

The language portion of the English Language Arts test focuses on the use of proper grammar, punctuation, spelling, and usage.

Language

- You need to express yourself clearly and in an interesting way.
- Choose your words carefully so your readers understand what you are writing.
- Apply the rules of grammar as you write.

Conventions of Standard English

- Use correct grammar and usage when writing.
- Use correct capitalization, punctuation, and spelling.

Style

- Vary the words you use. Use a dictionary and thesaurus to help you.
- Your writing should be clear and interesting at the same time.
- Use colorful language and different sentence structures.

KEY TERMS

Grammar: The set of rules for language. (L1e)

Usage: Using the correct word when there is a choice (to, too, two). (L1e)

Style: The personality of the writing and how you say things. (L3a)

Context clues: The words, facts, or ideas in a text that explain another word. (L4a)

Word Parts: The prefixes, suffixes, and root words that give clues as to the meaning of words. (L4b)

Noun: A part of speech that is a person, place, or thing. *Mother, school, and desk* are all nouns. (L1a)

Pronoun: A part of speech that is used instead of a noun when the meaning of the noun is already understood. *I, we, he, she, they, and it* are all pronouns. (L1a)

Verb: A part of speech that represents action or is a “doing” word. *Jump, walk, ski, and scare* are all verbs. (L1a)

Adjective: A part of speech that is a describing word. *Beautiful, tall, blue, and interesting* are all adjectives. (L1a)

Adverb: A part of speech that describes a verb. Adverbs usually end in *-ly*. *Quietly, thoroughly, frantically, and lovingly* are all adverbs. (L1a)

Verb Tense: Variation in a verb to express different periods of time or how long an action lasts. Verb tenses include past, present, future, conditional, and perfect. (L1e)

Punctuation: Writing marks that help to separate and clarify ideas. Examples of punctuation are periods, commas, colons, exclamation marks, and question marks. (L2)

Context: Words and phrases that surround another phrase and help to explain its meaning. Sometimes a word cannot be understood without the context of the words and phrases around it. For example, “she sunk it” could mean several things, but the meaning is clear when the full sentence is included: “She threw the basketball up high from midcourt, and she sunk it through the hoop for two points.” (L4a)

Root Word: The base word. Knowing the meaning of the root word can help a reader determine the meaning of other forms of the word. For example, if you know that the root word “school” is a place that provides knowledge, you may be able to guess that a “scholar” is someone who is seeking knowledge. (L4c)

Important Tips

-  To study for this part of the EOG assessment, concentrate on the kinds of errors you typically make in your own writing. Then review grammar rules for those specific kinds of errors. Use books or free online resources to find practice items that you can try. You can work with a partner and question each other on grammar rules or try editing sentences together. Focus your review time on strengthening the areas or skills that need it the most.
-  When you are faced with an unknown word, go back to the passage. Start reading two sentences before the word appears, and continue reading for two sentences afterward. If that doesn't give you enough clues, look elsewhere in the passage. By reading the context in which the word appears, you may be able to make an educated guess.

Sample Items 18–21

Item 18

Selected-Response

Which sentence uses a plural noun correctly?

- A. There are three childs playing in the garden.
- B. Roger thinks dogs are better pets than mice.
- C. Louise lost two baby tooths in the same week.
- D. There are lots of deers in the woods near my house.

Item 19

Selected-Response

Which sentence has an error in spelling?

- A. The bus was stuck in traffic.
- B. Grandma always wears a necklace.
- C. They need to repara the broken desk.
- D. I wonder if there is life on other planets.

Item 20

Selected-Response

Which sentence uses a possessive noun correctly?

- A. My parrots' beak was a bright yellow.
- B. Sarah borrowed her brother's mittens.
- C. We can use the schools' camera to film.
- D. The two team's colors were the same green.

Item 21**Selected-Response**

Which form of the verb BEST completes the sentence?

Last May, Rita _____ a soccer team.

- A. will join
- B. joins
- C. has joined
- D. joined

ENGLISH LANGUAGE ARTS (ELA) ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
1	ELAGSE3RL3 Literary	2	D	The correct answer is choice (D) sad. She is sad because she is leaving the ocean after a “wonderful” month. She feels as if she has “a hole in her stomach.” Choices (A) and (B) are incorrect because there is no indication that she is either angry or bored in the beginning. Choice (C) is incorrect because even though she runs to the beach, she is sad when she is there.
2	ELAGSE3RL4 Literary	2	C	The correct answer is choice (C) rushed. It shows that Sandra is angry and that she is moving fast, like the wind in a storm. Choice (A) is incorrect because there is nothing that indicates that she fell. Choice (B) is incorrect because there is no connection between jumped and stormed. Choice (D) is incorrect because stormed is more like rushing than walking.
3	ELACC3RL2	3	A/D	The correct answers are (A) It is nice to share., and (D) “Now it belongs to both of us,” she said. Sandra is initially very upset that her red shell is missing, but when she sees that Nina has placed it in a box of treasured possessions, Sandra softens and decides to place the shell in a location in their room where they can both appreciate it. The answer choice for Part B of the item shows text that supports this central message. In Part A, Choice (B) is incorrect in that Sandra leaves the beach early in the passage. Choice (C) is incorrect because the tidiness of the room is not of true significance in the passage. Choice (D) is incorrect because Sandra does not misplace the shell; Nina moves it to a hidden location. The incorrect options in Part B support incorrect answers in Part A.
4	ELAGSERL3 Literary	3	N/A	See scoring rubric and sample response on page 56.
5	ELAGSEW3	4	N/A	See scoring rubric beginning on page 62 and sample response on page 57.
6	ELAGSE3RI8 Informational/ Explanatory	2	B	The correct answer is choice (B) Horseshoe crabs provide food for the birds by laying eggs. The passage says that birds eat the eggs and depend on them for survival. Choice (A) is incorrect because the passage mentions that the eggs that are eaten would not have hatched. Choice (C) is incorrect because there is no mention of the crabs eating eggs. Choice (D) is incorrect because sea creatures lay their eggs on horseshoe shells, but birds do not.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
7	ELAGSE3RI1 Informational/ Explanatory	2	B	The correct answer is choice (B) After a cut, the blood stops flowing very quickly. Choice (A) is incorrect because though crabs get cut, this doesn't explain why the blood is special. Choice (C) is incorrect because doctors check their tools with it; they don't clean them with it. Choice (D) is incorrect because green color refers to the crab's shell and not its blood.
8	ELAGSE3RI6 Informational/ Explanatory	2	D	The correct answer is choice (D) Horseshoe crabs are unusual animals. The author tells many facts about the crab that are unusual. Choice (A) is incorrect because the crabs are helpful and not dangerous. Choice (B) is incorrect because the crabs are funny-looking and not beautiful. Choice (C) is incorrect because although their eggs get eaten, the author does not say the crabs are eaten.
9	ELAGSE3RI2 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 58.
10	ELAGSE3RI1 Informational/ Explanatory	2	C	The correct answer is choice (C) “. . . they wouldn't be as tired at night.” Choice (A) is incorrect because it makes no logical sense. Choice (B) is incorrect because the author makes no connection between being interested in classes and doing homework. Choice (D) is incorrect because there is no logical connection made between homework and half the students coming at a different time.
11	ELAGSE3RI2 Informational/ Explanatory	2	C	The correct answer is choice (C) “. . . the school day would be shorter.” The author mentions that a later start time might mean a shorter day, which would not be good. Choice (A) is incorrect because the author immediately follows it with “But that doesn't mean it's right.” Choice (B) is incorrect because “There might be little money left” refers to making the school day longer and not starting later. Choice (D) is incorrect because this statement has no connection to the opinion.
12	ELAGSE3RI9 Informational/ Explanatory	3	B	The correct answer is choice (B) What is good for students is the most important thing. Both arguments talk about what is best for the students. Choice (A) is incorrect because neither author makes this claim. Choice (C) is incorrect because neither author implies that one nor the other is more important. Choice (D) is incorrect because only one author makes this claim.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
13	ELAGSE3W1	4	N/A	See scoring rubric on pages 66 and 67 and sample response on page 59.
14	ELAGSE3RI1 Informational/ Explanatory	2	C	The correct answer is choice (C) “. . . Titan has clouds, and it even rains there.” This fact is true of Earth as well. Choices (A) and (D) are incorrect because these facts are not true about Earth. Choice (B) is incorrect because the people using telescopes would be on Earth and not on Titan.
15	ELAGSE3RI4 Informational/ Explanatory	2	B	The correct answer is choice (B) cut. Marks would appear from water slicing, or cutting, through ice. Choices (A), (C), and (D) are incorrect because crossed, hidden, and smoothed are not supported by the idea of something that carved itself in ice.
16	ELAGSE3RI8 Informational/ Explanatory	2	C	The correct answer is choice (C) rivers. Rivers result from sunlight interacting with methane in the atmosphere to create rain. Choice (A) is incorrect because the author does not say that the sun creates gases. Choice (B) is incorrect because the author makes no connection between a possible ocean and sunlight. Choice (D) is incorrect because although there may be a volcano it is not caused by sunlight.
17	ELAGSE3RI2 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 60.
18	ELAGSE3L1b	2	B	The correct answer is choice (B) Roger thinks dogs are better pets than mice. “Mice” is the plural form of “mouse.” Choice (A) is incorrect because “children” is the plural form of “child.” Choice (C) is incorrect because “teeth” is the plural form of “tooth.” Choice (D) is incorrect because “deer” is the plural form of “deer.”
19	ELAGSE3L2e	2	C	The correct answer is choice (C) They need to repara the broken desk. In Choices (A), (B), and (D), all words are spelled correctly.
20	ELAGSE3L2d	2	B	The correct answer is choice (B) Sarah borrowed her brother’s mittens. “Brother” is singular in this case. Choice (A) is incorrect because “parrot” is a singular noun, so the form should be “parrot’s.” Choice (C) is incorrect because “school” is a singular noun, so the correct form is “school’s.” Choice (D) is incorrect because “teams” is plural, so the form should be “teams’.”

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
21	ELAGSE3L1e	2	D	The correct answer is choice (D) joined. “Last May” is a specific time in the past. Choice (A) is incorrect because “will join” is in the future. Choice (B) is incorrect because “joins” is simple present to express future. Choice (C) is incorrect because “has joined” refers to a time connected to the present, such as “this week.”

ENGLISH LANGUAGE ARTS (ELA) SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES

Item 4

Scoring Rubric

Points	Description
2	The exemplar shows a full-credit response. It achieves the following: • Gives sufficient evidence of the ability to describe and compare characters in a story and to explain the support for a comparison • Includes specific examples/details that make clear reference to the text • Adequately describes and compares the characters and gives an explanation with clearly relevant information based on the text
1	The exemplar shows a 1-point response. It achieves the following: • Gives limited evidence of the ability to describe and compare characters in a story or to explain the support for a comparison • Includes vague/limited examples/details that make reference to the text • Describes and compares the characters or gives an explanation with vague/limited information based on the text
0	The exemplar shows a response that would earn no credit. It achieves the following: • Gives no evidence of the ability to describe and compare characters in a story or to explain the support for a comparison

Exemplar Response

Points Awarded	Sample Response
2	Sandra is upset that her sister has taken the shell. When she sees that Nina has kept a picture of the two of them together, she changes her mind. She sees that Nina loves her and keeps things that remind Nina of her. She goes back into the kitchen to comfort Nina because she understands that there is nothing to be angry about.
1	Sandra is mad at Nina for taking her shell. But then she finds the shell and goes back to say she's sorry.
0	Sandra goes back because she found the shell.

