Georgia Milestones
Assessment System

Study/Resource Guide
for Students and Parents
Grade 4

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.
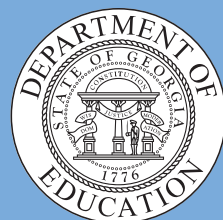
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THE GEORGIA MILESTONES ASSESSMENT SYSTEM

Dear Student,

This **Georgia Milestones Grade 4 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 4 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!

Georgia Milestones Grade 4 EOG Study/Resource Guide for Students and Parents

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 questions
  * Appear in English Language Arts (ELA), Mathematics, Science, and Social Studies
  * 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.
  * Eliminate the answers that you know are wrong.
  * Look for the answer that is the BEST choice.

* **Technology-enhanced items**
  * Appear in English Language Arts (ELA), Mathematics, Science, and Social Studies
  * There is a question, problem, or statement.
  * Read the directions for each question carefully.
  * Eliminate the answers you know are wrong.
  * In multi-select questions, you will be asked to select more than one right answer.
  * In multi-part questions, the questions will have more than one part. You will need to provide an answer in each part.
  * In evidence-based selected-response (EBSR) questions, you will be asked to answer the first part of the question. Then, you will answer the second part of the question based on the answer to the first part.
  * In drag-and-drop questions, you will be asked to use a mouse, touchpad, or touchscreen to move responses to designated areas on the screen.
  * In coordinate-graph questions, you will be asked to use a mouse, touchpad, or touchscreen to draw lines and/or plot points on a coordinate grid on the screen.
  * In line-plot questions, you will be asked to use a mouse, touchpad, or touchscreen to place Xs above a number line to create a line plot.
  * In bar-graph questions, you will be asked to use a mouse, touchpad, or touchscreen to select the height of each bar to create a bar graph.
  * In number-line questions, you will be asked to use a mouse, touchpad, or touchscreen to plot a point and/or represent inequalities.
  * Since some technology-enhanced items in this guide were designed to be used in an online, interactive-delivery format, some of the item-level directions will not appear to be applicable when working within the format presented in this document (for example, "Move the characteristics into boxes," "Create a scatter plot," or "Click To Respond").
  * This icon ⟳ identifies special directions that will help you answer technology-enhanced items as shown in the format presented within this guide. These directions do not appear in the online version of the test but explain information about how the item works that would be easily identifiable if you were completing the item in an online environment.

Georgia Milestones Grade 4 EOG Study/Resource Guide for Students and Parents

- To practice using technology-enhanced items in an online environment very similar to how they will appear on the online test, visit "Experience Online Testing Georgia."
    1. Go to the website "Welcome to Experience Online Testing Georgia" (http://gaexperienceonline.com/).
    2. Select "Test Practice."
    3. On the right side of the page, you will see "End-of-Grade (EOG) Spring Main" and "End-of-Grade (EOG) Summer Retest." Select "Online Tools Training" under either option.
    4. Select "EOG Test Practice."
    5. Select "Technology Enhanced Items."
    6. Select "All Grades."
    7. You will be taken to a login screen. Use the username and password provided on the screen to log in and practice navigating technology-enhanced items online.

    Please note that Google Chrome is the only supported browser for this public version of the online testing environment.

✳ Constructed-response items

- Appear in English Language Arts (ELA) and Mathematics only
- There is a question, problem, or statement but no answer choices.
- Read the question carefully and think about what you are asked to do.
- You must write your answer or work out a problem.
- 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

- Appear in English Language Arts (ELA) and Mathematics only
- 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-response

- Appears in English Language Arts (ELA) only
- There is a question, problem, or statement.
- You may be asked to do more than one thing.
- 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 items 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 • Make basic inferences or logical predictions from data or text • 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 • Predict

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 • 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 • 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 4 English Language Arts (ELA) EOG assessment has a total of 61 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 85 minutes to complete each section.

CONTENT

The Grade 4 English Language Arts (ELA) EOG assessment will measure the Grade 4 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—literary and informational text.

There are two kinds of essays students may be asked to write—an opinion essay and an informational or explanatory essay.

Students will also write an extended constructed-response using narrative techniques. Students may be asked to continue a story or perhaps write a new beginning, for example. The stimulus text may be literary or informational. (Item 8 on page 30 gives an example of a prompt that requires a narrative response.)

ITEM TYPES

The English Language Arts (ELA) portion of the Grade 4 EOG assessment consists of selected-response (multiple-choice), technology-enhanced (two-part questions that are evidence-based selected-response [EBSR] or multiple-select questions), constructed-response, extended constructed-response, and extended writing-response items.

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 distinguish between common and proper nouns.

English Language Arts (ELA) Grade 4 Content Domain II: Writing and Language

Standard: ELAGSE4L2a. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.
   a. Use correct capitalization.

Read the sentence.

> My <u>mother</u> picked out our next <u>family</u> car from a <u>dealership</u> in <u>texas</u>.

Which underlined word in the sentence should start with a capital letter?

A. mother
B. family
C. dealership
D. texas

Correct Answer: D

Explanation of Correct Answer: The correct answer is choice (D) texas. Cities, towns, states, and nations are always capitalized. Choice (A) is incorrect because it is not used as a name. Choices (B) and (C) are incorrect because they are common nouns.

Read the article and answer example items 2 and 3.

Central Park

Before 1850, many of the world's great cities had nice parks. However, there were no city parks in the United States. New York City was a busy city, and there were no places to escape from the noise or from the smell of horses. Some important people in New York City decided that a park was needed. The city had a contest to see who could design the best park.

There were many different designs for the park. People argued about the purpose of the park. Some people said that it should be like parks in England and France. Those parks were mostly for people who had lots of money. The parks had long, straight roads. People who could afford horses and carriages could ride in the parks. The gardens in those parks were very square. They had lots of large stone buildings. The parks were built like the gardens around palaces.

Other people said that a park should be designed for all the people, not just the rich. That meant the park should be good for walking, and there shouldn't be long, straight roads. Straight roads and big buildings allowed for less natural scenery.

The plan that the city chose was more like a park for all the people. It included large green areas and curvy walking paths. These paths were built around natural features, like large rocks. The park had very few buildings. It had special paths for horses to keep the animals separate from people. Today, Central Park is considered one of the greatest parks in the world.

Example Item 2

Selected-Response

DOK Level 2: This is a DOK level 2 item because the student is asked to apply knowledge of the text in order to answer the question.

English Language Arts (ELA) Grade 4 Content Domain I: Reading and Vocabulary

Genre: Informational

Standard: ELAGSE4RI3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Which sentence BEST describes why Central Park was designed to have few straight roads?

A. Curved roads were better for horses.
B. More natural features were left in place.
C. The builders used roads that already existed.
D. The roads were built to go around the gardens.

Correct Answer: B

Explanation of Correct Answer: The correct answer is choice (B) More natural features were left in place. The park was built to show as much natural scenery as possible, so roads curved around existing rocks and other features. Choice (A) is incorrect because the author does not tell you curved roads are better for horses. Choice (C) is incorrect because the author never says this. Choice (D) is incorrect because the author never mentions gardens in Central Park.

Example Item 3

Constructed-Response

DOK Level 3: This is a DOK level 3 item because students are asked to draw a conclusion based on the article and support a response with evidence from the text.

English Language Arts (ELA) Grade 4 Content Domain I: Reading and Vocabulary

Genre: Informational

Standard: ELAGSE4RI3. Explain events, procedures, ideas, or concepts in a historical, scientific, or technical text, including what happened and why, based on specific information in the text.

Explain how the purpose of the park impacted Central Park's design.

Use details from the article to support your answer. Write your answer on the lines on your answer document.

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Scoring Rubric

Points	Description
2	The exemplar shows a full-credit response. It achieves the following: • Gives sufficient evidence of the ability to explain events, ideas, or concepts in a historical text, including what happened and why, based on specific information in the text • Includes specific examples/details that make clear reference to the text • Adequately explains the idea 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 explain events, ideas, or concepts in a historical text, including what happened and why, based on specific information in the text • Includes vague/limited examples/details that make reference to the text • Explains the idea with clearly relevant 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 explain events, ideas, or concepts in a historical text, including what happened and why, based on specific information in the text

Exemplar Response

Points Awarded	Sample Response
2	People did not agree about the purpose of the park. Some thought it should be for wealthy people to drive carriages through, like parks in England and France. Those parks were designed to be very square with straight roads. Instead, the city decided Central Park should be a park for all people to walk through and enjoy natural scenery. That's why the park was designed with a lot of green areas, curvy walking paths, and natural things like rocks.
1	The purpose of central park was for people to enjoy the outdoors so that's why they designed it like that.
0	Central Park is in New York and it is a beautiful park to walk around in.

Example Item 4

Extended Writing-Response

DOK Level 4: This is a DOK Level 4 item because it requires students to read two passages, synthesize information, and respond to an extended writing task.

English Language Arts (ELA) Grade 4 Content Domain II: Writing and Language

Genre: Informational

Standards:

ELAGSE4W2. Write informative/explanatory texts to examine a topic and convey ideas and information clearly.

ELAGSE4L1. Demonstrate command of the conventions of Standard English grammar and usage when writing or speaking.

ELAGSE4L2. Demonstrate command of the conventions of Standard English capitalization, punctuation, and spelling when writing.

This section of the test assesses your skill to comprehend reading passages and use information from the passages to write an informational essay.

Before you begin writing your essay, you will read two passages.

As you read the passages, think about details you may use in an informational essay comparing and contrasting the two pilots.

These are the titles of the passages you will read:

1. Charles Lindbergh
2. Amelia Earhart

Charles Lindbergh

In 1927, Charles Lindbergh became the first person to fly nonstop across the Atlantic Ocean. This was a famous event in an event-filled life.

Lindbergh was born in 1902. At that time, flying was in its early days. Young Lindbergh found flight fascinating. He left college to go to flight school. After two years, he went into the U.S. Army. He became a pilot for the U.S. Army Air Corps.

After the army, Lindbergh flew for the U.S. Postal Service. He flew a mail plane from St. Louis to Chicago. During this time, he earned his nickname, "Lucky Lindy." He had to jump out of his plane four times. He got lucky and lived every time!

In 1919, a man named Raymond Orteig started a contest. He offered $25,000 to the first person who could fly across the Atlantic Ocean. Lindbergh spent the next eight years getting the right plane. He named the plane the *Spirit of St. Louis.* Then, in May 1927, he made his famous flight across the Atlantic.

Lindbergh received many awards in his life. One was a Pulitzer Prize for a book he wrote about his life. Lindbergh died at the age of 72.

Amelia Earhart

Amelia Earhart was born in 1898 in Kansas. She was a good student. However, she left college at the age of 19. Soon afterward, Earhart went to an air show in Long Beach, California. It was there that she took her first airplane ride. It changed her life forever. She started taking flying lessons. Earhart spent the next couple of years learning all about flying. She even bought her own plane.

Unfortunately, Earhart ran out of money and had to sell her plane. She went back to school for a while. Then she worked as a teacher and a social worker. In 1927, Charles Lindbergh made his famous flight across the Atlantic Ocean. People began asking, "Who will be the first woman?" In 1928, Earhart was a passenger on a flight across the Atlantic. She was the first woman to fly across the Atlantic. She later wrote a book about the experience. But being a passenger wasn't enough for Earhart.

In 1935, Earhart became the first person to fly from Hawaii to the U.S. mainland. The U.S. government gave her a medal for this. In 1937, she decided to try to fly around the world. She made it to an island in the Pacific Ocean. But then her plane disappeared. She was never found. Earhart will always be remembered, though. She showed the world what women pilots can do.

WRITING TASK

Think about the ideas in BOTH passages. Then write an **informational essay** in your own words explaining how Charles Lindbergh and Amelia Earhart were similar and how they were different.

Be sure to use information from BOTH passages in your **informational essay**.

Writer's Checklist

Be sure to:

- Introduce the topic clearly, provide a focus, and organize information in a way that makes sense.
- Use information from the two passages so that your essay includes important details.
- Develop the topic with facts, definitions, details, quotations, or other information and examples 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.
- Provide a conclusion that supports the information presented.
- Check your work for correct usage, grammar, spelling, capitalization, and punctuation.

Now write your informational essay on your answer document. Refer to the Writer's Checklist as you write and proofread your essay.

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 71 and 72 to see why this example would earn the maximum number of points.

Charles Lindbergh and Amelia Earhart had many similarities. They were both pilots at around the same time. Both left college and studied flying. They were both first at many flying goals, like flying across the Atlantic Ocean. They both wrote books about what they did.

The two pilots were different in some ways, however. One clear difference is that Lindbergh was a man, and Earhart was a woman. Also, Lindbergh didn't have the problems with money that Earhart had. I think the biggest difference between them, though, was that Lucky Lindy had good luck. He survived four plane crashes and lived to be 72 years old. But Earhart didn't have such good luck. At a young age, she disappeared while trying to fly around the world.

In the end, we will remember both Lindbergh and Earhart for being great pilots.

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 4 English Language Arts EOG assessment. This includes main ideas and important vocabulary words. This section also contains practice questions, with explanations of the correct answers, and activities that you can do 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 test are used to identify main ideas and details, cite evidence, make inferences, determine themes, and understand vocabulary.

Key Ideas and Details

- Look for ideas and details that tell you what the passage is about.
- Use these ideas and details when writing or speaking about the passage.
- Look for themes as you read. Ask yourself, "What is this about?"
- Think about why the author made the choices he or she made about the characters, setting, and events in the passage.
- Use specific details from the passage to help you describe a character's thoughts, words, or actions.
- Summarize the important ideas and details after you read.

Craft and Structure

- Make sure you understand the words and phrases as you read.
- Think about how the author includes words that allude to significant characters found in mythology.
- Compare and contrast the structural elements of different passage types, including poems, dramas, and prose, and be able to explain the similarities and differences.
- Compare and contrast the point of view in multiple passages, focusing on first- and third-person narration.

Integration of Knowledge and Ideas

- Look at the illustration in a passage. Make connections between the illustration and the description, events, or character traits in the passage.
- Think about the similarities and differences between themes, topics, and patterns of events in stories, myths, and traditional literature from different cultures.

KEY TERMS

Literary text: Passages that are stories, dramas, or poems. (RL)

Inference: To infer means to come to a reasonable conclusion based on evidence found in the passage. By contrast, an **explicit** idea or message is stated directly by the author. The author tells the readers exactly what they need to know. (RL1)

Theme: The theme of a literary passage is its lesson or message. For example, a passage could be about two friends who like to do things together, and the theme might be the importance of friendship. (RL2)

Summarize: To give the main events of a passage 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 literary passage takes place, including the time of day, the season, or the location. (RL3)

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

Mythology: Literary passages about popular beliefs in different cultures. In Greek mythology, the stories of the Greek gods are very well known and sometimes appear with different names in other cultures, such as in Roman mythology. (RL4)

Allusion: An allusion is an indirect reference to something. When an author refers to something without mentioning it explicitly, it is an allusion. For example, *The new student is a regular Einstein*. In this sentence, the author is alluding to Albert Einstein, the Nobel Prize-winning scientist and historical figure. (RL4)

Prose: A form of writing that uses ordinary language. It is the opposite of poetry. (RL5)

Poem: A piece of writing that uses words and phrases chosen for their sound or meaning. These words are arranged in a specific way on the page and use a number of poetic devices. (RL5)

- **Verse:** Writing organized in a rhythmic pattern, as often is the case in poetry. (RL5)
- **Rhythm:** The regular, repeated sounds of words in a poem. (RL5)
- **Meter:** A rhythm that repeats a basic pattern in a poem. (RL5)

Drama: A story, also known as a play, that is written for people to act out. (RL5)

- **Dialogue:** The words that actors are supposed to say or read aloud when they are acting out a drama. (RL5)
- **Stage directions:** The instructions that tell actors what to do in a drama. Stage directions may also give information about what the stage should look like, what the lighting should be, and what sounds should be heard. For example, stage directions tell actors when to enter the stage, when to exit, or what specific actions they should do while speaking. (RL5)
- **Cast of characters:** The list of different parts actors can play in the drama. Usually, each character is played by a different actor. (RL5)

Point of view: The perspective from which a story is told. The point of view depends upon who the narrator is and how much he or she knows. The point of view could be **first person** (*I* went to the store), **second person** (*You* went to the store), or **third person** (*He* went to the store). The point of view used by the author can have a big influence on his or her passage. (RL6)

Compare vs. contrast: Though similar, comparing is analyzing two things, such as characters or themes, in relation to each other, while contrasting is specifically analyzing the *differences* between two things, such as two different characters or themes. (RL6/RL9)

Genre: A category of passages, such as fiction and nonfiction. Each genre has a particular style, form, and content. (RL9)

Pattern of events: What happens in the story. This is often referred to as the plot or the sequence of events that make up the story. For example, a quest is a pattern of events in which a character searches for something. (RL9)

Traditional literature: Stories that were first told verbally but were written down much later. These stories do not happen in a specific time or place. Instead, they share values or common themes. For example, the stories of Cinderella, Sleeping Beauty, and the Three Little Pigs all had their beginnings in traditional literature. (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 1–8

Read the story and answer questions 1 through 8.

The Piano

Greta did not like change. She didn't like it when they changed the design on the wrapper of her favorite kind of ice cream (strawberry mango). She didn't like it when her father shaved his beard, because it made him look too young. And she didn't like it when she came home to find this . . . *thing* in the living room. It was old and brown and heavy, and it practically took up a whole wall. It had yellow teeth, and it made noise. It was a piano.

When her older brother Richard started banging on the instrument with his elbows, Greta ran to her room and closed the door. That's when she noticed something even worse: the toy chest was now in the middle of her room. This was the toy chest that had stood against the wall in the living room forever.

"Don't you like our new family member?" Greta's mother asked from outside the door.

Greta opened the door and blurted, "Where did you *get* that thing?"

