

# Georgia Milestones

Assessment System



## Study/Resource Guide for Students and Parents

### Grade 5



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](http://www.georgiastandards.org).

**Study/Resource Guide**



# Table of Contents

<b>THE GEORGIA MILESTONES ASSESSMENT SYSTEM</b> . . . . .	<b>3</b>
<b>HOW TO USE THIS GUIDE</b> . . . . .	<b>4</b>
<b>PREPARING FOR TAKING TESTS</b> . . . . .	<b>5</b>
<b>OVERVIEW OF THE END-OF-GRADE ASSESSMENT</b> . . . . .	<b>6</b>
TYPES OF ITEMS . . . . .	6
<b>DEPTH OF KNOWLEDGE</b> . . . . .	<b>8</b>
<b>ENGLISH LANGUAGE ARTS (ELA)</b> . . . . .	<b>11</b>
DESCRIPTION OF TEST FORMAT AND ORGANIZATION . . . . .	11
CONTENT . . . . .	11
ITEM TYPES . . . . .	11
ENGLISH LANGUAGE ARTS (ELA) DEPTH OF KNOWLEDGE EXAMPLE ITEMS . . . . .	12
ENGLISH LANGUAGE ARTS (ELA) CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS . . . . .	23
ENGLISH LANGUAGE ARTS (ELA) ADDITIONAL SAMPLE ITEM KEYS . . . . .	56
ENGLISH LANGUAGE ARTS (ELA) SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES . . . . .	59
ENGLISH LANGUAGE ARTS (ELA) WRITING RUBRICS . . . . .	67
<b>MATHEMATICS</b> . . . . .	<b>75</b>
DESCRIPTION OF TEST FORMAT AND ORGANIZATION . . . . .	75
CONTENT . . . . .	75
ITEM TYPES . . . . .	75
MATHEMATICS DEPTH OF KNOWLEDGE EXAMPLE ITEMS . . . . .	76
MATHEMATICS CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS . . . . .	83
MATHEMATICS ADDITIONAL SAMPLE ITEM KEYS . . . . .	114
MATHEMATICS SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES . . . . .	120
<b>SCIENCE</b> . . . . .	<b>135</b>
DESCRIPTION OF TEST FORMAT AND ORGANIZATION . . . . .	135
CONTENT . . . . .	135
ITEM TYPES . . . . .	135
SCIENCE DEPTH OF KNOWLEDGE EXAMPLE ITEMS . . . . .	136
SCIENCE CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS . . . . .	140
SCIENCE ADDITIONAL SAMPLE ITEM KEYS . . . . .	170
<b>SOCIAL STUDIES</b> . . . . .	<b>175</b>
DESCRIPTION OF TEST FORMAT AND ORGANIZATION . . . . .	175
CONTENT . . . . .	175
ITEM TYPES . . . . .	175
SOCIAL STUDIES DEPTH OF KNOWLEDGE EXAMPLE ITEMS . . . . .	176
SOCIAL STUDIES CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS . . . . .	179
SOCIAL STUDIES ADDITIONAL SAMPLE ITEM KEYS . . . . .	203
<b>APPENDIX A: LANGUAGE PROGRESSIVE SKILLS, BY GRADE</b> . . . . .	<b>210</b>
<b>APPENDIX B: CONDITION CODES</b> . . . . .	<b>211</b>

## THE GEORGIA MILESTONES ASSESSMENT SYSTEM



### Dear Student,

This **Georgia Milestones Grade 5 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 5 End-of-Grade (EOG) assessment covers.

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

**Get ready—open this guide—and get started!**

## HOW TO USE THIS GUIDE

### *Let's get started!*

#### \* **Get it together!**

- This guide
- Pen or pencil
- Highlighter
- Paper

#### \* **Gather materials**

- Classroom notebooks
- Textbooks

#### \* **Study space**

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

#### \* **Study time**

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

#### \* **Study buddy**

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

#### \* **Test-taking help**

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



## PREPARING FOR TAKING TESTS

### *Getting ready!*



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

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

### *Try your best!*

# OVERVIEW OF THE END-OF-GRADE ASSESSMENT

## *What is on the End-of-Grade Assessment?*

- \* English Language Arts (ELA)
- \* Mathematics
- \* Science
- \* Social Studies

## TYPES OF ITEMS

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

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

## DEPTH OF KNOWLEDGE

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

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

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

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

### **Level 1 (Recall of Information)**

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

### **Level 2 (Basic Reasoning)**

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

### **Level 3 (Complex Reasoning)**

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

### **Level 4 (Extended Reasoning)**

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



## Depth of Knowledge

### Level 1—Recall of Information

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

Skills Demonstrated	Question Cues
<ul style="list-style-type: none"> <li>• Make observations</li> <li>• Recall information</li> <li>• Recognize formulas, properties, patterns, processes</li> <li>• Know vocabulary, definitions</li> <li>• Know basic concepts</li> <li>• Perform one-step processes</li> <li>• Translate from one representation to another</li> <li>• Identify relationships</li> </ul>	<ul style="list-style-type: none"> <li>• Tell who, what, when, or where</li> <li>• Find</li> <li>• List</li> <li>• Define</li> <li>• Identify; label; name</li> <li>• Choose; select</li> <li>• Compute; estimate</li> <li>• Express as</li> <li>• Read from data displays</li> <li>• Order</li> </ul>

### 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
<ul style="list-style-type: none"> <li>• Apply learned information to abstract and real-life situations</li> <li>• Use methods, concepts, and theories in abstract and real-life situations</li> <li>• Perform multi-step processes</li> <li>• Solve problems using required skills or knowledge (requires more than habitual response)</li> <li>• Make a decision about how to proceed</li> <li>• Identify and organize components of a whole</li> <li>• Extend patterns</li> <li>• Identify/describe cause and effect</li> <li>• Recognize unstated assumptions; make inferences</li> <li>• Interpret facts</li> <li>• Compare or contrast simple concepts/ideas</li> </ul>	<ul style="list-style-type: none"> <li>• Apply</li> <li>• Calculate; solve</li> <li>• Complete</li> <li>• Describe</li> <li>• Explain how; demonstrate</li> <li>• Construct data displays</li> <li>• Construct; draw</li> <li>• Analyze</li> <li>• Extend</li> <li>• Connect</li> <li>• Classify</li> <li>• Arrange</li> <li>• Compare; contrast</li> </ul>

**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
<ul style="list-style-type: none"> <li>• Solve an open-ended problem with more than one correct answer</li> <li>• Create a pattern</li> <li>• Generalize from given facts</li> <li>• Relate knowledge from several sources</li> <li>• Draw conclusions</li> <li>• Make predictions</li> <li>• Translate knowledge into new contexts</li> <li>• Compare and discriminate between ideas</li> <li>• Assess value of methods, concepts, theories, processes, and formulas</li> <li>• Make choices based on a reasoned argument</li> <li>• Verify the value of evidence, information, numbers, and data</li> </ul>	<ul style="list-style-type: none"> <li>• Plan; prepare</li> <li>• Predict</li> <li>• Create; design</li> <li>• Ask “what if?” questions</li> <li>• Generalize</li> <li>• Justify; explain why; support; convince</li> <li>• Assess</li> <li>• Rank; grade</li> <li>• Test; judge</li> <li>• Recommend</li> <li>• Select</li> <li>• Conclude</li> </ul>

**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
<ul style="list-style-type: none"> <li>• Analyze and synthesize information from multiple sources</li> <li>• Examine and explain alternative perspectives across a variety of sources</li> <li>• Describe and illustrate how common themes are found across texts from different cultures</li> <li>• Apply mathematical models to illuminate a problem or situation</li> <li>• Design a mathematical model to inform and solve a practical or abstract situation</li> <li>• Combine and synthesize ideas into new concepts</li> </ul>	<ul style="list-style-type: none"> <li>• Design</li> <li>• Connect</li> <li>• Synthesize</li> <li>• Apply concepts</li> <li>• Critique</li> <li>• Analyze</li> <li>• Create</li> <li>• Prove</li> </ul>

---

## ENGLISH LANGUAGE ARTS (ELA)

### DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 5 English Language Arts (ELA) EOG assessment has a total of 60 items.

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

The test will be given in three sections.

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

### CONTENT

The Grade 5 English Language Arts (ELA) assessment will measure the Grade 5 standards that are described at [www.georgiastandards.org](http://www.georgiastandards.org).

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

- Reading and Vocabulary
- Writing and Language

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

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

Students will also write extended constructed responses that use narrative techniques such as completing a story, writing a new beginning, or adding dialogue. (Item 5 on page 29 gives an example of a prompt that requires a narrative response.)

### ITEM TYPES

The English Language Arts (ELA) portion of the Grade 5 EOG assessment consists of selected-response (multiple-choice), technology-enhanced (multiple-select or two-part questions), constructed-response, extended constructed-response, and extended writing-response items.

---

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

## ENGLISH LANGUAGE ARTS (ELA) DEPTH OF KNOWLEDGE EXAMPLE ITEMS

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

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

### Example Item 1

#### Selected-Response

**DOK Level 1:** This is a DOK level 1 item because it requires the student to recall how to indicate the title of a book.

**English Language Arts (ELA) Grade 5 Content Domain II:** Writing and Language

**Standard:** ELAGSE5L2d. Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing.

d. Use underlining, quotation marks, or italics to indicate titles of works.

**Which sentence shows the correct way to write the title of a book?**

- A. During the summer I read a great novel, Because of Winn-Dixie.
- B. During the summer I read a great novel, BECAUSE OF WINN-DIXIE.
- C. During the summer I read a great novel, Because of Winn-Dixie.
- D. During the summer I read a great novel, "Because of Winn-Dixie."

**Correct Answer:** C

**Explanation of Correct Answer:** The correct answer is choice (C) During the summer I read a great novel, Because of Winn-Dixie. Underlining or italics are appropriate for book titles. Choice (A) does not show the reader that Because of Winn-Dixie is a title. Choice (B) uses all caps, which is not correct for a book title. Choice (D) uses a format that would be appropriate for a short story but not for a novel.

Read the article “Making Hockey Safer” and answer example items 2 and 3.

## Making Hockey Safer

Hockey is a popular sport in North America. Players skate across a sheet of ice. They use special sticks to pass the puck, a small disc of hard rubber. Then the players try to score by shooting the puck into the opposing goal. The game moves fast, so it can be dangerous without the right gear for protection. Fortunately, protective equipment has improved over the years.

### History

When the National Hockey League began in 1917, players wore minimal gear. Helmets were not required. Goaltenders did not wear masks. This allowed players to see everything on the ice. However, it also increased the risk of getting hurt. Surprisingly, players were not forced to wear helmets until 1979. This was only required of new players, though. Men who had signed with the league before 1979 could choose for themselves. The last player to skate without a helmet retired in 1997.

### Present

Today, the league is clearer on player safety. All new players in the National Hockey League have to wear a partial visor on their helmets. A visor is a clear shield that protects the eyes. The rule applies to new players and is a response to eye injuries over the years. Men who have already been in the league do not have to follow the rule. When asked why they didn't want the added protection, some players claimed that wearing the gear makes it hard for them to see the puck clearly. Does this new rule mean that audiences will never see a player without a helmet shoot the puck? Not exactly. Another rule allows a player to continue skating if his helmet falls off. But, once the player leaves the ice, he cannot return without a helmet. Goalies, however, have a different rule. If they lose their helmets, play stops immediately.

### The Future

Each year, experts try to make hockey safer. Some of their attempts are successful, while others are not. Clearly, the league and the players need to work together to make the game safer. The debate continues over how much protection is enough.

## Example Item 2

### Selected-Response

**DOK Level 2:** This is a DOK level 2 item because the correct response is based directly on details and evidence from the text.

**English Language Arts (ELA) Grade 5 Content Domain I:** Reading and Vocabulary

**Genre:** Informational/Explanatory

**Standard:** ELAGSE5RI1. Quote accurately from a text when explaining what the text says explicitly and when drawing inferences from the text.

**Which sentence from the article BEST supports the idea that the league now has a stronger focus on safety?**

- A. The game moves fast, so it can be dangerous without the right gear for protection.
- B. When the National Hockey League began in 1917, players wore minimal gear.
- C. The rule applies to new players and is a response to eye injuries over the years.
- D. Another rule allows a player to continue skating if his helmet falls off.

**Correct Answer:** C

**Explanation of Correct Answer:** The correct answer is choice (C) The rule applies to new players and is a response to eye injuries over the years. The goal of the rule the sentence refers to is to protect players from injury. Choice (A) is incorrect. This is a reason for the new rule. Choice (B) is incorrect. This sentence tells only how much gear players wore at the time professional hockey began. Choice (D) is incorrect. This is an exception to the safety rule.



### Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives sufficient evidence of the ability to summarize a text and analyze its details</li> <li>• Includes specific examples/details that make clear reference to the text</li> <li>• Adequately explains key details and provides an explanation of their development with clearly relevant information based on the text</li> </ul>
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives limited evidence of the ability to summarize a text and analyze its details</li> <li>• Includes vague/limited examples/details that make reference to the text</li> <li>• Explains the key details or gives an explanation of their development with vague/limited information based on the text</li> </ul>
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives no evidence of the ability to summarize a text and analyze its details</li> </ul>

### Exemplar Response

Points Awarded	Sample Response
2	<p>The National Hockey League has improved player safety and continues to improve safety where possible. When the league began, players were not required to wear helmets. That changed in 1979 when new players were required to wear helmets. Now, new players must wear helmets that have protective visors. Eye injuries caused a need for this rule change. People in the league continue to discuss how much protection to use.</p>
1	<p>The National Hockey League added a rule making players wear helmets with shields to protect their eyes. A shield is a clear covering to protect their eyes and make it safe to play hockey.</p>
0	<p>Players didn't have to wear helmets to play hockey until recently.</p>



## Example Item 4

### Extended Writing-Response

**DOK Level 4:** This is a DOK level 4 item because the student must plan and write an essay and evaluate information from two passages in order to form an opinion.

**English Language Arts (ELA) Grade 5 Content Domain II:** Writing and Language

**Genre:** Informational/Opinion

**Standard:** ELAGSE5W1. Write opinion pieces on topics or texts, supporting a point of view with reasons and information.

**In this section, you will read about the debate over wind energy. What are the benefits and dangers of using this technology? In your own words, write an opinion essay supporting either side of the debate. Argue for or against the further development of wind energy.**

**Before you begin planning and writing, read the two passages:**

1. The Wind Energy Trap
2. Winning with Wind

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

### The Wind Energy Trap

Wind power lets people capture and use wind for energy. The structures that capture wind are called wind turbines. They are tall structures with blades similar to propellers on aircrafts. The blades turn in the wind to generate electricity. Supporters applaud wind for its environmental friendliness, but that is not the whole story. Wind farms, groups of turbines, may not emit air pollution or destroy habitats, but they do impact nature and humans.

First, the blades create noise pollution. When turning, the heavy blades produce significant noise. Some blame this noise for confusing birds and causing them to fly toward the noise and perish. Some humans living near wind farms have complained about this sound too. Farms that are too close may have to deal with constant noise. It is easy to support wind farms when you don't have to live next to one.

Wind energy is unreliable. It is plentiful when it is windy outside, but what happens during calm days? You can't store wind energy like you can solar energy. You can't allow it to build up for weeks to make up for calm days. There are some battery-powered storage options, but these are not used everywhere.

Energy from wind is also inconvenient. Windy conditions don't always match up with the need for electricity. For example, winds might increase at night when the demand for electricity is less. When people are sleeping, they don't need as much power.

Wind farms are more likely to be located in rural areas, away from large groups of people. But these large populations are the ones who need the extra energy. The only way to get that energy to the city is to build transmission lines, which are cables that let electricity move from one place to another. This is very expensive and time-consuming. Spending money to transmit or send wind power erases any savings wind power may have created.

Wind farms also require a large amount of space. You can't just put a wind farm anywhere. For instance, a hilly area might have trouble catching wind, as the hills break up the airflow. Some farmers don't want wind farms taking up valuable acres of land. Others do not like the look of wind farms. To please both groups, wind farms would need to be moved to areas with no people. There again, the cost of installing lines to send the power to a city would not make sense.

While wind energy may have some benefits, the costs are too big to ignore. People do not want the noise pollution. Birds fly into the tall structures. The energy is not always available when needed. Perhaps most importantly, few people want wind farms on their land. It is clear that wind is not the answer to our energy needs.

## Winning with Wind

It's very easy to take electricity for granted. We simply flip a switch and our lights turn on. Plug in a toaster, and bread cooks to a crisp. Both of these simple but important things are possible because of energy. One of the most promising types of energy comes from wind. It is plentiful, pollution-free, and cheap.

Wind energy is a type of solar energy. As long as the sun exists, wind will exist. It will never run out. Other resources like natural gas and oil will run out some day. No matter how much wind power is used, some amount of its energy will be available tomorrow.

So far, there is no energy source completely free from consequences. However, wind energy has the least impact on the environment by far. There is no digging, mining, or injecting chemicals into the ground. No gases are released into the air.

Critics claim that wind farms threaten birds and other wildlife. However, wind energy is far less threatening to these animals than other buildings and towers.

Additionally, thanks to wind power's lack of pollution, wildlife actually benefits from this energy. Other energy sources pollute the air, water, or soil. Wind energy is completely clean, ensuring no negative effects on nearby birds and animals.

The cost of this energy declines yearly. Start-up costs may exceed those of other energy sources, but prices drop sharply after the initial expense. In the short term, people may think it is expensive. Once it is set up, though, wind energy is affordable. Wind power requires no fuel and limited costs for management. Other types of energy require constant management. Coal, for instance, requires mining. It is very dangerous, expensive, and can have long-term effects on the health of the workers. With wind energy, wind does the work. It turns the blades to harness the energy.

Wind energy is produced in the United States. Any energy this country creates and keeps is less energy that it has to buy from other countries. It allows the United States to rely more on itself for energy. That saves money.

When you study each energy source and weigh the pros and cons, the clear winner is wind. It is an available resource. It can be harnessed easily. It keeps energy costs low and does not pollute Earth.

Now that you have read “The Wind Energy Trap” and “Winning with Wind,” create a plan for and write your opinion essay.

### Writing Task

Think about both sides of the discussion as presented in the passages, and then write an **opinion essay** supporting either side of the debate about the use of wind energy. Explain your opinion, and give reasons to support it.

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

**Be sure to:**

- Introduce your opinion.
- Support your opinion with reasons and details from the passages.
- Give your reasons and details in a clear order.
- Develop your ideas clearly and use your own words, except when quoting directly from the passages.
- Identify the passages by title or number when using details or facts directly from the passages.
- Use linking words, 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.