Item 5

To view the four-point rubric for a narrative response, see pages 62 and 63.

Exemplar Response

Points Awarded	Sample Response
4	Sandra asked Nina, "Why did you want the shell?" Nina thought for a moment. "Because it's pretty. And..." "And?" said Sandra. "It's something you like." "Is that why you kept the box and the drawing?" Nina looked surprised for a moment. Then she smiled shyly. "You know what?" said Sandra. "I kept the shell because it reminded me of the beach. I loved being there." "That's why I kept those things," said Nina. "They remind me of you." That made Sandra feel like crying. She hugged her sister for a long time.
3	Sandra asked Nina, "Why did you want the shell?" "Because it reminded me of you," said Nina. "I kept the shell because it reminded me of the beach," said Sandra. "Now we can remember it together."
2	Sandra asked Nina, "Why did you want the shell?" "It's pretty, like the beach," said Nina. "Now we can remember it together," said Sandra.
1	Sandra asked Nina, "Why did you want the shell?" "It's pretty, like the beach," said Nina
0	<i>The response is completely irrelevant or incorrect, or there is no response.</i>

Item 9

Scoring Rubric

Points	Description
2	The exemplar shows a full-credit response. It achieves the following: • Gives sufficient evidence of the ability to determine the main idea or to explain the support for a main idea • Includes specific examples/details that make clear reference to the text • Adequately explains the main idea or gives an explanation with clearly relevant information based on the text
1	The exemplar shows a 1-point response. It achieves the following: • Gives limited evidence of the ability to determine the main idea or to explain the support for a main idea • Includes vague/limited examples/details that make reference to the text • Explains the main idea or gives an explanation with vague/limited information based on the text
0	The exemplar shows a response that would earn no credit. It achieves the following: • Gives no evidence of the ability to determine the main idea or to explain the support for a main idea

Exemplar Response

Points Awarded	Sample Response
2	The main idea of the passage is that horseshoe crabs provide help for many different animals and also people. They provide food for birds and homes for other sea animals.
1	The main idea of the passage is that horseshoe crabs provide help for a lot of different animals.
0	The passage is about horseshoe crabs.

Item 13

The following is an example of a seven-point response. See the seven-point, two-trait rubric for a text-based opinion response on pages 66 and 67 to see why this example would earn the maximum number of points.

Example of a Seven-Point Response:

I agree with the author of "School Starts Too Early." The most important thing for a student to do well is to get a good night's sleep. The author says that people have studied the subject. What they found out is that students who get up early don't sleep as much. They do worse than students who get up later.

Starting school later may cost money, but students will learn more. Learning is the most important thing. I think schools can find a way to pay for more buses. Also, the author of "Don't Change!" says getting up early means you will be successful. That's not always true. Sometimes it just means you will be more tired.

Item 17

Scoring Rubric

Points	Description
2	The exemplar shows a full-credit response. It achieves the following: • Gives sufficient evidence of the ability to determine the main idea or to explain the support for a main idea • Includes specific examples/details that make clear reference to the text • Adequately explains the main idea or gives an explanation with clearly relevant information based on the text
1	The exemplar shows a 1-point response. It achieves the following: • Gives limited evidence of the ability to determine the main idea or to explain the support for a main idea • Includes vague/limited examples/details that make reference to the text • Explains the main idea or gives an explanation with vague/limited information based on the text
0	The exemplar shows a response that would earn no credit. It achieves the following: • Gives no evidence of the ability to determine the main idea or to explain the support for a main idea

Exemplar Response

Points Awarded	Sample Response
2	The main idea of the passage is that Titan is a very interesting and unusual moon. The author points out many things that are unusual about Titan. For example, it is more like Earth than other planets. It has weather and liquid on the surface. It is also very large.
1	The main idea of the passage is that Titan is interesting.
0	The passage is about a moon called Titan.

ENGLISH LANGUAGE ARTS (ELA) WRITING RUBRICS

Grade 3 items that are not machine-scored—i.e., constructed-response, extended constructed-response, and extended writing response items—are manually scored using either a holistic rubric or a two-trait rubric.

Four-Point Holistic Rubric

Genre: Narrative

A holistic rubric evaluates one major feature, which is ideas. On the Georgia Milestones EOG assessment, a holistic rubric is scored from zero to four. Each point value represents the difference in the levels or quality of the student's work. To score an item on a holistic rubric, the scorer need only choose the description and associated point value that best represents the student's work. Increasing point values represent a greater understanding of the content and, thus, a higher score.

Seven-Point, Two-Trait Rubric

Genre: Opinion or Informational/Explanatory

A two-trait rubric, on the other hand, evaluates two major traits, which are conventions and ideas. On the Georgia Milestones EOG assessment, a two-trait rubric contains two scales, one for each trait, ranging from zero to three on one scale (conventions) and zero to four on the other (ideas). A score is given for each of the two traits, for a total of seven possible points for the item. To score an item on a two-trait rubric, a scorer must choose the description and associated point value for each trait that best represents the student's work. The two scores are added together. Increasing point values represent a greater understanding of the content and, thus, a higher score.

On the following pages are the rubrics that will be used to evaluate writing on the Georgia Milestones Grade 3 English Language Arts EOG assessment.

Four-Point Holistic Rubric

Genre: Narrative

Writing Trait	Points	Criteria
<i>This trait examines the writer's ability to effectively develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences based on a text that has been read.</i>	4	<i>The student's response is a well-developed narrative that fully develops a real or imagined experience based on text as a stimulus.</i> - Effectively establishes a situation and introduces a narrator and/or characters - Organizes an event sequence that unfolds naturally - Effectively uses narrative techniques, such as dialogue and description, to develop interesting experiences and events or show the response of characters to situations - Uses a variety of words and phrases consistently to signal the sequence of events - Provides a sense of closure that follows from the narrated experiences or events - Integrates ideas and details from source material effectively - Has very few or no errors in usage and/or conventions that interfere with meaning*
	3	<i>The student's response is a complete narrative that develops a real or imagined experience based on text as a stimulus.</i> - Establishes a situation and introduces one or more characters - Organizes events in a clear, logical order - Uses narrative techniques, such as dialogue and description, to develop experiences and events or show the response of characters to situations - Uses words and/or phrases to indicate sequence - Provides an appropriate sense of closure - Integrates some ideas and/or details from source material - Has a few minor errors in usage and/or conventions with no significant effect on meaning*
	2	<i>The student's response is an incomplete or oversimplified narrative based on text as a stimulus.</i> - Introduces a vague situation and at least one character - Organizes events in a sequence but with some gaps or ambiguity - Attempts to use a narrative technique, such as dialogue and description, to develop experiences and events or show the response of characters to situations - Uses occasional signal words to indicate sequence - Provides a weak or ambiguous sense of closure - Attempts to integrate ideas or details from source material - Has frequent errors in usage and conventions that sometimes interfere with meaning*

Four-Point Holistic Rubric

Genre: Narrative (continued)

Writing Trait	Points	Criteria
<i>This trait examines the writer's ability to effectively develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences based on a text that has been read.</i>	1	<i>The student's response provides evidence of an attempt to write a narrative based on text as a stimulus.</i> • Response is a summary of the story • Provides a weak or minimal introduction of a situation or a character • May be too brief to demonstrate a complete sequence of events • Shows little or no attempt to use dialogue or description to develop experiences and events or show the response of characters to situations • Uses words that are inappropriate, overly simple, or unclear to convey any sense of event order • Provides a minimal or no sense of closure • May use few, if any, ideas or details from source material • Has frequent major errors in usage and conventions that interfere with meaning*
	0	<i>The student's response is flawed for various reasons and will receive a condition code:</i> The condition codes can be found on page 131 of this guide.

*Students are responsible for language conventions learned in their current grade as well as in prior grades. Refer to the language skills for each grade to determine the grade-level expectations for grammar, syntax, capitalization, punctuation, and spelling. Also refer to the "Language Progressive Skills, by Grade" chart in Appendix A for those standards that need continued attention beyond the grade in which they were introduced.

Seven-Point, Two-Trait Rubric

Trait 1 for Informational/Explanatory Genre

Writing Trait	Points	Criteria
Idea Development, Organization, and Coherence <i>This trait examines the writer's ability to effectively establish a controlling idea and to support the idea with evidence from the text(s) read and to elaborate on the idea with examples, illustrations, facts, and other details in order. The writer must integrate the information from the text(s) into his/her own words and arrange the ideas and supporting evidence (from text that they have read) in order to create cohesion for an informative/explanatory essay.</i>	4	<i>The student's response is a well-developed informative/explanatory text that examines a topic in depth and conveys ideas and information clearly based on text as a stimulus.</i> - Effectively introduces a topic - Groups related ideas together to give some organization to the writing - Effectively develops the topic with multiple facts, definitions, and details - Effectively uses linking words and phrases to connect ideas within categories of information - Provides a strong concluding statement or section
	3	<i>The student's response is a complete informative/explanatory text that examines a topic and presents information based on a text as a stimulus.</i> - Introduces a topic - Develops the topic with some facts, definitions, and details - Groups some related ideas together to give partial organization to the writing - Uses some linking words to connect ideas within categories of information, but relationships may not always be clear - Provides a concluding statement or section
	2	<i>The student's response is an incomplete or oversimplified informative/explanatory text that cursorily examines a topic based on a text as a stimulus.</i> - Attempts to introduce a topic - Attempts to develop a topic with too few details, but not all of these are supported or relevant to the topic - Ineffectively groups some related ideas together - Uses few linking words to connect ideas, but not all ideas are well connected to the topic - Provides a weak concluding statement or section
	1	<i>The student's response is a weak attempt to write an informative/explanatory text that examines a topic based on a text as a stimulus.</i> - May not introduce a topic or topic is unclear - May not develop a topic - May be too brief to group any related ideas together - May not use any linking words to connect ideas - Provides a minimal or no concluding statement or section
	0	<i>The student's response is flawed for various reasons and will receive a condition code:</i> The condition codes can be found on page 131 of this guide.

Seven-Point, Two-Trait Rubric

Trait 2 for Informational/Explanatory Genre

Writing Trait	Points	Criteria
Language Usage and Conventions <i>This trait examines the writer's ability to demonstrate control of sentence formation, usage, and mechanics as embodied in the grade-level expectations of the language standards.</i>	3	<i>The student's response demonstrates full command of language usage and conventions.</i> - Has clear and complete sentence structure, with appropriate range and variety - Shows knowledge of language and its conventions when writing - Any errors in usage and conventions do not interfere with meaning*
	2	<i>The student's response demonstrates partial command of language usage and conventions.</i> - Has complete sentences, with some variety - Shows some knowledge of language and its conventions when writing - Has minor errors in usage and conventions with no significant effect on meaning*
	1	<i>The student's response demonstrates weak command of language usage and conventions.</i> - Has fragments, run-ons, and/or other sentence structure errors - Shows little knowledge of language and its conventions when writing - Has frequent errors in usage and conventions that interfere with meaning*
	0	<i>The student's response is flawed for various reasons and will receive a condition code:</i> The condition codes can be found on page 131 of this guide.