"The Kleins are moving out, and they didn't want to move it."

"The Kleins are moving?" That meant more change. The Kleins had always lived in the apartment down the hall. It was all too much.

"Yes, and it will all be fine," said Greta's mother, and she walked back toward the living room.

Greta closed the door, flopped onto her bed face-down, and did what she always did when she didn't like what was going on: she fell asleep.

In her dream, Greta was floating on a raft in the middle of a river. The breeze stirred the water and made the most beautiful sound. The sound rose and fell and became louder when the wind became stronger.

Greta woke up and opened her eyes, but the sound continued. She got up and stumbled into the living room, where her mother sat at the piano. The sound was pouring out of her mother's fingers, but she was looking straight ahead with her head cocked slightly to the right. Then she stopped playing and remained still, in a different world.

"Come and sit here," Greta's mother said as she scooted over and patted the bench next to her.

"I didn't know . . . ," Greta began.

"Of course you didn't know, because I never told you I could play. I started when I was about five years old."

"Why did you stop?"

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"I didn't really stop. I guess I kind of drifted away from it. When I moved out of my parents' house, I left the piano behind, and I never got another one."

Greta stared at her mother's face, which held a half smile. "You never should have stopped," said Greta.

"You might be right," Greta's mother said, and she stole a quick look at her daughter.

Greta felt like her mother had just told her a secret, and a bubble of warmth rose inside her.

"Will you play some more?" she asked.

Item 1

Selected-Response

What is the MOST LIKELY reason Greta's mother invites Greta to sit on the piano bench with her?

A.   She would like to show Greta how to play the piano.
B.   She knows Greta is upset and is trying to comfort her.
C.   She would like to explain to Greta how she learned to play the piano.
D.   She knows Greta is nervous about having new neighbors.

Item 2

Selected-Response

Which explanation BEST describes the meaning of the phrase *drifted away from it* as it is used in these sentences from the story?

> "I didn't really stop. I guess I kind of drifted away from it. When I moved out of my parents' house, I left the piano behind, and I never got another one."

A.   Greta's mother stopped enjoying music.
B.   Greta's mother felt sad about playing music.
C.   Greta's mother stopped playing the piano bit by bit.
D.   Greta's mother suddenly finished listening to a song.

Item 3

Selected-Response

At the end of the story, Greta asks her mother, "Will you play some more?"

Based on the story, why does Greta MOST LIKELY ask this question?

A. She wants her neighbors to hear her mother playing the piano.
B. She worries that her mother does not like playing the piano.
C. She hopes her mother can become better at playing the piano.
D. She enjoys hearing her mother playing the piano.

Item 4

Selected-Response

Why does the author use dialogue in the scene at the piano?

A. to show how Greta's feelings are changing
B. to show why Greta's mother is upset
C. to show Greta's excitement about having new neighbors
D. to show that Greta's mother worries about her daughter

Item 5

Selected-Response

Which sentence correctly states the point of view in the story?

A. The story is told by a narrator who provides Greta's point of view.
B. The story is told by a narrator who provides Greta's mother's point of view.
C. The story is told by a narrator who provides Richard's point of view.
D. The story is told by a narrator who provides many family members' points of view.

Item 6

Evidence-Based Selected-Response Technology-Enhanced

This question has two parts. Answer Part A, and then answer Part B.

Part A

Which word BEST describes Greta's mother?

A. generous
B. humorous
C. talented
D. forgiving

Part B

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

A. "Yes, and it will all be fine," said Greta's mother, and she walked back toward the living room.
B. The sound was pouring out of her mother's fingers, but she was looking straight ahead with her head cocked slightly to the right.
C. "You might be right," Greta's mother said, and she stole a quick look at her daughter.
D. Greta felt like her mother had just told her a secret, and a bubble of warmth rose inside her.

Item 7

Constructed-Response

Explain the theme of "The Piano."

Use details from the story to support your answer. Write your answer on the lines on your answer document.

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Item 8

Extended Constructed-Response

Write an ending to the story that starts with Greta's mother saying to Greta, "Now tell me why you were so upset when you saw the piano."

Be sure that your story ending flows naturally from the rest of the story. Use dialogue and descriptions in your story. Write your answer on the lines on your answer document.

Unit 2: Reading Informational Text

READING PASSAGES: INFORMATIONAL TEXT

CONTENT DESCRIPTION

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

Key Ideas and Details

- Think about the passage and try to paraphrase and summarize as you read.
- Look for ideas and details that tell you what the passage is about.
- Use these ideas and details when writing or speaking about the passage.
- Think about how key details, examples, and inferences help you determine the main idea in the passage.
- Use specific details from the passage when explaining events, procedures, ideas, and concepts.

Craft and Structure

- Make sure you understand the words in the passage.
- Understand common organizational structures, such as chronological order, cause and effect, and comparison, and recognize when they are used in a passage.
- Understand how a firsthand account differs from a secondhand account when reading two passages about the same event or topic.

Integration of Knowledge and Ideas

- Understand how graphic features, such as charts, graphs, maps, timelines, and illustrations, are used to help the reader understand the passage.
- Think about how the author uses reasons and evidence to support particular points in the passage.
- Integrate information from two passages on the same topic in order to show an understanding of the topic.

KEY TERMS

Informational text: Passages that explain or inform. (RI)

Inference: To infer means to come to a reasonable conclusion based on evidence found in the passage. By contrast, an **explicit** idea or message is stated directly by the author. The author tells the readers exactly what they need to know. (RI1)

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

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

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

Organization: Organization refers to the way in which a piece of writing is structured. Each sentence, paragraph, or chapter fits into the overall structure of a text and contributes to the development of ideas. **Organizational structures** include chronological order, cause and effect, compare and contrast, and problem and solution. (RI5)

- **Chronological order:** The order in which a series of events happens. A passage that is arranged in order of time from the beginning to the end is in chronological order. (RI5)
- **Compare and contrast:** Compare and contrast analyzes the relationships between ideas in a text. Comparing analyzes the similarities, while contrasting analyzes the differences. (RI5, RI6)
- **Cause and effect:** This is a relationship where one thing causes another thing to happen. (RI3, RI5)
- **Problem and solution:** Text that is organized by problem and solution identifies a problem and proposes one or more solutions. An author may use problem and solution to try to persuade readers about a certain topic or course of action. (RI5)

Firsthand account: A description of events written or told by someone who was actually there. If your friend tells you she fell and hurt her knee, it is a firsthand account. (RI6)

Secondhand account: A description of events written or told by someone who was not actually there but who got the story from another source. If your friend tells you that your other friend fell and hurt her knee, but the friend who is telling you didn't see the fall happen, it is a secondhand account. (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)

Author's purpose: The author has a specific reason or purpose for writing the passage. Often the author's purpose is not directly stated. (RI8)

Important Tips

- ✎ Try to read the questions about an informational passage 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 answer *what* you know and *how* you know it.

Sample Items 9–12

Read the article and answer questions 9 through 12.

The Statue of Liberty

The Statue of Liberty is one of the world's most famous statues. Lady Liberty stands with a torch in her hand. She has been welcoming ships into New York City's harbor since 1886. Many people know that the statue was a gift from France to the United States. But the story is not that simple.

The idea to make a statue as a gift began in France. An artist named Frédéric-Auguste Bartholdi wanted to build the statue, but he needed the money to do it. He formed a group in France. They decided to raise money in France to pay for the copper statue. However, Lady Liberty needed a base to stand on. That money was to be raised in the United States.

Many people in France gave money for the statue. Even schoolchildren contributed. A copper company gave Bartholdi all the copper he needed.

Bartholdi made the right arm and hand of the statue. It was put on display in Philadelphia and New York City. People became excited about the statue. Americans began to give money to complete it. But there still wasn't enough money for the base.

Then Bartholdi came up with a good idea. In New York he spread the word that the statue might go to Boston or another city. The idea worked. New Yorkers didn't want to be left out. The people of New York donated more money. Then Bartholdi could complete the base. Now Lady Liberty stands in New York Harbor. The people of France and the United States worked together. Like most great works, it took a long time. It also took a lot more work than most people think.

Item 9

Selected-Response

Which sentence from the article explains why enough money was finally raised for the base?

A. That money was to be raised in the United States.
B. People became excited about the statue.
C. Americans began to give money to complete it.
D. New Yorkers didn't want to be left out.

Item 10

Selected-Response

What does the phrase *spread the word* mean in this sentence from the article?

In New York he <u>spread the word</u> that the statue might go to Boston or another city.

A. told a lie
B. kept a secret
C. wrote a large sign
D. told a lot of people

Item 11

Selected-Response

With which statement would the author MOST LIKELY agree?

A. People often do not know the real story behind events.
B. No one knows how the Statue of Liberty was really built.
C. The money for the Statue of Liberty came only from France.
D. Americans do not care enough about their nation's history.

Item 12

Constructed-Response

What is the main idea of the article?

Use details from the article to support your answer. Write your answer on the lines on your answer document.

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Unit 3: Writing Opinion Texts

CONTENT DESCRIPTION

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

Text Type and Purpose

- An opinion essay states an opinion or agrees or disagrees with a point of view.
- Some common opinion words are "agree," "disagree," "for," and "against."
- When you state your opinion, you need to support it with reasons, examples, and evidence.

Production and Distribution of Writing

- Introduce a topic clearly by stating your opinion.
- Produce writing with an organization and a style that fit the task, purpose, and audience.
- Provide a concluding statement related to the opinion you present.
- Strengthen your writing by reviewing and revising, if needed.

Audience, Purpose, and Voice

- As you write, remember who your audience will be.
- Use linking words and phrases to connect opinions and reasons.
- Remember, you are writing for a purpose—think about *what* you are writing and *why*.

Research to Build and Present Knowledge

- Conduct a short research project that builds knowledge through investigation of different aspects of a topic.
- Gather information from different types of sources, including print and digital sources.
- Take brief notes on the sources and sort the information about the topic into categories.
- Provide a list of sources you used for your research.

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 Rubric

- An opinion scoring rubric can be found beginning on page 73. You may find it helpful to read and discuss this rubric with a parent or another adult.
- The rubric shows you what is needed to produce a strong piece of opinion writing.
- The rubric is important to understand. It tells you what to add to your opinion writing.
- Opinion writing on the EOG assessment will be scored using this rubric.

KEY TERMS

Opinion text: An opinion text states an opinion or agrees or disagrees with a point of view. (W1)

Point of view: The opinion or perspective of the writer on a specific topic. (W1)

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)

Introduction: The beginning of a piece of writing. The introduction should let readers know what they will be reading about, and it should set up the main idea, or thesis, of the writing. (W1a)

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. Each sentence, paragraph, or text feature fits into the overall structure of a passage and contributes to the development of ideas. Writers structure their texts to match their purpose and audience. (W1a, W4)

Reasons: Details that support your opinion in a piece of writing. (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 a statement is a fact 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. (W1b)

Linking words and phrases: Words or groups of words that link 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*. Examples of linking phrases are *to begin*, *on the other hand*, *for example*, and *in conclusion*. (W1c)

Concluding statement: The end of a piece of writing. The concluding statement should sum up the main purpose of the writing and provide an overall takeaway for the reader. (W1d)

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)

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. (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)

Research: Gathering information in order to learn more about a topic. (W7)

Source: A book, article, website, person, or piece of media that contains information. (W8)

Evidence: Something that proves the truth of something else. Informational texts may include facts, opinions of experts, quotes, statistics, and definitions that can be used as evidence. In literary text, the character's thoughts, words, or actions may be used as evidence. (W9)

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 problem and solution.
- ✎ 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 13–16

[**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 (one on the actual test); and 3) an extended writing prompt (one on the actual test). 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 Unit 3. There is no extended writing prompt for the Unit 4 practice items.]

This section of the test assesses your skill to comprehend reading passages and use information from the passages to write an opinion essay.

Before you begin writing your essay, you will read two passages and answer three multiple-choice questions about what you have read.

As you read the passages, think about details you may use in an opinion essay about weekend homework.

These are the titles of the passages you will read:

1. Homework on the Weekend
2. Weekends Are for Fun

Homework on the Weekend

Homework on the weekend is an important part of our education. First of all, we go to school to prepare for the real world. In the real world, most people work long hours. They may work nights and on the weekends. Sometimes, they don't have a choice about weekend work. Learning is the same way. It doesn't happen just during the school week. Doing homework on the weekend is another way to help you learn.

It's true that there is no school on the weekends. Many students look at the weekend as a time to play or to do other fun activities. No one is saying you need to stay in and do a lot of homework. You need *some* time for fun. But an hour or so of homework should be fine. There is plenty of time over the weekend to get it done and go have fun as well.

Finally, many students want to go to a college or university. Students do whatever is necessary to help them get into college, even if that means doing homework on the weekend.

Weekends Are for Fun

Homework on the weekends is more harmful than helpful. One university study explored the effects of homework. The study leaders asked, Does homework help students do better in school? Homework had very little effect on younger kids especially. If homework isn't helping us, why have it on weekends?

Homework can actually harm students. Young people need their weekends. They should forget about school. They should just be kids. Weekend homework is stressful for kids. It ruins their time off.

On weekends kids should spend time with their families. Sports and hobbies are also important. What happens if kids can't do these things? They are tired and unhappy on Mondays. Tired, unhappy students don't perform well. Therefore, teachers should not give homework on the weekends.

Item 13

Selected-Response

Why does the author of "Homework on the Weekend" MOST LIKELY mention college?

A. College students often work jobs on weekends.
B. Students in college have to study on weekends.
C. Weekend homework might help students get into college.
D. College is more like the real world than elementary school is.

Item 14

Selected-Response

Which sentence from "Weekends Are for Fun" explains why students would do better in school if they had no homework on weekends?

A. Homework had very little effect on younger kids especially.
B. If homework isn't helping us, why have it on weekends?
C. On weekends kids should spend time with their families.
D. Tired, unhappy students don't perform well.

Item 15

Selected-Response

Which sentence describes something the reader learns from reading BOTH passages?

A. Homework is important for young kids.
B. Students should think about their futures.
C. There should be no homework on weekends.
D. It is important to have time to play on the weekends.

Item 16

Extended Writing-Response

WRITING TASK

Both passages discuss the idea of giving students homework on weekends.

Think about the ideas in BOTH passages. Then write an **opinion essay** about whether students should be given homework on the weekend.

Be sure to use information from BOTH passages in your **opinion essay**.

Writer's Checklist

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, phrases, and clauses to connect reasons.
- Use clear language and vocabulary.
- Have a strong conclusion that supports your opinion.
- Check your work for correct usage, grammar, spelling, capitalization, and punctuation.

Now write your opinion essay on your answer document. Refer to the Writer's Checklist as you write and proofread your essay.

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Unit 4: Writing Informational/Explanatory Texts

CONTENT DESCRIPTION

Some passages in the English Language Arts test will help you develop an informational/explanatory essay. In your writing, state ideas, summarize research, and use information from more than one source to develop and support your ideas.

Text Type and Purpose

- An informational/explanatory essay states ideas and information clearly and accurately.
- When you develop your topic, use facts, definitions, concrete details, quotations, and other information and examples related to the topic.

Production and Distribution of Writing

- Introduce a topic, and group related information in paragraphs.
- Produce writing with an organization and a style that fit the task, purpose, and audience.
- Provide a concluding statement related to the information or explanation in the essay.
- Strengthen your writing by reviewing and revising, if needed.

Audience, Purpose, and Voice

- As you write, remember who your audience will be.
- Use specific language to inform or explain about your topic.
- Use linking words and phrases to connect ideas within categories of information.
- Remember, you are writing for a purpose—think about *what* you are writing and *why*.

Research to Build and Present Knowledge

- Conduct a short research project that builds knowledge through investigation of different aspects of a topic.
- Gather information from different types of sources, including print and digital sources.
- Take brief notes on the sources and sort the information about the topic into categories.
- Provide a list of sources you used for your research.

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 Rubric

- An informational/explanatory scoring rubric can be found beginning on page 71. You may find it helpful to read and discuss this rubric with a parent or another adult.
- The rubric shows you what is needed to produce a strong piece of informational/explanatory writing.
- The rubric is important to understand. It tells you what to add to your informational/explanatory writing.
- Informational/explanatory writing on the EOG assessment will be scored using this rubric.

KEY TERMS

Informational/explanatory texts: A form of writing that informs the reader or explains something. (W2)

Topic: What a piece of writing is about. (W2a)

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)

Formatting: The way in which a piece of writing is organized. For example, a writer can use headings and subheadings to organize the writing and present the information in a clear way. (W2a)

Linking words and phrases: Words or groups of words that link 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*. Examples of linking phrases are *to begin, on the other hand, for example,* and *in conclusion*. (W2c)

Precise language: Good writers choose their words carefully. Specific and vivid words and phrases describe or explain and make meaning clear. The sentence *A bird was on the ground* is very general and does not use precise language. However, that sentence could be rewritten using more specific nouns and verbs: *A robin landed in the grassy field*. (W2d)

Concluding statement: The end of a piece of writing. The concluding statement should sum up the main purpose of the writing and provide an overall takeaway for the reader. (W2d)

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. Each sentence, paragraph, or text feature fits into the overall structure of a passage and contributes to the development of ideas. Writers structure their texts to match their purpose and audience. (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)

Research: Gathering information in order to learn more about a topic. (W7)

Source: A book, article, website, person, or piece of media that contains information. (W8)

Evidence: Something that proves the truth of something else. Informational texts may include facts, opinions of experts, quotes, statistics, and definitions that can be used as evidence. In literary text, the character's thoughts, words, or actions may be used as evidence. (W9)

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 by 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 17–21

[**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 (one on the actual test); and 3) an extended writing prompt (one on the actual test). In this study guide, there is no extended writing prompt for this unit.]

Read the article and answer questions 17 through 21.