**The following are examples of a seven-point response. See the seven-point, two-trait rubric for a text-based opinion response on pages 72 and 73 to see why these examples would earn the maximum number of points.**

**Examples of a Seven-Point Response:**

*Wind energy is good in many ways. It is cheap and can be found everywhere. It also does not hurt animals and nature. People should support using wind energy.*

*Wind is a free resource. In “Winning with Wind,” the author states, “No matter how much wind power is used, some amount of its energy will be available tomorrow.” It will never completely run out. Oil, natural gas, and coal will all run out, but wind will always be here.*

*The low price of wind energy is also helpful. After start-up costs, it is very cheap to catch. “Wind power requires no fuel and limited costs for management,” according to the second article. It also saves money because the more wind energy the United States uses, the less energy it has to buy from other countries.*

*The first author does make a good point that “It is easy to support wind farms when you don’t have to live next to one.” It is easy for people in cities to push for wind farms, because they don’t have to live by them. For those people who live with the noise, wind energy isn’t so good. Wind farms should be moved farther away from people’s homes. It will cost more to build transmission lines, but it is worth the cost.*

*Wind energy should be a benefit for everyone. By making this change and paying the extra money, everyone can be safe from the few downsides.*

OR

*Things that seem too good to be true often are. Wind energy sounds like a good solution to bring cheap energy to American homes, but there is more to the issue.*

*First, people can suffer with health issues because of farms. Although those in favor of wind farms say that wind farms don’t cause pollution, they cannot deny that the farms do fill the air with noise. The constant loud noise is more than annoying. It is harmful. Animals are also at risk. Birds, for instance, fly into wind turbines and die. In “Winning with Wind,” the author claims that “. . .wind energy is far less threatening to these animals than other buildings and towers.” That does not mean that it is okay to put animals at risk. People and animals should not have to deal with these problems.*

*People cannot rely on wind energy. One day it could be very windy and then calm the next. For it to be reliable, it would have to be windy every day. Solar energy is more reliable; it is available more often than wind and can be stored very easily for later use.*

*Another problem with wind energy is that people don’t agree about where to build wind farms. People don’t want them on their land. The noise and the sight of them bother people. Moving wind farms to the middle of nowhere would work if it weren’t so costly. We would have to build transmission lines, and that would cost too much.*

*Wind energy may be a better solution than coal and oil, but it is far from perfect. Before Americans can rely on wind, more research needs to be done. Experts need to find ways to make it safer.*

---

## 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 5 English Language Arts EOG assessment. This includes main ideas and important vocabulary words. This section also contains practice questions, with an explanation of the correct answers, and activities that you can do on your own or with your classmates or family to prepare for the test.

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

### Unit 1: Reading Literary Text

#### READING PASSAGES: LITERARY TEXT

##### CONTENT DESCRIPTION

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

##### Key Ideas and Details

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

##### Structure of the Text

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

##### Understanding What You Read

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

## KEY TERMS

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

**Character:** A person or thing that plays a part in the events of a story. (RL3)

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

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

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

**Inference:** To infer means to come to a reasonable conclusion based on evidence found in the text. (RL1)

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

**Theme:** The theme of a literary text is its lesson or message. For example, if a story is about a student who gets made fun of and has no one to play with until another student decides to befriend him or her, the theme may be bullying. (RL2)

**Compare vs. contrast:** Though similar, comparing is analyzing two things such as characters or stories in relation to each other, while contrasting is specifically analyzing the *differences* between two things such as two different characters or stories. (RL3)

**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.

Examples of figurative language are similes and metaphors. **Similes** make a comparison using a linking word such as *like*, *as*, or *than*. (Her shirt was as green as the grass.) A **metaphor** makes a comparison without a linking word; instead of one thing being *like* another, one thing *is* another. If someone describes recess by saying “It was a zoo,” he or she is using a metaphor. Recess was chaotic with lots of different people running around; it was not literally a zoo. (RL4)

**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 the story. (RL6)

**Genre:** A **genre** is a category of composition. Each genre has a particular style, form, and content. (RL9)

### Important Tips

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



**Sample Items 1–5**

Read the story and answer questions 1 through 5.

**Doctor Dolittle**  
**By Hugh Lofting**

ONCE upon a time, many years ago when our grandfathers were little children—there was a doctor; and his name was Dolittle—John Dolittle, M.D. “M.D.” means that he was a proper doctor and knew a whole lot.

He lived in a little town called, Puddleby-on-the-Marsh. All the folks, young and old, knew him well by sight. And whenever he walked down the street in his high hat everyone would say, “There goes the Doctor!—He’s a clever man.” And the dogs and the children would all run up and follow behind him; and even the crows that lived in the church tower would caw and nod their heads.

The house he lived in, on the edge of the town, was quite small; but his garden was very large and had a wide lawn and stone seats and weeping-willows hanging over. His sister, Sarah Dolittle, was housekeeper for him; but the Doctor looked after the garden himself.

He was very fond of animals and kept many kinds of pets. Besides the goldfish in the pond at the bottom of his garden, he had rabbits in the pantry, white mice in his piano, a squirrel in the linen closet and a hedgehog in the cellar. He had a cow with a calf too, and an old lame horse—twenty-five years of age—and chickens, and pigeons, and two lambs, and many other animals. But his favorite pets were Dab-Dab the duck, Jip the dog, Gub-Gub the baby pig, Polynesia the parrot, and the owl Too-Too.

His sister used to grumble about all these animals and said they made the house untidy. And one day when an old lady with rheumatism came to see the Doctor, she sat on the hedgehog who was sleeping on the sofa and never came to see him anymore, but drove every Saturday all the way to Oxenthorpe, another town ten miles off, to see a different doctor.

Then his sister, Sarah Dolittle, came to him and said, “John, how can you expect sick people to come and see you when you keep all these animals in the house? It’s a fine doctor who would have his parlor full of hedgehogs and mice! That’s the fourth personage these animals have driven away. Squire Jenkins and the Parson say they wouldn’t come near your house again—no matter how sick they are. We are getting poorer every day. If you go on like this, none of the best people will have you for a doctor.”

“But I like the animals better than the ‘best people,’” said the Doctor.

“You are ridiculous,” said his sister, and walked out of the room.

So, as time went on, the Doctor got more and more animals; and the people who came to see him got less and less. Till at last he had no one left—except the Cat’s-meat-Man, who didn’t mind any kind of animals. But the Cat’s-meat Man wasn’t very rich and he only got sick once a year—at Christmas-time, when he used to give the Doctor sixpence for a bottle of medicine.

Sixpence a year wasn’t enough to live on—even in those days, long ago; and if the Doctor hadn’t had some money saved up in his money-box, no one knows what would have happened.

And he kept on getting still more pets; and of course it cost a lot to feed them. And the money he had saved up grew littler and littler.

Then he sold his piano, and let the mice live in a bureau-drawer. But the money he got for that too began to go, so he sold the brown suit he wore on Sundays and went on becoming poorer and poorer.

And now, when he walked down the street in his high hat, people would say to one another, "There goes John Dolittle, M.D.! There was a time when he was the best known doctor in the West Country—Look at him now—He hasn't any money and his stockings are full of holes!"

But the dogs and the cats and the children still ran up and followed him through the town—the same as they had done when he was rich.

## Item 1

### Selected-Response

**Based on the information in paragraphs 6 and 7, choose the sentence that BEST describes Dr. Dolittle.**

- A. He does not like the people who live in his small town.
- B. He feels more appreciated by animals than patients.
- C. He is happier being around animals than people.
- D. He resents his sister for not taking his side.

**Item 2****Selected-Response**

**How do these sentences support a main idea of the story?**

Then he sold his piano, and let the mice live in a bureau-drawer. But the money he got for that too began to go, so he sold the brown suit he wore on Sundays and went on becoming poorer and poorer.

- A. They teach that even the rich can become poor.
- B. They teach how to be resourceful when times are tough.
- C. They show that the Doctor's priority is to care for his animals.
- D. They show why the Doctor now regrets the decisions he made.

**Item 3****Multi-Part Technology-Enhanced**

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

**Part A**

**Which word BEST describes how Sarah Dolittle feels about her brother?**

- A. proud
- B. annoyed
- C. confident
- D. disappointed

**Part B**

**Which sentence from the passage BEST supports the answer in part A?**

- A. The house he lived in, on the edge of the town, was quite small; but his garden was very large and had a wide lawn and stone seats and weeping-willows hanging over.
- B. His sister, Sarah Dolittle, was housekeeper for him; but the Doctor looked after the garden himself.
- C. His sister used to grumble about all these animals and said they made the house untidy.
- D. And the money he had saved up grew littler and littler.



**Item 5**

**Extended Constructed-Response**

**Rewrite the story from Sarah’s point of view.**

**Be sure to include only the portions of the story that Sarah witnesses. Include details that support her viewpoint.**

A large rectangular box containing 25 horizontal lines for writing a response.



---

## Unit 2: Reading Informational Text

### READING PASSAGES: INFORMATIONAL TEXT

#### CONTENT DESCRIPTION

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

#### Key Ideas and Details

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

#### Structure

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

#### Understanding the Text

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

## KEY TERMS

**Informational texts:** Passages that explain or inform. (RI)

**Controlling ideas:** What the text is mainly about. These are also called the central or main ideas. (RI2)

**Details:** The facts and ideas that support the central idea. (RI2)

**Evidence:** Something that proves or demonstrates the truth of something else. Informational texts may contain facts and reasons to help prove a point. (RI8)

**Structure:** The way a text is organized—how information and ideas are built upon each other. (RI5)

**Relationships:** Ways in which two or more things or people are connected. When reading for information, it is important to examine the way individuals, events, ideas, and concepts interact. (RI3)

**Summary:** A summary is an overview of a text that captures the main points but does not give all of the details. (RI2)

**Author's purpose:** The author has a specific reason or purpose for writing the text. Often the author's purpose is not directly stated in the text, and readers have to figure out the reason for the text. (RI3)

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

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

**Cause and effect:** Events and their outcomes. A text may be organized by problems and solutions, or actions and reactions. These are all referred to as cause and effect. (RI5)

### Important Tips

- ✍ Try to read the questions about an informational text before you read the text so that you know what to look out for.
- ✍ Cite strong evidence from a text to support analysis of what the text says explicitly and what can be inferred. Determine where the text leaves matters uncertain.
- ✍ Locate support for important ideas and concepts within the text to answer *what* you know and *how* you know it.



**Sample Items 6–9**

Read the article and answer questions 6 through 9.

**Are You Ready for a Pet?**

There are many factors to consider when adding a pet to your family. First, you need to be sure that you are able to care for the animal for life. Many people think they want a pet, but they don't realize the work it takes. Puppies, for instance, need lots of attention. They need activities to burn off extra energy. They also need training.

It is not fair to bring an animal into your home only to ignore it or fail to take care of it. Like humans, animals require not only food and shelter, but also love and attention. Owners will also need to pay for various expenses. Pets need regular visits to their doctors. They need special food, the cost of which ranges from reasonable to pricy. Collars and leashes are important too. Some pets need training. Make sure that your budget can stretch to meet the needs of a pet.

When you are confident that you want a pet and are able to care for it forever, you must choose an animal whose needs work with your lifestyle. For instance, someone who is away from home all day and unable to let a dog outside might want to consider a cat, turtle, or bird. Similarly, if you don't have time to walk your pet, opt for a smaller breed of dog. Often, they do not require as much activity as large dogs. Bored dogs develop undesirable habits like chewing shoes and destroying furniture.

Pets are not the only ones who benefit from living with humans. Research shows that just interacting with their pets can make people happier and healthier. Petting a dog provides unexpected benefits. For example, it can improve a person's ability to resist disease. It can also lower high blood pressure. There are even some chemical benefits, including lowered stress. Of course, pets also tend to make their owners feel happier.

Consider adopting from an animal shelter. So many animals have been abandoned and neglected and need a forever home. Many of these pets are turned over to shelters because their families can no longer afford them. Some are left behind when their families move to housing that does not allow pets. Some families simply don't want the responsibility of a pet anymore.

Animal shelters have pets of all ages and needs. This means there is an ideal animal for every home. If you don't have time to train a puppy, you might prefer an adult or senior dog. Some breeds have excess energy and need to run. Others prefer to sit in your lap and relax.

There are several factors to consider before adding a pet to your family. Remember that pets need as much love and care as any other family member. Be sure you are able to provide these needs before inviting an animal into your home.

### Item 6

#### Selected-Response

Which sentence **BEST** states a main idea of the article?

- A. People should be aware of their needs and limits before adding a pet to their families.
- B. Busy families should consider cats or other animals that do not need much care.
- C. Animal shelters provide the best variety of animals to choose from.
- D. Pets are a big responsibility but also a great joy.

### Item 7

#### Selected-Response

Which word **BEST** expresses the meaning of *various* in the sentence?

Owners will also need to pay for various expenses.

- A. large
- B. many
- C. required
- D. unplanned

**Item 8**

**Constructed-Response**

**How does the author support the idea that there are many things to consider before buying a pet?**

**Be sure to include details from the text that clearly show how the author develops this idea. Write your answer on the lines provided.**

A large rectangular box containing 20 horizontal lines for writing an answer.



---

## Unit 3: Writing Opinion Texts

### CONTENT DESCRIPTION

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

#### Purpose

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

#### Editing Your Writing

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

#### Scoring Rubrics

- Scoring rubrics can be found beginning on page 67. You may find it helpful to read and discuss these with a parent or another adult.
- The rubrics show you what is needed to produce a strong piece of writing.
- Rubrics are important to understand. They tell you what to add to your writing.
- Writing on the EOG assessment will be scored using these rubrics.

## KEY TERMS

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

**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. (W1a)

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

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

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

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

**Organization:** In writing, the organization of text helps us to convey complex ideas and information more clearly. Writers use transitions to organize information. Also, an entire piece of writing has an organizational structure to it. Writers structure their texts depending on their purpose or audience. For example, if you were writing an opinion text in which you wanted to show the negative effects of something, you might choose cause and effect as an organizational structure. Questions about organization may ask you to select a sentence that helps or hurts the organization of a passage. (W1a)

### Important Tips

- ✍ Cite strong evidence from a text to support analysis of an author’s point of view and purpose.
- ✍ Organize your writing by using chronological order, cause and effect, compare and contrast, or asking and answering questions.
- ✍ Make sure your writing has a concluding statement that supports the information or explanation presented.
- ✍ Strengthen your writing by planning, revising, editing, rewriting, or trying a new approach.
- ✍ Use the rubric before, during, and after writing to make sure you are meeting the criteria.

## Sample Items 10–13

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

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

### WRITING TASK

You will read about the controversy over new school lunch guidelines. What are the benefits and drawbacks of these guidelines? You will write an **opinion essay** in your own words about the new guidelines.

Think about both sides of the discussion as presented in the passages, and then write an **opinion essay** supporting either side of the debate about the new school lunch plan. Explain your opinion, and give reasons to support it.

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

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

- 1. So-Called “Healthier” School Lunches**
- 2. Bravo for Making Kids Healthier**

**As you read the passages, think about what details from the passages you might use in your opinion essay.**

### **So-Called “Healthier” School Lunches**

Dear Editor,

I was so excited to hear that our local schools would finally be serving more healthy lunches. For years I have felt guilty for allowing my kids to eat the processed foods offered by the school lunch program. Sadly, it seems that the new guidelines have not made much of a difference. Kids are still eating chicken nuggets, fish sticks, and pizza every month. Some of the fruits and vegetables that are supposed to be so healthy come from cans. They are not the fresh and healthy produce I was expecting.

Another problem with new guidelines is the portion sizes. Kids are given a calorie maximum based on their age, without taking into account their different sizes and needs. A 220-pound high school football player doing two-a-day practices is getting the same amount of food as smaller kids or kids who are not as active. That hardly seems fair.

Both of my children have told me that they are hungry all day. One of my children has lunch at 10:45 a.m., and that is supposed to last until school is over at 3:15? My kids hunt for junk food every day right after school. I know that many schools are struggling to meet these guidelines, but they have to do better than this.

I have no choice but to send my children to school with packed lunches. This way I can control the portions myself. I can also be sure that they have fresh, not processed, fruits and vegetables every day.

Frustrated with food,

Palmer Ross



## Bravo for Making Kids Healthier

Dear Editor,

Before retiring ten years ago, I had been an elementary school teacher for thirty-seven years. During my first year, kids were filled with energy. They ran around all during recess. Then they would come back in and complete their lessons.

At the start of my career, kids ate in the classroom. Their parents packed them fairly healthy lunches. Often they consisted of leftover home-cooked meals rather than processed foods. I often saw vegetables that seemed to have come straight from the garden.

Over the years, young people seemed to get less energetic. I noticed more kids sitting and talking during recess. Many were eating non-nutritional snacks. Fewer were playing and burning off extra energy. When they returned to class, their minds wandered. They struggled to focus.

Prepared lunches at school did not help. In fact, they added to the problem. Kids received regular servings of pizza, burgers, and mashed potatoes from a box. Many kids loved it, but it didn't seem right to me. Our kids deserved better. They deserved healthy foods to nourish their brains and bodies.

Now, kids are finally getting more healthy foods at schools. Our country recently revealed a change in school lunches. No more processed chicken fingers, pizza, and sugary chocolate milk. Students now enjoy more healthy baked options, fruits, vegetables, and low-fat dairy products. These options are offered at every meal. Students can fill up on brain-healthy foods.

I have also heard that school leaders plan to change vending machine options. They will swap sugary snacks for more healthy whole-grain options. Hats off to health!

There are so many distractions like the Internet, video games, and smart phones. Real foods like vegetables and fruits will help students focus in class. It will help them feel healthier and have more energy to be active.

Sincerely,

Tyra Watts

### Item 10

#### Selected-Response

Which sentence would be **BEST** to add to the last paragraph of “So-Called ‘Healthier’ School Lunches” as the concluding sentence?

I have no choice but to send my children to school with packed lunches. This way I can control the portions myself. I can also be sure that they have fresh, not processed, fruits and vegetables every day.

- A. It is not too late to take control of our children’s health.
- B. Some canned fruits are loaded with sugar and preservatives.
- C. We cannot leave it up to our children to make the right food choices.
- D. If we buy fruits and vegetables when they are in season, we can also save money.

### Item 11

#### Selected-Response

Which sentence should be added to the beginning of this paragraph from “Bravo for Making Kids Healthier” to **BEST** support the writer’s opinion?

There are so many distractions like the Internet, video games, and smart phones. Real foods like vegetables and fruits will help students focus in class. It will help them feel healthier and have more energy to be active.

- A. Unhealthy foods add to the challenges kids face in school today.
- B. Sugary snacks and lack of exercise make it harder for kids to sit still.
- C. It is not fair to expect kids to focus on schoolwork without giving them snacks.
- D. Smart phones and other distractions are the reason why kids do not pay attention.

**Item 12**

**Constructed-Response**

Explain how the author of “So-Called ‘Healthier’ School Lunches” supports the idea that the new school lunch guidelines are not working.

Use details from BOTH passages to support your answer. Write your answer on the lines provided.

A large rectangular box containing 25 horizontal lines for writing an answer.

## Item 13

### Extended Writing-Response

Now that you have read “So-Called ‘Healthier’ School Lunches” and “Bravo for Making Kids Healthier” and answered some questions about what you have read, create a plan for and write your opinion essay.

### WRITING TASK

You will read about the controversy over new school lunch guidelines. What are the benefits and drawbacks of these guidelines? You will write an **opinion essay** in your own words about the new guidelines.

Think about both sides of the discussion as presented in the passages, and then write an **opinion essay** supporting either side of the debate about the new school lunch plan. Explain your opinion, and give reasons to support it.

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

#### Be sure to:

- Introduce your opinion.
- Support your opinion with reasons and details from the passages.
- Give your reasons and details in a clear order.
- Develop your ideas clearly and use your own words, except when quoting directly from the passages.
- Identify the passages by title or number when using details or facts directly from the passages.
- Use linking words, 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.