*Students are responsible for language conventions learned in their current grade as well as in prior grades. Refer to the language skills for each grade to determine the grade-level expectations for grammar, syntax, capitalization, punctuation, and spelling. Also refer to the "Language Progressive Skills, by Grade" chart in Appendix A for those standards that need continued attention beyond the grade in which they were introduced.

Seven-Point, Two-Trait Rubric

Trait 1 for Opinion Genre

Writing Trait	Points	Criteria
Idea Development, Organization, and Coherence <i>This trait examines the writer's ability to effectively establish a point of view and to support the opinion with reasons from the text(s) read. The writer must form an opinion from the text(s) in his/her own words and organize reasons for the opinion (from text that they have read) in order to create cohesion for an opinion essay.</i>	4	<i>The student's response is a well-developed opinion piece that effectively examines a topic and supports a point of view, with reasons, clearly based on text as a stimulus.</i> - Effectively introduces a topic and clearly states an opinion - Creates an effective organizational structure to group reasons - Provides clear, relevant reasons to support the opinion - Uses linking words and phrases effectively to connect opinions and reasons - Provides a strong concluding statement or section
	3	<i>The student's response is a complete opinion piece that examines a topic and supports a point of view based on text.</i> - Introduces a topic and states an opinion - Provides some organizational structure to group reasons - Provides reasons to support the opinion - Uses some linking words to connect opinions and reasons - Provides a concluding statement or section
	2	<i>The student's response is an incomplete or oversimplified opinion piece that examines a topic and partially supports a point of view based on text.</i> - Attempts to introduce a topic and state an opinion - Attempts to provide some organization, but structure sometimes impedes the reader - Attempts to provide reasons that sometimes support the opinion - Uses few linking words to connect opinions and reasons; connections are not always clear - Provides a weak concluding statement or section
	1	<i>The student's response is a weak attempt to write an opinion piece that examines a topic and does not support a text-based point of view.</i> - May not introduce a topic or state an opinion - May not have any organizational structure evident - May not provide reasons to support the opinion - May not use any linking words to connect opinions and reasons - Provides a minimal or no concluding statement or section
	0	<i>The student's response is flawed for various reasons and will receive a condition code:</i> The condition codes can be found on page 131 of this guide.

Seven-Point, Two-Trait Rubric

Trait 2 for Opinion Genre

Writing Trait	Points	Criteria
Language Usage and Conventions <i>This trait examines the writer's ability to demonstrate control of sentence formation, usage and mechanics as embodied in the grade-level expectations of the language standards.</i>	3	<i>The student's response demonstrates full command of language usage and conventions.</i> • Has clear and complete sentence structure, with appropriate range and variety • Shows knowledge of language and its conventions when writing • Any errors in usage and conventions do not interfere with meaning*
	2	<i>The student's response demonstrates partial command of language usage and conventions.</i> • Has complete sentences, with some variety • Shows some knowledge of language and its conventions when writing • Has minor errors in usage and conventions with no significant effect on meaning*
	1	<i>The student's response demonstrates weak command of language usage and conventions.</i> • Has fragments, run-ons, and/or other sentence structure errors • Shows little knowledge of language and its conventions when writing • Has frequent errors in usage and conventions that interfere with meaning*
	0	<i>The student's response is flawed for various reasons and will receive a condition code:</i> The condition codes can be found on page 131 of this guide.

*Students are responsible for language conventions learned in their current grade as well as in prior grades. Refer to the language skills for each grade to determine the grade-level expectations for grammar, syntax, capitalization, punctuation, and spelling. Also refer to the "Language Progressive Skills, by Grade" chart in Appendix A for those standards that need continued attention beyond the grade in which they were introduced.

ACTIVITY

The following activity develops skills in the Unit 1: Reading Literary Text.

Standards: ELAGSE3.RL.1, ELAGSE3.RL.2, ELAGSE3.RL.3, ELAGSE3.RL.4, ELAGSE3.RL.5, ELAGSE3.RL.6, ELAGSE3.RL.7, ELAGSE3.RL.9 and ELAGSE3.W.3

Create a Story

Cut out a picture from a magazine or newspaper and paste it to the top of a blank sheet of lined paper. Look at your picture and consider the following questions:

- Where is the setting?
- Who are the characters?
- What might be happening?
- When could the events take place?

Based on your answers, write an original story based on the picture. When you are finished, share your story with a family member or a friend. Have a discussion about what you saw in the picture and what they see in the picture. Consider how your stories could be different.

Tell a Story through Characters

Start by inventing a character. Each character should have a name and an occupation. Each character feels a certain way. Use the following suggestion to help you develop your character.

- Write on a piece of paper the following:
Sarah is a doctor. She feels bored. She always walks fast.
(name) is a (job). (S)he feels _____. (S)he always _____.
- Work with friends and combine your characters into a story.
- Share the story with others.

ACTIVITY

The following activity develops skills in Unit 5: Language.

Standards: ELAGSE3.L.1a-i

This activity is based on the card game “Go Fish.”

Prepare three stacks of index cards, 40 cards in each stack. In each stack, ten cards will have random nouns written on one side, ten will have adjectives, ten will have verbs, and ten will have adverbs. Make sure to include irregular forms, such as the adverb “well,” as well as verbs in different tenses.

If you need help remembering what the parts of speech are, take a piece of paper and fill in ten words under each category. Work with a partner, family member, or someone else.

nouns

verbs

adjectives

adverbs

Take five cards from a stack. The object of the game is to collect as many groups of words as possible. A group is five of the same kind of words.

If a player has a certain kind of card, such as an adjective, she selects an individual opponent and asks, “Do you have any...adjectives?” for example. That person must surrender an adjective card. If the opponent doesn’t have an adjective, he says, “Go fish!” and the player must “fish” from the unused portion of the deck.

The cards have only the words, not the category written on them, so there may be some discussion about who is correct.

MATHEMATICS

DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 3 Mathematics EOG assessment consists of a total of 73 items.

You will answer a variety of item types on the test. Some of the items are selected-response (multiple-choice), which means you choose the correct answer from four choices. Some items will ask you to write your response.

The test will be given in two sections.

- You may have up to 85 minutes per section to complete Sections 1 and 2.
- The test will take about 120 to 170 minutes.

CONTENT

The Grade 3 Mathematics EOG assessment will measure the Grade 3 standards that are described at www.georgiastandards.org.

The content of the assessment covers standards that are reported under these domains:

- Operations and Algebraic Thinking
- Number and Operations
- Measurement and Data
- Geometry

ITEM TYPES

The Mathematics portion of the Grade 3 EOG assessment consists of selected-response (multiple-choice), technology-enhanced (multiple-select or two-part), constructed-response, and extended constructed-response items.

MATHEMATICS DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels are provided for you on the following pages. The items and explanations of what is expected of you to answer them will help you prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

Example Item 1

Selected-Response

DOK Level 1: This item is a DOK level 1 item because it asks students to use what they know about units of mass and make an estimate.

Mathematics Grade 3 Content Domain: Measurement and Data

Standard: MGSE3.MD.2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Which of these is the BEST estimate for the mass of a feather?

- A. 1 gram
- B. 100 grams
- C. 1 kilogram
- D. 10 kilograms

Correct Answer: A

Explanation of Correct Answer: The correct answer is choice (A) 1 gram. A gram is a small unit of mass. A paper clip has a mass of about 1 gram, which is about the same as the mass of a feather. Choice (B) is incorrect because 100 grams is about the mass of 100 paper clips, which has a greater mass than a feather. Choice (C) is incorrect because 1 kilogram is about the mass of a textbook, which is much heavier than a feather. Choice (D) is incorrect because 10 kilograms is about the mass of 10 textbooks, which is much heavier than a feather.

Example Item 2**Constructed-Response**

DOK Level 2: This is a DOK level 2 item because it assesses the ability to solve a multiplication problem and explain the strategy used for solving it.

Mathematics Grade 3 Content Domain: Operations and Algebraic Thinking

Standard: MGSE3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9×80 , 5×60) using strategies based on place value and properties of operations.

Part A: Solve.

$$60 \times 7 = \square$$

Part B: Explain each step you used to solve the problem.

Correct Answer: 420

Example of Correct Answer: The answer is 420. Another way to look at this is as repeated addition using multiples of ten. Seven groups of 6 tens is the same as $60 + 60 + 60 + 60 + 60 + 60$, or 420. OR, this is the same as $6 \times 7 \times 10$, which is 42×10 or 420.

Scoring Rubric

Points	Description
2	The response achieves the following: • Response demonstrates a complete understanding of multiplying one-digit numbers by multiples of ten. • Give two points for the correct answer and a complete, correct explanation of using a strategy based on place value or properties of operations to show how the answer was calculated. • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols, as appropriate.
1	The response achieves the following: • Response demonstrates a partial understanding of multiplying one-digit numbers by multiples of ten. • Give one point for the correct answer but a partially correct explanation shown OR a correct explanation with a calculation error. • Response is mostly correct, but contains either a computational error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially using words, calculations, and/or symbols, as appropriate.
0	The response achieves the following: • The response demonstrates no understanding of multiplying one-digit numbers by multiples of ten. • Response is incorrect. • Response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	The answer is 420. AND To calculate the answer use repeated addition. Seven groups of 6 tens is the same as 60 and 60 and 60 and 60 and 60 and 60 and 60, or 420. <i>OR other valid process</i>
1	The answer is 420. OR Seven groups of 6 tens is the same as 60 and 60 and 60 and 60 and 60 and 60 and 60. <i>OR other valid process</i>
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Example Item 3**Extended Constructed-Response**

DOK Level 3: This is a DOK level 3 item because it asks students to create a word problem using an existing equation, solve the problem, and write an explanation of how their word problem matches the equation. This is an open-ended problem with more than one correct answer.

Mathematics Grade 3 Content Domain: Operations and Algebraic Thinking

Standard: MGSE3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities,[†] e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.¹² [†]See Glossary: *Multiplication and Division Within 100*.

This number sentence represents a word problem.

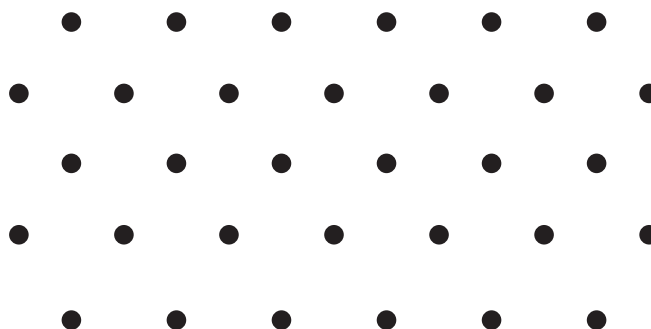
$$32 \div \square = 8$$

Part A: Use the number sentence to write a story word problem.