Altamira Cave Paintings

1   Many people think archaeology means digging in the ground for treasures. Digging is only a part of what archaeologists do. They also spend a lot of time studying artifacts. Artifacts are things that were made by people in the past. Artifacts need to be protected from air, sun, moisture, and other things that can harm them. Artifacts aren't always found by digging. Sometimes they are in the open. This is one example.

2   In the 1870s in Altamira, Spain, a man and his daughter were exploring a cave. The little girl looked up and saw an amazing sight. Animals were painted on the ceiling! The man's name was Marcelino Sanz de Sautuola. He was an archaeologist. He looked at the paintings and saw how well they were painted. He thought they were very old. The paintings were in good shape. This is because the cave had been closed by rocks for many years. So it had been protected from sun, wind, and rain. Sautuola and another archaeologist declared that the cave was an archaeological site. They carefully wrote about everything they saw and then made a report about the cave. Sautuola said the paintings were probably 18,000 years old.

3   Many people didn't believe Sautuola. They said people from so long ago couldn't have painted that well. Scientists argued about the cave for years. Then other caves were discovered in France. They, too, had amazing paintings on the walls. More people decided that Sautuola was right. One famous archaeologist even wrote an apology to Sautuola.

4   Visitors went to Altamira for many years. But too many people were breathing inside the cave, and the moisture in their breath was damaging the paintings. So, the cave was closed to the public in 1977. People built a museum next to the cave though. It has a life-size model of the cave. Now visitors can see what the paintings are like without hurting them.

Item 17

Selected-Response

Which paragraph BEST explains why the paintings were found in good condition?

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

Item 18

Selected-Response

According to the article, how did the discovery in the caves in France change archaeologists' views about Altamira?

A. They started to believe in Sautuola's ideas.
B. They argued about the French caves for years.
C. They believed that someone was playing a trick.
D. They said the cave paintings could not be that old.

Item 19

Selected-Response

Which word BEST explains the meaning of the word *site* in this sentence from the article?

> **Sautuola and another archaeologist declared that the cave was an archaeological <u>site</u>.**

A. area
B. building
C. example
D. town

Item 20

Selected-Response

Which sentence BEST describes the structure of the article "Altamira Cave Paintings"?

A. The author compares cave paintings with other types of art.

B. The author uses chronological order to outline the events that happened after the paintings were discovered.

C. The author compares the discovery of the cave paintings with other important discoveries.

D. The author lists many different countries where cave paintings were found and the names of people who discovered them.

Item 21

Constructed-Response

What would MOST LIKELY have happened if the caves at Altamira had stayed open to the public?

Use details from the article to support your answer. Write your answer on the lines on your answer document.

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Unit 5: Language

CONTENT DESCRIPTION

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

Conventions of Standard English

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

Knowledge of Language

- Express yourself clearly and in an interesting way.
- Choose your words carefully so readers understand what you are writing.

Vocabulary Acquisition and Use

- Vary the words you use in your writing.
- Use different strategies (e.g., context, affixes, roots) to help you determine the meaning of unknown or multiple-meaning words.
- Show an understanding of figurative language (i.e., similes, metaphors) and word relationships (i.e., synonyms, antonyms).
- Recognize and explain the meaning of common idioms, adages, and proverbs.
- Use reference materials to determine the precise meanings of words or phrases.

KEY TERMS

Grammar: The system of rules for a language. (L1)

Usage: Using the correct word when there is a choice (e.g., *to*, *too*, and *two*). (L1)

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)

Relative pronouns: Words used to refer to a noun that was already mentioned but is being referred to again. Examples of relative pronouns are *who*, *which*, *whose*, *whom*, and *that*. (L1a)

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

Relative adverb: A relative adverb is used to give more details in a sentence. For example, *where*, *when*, and *why*. (L1a)

Progressive tense: A tense used to describe an action that is ongoing and has not stopped. For example, *I am walking*, *I was walking*, and *I will be walking* are all variations of the progressive tense. (L1b)

Helping verb: A verb that helps a main verb by adding to the meaning of the main verb (e.g., *am*, *are*, *is*, *were*, *could*). For example, in the sentence *Dad may plant roses in the garden*, the helping verb is *may*. (L1c)

Linking verb: Connects the subject to a word that describes the subject. For example, in the sentence *The sky is blue*, the word *is* links the subject *sky* to the word *blue*, which describes *sky*. Linking verbs do not show any action. The most common linking verbs are forms of the verb *be*: *am*, *is*, *was*, *were*, *are*. (L1c)

Condition: Create conditional sentences, which are sentences that describe situations that might happen but haven't happened yet. Linking verbs and helping verbs can be added to verbs to show conditions. For example, *If the weather is wet, George will need an umbrella*. The helping verb *will* works with *need* to explain the type of condition that would require George to need an umbrella. (L1c)

Adjective: A part of speech that is a describing word. *Beautiful*, *tall*, *blue*, and *interesting* are all adjectives. (L1d)

Order of adjectives: This refers to the order in which adjectives are correctly listed according to their type. For example, *the big red ball*. (L1d)

Prepositional phrases: Phrases that are used to show direction, location, or time. Examples of prepositional phrases are *on the box*, *in the box*, *around the box*, *by the box*, and *through the box*. (L1e)

Sentence fragment: A sentence that is incomplete. *A short walk* would be a sentence fragment. The complete sentence would be *I went on a short walk*. (L1f)

Run-on sentence: A run-on happens when more than one sentence is joined without the correct word and/or punctuation mark. (L1f)

Capitalization: To correctly make the first letter of a word uppercase. (L2, L2a)

Punctuation: Writing marks that help to separate and clarify ideas. Examples of punctuation are periods, colons, exclamation marks, and question marks. Commas and quotation marks are used for dialogue to show the exact words being said. Commas are also used before coordinating conjunctions in a compound sentence. Punctuation can also be used for effect. For example, an exclamation mark can be used to show excitement. (L2, L2b, L2c, L3b)

Quotation: Repeating or writing out exactly what a source said, word for word. Quotes are always put inside quotation marks. (L2b)

Coordinating conjunction: A word that is used to combine two simple sentences to make a compound sentence. For example, *and*, *or*, *but*. (L2c)

Compound sentence: A compound sentence contains two independent clauses joined by a conjunction. An independent clause is a part of a sentence that can stand alone because it expresses a complete thought and has a subject and a verb. An example of a compound sentence is *The child rode his bicycle to school, so he made it to his first class on time*. The sentence contains two independent clauses joined by the conjunction *so*. (L2c)

Conventions: Rules for how to spell words, write sentences, and use punctuation so that everyone who reads or speaks that language will understand the intended meaning. For example, capitalizing the first word of a sentence is a convention of the English language. (L3)

Formal style: A formal style is used in formal writing, such as an essay, research paper, or formal letter. When writing in a formal style, the writer chooses language that matches the audience and purpose and avoids informal language. (L3c)

Context clues: The words, facts, or ideas in a text that help you understand the meaning of an unknown word. (L4, L4a)

Context: Words and phrases that surround an unknown word or 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, the word *sink* is a **multiple-meaning word** because it could mean several things. The meaning is clear when the full sentence is included: *She will throw the basketball up high from midcourt and sink it through the hoop for two points*. (L4, 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. (L4b)

Affix: Letters added to a root word that change its meaning. For example, when the prefix *dis-* is added to the word *interest*, the word *disinterest* means the opposite of the root word *interest*. (L4b)

Dictionary: A reference book that provides the **precise**, or exact, meanings of words and phrases. (L4c)

Glossary: An alphabetical list of words and phrases and their meanings. A glossary is often found at the end of a text. (L4c)

Figurative language: To understand figurative language, you cannot simply define the words in the phrase. You will need to distinguish between literal and figurative meanings of words and phrases. (Literal refers to the "actual meaning of a word or phrase.") For example, if someone tells you to "open the door," you can open a real door. If someone tells you to "open the door to your heart," you are not expected to find a door in your chest. Instead, you are to open up your feelings and emotions. (L5)

- **Simile:** A comparison using *like* or *as*. For example, "She is as pretty as a picture." (L5a)
- **Metaphor:** A direct comparison that states one thing is another. It isn't meant to be literal, but descriptive. For example, if someone describes recess by saying "It was a zoo," he or she is using a metaphor. Recess was chaotic with many different people running around; it was not literally a zoo. (L5a)
- **Adage:** A saying that is repeated and is generally accepted as truth over time. An example is, *A penny saved is a penny earned*. (L5b)
- **Proverb:** A short saying that gives a piece of advice, such as "Don't rock the boat." (L5b)
- **Idioms:** Quirky sayings and expressions specific to a language. If a saying seems unfamiliar or is not understood, it may be an idiom that needs to be researched. (L5b)

Synonyms: Words that have the same meaning. *Small* and *little* are synonyms. (L5c)

Antonyms: Words that have opposite meanings. *Small* and *large* are antonyms. (L5c)

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.

Sample Items 22–29

Item 22

Selected-Response

Which form of the verb correctly completes the sentence?

Roger _____ when suddenly he heard a knock on the door.

A. is reading
B. was reading
C. will be reading
D. has been reading

Item 23

Selected-Response

In which sentence are the adjectives ordered correctly?

A. Ted's mother drove a tiny old car.
B. Melissa lived in a blue large house.
C. Henry listened to a French tall man singing.
D. There was a copper strange handle on Cliff's door.

Item 24

Selected-Response

Which sentence shows correct use of a prepositional phrase?

A. I dropped the ball, and it rolled in the creek.
B. The rain came down of the sky like a waterfall.
C. Paula pulled the rock out of the water and dried it.
D. The young parrot left its cage and flew out from the house.

Item 25

Selected-Response

In which sentence is the underlined word used correctly?

A. All the students brought <u>their</u> books to school.
B. The extra work helped improve my grades <u>to</u>.
C. Everyone went to Daniela's party <u>accept</u> for Roland.
D. There is nothing better <u>then</u> cold ice cream on a hot day.

Item 26

Selected-Response

Which sentence uses correct punctuation?

A. Jenna asked her father "Who is your favorite singer?"
B. Jenna asked her father? "Who is your favorite singer?"
C. Jenna asked her father. "Who is your favorite singer?"
D. Jenna asked her father, "Who is your favorite singer?"

Item 27

Selected-Response

Which sentences use *would*, *could*, and *should* correctly?

A. We would try to find the person who owns this dog. We should put up signs, and hopefully the dog's owner could see them.
B. We should try to find the person who owns this dog. We could put up signs, and hopefully the dog's owner would see them.
C. We could try to find the person who owns this dog. We would put up signs, and hopefully the dog's owner should see them.
D. We would try to find the person who owns this dog. We could put up signs, and hopefully the dog's owner should see them.

Item 28

Selected-Response

Read the story that a student is writing.

[1]Yesterday, two zookeepers visited my school to give a presentation. [2]They told us facts about many kinds of animals. [3]Then one of the zookeepers brought out a surprise from behind a curtain. [4]It was a real-life version of our school mascot—an eagle. [5]I couldn't believe it. [6]By the end of the presentation, I had a new interest in eagles.

Which sentence should end with an exclamation point to help show the narrator's excitement?

A. sentence 3
B. sentence 4
C. sentence 5
D. sentence 6

Item 29

Selected-Response

Read the paragraph.

In soccer, the goalie must <u>defend</u> the goal. The <u>entyre</u> team depends on the goalie to do this. It is a <u>problem</u> if the goalie stops paying <u>attention</u> to the game.

Which word is misspelled?

A. defend
B. entyre
C. problem
D. attention

Georgia Milestones Grade 4 EOG Study/Resource Guide for Students and Parents

ENGLISH LANGUAGE ARTS (ELA) ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/Element/Genre	DOK Level	Correct Answer	Explanation
1	ELAGSE4RL3 Literary	2	B	The correct answer is choice (B) She knows Greta is upset and is trying to comfort her. This answer is supported by Greta's mother's earlier comment, "Yes, and it will all be fine." Choice (A) is incorrect because there is no evidence that Greta's mother wants to teach Greta to play the piano. Choice (C) is incorrect because Greta's mother mentions she knows how to play the piano, but there is not evidence that she would like to explain how she learned to play. Choice (D) is incorrect because although Greta knows her neighbors are moving, the story doesn't provide enough evidence to show that their moving is Greta's main concern.
2	ELAGSE4RL4 Literary	2	C	The correct answer is choice (C) Greta's mother stopped playing the piano bit by bit. Perhaps unintentionally, Greta's mother slowly moved away from playing piano. Choice (A) is incorrect because there is no evidence that Greta's mother stopped enjoying music; she just got out of the habit of playing it. Choice (B) is incorrect because the passage contains no evidence that music made Greta's mother sad. Choice (D) is incorrect because "drifting away" refers to abandoning piano playing altogether, not discontinuing to listen in the middle of a song.
3	ELAGSE4RL1 Literary	2	D	The correct answer is choice (D) She enjoys hearing her mother playing the piano. The context of the passage supports the idea that Greta enjoys listening to her mother play and that knowing that her mother can play is like "a secret," causing "a bubble of warmth [to rise] inside her." Choice (A) is incorrect because there is no suggestion it is important to Greta that others hear her mother play. Choice (B) is incorrect because she is not trying to nudge her mother into doing a difficult task. Choice (C) is incorrect because her mother seems to be an adept pianist.
4	ELAGSE4RL5 Literary	2	A	The correct answer is choice (A) to show how Greta's feelings are changing. There are two sections of dialogue, with the first showing Greta's dismay at the piano's arrival and the second showing Greta's pleasure at her mother's piano playing. Choice (B) is incorrect because Greta's mother is not upset. Choice (C) is incorrect because Greta's emotions are directed at the piano, not the neighbors. Choice (D) is incorrect because Greta's mother reassures her daughter but does not express worry over her.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
5	ELAGSE4RL6 Literary	2	A	The correct answer is choice (A) The story is told by a narrator who provides Greta's point of view. The story is told from a third person limited point of view, limited to Greta's thoughts and emotions. Choices (B), (C), and (D) are incorrect because the story is not told from the mother's, Richard's, or an omniscient point of view.
6	ELAGSE4RL3 Literary	3	C/B	The correct answers are choice (C) talented **and** choice (B) The sound was pouring out of her mother's fingers, but she was looking straight ahead with her head cocked slightly to the right. Greta hears beautiful music and cannot identify the source right away; she is pleasantly surprised to find that it is her mother playing the piano. The correct answer choice for Part B of the item shows text that supports this. In Part A, choice (A) is incorrect because, while it is appealing, Greta's mother's talent with the piano is emphasized more in the passage. Choice (B) is incorrect as there is no indication that Greta's mother is humorous. Choice (D) is incorrect because there is no scenario that requires Greta's mother to be forgiving within the passage. The incorrect options in Part B support incorrect answers in Part A.
7	ELAGSE4RL2 Literary	3	N/A	See scoring rubric and sample responses on page 63.
8	ELAGSE4W3	4	N/A	See scoring rubric beginning on page 69 and sample responses on page 64.
9	ELAGSE4RI1 Informational/ Explanatory	2	D	The correct answer is choice (D) New Yorkers didn't want to be left out. The key word in the question is *finally*. It was Bartholdi's "good idea" that inspired donations to complete the base. Choice (A) is incorrect because it refers to the time before fundraising began in the United States. Choice (B) is incorrect because Americans' initial excitement inspired donations for the statue, not the base. Choice (C) is incorrect because this also refers to the statue rather than the base.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
10	ELAGSE4RI4 Informational/ Explanatory	2	D	The correct answer is choice (D) told a lot of people. Bartholdi wanted to make sure New Yorkers heard what he was saying. Choice (A) is incorrect because the author never states that Bartholdi was lying. Choice (B) is incorrect because "spread the word" means the opposite of keeping a secret; it means telling a lot of people. Choice (C) is incorrect because although a sign could help spread the word, there is no evidence that Bartholdi limited his efforts to a sign.
11	ELAGSE4RI8 Informational/ Explanatory	2	A	The correct answer is choice (A) People often do not know the real story behind events. The author writes, "Many people know that . . . , [b]ut the story is not that simple." Choice (B) is incorrect because the author provides information about how the statue came to be built. Choice (C) is incorrect because although some of the money came from France, a significant portion came from the United States. Choice (D) is incorrect because the author does not imply that Americans don't care about their history; on the contrary, they donated money to make the statue.
12	ELAGSE4RI2 Informational/ Explanatory	3	N/A	See scoring rubric and sample responses on page 65.
13	ELAGSE4RI8 Informational/ Explanatory	2	C	The correct answer is choice (C) Weekend homework might help students get into college. The author mentions that students who aspire to go to college would "do whatever is necessary" to get into college, and the author's overall purpose is to encourage weekend homework. Choice (A) is incorrect because the author mentions nothing about college students' jobs. Choices (B) and (D) are incorrect because although they *could* be used to support the author's argument, they are less directly related to the author's final argument than choice (C) is.
14	ELAGSE4RI1 Informational/ Explanatory	2	D	The correct answer is choice (D) Tired, unhappy students don't perform well. This suggests that if students did no weekend homework, they would be neither tired nor unhappy, and they would perform better than if they had done weekend homework. Choices (A) and (B) are incorrect because even if homework has *no* effect, we cannot logically conclude that students would do *better* in school if they did no weekend homework; they might perform in exactly the same way. Choice (C) is incorrect because it bears no relevance to the question. The author makes no connection between family time and school performance.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
15	ELAGSE4RI1 Informational/ Explanatory	3	D	The correct answer is choice (D) It is important to have time to play on the weekends. This point is mentioned in both articles. Choice (A) is incorrect because the articles don't say homework is important for young kids. Choice (B) is incorrect because only one of the articles talks about students' futures. Choice (C) is incorrect because no homework on the weekend is supported by only one of the articles.
16	ELAGSE4W1, ELAGSE4L1, ELAGSE4L2	4	N/A	See scoring rubric beginning on page 73 and exemplar response on page 66.
17	ELAGSE4RI1 Informational/ Explanatory	2	B	The correct answer is choice (B) paragraph 2. The author mentions that the rocks that sealed the cave protected the paintings for a long time. Choice (A) is incorrect because this paragraph doesn't mention the paintings. Choice (C) is incorrect because this paragraph does not mention the condition of the paintings. Choice (D) is incorrect because paragraph 4 discusses the condition of the paintings only after they were displayed.
18	ELAGSE4RI8 Informational/ Explanatory	2	A	The correct answer is choice (A) They started to believe in Sautuola's ideas. The discovery of similar caves in France changed people's minds; they decided Sautuola had been right about the age of the Altamira paintings. Choice (B) is incorrect because the long argument occurred before the French cave paintings were discovered. Choice (C) is incorrect because the author never mentions a suspected trick. Choice (D) is incorrect because this happened before the French paintings were discovered.
19	ELAGSE4RI4 Informational/ Explanatory	2	A	The correct answer is choice (A) area. An archaeological site is a place or an area where artifacts are discovered and studied. Choice (B) is incorrect because a site is not a building in this sentence. Choice (C) is incorrect because a site in this sentence is a place and not an example of something. Choice (D) is incorrect because a site is not a town in this sentence.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
20	ELAGSE4RI5 Informational/ Explanatory	3	B	The correct answer is choice (B) The author uses chronological order to outline the events that happened after the paintings were discovered. The author first focuses on the discovery of the paintings, then the subsequent debate over the paintings' origins, and finally the most recent conclusions about the paintings. Choice (A) is incorrect because the author does not compare the paintings with other art. Choice (C) is incorrect because the author does not compare the discovery of the paintings with other discoveries. Choice (D) is incorrect because the author does not list different countries with cave paintings and the people who discovered them.
21	ELAGSE4RI1 Informational/ Explanatory	3	N/A	See scoring rubric and sample responses on page 67.
22	ELAGSE4L1b	2	B	The correct answer is choice (B) was reading. Reading was an activity that was taking place when Roger heard the knock. Choice (A) is incorrect because it is the wrong tense of the verb. Choice (C) is incorrect because the action of the entire sentence occurred in the past, not the future. Choice (D) is incorrect because it is the wrong tense of the verb.
23	ELAGSE4L1d	2	A	The correct answer is choice (A) Ted's mother drove a tiny old car. Size-related adjectives come before age-related adjectives. Choice (B) is incorrect because size comes before color. Choice (C) is incorrect because national origin comes after size. Choice (D) is incorrect because opinion comes before material.
24	ELAGSE4L1e	2	C	The correct answer is choice (C) Paula pulled the rock out of the water and dried it. The phrase "out of the water" is a correctly used prepositional phrase. Choice (A) is incorrect because the correct preposition of motion in this use is *into*, not *in*. Choice (B) is incorrect because the prepositional phrase should read "*from* the sky." Choice (D) is incorrect because the prepositional phrase should be "*of* the house."
25	ELAGSE4L1g	2	A	The correct answer is choice (A) All the students brought their books to school. The writer does not make the common mistake of using *there*. Choice (B) is incorrect because the correct word is *too*, not *to*. Choice (C) is incorrect because the correct word is *except*; *accept* does not make sense. Choice (D) is incorrect because the correct word is *than*—a word of comparison rather than a word of sequence.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
26	ELAGSE4L2b	2	D	The correct answer is choice (D) Jenna asked her father, "Who is your favorite singer?" This sentence provides a comma, which is the appropriate punctuation before the quotation. Options (A), (B), and (C) are incorrect because a lack of punctuation, a question mark, and a period are all incorrect punctuation choices before the quotation.
27	ELAGSE4L1c	2	B	The correct answer is choice (B) We should try to find the person who owns this dog. We could put up signs, and hopefully the dog's owner would see them. Choices (A), (C), and (D) all use *would*, *could*, and *should* in ways that do not sensibly combine the two sentences.
28	ELAGSE4L3b	2	C	The correct answer is choice (C) sentence 5. This option is correct because the exclamation mark supports the student's enthusiasm for what was seen during the presentation. Choices (A) and (D) are incorrect because they are matters of fact. Choice (B) is incorrect because it is the sentence that is leading into the narrator's excitement, but it does not require an exclamation mark.
29	ELAGSE4L2d	1	B	The correct answer is choice (B) *entyre*. This word should be correctly spelled *entire*. Choices (A), (C), and (D) are incorrect because *defend*, *problem*, and *attention* are all spelled correctly.