## Unit 4: Writing Informational/Explanatory Texts

### CONTENT DESCRIPTION

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

### Text Types and Purposes

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

### Production and Distribution of Writing

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

### Audience, Purpose, and Voice

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

### Range of Writing

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

### Scoring Rubrics

- Scoring rubrics can be found beginning on page 67. You may find it helpful to read and discuss these with a parent or another adult.
- The rubrics show you what is needed to produce a strong piece of writing.
- Rubrics are important to understand. They tell you what to add to your writing.
- Writing on the EOG assessment will be scored using these rubrics.

---

## KEY TERMS

**Informational/explanatory texts** are pieces of writing that inform or explain something to the reader. (W2D)

**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. (W2a)

**Transition:** A word, phrase, or clause that links one idea to the next. Writing should not jump from one idea to the next without transitions that guide the reader to the next idea. Examples include words such as “in contrast,” “in addition,” “especially,” and “consequently.” (W2c)

**Conclusion:** The end of a piece of writing is the conclusion. The conclusion should sum up the main purpose of the writing and provide an overall takeaway for the reader. (W2e)

**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)

**Multimedia:** A variety of mediums. Writing does not only include pen and paper or a typed essay. Other ways of enhancing writing can include mediums such as art, presentations, photographs, charts, videos, and more. (W2a)

**Organization:** In writing, the organization of text helps us to convey complex ideas and information more clearly. Writers use transitions to organize information. Also, an entire piece of writing has an organizational structure to it. Writers structure their texts depending on their purpose or audience. (W4)

### Important Tips

- ✍ Begin by organizing your ideas in an outline using the main topics. Then it will be easier to fill in the supporting details.
- ✍ Be sure to develop your topic with concrete details such as facts, definitions, quotations, or other information related to your topic.
- ✍ Organize your writing by using chronological order, cause and effect, compare and contrast, or asking and answering questions.
- ✍ Make sure your writing has a concluding statement that supports the information or explanation presented.
- ✍ Strengthen your writing by planning, revising, editing, rewriting, or trying a new approach.
- ✍ Use the rubric before, during, and after writing to make sure you are meeting the criteria.

## Sample Items 14–17

[NOTE: The structure of the practice items for Unit 4 appears as follows on the Georgia Milestones End-of-Grade Assessment with the exception of the extended writing prompt: 1) multiple-choice questions (three on the actual test); 2) a constructed-response item; and 3) an extended writing prompt.]

Read two articles, “Fast Freddy’s Grill” and “Farm Fresh,” and answer questions 14 through 17.

### Fast Freddy’s Grill

Welcome to Wilford’s newest fast-food restaurant, Fast Freddy’s Grill. We bring you perfectly grilled burgers every time, in no time. All our meat comes from local ranchers and has no added hormones or antibiotics, so you can feel good about indulging.

We have something for everyone at Fast Freddy’s Grill. Start with a patty made from fresh beef or turkey. Pile it high with your choice of six cheeses and a bevy of vegetables to transform your burger into your own unique creation. Vegetarians can enjoy our veggie burgers made from black beans, quinoa, and our special blend of spices.

Our critics complain that we lack choices in our menu. We may not have the variety of other restaurants, but that’s because we specialize in burgers. We put all our energy into perfecting them and becoming your go-to burger joint. As a result, we give you the best-tasting and quickest burgers in town.

In a hurry? Come to our convenient drive-through window and try our five-minute burger, which includes an all-beef patty, bacon, lettuce, and tomato for \$4.49. Guaranteed to be ready in five minutes or less or it’s free!

Next time you’re in the mood for a juicy grilled burger, give Fast Freddy’s Grill a try.

### Farm Fresh

Enjoy a full-service dining experience unlike any other at Farm Fresh Restaurant. We recently opened on 5th Street and are proud to be Wilford’s first farm-to-table restaurant. We never use processed foods. Our entire menu is made fresh daily, including our famous grain-free pumpkin loaf.

We get all our ingredients from local farmers. This cuts down on air pollution from trucks driving across the country. Our produce doesn’t sit on trucks driving cross-country for days. All our foods come from within a 60-mile radius. Our customers enjoy not only great taste, but also excellent health benefits. All the crops we purchase are organic; no pesticides are used to build our flavorful dishes.

Because we rely on local farmers, our menu changes depending on the produce that is in season. This means that there will always be new and healthy dishes for you to sample. Our winter menu, for example, features a hearty turkey and squash stew that will warm your insides on a cold day!

Bring your family to Farm Fresh today and enjoy guilt-free healthy dining.



**Item 14****Selected-Response**

If headings were added to “Fast Freddy’s Grill,” which of these would be the **BEST** one to add to this paragraph from the article?

We have something for everyone at Fast Freddy’s Grill. Start with a patty made from fresh beef or turkey. Pile it high with your choice of six cheeses and a bevy of vegetables to transform your burger into your own unique creation. Vegetarians can enjoy our veggie burgers made from black beans, quinoa, and our special blend of spices.

- A. Special Toppings
- B. Vegetarian Options
- C. Customize Your Burger
- D. Burgers for Meat Lovers

**Item 15****Selected-Response**

Read these sentences from “Farm Fresh.”

- (1) Our customers enjoy not only great taste, but also excellent health benefits.  
(2) All the crops we purchase are organic, no pesticides are used to build our flavorful dishes.

Which transition should be added to the beginning of sentence 2 to **BEST** connect the ideas in the paragraph?

- A. Besides
- B. However
- C. Similarly
- D. Since



**Item 17**

**Constructed-Response**

Read this sentence from “Fast Freddy’s Grill.”

Our critics complain that we lack choices in our menu.

Why does this statement apply to Fast Freddy’s Grill but not to Farm Fresh Restaurant? How are the two restaurants different?

Be sure to use details from BOTH articles to support your answer. Write your answer on the lines provided.

Blank writing area with horizontal lines for student response.

## Unit 5: Language

### CONTENT DESCRIPTION

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

#### Language

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

#### Conventions of Standard English

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

#### Style

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

### KEY TERMS

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

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

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

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

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

**Verb tense:** Variation in a verb to express different periods of time or how long an action lasts. Verb tenses include past, present, future, conditional, and perfect. (L1c)

**Conjunction:** A word that joins together different sentences, clauses, or phrases. Examples of conjunctions are *with*, *and*, *but*, and *although*. (L1a)

**Preposition:** A word or phrase that is used to show direction, location, or time. Examples of prepositions are *on*, *in*, *around*, *by*, *through*, *over*, and *behind*. (L1a)

**Interjection:** A word or phrase that expresses sudden or strong feelings. Examples of interjections are *oh*, *alas*, and *wow*. (L1a)

**Punctuation:** Writing marks that help to separate and clarify ideas. Examples of punctuation are the period, comma, colon, exclamation mark, and question mark. (L2)

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

**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)

**Homographs:** Words that are spelled the same but have different meanings. A *bow* to put in a girl's hair and a *bow* that is used to shoot an arrow are homographs. In the case of homographs, **context** becomes especially important. (L5c)

**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)

### **Important Tips**

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

## Sample Items 18–21

### Item 18

#### Selected-Response

Which sentence uses commas correctly?

- A. “Jason, you called last night, didn’t you?”
- B. “Yes it was me, I did phone you, last night.”
- C. “There goes your little sister Nathaniel,” I said.
- D. “No she is home sick today,” Nathaniel replied.

### Item 19

#### Selected-Response

Which of these BEST combines the sentences into one clear statement?

Richard went to a museum. It was his first museum visit. He was amazed by the variety of items. He was also amazed by the quality of items.

- A. Having never visited a museum before, Richard was amazed by the variety and quality of the items.
- B. The quality and variety of items at the museum amazed Richard during his first trip to a museum.
- C. Because he was impressed by the quality of items and their variety, Richard visited a museum.
- D. Both the quality and variety of items impressed Richard at the museum for his first visit.

**Item 20****Selected-Response**

**Which revision of sentence 3 makes the verb tense consistent with the rest of the paragraph?**

(1) Animals need to visit their doctors regularly. (2) Veterinarians administer shots regularly to keep pets healthy. (3) They also check pets' teeth, just like dentists, to make sure they had no dangerous plaque. (4) Veterinarians can even provide grooming services to keep your pet's nails at a comfortable length.

- A. They also would check pets' teeth, just like dentists, to make sure they had no dangerous plaque.
- B. They also checked pets' teeth, just like dentists, to make sure they have no dangerous plaque.
- C. They also check pets' teeth, just like dentists, to make sure they have no dangerous plaque.
- D. They also check pets' teeth, just like dentists, to make sure they had no dangerous plaque.

**Item 21****Selected-Response**

**Which sentence uses the underlined word as a preposition?**

- A. Derrick always forgets to bring his winter gloves.
- B. Jasmine called to ask if I wanted to come over later.
- C. While visiting your cousin, complete your homework.
- D. Iris decided to walk home with her friends after school.

## ENGLISH LANGUAGE ARTS (ELA) ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
1	ELAGSE5RL1 Literary	2	C	The correct answer is choice (C) He is happier being around animals than people. The Doctor will not get rid of his animals so that more patients come because he likes the animals too much. Choice (A) is incorrect because while he prefers his animals, there is no indication that he does not like the people in his town. Choice (B) is incorrect because there is no evidence to support whether he feels appreciated. Choice (D) is incorrect because he does not show concern about his sister criticizing him.
2	ELAGSE5RL2 Literary	2	C	The correct answer is choice (C) They show that the Doctor's priority is to care for his animals. He sacrifices his personal items to keep his animals. Choices (A) and (B) are incorrect because although the statements are true, they do not support a main idea in the story. Choice (D) is incorrect because he is happy and does not regret his decision.
3	ELAGSE5RL1	3	B/C	The correct answers are (B) annoyed, <b>and</b> (C) His sister used to grumble about all these animals and said they made the house untidy.  Sarah doesn't appreciate having to clean up after the animals and is annoyed by the fact that the animals are driving off paying patients. The answer choice for Part B of the item shows text that supports this.  In Part A, Choice (A) is incorrect because Sarah is clearly unhappy about her brother's choices. Choice (C) is incorrect because Sarah does not think her brother is making wise decisions. Choice (D) is incorrect because while Sarah thinks her brother is making poor choices, she doesn't show disappointment in him. The incorrect options in Part B support incorrect answers in Part A.
4	ELAGSE5RL2 Literary	3	N/A	See scoring rubric and sample response on page 59.
5	ELAGSE5W3b	4	N/A	See scoring rubric beginning on page 68 and sample response on page 60.
6	ELAGSE5RI2 Informational/ Explanatory	2	A	The correct answer is choice (A) People should be aware of their needs and limits before adding a pet to their families. The article focuses on evaluating whether or not you can handle a pet. Choices (B) and (C) are incorrect because they are supporting details. Choice (D) is incorrect because it does not include evaluating the family's ability to care for a pet.



Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
7	ELAGSE5RI4 Informational/ Explanatory	2	B	The correct answer is choice (B) many. A list of several expenses follows the sample sentence. Choice (A) is incorrect because not all expenses are large, like collars and leashes. Choice (C) is incorrect because not all expenses are needed (e.g., training is not required). Choice (D) is incorrect because some of these expenses, like vet visits, would be planned.
8	ELAGSE5RI8 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 61.
9	ELAGSE5RI3 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 62.
10	ELAGSE5W1d	2	A	The correct answer is choice (A) It is not too late to take control of our children’s health. In the passage, the father is regaining control by packing lunches for his children. Choice (B) is incorrect because it is another detail. Choice (C) is incorrect because it shifts the attack onto the children. Choice (D) is incorrect because the purpose of the paragraph is not related to money.
11	ELAGSE5W1a	2	A	The correct answer is choice (A) Unhealthy foods add to the challenges kids face in school today. It is correct because it introduces the main topic of the paragraph. Choices (B), (C), and (D) are incorrect because they are supporting details.
12	ELAGSE5RI2 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 63.
13	ELAGSE5W1	4	N/A	See scoring rubric beginning on page 72 and sample response on page 64.
14	ELAGSE5W2a	2	C	The correct answer is choice (C) Customize Your Burger. The focus of the paragraph is making the burger uniquely yours. Choice (A) is incorrect because the toppings are not unique. Choice (B) is incorrect because the vegetarian options are not part of the main idea. Choice (D) is incorrect because that detail is focused on in another paragraph.

Item	Standard/ Element/ Genre	DOK Level	Correct Answer	Explanation
15	ELAGSE5W2c	2	D	The correct answer is choice (D) Since. This transition is used to point out that this is additional information that supports the first sentence. Choice (A) is incorrect because “besides” is used to explain something that is less relevant. Choice (B) is incorrect because “however” is used to contrast something. Choice (C) is incorrect because “similarly” is used to make a point.
16	ELAGSE5RI3 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 65.
17	ELAGSE5RI9 Informational/ Explanatory	3	N/A	See scoring rubric and sample response on page 66.
18	ELAGSE5L2c	2	A	The correct answer is choice (A) “Jason, you called last night, didn’t you?” Choices (B) and (D) are incorrect because “yes” and “no” require commas after them. Choice (C) is incorrect because it needs a comma before “Nathaniel.”
19	ELAGSE5L3a	3	A	The correct answer is choice (A) Having never visited a museum before, Richard was amazed by the variety and quality of the items. Choice (B) is incorrect because it repeats “museum.” Choice (C) is incorrect because it shows an inaccurate cause and effect relationship. Choice (D) is incorrect because the prepositional phrases create an awkward, unclear construction.
20	ELAGSE5L1d	2	C	The correct choice is choice (C) They also check pets’ teeth, just like dentists, to make sure they have no dangerous plaque. Sentence 3 is written in the present tense, and “have” is present tense. Choice (A) is incorrect because “would check” is future tense. Choice (B) is incorrect because “checked” is past tense. Choice (D) is incorrect because “had” is past tense.
21	ELAGSE5L1a	2	D	The correct choice is choice (D) Iris decided to walk home <u>with</u> her friends after school. “With her friends” is a prepositional phrase. Choice (A) is used as an infinitive. Choice (B) has an adverb underlined, and choice (C) has a subordinating conjunction underlined.

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

### Item 4

#### Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives sufficient evidence of the ability to determine the theme and analyze its development over the course of a text</li> <li>• Includes specific examples/details that make clear reference to the text</li> <li>• Adequately explains the theme or gives an explanation of its development with clearly relevant information based on the text</li> </ul>
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives limited evidence of the ability to determine the theme and analyze its development over the course of a text</li> <li>• Includes vague/limited examples/details that make reference to the text</li> <li>• Explains the theme or gives an explanation of its development with vague/limited information based on the text</li> </ul>
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives no evidence of the ability to determine the theme or analyze its development over the course of a text</li> </ul>

#### Exemplar Response

Points Awarded	Sample Response
2	<p>In the beginning, the public admires Doctor Dolittle. When he is seen in town, “. . . everyone would say, ‘There goes the Doctor!—He’s a clever man.’” Kids and dogs would follow him around. By the end of the story, though, the public’s attitude toward the Doctor changes. Now they say, “. . . Look at him now—He hasn’t any money and his stockings are full of holes!” However, the kids and animals treated him the same as when he was rich. This reveals the theme that true friends accept you no matter what. Whether you are rich or poor, a real friend treats you the same.</p>
1	<p>The public’s opinion of the Doctor changes from the beginning to the end of the story. This reveals that the theme of the story is real friends accept you no matter what.</p>
0	<p>The people in the story look at Doctor Dolittle as a rich and smart man.</p>

## Item 5

To view the four-point rubric for a narrative response, see pages 68 and 69.

## Exemplar Response

Points Awarded	Sample Response
4	<p>I used to think I was so lucky to have a doctor for a brother. I even worked for him, cleaning his house. I tried to be patient with my brother and his animals, but I could only take so much. Everywhere I turned there were signs of animals: fur, chewed paper, dirty paw prints. I would barely get one mess cleaned up when another one appeared. It was ridiculous. When he started losing his patients and their money, I had to say something. I said, “John, you’re losing your patients because of these animals. Soon we won’t have enough money to put food on the table. Nobody will want you for their doctor.”</p> <p>“I like the animals better anyway,” he said.</p> <p>Then things got worse. It was bad enough when it was just a few animals, but the house was beginning to look like a zoo. Couldn’t my brother at least have kept the animals outside instead of letting the mice live in his dressers? They have taken over the house. Each day he welcomes a new animal, and each day I feel less welcome.</p> <p>With our small town, there was no chance that we could hide it for long. He sold his piano and dress clothes just to keep food on the table. People used to look at my brother with respect and awe. Now they look down on him.</p>
3	<p>I used to think I was so lucky to have a doctor for a brother. I even worked for him, cleaning his house. But the animals took over. Everywhere I turned there were signs of animals: fur, chewed paper, dirty paw prints. I would barely get one mess cleaned up when another one appeared. “You are ridiculous,” I told him.</p> <p>When he started losing his patients and their money, I had to say something. I warned him that we would go broke and not be able to put food on the table. He didn’t listen.</p> <p>It was bad enough when it was just a few animals, but the house was beginning to look like a zoo. Couldn’t my brother at least have kept the animals outside instead of letting the mice live in his dressers? They have taken over the house. We get new animals every day.</p>
2	<p>I cleaned house for my brother, the doctor. His pets had taken over. There was fur and messes everywhere. I didn’t want to clean anymore.</p> <p>Nobody wanted John to be their doctor anymore. We didn’t have enough money to buy food. He sold things to take care of the animals. He was paying to run a zoo. The animals took over the house. They are living in the furniture. “You are ridiculous,” I told him.</p>
1	<p>The animals took over the house. They lived in the furniture. We couldn’t afford to feed them, so Doctor Dolittle sold his piano.</p>
0	<p>Doctor Dolittle and I lived together for many years. Then the animals took over.</p>

## Item 8

## Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives sufficient evidence of the ability to support an idea and determine the reasons and evidence that support a particular point in a text</li> <li>• Includes specific examples/details that make clear reference to the text</li> <li>• Adequately explains an idea or gives an explanation of its development with clearly relevant information based on the text</li> </ul>
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives limited evidence of the ability to support an idea and determine the reasons and evidence that support a particular point in a text</li> <li>• Includes vague/limited examples/details that make reference to the text</li> <li>• Explains an idea or gives an explanation of its development with vague/limited information based on the text</li> </ul>
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives no evidence of the ability to support an idea or determine the reasons and evidence that support a particular point in a text</li> </ul>

## Exemplar Response

Points Awarded	Sample Response
2	<p>The author instructs readers to consider several things before buying a pet. First, they have to be prepared for a long-term commitment. To support this, the author points out that pets will need love, attention, food, and exercise for the rest of their lives. Families must be prepared to make this promise. The author also points out the costs of pet ownership. The author supports this by identifying some of the common costs. These include vet visits, special food, training, and collars and leashes. The author also warns people to think about the amount of time they have to spend on a pet. Some pets need more exercise than others. Puppies need more attention and training than older dogs.</p>
1	<p>The author claims that people need to think about several things before they buy a pet. Pets cost money. People should be able to afford vet visits and supplies.</p>
0	<p>Pets benefit from humans, but humans benefit from pets, too. Pets make you happy. They lower stress.</p>

## Item 9

## Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives sufficient evidence of the ability to determine the author’s purpose and analyze its development over the course of a text</li> <li>• Includes specific examples/details that make clear reference to the text</li> <li>• Adequately explains the author’s purpose or gives an explanation of its development with clearly relevant information based on the text</li> </ul>
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives limited evidence of the ability to determine the author’s purpose and analyze its development over the course of a text</li> <li>• Includes vague/limited examples/details that make reference to the text</li> <li>• Explains the author’s purpose or gives an explanation of its development with vague/limited information based on the text</li> </ul>
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives no evidence of the ability to determine the author’s purpose or analyze its development over the course of a text</li> </ul>

## Exemplar Response

Points Awarded	Sample Response
2	The author discusses animal shelters to encourage people to adopt their pets from shelters. The author points out that many animals there have been abandoned and neglected. This affects the reader and causes him to feel sorry for these animals. This might make them more likely to consider adopting. The author also points out that shelters have pets with a variety of needs and ages. This flexibility might also encourage families to adopt. A busy family, for example, might want a lapdog that doesn’t need as much exercise.
1	The author wants people to adopt pets from animal shelters. These animals deserve a new family and new start.
0	Animal shelters take in pets who come from families that can no longer take care of them.