Part B: Solve the problem.

Solution: _____

Part C: Using the 32 dots shown, draw a circle around groups of dots to match your story problem.



Part D: Rewrite the number sentence $32 \div \square = 8$ using multiplication and your solution from Part B.

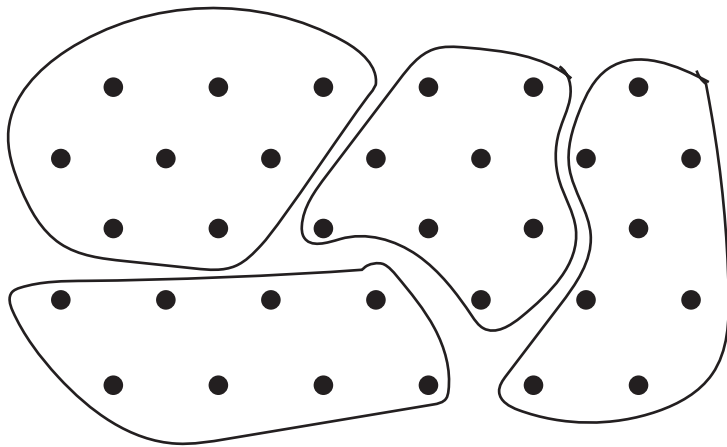
Solution: _____

Scoring Rubric

Points	Description
4	The response achieves the following: • The response demonstrates a complete understanding of using multiplication and division to solve word problems by using drawings and equations. • Give four points if student response includes a word problem AND its correct solution AND a number sentence AND provides a clear understanding of how the word problem and solution match the number sentence. • Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols, as appropriate.
3	The response achieves the following: • The response demonstrates a good understanding of using multiplication and division to solve word problems by using drawings and equations. • Give three points if student response indicates an error in the word problem, solution, or explanation OR one part is incomplete. • Response is mostly correct, but contains either a computational error or an unclear or incomplete explanation. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.
2	The response achieves the following: • The response demonstrates a partial understanding of using multiplication and division to solve word problems by using drawings and equations OR two parts are incomplete. • Give two points if student response indicates two errors in the word problem, solution, or explanation. • Response is only partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.
1	The response achieves the following: • The response demonstrates a limited understanding of using multiplication and division to solve word problems by using drawings and equations. • Give one point if student response indicates three errors in the word problem, solution, or explanation OR all three parts are incomplete. • Response is only partially correct. • Response shows incomplete or inaccurate application of a relevant strategy. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.

Points	Description
0	The response achieves the following: - The response demonstrates no understanding of using multiplication and division to solve word problems by using drawings and equations. - Response is incorrect. - Response shows no application of a strategy. - Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
4	There were 32 guests at a party. They were asked to sit at some tables. The guests sat 8 to a table. How many tables were at the party? <i>OR other valid word problem</i> AND There were 4 tables at the party. AND  <i>OR other valid response</i> AND $4 \times 8 = 32$ <i>OR other valid number sentence</i>
3	The student correctly answers three out of the four parts.
2	The student correctly answers two out of the four parts.
1	The student correctly answers one of the four parts.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

MATHEMATICS CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 3 Mathematics EOG assessment. This includes key terms and important vocabulary words. This section also contains practice questions, with an explanation of the correct answer, and activities that you can do on your own or with your classmates or family to prepare for the test.

All example and sample items contained in this guide are the property of the Georgia Department of Education.

CONTENT DESCRIPTION

- Develop an understanding of place value and properties of operations.
- Perform multi-digit arithmetic and develop an understanding of fractions as numbers.
- Represent and solve problems involving multiplication and division.
- Understand properties of multiplication and the relationship between multiplication and division.
- Multiply and divide within 100.
- Solve problems involving the four operations.
- Identify and explain patterns in arithmetic.
- Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.
- Represent and interpret data.
- Understand concepts of area and perimeter.
- Reason with shapes and their attributes.

Unit 1: Numbers and Operations in Base Ten

In this unit, you will understand the place-value system. You will be able to perform operations in the correct order, using the distributive, commutative, and associative properties. You will graph information and use line plots.

KEY TERMS

Place value: The value of a digit in a number based on its location. For example, the digit 4 in 243 is in the tens place and has a value of 4 tens, or 40. (NBT.1)

A number can be **rounded** to the nearest ten or hundred. Use a number line to see which multiple of 10 or 100 the given number is closest to. (NBT.1)

Add and **subtract** whole numbers up to 1000 using strategies, including models such as Base Ten blocks and the properties of operations. (NBT.2)

Properties of Operations:

- **Associative Property of Addition:** If there are three or more **addends**, they can be grouped together in any way and the **sum** will stay the same.
- **Commutative Property of Addition:** Numbers can be added in any order and the **sum** will stay the same.
- **Identity Property of Addition:** The sum of a number and zero does not change the value of the original number. (NBT.2)

Scaled picture graph: Graph information or **data** using symbols. One symbol can be used to represent more than one object. **Half a symbol** would show half the number of objects. For example, a picture of a cat on a graph is equal to 4 cats. (MD.3)

Scaled bar graph: Graph information or **data** using shaded squares. Each square on the bar graph can be used to represent more than one object. For example, one square on a graph is equal to seven people. (MD.3)

Use the information recorded on picture and bar graphs to answer questions such as “How many more people have a cat as a pet than a dog?” (MD.3)

Line plot: A line plot is used to record measurements for a group of objects. The measurement values are shown, and a picture or mark is placed above the value for each object being measured. A line plot can include rational measurements. (MD.4)

Important Tip

- ✍ Models can be useful when adding and subtracting numbers. Use pictures, Base Ten blocks, or number lines to create a model of the problem before solving it on paper.

Sample Items 1–4

Item 1

Selected-Response

There are 461 books in the library.

To the nearest hundred, ABOUT how many books are in the library?

- A. 400
- B. 460
- C. 470
- D. 500

Item 2

Selected-Response

Solve.

$$724 + 152 = \square$$

- A. 776
- B. 875
- C. 876
- D. 975

[illegible]

Item 4**Extended Constructed-Response**

Part A: Measure the length of each line segment to the nearest quarter inch.

A _____ Measurement =

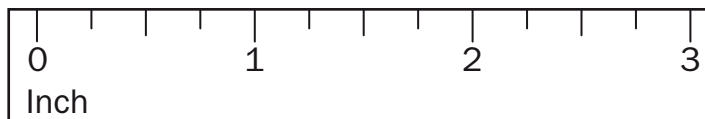
B _____ Measurement =

C _____ Measurement =

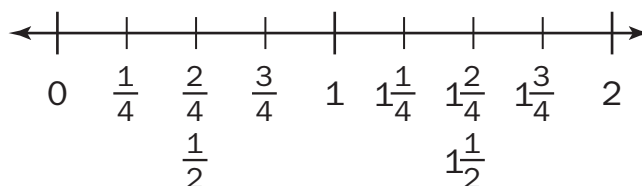
D _____ Measurement =

E _____ Measurement =

F _____ Measurement =



Part B: Display the length data from Part A on this line plot.



What do the fractions under the number line in the plot represent?

Unit 2: Operations and Algebraic Thinking: The Relationship Between Multiplication and Division

In this unit, you will learn about the properties of multiplication and division and the relationship between them. You will use models to represent multiplicative and divisional equations.

KEY TERMS

Multiplication is used to find the total number of objects in a set of equal groups. For example, 3 groups of 4 objects have a total of 12 objects. (OA.1)

Division is used to partition or break apart the total number of objects into a number of groups or into groups of a specific size. For example, 12 objects divided into 4 groups have 3 objects in each group, or 12 objects divided into groups of 4 will create 3 groups. (OA.2)

Models can be used to represent multiplication and division equations. Use **equal groups**, **arrays**, or **measurements** to solve the equations. (OA.3)

Use the relationship between three numbers in an equation to find the value of the **unknown** number. Use the given information to create a visual representation using arrays, counters, or drawings of groups and find the missing value that makes the equation true. (OA.4)

Properties of Operations:

- **Commutative Property:** Numbers can be multiplied in any order and the **product** will stay the same.
- **Associative Property:** Three or more **factors** can be grouped together in any way and the **product** will stay the same.
- **Distributive Property:** Knowing that $8 \times 5 = 40$ and $8 \times 2 = 16$, one can find 8×7 as $8 \times (5 + 2) = (8 \times 5) + (8 \times 2) = 40 + 16 = 56$.

There is a **relationship between multiplication and division**. Both operations relate equal groups of objects to a total number of objects. A multiplicative equation can be rewritten as a divisional equation. For example, $5 \times 6 = 30$ and $30 \div 5 = 6$. (OA.6)

Knowing the product of two one-digit numbers can help in multiplying one-digit numbers by a **multiple of 10**. For example, 3 groups of 2 has a product of 6, 3 groups of 20 has a product of 60. (NBT.3)

Important Tip

- ✍ Equations can use symbols, letters, empty boxes, or even question marks to represent an unknown number. In a multiplicative equation, the unknown number might be the product or one of the factors. In a divisional equation, the unknown number might be the dividend, divisor, or quotient.

Sample Items 5–9**Item 5****Selected-Response**

Look at the problem.

$$42 \div 6 = \square$$

Which number sentence will help solve this problem?

- A. $6 \times \square = 42$
- B. $42 \times 6 = \square$
- C. $6 + \square = 42$
- D. $42 - \square = 6$

Item 6**Selected-Response**

Solve.

$$14 \times 7 = \square$$

- A. 2
- B. 21
- C. 78
- D. 98

Item 7**Selected-Response**

Look at the number sentence.

$$8 \times \square = 64$$

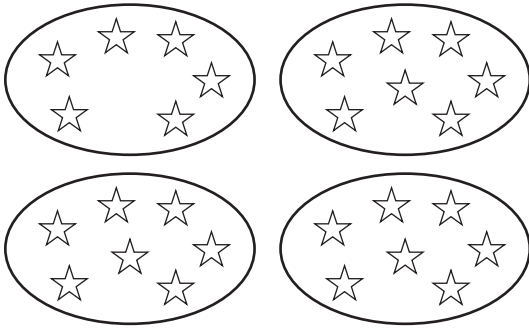
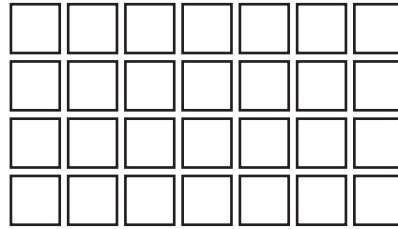
What number belongs in the $\square$ to make this number sentence TRUE?

- A. 8
- B. 9
- C. 56
- D. 72

Item 8**Extended Constructed-Response**

A bookshelf has 4 shelves. Max puts 7 books on each shelf.

Part A: Which drawing correctly shows how many books Max put on the shelf altogether? Explain how you know.

Drawing A**Drawing B**

Part B: Write a number sentence for the drawing you chose.

Item 9**Technology-Enhanced**

A bag of 54 marbles will be shared equally among some friends. The equation shown represents that each friend will receive 9 marbles.

$$54 \div \square = 9$$

Part A

Select **TWO** equations that are missing the same number as $54 \div \square = 9$.