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

Item 7

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 theme of a story • Includes specific examples/details that make clear reference to the text • Adequately explains the theme 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 theme of a story • Includes vague/limited examples/details that make reference to the text • Explains the theme 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 theme of a story

Exemplar Response

Points Awarded	Sample Response
2	The theme of the story is to not judge change as always being bad. Greta immediately reacts with suspicion and dread of the new piano. By the end of the story, though, she has learned to welcome it. Greta tells her mother she never should have stopped playing the piano. When Greta learns that her mother can play she feels "a bubble of warmth." Knowing this secret has brought them closer together.
1	The theme of the story is to think before you judge a change. The piano turns out to be a good change.
0	This story is about a girl and her mother.

Item 8

To view the four-point holistic rubric for a text-based narrative response, see pages 69 and 70.

Exemplar Response

Points Awarded	Sample Response
4	Greta's mother said, "Now tell me why you were so upset when you saw the piano." "Well, for one thing, you know me. I don't like surprises." "That's for sure! I did know that," her mother said. "Well, then Richard was pounding on the piano really loudly. And it replaced my toy chest. My toy chest has always been in that spot in the living room." Greta felt a little foolish for a moment. She giggled softly. "Well," said her mother, raising her eyebrows, "we could always bring the toy chest back in here and get rid of the piano. Then you can play with your stuffed animals all day." They both laughed. "Now let me show you a simple little melody," Greta's mother said, turning to the piano keys.
3	Greta's mother said, "Now tell me why you were so upset when you saw the piano." "Because I don't like change. And this thing was a big change." "Okay," said her mother. "I understand. I know the piano is a big change. I wonder if we can turn it into something good. Do you want to give it a try?" Her mother then gave Greta her first piano lesson.
2	Greta's mother wondered why Greta was so upset about the piano. She knew Greta didn't like change but thought the piano was a good thing. She decided to play the piano to make Greta feel better.
1	Greta's mother didn't know why Greta was so upset. She saw Greta run to her room after Richard played the piano.
0	Greta's mother loves the new piano.

Item 12

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 and to explain the support for a main idea • Includes specific examples/details that make clear reference to the text • Adequately explains the main idea 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 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 article is mainly about the process of raising money for the Statue of Liberty. Bartholdi's group raised money for the statue in France and then went to the United States to raise money for the base. Many different people donated money for the statue and the base. Many Americans do not know the story behind their statue.
1	The main idea of the article is that raising money for the Statue of Liberty was difficult. The money had to come from many different places.
0	The article is about the Statue of Liberty.

Item 16

The following are examples of seven-point responses. See the seven-point, two-trait rubric for a text-based opinion response on pages 73 and 74 to see why these examples would earn the maximum number of points.

Many kids complain if they have homework on the weekend. Some say it is even harmful. However, I agree with the writer of "Homework on the Weekend" that weekend homework is an important part of our education.

First of all, homework helps us learn. As the writer points out, learning "doesn't happen just during the school week." There is not enough time during the school day to learn everything we need to know. That's why teachers give us homework on the weekend. We can practice what we are learning so we understand it better.

Secondly, homework also helps get us ready for college and the real world. Just like adults, we have to learn to work even when we don't really feel like it. We will learn that if we do our work quickly, we have more time for fun.

Finally, there is no reason why we can't do our homework and have fun too. I agree with the writer of "Weekends Are for Fun" that kids need time for sports and hobbies, and need to spend time with family. But as the writer says in "Homework on the Weekend," an hour or so of homework is not too much. There is still enough time for fun activities and relaxing on the weekends.

In conclusion, I think it is fine for students to have homework on the weekend. It is another way to help us learn and will help prepare us for the real world. If we plan our time well and work hard, we can get our homework done and still have time for fun.

OR

Should kids have homework on the weekend? People have different opinions about this topic. I agree with the writer of "Weekends Are for Fun" that students should not get homework on the weekend.

One reason kids get homework is because people think it helps us learn. But, according to the passage, a study showed that homework does not help kids do better in school. Even worse, it causes stress and takes time away from sports, hobbies, and being with family.

Another reason kids get homework is that people think it prepares us for the real world. But we are kids, not adults. As the writer says in "Weekends Are for Fun," kids "should forget about school. They should just be kids."

In "Homework on the Weekend," the writer says that one hour of homework on the weekend is fine. But for many students, homework takes longer than an hour, especially if the work is more difficult for them. They may not have enough time to relax. They will feel tired on Monday morning when it is time to get up for school.

For these reasons, I think that kids should not have homework on the weekend. Homework does not help us learn and it does not prepare us for the real world. In fact, it can even be harmful because it causes stress. Instead of spending weekends doing homework, we need time to relax and just be kids.

Item 21

Scoring Rubric

Points	Description
2	The exemplar shows a full-credit response. It achieves the following: • Gives sufficient evidence of the ability to draw a conclusion based on the text and to explain the support for a conclusion drawn about the text • Includes specific examples/details that make clear reference to the text • Adequately explains the conclusion drawn 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 draw a conclusion based on the text or to explain the support for a conclusion drawn about the text • Includes vague/limited examples/details that make reference to the text • Explains the conclusion drawn 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 draw a conclusion based on the text or to explain the support for a conclusion drawn about the text

Exemplar Response

Points Awarded	Sample Response
2	Artifacts that are exposed to air, sun, or water can lose their shape or color or disappear entirely. The paintings in the caves are artifacts. The problem with leaving the caves open is human breath, which contains moisture. The paintings would probably have lost their color and eventually would have disappeared if they had been left open.
1	The caves would have been ruined if they stayed open. The breathing from visitors would have harmed them.
0	The paintings would get hurt.

ENGLISH LANGUAGE ARTS (ELA) WRITING RUBRICS

Grade 4 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 trait, 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, a scorer need only choose the criteria 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 ideas and conventions. On the Georgia Milestones EOG assessment, a two-trait rubric contains two scales, one for each trait, ranging from zero to four on one scale (ideas) and zero to three on the other (conventions). 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 criteria 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 4 English Language Arts EOG assessment.

Four-Point Holistic Rubric

Genre: Narrative

Writing Trait	Points	Criteria
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.	4	*The student's response is a well-developed narrative that fully develops a real or imagined experience based on text as a stimulus.* • 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 rich, interesting experiences and events or show the responses of characters to situations • Uses a variety of words and phrases consistently to signal the sequence of events • Uses concrete words, phrases, and sensory language consistently and effectively to convey experiences and events precisely • Provides a conclusion 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	*The student's response is a complete narrative that develops a real or imagined experience based on text as a stimulus.* • 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 responses of characters to situations • Uses words and/or phrases to indicate sequence • Uses words, phrases, and details to convey experiences and events • Provides an appropriate conclusion • Integrates some ideas and/or details from source material • Has a few minor errors in usage and/or conventions that interfere with meaning*
	2	*The student's response is an incomplete or oversimplified narrative based on text as a stimulus.* • 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 responses of characters to situations • Uses occasional signal words to indicate sequence • Uses some words or phrases inconsistently to convey experiences and events • Provides a weak or ambiguous conclusion • 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
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.	1	*The student's response provides evidence of an attempt to write a narrative based on text as a stimulus.* • 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 responses of characters to situations • Uses words that are inappropriate, overly simple, or unclear • Provides few, if any, words that convey events • Provides a minimal or no conclusion • May use few, if any, ideas or details from source material • Has frequent major errors in usage and conventions that interfere with meaning*
	0	*The student will receive a condition code for various reasons:* • Blank • Copied • Too Limited to Score/Illegible/Incomprehensible • Non-English/Foreign Language • Off Topic/Off Task/Offensive

*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 the Appendix 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 *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.*	4	*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.* • Effectively introduces a topic • Effectively develops the topic with multiple facts, definitions, concrete details, quotations, or other information and examples related to the topic • Groups related ideas together to give some organization to the writing • Effectively uses linking words and phrases to connect ideas within categories of information • Uses precise language and domain-specific vocabulary to explain the topic • Provides a strong concluding statement or section related to the information or explanation presented
	3	*The student's response is a complete informative/explanatory text that examines a topic and presents information based on text as a stimulus.* • 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 • Uses some precise language and domain-specific vocabulary to explain the topic • Provides a concluding statement or section
	2	*The student's response is an incomplete or oversimplified informative/explanatory text that cursorily examines a topic.* • 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 • Uses limited language and vocabulary that does not clearly explain the topic • Provides a weak concluding statement or section
	1	*The student's response is a weak attempt to write an informative/explanatory text that examines a topic.* • 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 • Uses vague, ambiguous, or repetitive language • Provides a minimal or no concluding statement or section
	0	*The student will receive a condition code for various reasons:* • Blank • Copied • Too Limited to Score/Illegible/Incomprehensible • Non-English/Foreign Language • Off Topic/Off Task/Offensive

Seven-Point, Two-Trait Rubric

Trait 2 for Informational/Explanatory Genre

Writing Trait	Points	Criteria
Language Usage and Conventions *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.*	3	*The student's response demonstrates full command of language usage and conventions.* • 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	*The student's response demonstrates partial command of language usage and conventions.* • 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	*The student's response demonstrates weak command of language usage and conventions.* • 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	*The student will receive a condition code for various reasons:* • Blank • Copied • Too Limited to Score/Illegible/Incomprehensible • Non-English/Foreign Language • Off Topic/Off Task/Offensive

*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 the Appendix 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 *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.*	4	*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.* • Effectively introduces a topic and clearly states an opinion • Creates an effective organizational structure that logically groups ideas and reasons to support the writer's purpose • Provides clear reasons that are supported by facts and details • Uses linking words and phrases effectively to connect opinions and reasons • Provides a strong concluding statement or section related to the opinion presented
	3	*The student's response is a complete opinion piece that examines a topic and supports a point of view based on text.* • Introduces a topic and states an opinion • Provides some organizational structure that groups ideas and reasons to support the writer's purpose • Provides reasons that are supported by facts • Uses some linking words to connect opinions and reasons • Provides a concluding statement or section related to the opinion presented
	2	*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.* • 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 are sometimes supported by facts • Uses few linking words to connect opinions and reasons; connections are not always clear • Provides a weak concluding statement or section that may not be related to the opinion
	1	*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.* • May not introduce a topic or state an opinion • May not have any organizational structure evident • May not provide reasons that are supported by facts • May not use any linking words to connect opinions and reasons • Provides a minimal or no concluding statement or section
	0	*The student will receive a condition code for various reasons:* • Blank • Copied • Too Limited to Score/Illegible/Incomprehensible • Non-English/Foreign Language • Off Topic/Off Task/Offensive

Seven-Point, Two-Trait Rubric
Trait 2 for Opinion Genre

Writing Trait	Points	Criteria
Language Usage and Conventions *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.*	3	*The student's response demonstrates full command of language usage and conventions.* • 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	*The student's response demonstrates partial command of language usage and conventions.* • 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	*The student's response demonstrates weak command of language usage and conventions.* • 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	*The student will receive a condition code for various reasons:* • Blank • Copied • Too Limited to Score/Illegible/Incomprehensible • Non-English/Foreign Language • Off Topic/Off Task/Offensive

*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 the Appendix for those standards that need continued attention beyond the grade in which they were introduced.

ACTIVITY

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

Standards: ELAGSE4RL1, ELAGSE4RL2, ELAGSE4RL3, ELAGSE4RL9

Prepare for the activity.

1. Ask a family member to help you locate and print out 10 fables, including "The Lion and the Mouse," from the following website: http://read.gov/aesop/index.html

2. A theme is listed at the bottom of each fable. Cut out the theme from each fable. (Keep "The Lion and the Mouse" separate to use as an example.)

3. Ask a family member to shuffle the remaining themes and give you a stack of stories and a stack of themes.

Work through the example with a family member.

1. Read the fable "The Lion and the Mouse."

2. After you have read the fable, try to figure out the theme. You can usually determine the theme by answering the following questions:

    a. How did the main character change through the challenges he or she faced in the fable?

    b. What is the lesson the main character learned by the end of the fable?

3. Write the theme on the printed copy of the fable.

4. Go back and underline the specific detail(s) from the fable that helped you decide on the theme.

5. Now read the theme on the strip of paper cut from the fable: "A kindness is never wasted."

6. With your family member, discuss how the theme you wrote and the theme on the strip of paper are similar or different. If the themes are different, discuss why you and the author decided on different themes.

Now try it on your own.

1. Read the first fable in the stack provided to you.

2. After you have read the fable, try to figure out the theme.

3. Write the theme on the printed copy of the fable.

4. Underline the specific detail(s) from the fable that helped you decide on the theme.

5. Continue steps one through four with the remaining stories.

Play a theme matching game.

Using your themes, you can play a matching game with the themes that were cut from the bottom of the fables.

1. Look through the stack of themes that were cut from the bottom of the fables. Find the theme you believe is the best match for the theme you've written for each fable.

2. After you've matched all the themes, ask your family member to confirm the theme for each of the fables by going back online and checking the themes at the bottom of each story.

3. With your family member, discuss how your theme and the theme on the paper are similar or different. If they are different, discuss why you and the author came up with different themes.

Make more connections.

1. Do any of the fables have a similar theme to the example? If so, how are the themes similar?
2. Do any of the other fables have similar themes? If so, how are the themes similar?
3. How are the patterns of the events in the fables similar or different?
4. How are the characters' thoughts, words, or actions in the fables similar or different?

ACTIVITY

The following activity develops skills in Unit 5: Language.