## Item 12

## Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives sufficient evidence of the ability to determine the main idea and analyze its development over the course of a text</li> <li>• Includes specific examples/details that make clear reference to the text</li> <li>• Adequately explains the main idea or gives an explanation of its development with clearly relevant information based on the text</li> </ul>
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives limited evidence of the ability to determine the main idea and analyze its development over the course of a text</li> <li>• Includes vague/limited examples/details that make reference to the text</li> <li>• Explains the main idea or gives an explanation of its development with vague/limited information based on the text</li> </ul>
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives no evidence of the ability to determine the main idea or analyze its development over the course of a text</li> </ul>

## Exemplar Response

Points Awarded	Sample Response
2	<p>The author supports the idea that new school lunch guidelines aren't working by providing examples from his children's school. For example, he shares that his kids are still eating processed foods like pizza and chicken nuggets. He also describes the unfairness of the guidelines. He says, "Kids are given a calorie maximum based on their age, without taking into account their different sizes and needs. A 220-pound high school football player doing two-a-day practices is getting the same amount of food as smaller kids or kids who are not as active." This supports the idea that the guidelines aren't working, because they don't take into account individuals. They focus on age-based groups. Finally, he concludes the letter by admitting that the guidelines are so bad, he is sending lunches with his kids. This proves just how upsetting the new school lunches are.</p>
1	<p>The author supports the failure of the new school lunch guidelines. He explains the lunches that he has seen his child eat. He sends lunch with her so she won't have to eat what the schools provide.</p>
0	<p>The author of the letter does not support the new school lunch guidelines.</p>

## Item 13

The following is an example of a seven-point response. See the seven-point, two-trait rubric for a text-based opinion response on pages 72 and 73 to see why this example would earn the maximum number of points.

### Example of a Seven-Point Response:

*Although schools are taking steps in the right direction, the new school lunch guidelines are not working. For them to work, the guidelines must provide fresh and healthy foods. More has to be done to help kids get easy access to healthy foods every day.*

*Currently, school guidelines require students to get fruits, vegetables, and whole grains. In some areas, fresh produce may not be available. This means that students only have canned vegetables, which do not provide them with the nutrition they need.*

*In addition, the guidelines are not fair. Palmer Ross writes, “Kids are given a calorie maximum based on their age, without taking into account their different sizes and needs. A 220-pound high school football player doing two-a-day practices is getting the same amount of food as smaller kids or kids who are not as active.” This reveals a need for more common sense. Maybe the guidelines should reflect activity level or another standard besides age.*

*Tyra Watts points out that, “Students now enjoy more healthy baked options, fruits, vegetables, and low-fat dairy products. These options are offered at every meal.” But, this is not always the case. School budgets do not always allow schools to buy the healthiest foods. They would need far more government funding.*

*For students to really get healthier, they need more than a new school lunch program. Students need chances to be active. There is only so much the schools can do, providing one meal a day. While they are taking steps in the right direction, there is so much more work to be done.*



## Item 16

## Scoring Rubric

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives sufficient evidence of the ability to determine the relationships between ideas and analyze their development over the course of a text</li> <li>• Includes specific examples/details that make clear reference to the text</li> <li>• Adequately explains the relationships between ideas or gives an explanation of their development with clearly relevant information based on the text</li> </ul>
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives limited evidence of the ability to determine the relationships between ideas and analyze their development over the course of a text</li> <li>• Includes vague/limited examples/details that make reference to the text</li> <li>• Explains the relationships between ideas or gives an explanation of their development with vague/limited information based on the text</li> </ul>
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives no evidence of the ability to determine the relationships between ideas or analyze their development over the course of a text</li> </ul>

## Exemplar Response

Points Awarded	Sample Response
2	<p>In “Farm Fresh,” the author’s purpose in describing where their ingredients come from is to educate the public on the benefits of farm-to-table restaurants. The author wants people to know that they buy locally, so that their food is always the freshest possible. The author states, “Our produce doesn’t sit on trucks driving cross-country for days. All our foods come from within a 60-mile radius.” This implies that every other restaurant in the area serves food that is neither as fresh nor as healthy. This sets them apart from other restaurants.</p>
1	<p>The author describes their ingredients to set them apart from other restaurants. They are the restaurant that buys only local and healthy foods. That is where you go when you want healthy food.</p>
0	<p>Farm Fresh is a farm-to-table restaurant.</p>

**Item 17**

**Scoring Rubric**

Points	Description
2	<p>The exemplar shows a full-credit response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives sufficient evidence of the ability to draw a conclusion based on the texts and to explain the support for a conclusion drawn about the texts</li> <li>• Includes specific examples/details that make clear reference to the texts</li> <li>• Adequately explains the conclusion drawn with clearly relevant information based on the texts</li> </ul>
1	<p>The exemplar shows a 1-point response. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives limited evidence of the ability to draw a conclusion based on the texts or to explain the support for conclusions drawn from the texts</li> <li>• Includes vague/limited examples/details that make reference to the texts</li> <li>• Explains the conclusion drawn or gives an explanation of its development with vague/limited information based on the texts</li> </ul>
0	<p>The exemplar shows a response that would earn no credit. It achieves the following:</p> <ul style="list-style-type: none"> <li>• Gives no evidence of the ability to draw a conclusion based on the texts or to explain the support for a conclusion drawn about the texts</li> </ul>

**Exemplar Response**

Points Awarded	Sample Response
2	<p>Based on this detail from the story, the reader can conclude that many people have complained that the menu at Fast Freddy’s Grill is small. The owners say that they want to be “. . . your go-to burger joint,” so burgers are their focus. Burgers are the only food described in the text. They mention a veggie burger, too. They say that they offer several toppings, but no sides are talked about. Therefore, Fast Freddy’s Grill has a limited menu that does not apply to many different groups of people. Farm Fresh is not limited to one kind of food. They serve a large variety of healthy foods.</p>
1	<p>Fast Freddy’s Grill has a small menu that people have complained about. They serve lots of burgers with many toppings to choose from. Farm Fresh has lots of different kinds of foods.</p>
0	<p>People complain about Fast Freddy’s Grill and its menu but not about Farm Fresh.</p>

---

## ENGLISH LANGUAGE ARTS (ELA) WRITING RUBRICS

Grade 5 items that are not machine-scored—i.e., constructed-response, extended constructed-response, and extended writing response items—are manually scored using either a holistic rubric or a two-trait rubric.

### Four-Point Holistic Rubric

**Genre:** Narrative

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

### Seven-Point, Two-Trait Rubric

**Genre:** Opinion or Informational/Explanatory

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

On the following pages are the rubrics that will be used to evaluate writing on the Georgia Milestones Grade 5 English Language Arts (ELA) EOG assessment.

**Four-Point Holistic Rubric**

**Genre: Narrative**

Writing Trait	Points	Criteria
<p><i>This trait examines the writer’s ability to effectively develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences based on a text that has been read.</i></p>	4	<p><i>The student’s response is a well-developed narrative that fully develops a real or imagined experience based on text as a stimulus.</i></p> <ul style="list-style-type: none"> <li>• Effectively establishes a situation and introduces a narrator and/or characters</li> <li>• Organizes an event sequence that unfolds naturally</li> <li>• Effectively uses narrative techniques, such as dialogue, description, and pacing, to develop rich, interesting experiences and events or show the responses of characters to situations</li> <li>• Uses a variety of words and phrases consistently to signal the sequence of events</li> <li>• Uses concrete words, phrases, and sensory language consistently to convey experiences or events precisely</li> <li>• Provides a conclusion that follows from the narrated experiences or events</li> <li>• Integrates ideas and details from source material effectively</li> <li>• Has very few or no errors in usage and/or conventions that interfere with meaning*</li> </ul>
	3	<p><i>The student’s response is a complete narrative that develops a real or imagined experience based on text as a stimulus.</i></p> <ul style="list-style-type: none"> <li>• Establishes a situation and introduces one or more characters</li> <li>• Organizes events in a clear, logical order</li> <li>• Uses narrative techniques, such as dialogue and description, to develop experiences and events or show the responses of characters to situations</li> <li>• Uses words and/or phrases to indicate sequence</li> <li>• Uses words, phrases, and details to convey experiences and events</li> <li>• Provides an appropriate conclusion</li> <li>• Integrates some ideas and/or details from source material</li> <li>• Has a few minor errors in usage and/or conventions that interfere with meaning*</li> </ul>

## Four-Point Holistic Rubric

### Genre: Narrative (continued)

Writing Trait	Points	Criteria
<p><i>This trait examines the writer's ability to effectively develop real or imagined experiences or events using effective techniques, descriptive details, and clear event sequences based on a text that has been read.</i></p>	2	<p><i>The student's response is an incomplete or oversimplified narrative based on text as a stimulus.</i></p> <ul style="list-style-type: none"> <li>• Introduces a vague situation and at least one character</li> <li>• Organizes events in a sequence but with some gaps or ambiguity</li> <li>• Attempts to use a narrative technique, such as dialogue or description, to develop experiences and events or show the responses of characters to situations</li> <li>• Uses occasional signal words to indicate sequence</li> <li>• Uses some words or phrases inconsistently to convey experiences and events</li> <li>• Provides a weak or ambiguous conclusion</li> <li>• Attempts to integrate ideas or details from source material</li> <li>• Has frequent errors in usage and conventions that sometimes interfere with meaning*</li> </ul>
	1	<p><i>The student's response provides evidence of an attempt to write a narrative based on text as a stimulus.</i></p> <ul style="list-style-type: none"> <li>• Response is a summary of the story</li> <li>• Provides a weak or minimal introduction of a situation or a character</li> <li>• May be too brief to demonstrate a complete sequence of events</li> <li>• Shows little or no attempt to use dialogue or description to develop experiences and events or show the responses of characters to situations</li> <li>• Uses words that are inappropriate, overly simple, or unclear</li> <li>• Provides few, if any, words that convey experiences or events</li> <li>• Provides a minimal or no conclusion</li> <li>• May use few, if any, ideas or details from source material</li> <li>• Has frequent major errors in usage and conventions that interfere with meaning*</li> </ul>
	0	<p><i>The student's response is flawed for various reasons and will receive a condition code:</i></p> <p>The condition codes can be found on page 211 of this guide.</p>

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

**Seven-Point, Two-Trait Rubric**

**Trait 1 for Informational/Explanatory Genre**

Writing Trait	Points	Criteria
<p><b>Idea Development, Organization, and Coherence</b></p> <p><i>This trait examines the writer’s ability to effectively establish a controlling idea and to support the idea with evidence from the text(s) read and to elaborate on the idea with examples, illustrations, facts, and other details in order. The writer must integrate the information from the text(s) into his/her own words and arrange the ideas and supporting evidence (from text that they have read) in order to create cohesion for an informative/explanatory essay.</i></p>	4	<p><i>The student’s response is a well-developed informative/explanatory text that examines a topic in depth and conveys ideas and information clearly based on text as a stimulus.</i></p> <ul style="list-style-type: none"> <li>Effectively introduces a topic</li> <li>Groups related ideas together logically to give some organization to the writing</li> <li>Effectively develops the topic with multiple facts, definitions, concrete details, quotations, or other information and examples related to the topic</li> <li>Effectively uses linking words and phrases to connect ideas within and across categories of information</li> <li>Uses precise language and domain-specific vocabulary to explain the topic</li> <li>Provides a strong concluding statement or section related to the information or explanation presented</li> </ul>
	3	<p><i>The student’s response is a complete informative/explanatory text that examines a topic and presents information based on a text as a stimulus.</i></p> <ul style="list-style-type: none"> <li>Introduces a topic</li> <li>Develops the topic with some facts, definitions, and details</li> <li>Groups some related ideas together to give partial organization to the writing</li> <li>Uses some linking words to connect ideas within and across categories of information, but relationships may not always be clear</li> <li>Uses some precise language and domain-specific vocabulary to explain the topic</li> <li>Provides a concluding statement or section</li> </ul>
	2	<p><i>The student’s response is an incomplete or oversimplified informative/explanatory text that cursorily examines a topic.</i></p> <ul style="list-style-type: none"> <li>Attempts to introduce a topic</li> <li>Attempts to develop a topic with too few details</li> <li>Attempts to group some related ideas together but organization is not clear</li> <li>Uses few linking words to connect ideas, but not all ideas are well connected to the topic</li> <li>Uses limited language and vocabulary that do not clearly explain the topic</li> <li>Provides a weak concluding statement or section</li> </ul>
	1	<p><i>The student’s response is a weak attempt to write an informative/explanatory text that examines a topic.</i></p> <ul style="list-style-type: none"> <li>May not introduce a topic or topic is unclear</li> <li>May not develop a topic</li> <li>May be too brief to group any related ideas together</li> <li>May not use any linking words to connect ideas</li> <li>Uses vague, ambiguous, or repetitive language</li> <li>Provides a minimal or no concluding statement or section</li> </ul>
	0	<p><i>The student’s response is flawed for various reasons and will receive a condition code:</i></p> <p>The condition codes can be found on page 211 of this guide.</p>

## Seven-Point, Two-Trait Rubric

### Trait 2 for Informational/Explanatory Genre

Writing Trait	Points	Criteria
<b>Language Usage and Conventions</b> <i>This trait examines the writer's ability to demonstrate control of sentence formation, usage, and mechanics as embodied in the grade-level expectations of the language standards.</i>	3	<i>The student's response demonstrates full command of language usage and conventions.</i> <ul style="list-style-type: none"> <li>• Has clear and complete sentence structure, with appropriate range and variety</li> <li>• Shows command of language and its conventions when writing</li> <li>• Any errors in usage and conventions do not interfere with meaning*</li> </ul>
	2	<i>The student's response demonstrates partial command of language usage and conventions.</i> <ul style="list-style-type: none"> <li>• Has complete sentences, with some variety</li> <li>• Shows some knowledge of language and its conventions when writing</li> <li>• Has minor errors in usage and conventions with no significant effect on meaning*</li> </ul>
	1	<i>The student's response demonstrates weak command of language usage and conventions.</i> <ul style="list-style-type: none"> <li>• Has fragments, run-ons, and/or other sentence structure errors</li> <li>• Shows little knowledge of language and its conventions when writing</li> <li>• Has frequent errors in usage and conventions that interfere with meaning*</li> </ul>
	0	<i>The student's response is flawed for various reasons and will receive a condition code:</i> The condition codes can be found on page 211 of this guide.

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

**Seven-Point, Two-Trait Rubric**

**Trait 1 for Opinion Genre**

Writing Trait	Points	Criteria
<p><b>Idea Development, Organization, and Coherence</b></p> <p><i>This trait examines the writer’s ability to effectively establish a point of view and to support the opinion with reasons from the text(s) read. The writer must form an opinion from the text(s) in his/her own words and organize reasons for the opinion (from text that they have read) in order to create cohesion for an opinion essay.</i></p>	4	<p><i>The student’s response is a well-developed opinion piece that effectively examines a topic and supports a point of view, with reasons, clearly based on text as a stimulus.</i></p> <ul style="list-style-type: none"> <li>• Effectively introduces a topic and clearly states an opinion</li> <li>• Creates an effective organizational structure that logically groups the ideas and reasons to support the writer’s purpose</li> <li>• Effectively develops the reasons that are supported by facts and details</li> <li>• Uses words, phrases, and clauses effectively to link opinion and reasons</li> <li>• Provides a strong concluding statement or section related to the opinion presented</li> </ul>
	3	<p><i>The student’s response is a complete opinion piece that examines a topic and presents a point of view based on text.</i></p> <ul style="list-style-type: none"> <li>• Introduces a topic and states an opinion</li> <li>• Provides some organizational structure to group ideas and reasons</li> <li>• Develops the topic and supports the opinion with facts and details</li> <li>• Uses some words, phrases, and clauses to link opinion and reasons</li> <li>• Provides a concluding statement or section related to the opinion presented</li> </ul>
	2	<p><i>The student’s response is an incomplete or oversimplified opinion piece that examines a topic and partially supports a point of view based on text.</i></p> <ul style="list-style-type: none"> <li>• Attempts to introduce a topic and state an opinion</li> <li>• Attempts to provide an organizational structure to group reasons, but structure is inconsistent</li> <li>• Attempts to develop the topic and support the opinion with facts and details</li> <li>• Uses few words, phrases, or clauses to link opinion and reasons; connections are not always clear</li> <li>• Provides a weak concluding statement or section that may not be related to the opinion</li> </ul>
	1	<p><i>The student’s response is a weak attempt to write an opinion piece that examines a topic and does not support a text-based point of view.</i></p> <ul style="list-style-type: none"> <li>• May not introduce a topic or state an opinion</li> <li>• May not have any organizational structure evident</li> <li>• May not develop the topic or support the opinion</li> <li>• May not use words or phrases to link opinion and reasons</li> <li>• Provides a minimal or no concluding statement or section</li> </ul>
	0	<p><i>The student’s response is flawed for various reasons and will receive a condition code:</i></p> <p>The condition codes can be found on page 211 of this guide.</p>



## Seven-Point, Two-Trait Rubric

### Trait 2 for Opinion Genre

Writing Trait	Points	Criteria
<p><b>Language Usage and Conventions</b></p> <p><i>This trait examines the writer's ability to demonstrate control of sentence formation, usage, and mechanics as embodied in the grade-level expectations of the language standards.</i></p>	3	<p><i>The student's response demonstrates full command of language usage and conventions.</i></p> <ul style="list-style-type: none"> <li>• Has clear and complete sentence structure, with appropriate range and variety</li> <li>• Shows command of language and its conventions when writing</li> <li>• Any errors in usage and conventions do not interfere with meaning*</li> </ul>
	2	<p><i>The student's response demonstrates partial command of language usage and conventions.</i></p> <ul style="list-style-type: none"> <li>• Has complete sentences, with some variety</li> <li>• Shows some knowledge of language and its conventions when writing</li> <li>• Has minor errors in usage and conventions with no significant effect on meaning*</li> </ul>
	1	<p><i>The student's response demonstrates weak command of language usage and conventions.</i></p> <ul style="list-style-type: none"> <li>• Has fragments, run-ons, and/or other sentence structure errors</li> <li>• Shows little knowledge of language and its conventions when writing</li> <li>• Has frequent errors in usage and conventions that interfere with meaning*</li> </ul>
	0	<p><i>The student's response is flawed for various reasons and will receive a condition code:</i></p> <p>The condition codes can be found on page 211 of this guide.</p>

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

## ACTIVITY

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

**Standards:** ELAGSE5.RL.1, ELAGSE5.RL.2, ELAGSE5.RL.3, ELAGSE5.W.3

### Story Time!

Try this activity after reading a story, book, or play:

- Work with family or friends.
- Choose a character you just read about.
- Make a list of clues you learned about your character.
- Write your ideas down on paper or on a board.  
You can also use a chart like this one:

Character: \_\_\_\_\_

Type of Clue	Sentence or Clue from the Story	My Opinion about the Character
Says		
Does		
Worries about		
Looks like		
What others say		

- Share your ideas or charts with your family or friends.