- A. $\square \times 9 = 36$
- B. $18 \div \square = 2$
- C. $\square \times 4 = 24$
- D. $12 \div \square = 3$
- E. $\square \times 6 = 1$
- F. $30 \div \square = 5$

Part B

How many friends shared this bag of marbles?

- A. 5
- B. 6
- C. 9
- D. 45

Unit 3: Operations and Algebraic Thinking: Patterns in Addition and Multiplication

In this unit, you will work with word problems, arrays, and arithmetical patterns. You will calculate the area of a shape.

KEY TERMS

Use drawings, counters, or other tools to model a **word problem** involving **two steps**. Then write an **equation** to represent the problem. Use a **letter** such as x to represent an **unknown number** in the equation. Use the four operations to solve the problem. (OA.8)

Arithmetical patterns: A pattern in the solutions to equations using the four operations. For example, any number times two is an even number. (OA.9)

Identify arithmetical patterns found in any set of equations by looking at the change, likeness, or difference in the solutions. Arithmetic patterns can also be found in the **addition table** or **multiplication table**. Use properties of operations to explain the patterns. (OA.9)

Area: The size of a plane shape. (MD.5)

Square unit: A square that is one unit of measure long and one unit of measure wide. This can include square inches, square feet, and other measurements. (MD.5)

The area of a shape can be measured by covering the surface with square unit tiles. The tiles cannot **overlap** each other or leave **gaps**. (MD.5) The total number of squares used to cover the shape is equal to the area of the shape. (MD.6)

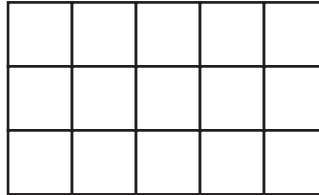
A rectangle covered with square unit tiles will create an **array** of rows and columns that are equal to the length and width of the shape. The total number of tiles in the array can be found using repeated **addition** or **multiplication**. (MD.7)

Important Tip

 A letter can stand for the unknown in many different equations. A letter such as x will not be equal to the same number every time. The value of an unknown number depends on the problem.

Sample Items 10–14**Item 10****Selected-Response**

The diagram represents the floor of a rectangular garage.



KEY	
☐	= 1 square meter

What is the **TOTAL** area of the floor?

- A. 8 square meters
- B. 15 square meters
- C. 16 square meters
- D. 20 square meters

Item 11**Selected-Response**

Pam had 3 bags of marbles. There were 6 marbles in each bag. Pam gave 5 marbles to her friend.

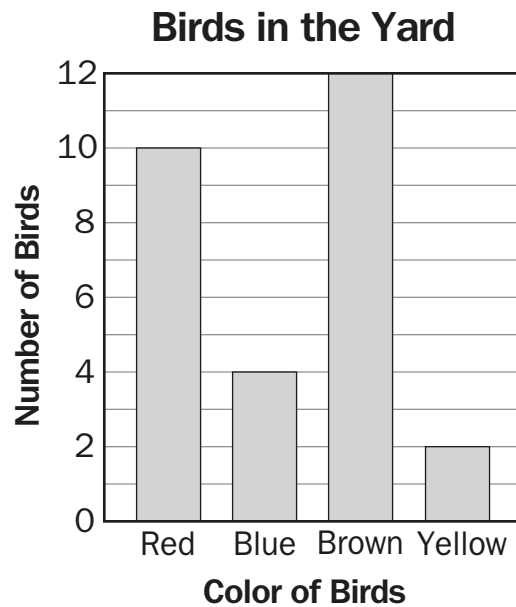
How many marbles did Pam have left?

- A. 13 marbles
- B. 14 marbles
- C. 18 marbles
- D. 23 marbles

Item 12

Constructed-Response

Ben counted the number of birds he saw in his yard over the weekend. The bar graph shows his data.



How many more red birds than yellow birds did Ben count? Explain how you found your answer.

[illegible]

Item 13**Extended Constructed-Response**

Study the multiplication chart.

Multiplication Chart

×	1	2	3	4	5	6	7	8	9	10
1	1	2	3	4	5	6	7	8	9	10
2	2	4	6	8	10	12	14	16	18	20
3	3	6	9	12	15	18	21	24	27	30
4	4	8	12	16	20	24	28	32	36	40
5	5	10	15	20	25	30	35	40	45	50
6	6	12	18	24	30	36	42	48	54	60
7	7	14	21	28	35	42	49	56	63	70
8	8	16	24	32	40	48	56	64	72	80
9	9	18	27	36	45	54	63	72	81	90
10	10	20	30	40	50	60	70	80	90	100

Describe **FOUR** patterns found in this multiplication chart.

Item 14

Selected-Response

Miss Kelly's class collected data about favorite pets. The tally chart shows the data.

Favorite Pets in Miss Kelly's Class	
Dog	
Cat	
Fish	
Bird	

If each smiley face represents two students, which picture graph correctly shows the data from this tally chart?

 = 2 students

A.

Pets	
Dog	       
Cat	         
Fish	     
Bird	 

B.

Pets	
Dog	   
Cat	   
Fish	     
Bird	 

C.

Pets	
Dog	   
Cat	    
Fish	  
Bird	

D.

Pets	
Dog	    
Cat	    
Fish	  
Bird	 

Unit 4: Geometry

In this unit, you will explore plane shapes and their attributes. You will work with square units to find the area of a plane shape. You will also find the perimeters of shapes.

KEY TERMS

Plane shapes: A flat shape that can be measured in two dimensions, length and width. (G.1)

Attributes: Properties of plane shapes that can be used to sort the shapes into categories.

- Number of sides
- Length of sides
- Parallel lines
- Angles (G.1)

Shapes are put into **categories** with other shapes that have the same attributes. A shape can belong to more than one category. For example, a shape with 2 long sides and 2 short sides can be placed in the rectangle and quadrilateral categories. (G.1)

Shapes can be **partitioned** or divided into parts that have equal areas. Each part is the same size and represents a fraction of the whole shape. (G.2)

Area: The size of a plane shape in square units. (MD.7)

Square unit: A square that is one unit of measure tall and one unit of measure wide. This can include square inches, square feet, and other measurements. (MD.7)

The area of a shape can be measured by covering the surface with square unit tiles. The tiles cannot **overlap** each other or leave **gaps**. The total number of squares used to cover the shape is equal to the area of the shape. (MD.7)

A rectangle covered with square unit tiles will create an **array** of rows and columns that are equal to the length and width of the shape. The total number of tiles in the array can be found using repeated **addition** or **multiplication**. (MD.7)

Perimeter: The total length of all sides of a shape. (MD.8)

The perimeter of a shape can be found by **adding** the length of all its sides. The length of an **unknown** side can be found if all other side lengths are given along with the perimeter, using an equation with a letter or symbol for the unknown value. (MD.8)

Important Tips

-  Use the attributes of a shape to determine its category. Shapes can be turned and may appear different, but that does not change their shape.
-  Shapes may belong to more than one category. For example, a rectangle can be in the quadrilateral category and the parallelogram category, because it shares attributes with both categories.

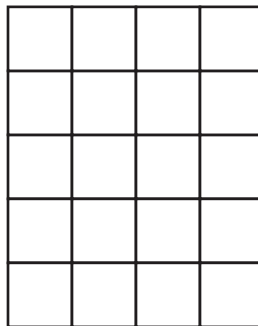
Sample Items 15–18**Item 15****Selected-Response**

Which one of these quadrilaterals ALWAYS has four sides of equal length?

- A. rectangle
- B. square
- C. trapezoid
- D. parallelogram

Item 16**Selected-Response**

A wall is covered in square tiles, as shown in the diagram.



KEY	
	= One square unit

Which expression shows how to find the area of this wall?

- A. $4 + 5$
- B. 5×5
- C. 5×4
- D. $4 + 5 + 4 + 5$

Item 17**Selected-Response**

A rectangular board has an area of 1 square foot. Sam cuts the board into 4 parts that have equal areas. He uses one part to make a birdhouse. What is the area of the part that Sam uses?

- A. $\frac{1}{4}$ square foot
- B. $\frac{3}{4}$ square foot
- C. $1\frac{1}{4}$ square feet
- D. $\frac{4}{1}$ square feet

Item 18**Technology-Enhanced**

Mrs. Pike has pieces of paper that are different colors. Each piece of paper is a rectangle. The table shows the length and width for the different colors of paper.

Mrs. Pike's Colors of Paper

Color	Width (inches)	Length (inches)
yellow	4	9
white	7	5
brown	10	4
green	6	6
orange	5	8
red	12	3

Select **THREE** colors of paper that each have an area of 36 square inches.

- A. yellow
- B. white
- C. brown
- D. green
- E. orange
- F. red

Unit 5: Representing and Comparing Fractions

In this unit, you will work with fractions. You will develop an understanding of equivalent fractions and comparing fractions. You will also use models, number lines, and pictures to compare fractions.

KEY TERMS

Fraction: A number used to represent equal parts of a whole. (NF.1)

Numerator: The top number shows the number of equal parts you are referring to. (NF.1)

Denominator: The bottom number shows the total number of equal parts the whole is divided into. (NF.1)

Use a **number line** to represent fractions by dividing the line between 0 and 1 into **equal parts**. The denominator shows how many equal parts the number line is divided into. The numerator shows how many equal parts out of the whole make up the number. For example, to show the fraction $\frac{1}{4}$, divide the number line into 4 equal sections between 0 and 1. The numerator shows that the fraction represents 1 equal section out of the total of 4. (NF.2)

Equivalent fractions: Fractions that are the same size or at the same point on the number line and represent the same values. (NF.3)

Whole numbers can also be written as fractions. The number 1 can be written using the total number of equal parts in the whole as both the numerator and the denominator, as in the example $\frac{3}{3}$. A whole number greater than one is shown as the whole number over a denominator of one. The denominator shows that the whole is one equal part and the numerator shows how many wholes are in the number, such as $\frac{3}{1}$ or $\frac{6}{2}$. (NF.3)

Compare: Determine the value or size of two fractions to see which fraction is larger. Fractions can be compared by looking at the number of equal parts and the size of the equal parts.

- **Greater than:** If a fraction is larger in size and value, use the symbol $>$.
- **Less than:** If a fraction is smaller in size and value, use the symbol $<$.
- **Equal to:** If the fractions are the same size, so they are equivalent fractions, use the symbol $=$. (NF.3)

Important Tips

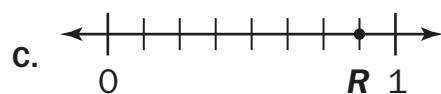
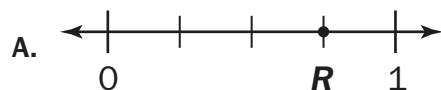
- ✍ A fraction with a large denominator will have smaller equal parts. A fraction with a small denominator will have larger equal parts. So, $\frac{1}{4}$ has a value less than $\frac{1}{2}$ because the size of the equal part is smaller.
- ✍ When comparing fractions, look at both the numerator and the denominator to find the value of the fraction. The numerator tells the number of parts out of the whole number. The denominator tells the size of the whole.
- ✍ Fraction models, number lines, and pictures can be used to show fractions. Use the same size and shape model for fractions that have the same whole when comparing.