Standard: ELAGSE4L5c

Preparation: Number 40 simple note cards on one side from 1 to 40.

This activity is based on the game Concentration. Work with a friend or family member to think of 20 words and each word's synonym, for a total of 40 words. Shuffle the cards, and lay them out on a table, number-side down. Choose two cards at random. On one card, write the word. On the other card, write its synonym. Do not look at the numbered sides, and set aside those two cards. Continue until all cards are completed. Shuffle the cards when you are done.

Examples: Words and Synonyms

1. destroy   13. ruin
2. eat   18. consume
3. explore   24. investigate
4. protect   32. defend

Arrange the cards on a table in five rows of eight, with the numbers up, from 1 to 40.

Pick two cards to be turned over. If the words on the cards do not match as synonyms, the cards must be turned back over. Now, the other person gets a turn. Whenever a match is found, the person who finds it gets a point and the matched pair is removed from the table.

Variation:

After the cards have been created, work independently to find the matches.

MATHEMATICS

DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 4 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 will 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 4 Mathematics EOG assessment will measure the Grade 4 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 in Base 10
- Number and Operations—Fractions
- Measurement and Data
- Geometry

ITEM TYPES

The Mathematics portion of the Grade 4 EOG assessment consists of selected-response (multiple-choice), technology-enhanced, constructed-response, and extended constructed-response items.

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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 is a DOK level 1 item because it assesses recall of a vocabulary term and its definition.

Mathematics Grade 4 Content Domain: Geometry

Standard: MGSE4.G.1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.

Which of these figures BEST models a ray?

A.

B.

C.

D.
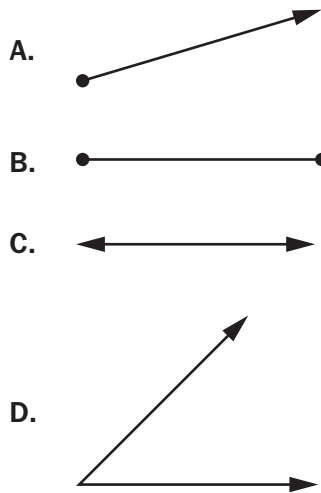
Correct Answer: A

Explanation of Correct Answer: The correct answer is choice (A). A ray is a part of a line with a starting point, but no ending point. Choice (B) is incorrect because it is a line segment, a part of a line with starting and ending points. Choice (C) is incorrect because it is a line; it has neither a starting nor an ending point. Choice (D) is incorrect because it is an acute angle, formed by two rays.

Example Item 2

Constructed-Response

DOK Level 2: This is a DOK level 2 item because it assesses the application of adding or subtracting fractions with like denominators.

Mathematics Grade 4 Content Domain: Number and Operations–Fractions

Standard: MGSE4.NF.3. Understand a fraction a/b with a numerator > 1 as a sum of unit fractions $1/b$.
d. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.

Part A   **Matt has four leftover pieces of fabric from some projects. The lengths of the pieces are $\frac{1}{3}$ yard, $\frac{2}{3}$ yard, $\frac{1}{3}$ yard, and $\frac{2}{3}$ yard.**

How much leftover fabric does Matt have in all? Write your answer in the space provided.

Part B   **Krista has a yard of fabric that she cuts into 8 identical pieces. She uses 2 pieces for one project and 3 pieces for a different project.**

What fraction of the yard of fabric does Krista have left? Write your answer in the space provided.

Part A _____
Part B _____

Go on to the next page to finish example item 2.

Example Item 2

Scoring Rubric

Points	Rationale
2	The response achieves the following: • The response demonstrates a complete understanding of adding or subtracting fractions with like denominators. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
1	The response achieves the following: • The response demonstrates a partial understanding of adding or subtracting fractions with like denominators. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of adding or subtracting fractions with like denominators. • The response is incorrect. • The 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	Part A: 2 yards *or equivalent fraction* **AND** Part B: $\dfrac{3}{8}$
1	The student correctly answers one of the two parts.
0	*Response is irrelevant, inappropriate, or not provided.*

Example Item 3

Extended Constructed-Response

DOK Level 3: This is a DOK level 3 item because it assesses finding all factor pairs of a whole number, identifying the factors as prime or composite, and justifying the greatest factor with certain conditions.

Mathematics Grade 4 Content Domain: Operations and Algebraic Thinking

Standard: MGSE4.OA.4. Find all factor pairs for a whole number in the range 1–100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1–100 is a multiple of a given one-digit number. Determine whether a given whole number in the range 1–100 is prime or composite.

Part A   A partial list of factors is shown.

   1, 2, 4, 16, 32

   What number is missing to make this a list of all the factors of 32? Write your answer in the space provided.

Part B   Identify whether 4 is *prime*, *composite*, or *neither*. Write your answer in the space provided.

Part C   There are 21 baseballs. Each baseball is placed in a bucket. There is more than one bucket, and each bucket must have more than one baseball in it. Each bucket has the same number of baseballs in it.

   What is the GREATEST number of buckets needed for the baseballs? Explain your answer. Write your answer in the space provided.

Go on to the next page to finish example item 3.

Example Item 3. *Continued*.

Part A _____
Part B _____
Part C

Go on to the next page to finish example item 3.

Example Item 3

Scoring Rubric

Points	Rationale
4	The response achieves the following: • The response demonstrates a complete understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
3	The response achieves the following: • The response demonstrates a nearly complete understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
2	The response achieves the following: • The response demonstrates a partial understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • The response is only partially correct. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
1	The response achieves the following: • The response demonstrates a minimal understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • The response is only minimally correct. • The response shows the incomplete or inaccurate application of a relevant strategy. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of identifying factor pairs of whole numbers and of identifying prime and composite numbers. • The response is incorrect. • The response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Go on to the next page to finish example item 3.

Example Item 3

Exemplar Response

Points Awarded	Sample Response
4	Part A: 8 Part B: Composite Part C: 7 **AND** The possible numbers of buckets for 21 baseballs evenly divided are 1, 3, 7, or 21. Each bucket must have more than one ball, so there cannot be 21 buckets. The greatest remaining possible number of buckets is 7. *Or other valid explanation*.
3	The student correctly answers three of the four parts.
2	The student correctly answers two of the four parts.
1	The student correctly answers one of the four parts.
0	*Response is irrelevant, inappropriate, or not provided.*

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 4 Mathematics EOG test. This includes key terms and important vocabulary words. This section also contains practice questions, explanations of the correct answers, and activities that you can do on your own or with your classmates or family to prepare for the test.

The organization of Mathematics units in this guide is based on Frameworks developed by the Curriculum and Instructional Division of the Georgia Department of Education. These Frameworks can be accessed at https://www.georgiastandards.org/Georgia-Standards/Pages/Math-K-5.aspx.

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

CONTENT DESCRIPTION

- Perform multi-digit multiplication and develop an understanding of dividing to find quotients involving multi-digit dividends
- Develop an understanding of fractions
- Multiply fractions by whole numbers
- Generate and analyze patterns
- Analyze and classify geometric figures based on their properties
- Represent and interpret data
- Understand concepts of angles and measure angles

Unit 1: Whole Numbers, Place Value, and Rounding in Computation

In this unit, you will work with the place value system. You will round, compare, and estimate numbers. You will use word problems with more than one step and write equations with unknown numbers.

KEY TERMS

Algorithm: A set of steps used to solve problems involving more than one step. Algorithms use the four operations to solve word problems by using a letter, such as x, to represent an unknown number. (OA.3)

Estimate: A value that is close enough to the right answer. Solutions to multi-step word problems can be checked to make sure that are reasonable by comparing the solution to the estimate. The estimate is often found by rounding the numbers in the equation before solving. (OA.3)

Place value: The numerical value of a digit in a number based on its location. A digit in the tens place of a number is 10 times the value of the same digit in the ones place. A digit in the hundreds place is 10 times the value of the same digit in the tens place. (NBT.1)

Forms of a number: Numbers can be written in different forms using the place value of each digit. Use the number 183 as an example.

- **Standard form:** The number is written as a group of digits. For example, the standard form is 183.
- **Word form:** The number is written in words. For example, the word form is one hundred eighty-three.
- **Expanded form:** The number is written as the sum of the values of its digits. For example, the expanded form is 100 + 80 + 3. (NBT.2)

Compare: Determine the value of two numbers written in different forms to see which has a greater value.

- **Greater than:** If a number is larger in value, use the symbol >.
- **Less than:** If a number is smaller in value, use the symbol <.
- **Equal to:** If the numbers have the same value, use the symbol =. (NBT.2)

Rounding: A number can be rounded to the nearest number of a certain place value. For example, 295 can be rounded to the nearest hundred to get 300, as the number in the tens place is greater than 5. (NBT.3)

Important Tips

- ✎ Use the place value of each digit when writing numbers from word form. Remember to keep in mind place value when writing numbers. For example, one thousand twenty-four is written as 1,024 with a 1 in the thousands place, 2 in the tens place, and 4 in the ones place.
- ✎ When using rounded numbers in an equation, the answer will be an estimate.
- ✎ Add and subtract whole numbers using place value to regroup as needed. When adding, a place value that has a sum of 10 or greater will need to regroup into the higher place value. When subtracting, find the difference between the first and second number. If a digit in the first number is smaller than the digit in the same place in the second number, regroup from a higher place value into a lower place value.

Sample Items 1–4

Item 1

Selected-Response

The population of Pleasantville is 2,378.

What is the population of the city, rounded to the nearest hundred?

A. 2,000
B. 2,300
C. 2,380
D. 2,400

Item 2

Selected-Response

Subtract.

2,406 – 157

A. 2,249
B. 2,259
C. 2,349
D. 2,351

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Item 3

Drag-and-Drop Technology-Enhanced

Move numbers into the blanks to represent 1,507 in expanded form.

(_____ × _____) + (_____ × _____) + (_____ × _____) + (_____ × _____)

| 0 | 1 | 5 | 7 | 10 | 100 | 1,000 | 10,000 |

➔ Use a mouse, touchpad, or touchscreen to move a number into each blank. Each number may be used 8 times.

Item 4

Extended Constructed-Response

On Monday, workers at a toy factory made 529 teddy bears. On Tuesday, they made 207 teddy bears. On Wednesday, they made 174 teddy bears.

Part A   Rounding to the nearest hundred, about how many total teddy bears did the factory workers make in those three days?

Part B   Explain how you found the answer. Write your answer in the space provided.

Part C   What is the exact number of teddy bears made in those three days? Write your answer in the space provided.

Part D   Explain how you know that your estimate is a reasonable answer. Write your answer in the space provided.

Part A _____

Part B

Go on to the next page to finish item 4.

Item 4. *Continued.*

Part C _____

Part D

_____

_____

_____

_____

_____

_____

_____

_____

Unit 2: Multiplication and Division of Whole Numbers

In this unit, you will use multiplication, division, and word problems with more than one step. You will use the properties of operations. You will work with prime and composite numbers and patterns.

KEY TERMS

Multiplication: The operation 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.

Multiplier: The number that is being multiplied by. For example, in 2 × 3 = 6, the multiplier is 2.

Multiplicand: The number that is getting multiplied. For example, in 2 × 3 = 6, the multiplicand is 3.

Product: The answer of a multiplication problem. For example, in 2 × 3 = 6, the product is 6.

Division: The operation 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, 15 objects divided into 3 groups have 5 objects in each group, or 15 objects divided into groups of 3 will create 5 groups.

Dividend: The number that is divided. For example, in 20 ÷ 4 = 5, the dividend is 20.

Divisor: The number that is divided by. For example, in 20 ÷ 4 = 5, the divisor is 4.

Quotient: The answer to a division problem. For example, in 20 ÷ 4 = 5, the quotient is 5.

Remainder: The amount remaining when division occurs. For example, when 7 cookies are shared among 3 people, each person will get 2 cookies and 1 will be left over. The remainder is 1.

Multiplicative comparison: Comparing the value of one object to the value of another, using phrases such as "3 times as long." (OA.1)

Equation: A grouping of numbers, letters, and operations with an equal sign.

Expression: A grouping of numbers, letters, and operations without an equal sign.

Unknown: A value in an equation or expression that is missing. The unknown value can be represented by a symbol, letter, empty box, or even a question mark. When an unknown value is represented by a letter, for example x, it is called a variable.

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:** Multiplication can be distributed over addition. For example, $2(3 + 4) = 2 × 3 + 2 × 4$. (NBT.5)

Factors: Numbers that multiply together to equal the given number. For example, 4 and 2 are factors of 8; 4 × 2 = 8. (OA.4)

Multiple: The product of the given number and another number. For example, 12 is a multiple of 3 because 3 × 4 = 12. (OA.4)

Prime: A number that can be broken down into factors of only 1 and itself. (OA.4)

Composite: A number that has more factors than 1 and itself. (OA.4)

Patterns: Repeated sequences of numbers or shapes that follow a set of rules, such as "add 5." (OA.5)

Important Tips

- ✎ When listing multiples of a number, include the given number. The smallest multiple of a number is the number itself. For example, 5 is a multiple of 5 using the expression 5 × 1.

- ✎ The number of factors a number has is not related to how small or large the number is. A number with a greater value may not have a large number of factors.

- ✎ A prime number has factors of only one and itself. Two is the smallest prime number. A composite numbers is a number that has factors other than one and itself.

- ✎ Notice that 1 is neither prime nor composite.

- ✎ Solve word problems involving multiplicative comparison by creating a drawing or equation to represent the problem. A letter can be used in an equation for an unknown number. Use multiplication or division to solve for the unknown number.

- ✎ Use place value and properties of operations to multiply and divide whole numbers. Use models such as arrays, area models, and equations to illustrate the problem.

Sample Items 5–8

Item 5

Selected-Response

Multiply.

35 × 43

A.   425
B. 1,325
C. 1,405
D. 1,505

Item 6

Selected-Response

There are 3 times as many red crayons in a bucket as blue crayons. There are 8 blue crayons.

Which equation represents the number of red crayons in the bucket?

A. $16 \div 8 = 3$
B. $8 - 3 = 5$
C. $3 + 8 = 11$
D. $3 \times 8 = 24$

Item 7

Multi-Part Multi-Select Technology-Enhanced

Part A

A factor pair of 93 is 1 and 93.

What is another factor pair of 93?

A. 3 and 9
B. 3 and 31
C. 9 and 10
D. 3 and 90

Part B

Select TWO numbers that are multiples of 8.

A. 8
B. 22
C. 56
D. 68
E. 84

Item 8

Constructed-Response

There are 60 books that need to be shipped to a bookstore. Each shipping box holds 8 books.

How many shipping boxes are needed? Explain how you found your answer. Write your answer in the space provided.

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Unit 3: Fraction Equivalents

In this unit, you will work with fractions, including improper and equivalent fractions and mixed numbers. You will compare fractions and create common denominators and numerators.

KEY TERMS

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

Numerator: The top number in a fraction. For example, in the fraction $\frac{2}{3}$, the 2 is the numerator. (NF.1)

Denominator: The bottom number in a fraction. For example, in the fraction $\frac{2}{3}$, the 3 is the denominator. (NF.1)

Improper fraction: A fraction with a value greater than 1. This means the numerator is greater than the denominator. For example, $\frac{9}{2}$ is an improper fraction. (NF.1)

Mixed number: A number that includes a whole number and a fraction, and it has an improper fraction that it is equal to. For example, $\frac{9}{2}$ is an improper fraction, and $4\frac{1}{2}$ is the equivalent mixed number. (NF.1)

Whole number: Counting numbers are whole numbers. For example, 0, 1, 2, 3, and so are on are all whole numbers. (NF.1)

Equivalent fractions: Fractions that have the same value or represent the same point on the number line. (NF.1) Equivalent fractions are created by multiplying the numerator and denominator by the same number, which is the same as multiplying the fraction by 1. For example, $\frac{(1 \times 4)}{(2 \times 4)} = \frac{4}{8}$, so $\frac{4}{8}$ is equivalent to $\frac{1}{2}$. The fraction now describes a different number of parts in the whole and the parts are a different size than they were, but the value of the fraction remains the same. (NF.1)

Compare: Determine the value of each of two fractions to see which fraction is larger. Fractions can be compared when the whole represented by each fraction is divided into equal-size parts and the wholes are the same size.

Greater than: When the first fraction is larger in value than the second fraction, use the symbol >.

Less than: When the first fraction is smaller in value than the second fraction, use the symbol <.

Equal to: When the fractions have the same value (equivalent fractions), use the symbol =. (NF.2)

Common denominator: Using strategies for creating equivalent fractions, create fractions that have the same denominator. This makes comparing the fractions easier. (NF.2)

Common numerator: Using strategies for creating equivalent fractions, create fractions that have the same numerator. This makes comparing the fractions easier. (NF.2)

Benchmark fraction: Common fraction used to compare other fractions, such as 1 __ 2 . (NF.2)

Important Tips

- ✎ When comparing fractions, use both the numerator and the denominator to find the value of the fraction. The numerator tells the number of parts out of the whole, and the denominator tells how many parts are in the whole.
- ✎ Fractions in a comparison must represent parts of wholes that are the same size. When using models to compare fractions, use models that are the same size and shape.

Sample Items 9–12

Item 9

Selected-Response

Look at the model.
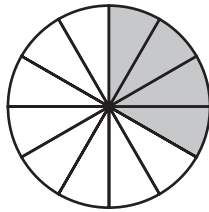
Which fraction is equivalent to the shaded part of this model?

A. $\dfrac{1}{4}$

B. $\dfrac{1}{3}$

C. $\dfrac{1}{2}$

D. $\dfrac{1}{6}$

Item 10
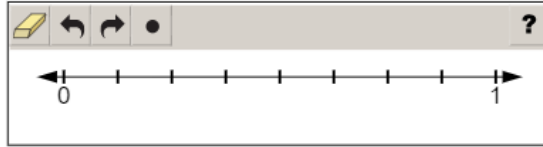
Selected-Response

Look at the expression.

$$\square > \dfrac{1}{2}$$

Which fraction goes in the ☐ to make this expression TRUE?