### Game: Who Am I?

- Another fun thing to do is to not let anyone know which character you chose.
- After you have completed your notes or chart, play a guessing game.
- Pretend to act like your character, and have your family or friends guess who you are.

### Put On a Play

- Write a story idea or plot with family or friends.
- Act out your story as if you were the character you chose. How would your character speak and act in a new situation?

---

# MATHEMATICS

## DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 5 Mathematics EOG assessment consists of a total of 73 items.

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

The test will be given in two sections.

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

## CONTENT

The Grade 5 Mathematics EOG assessment will measure the Grade 5 standards that are described at [www.georgiastandards.org](http://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 5 EOG assessment consists of selected-response (multiple-choice), technology-enhanced (multiple-select or two-part), constructed-response, and extended constructed-response items.

## MATHEMATICS DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels present in the Math assessment 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 asks students to use what they know about place value and determining how much greater the same digit is in the tens place versus the ones place.

**Mathematics Grade 5 Content Domain:** Number and Operations in Base 10

**Standard:** MGSE5.NBT.1. Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and  $\frac{1}{10}$  of what it represents in the place to its left.

**Look at these two numbers:**

563    436

**How much greater is the digit 6 in 563 than the digit 6 in 436?**

- A. 6 times greater
- B. 10 times greater
- C. 60 times greater
- D. 100 times greater

**Correct Answer:** B

**Explanation of Correct Answer:** The correct answer choice is (B) 10 times greater. The digit 6 is in the tens place in 563 and in the ones place for 436. The value of the same digit in the tens place is always ten times greater than the value of that digit in the ones place. Choice (A) is incorrect because it shows a lack of understanding of place value. Choice (C) is incorrect because it shows the value of the digit in 563, but this does not compare the value of the digit in the two numbers. Choice (D) is incorrect because it shows what the difference would be if the digit 6 were in the hundreds place rather than the tens place.

**Example Item 2****Constructed-Response**

**DOK Level 2:** This is a DOK level 2 item because it assesses the ability to evaluate multi-step expressions with and without parentheses and apply the order of operations rules.

**Mathematics Grade 5 Content Domain:** Operations and Algebraic Thinking.

**Standard:** MGSE5.OA.1. Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.

**Evaluate these two expressions.**

a)  $(7 + 5) \times 4$

b)  $7 + 5 \times 4$

**Part A: Which expression has a greater value—a or b?**

---

**Correct Answer:** a

**Part B: Explain why this expression has a greater value.**

<hr/> <hr/>
-------------

**Explanation of Correct Answer:** The correct answer is choice (a). This expression has a value of 48, which is greater than choice b, which has a value of 27. Expression (a) has parentheses around 7 and 5, so you have to add these numbers first to find a sum of 12. Next you multiply the sum 12 by 4. The total value is 48. For the second expression, there are no parentheses. The order of operations states that you perform operations in parentheses first. If there are no parentheses in an expression, multiplication comes before addition. For expression (b), you must multiply 5 times 4, which is 20. Next you add 7, which is a total of 27.

**Scoring Rubric**

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a complete understanding of how to evaluate multi-step expressions with and without parentheses.</li> <li>• Give 2 points for a correct response and a valid process.                             <ul style="list-style-type: none"> <li>• Response is correct and complete.</li> <li>• Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a partial understanding of how to evaluate multi-step expressions with and without parentheses.</li> <li>• Give 1 point for a correct response but no valid process, or give one point for a calculation mistake made in an otherwise correct process.                             <ul style="list-style-type: none"> <li>• Response is mostly correct but contains either a computation error or an unclear or incomplete explanation.</li> <li>• Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates no understanding of how to evaluate multi-step expressions with and without parentheses.                             <ul style="list-style-type: none"> <li>• Response shows no application of a strategy.</li> <li>• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.</li> </ul> </li> </ul>

**Exemplar Response**

Points Awarded	Sample Response
2	<p>a; This expression has a value of 48, which is greater than the value of b, which is 27. Expression a has parentheses around 7 plus 5, so you have to add these numbers first to find a sum of 12. Next you multiply the sum of 12 by 4. The total value is 48. For the second expression, there are no parentheses. The order of operations states that you perform operations in parentheses first. If there are no parentheses in an expression, multiplication comes before addition. For expression b you must multiply 5 times 4, which is 20. Next you add 7 to 20, which is 27.</p>
1	<p>a</p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

### Example Item 3

#### Extended Constructed-Response

**DOK Level 3:** This is a DOK level 3 item because it asks students to assess the reasonableness of a given answer and justify their assessment. The students then must determine how to correct the error and explain their reasoning.

**Mathematics Grade 5 Content Domain:** Use equivalent fractions as a strategy to add and subtract fractions.

**Standard:** MGSE5.NF.2. Solve word problems involving addition and subtraction of fractions, including cases of unlike denominators (e.g., by using visual fraction models or equations to represent the problem). Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. For example, recognize an incorrect result  $\frac{2}{5} + \frac{1}{2} = \frac{3}{7}$ , by observing that  $\frac{3}{7} < \frac{1}{2}$ .

Use the fraction bars to help you solve the problem.

$\frac{1}{3}$				$\frac{1}{3}$				$\frac{1}{3}$			
$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$			$\frac{1}{4}$		
$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$	$\frac{1}{12}$

Anita is making chocolate fudge brownies. She needs  $\frac{1}{3}$  cup of water and  $\frac{3}{4}$  cup of vegetable oil for the recipe. Anita pours both the water and vegetable oil into a large mixing bowl. She measures the combined total amount of the water and vegetable oil and sees that it is more than one cup.

**Part A:** How much more than one cup is Anita's mixture of water and vegetable oil?

---



---

**Correct Answer:** Adding  $\frac{1}{3}$  and  $\frac{3}{4}$  is the same as adding  $\frac{4}{12}$  and  $\frac{9}{12}$  because  $\frac{1}{3} = \frac{4}{12}$  and  $\frac{3}{4} = \frac{9}{12}$ .  $\frac{4}{12} + \frac{9}{12} = \frac{13}{12}$  and  $\frac{13}{12} = 1\frac{1}{12}$  which is  $\frac{1}{12}$  more than 1 cup.

**Part B:** How could Anita know, without measuring, that  $\frac{1}{3}$  cup of water and  $\frac{3}{4}$  cup of oil together is less than 2 cups?

---

**Correct Answer:** Both  $\frac{1}{3}$  and  $\frac{3}{4}$  are each less than 1, so their sum must be less than 2.

**Part C:** How much less than 2 is the sum of  $\frac{1}{3}$  and  $\frac{3}{4}$ ?

---

---

**Correct Answer:**  $2 = \frac{24}{12}$  and  $1 \frac{1}{12} = \frac{13}{12}$ , so  $\frac{24}{12} - \frac{13}{12} = \frac{11}{12}$ .



## Scoring Rubric

Points	Description
3	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates a complete understanding of using benchmark fractions and number sense to estimate mentally and assess the reasonableness of answers when solving a real-world problem involving fraction addition.</li> <li>• Give 3 points for 3 parts answered correctly.               <ul style="list-style-type: none"> <li>• Response is correct and complete.</li> <li>• Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates a good understanding of using benchmark fractions and number sense to estimate mentally and assess the reasonableness of answers when solving a real-world problem involving fraction addition.</li> <li>• Give 2 points for 2 out of 3 parts answered correctly or for making 1 error in any of the 3 parts.               <ul style="list-style-type: none"> <li>• Response is mostly correct but contains either a computation error or an unclear or incomplete explanation.</li> <li>• Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates a limited understanding of using benchmark fractions and number sense to estimate mentally and assess the reasonableness of answers when solving a real-world problem involving fraction addition.</li> <li>• Give 1 point for 1 out of 3 parts answered correctly or for making 2 errors in any of the 3 parts.               <ul style="list-style-type: none"> <li>• Response is only partially correct.</li> <li>• Response shows incomplete or inaccurate application of a relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates no understanding of using benchmark fractions and number sense to estimate mentally and assess the reasonableness of answers when solving a real-world problem involving fraction addition.               <ul style="list-style-type: none"> <li>• Response shows no application of a strategy.</li> </ul> </li> <li>• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.</li> </ul>

## Exemplar Response

Points Awarded	Sample Response
3	<p>Part A: Adding <math>\frac{1}{3}</math> and <math>\frac{3}{4}</math> is the same as adding <math>\frac{4}{12}</math> and <math>\frac{9}{12}</math> because <math>\frac{1}{3} = \frac{4}{12}</math> and <math>\frac{3}{4} = \frac{9}{12}</math>. <math>\frac{4}{12} + \frac{9}{12} = \frac{13}{12}</math> and <math>\frac{13}{12} = 1 \frac{1}{12}</math> which is <math>\frac{1}{12}</math> more than 1 cup.</p> <p>Part B: Both <math>\frac{1}{3}</math> and <math>\frac{3}{4}</math> are each less than 1, so their sum must be less than 2.</p> <p>Part C: <math>2 = \frac{24}{12}</math> and <math>1 \frac{1}{12} = \frac{13}{12}</math>, so <math>\frac{24}{12} - \frac{13}{12} = \frac{11}{12}</math>.</p>
2	The student correctly answers two of three parts.
1	The student correctly answers one of three parts.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

---

## MATHEMATICS CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 5 Mathematics EOG assessment. This includes main ideas and important vocabulary words. This section also contains practice questions with an explanation of the correct answers and activities that you can do on your own or with your classmates or family to prepare for the test.

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

### CONTENT DESCRIPTION

- Develop an understanding of addition and subtraction of fractions and of the multiplication and division of fractions in limited cases.
- Divide with two-digit divisors, integrate decimals into the place value system, and develop an understanding of operations with decimals to the hundredths.
- Develop an understanding of volume, and be able to convert like measurement units within a given system.
- Graph points on a coordinate plane, and extend your understanding of classifications of two-dimensional figures.
- Write and interpret numerical expressions and analyze patterns and relationships.

## Unit 1: Order of Operations and Whole Numbers

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

### KEY TERMS

A **numerical expression** is a set of numbers and operations including addition, subtraction, multiplication, and division. The expression may also contain parentheses, brackets, or braces. (OA.1)

**Evaluate a numerical expression:** Find the value of the expression by completing the operations for each number in the expression. (OA.2)

To evaluate a numerical expression in the correct order, use the **order of operations** to complete each step in the expression. Operations in **parentheses, brackets, or braces** are completed first, then division and multiplication of digits from left to right. Finally, subtraction and addition can be completed from left to right. (OA.1)

A multiplication equation or expression has three parts. The **multiplicand** and **multiplier** are numbers that are multiplied to result in the **product**. (NBT.5)

Dividing whole numbers includes partitioning the **dividend** into an equal number of groups or into groups of equal size that are equivalent to the **divisor**. The **quotient** shows the size of each group or the total number of groups that are created. (NBT.6)

Multiplication and division of whole numbers can be solved using multiple strategies.

- One strategy for multiplication is the **standard algorithm**. The standard algorithm is a method used to solve a problem that includes a set of specific steps. (NBT.5)
- Other strategies for multiplication and division include using the properties of operations or models such as **rectangular arrays, area models, and fair-sharing**. (NBT.6)

### Properties of Operations:

- The **distributive property** multiplies a factor that is outside of a set of parentheses with each addend within the parentheses to solve.
- The **commutative property** allows for addends in addition equations or factors in a multiplication equations to be moved or placed in a different order while solving.
- The **associative property** allows for addends in addition equations or factors in multiplication equations to be grouped together into different pairs while solving. (NBT.6)

**Place value** is the numerical value of a digit in a number based on its location related to the decimal point. 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 tens place is  $\frac{1}{10}$  the value of the same digit in the hundreds place. (NBT.1)

A **power of 10** refers to a multiple of 10. For example,  $10^3$  is 10 with an **exponent** of 3. The exponent shows the number of times to multiply ten ( $10 \times 10 \times 10 = 1000$ ). Multiplying a number by  $10^3$  is the same as multiplying by 1000. The effect on the number is that it becomes 10 times greater 3 times. (NBT.2)

**Important Tip**

- ✍ Look at each multiplication and division equation individually to determine the best strategy to use when solving. The standard algorithm can be used. A model can also be used including Rectangular Arrays, Area Models, Lattice Methods, Partial Products, and Fair-Sharing models.

**Sample Items 1–4****Item 1****Constructed-Response**

There are 14 students making sculptures with craft sticks. There are 644 craft sticks in a box. Each student gets an equal number of craft sticks.

Part A: Explain each step needed to determine the maximum number of craft sticks that each student can get.

<hr/> <hr/> <hr/> <hr/>
-------------------------

Part B: How does the equation  $644 \div 14 = \square$  model the problem and what number should go in the box?

<hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/> <hr/>
---

### Item 2

#### Selected-Response

Which expression has a total value of 40?

- A.  $3 + 2 \times (13 - 5)$
- B.  $3 + 2 \times 13 - 5$
- C.  $(3 + 2) \times (13 - 5)$
- D.  $(3 + 2) \times 13 - 5$

### Item 3

#### Constructed-Response

Rita wants to find the number that is *3 times as large as the sum of 5 and 7*.

She writes this expression:  $3 \times 5 + 7$ .

**Part A:** Explain why Rita cannot use this expression to find the number.

---

---

**Part B:** How could Rita change the expression to find the correct number?

---

---

**Item 4****Multi-Part Technology-Enhanced****Part A**

Which expression represents the calculation “subtract 7 and 1, then divide by 3”?

- A.  $7 - 1 \div 3$
- B.  $3 \div (7 - 1)$
- C.  $(7 - 1) \div 3$
- D.  $7 - (1 \div 3)$

**Part B**

Which description is equivalent to  $5 + (4 \times 2)$ ?

- A. add 5 and 4, then multiply by 2
- B. multiply 4 by 2, then add 5
- C. multiply 5 by 2, then add 4
- D. add 4 and 2, then multiply by 5

## Unit 2: Decimals

In this unit, you will work with decimals. You will add and subtract decimal numbers, compare decimal numbers, and use place value to determine the numerical value of a number. You will also learn about expanded notation and rounding numbers.

### KEY TERMS

A **decimal** is another way to write a **fraction**. Both a decimal and a fraction show a value that is between whole numbers. For example,  $\frac{1}{2}$  or 0.5 is a value between the whole numbers 0 and 1. (NBT.7)

**Decimal point:** A marker to indicate the value of each digit in a number. Digits on the left of the decimal point indicate whole units (ones, tens, hundreds). Digits to the right of the decimal point indicate fractions, or parts, of a unit (tenths, hundredths, thousandths). (NBT.3)

**Place value** is the numerical 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. (NBT.1)

- **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  $\frac{1}{100}$ .
- **Thousandths place:** This is the third place to the right of the decimal point. A decimal of 0.001 would have a value equivalent to  $\frac{1}{1000}$ . (NBT.3a)

Decimal numbers can be written using numerals or number words. They can also be written using expanded notation. **Expanded notation** creates an addition expression by writing the value for each place of the number separately. For example, 302.4 can be written as  $300 + 2 + \frac{4}{10}$ . (NBT.3a)

To **compare decimal numbers**, determine the value of two or more decimal numbers and identify the number that has a greater value, if possible.

- **Greater than:** When the decimal number has a greater value than the other number in the comparison, use the symbol  $>$ .
- **Less than:** When the decimal number has a smaller value than the other number in the comparison, use the symbol  $<$ .
- **Equal to:** When both numbers in the comparison have the same value, use the symbol  $=$ . (NBT.3b)

Decimal numbers can be **rounded** to a given place value. Models such as number lines can be used to determine the nearest number of the given place value. (NBT.4)



---

**Addition** and **subtraction** of decimal numbers require close attention to the place value of each digit. Operations must be completed on the digit in the same location such as adding the tenths place in one number with the tenths place in another number. Models such as area models and place value charts can be used as a visual representation of the problem while solving. (NBT.7)

### **Important Tips**

- ✍ When comparing decimal numbers, look at the place value of each digit. The location of the digit determines its value.
- ✍ When adding or subtracting decimal numbers, estimate the value first. Then a place value chart can be used to solve the equation. Each operation should be completed on digits in the same location or place value.

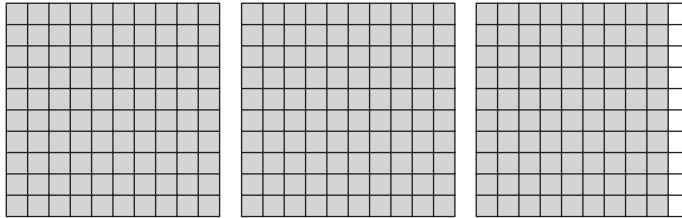
**Sample Items 5–8**

**Item 5**

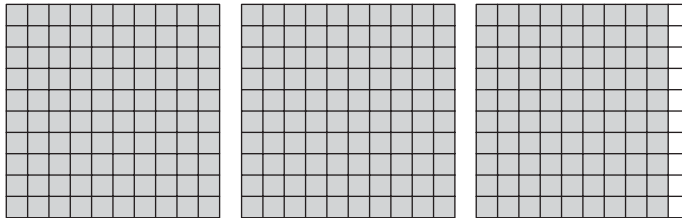
**Extended Constructed-Response**

Miguel, Jane, and Robert rode 8.7 miles in a bike relay race. They each rode the same distance. Jane shaded the models shown to determine how many miles each person rode. Each hundred model stands for 1 mile.

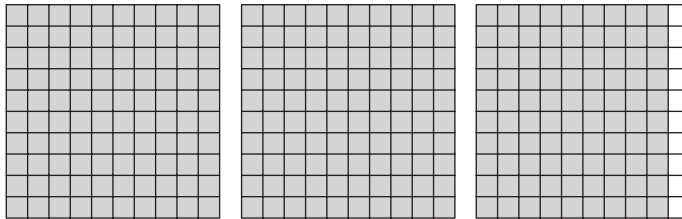
Miguel:



Jane:



Robert:



**Part A: What is the total number of miles each person rode?**

---

**Part B: Explain how the models illustrate the problem and answer.**

---

---

---

---

**Item 6****Selected-Response**

Which shows the decimal form for this expression?

$$8 \times \left(\frac{1}{10}\right) + 3 \times \left(\frac{1}{100}\right) + 9 \times \left(\frac{1}{1000}\right)$$

- A. 0.0839
- B. 0.839
- C. 8.39
- D. 83.9

**Item 7****Selected-Response**

What is 5.816 rounded to the nearest tenth?

- A. 5.8
- B. 5.82
- C. 5.9
- D. 6.00

**Item 8**

**Multi-Part Multi-Select Technology-Enhanced**

The mass of a quarter to be 5.67 grams and the mass of a half-dollar coin to be 11.34 grams.

**Part A**

Select TWO numbers that when rounded to the hundredths place will each make the inequality shown true.

$$5.67 < \underline{\hspace{1cm}}$$

- A. 5.609
- B. 5.762
- C. 5.665
- D. 5.098
- E. 5.677
- F. 5.045

**Part B**

Which number when rounded to the nearest tenth is less than 11.34 rounded to the nearest tenth?