Sample Items 19–22

Item 19

Selected-Response

Which number line shows point R at $\frac{3}{4}$?



Item 20**Selected-Response**

The shaded part of the rectangle is $\frac{1}{2}$ of the rectangle.

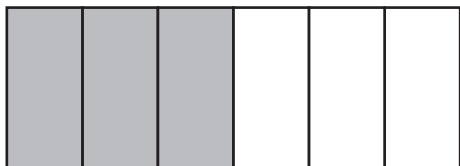


Which fraction is equivalent to $\frac{1}{2}$?

A. $\frac{3}{4}$



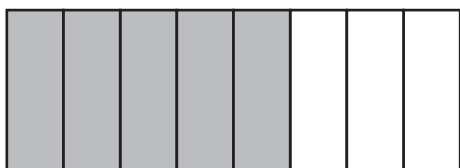
B. $\frac{3}{6}$



C. $\frac{2}{3}$



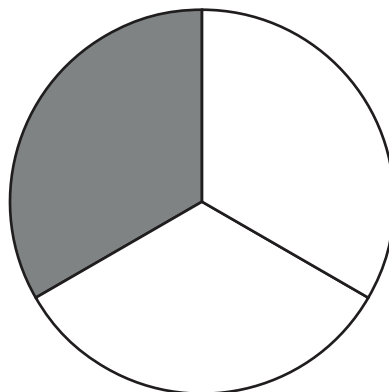
D. $\frac{5}{8}$



Item 21

Selected-Response

Look at the circle.



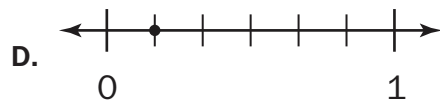
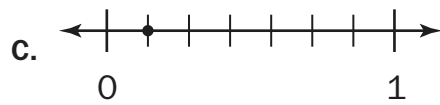
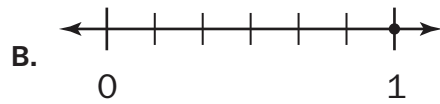
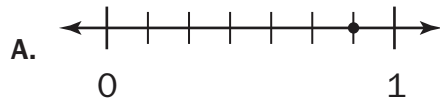
Which fraction represents the SHADED part of this circle?

- A. $\frac{1}{3}$
- B. $\frac{2}{3}$
- C. $\frac{2}{4}$
- D. $\frac{1}{4}$

Item 22

Selected-Response

Which number line BEST shows the fraction $\frac{1}{6}$?



Unit 6: Measurement

In this unit, you will work with different kinds of measurement. You will tell and write time and determine elapsed time. You will estimate and measure liquid volume and mass.

KEY TERMS

Tell and **write time** to the nearest minute, using a digital or analog clock. (MD.1)

Elapsed time: The time interval or amount of time an event takes. (MD.1)

Use **addition** and **subtraction** to solve word problems involving elapsed time. A **number line** can be used to show the beginning and ending time of an event or to measure the length of time, in minutes, an event occurs. (MD.1)

Estimate liquid volume and mass of objects. Then **measure** liquid volume and mass using drawings of a beaker, scale, or other measurement tools. (MD.2)

Length: Distance of an object from one end of the object to the other end of the object.

Liquid volume: The amount of liquid a container holds is measured in liters. (MD.2)

Mass: The weight of an object is measured in grams or kilograms. (MD.2)

Use the four operations to solve problems involving liquid volume and mass with the same units of measure. For example, 15 grams of flour added to 12 grams of sugar will result in a total of 27 grams all together. (MD.2)

Important Tips

-  When solving problems involving liquid volume and mass, all measurements must be in the same unit.
-  Determine the intervals on measurement scales before measuring a mass or liquid volume. Measurement tools can use different intervals; for example, one beaker may use intervals of 5 liters and another container may use intervals of 2 liters.

Sample Items 23–27

Item 23

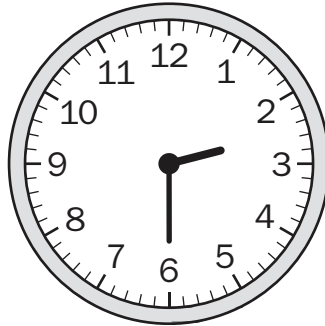
Selected-Response

Which of these is the **BEST** estimate for the amount of water needed to fill a bathtub?

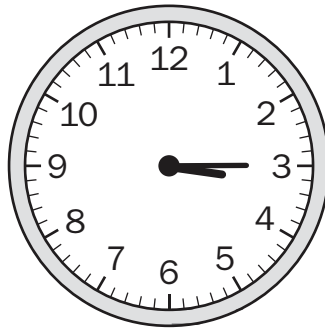
- A. 2 liters
- B. 20 liters
- C. 200 liters
- D. 2,000 liters

Item 24**Selected-Response**

Sara began her swim lesson at this time.



She ended her swim lesson at this time.

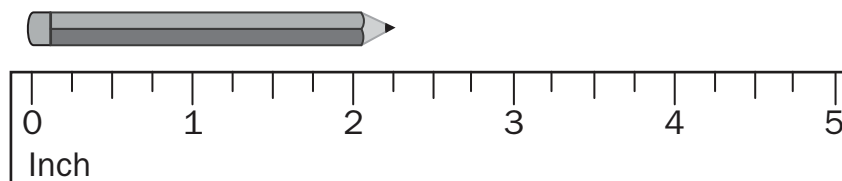


How long was her swim lesson?

- A. 30 minutes
- B. 45 minutes
- C. 60 minutes
- D. 90 minutes

Item 25**Selected-Response**

Look at this pencil and ruler.



What is the length of the pencil to the nearest quarter inch?

- A. 2 inches
- B. $2\frac{1}{4}$ inches
- C. $2\frac{1}{2}$ inches
- D. $2\frac{3}{4}$ inches

Item 26**Technology-Enhanced****Part A**

A city plans to build a new rectangular-shaped park. The perimeter of the park will be 940 meters. The width of the park will be 300 meters.

What will be the length, in meters, of the new park?

- A. 170
- B. 340
- C. 600
- D. 640

Part B

The old city park is rectangular. It has a length of 350 meters. It has a width of 125 meters.

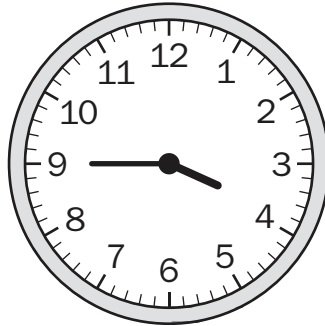
What is the perimeter, in meters, of the old city park?

- A. 250
- B. 475
- C. 700
- D. 950

Item 27

Constructed-Response

A movie was 90 minutes long. This clock shows what time the movie ended.



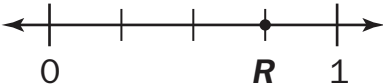
What time did the movie start? Explain how you found your answer.

[illegible]

MATHEMATICS ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
1	MGSE3.NBT.1	2	D	The correct answer is choice (D) 500. To round to the nearest hundred, the value of the digit in the tens place is evaluated. If the digit in the tens place is 5 or greater, the digit in the hundreds place rounds up to the greater hundred. Choice (A) is incorrect because it is the result of rounding down to the lesser hundred. Choice (B) is incorrect because it shows rounding to the nearest ten, not to the nearest hundred. Choice (C) is incorrect because it incorrectly shows rounding to the nearest ten.
2	MGSE3.NBT.2	2	C	The correct answer is choice (C) 876. Choice (A) is incorrect because the one hundred of 152 was not added. Choice (B) is incorrect because the ones place was added incorrectly. Choice (D) is incorrect because the digits were incorrectly aligned and the digits were added from the outside in—7 with 2, 2 with 5, and 4 with 1.
3	MGSE3.NBT.2	2	N/A	See scoring rubric and sample response beginning on page 111.
4	MGSE3.MD.4	3	N/A	See scoring rubric and sample response beginning on page 113.
5	MGSE3.OA.6	2	A	The correct answer is choice (A) $6 \times \square = 42$. Multiplication is the inverse operation of division. Choices (B), (C), and (D) are incorrect because they will not help solve this division problem.
6	MGSE3.OA.5	2	D	The correct answer is choice (D) 98. The product of 14 times 7 is solved correctly. Choice (A) is not correct because 2 is the answer using the operation of division. Choice (B) is incorrect because 21 is the answer using the operation of addition. Choice (C) is incorrect because the factors were incorrectly multiplied.
7	MGSE3.OA.4	2	A	The correct answer is choice (A) 8. The number in the box is the factor that when multiplied by 8 equals 64. Choice (B) is incorrect because when 8 is multiplied by 9, the product is 72. Choice (C) is incorrect because 56 is the answer when 8 is subtracted from 64. Choice (D) is incorrect because 72 is the answer when 8 is added to 64.
8	MGSE3.OA.3	2	N/A	See scoring rubric and sample response beginning on page 118.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
9	GSE-1: 3.OA.4	3	Part A: C/F Part B: B	See scoring rubric on page 120.
10	MGSE3.MD.6	1	B	The correct answer is choice (B) 15 square meters. There are 3 rows of 5 squares. Choice (A) is incorrect because it is the answer to adding two side lengths. Choice (C) is incorrect because it adds the outside squares. Choice (D) is incorrect because it would mean an extra row of squares was added to the rectangle.
11	MGSE3.OA.8	2	A	The correct answer is choice (A) 13 marbles. First, 3 groups of 6 were multiplied to find a total of 18 marbles. Then 5 marbles were subtracted from the total. Choice (B) is incorrect because the answer is found by adding 3, 6, and 5. Choice (C) is incorrect because after the total number of marbles in the three bags was found, 5 marbles needed to be subtracted from the product. Choice (D) is incorrect because after the total number of marbles in the three bags was found, the 5 marbles needed to be subtracted from, not added to, 18.
12	MGSE3.MD.3	2	N/A	See scoring rubric and sample response on page 121.
13	MGSE3.OA.9	3	N/A	See scoring rubric and sample response beginning on page 122.
14	MGSE3.MD.3	2	C	The correct answer is choice (C). Each smiley face correctly represents 2 students. Choice (A) is incorrect because each smiley face needs to represent 2 students, not 1 student. Choices (B) and (D) are incorrect because the smiley faces incorrectly represent the tally marks.
15	MGSE3.G.1	1	B	The correct answer is choice (B) square. A square is a quadrilateral, a polygon with four sides, and all of the sides have the same length. Choices (A) and (C) are incorrect because all sides do not have to be equal. Choice (D) is incorrect because only opposite sides are the same length.
16	MGSE3.MD.7	2	C	The correct answer is choice (C) 5×4 . This expression shows that the area of the rectangle is the product of the length and width. Choice (A) is incorrect because it shows an addition problem. Choice (B) is incorrect because it shows an incorrect equation. Choice (D) is incorrect because it shows how to find the figure's perimeter, not area.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
17	MGSE3.G.2	2	A	The correct answer is choice (A) $\frac{1}{4}$ square foot. The whole area of 1 foot is divided into 4 equal parts, so each part is $\frac{1}{4}$ of the whole area. Choice (B) is incorrect because it is the area of the parts Sam does not use. Choice (C) is incorrect because it is the sum of the whole and the part. Choice (D) is incorrect because it is the product of the whole area and 4.
18	GSE-1: 3.MD.7b	2	A/D/F	See scoring rubric on page 124.
19	MGSE3.NF.2b	1	A	The correct answer is choice (A)  . The number line is divided into fourths, and the point is located on the third of the four division lines. Choice (B) is incorrect because the point is located at $\frac{2}{6}$. Choice (C) is incorrect because the point is located at $\frac{7}{8}$. Choice (D) is incorrect because the point is located at $\frac{1}{3}$.
20	MGSE3.NF.3a	2	B	The correct answer is choice (B) $\frac{3}{6}$. The shaded value of $\frac{3}{6}$ is equal to the shaded value of $\frac{1}{2}$. Choices (A), (C), and (D) are incorrect because the shaded value in each rectangle is not equal to the shaded value of $\frac{1}{2}$.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
21	MGSE3.NF.1	2	A	The correct answer is choice (A) $\frac{1}{3}$. The circle is divided into three equal parts, represented by the denominator of 3. There is one shaded part, represented by the numerator of 1. Choice (B) is incorrect because the circle shows 1 part shaded, not 2. Choices (C) and (D) are incorrect because these fractions represent a whole divided into 4 parts, not 3.
22	MGSE3.NF.2ba	1	D	The correct answer is choice (D). It shows the number line partitioned into sixths and the first division plotted with a point to show $\frac{1}{6}$. Choice (A) is incorrect because the number line is partitioned into sevenths. Choice (B) is correctly partitioned into sixths but the choice is incorrect because the point is incorrectly plotted and shows one. Choice (C) is incorrect because the number line is partitioned into sevenths, so the plotted point shows $\frac{1}{7}$.
23	MGSE3.MD.2	2	C	The correct answer is choice (C) 200 liters. A large bottle of water holds about 1 liter, and it would take about 200 bottles to fill a bathtub. Choice (A) is incorrect because 2 bottles of water would not fill a bathtub. Choice (B) is incorrect because 20 bottles of water would not fill a bathtub. Choice (D) is incorrect because 2,000 bottles would be too much—a bathtub could not hold that much water.
24	MGSE3.MD.1	2	B	The correct answer is choice (B) 45 minutes. The swim lesson started at 2:30 and ended at 3:15, a total of 45 minutes. Choices (A), (C), and (D) are incorrect because they are incorrect numbers of minutes.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
25	MGSE3.MD.4	2	B	The correct answer is choice (B) $2\frac{1}{4}$ inches. The ruler is marked in fourths, and the pencil ends closest to the first mark after 2. Choice (A) is incorrect because the pencil ends closer to the first quarter-inch mark after 2, not to 2. Choice (C) is incorrect because the pencil ends closer to the first quarter-inch mark after 2 than to the second. Choice (D) is incorrect because the pencil ends closer to the first quarter-inch mark after 2 than to the third.
26	GSE-1: 3.MD.8	2	Part A: B Part B: D	See scoring rubric on page 125.
27	MGSE3.MD.1	3	N/A	See scoring rubric and sample response beginning on page 126.