A. $\dfrac{1}{4}$

B. $\dfrac{2}{3}$

C. $\dfrac{2}{4}$

D. $\dfrac{1}{3}$

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Item 11

Number-Line Technology-Enhanced

Plot TWO points that each represent a fraction with a value between $\frac{2}{8}$ and $\frac{3}{4}$.

➔ Use a mouse, touchpad, or touchscreen to plot points on the number line. At most 2 points can be plotted.

Item 12

Extended Constructed-Response

These models show two equivalent fractions.
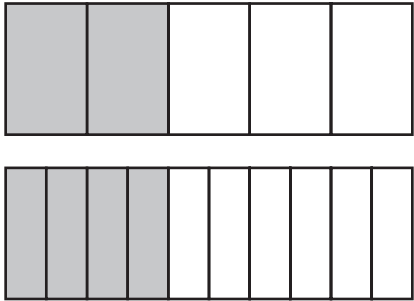
Part A   Write the fraction represented by the first model. Write your answer in the space provided.

Part B   Write the fraction represented by the second model. Write your answer in the space provided.

Part C   Explain why the fractions are equivalent. Write your answer in the space provided.

Part D   Describe how you could model a third fraction that is equivalent to these two. Write your answer in the space provided.

Part A _____
Part B _____

Go on to the next page to finish item 12.

Item 12. *Continued*.

Part C

_____

_____

_____

_____

_____

_____

_____

Part D

_____

_____

_____

_____

_____

_____

_____

Unit 4: Operations with Fractions

In this unit, you will add, subtract, and multiply fractions. You will continue to work with improper fractions and mixed numbers.

KEY TERMS

Proper fraction: A fraction where the value of the numerator is less than the value of the denominator.

Unit fraction: A proper fraction that has a numerator of 1.

Common denominator: When fractions have the same denominator, they can be added or subtracted. (NF.3)

Unlike denominators: Fractions that do not have the same denominator cannot be added or subtracted until the fractions are replaced with equivalent fractions so that they have a common denominator.

Equivalent: Same value. Equivalent fractions have the same value and represent the same point on a number line.

Improper fractions: Fractions that have a numerator that is greater than the denominator. An improper fraction always has a value greater than 1. (NF.3)

Mixed numbers: A whole number and a fraction. Mixed numbers are another way to write an improper fraction, and they always have a value greater than 1. (NF.3)

Important Tips

- ✍ Fractions in an equation must represent parts of wholes that are the same size. When using models to solve the equations, use models that are the same size and shape.

- ✍ Decompose a fraction by separating the given fraction into a sum of smaller fractions. For example, $\frac{3}{5} = \frac{1}{5} + \frac{2}{5}$.

- ✍ A fraction is a multiple of a unit fraction. For example, $\frac{2}{3}$ is $2 \times \frac{1}{3}$. This strategy can be used to multiply a fraction by a whole number.

- ✍ Multiplying a fraction by a whole number is the same as repeatedly adding the fraction. For example, $\frac{1}{4} \times 3 = \frac{1}{4} + \frac{1}{4} + \frac{1}{4}$.

- ✍ Word problems can be represented using an equation or a fraction model.

Sample Items 13–17

Item 13

Selected-Response

Which equation is TRUE?

A. $\dfrac{2}{8} = \dfrac{1}{5} + \dfrac{1}{3}$

B. $\dfrac{3}{8} = \dfrac{1}{3} + \dfrac{1}{3} + \dfrac{1}{3}$

C. $\dfrac{6}{8} = \dfrac{1}{8} + \dfrac{1}{8} + \dfrac{1}{8} + \dfrac{1}{8} + \dfrac{1}{8} + \dfrac{1}{8}$

D. $\dfrac{6}{8} = \dfrac{1}{6} + \dfrac{1}{6} + \dfrac{1}{6} + \dfrac{1}{6} + \dfrac{1}{6} + \dfrac{1}{6} + \dfrac{1}{6} + \dfrac{1}{6}$

Item 14

Selected-Response

Sarita has 3 rolls of ribbon. Sarita cuts off $\dfrac{1}{2}$ yard from each roll.

How much ribbon does she cut off in all?

A. 1 yard

B. $1\dfrac{1}{2}$ yards

C. 3 yards

D. $3\dfrac{1}{2}$ yards

Item 15

Multi-Select Technology-Enhanced

Yolanda has $\dfrac{4}{5}$ of a bag of dog food remaining. She will put the remaining dog food in smaller bags.

Select THREE equations that can represent fractions of the bag of dog food that Yolanda can put in smaller bags.

A. $\dfrac{4}{5} = \dfrac{1}{5} + \dfrac{1}{5} + \dfrac{1}{5} + \dfrac{1}{5}$

B. $\dfrac{4}{5} = \dfrac{2}{3} + \dfrac{2}{2}$

C. $\dfrac{4}{5} = \dfrac{4}{1} + \dfrac{1}{5}$

D. $\dfrac{4}{5} = \dfrac{3}{5} + \dfrac{1}{5}$

E. $\dfrac{4}{5} = \dfrac{2}{5} + \dfrac{1}{5} + \dfrac{1}{5}$

F. $\dfrac{4}{5} = \dfrac{1}{5} + \dfrac{4}{5}$

Item 16

Drag-and-Drop Multi-Part Technology-Enhanced

Part A

Part A Ralph is making a model to show the multiplication problem $4 \times \frac{3}{5}$.

Move the shaded square into the model as many times as needed to show the product of 4 and $\frac{3}{5}$.
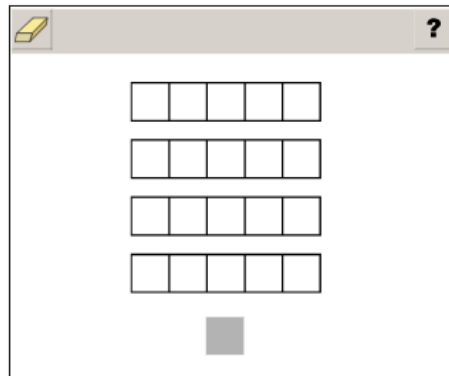
➥ Use a mouse, touchpad, or touchscreen to move the shaded square into model. The shaded square may be used 20 times.

Go on to the next page to finish item 16.

Item 16. *Continued.*

Part B

Part B Susan uses a similar model to find the product of 5 and $\frac{3}{4}$.

What is the value of $5 \times \frac{3}{4}$?

- ⓐ $\frac{15}{20}$

- ⓑ $\frac{15}{4}$

- ⓒ 15

- ⓓ 20

➔ Use a mouse, touchpad, or touchscreen to select a response.

Item 17

Constructed-Response

A dog's bowl is $\frac{4}{5}$ full of water. The dog's owner adds another $\frac{1}{5}$ bowl of water to the dog's bowl.

Part A Explain how you know that the dog's bowl is completely full of water. Write your answer in the space provided.

Part B The dog drinks $\frac{2}{5}$ of the water in the bowl.

What fraction of the bowl of water is left? Write your answer in the space provided.

Part A _____

_____

_____

_____

_____

_____

_____

_____

Part B _____

Unit 5: Fractions and Decimals

In this unit, you will add and subtract fractions. You will compare decimals and work with place value.

KEY TERMS

Decimal: Another way to write a fraction. Both a decimal and a fraction show a value that is between whole numbers. For example, $\frac{6}{10}$ or 0.6 is a value between the whole numbers 0 and 1. (NF.6)

Place value: The value of a digit in a number based on its location related to the decimal point. A digit in the tenths place of a number is 10 times the value of the same digit in the hundredths place. A digit in the tenths place is $\frac{1}{10}$ the value of the same digit in the ones place. (NF.6)

- **Tenths place:** This is the first place to the right of the decimal point. A decimal of 0.1 would have a value equivalent to $\frac{1}{10}$.
- **Hundredths place:** This is the second place to the right of the decimal point. A decimal of 0.01 would have a value equivalent to $\frac{1}{100}$. (NF.6)

Compare: Determine the value of two decimal numbers and determine whether one number has a greater value or whether the numbers have an equal value.

- **Greater than:** When the first number has a greater value than the other number, use the symbol >.
- **Less than:** When the first number has a smaller value than the other number, use the symbol <.
- **Equal to:** When both numbers have the same value, use the symbol =. (NF.7)

Important Tips

- ✎ When comparing decimal numbers, look at the place value of each digit. The location of the digit determines its value.
- ✎ Fraction models and drawings can be used to compare decimals.
- ✎ Decimals can be changed into fractions with a denominator of 10 or 100 and then used to create the model. A decimal such as 0.35 can be written as $\frac{35}{100}$ or $\frac{3}{10} + \frac{5}{100}$.

Sample Items 18–20

Item 18

Selected-Response

Which fraction is equivalent to $\frac{3}{10}$?

A. $\frac{3}{100}$

B. $\frac{6}{100}$

C. $\frac{10}{100}$

D. $\frac{30}{100}$

Item 19

Selected-Response

Which decimal is equivalent to $\frac{43}{100}$?

A. 0.043

B. 0.43

C. 4.3

D. 43.00

Item 20

Constructed-Response

Is 0.54 mile greater than, less than, or equal to 0.45 mile? Explain how you determined your answer. Write your answer in the space provided.

_____

_____

_____

_____

_____

_____

_____

_____

Unit 6: Geometry

In this unit, you will study two-dimensional figures and their properties. You will work with angles, parallel and perpendicular lines, points, lines, line segments, rays, and lines of symmetry.

KEY TERMS

Plane figure: A two-dimensional figure that consists of length and width. Plane figures have properties, some of which are listed here.

- **Angles:**
  - **Acute:** An angle measure less than 90°.
  - **Obtuse:** An angle measure greater than 90°.
  - **Right:** An angle measure equal to 90°; this is noted on geometric figures by a box in a corner that is 90°.
- **Parallel lines:** Two lines that are always an equal distance apart.
- **Perpendicular lines:** Two lines that intersect at a 90° angle.
- **Point:** A location represented by a dot.
- **Line:** A straight line that continues in each direction with no endpoints.
- **Line segment:** Part of a straight line that begins and ends at two specific points.
- **Ray:** A part of a straight line that continues in one direction and has one endpoint.
- **Vertex:** A point where two or more line segments meet. (G.1)

Category: A group of two-dimensional figures that share at least one property. Several categories are defined below. (G.2)

- **Polygon:** A closed plane figure made of three or more line segments, called sides, that have endpoints that intersect to form vertices.
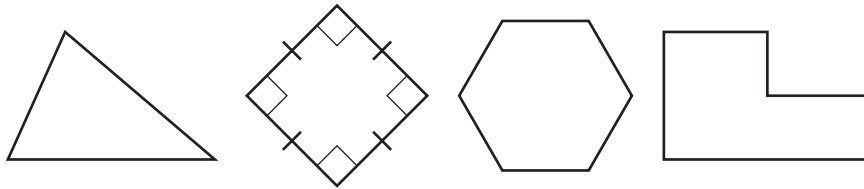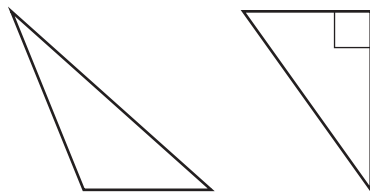
- **Triangle:** A polygon with three sides.
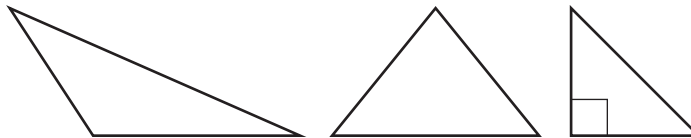
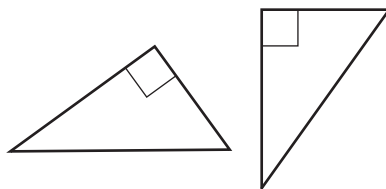- **Equilateral triangle:** A triangle with three sides of equal length.
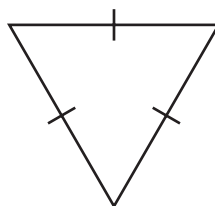
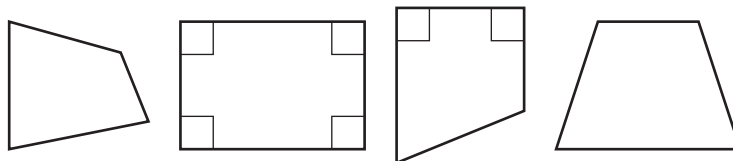- **Isosceles triangle:** A triangle with two sides of equal length.
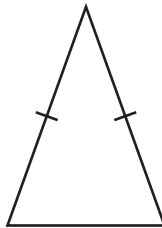
- **Scalene triangle:** A triangle with three sides of different lengths.
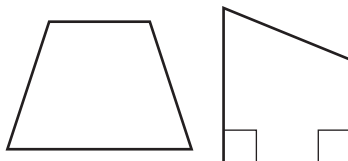
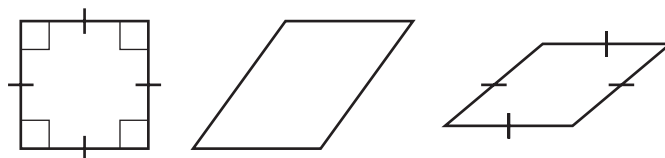- **Right triangle:** A triangle with one right angle.
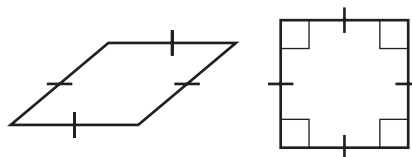
- **Quadrilateral:** A polygon with four sides.

- **Trapezoid:** A quadrilateral with at least one pair of parallel sides.
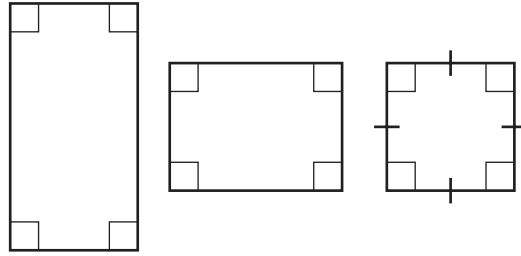
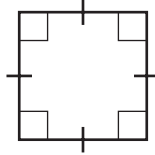- **Parallelogram:** A quadrilateral with two pairs of parallel sides.

- **Rhombus:** A parallelogram with four sides of equal length.

- **Rectangle:** A parallelogram with four right angles.

- **Square:** A rhombus that is also a rectangle with four sides of equal length and four right angles.

Line of symmetry: A line across a figure such that the figure can be folded along the line into matching parts. (G.3)

Important Tips

- ✍ The measure of an angle is not impacted by the length of the lines that make up the angle. When comparing angles, use a protractor to measure the angles or visually compare the degrees of measure.
- ✍ A right angle can be estimated using the corner of a piece of paper or book. These everyday objects are rectangles and therefore have four right angles.
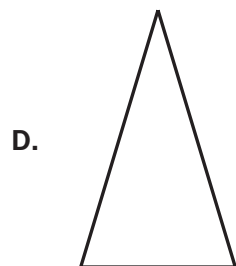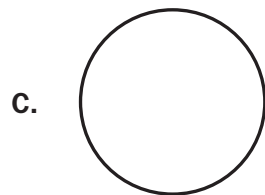
Sample Items 21–24
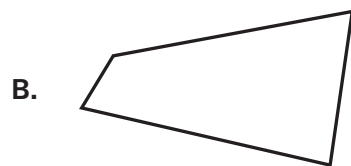
Item 21

Selected-Response

Which type of lines meet at a 90° angle?

A. curved
B. diagonal
C. parallel
D. perpendicular
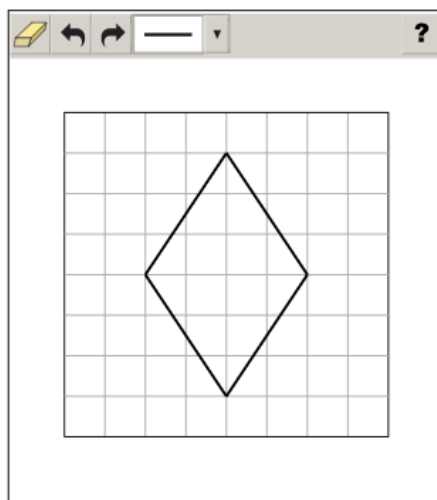
Item 22

Selected-Response

Which figure has exactly one line of symmetry?

A.

B.

C.

D.
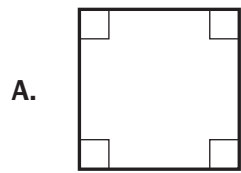
Item 23

Coordinate-Graph Technology-Enhanced

Place line segments on the grid to show ALL the lines of symmetry for this polygon.

➡ Use a mouse, touchpad, or touchscreen to draw line segments on the grid. At most 4 line segments can be placed.

Item 24

Constructed-Response

A rectangle that is not a square is shown.

Part A **What other category could the rectangle be classified as, knowing that opposite sides are parallel? Write your answer in the space provided.**

Part B **What could be changed about the rectangle to make it a square? Write your answer in the space provided.**

Part A	_____
Part B	_____
	_____
	_____
	_____
	_____
	_____
	_____

Unit 7: Measurement

In this unit, you will work with different units of measurement, including time. You will record measurements on line plots and use protractors to measure angles. You will determine the area and perimeter of rectangles.

KEY TERMS

Conversion: Changing between units within the same measurement system. For example, 12 inches is equal to 1 foot, so to convert 3 feet to inches, you would multiply 12 by 3 to get 36 inches. (MD.1)

Units of measurement: The following lists the units used for different types of measurements.