- A. 11.361
- B. 11.283
- C. 11.347
- D. 11.249

## Unit 3: Multiplying and Dividing with Decimals

In this unit, you will continue to work with decimals. You will multiply and divide with decimals. You will use estimation and work with models like rectangular arrays and area models.

### KEY TERMS

A **decimal** is another way to write a **fraction**. Both a decimal and fraction show a value that is between whole numbers. For example,  $\frac{1}{2}$  or 0.5 is a value between the whole numbers 0 and 1. (NBT.7)

**Place value** is the numerical value of a digit 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.

- **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  $\frac{1}{100}$ . (NBT.7)

The same strategies used to multiply and divide whole numbers can be used with decimals. (NBT.7)

When **multiplying** a whole number by a decimal number, the product will have a smaller value than the whole number factor. The equation  $2 \times 0.01 = 0.02$  shows that 2 groups of 1 hundredth are equal to 2 hundredths. (NBT.7)

When **dividing** a whole number by a decimal number, the **quotient** will have a greater value than the **dividend**. The equation  $2 \div 0.01 = 200$  shows that there are 200 hundredths in the number 2. (NBT.7)

Along with strategies based on place value and the properties of operations, models can be used to multiply and divide decimal numbers. **Rectangular arrays** and **area models** can be used to represent the equation. (NBT.7)

Using a **power of 10** creates a pattern in the number of zeros in a number. For example,  $10^3$  is 10 with an **exponent** of 3. The exponent shows the number of times to multiply ten ( $10 \times 10 \times 10 = 1000$ ). Multiplying a number by  $10^3$  is the same as multiplying by 1000. The effect on the number is that it becomes 10 times greater 3 times and the decimal point moves 3 places to the right. When dividing by a power of 10, the decimal point will move to the left. (NBT.2)

### Important Tip

- ✍ Estimation can be used before computing the product or quotient of the equation. Decimal numbers can be rounded to the nearest whole number to determine a reasonable estimate.

## Sample Items 9–11

### Item 9

#### Selected-Response

Hannah multiplies 0.542 by powers of 10.

$$0.542 \times 10^1 = 5.42$$

$$0.542 \times 10^2 = 54.2$$

$$0.542 \times 10^3 = 542$$

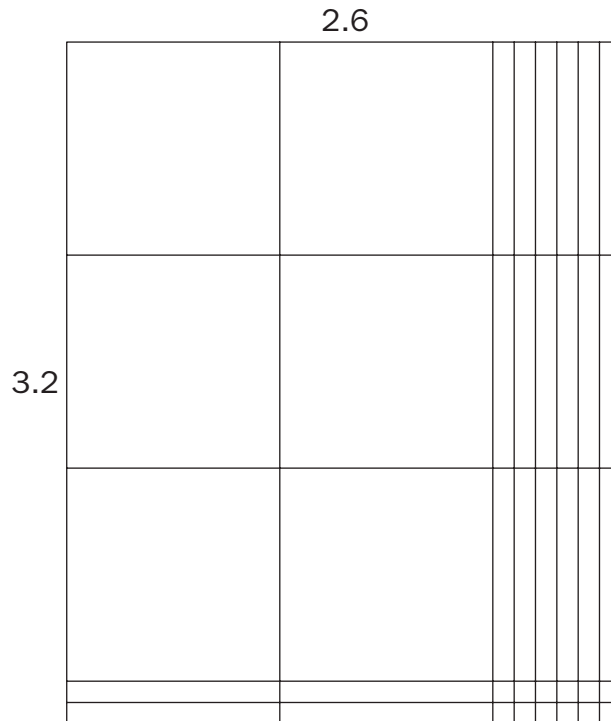
$$0.542 \times 10^4 = 5,420$$

By what power of 10 would Hannah multiply 0.542 to get a product of 5,420,000?

- A.  $10^5$
- B.  $10^6$
- C.  $10^7$
- D.  $10^8$

**Item 10****Selected-Response**

The area model illustrates the product of  $2.6 \times 3.2$ .



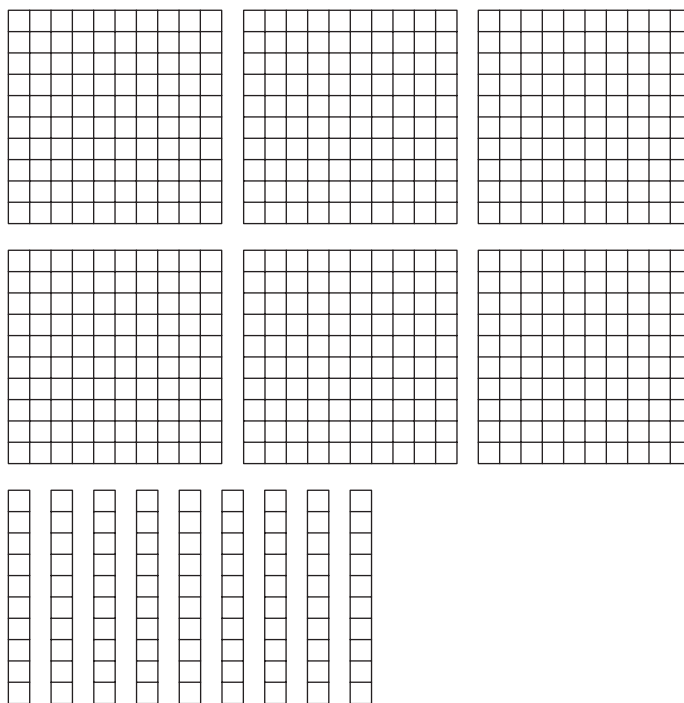
**What is the product?**

- A. 6.232
- B. 7.8
- C. 8.32
- D. 9.6

**Item 11**

**Selected-Response**

Ted is using a model to find the quotient of  $6.9 \div 2.3$ . He starts by modeling the dividend, 6.9, as shown.



He will now separate the model into equal groups to model the division. How many equal groups of 2.3 should he make?

- A. 0.3
- B. 3
- C. 30
- D. 300



## Unit 4: Adding, Subtracting, Multiplying, and Dividing Fractions

In this unit, you will work with fractions. You will practice adding, subtracting, multiplying, and dividing fractions. You will work with fractions that have common and uncommon denominators, as well as equivalent fractions. You will use fraction models, number lines, and other visual models.

### KEY TERMS

A **fraction** represents the division of two numbers. (NF.3) The dividend of the expression becomes the **numerator**, and the divisor becomes the **denominator**. (NF.3) The fraction often represents a value between two whole numbers. (NF.2)

Fractions greater than 1 are written as **improper fractions** where the numerator is greater than the denominator or as **mixed numbers**, which include a whole number and a fraction. (NF.1)

Before adding or subtracting fractions, find a **common denominator**. If the fractions in the equation have **unlike denominators**, replace each fraction with **equivalent fractions** that have the same denominator. (NF.1)

After creating a common denominator, **add** the numerators to find the **sum**, or **subtract** the numerators to find the **difference**. (NF.1)

When adding and subtracting fractions, an **estimate** can be made by comparing each fraction with a **benchmark fraction** such as  $\frac{1}{2}$ . For example, if both fractions are greater than  $\frac{1}{2}$ , then a reasonable sum would be greater than 1. (NF.2)

**Multiplying fractions:** Multiply the numerators of each fraction to find the numerator of the product. Multiply the denominator of each fraction to find the denominator of the product. Whole numbers can be written with a denominator of 1. (NF.4a)

Multiplication of fractions is used to find the **area** of a figure with fractional **side lengths**. The area can also be found by tiling the figure with square units that have fractional side lengths. (NF.4b)

**Scaling:** Comparing the value of one object to the value of another using a fraction. An example of scaling would be saying, “That rope is  $\frac{1}{3}$  as long as this rope.”

**Unit fraction:** A fraction with a numerator of 1. (NF.7)

**Dividing fractions:** Use fraction models, number lines, and other visual models to represent the division of whole numbers and unit fractions. Models can be **partitioned** into **equal parts** based on the equation. (NF.7)

### Important Tip

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

**Sample Items 12–14****Item 12****Selected-Response**

A teacher has a 60-pound bag of sand. She pours all the sand into 8 buckets. She puts an equal amount of sand in each bucket. What is the total amount of sand in each bucket?

- A.  $\frac{2}{15}$  pounds
- B.  $6\frac{1}{2}$  pounds
- C.  $7\frac{1}{2}$  pounds
- D.  $8\frac{1}{2}$  pounds

**Item 13****Selected-Response**

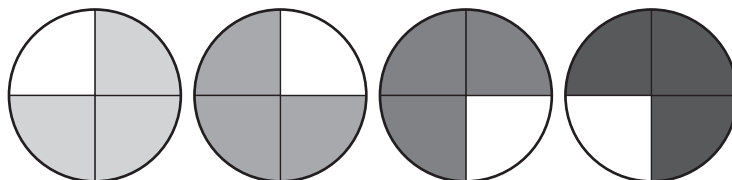
What is the difference of these fractions?

$$1\frac{5}{8} - \frac{2}{3}$$

- A.  $\frac{2}{24}$
- B.  $\frac{16}{24}$
- C.  $\frac{23}{24}$
- D.  $\frac{11}{5}$

**Item 14****Selected-Response**

Four students each draw a circle. They each shade  $\frac{3}{4}$  of their circles, as shown.



Which equation shows how much of the circles are shaded altogether?

- A.  $4 \times \frac{1}{4} = \frac{4}{4} = 1$
- B.  $4 \times \frac{3}{4} = \frac{7}{4} = 1\frac{3}{4}$
- C.  $4 \times \frac{3}{4} = \frac{3}{16}$
- D.  $4 \times \frac{3}{4} = \frac{12}{4} = 3$

## Unit 5: Geometry and the Coordinate Plane

In this unit, you will use geometry. You will become familiar with coordinate planes, ordered pairs, quadrants, and points. You will follow rules to create numerical patterns.

### KEY TERMS

**Numerical patterns:** A sequence of numbers that are created by following a set of **rules** such as “add 5.” Generate two numerical patterns using a given rule. Using the terms created, form and graph ordered pairs on a coordinate plane. A line can be generated from the pattern. (OA.3)

**Ordered pairs:** A set of numbers that are used to label the location of a point on the coordinate plane. Ordered pairs are written as (1, 2). (OA.3)

A **coordinate plane** is created by **intersecting** two perpendicular number lines at 0. The point where the two lines meet is called the **origin**. The **horizontal number line** is called the **x-axis** and the **vertical number line** is called the **y-axis**. (G.1)

The **First quadrant** of the coordinate plane has values of 0 and greater for the x-axis and the y-axis. (G.1)

**Point:** a location on the coordinate plane that is labeled by the values of the **x-coordinate** and **y-coordinate**. (G.1)

The x-coordinate represents the value on the x-axis, moving horizontally from the origin. The y-coordinate represent the value on the y-axis moving vertically from the origin. For example, the point (2, 3) moves to the right 2 units, then up 3 units. (G.1)

**Line:** A line connects multiple points on the coordinate plane. (G.1)

The coordinate plane can be used to represent real-world situations by **graphing** points and finding the value of points as it relates to the situation. (G.2)

### Important Tip

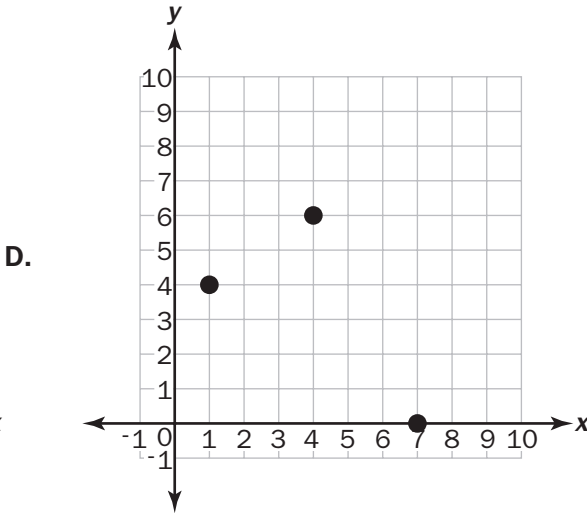
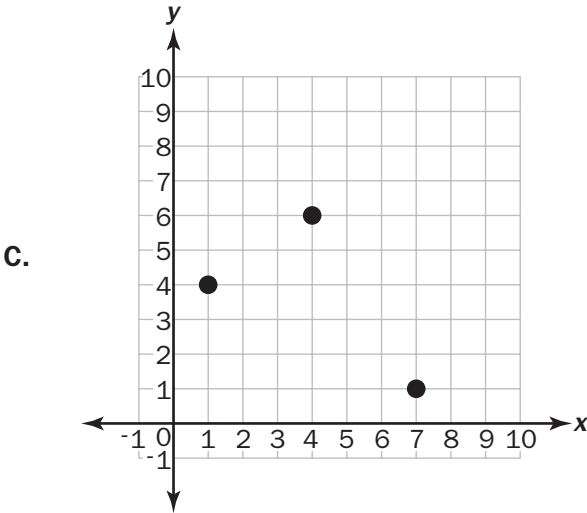
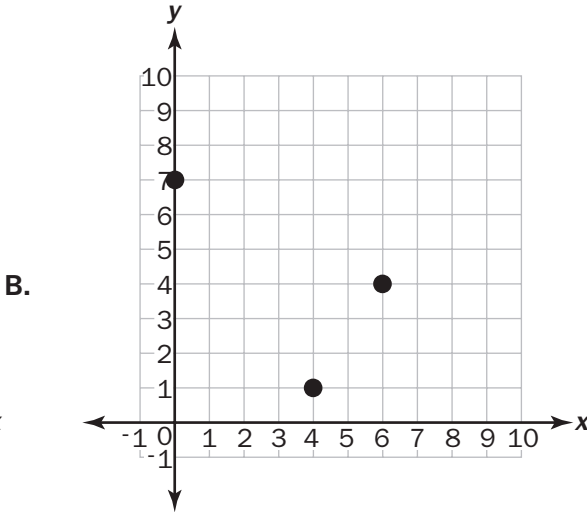
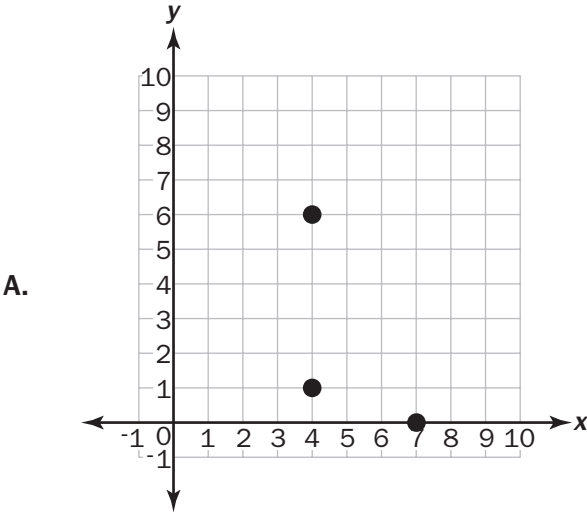
✍ An ordered pair lists the x-coordinate first, then the y-coordinate. When graphing a point using the ordered pair, move across the x-axis using the x-coordinate and then move up the y-axis using the y-coordinate.

Sample Items 15–17

Item 15

Selected-Response

Which graph shows the points (1, 4), (7, 0), and (4, 6)?



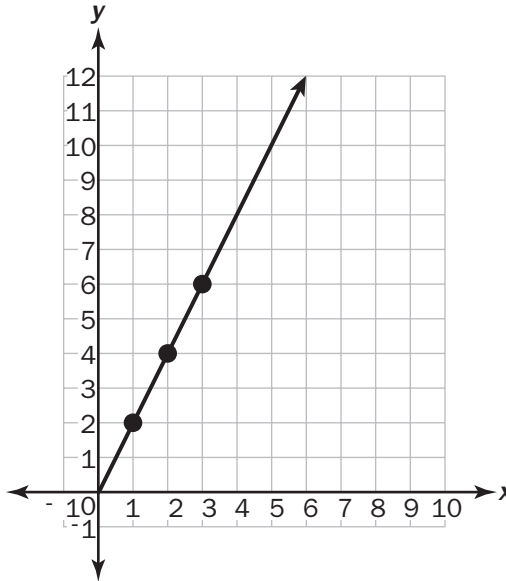
**Item 16**

**Constructed-Response**

Kirk wants to show two number patterns on a coordinate grid.

Use the coordinate grid and the table to help Kirk show his patterns.

Row	x	y
A	1	—
B	—	4
C	3	6
D	—	—
E	—	—



**Part A:** Identify the missing numbers in the table and write each row as an ordered pair.

Row A: (1, \_\_\_\_\_)

Row B: (\_\_\_\_\_, 4)

Row C: (3, 6)

Row D: (\_\_\_\_\_, \_\_\_\_\_)

Row E: (\_\_\_\_\_, \_\_\_\_\_)

**Part B:** Describe the relationship between the x-values and the y-values that are in the same row of the table.

---



---



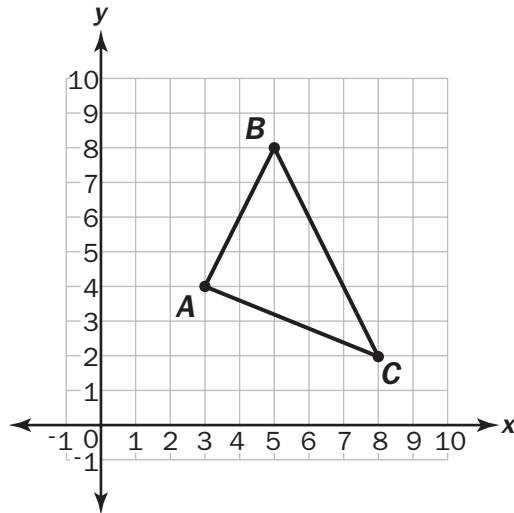
---



---

**Item 17****Selected-Response**

Felipe made a triangle on a coordinate grid.



What are the coordinates for point C?

- A. (3, 4)
- B. (5, 8)
- C. (8, 2)
- D. (2, 8)

## Unit 6: Two-Dimensional (2-D) Figures

In this unit, you will work with two-dimensional figures. You will learn about plane figures, two-dimensional figures, and their attributes. You will learn to identify geometric shapes.

### KEY TERMS

**Two-Dimensional Figures:** A **plane figure** that has two dimensions, such as a rectangle that has the dimension of length and one of width. (G.3)

The **attributes** of a 2-D figure are **properties** including the following:

- **Angles**
  - **Acute:** an angle measure less than  $90^\circ$ .
  - **Obtuse:** an angle measure greater than  $90^\circ$ .
  - **Right:** an angle measure equal to  $90^\circ$ .
- **Parallel lines:** two lines that are always an equal distance apart.
- **Perpendicular lines:** two lines that intersect at a  $90^\circ$  angle.
- **Number of sides:** how many lines are used to create a figure.
- **Length of sides:** measurement of the length of each line used to create a figure.
- **Congruent:** two figures that are the same size and shape.
- **Vertex:** the point where two lines of the figure meet. (G.3)

**Category:** A large group of two-dimensional figures that share at least one attribute. For example, all shapes with four sides belong to the category of quadrilateral. (G.3)

**Subcategory:** A smaller group of items within a category that share at least one attribute. (G.3)

**Geometric shapes** include triangles, rectangles, squares, rhombi, pentagons, hexagons, trapezoids, quadrilaterals, quarter circles, half circles, and circles.