MATHEMATICS SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES

Item 3

Scoring Rubric

Points	Description
2	The response achieves the following: • Response demonstrates a complete understanding of solving a multi-digit subtraction problem that requires regrouping. • Give two points for answer (247) and a complete explanation of the strategy used to solve the problem. • Response shows application of a reasonable and relevant strategy to solve. • Mathematical ideas are expressed coherently through clear, complete, logical, and fully developed responses using words, calculations, and/or symbols, as appropriate.
1	The response achieves the following: • Response demonstrates a partial understanding of solving a multi-digit subtraction problem that requires regrouping. • Give one point for the correct answer of 247 but no process shown OR a correct process with a calculation error. Response is only partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.
0	The response achieves the following: • Response demonstrates limited to no understanding of how to solve a multi-digit subtraction problem that requires regrouping. • The student is unable to perform any of the solution steps correctly. • Response shows no application of a strategy or shows application of an irrelevant strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	247 AND I used a number line and counting back to subtract. I started at 571 and counted back by hundreds 3 times to subtract 300 and ended at 271. Then I counted back by tens 2 times to subtract 20 and ended at 251. Then I counted back by ones 4 times to subtract 4 and ended at 247. <i>OR other valid process</i>
1	247
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

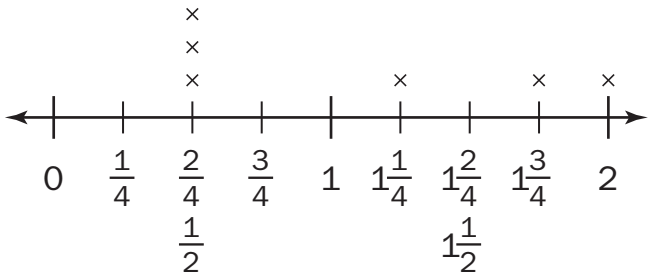
Item 4

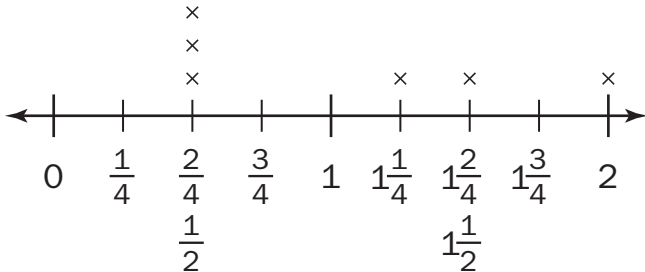
Scoring Rubric

Points	Description
4	The response achieves the following: • Response demonstrates a complete understanding of measuring objects to the nearest quarter inch, creating a line plot with the data, and explaining the units on the plot. • Give four points if student response indicates the correct measurement for each line segment AND correctly describes how to create a line plot with the measurement data AND provides a clear understanding of the line plot's units. Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through clear, complete, logical, and fully developed responses, using words, calculations, and/or symbols, as appropriate.
3	The response achieves the following: • Response demonstrates a nearly complete understanding of measuring objects to the nearest quarter inch, creating a line plot with the data, and explaining the units on the plot. • Give three points if student response indicates an incorrect measurement in Part A, but the incorrect measurement is used correctly in the description of how to create the line plot AND the units are correctly explained AND response is nearly completely correct. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through clear, complete, logical, and fully developed responses, using words, calculations, and/or symbols, as appropriate.
2	The response achieves the following: • Response demonstrates a partial understanding of measuring objects to the nearest quarter inch, creating a line plot with the data, and explaining the units on the plot. • Give two points if student response indicates two or three incorrect measurements in Part A, but incorrect measurements are used correctly in the description of how to create the line plot AND the units are correctly explained AND response is partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.

Points	Description
1	The response achieves the following: • Response demonstrates minimal understanding of measuring objects to the nearest quarter inch, creating a line plot with the data, and explaining the units on the plot. • Give one point if student response indicates at least two correct measurements and has a partially complete description of the line plot's units and how to create the line plot AND response is only partially correct. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.
0	The response achieves the following: • Response demonstrates limited to no understanding of measuring objects to the nearest quarter inch, creating a line plot with the data, or explaining the units on the plot. • The student is unable to measure to the nearest quarter inch, explain how to create a line plot, or explain the units on a line plot. • Response shows no application of a strategy or applies an irrelevant strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points	Sample Response
4	Part A: $A = \frac{1}{2}$ inch $B = 1\frac{3}{4}$ inches $C = 2$ inches $D = \frac{1}{2}$ inch $E = \frac{1}{2}$ inch $F = 1\frac{1}{4}$ inches AND Part B: They represent length measurements to the quarter inch.  The number line shows measurements to the quarter inch. Above the line, 'x' marks are placed at $\frac{2}{4}$, $1\frac{1}{4}$, $1\frac{3}{4}$, and 2. Below the line, the fractions $\frac{1}{2}$, $1\frac{1}{2}$, and $1\frac{3}{4}$ are written under their respective tick marks.

Points	Sample Response
3	Part A: $A = \frac{1}{2}$ inch $B = 1\frac{1}{2}$ inches $C = 2$ inches $D = \frac{1}{2}$ inch $E = \frac{1}{2}$ inch $F = 1\frac{1}{4}$ inches AND Part B: They represent length measurements to the quarter inch. 
2	Part A: $A = \frac{1}{4}$ inch $B = 1\frac{1}{4}$ inches $C = 2$ inches $D = \frac{1}{2}$ inch $E = \frac{1}{2}$ inch $F = 1\frac{1}{4}$ inches AND Part B: They represent length measurements to the quarter inch.

Points	Sample Response
1	Part A: $A = \frac{1}{2}$ inch $B = 2$ inches $C = 2$ inches $D = \frac{1}{2}$ inch $E = \frac{1}{2}$ inch $F = \frac{3}{4}$ inches AND Part B: They represent length measurements.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Item 8

Scoring Rubric

Points	Description
2	The response achieves the following: • Response demonstrates a complete understanding of the meaning of multiplication, through groups of objects or an array. • Give two points for an answer that identifies the correct drawing AND explains the identification AND gives the correct number sentence. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through clear, complete, logical, and fully developed responses, using words, calculations, and/or symbols, as appropriate.
1	The response achieves the following: • Response demonstrates a partial understanding of the meaning of multiplication. • Give one point for an answer that identifies the correct drawing AND gives the correct number sentence, but does not explain the identification. • Response shows application of a relevant strategy, though it may be only partially applied. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.
0	The response achieves the following: • Response demonstrates limited to no understanding of the meaning of a multiplication problem. • The student is unable to perform any of the solution steps correctly. • Response shows no application of a strategy or shows application of an irrelevant strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	Part A: Drawing B is correct. It shows an array with 4 rows for the 4 bookshelves. The 7 squares in each row show the 7 books on each shelf. <i>OR other valid explanation</i> AND Part B: $4 \times 7 = 28$
1	Part A: Drawing B is correct. It shows an array with 4 rows for the 4 bookshelves. The 7 squares in each row show the 7 books on each shelf. <i>OR other valid explanation</i> OR Part B: $4 \times 7 = 28$
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Item 9

Scoring Rubric

Points	Description
2	The response achieves the following: • A score of 2 indicates a complete understanding of how to determine the unknown whole number in a multiplication or division equation relating three whole numbers using the inverse relationship of multiplication and division. • The student determines that the correct answers for Part A are Choice (C) and Choice (F). AND • The student determines that the correct answer for Part B is Choice (B).
1	The response achieves the following: • A score of 1 indicates a partial understanding of how to determine the unknown whole number in a multiplication or division equation relating three whole numbers using the inverse relationship of multiplication and division. • The student determines that the correct answers for Part A are Choice (C) and Choice (F). OR • The student determines that the correct answer for Part B is Choice (B).
0	The response achieves the following: • A score of 0 indicates limited to no understanding of how to determine the unknown whole number in a multiplication or division equation relating three whole numbers using the inverse relationship of multiplication and division.