Customary Measurement

- **Liquid volume:** cups, pints, quarts, and gallons
- **Length:** inches, feet, yards, and miles
- **Weight:** ounces, pounds, and tons

Metric Measurement

- **Liquid volume:** milliliters and liters
- **Length:** centimeters, meters, and kilometers
- **Mass:** grams and kilograms

Time: seconds, minutes, and hours (MD.1)

Area: The amount of space inside a two-dimensional shape. The formula for finding the area of a rectangle is *A = length × width*. (MD.3)

Perimeter: The distance around a two-dimensional shape. The formula for finding the perimeter of a rectangle is *P = 2(length + width)*. (MD.3)

Line plot: A way of recording measurements for a group of objects. These measurements can include liquid volume, length, mass, and time. For example, a line is marked with measurements using unit fractions, including $\frac{1}{8}, \frac{1}{4}$, and $\frac{1}{2}$. Marks are placed above the measurements on the line. The line plot is used to answer questions about the measurements shown. (MD.4)

Angles: Two rays that have the same endpoint form an angle. They are measured as part of a circle with the endpoint as the center. The measure of an angle is the part between the two rays. (MD.5) Angles are measured in degrees using a protractor. (MD.6)

Important Tips

- To convert a measurement, such as yards, choose another unit used to measure length within the same measurement system, such as feet or inches.

- Estimate the size of an angle as greater than or less than 90° before measuring with a protractor. If the estimate of the angle is less than 90°, then use the smaller number on the protractor. If the estimate is greater than 90°, then use the larger number on the protractor.

- Use the four operations to solve word problems involving liquid volume, mass, intervals of time, and money within the same units of measure. If the units of measure are not the same, convert larger units into smaller units, such as feet into inches. These word problems may include decimals or fractions.

- An angle can be divided into smaller angles that do not overlap. The measure of non-overlapping parts can be added together to find the measure of the whole angle. You can also find the measure of unknown angles by writing an equation with a letter for the unknown angle measure.

Sample Items 25–29

Item 25

Constructed-Response

Consider the angle and protractor.
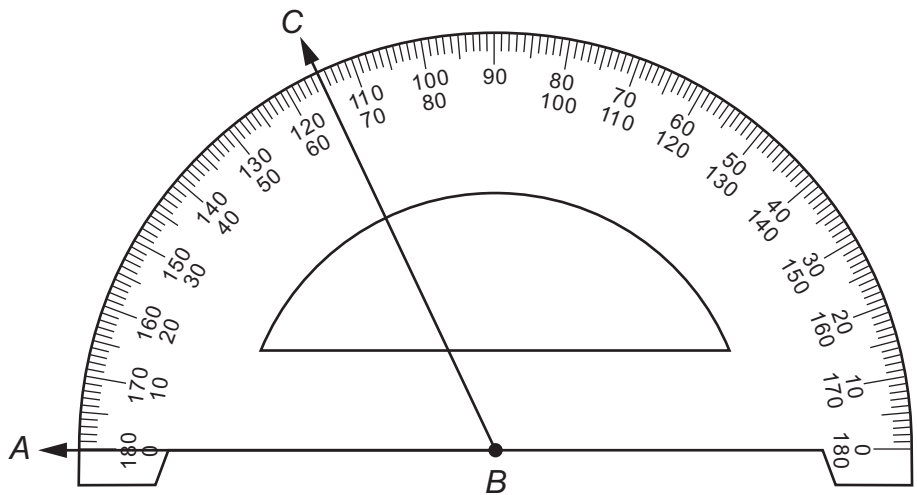
Part A   What is the measure of angle *ABC* to the nearest whole degree? Write your answer in the space provided.

Part B   Describe how you would create a 90° angle by moving ray *BC*. Write your answer in the space provided.

Part A _____

Part B _____

Item 26

Selected-Response

Ms. Johnson planted a rectangular garden. The length of the garden is 8 feet. The width is 7 feet.

What is the perimeter of the garden?

Perimeter = 2(length + width)

A. 15 feet
B. 20 feet
C. 30 feet
D. 56 feet

Item 27

Selected-Response

Look at the angle measures in the right angle.
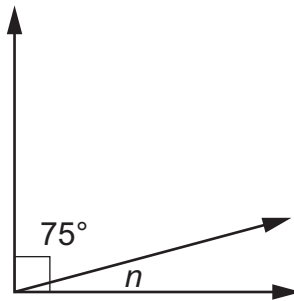
What is the measure of the unknown angle, *n*?

A. 15°
B. 25°
C. 90°
D. 180°

Item 28

Multi-Part Technology-Enhanced

Katie buys a container that has 24 ounces of iced tea mix. This container has enough iced tea mix to make 10 quarts of iced tea.

(1 cup = 8 ounces)
(4 cups = 1 quart)
(1 gallon = 4 quarts)
(2 cups = 1 pint)

Part A

Which quantity is equivalent to 10 quarts?

A. 2 gallons
B. 3 pints
C. 32 ounces
D. 40 cups

Part B

Katie used $1\frac{1}{2}$ tablespoons of iced tea mix for every cup of water. She used 6 cups of water to make some iced tea.

Which statement describes the number of tablespoons of iced tea mix and the number of ounces of water Katie used?

A. Katie used 9 tablespoons of iced tea mix and 14 ounces of water.
B. Katie used 9 tablespoons of iced tea mix and 48 ounces of water.
C. Katie used 12 tablespoons of iced tea mix and 14 ounces of water.
D. Katie used 12 tablespoons of iced tea mix and 48 ounces of water.

Item 29

Bar-Graph Technology-Enhanced
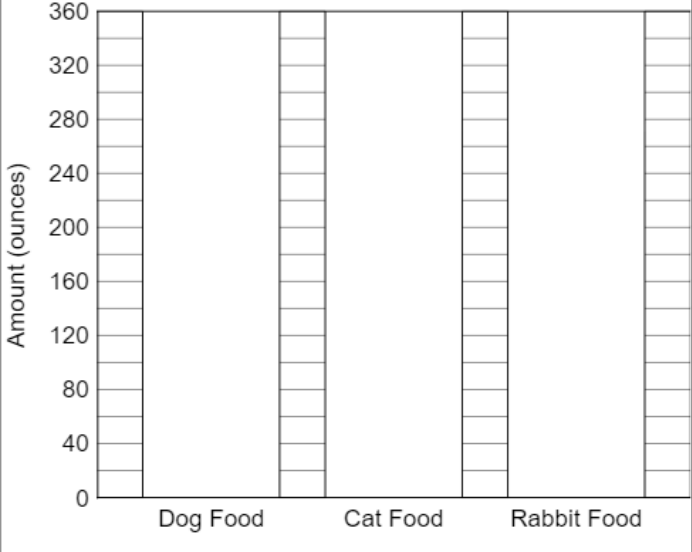
Leo has three storage containers. One container has 20 pounds of dog food, another container has 15 pounds of cat food, and the third container has 5 pounds of rabbit food.

(1 pound = 16 ounces)

Complete the bar graph to display the amounts, in ounces, Leo has in the three containers.

Storage Containers

Amount (ounces): 360, 320, 280, 240, 200, 160, 120, 80, 40, 0

Dog Food   Cat Food   Rabbit Food

➔ Use a mouse, touchpad, or touchscreen to create each bar in the bar graph.

MATHEMATICS ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
1	MGSE4.NBT.3	2	D	The correct answer is choice (D) 2,400. 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 greater than 5, the digit in the hundreds place rounds to the greater hundred. Choice (A) is incorrect because it is the result of rounding to the nearest thousand. Choice (B) is incorrect because it incorrectly shows rounding to the nearest hundred. Choice (C) is incorrect because it shows rounding to the nearest ten.
2	MGSE4.NBT.4	2	A	The correct answer is choice (A) 2,249. This subtraction problem requires regrouping with a zero. Choices (B) and (C) are incorrect because both were regrouped incorrectly. Choice (D) is incorrect because digits were subtracted without regrouping.
3	MGSE4.NBT.2	2	N/A	See scoring rubric and exemplar responses on page 127.
4	MGSE4.OA.3 MGSE4.NBT.3	2	N/A	See scoring rubric and sample response beginning on page 128.
5	MGSE4.NBT.5	2	D	The correct answer is choice (D) 1,505. Using an area model, add 1200 + 200 + 90 + 15. Choice (A) is incorrect because it is the result of multiplying 40 times 30 and getting 120 instead of 1,200. Choice (B) is incorrect because it is the result of multiplying 40 times 5 and getting 20 instead of 200. Choice (C) is incorrect because it is the result of adding tens incorrectly.
6	MGSE4.OA.1	2	D	The correct answer is choice (D) $3 \times 8 = 24$. This word problem asks which equation represents the number of red crayons. This was best shown with the operation of multiplication. Choice (A) is incorrect because the equation is not true. Choices (B) and (C) are incorrect because they use the wrong operations.
7	MGSE4.OA.4	2	Part A: B Part B: A, C	Part A: The correct answer is choice (B) 3 and 31. Choice (A) is incorrect because 3 and 9 are the digits of 93 but 9 is not a factor of 93. Choice (C) is incorrect because neither 9 nor 10 is a factor of 93 but factors of 90. Choice (D) is incorrect because 3 + 90 is 93 but 90 is not a factor of 93. Part B: The correct answers are choices (A) and (C). Choices (B), (D), and (E) are incorrect because there is no whole number that can be multiplied by 8 that would result in these numbers.
8	MGSE4.NBT.6	2	N/A	See scoring rubric and sample response on page 130.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
9	MGSE4.NF.1	1	B	The correct answer is choice (B) $\frac{1}{3}$. The circle is divided into 12 equal parts, and 4 of them are shaded. Four out of 12 is equivalent to $\frac{1}{3}$. Choice (A) is incorrect because it is equivalent to 3 out of 12 parts shaded. Choice (C) is incorrect because it is equivalent to 6 out of 12 parts shaded. Choice (D) is incorrect because it is equivalent to 2 out of 12 parts shaded.
10	MGSE4.NF.2	1	B	The correct answer is choice (B) $\frac{2}{3}$. Rewriting both fractions with a common denominator gives $\frac{2}{3} = \frac{4}{6}$ and $\frac{1}{2} = \frac{3}{6}$. Since $\frac{4}{6} > \frac{3}{6}$ then $\frac{2}{3} > \frac{1}{2}$. Choice (A) is incorrect because $\frac{1}{4} < \frac{1}{2}$. Choice (C) is incorrect because $\frac{2}{4} = \frac{1}{2}$. Choice (D) is incorrect because $\frac{1}{3} < \frac{1}{2}$.
11	MGSE4.NF.2	3	N/A	See scoring rubric and exemplar responses on page 131.
12	MGSE4.NF.1	3	N/A	See scoring rubric and sample response beginning on page 132.
13	MGSE4.NF.3a	2	C	The correct answer is choice (C); $\frac{6}{8}$ can be made by joining 6 unit fractions of the same denominator. Choice (A) is incorrect because the sum of the unit fractions equals $\frac{8}{15}$, not $\frac{2}{8}$. Choice (B) is incorrect because the sum of the unit fractions equals $\frac{3}{3} = 1$, not $\frac{3}{8}$. Choice (D) is incorrect because the sum of the unit fractions equals $\frac{8}{6}$, not $\frac{6}{8}$.
14	MGSE4.NF.4c	2	B	The correct answer is choice (B) $1\frac{1}{2}$ yards. This is the same as $\frac{1}{2} + \frac{1}{2} + \frac{1}{2}$, which equals $\frac{3}{2}$. Two pieces of ribbon that are $\frac{1}{2}$ yard equal 1 yard in total plus an additional $\frac{1}{2}$ yard. Choice (A) is incorrect because it is the total amount cut off only 2 rolls. Choice (C) is incorrect because it is the number of pieces of ribbon. Choice (D) is incorrect because it is the sum of two numbers given in the problem.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
15	MGSE4.NF.3b	2	A/D/E	The correct answers are choices (A), (D), and (E). Each of these recognizes that when adding fractions, the denominator must be the same and the numerators are added together. Choice (B) is incorrect because the denominators are added. Choice (C) is incorrect because it incorrectly creates unit fractions. Choice (F) is incorrect because it results in $\frac{5}{5} = 1$.
16	MGSE4.NF.4	2	N/A	See scoring rubric and exemplar responses on page 134.
17	MGSE4.NF.3	2	N/A	See scoring rubric and sample response on page 135.
18	MGSE4.NF.5	1	D	The correct answer is choice (D) $\frac{30}{100}$. The fraction $\frac{3}{10}$ has the same value as $\frac{30}{100}$ since 3 times 10 equals 30 and 10 times 10 equals 100. Choices (A), (B), and (C) are incorrect because the fractions are not equivalent to $\frac{3}{10}$.
19	MGSE4.NF.6	2	B	The correct answer is choice (B) 0.43. The decimal 0.43 means there are 43 hundredths; this is equivalent to $\frac{43}{100}$. Choice (A) is incorrect because 0.043 means 43 thousandths, or $\frac{43}{1000}$. Choice (C) is incorrect because 4.3 means 4 wholes and 3 tenths, or $4\frac{3}{10}$. Choice (D) is incorrect because 43.00 means 43 wholes.
20	MGSE4.NF.7	2	N/A	See scoring rubric and sample response on page 136.
21	MGSE4.G.1	1	D	The correct answer is choice (D) perpendicular. Perpendicular lines intersect at a right angle, or 90 degrees. Choice (A) is incorrect because curved lines don't meet at an angle; an angle is formed by the intersection of two lines, segments, or rays. Choice (B) is incorrect because not all diagonal lines intersect. Choice (C) is incorrect because parallel lines are lines that will never intersect; they will always be the same distance apart from one another.
22	MGSE4.G.3	2	D	The correct answer is choice (D). An isosceles triangle has exactly one line of symmetry. Choice (A) is incorrect because a square has four lines of symmetry. Choice (B) is incorrect because the figure has no lines of symmetry. Choice (C) is incorrect because a circle has an unlimited number of lines of symmetry.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
23	MGSE4.G.3	2	N/A	See scoring rubric and exemplar responses on page 137.
24	MGSE4.G.2	3	N/A	See scoring rubric and sample response on page 138.
25	MGSE4.MD.6	2	N/A	See scoring rubric and sample response on page 139.
26	MGSE4.MD.3	2	C	The correct answer is choice (C) 30 feet. The perimeter is found by adding all side lengths of a figure. Choice (A) is incorrect because just two sides of the figure were added. Choice (B) is incorrect because it is the result of incorrectly adding 16 and 14 and getting 20. Choice (D) is incorrect because it is the area, the space inside the figure.
27	MGSE4.MD.7	2	A	The correct answer is choice (A) 15°. The two smaller angles together form a right angle, so their sum must be 90°. Choice (B) is incorrect because a right angle does not measure 100°. Choice (C) is incorrect because 90° is the entire measurement of the right angle. Choice (D) is incorrect because it is the measurement of a straight line.
28	MGSE4.MD.1	3	Part A: D Part B: B	Part A: The correct answer is choice (D) 40 cups. Ten quarts is equivalent to 40 cups. Choice (A) is incorrect because 10 quarts is equivalent to 2.5 gallons. Choice (B) is incorrect because 10 quarts is equivalent to 20 pints. Choice (C) is incorrect because 10 quarts is equivalent to 320 ounces. Part B: The correct answer is choice (B). Six cups of water equals 48 ounces of water, and 6 whole tablespoons plus 6 half tablespoons of ice tea mix is 9 tablespoons. Choice (A) is incorrect because it adds 8 and 6 to get 14 ounces. Choice (C) is incorrect because it incorrectly found the number of tablespoons and the number of ounces of water Katie used. Choice (D) is incorrect because it incorrectly found the number of tablespoons Katie used.
29	MGSE4.MD.1	2	N/A	See scoring rubric and exemplar responses on page 140.

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MATHEMATICS EXAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES

Item 3

Scoring Rubric

Points	Description
2	The student correctly represents the number in expanded form.
1	The student correctly represents two or three of the four digits in expanded form.
0	The student does not correctly represent at least two of the digits in expanded form.

Exemplar Response

The correct response is shown below.

The given number is read one thousand five hundred seven. There is a 1 in the thousands place, which is equal to "1" × "1000." There is a 5 in the hundreds place, which is equal to "5" × "100." There is a 0 in the tens place, which is equal to "0" × "10." There is a 7 in the ones place, which is equal to "7" × "1." To represent 1,507 in expanded form, the four multiplication expressions are added together.

Item 4

Scoring Rubric

Points	Rationale
4	The response achieves the following: • The response demonstrates a complete understanding of using estimation to solve a multi-digit addition problem with more than two addends. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
3	The response achieves the following: • The response demonstrates a nearly complete understanding of using estimation to solve a multi-digit addition problem with more than two addends. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
2	The response achieves the following: • The response demonstrates a partial understanding of using estimation to solve a multi-digit addition problem with more than two addends. • The response is only partially correct. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
1	The response achieves the following: • The response demonstrates a minimal understanding of using estimation to solve a multi-digit addition problem with more than two addends. • The response is only minimally correct. • The response shows the incomplete or inaccurate application of a relevant strategy. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of using estimation to solve a multi-digit addition problem with more than two addends. • The response is incorrect. • The response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Go on to the next page to finish item 4.

Item 4

Exemplar Response

Points Awarded	Sample Response
4	Part A: The factory workers made ABOUT 900 teddy bears in three days. **AND** Part B: To calculate the answer, I used rounding. I rounded each number to the nearest hundred and then added the estimates together; 500 and 200 and 200 equal 900. *Or other valid process*. **AND** Part C: The factory workers made EXACTLY 910 teddy bears in three days. **AND** Part D: My estimate was a reasonable answer because my estimate, 900, and the exact answer, 910, are close. *Or other valid process*.
3	The student correctly answers three of the four parts.
2	The student correctly answers two of the four parts.
1	The student correctly answers one of the four parts.
0	*Response is irrelevant, inappropriate, or not provided.*

Note: If a student makes an error in one part that is carried through to subsequent parts, then the student is not penalized again for the same error.