- **Polygon:** A closed geometric shape with multiple straight sides.
- **Regular polygon:** A geometric shape with multiple sides that all have equal angles and lengths.
- **Irregular polygon:** A geometric shape with multiple sides where the side lengths vary. (G.4)

Geometric shapes can be placed in a **hierarchy**, or a set of categories and subcategories, based on their attributes. For example, in the category of quadrilaterals, there is the subcategory of rectangles. Within the subcategory of rectangles, there is the sub-category of squares. (G.4)

### Important Tip

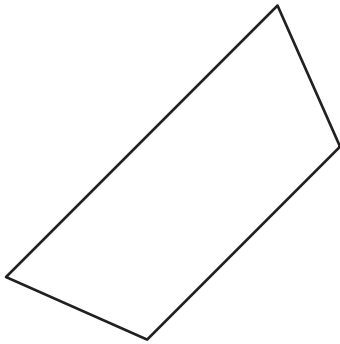
 A two-dimensional figure can belong in more than one category as well as more than one subcategory.



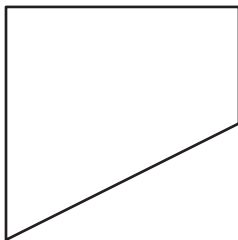
**Sample Items 18–21****Item 18****Selected-Response**

Which figure has four right angles?

A.



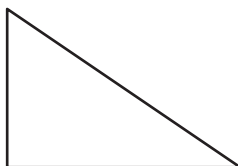
B.



C.



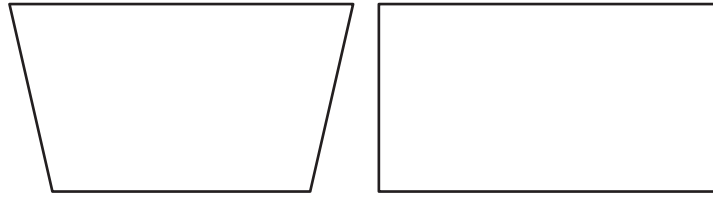
D.



**Item 19**

**Selected-Response**

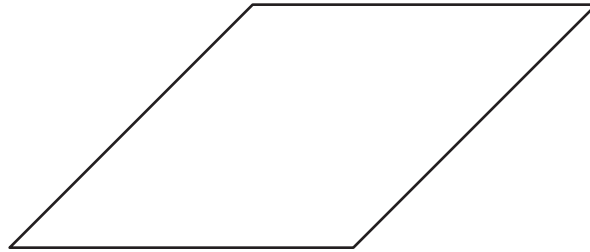
**What attributes do these two figures have in common?**



- A. Both figures have four right angles.
- B. Both figures have two pairs of equal sides.
- C. Both figures have two pairs of parallel sides.
- D. Both figures have at least one pair of parallel sides.

**Item 20****Extended Constructed-Response**

Look at this figure.



**Part A:** Name the type of figure shown.

---

**Part B:** Explain why you gave the figure this name.

<hr/> <hr/>
-------------

**Part C:** What other name could you give this figure?

<hr/> <hr/>
-------------

## Item 21

### Multi-Select Technology-Enhanced

Greg wants to rent a warehouse to store his company's lumber. The warehouse must have a volume of at least 5,000 cubic meters but no more than 8,000 cubic meters.

Select **THREE** sets of dimensions that meet Greg's requirements for the volume of a warehouse.

$$(V = l \times w \times h)$$

- A. 20 meters wide, 15 meters long, 13 meters high
- B. 18 meters wide, 18 meters long, 15 meters high
- C. 25 meters wide, 20 meters long, 15 meters high
- D. 22 meters wide, 28 meters long, 10 meters high
- E. 30 meters wide, 20 meters long, 15 meters high
- F. 35 meters wide, 15 meters long, 15 meters high

## Unit 7: Volume and Measurement

In this unit, you will work with different kinds of measurement: customary, metric, and time. You will convert between measurement units. You will use a line plot to record measurements.

### KEY TERMS

**Conversion:** changing between units within the same measurement system. (MD.1)

#### Customary Measurements:

- **Liquid volume** is measured in cups, pints, quarts, and gallons.
- **Length** is measured in inches, feet, yards, and miles.
- **Mass** is measured in ounces, pounds, and tons. (MD.1)

#### Metric Measurements:

- **Liquid volume** is measured in liters and milliliters.
- **Length** is measured in centimeters, meters, and kilometers.
- **Mass** is measured in grams and kilograms. (MD.1)

**Time** is measured in seconds, minutes, and hours. (MD.1)

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

A **solid figure**, or 3-D figure, has a volume. One example of a solid figure is a **right rectangular prism**. Each face of the right rectangular prism is a rectangle. (MD.3)

A cube with all side lengths equal to 1 unit is called a **unit cube** and has a volume of 1 cubic unit. A solid figure can be packed with unit cubes leaving no **gaps** and without **overlapping** cubes. The number of unit cubes packed into the solid figure represents the volume of the figure. (MD.3)

The volume of a shape is the number of unit cubes that fit in the three-dimensional shape.

Volume is measured in **cubic units**. These may include cubic centimeters, cubic inches, cubic feet, or other length measurements. (MD.4)

The volume of a solid figure can also be determined using two formulas:

- $l \times w \times h$  multiplies the **length**, **width**, and **height** of the figure to find the cubic units of volume.
- $B \times h$  finds the **area of the base** using the width and length, and then multiplies it by the **height** of the figure to find the cubic units of volume. (MD.5b)

Volume is an **additive** value. This means that a solid figure can be separated into two rectangular prisms. The volume of each rectangular prism can be added together to find the total volume for the solid figure. (MD.5c)

**Important Tips**

- ✍ To convert a measurement, choose another unit used to measure the same dimension within the customary or within the metric measurement systems.
- ✍ Comparing the volume of two figures requires using all three dimensions of length, width, and height. A figure may appear to have a greater volume based on one dimension such as height, but the size of the base will affect the total volume as well.

Sample Items 22–24

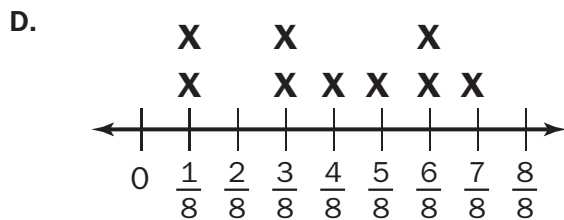
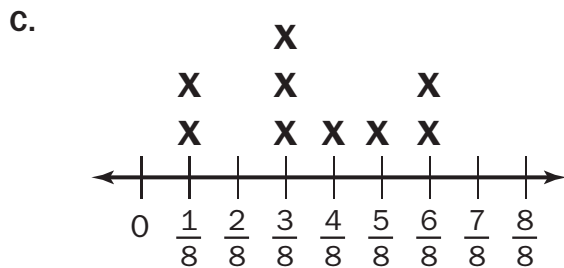
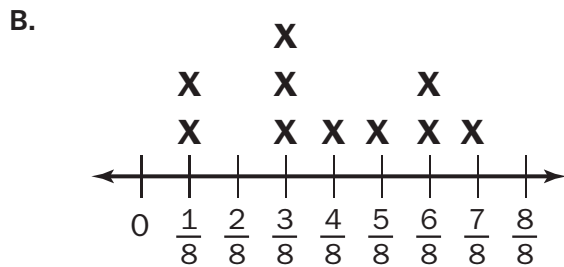
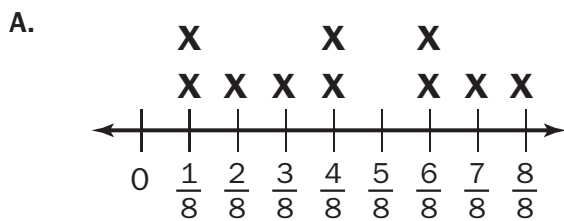
Item 22

Selected-Response

Ten students measured the amount of water in their water bottles. Here are the measurements found in liters:

$$\frac{5}{8}, \frac{3}{8}, \frac{1}{8}, \frac{3}{8}, \frac{6}{8}, \frac{3}{8}, \frac{1}{8}, \frac{7}{8}, \frac{6}{8}, \frac{4}{8}$$

Which line plot shows the data?



**Item 23**

**Constructed-Response**

Ms. Reyes wants to display three students' paintings on a wall. The lengths of the paintings are 54 inches, 3.5 feet, and 1 yard.

**Unit Conversions**  
1 yard = 3 feet  
1 foot = 12 inches

**Part A: What is the total length of the paintings, in feet? Explain your answer.**

Total length of paintings: \_\_\_\_\_ feet

---

---

---

---

---

**Part B: What is the total length of the paintings, in inches? Explain your answer.**

Total length of paintings: \_\_\_\_\_ inches

---

---

---

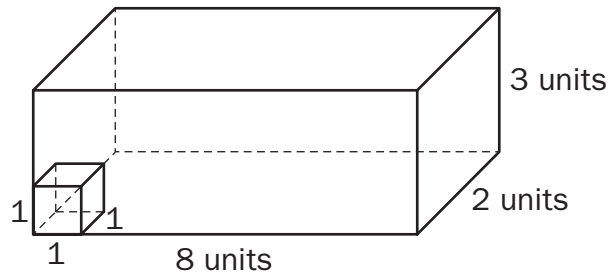
---

---



**Item 24****Selected-Response**

Find the volume of the rectangular prism using the formula  
 $\text{Volume} = (\text{area of base}) \times (\text{height})$ .



What is the maximum number of unit cubes that will fit inside the rectangular prism?

- A. 6
- B. 16
- C. 24
- D. 48

## MATHEMATICS ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
1	MGSE5.NBT.6	2	N/A	See scoring rubric and sample response beginning on page 120.
2	MGSE5.OA.1	1	C	The correct answer is choice (C) $(3 + 2) \times (13 - 5)$ . The order of operations requires that you solve the operations within the parentheses first, and then multiply and divide and add and subtract from left to right. The values inside the two parentheses in $(3 + 2) \times (13 - 5)$ are 5 and 8, which are multiplied together for a product of 40. Choice (A) is multiply 2 by the difference within the parentheses, 8, which is 16. Next you add 3, which has a total value of 19. Choice (B) is incorrect because you must first multiply $2 \times 13$ , which is 26. The order of operations requires that you add next, so $26 + 3 = 29$ . Finally, you subtract $29 - 5$ , which is 24. Choice (D) is incorrect because you first multiply the sum of 3 and 2, which is 5, by 13, for a product of 65. Finally you subtract, $65 - 5 = 60$ .
3	MGSE5.OA.2	3	N/A	See scoring rubric and sample response beginning on page 122.
4	GSE-1: 5.OA.2	2	Part A: C Part B: B	See scoring rubric on page 123.
5	MGSE5.NBT.7	2	N/A	See scoring rubric and sample response on page 124.
6	MGSE5.NBT.3	1	B	The correct answer is choice (B) 0.839. This is the decimal form for the given expression. Choice (A) is incorrect because it shows the decimal form for $8 \times \left(\frac{1}{100}\right) + 3 \times \left(\frac{1}{1000}\right) + 9 \times \left(\frac{1}{10000}\right)$ . Choice (C) is incorrect because it shows the decimal form for $8 \times (1) + 3 \times \left(\frac{1}{10}\right) + 9 \times \left(\frac{1}{100}\right)$ . Choice (D) is incorrect because it shows the decimal form for $8 \times (10) + 3 \times (1) + 9 \times \left(\frac{1}{10}\right)$ .

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
7	MGSE5.NBT.4	1	A	The correct answer is choice (A) 5.8. When rounding to the nearest tenth, use the digit in the hundredths place. If that digit is less than 5, round down. Since the digit 1, in 5.816, is less than 5, round down to 8 in the tenths place. Choice (B) is incorrect because the response shows 5.816 rounded to the nearest hundredth rather than the nearest tenth. Choice (C) is incorrect because it indicates rounding up to 9 tenths, rather than round down to 8 tenths. Choice (D) is incorrect because it indicates rounding to the nearest whole number rather than to the nearest tenth.
8	GSE-1: 5.NBT.4	2	Part A: B/E Part B: D	See scoring rubric on page 125.
9	MGSE5.NBT.2	1	C	The correct answer is choice (C) $10^7$ . When you multiply by 10, each digit's value becomes 10 times larger. If you multiply by 10 seven times, the decimal moves to the left 7 places. Choice (A) is incorrect because it shows a movement to the left of only 5 places. This number is 54,200. Choice (B) is incorrect because it shows a movement to the left of only 6 places. This number is 542,000. Choice (D) is incorrect because it shows a movement to the left of 8 places, rather than 7. This number is 54,200,000.
10	MGSE5.NBT.7	1	C	The correct answer is choice (C) 8.32. This response shows that the student multiplied correctly. Choice (A) is incorrect because the response indicates an error in regrouping tenths and hundredths. Choice (B) is incorrect because the response indicates rounding 3.2 to 3 before multiplying. Choice (D) is incorrect because the response indicates rounding 2.6 to 3 before multiplying.
11	MGSE5.NBT.7	1	B	The correct answer is choice (B) 3. The student divided correctly and understood that in this case, the quotient is the number of equal groups. Choice (A) is incorrect because the response shows that the decimal portion of the number was not considered. Choice (C) is incorrect because the response indicates the student misplaced the decimal point when dividing. Choice (D) is incorrect because the response indicates the student misplaced the decimal point when dividing.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
12	MGSE5.NF.3	1	C	<p>The correct is choice (C) <math>7\frac{1}{2}</math> pounds. This response indicates that student wrote division as a fraction, <math>\frac{60}{8}</math>, and evaluated the expression. Choice (A) is incorrect because the response indicates the student reversed the dividend and divisor. Choice (B) is incorrect because the response indicates the student subtracted 8 before dividing. Choice (D) is incorrect because the response indicates the student added 8 before dividing.</p>
13	MGSE5.NF.1	1	C	<p>The correct answer is choice (C) <math>\frac{23}{24}</math>. This response shows that the mixed number was made into an improper fraction, <math>\frac{13}{8}</math>, and a common denominator, 24, was found for the minuend and subtrahend. Choice (A) is incorrect because the response indicates an error was made when the mixed number was changed to an improper fraction. Choice (B) is incorrect because the response shows the subtrahend of the new fraction with the common denominator. No subtraction was performed. Choice (D) is incorrect because the response indicates the student did not find a common denominator needed for the minuend and subtrahend.</p>

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
14	MGSE5.NF.4	1	D	<p>The correct answer is choice (D) <math>4 \times \frac{3}{4} = \frac{12}{4} = 3</math>.</p> <p>This response shows that the total of 4 groups of <math>\frac{3}{4}</math> is 3.</p> <p>Choice (A) is incorrect because it finds the total of the circles that is not shaded. Choice (B) is incorrect because it shows the numerators added instead of multiplied. Choice (C) is incorrect because it shows the numerator of the first fraction multiplied by the denominator of the second.</p>
15	MGSE5.G.2	1	D	<p>The correct answer is choice (D) graph with points on (1, 4), (7, 0), and (4, 6). This response shows the points graphed correctly. Choice (A) is incorrect because the response shows a graph with the point (4, 1) rather than (1, 4). Choice (B) is incorrect because the response shows a graph with the points (4, 1), (0, 7), and (6, 4) rather than (1, 4), (7, 0), and (4, 6). Choice (C) is incorrect because the response shows a graph with a point (7, 1) rather than (7, 0).</p>
16	MGSE5.OA.3	2	N/A	See scoring rubric and sample response beginning on page 126.
17	MGSE5.G.2	1	C	<p>The correct answer is choice (C) (8, 2). To locate coordinates for a point on a coordinate plane, start at (0, 0), move across the x-axis, and then move up or down the y-axis. To get to point C, first move across 8, then up 2. Choice (A) is incorrect because its coordinates show the location for point A. Choice (B) is incorrect because its coordinates show the location for point B. Choice (D) is incorrect because it reverses the x- and y-coordinates, showing a movement of across 2, then up 8, which would locate a point at a different location than point C.</p>
18	MGSE5.G.3	1	C	<p>The correct answer is choice (C). This shape is a rectangle. It has four right angles. Choice (A) is incorrect because this quadrilateral is a trapezoid with no right angles. Choice (B) is incorrect because this quadrilateral is a trapezoid with only has two right angles. Choice (D) is incorrect because it is a right triangle, which has only one right angle.</p>

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
19	MGSE5.G.3	1	D	The correct answer is choice (D) Both figures have at least one pair of parallel sides. The first figure is a trapezoid, and the top and bottom sides are parallel. It has one set of parallel sides. The second figure is a rectangle and it has two pairs of parallel sides. Choice (A) is incorrect because only the rectangle has four right angles. Choice (B) is incorrect because the trapezoid has only one pair of equal sides, while the rectangle has two. Choice (C) is incorrect because only the rectangle has two sets of parallel sides.
20	MGSE5.G.4	3	N/A	See scoring rubric and sample response beginning on page 128.
21	GSE-1: 5.MD.5b	2	C/D/F	See scoring rubric on page 130.
22	MGSE5.MD.2	1	B	The correct answer is choice (B). This line plot shows the correct representation of the provided data. Choice (A) is incorrect because the line plot shows X's for fraction amounts that were not recorded by students, such as $\frac{2}{8}$ and $\frac{8}{8}$ . Choice (C) is incorrect because the line plot is missing the data value $\frac{7}{8}$ . Choice (D) is incorrect because the line plot is missing one of the $\frac{3}{8}$ measurements.
23	MGSE5.MD.1	2	N/A	See scoring rubric and sample response beginning on page 131.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
24	MGSE5.MD.5	1	D	<p>The correct answer is choice (D) 48. This response shows that the student correctly multiplied the length and width to find the area of the base and then multiplied that product by the height to find the volume, or counted rows and columns of unit cubes. Choice (A) is incorrect because it shows the area of the one side, or how many unit cubes are needed to cover that side, not the volume of the entire prism. Student only multiplied width times height. Choice (B) is incorrect because it shows the area of the base, or how many unit cubes are needed to cover the base, not the volume of the entire prism. The student only multiplied length times width. Choice (C) is incorrect because it shows the volume for only half of the figure rather than the whole figure. The student only multiplied length times height.</p>

## MATHEMATICS SAMPLE SCORING RUBRICS AND EXEMPLAR RESPONSES

### Item 1

#### Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a complete understanding of using division to solve a real-world problem.</li> <li>• Give 2 points for a correct response and valid explanations.               <ul style="list-style-type: none"> <li>• Response is correct and complete.</li> <li>• Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a partial understanding of using division to solve a real-world problem.</li> <li>• Give 1 point for correct responses but no valid explanations or calculation mistakes made in an otherwise correct process.               <ul style="list-style-type: none"> <li>• Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation.</li> <li>• Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates no understanding of using division to solve a real-world problem.               <ul style="list-style-type: none"> <li>• Response is incorrect.</li> <li>• Response shows no application of a strategy.</li> </ul> </li> </ul> <p>Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.</p>



**Exemplar Response**

<b>Points Awarded</b>	<b>Sample Response</b>
2	Part A: To find the number of craft sticks, find the number of sets of 14 there are in 644. If you multiply 14 by 46, the answer is 644. Each student gets 46 craft sticks. AND Part B: The equation models the problem because it shows a total of 644 craft sticks separated into 14 equal groups. Each student can get a maximum of <b>46</b> craft sticks.
1	Part A: To find the number of craft sticks, find the number of sets of 14 there are in 644. If you multiply 14 by 46, the answer is 644. Each student gets 46 craft sticks. AND Each student can get a maximum of 48 craft sticks.
0	<i>Student does not produce a correct response or a correct process.</i>