Item 12

Scoring Rubric

Points	Description
2	The response achieves the following: • Response demonstrates a complete understanding of how to solve “how many more” problems using information presented in a scaled bar graph. • Give two points for a correct answer and explanation of using the graph to find the answer. • Response shows application of a reasonable and relevant bar graph.
1	The response achieves the following: • Response demonstrates a partial understanding of how to solve “how many more” problems using information presented in a scaled bar graph. • Give one point for a correct answer but incorrect or incomplete explanation of using the graph to find the answer. • Response shows application of understanding how to show data as a graph, though it may be only partially applied. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols as, appropriate.
0	The response achieves the following: • Response demonstrates limited to no understanding of how to solve “how many more” problems using information presented in a scaled bar graph. • The student is unable to use the graph to solve the problem. • Response shows no application of a strategy or shows application of an irrelevant strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points Awarded	Sample Response
2	Ben counted 8 more red birds than yellow birds. The bar for red ends at 10 to show that Ben counted 10 red birds. The bar for yellow ends at 2 to show that Ben counted 2 red birds. 10 minus 2 is 8. <i>OR other valid explanation</i>
1	Ben counted 8 more red birds than yellow birds.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Item 13

Scoring Rubric

Points	Description
4	The response achieves the following: • Response demonstrates a complete understanding of patterns in the multiplication table. • Give four points if student response indicates four correct patterns in the multiplication chart. Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through clear, complete, logical, and fully developed responses, using words, calculations, and/or symbols, as appropriate.
3	The response achieves the following: • Response demonstrates a nearly complete understanding of patterns in the multiplication table. • Give three points if student response indicates three correct patterns in the multiplication chart. Response is nearly completely correct. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through clear, complete, logical, and fully developed responses, using words, calculations, and/or symbols, as appropriate.
2	The response achieves the following: • Response demonstrates a partial understanding of patterns in the multiplication chart. • Give two points if student response indicates two correct patterns. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.
1	The response achieves the following: • Response demonstrates minimal understanding of patterns on the multiplication chart. • Give one point if student response indicates at least one correct pattern. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.

Points	Description
0	The response achieves the following: • Response demonstrates limited to no understanding of patterns on the multiplication chart. • The student is unable to identify patterns. • Response shows no application of a strategy or applies an irrelevant strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points	Sample Response
4	Pattern 1: For each multiple of 9, the digits can be added together to equal nine. Pattern 2: When 4 is multiplied by any number, the product is an even number. Pattern 3: Multiples of 5 have either a 5 or a 0 in the ones place. Pattern 4: An odd factor times an odd factor equals an odd product. <i>OR other valid patterns</i>
3	The student correctly answers three out of the four parts.
2	The student correctly answers two out of the four parts.
1	The student correctly answers one of the four parts.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

Item 18

Scoring Rubric

Points	Description
2	The response achieves the following: - A score of 2 indicates complete understanding of how to multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. - The student selects Choice (A), Choice (D), and Choice (F).
1	The response achieves the following: - A score of 1 indicates a partial understanding of how to multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. - The student selects Choice (A) and Choice (D), with or without an additional incorrect answer. OR - The student selects Choice (A) and Choice (F), without or without an additional incorrect answer. OR - The student selects Choice (D) and Choice (F), with or without an additional incorrect answer.
0	The response achieves the following: - A score of 0 indicates limited to no understanding of how to multiply side lengths to find areas of rectangles with whole number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. - The student selects Choice (A), with or without any additional incorrect answers. OR - The student selects Choice (D), with or without any additional incorrect answers. OR - The student selects Choice (F), with or without any additional incorrect answers. OR - The student does not select any correct answers.

Item 26

Scoring Rubric

Points	Description
2	The response achieves the following: - A score of 2 indicates complete understanding of how to solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. - The student determines that the correct answer for Part A is Choice (A). AND - The student determines that the correct answer for Part B is Choice (D).
1	The response achieves the following: - A score of 1 indicates a partial understanding of how to solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters. - The student determines that the correct answer for Part A is Choice (A). OR - The student determines that the correct answer for Part B is Choice (D).
0	The response achieves the following: A score of 0 indicates limited to no understanding of how to solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.

Item 27

Scoring Rubric

Points	Description
2	The response achieves the following: • Response demonstrates a complete understanding of telling and writing time to the nearest minute and determining elapsed time. • Give two points if student response indicates the correct start time AND provides a clear understanding of how the start time was determined. Response is correct and complete. • Response shows application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently through clear, complete, logical, and fully developed responses, using words, calculations, and/or symbols, as appropriate.
1	The response achieves the following: • Response demonstrates a partial understanding of telling and writing time to the nearest minute. • Give one point if student response indicates the correct start time but no explanation is given. • Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained. • Mathematical ideas are expressed only partially, using words, calculations, and/or symbols, as appropriate.
0	The response achieves the following: • Response demonstrates limited to no understanding of telling and writing time to the nearest minute and determining elapsed time. • The student is unable to tell and write time to the nearest minute or determine elapsed time. • Response shows no application of a strategy or applies an irrelevant strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Exemplar Response

Points	Sample Response
2	The start time was 2:15. The clock shows the movie ended at 3:45. Ninety minutes is the same as 60 minutes plus 30 minutes. First, I found that an hour earlier than 3:45 would be 2:45. Then, I determined 30 minutes earlier than 2:45 was 2:15.
1	The start time was 2:15.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

ACTIVITY

The following activities develop skills in Unit 3: Operations and Algebraic Thinking: Patterns in Addition and Multiplication.

Standards: MGSE3.OA.1, MGSE3.OA.2, MGSE3.OA.3, MGSE3.OA.4, MGSE3.OA.5, MGSE3.OA.6, MGSE3.OA.7, MGSE3.NBT.3, MGSE3.MD.3, MGSE3.MD.4

Work with manipulatives such as Base Ten blocks and counters.

- Make arrays with counters to determine the total amount. Choose a total amount and determine how many rows and columns are needed to show the number as an array.
- Use Base Ten blocks to show regrouping in addition problems.

Write problems with unknowns as you use manipulatives.

- For example: *I know there are 4 groups of counters. I don't know how many are in each group, but I know there are 16 total counters and each group has the same amount. How many counters are in each group?*
- Act out the problem with the counters and record the equation with the unknown.

Use multiplication tables to work with finding patterns.

- Use the chart for multiplication and division facts.

Act out word problems with friends or family.

- For example: *There are 12 students in class. They line up in 4 equal lines during gym class. How many students are in each line?*
- Write your own word problems and act them out.

ACTIVITY

The following activities develop skills in Unit 6: Measurement.

Standards: MGSE3.MD.1, MGSE3.MD.2, MGSE3.MD.3, MGSE3.MD.4

Determine time to the nearest minute and measure elapsed time using real-life examples.

- Over a few days, keep a log of the times you start and stop activities.
- Then calculate the amount of time you spent on each activity.

Use sticky notes or small pieces of paper to gather data about your family and friends.

- For example, ask your friends or family what their favorite color is and then write the name of the color on a sticky note or small piece of paper.
- Use the sticky notes or pieces of paper to create a bar graph, and then read it and interpret the data.
- Use the bar graph to create a picture graph.

Measure to the nearest half or quarter inch using a ruler.

- For example: *What is the length of your shoe?*
- Use the data to make line plots to display and interpret the data.

Explore volume and mass.

- Weigh items by comparing to the weight of a paper clip or feather.
- Use measuring cups, bowls, and pitchers to work with liquid volume.

APPENDIX A: LANGUAGE PROGRESSIVE SKILLS, BY GRADE

The following skills, marked with an asterisk (*) in Language standards 1–3, are particularly likely to require continued attention in higher grades as they are applied to increasingly sophisticated writing and speaking.

Standard	Grade(s)							
	3	4	5	6	7	8	9–10	11–12
L.3.1f. Ensure subject-verb and pronoun-antecedent agreement.								
L.3.3a. Choose words and phrases for effect.								
L.4.1f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.								
L.4.1g. Correctly use frequently confused words (e.g., <i>to/too/two</i> ; <i>there/their</i>).								
L.4.3a. Choose words and phrases to convey ideas precisely.*								
L.4.3b. Choose punctuation for effect.								
L.5.1d. Recognize and correct inappropriate shifts in verb tense.								
L.5.2a. Use punctuation to separate items in a series.†								
L.6.1c. Recognize and correct inappropriate shifts in pronoun number and person.								
L.6.1d. Recognize and correct vague pronouns (i.e., ones with unclear or ambiguous antecedents).								
L.6.1e. Recognize variations from standard English in their own and others’ writing and speaking, and identify and use strategies to improve expression in conventional language.								
L.6.2a. Use punctuation (commas, parentheses, dashes) to set off nonrestrictive/parenthetical elements.								
L.6.3a. Vary sentence patterns for meaning, reader/listener interest, and style.*								
L.6.3b. Maintain consistency in style and tone.								
L.7.1c. Places phrases and clauses within a sentence, recognizing and correcting misplaced and dangling modifiers.								
L.7.3a. Choose language that expresses ideas precisely and concisely, recognizing and eliminating wordiness and redundancy.								
L.8.1d. Recognize and correct inappropriate shifts in verb voice and mood.								
L.9-10.1a. Use parallel structure.								

* Subsumed by L.7.3a

† Subsumed by L.9–10.1a

* Subsumed by L.11–12.3a

APPENDIX B: CONDITION CODES

Condition Codes (Non-Score)

The student response is flawed for various reasons and will receive a condition code (non-score).

Students who receive a condition code (non-score) have a score of zero (0).

- For the extended writing tasks, both traits receive a score of 0. For Trait 1: Ideas, the score is 0 out of 4 possible points, and for Trait 2: Language Usage, the score is 0 out of 3 points. (Or the score is 0 points out of a possible 7 points.)
- For the narrative item, the score is 0 out of a possible 4 points.

Non-Score (Code)	Performance Scoring: Non-Score (Code) Description	Full Description
B	Blank	• Blank • Student's response did not contain words. • In some instances, student may have drawn pictures.
C	Copied	• Student's response is not his/her own work. • Student does not clearly attribute words to the text(s). • Student copies from the text(s) that serve(s) as writing stimulus.
I	Too Limited to Score	• Student's response is not long enough to evaluate his/her ability to write to genre or his/her command of language conventions.
F	Non-English/ Foreign Language	• Written in some language other than English • The writing items/tasks on the test require the student to write in English.
T	Off Topic/Off Task	• Student may have written something that is totally off topic (e.g., major portion of response is unrelated to the assigned task). • Student response did not follow the directions of the assigned task (i.e., off task).
U	Unreadable/ Illegible/ Incomprehensible	• Response is unreadable. • An illegible response does not contain enough recognizable words to provide a score. • An incomprehensible paper contains few recognizable English words, or it may contain recognizable English words arranged in such a way that no meaning is conveyed.
S	Offensive	• Student uses inappropriate or offensive language or pictures.

Study/Resource Guide
for Students and Parents
Grade 3
End-of-Grade