Item 8

Scoring Rubric

Points	Rationale
2	The response achieves the following: • The response demonstrates a complete understanding of division and remainders. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
1	The response achieves the following: • The response demonstrates a partial understanding of division and remainders. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of division and remainders. • The response is incorrect. • The 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	8 boxes are needed. **AND** To calculate, I used division: 60 divided by 8. The answer is 7 with a remainder of 4. That means that 7 boxes will be completely filled with 8 books in each box, and there will be 4 books left over. Since all 60 books need to be shipped, the remaining books will need to go in an eighth box that will not be completely full. *Or other valid explanation*.
1	8 boxes are needed *with no explanation or an incorrect explanation* **OR** *an explanation that contains a computation error but contains the correct process.*
0	*Response is irrelevant, inappropriate, or not provided.*

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Item 11

Scoring Rubric

Points	Description
2	The student correctly plots both points on the number line.
1	The student correctly plots one of the two points on the number line.
0	The student does not correctly plot at least one point on the number line.

Exemplar Response

Three possible correct responses are shown below.
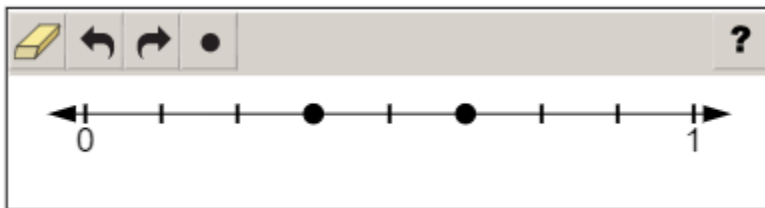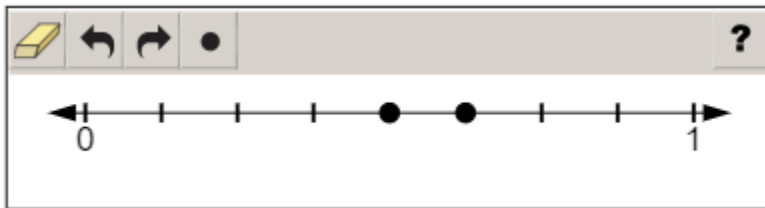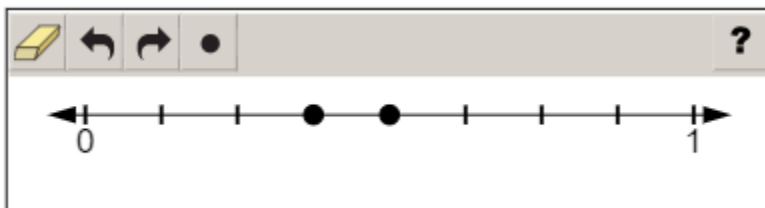
There are 8 marks from 0 to 1, which makes each of the marks equal to $\frac{1}{8}$. The fraction $\frac{3}{4}$ is equivalent to the fraction $\frac{6}{8}$, so both points need to be placed between the second and sixth marks on the number line.

Plotting a point on any two of the third, fourth, or fifth marks is a correct response.

Item 12

Scoring Rubric

Points	Rationale
4	The response achieves the following: • The response demonstrates a complete understanding of equivalent fractions. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
3	The response achieves the following: • The response demonstrates a nearly complete understanding of equivalent fractions. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
2	The response achieves the following: • The response demonstrates a partial understanding of equivalent fractions. • The response is only partially correct. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
1	The response achieves the following: • The response demonstrates a minimal understanding of equivalent fractions. • The response is only minimally correct. • The response shows the incomplete or inaccurate application of a relevant strategy. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of equivalent fractions. • The response is incorrect. • The response shows no application of a strategy. • Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.

Go on to the next page to finish item 12.

Item 12

Exemplar Response

| Points Awarded	Sample Response
4	Part A: $\dfrac{2}{5}$ **AND** Part B: $\dfrac{4}{10}$ **AND** Part C: Both fractions represent the same shaded amount of the rectangle which is the same size. They both represent the same amount out of the same whole. *Or other valid process or explanation*. **AND** Part D: Start with a rectangle that is the same size as the models. Divide the rectangle into 100 equal parts and shade 40 parts. *Or other valid equivalent fraction or description*.
3	The student correctly answers three of the four parts.
2	The student correctly answers two of the four parts.
1	The student correctly answers one of the four parts.
0	*Response is irrelevant, inappropriate, or not provided.*

Item 16

Scoring Rubric

Points	Description
2	The student correctly answers both Part A and Part B.
1	The student correctly answers either Part A OR Part B.
0	The student does not correctly answer either part.

Exemplar Response

Part A

The correct response is shown below.
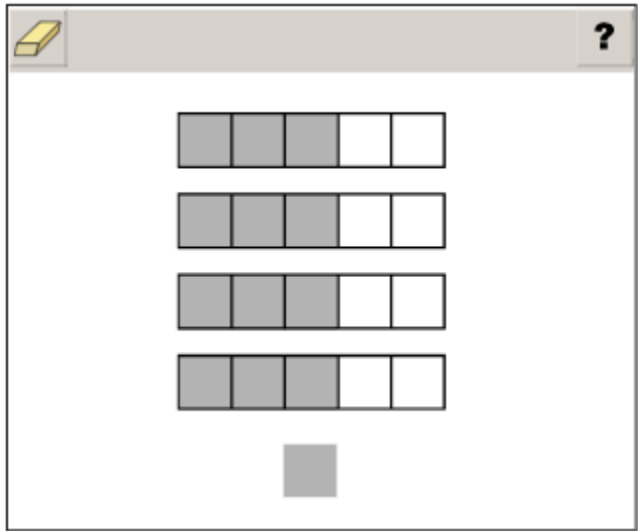
Each group of 5 squares represents $\frac{5}{5}$, or 1 whole. The expression $4 \times \frac{3}{5}$ can be thought of as having 4 groups of $\frac{3}{5}$ parts. There are 4 groups, so shading 3 squares in each of the groups represents the expression $4 \times \frac{3}{5}$.

Part B

The correct answer is choice (B) $\frac{15}{4}$. By using a similar model there would be 5 whole strips each divided into 4 parts. Shading 3 of the 4 parts in each strip would yield $3 \times 5 = 15$ shaded squares. Each square is $\frac{1}{4}$ of a whole, so there would be $\frac{15}{4}$ shaded squares. Choice (A) is incorrect because it represents attempting to use the standard algorithm but multiplying both the numerator and denominator by 5. Choice (C) is incorrect because it represents counting the number of shaded squares in the diagram and not recognizing that each square represents $\frac{1}{4}$. Choice (D) is incorrect because it represents counting all the squares in the model.

Item 17

Scoring Rubric

Points	Rationale
2	The response achieves the following: • The response demonstrates a complete understanding of decomposing a sum of fractions. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
1	The response achieves the following: • The response demonstrates a partial understanding of decomposing a sum of fractions. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of decomposing a sum of fractions. • The response is incorrect. • The 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	Part A: When I add the fractions I get $\frac{5}{5}$, which is 1 or a full bowl. *Or other valid explanation.* **AND** Part B: $\frac{3}{5}$
1	The student correctly answers one of the two parts.
0	*Response is irrelevant, inappropriate, or not provided.*

Item 20

Scoring Rubric

Points	Rationale
2	The response achieves the following: • The response demonstrates a complete understanding of comparing decimals to the hundredths. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
1	The response achieves the following: • The response demonstrates a partial understanding of comparing decimals to the hundredths. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of comparing decimals to the hundredths. • The response is incorrect. • The 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	greater than **AND** I compared the two decimals by using hundredths grids. I shaded in 54 of the 100 squares to show the first decimal. It is made up of 5 tenths and 4 hundredths. I shaded in 45 of the 100 squares to show the second decimal. It is made up of 4 tenths and 5 hundredths. The first decimal is the greater decimal. *Or other valid explanation*
1	greater than
0	*Response is irrelevant, inappropriate, or not provided.*

Item 23

Scoring Rubric

Points	Description
2	The student correctly places two lines of symmetry.
1	The student correctly places one line of symmetry.
0	The student does not correctly place a line of symmetry.

Exemplar Response

The correct response is shown below.
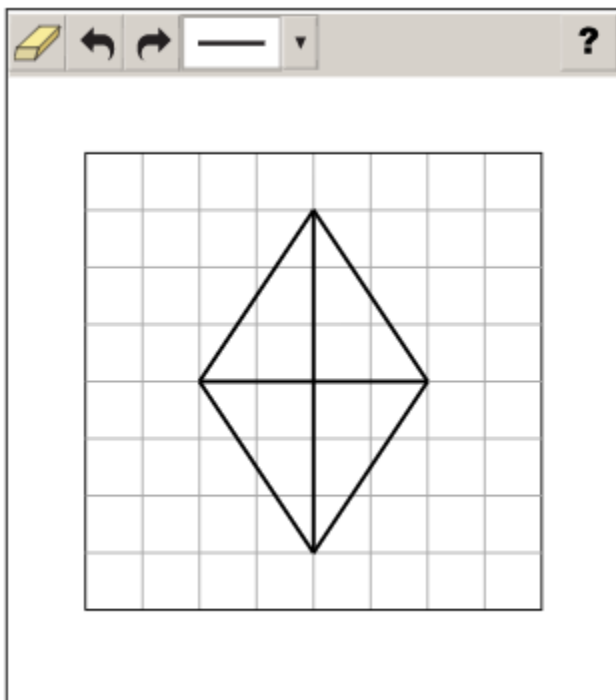
A line of symmetry divides a figure into two equal pieces that would fold onto each other. The shape drawn is a rhombus, which can be divided into two equal pieces with a segment through each pair of opposite angles.

Item 24

Scoring Rubric

Points	Rationale
2	The response achieves the following: • The response demonstrates a complete understanding of classifying a two-dimensional figure by its characteristics. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
1	The response achieves the following: • The response demonstrates a partial understanding of classifying a two-dimensional figure by its characteristics. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of classifying a two-dimensional figure by its characteristics. • The response is incorrect. • The 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	Part A: parallelogram *or other valid response* **AND** Part B: Make all the sides the same length. *Or other valid response*.
1	The student correctly answers one of the two parts.
0	*Response is irrelevant, inappropriate, or not provided.*

Note: If a student makes an error in one part that is carried through to subsequent parts, then the student is not penalized again for the same error.

Item 25

Scoring Rubric

Points	Rationale
2	The response achieves the following: • The response demonstrates a complete understanding of measuring an angle using a protractor. • The response is correct and complete. • The response shows the application of a reasonable and relevant strategy. • Mathematical ideas are expressed coherently in the response, which is clear, complete, logical, and fully developed.
1	The response achieves the following: • The response demonstrates a partial understanding of measuring an angle using a protractor. • The response is mostly correct but contains either a computation error or an unclear or incomplete explanation. • The response shows the application of a relevant strategy, though the strategy may be only partially applied or may remain unexplained. • Mathematical ideas are expressed only partially in the response.
0	The response achieves the following: • The response demonstrates limited to no understanding of measuring an angle using a protractor. • The response is incorrect. • The 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	Part A: 65 **AND** Part B: Move the ray BC to the right 25 degrees to go straight up through the 90 on the protractor. *Or other valid explanation*.
1	The student correctly answers one of the two parts.
0	*Response is irrelevant, inappropriate, or not provided.*

Item 29

Scoring Rubric

Points	Description
2	The student correctly creates the bar graph.
1	The student correctly creates two of the three bars in the bar graph.
0	The student does not correctly create at least two bars in the bar graph.

Exemplar Response

The correct response is shown below.
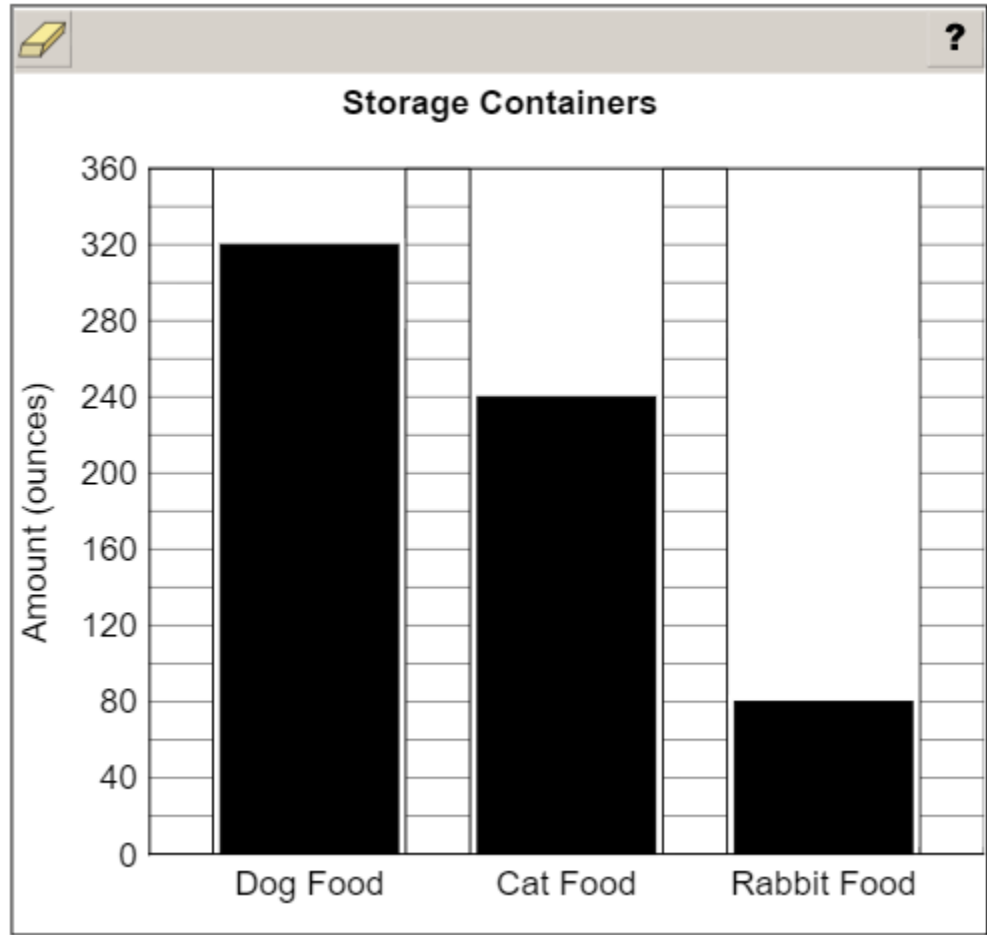
Each line on the vertical axis represents 20 ounces of food. Since there are 16 ounces in 1 pound, Leo has 16 × 20 = 320 ounces of dog food, 16 × 15 = 240 ounces of cat food, and 16 × 5 = 80 ounces of rabbit food. All three of these values can be found labeled on the vertical axis, so the first bar stops at 320, the second bar stops at 240, and the third bar stops at 80.

ACTIVITY

The following activities develop skills in Unit 2: Multiplication and Division of Whole Numbers.

Standards: MGSE4.OA.1, MGSE4.OA.2, MGSE4.OA.3, MGSE4.OA.4, MGSE4.OA.5, MGSE4.NBT.5, MGSE4.NBT.6

Complete the following activities with a partner.

Activity 1: Use place-value blocks to model three-digit whole numbers. Your partner should decompose the number in at least three different ways.

Example:

$$317 = 3 \text{ hundreds} + 1 \text{ ten} + 7 \text{ ones} = 300 + 10 + 7$$
$$= 3 \text{ hundreds} + 17 \text{ ones} = 300 + 17$$
$$= 2 \text{ hundreds} + 11 \text{ tens} + 7 \text{ ones} = 200 + 110 + 7$$

Switch roles and repeat so that each partner models at least five numbers.

Activity 2: Make a place-value chart that extends to millions. Write a whole number with 5 to 7 digits in the chart. Your partner should read the number aloud and write it in word form. Switch roles and repeat so that each partner writes at least five numbers.

Activity 3: Make a multiplication chart for whole numbers 0 to 10. Say a multiplication or division fact problem. Your partner should show how to use the chart to find the product or quotient. Switch roles and repeat so that each partner solves at least five multiplication or division problems. Then work together to find and describe at least five patterns in the chart.

ACTIVITY

The following activities develop skills in Unit 7: Measurement.

Standards: MGSE4.MD.1, MGSE4.MD.2, MGSE4.MD.3, MGSE4.MD.4, MGSE4.MD.5, MGSE4.MD.6, MGSE4.MD.7

Complete the following activities with a partner.

Activity 1: Use tools such as balances, scales, meter sticks, yardsticks, rulers, analog and digital clocks, and containers marked with cups, ounces, and liters to practice measuring objects or liquids in different units.

Activity 2: Make two conversion charts—one with customary units and one with metric units. Each chart should give rules for converting between at least 10 pairs of units in each system. Then choose one rule from each chart. Use each rule to record measurement equivalents in a two-column table. Then list each pair of equivalent measures as a number pair. For example, if you choose the rule for converting feet to inches, your number pairs might be (1, 12), (2, 24), (3, 36), etc.

Activity 3: Write at least five word problems that involve distances, intervals of time, liquid volumes, masses of objects, and money that can be solved using the four operations. At least two of the problems should involve simple fractions or decimals. Trade problems with another person and solve the problems you receive. Use diagrams in your solutions, when possible.

Activity 4: Search newspapers, magazines, or the Internet for articles or websites that mention measurements. For each example, identify what is measured and what unit is used. Explain why you think that unit was chosen. Then create a chart called "Measurements in Real Life" that shows real-world benchmarks for different types of measurements and units.

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

* Subsumed by L.7.3a
† Subsumed by L.9-10.1a
‡ Subsumed by L.11-12.3a

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Grade 4
End-of-Grade