## Item 3

## Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates a complete understanding of writing expressions, identifying incorrect expressions, and justifying errors.</li> <li>• Give 2 points for a correct response and valid explanation.               <ul style="list-style-type: none"> <li>• Response is correct and complete.</li> <li>• Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates a partial understanding of writing expressions, identifying incorrect expressions, and justifying errors.</li> <li>• Give 1 point for 1 part answered correctly.               <ul style="list-style-type: none"> <li>• Response is mostly correct.</li> <li>• Response shows inaccurate application of a relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates no understanding of writing expressions, identifying incorrect expressions, or justifying errors.               <ul style="list-style-type: none"> <li>• Response is incorrect.</li> <li>• Response shows no application of a strategy.</li> </ul> </li> <li>• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.</li> </ul>

## Exemplar Response

Points Awarded	Sample Response
2	Part A: Rita wants to find the value of three times the sum of 5 and 7, so the expression must show that 5 and 7 must be added first and then that sum is multiplied by 3. As the expression is now, it shows that 3 and 5 are multiplied first and then 7 is added to that product. AND Part B: She should group the 5 and 7 using parentheses.
1	Part A: Rita wants to find the value of three times the sum of 5 and 7, so the expression must show that 5 and 7 must be added first and then that sum is multiplied by 3. As the expression is now, it shows that 3 and 5 are multiplied first and then 7 is added to that product. OR Part B: She should group the 5 and 7 using parentheses.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

## Item 4

## Scoring Rubric

Points	Description
2	The response achieves the following: <ul style="list-style-type: none"> <li>A score of 2 indicates complete understanding of how to write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.</li> <li>The student determines that the correct answer for Part A is Choice (C). AND</li> <li>The student determines that the correct answer for Part B is Choice (B).</li> </ul>
1	The response achieves the following: <ul style="list-style-type: none"> <li>A score of 1 indicates a partial understanding of how to write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.</li> <li>The student determines that the correct answer for Part A is Choice (C). OR</li> <li>The student determines that the correct answer for Part B is Choice (B).</li> </ul>
0	The response achieves the following: <ul style="list-style-type: none"> <li>A score of 0 indicates limited to no understanding of how to write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.</li> </ul>

**Item 5**

**Scoring Rubric**

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a complete understanding of dividing a decimal number by a whole number.</li> <li>• Give 2 points for a correct response and valid explanation.                             <ul style="list-style-type: none"> <li>• Response is correct and complete.</li> <li>• Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a partial understanding of dividing a decimal number by a whole number.</li> <li>• Give 1 point for a correct response but no valid explanation or a calculation mistake made in an otherwise correct response.                             <ul style="list-style-type: none"> <li>• Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation.</li> <li>• Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates no understanding of dividing a decimal number by a whole number.                             <ul style="list-style-type: none"> <li>• Response is incorrect.</li> <li>• Response shows no application of a strategy.</li> </ul> </li> <li>• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.</li> </ul>

**Exemplar Response**

Points Awarded	Sample Response
2	<p>Each person rode 2.9 or 2.90 miles. AND A total of 8 ones and 7 tenths are shaded to model the total length of the race. The shading is equally divided into 3 groups to model the 3 riders. And each group has 2 ones and 9 tenths shaded to model the distance each person rode.</p>
1	<p>Each person rode 2.9 or 2.90 miles. [NO explanation of models is given.]</p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

## Item 8

## Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"><li>• A score of 2 indicates a complete understanding of how to use place value to round decimals up to the hundredths' place.</li><li>• The student determines that the correct answers for Part A are Choice (B) and Choice (E). AND</li><li>• The student determines that the correct answer for Part B is Choice (D).</li></ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"><li>• A score of 1 indicates a partial understanding of how to use place value to round decimals up to the hundredths' place.</li><li>• The student determines that the correct answers for Part A are Choice (B) and Choice (E). OR</li><li>• The student determines that the correct answer for Part B is Choice (D).</li></ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"><li>• A score of 0 indicates limited to no understanding of how to use place value to round decimals up to the hundredths' place.</li></ul>

## Item 16

## Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a complete understanding of how to identify a two-numerical pattern given examples and form ordered pairs from corresponding terms in the two patterns.</li> <li>• Give 2 points for a correct response and valid process.               <ul style="list-style-type: none"> <li>• Response is correct and complete.</li> <li>• Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a partial understanding of how to identify a two-numerical pattern given examples and form ordered pairs from corresponding terms in the two patterns.</li> <li>• Give 1 point for a correct response but no valid process or a calculation mistake made in an otherwise correct process.               <ul style="list-style-type: none"> <li>• Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation.</li> <li>• Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates no understanding of how to identify a two-numerical pattern given examples and form ordered pairs from corresponding terms in the two patterns.               <ul style="list-style-type: none"> <li>• Response is incorrect.</li> <li>• Response shows no application of a strategy.</li> </ul> </li> <li>• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding.</li> </ul>

## Exemplar Response

Points Awarded	Sample Response
2	Part A: Row A: 2 Row B: 2 Row D: 4, 8 Row E: 5, 10 AND Part B: The x-values in each row are doubled to get the y-values of the same row.
1	Completes only one part correctly or completes both parts with no more than two errors. Part A: Row A: 2 Row B: 2 Row D: 4, 8 Row E: 5, 10 OR Part B: The x-values in each row are doubled to get the y-values of the same row.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

## Item 20

## Scoring Rubric

Points	Description
3	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>The response demonstrates a complete understanding of classifying two-dimensional figures based on properties.</li> <li>Give 3 points for 3 parts answered correctly.               <ul style="list-style-type: none"> <li>Response is correct and complete.</li> <li>Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>The response demonstrates a good understanding of classifying two-dimensional figures based on properties.</li> <li>Give 2 points for correct identification of the given figure and identification of another figure that fits the criteria for the classification in Part B. However, the student only provides one attribute to describe the given figure or both figures.               <ul style="list-style-type: none"> <li>Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation.</li> <li>Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.</li> </ul> </li> <li>Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>The response demonstrates a limited understanding of classifying two-dimensional figures based on properties.               <ul style="list-style-type: none"> <li>Response is only partially correct.</li> <li>Response shows incomplete or inaccurate application of a relevant strategy.</li> </ul> </li> <li>Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>The response demonstrates no understanding of classifying two-dimensional figures based on properties.               <ul style="list-style-type: none"> <li>Response is incorrect.</li> <li>Response shows no application of a strategy.</li> </ul> </li> <li>Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding</li> </ul>



**Exemplar Response**

<b>Points Awarded</b>	<b>Sample Response</b>
3	Part A: (Answers may vary.) quadrilateral, rhombus, or parallelogram; Part B: The figure has four sides, which makes it a quadrilateral. The fact that it has two pairs of parallel sides with opposite sides being equal in length as well as opposite angles being equal makes it a parallelogram. The fact that all four sides are congruent makes it a rhombus or other correct response. AND Part C: quadrilateral, rhombus, or parallelogram; (Whichever term was not used in Part A.)
2	Student gives two correct responses.
1	Student gives one correct response.
0	<i>Response is irrelevant, inappropriate, or not provided.</i>

## Item 21

## Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• A score of 2 indicates complete understanding of how to relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume.</li> <li>• The student selects Choice (C), Choice (D), and Choice (F).</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• A score of 1 indicates a partial understanding of how to relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume.</li> <li>• The student selects Choice (C) and Choice (D), with or without an additional incorrect answer. OR</li> <li>• The student selects Choice (C) and Choice (F), with or without an additional incorrect answer. OR</li> <li>• The student selects Choice (D) and Choice (F), with or without an additional incorrect answer.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• A score of 0 indicates limited to no understanding of how to relate volume to the operations of multiplication and addition and solve real-world and mathematical problems involving volume.</li> <li>• The student selects Choice (C), with or without any additional incorrect answers. OR</li> <li>• The student selects Choice (D), with or without any additional incorrect answers. OR</li> <li>• The student selects Choice (F), with or without any additional incorrect answers. OR</li> <li>• The student does not select any correct answers.</li> </ul>

## Item 23

## Scoring Rubric

Points	Description
2	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a complete understanding of how to convert among customary units of length and use the conversions in solving a real-world problem.</li> <li>• Give 2 points for a correct response and valid process.               <ul style="list-style-type: none"> <li>• Response is correct and complete.</li> <li>• Response shows application of a reasonable and relevant strategy.</li> </ul> </li> <li>• Mathematical ideas are expressed coherently through a clear, complete, logical, and fully developed response using words, calculations, and/or symbols as appropriate.</li> </ul>
1	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• Response demonstrates a partial understanding of how to convert among customary units of length and use the conversions in solving a real-world problem.</li> <li>• Give 1 point for a correct response but no valid process or a calculation mistake made in an otherwise correct process.               <ul style="list-style-type: none"> <li>• Response is mostly correct, but contains either a computation error or an unclear or incomplete explanation.</li> <li>• Response shows application of a relevant strategy, though it may be only partially applied or remain unexplained.</li> </ul> </li> <li>• Mathematical ideas are expressed only partially using words, calculations, and/or symbols as appropriate.</li> </ul>
0	<p>The response achieves the following:</p> <ul style="list-style-type: none"> <li>• The response demonstrates no understanding of how to convert among customary units of length and use the conversions in solving a real-world problem.               <ul style="list-style-type: none"> <li>• Response is incorrect.</li> <li>• Response shows no application of a strategy.</li> </ul> </li> <li>• Mathematical ideas cannot be interpreted or lack sufficient evidence to support even a limited understanding</li> </ul>

**Exemplar Response**

<b>Points Awarded</b>	<b>Sample Response</b>
2	<p>Part A: The total length of the three paintings is 11 feet.                      Since 12 inches is 1 foot, I converted 54 inches to feet by dividing by 12. I know that 1 yard is 3 feet. Then I added the three lengths, in feet, to get a total length of 11 feet.</p> <p>AND</p> <p>Part B: The total length of the three paintings is 132 inches.                      Since each foot is 12 inches, I multiplied 11 feet by 12 to convert the total length in inches to feet.</p> <p>OR</p> <p>Part B: The total length of the three paintings is 132 inches.                      Since each foot is 12 inches, I multiplied the length given in feet by 12 to get 42 inches. Since 1 yard is 3 feet, I multiplied 3 by 12 to convert 1 yard to 36 inches. Then I added the three lengths, in inches, to get a total length of 132 inches.</p>
1	<p>Part A: The length of the three paintings is 11 feet.                      Part B: The length of the three paintings is 132 inches.</p> <p>OR</p> <p>Part A: The total length of the three paintings is 11 feet.                      Since 12 inches is 1 foot, I converted 54 inches to feet by dividing by 12. I know that 1 yard is 3 feet. Then I added the three lengths, in feet, to get a total length of 11 feet.</p> <p>OR</p> <p>Part B: The total length of the three paintings is 132 inches.                      Since each foot is 12 inches, I multiplied 11 feet by 12 to convert the total length in inches to feet.</p> <p>OR</p> <p>Part B: The total length of the three paintings is 132 inches.                      Since each foot is 12 inches, I multiplied the length given in feet by 12 to get 42 inches. Since 1 yard is 3 feet, I multiplied 3 by 12 to convert 1 yard to 36 inches. Then I added the three lengths, in inches, to get a total length of 132 inches.</p>
0	<p><i>Response is irrelevant, inappropriate, or not provided.</i></p>

**ACTIVITY**

The following activity develops skills in Unit 1: Order of Operations and Whole Numbers.

**Standards:** MGSE.5.OA.1, MGSE.5.OA.2, MGSE.5.OA.3

**Place Value**

You can do this activity yourself or with your family. For this activity, you will need a large quantity of small objects, such as paper clips, pennies, or seeds.

**Directions:**

- Put all of the objects in a bowl, or spread them out on a table or on the ground.
- Estimate the number of objects. Record each person's estimate.
- Separate the objects into groups of tens, hundreds, and thousands (if you have that many). Record the number of ones, tens, hundreds, and thousands on a place value chart like the one shown below, and use it to find the total number of objects.

Thousands	Hundreds	Tens	Ones

- Find the difference between each estimate and the actual number of objects. Whose estimate is closest?
- Write and solve addition, subtraction, multiplication, and division problems based on the number of objects.
- Choose three fractions in halves, quarters, thirds, fourths, fifths, sixths, or eighths.
- Find each fraction of the whole group of objects. Represent these quantities in fraction and decimal forms.

## ACTIVITY

The following activity develops skills in Unit 7: Volume and Measurement.

**Standards:** MGSE.5.G.1, MGSE.5.G.2, MGSE.5.G.3

You can do this activity yourself or in small groups with your family.

**Directions:** Imagine you are going to put on a play.

- Choose a location in the house to serve as a stage area, and choose at least two large and two small objects to use as furniture or props.
- Use attributes to classify the shape of the stage area and the shape of each object. Try to classify each in as many ways as you can.
- Describe the different ways the stage area and each object could be measured.
- Measure the stage area and objects and explain why you chose the units you used. At least one measurement should involve volume.
- Use a coordinate grid to represent the stage area, and plot points to represent the locations of props and actors. There is only one entrance to the stage. Make the origin on the grid the location of the stage entrance for actors. Then use the grid to write stage directions that tell each actor how to get from the stage entrance to his or her correct place on the stage.
- Write ten sentences of dialogue for the play. Use a stopwatch or online timer to determine how long it takes to say each sentence to the nearest quarter minute. Record the time data on a line plot. Use the plot to determine how long each sentence would be if you redistributed the total amount of time needed to say all the sentences equally among the ten sentences.

---

# SCIENCE

## DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 5 Science EOG assessment has a total of 76 items.

The test will be given in two sections.

- You may have up to 70 minutes per section to complete Sections 1 and 2.
- The total estimated testing time for the Grade 5 Science EOG assessment ranges from approximately 90 to 140 minutes.

## CONTENT

The Grade 5 Science EOG assessment will measure the Grade 5 Science standards that are described at [www.georgiastandards.org](http://www.georgiastandards.org). The Science Georgia Standards of Excellence are designed to provide foundational knowledge and skills for all students to develop proficiency in science. These standards focus on a limited number of core disciplinary ideas and crosscutting concepts which build from Kindergarten to high school. The standards are written with the core knowledge to be mastered integrated with the science and engineering practices needed to engage in scientific inquiry and engineering design. Crosscutting concepts are used to make connections across different science disciplines.

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

- Earth Science
- Physical Science
- Life Science

## ITEM TYPES

Operational items in the Science portion of the Grade 5 EOG assessment consist of selected-response (multiple-choice) items and technology-enhanced (multiple-select or two-part) items.

## SCIENCE 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 the question requires the student to recall information concerning a known relationship between scientific quantities.

**Science Grade 5 Content Domain:** Physical Science

**Standard:** S5P2. Obtain, evaluate, and communicate information to investigate electricity.  
b. Design a complete, simple electric circuit, and explain all necessary components.

**A student wants to design a complete, simple circuit for a class project. The student has more materials available than are needed for the project.**

**What does a complete, simple circuit require to work?**

- A. wire and a switch
- B. wire and a light bulb
- C. wire, a battery, and a switch
- D. wire, a battery, and a light bulb

**Correct Answer:** D

**Explanation of Correct Answer:** The correct answer is choice (D) wire, a battery, and a light bulb. The necessary components of a simple electric circuit are a source of power, a path for the current, and something to power. Choice (A) is incorrect because a switch is not necessary, but a power source is a necessary component. Choice (B) is incorrect because a power source is a necessary component. Choice (C) is incorrect because a switch is not a necessary component.



## Example Item 2

### Selected-Response

**DOK Level 2:** This is a DOK level 2 item because the question requires the student to apply learned information to abstract and real-life situations.

**Science Grade 5 Content Domain:** Earth and Space Science

**Standard:** S5E1. Obtain, evaluate, and communicate information to identify surface features on the Earth caused by constructive and/or destructive processes.

- b. Develop simple interactive models to collect data that illustrate how changes in surface features are/were caused by constructive and/or destructive processes.

**Deposition of sediments can change the depth of a lake over time. A student wants to make a model that shows how this process takes place.**

**Which model would provide data about changes in the depth of a lake caused by deposition?**

- A. Fill a beaker with water. Slowly allow the water to evaporate from the beaker. Measure the change in the depth of the water.
- B. Fill a beaker with water. Slowly drop sand, gravel, and dead plant material into the beaker. Measure the change in the depth of the water.
- C. Fill a plastic box with water. Put a hose in the water on one end of the box and turn the water on to a slow flow. Measure the depth of the water when the box is full.
- D. Fill a plastic box with sand, gravel, and dead plant material. Put a hose in the middle of the box and turn the water on to a slow flow. Measure the depth of the water when the box is full.

**Correct Answer:** B

**Explanation of Correct Answer:** The correct answer is choice (B) Fill a beaker with water. Slowly drop sand, gravel, and dead plant material into the beaker. Measure the change in the depth of the water. Choice (A) is incorrect because there are no sediments being added to the water, the change in water level is due to evaporation. Choice (C) is incorrect because this would demonstrate increased water from runoff, not deposition. Choice (D) is incorrect because this would demonstrate increased rainfall and erosion as the sediments are redistributed by the water flow.

### Example Item 3

#### Selected-Response

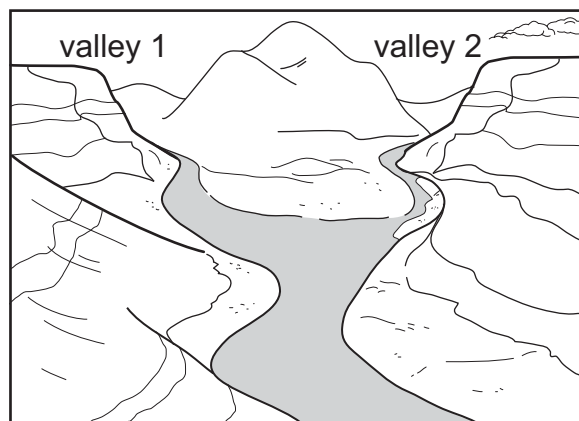
**DOK Level 3:** This is a DOK level 3 item because the question requires the student to make choices based on a reasoned argument.

**Science Grade 5 Content Domain:** Earth Science

**Standard:** S5E1. Obtain, evaluate, and communicate information to identify surface features on the Earth caused by constructive and/or destructive processes.

- a. Construct an argument supported by scientific evidence to identify surface features (examples could include deltas, sand dunes, mountains, volcanoes) as being caused by constructive and/or destructive processes (examples could include deposition, weathering, erosion, and impact of organisms).

The picture shows two steep valleys and two rivers that join together and become one larger river in a wider valley.



A student claims that both valleys have been formed by the same process over a long period of time.

Which argument **BEST** explains why the student's claim is correct or incorrect?

- A. The student's claim is correct; the evidence in the picture shows that both valleys were formed by the constructive force of deposition because flowing water carries large rocks from far away and drops them along a river, making the banks taller.
- B. The student's claim is correct; the evidence in the picture shows that both valleys were formed by the destructive forces of weathering and erosion because flowing water breaks down rock and carries the small pieces downstream.
- C. The student's claim is not correct; the evidence in the picture shows that valley 1 was formed by the destructive forces of weathering and erosion because flowing water breaks down rock and carries the small pieces downstream, but valley 2 was formed by the constructive force of deposition because flowing water carries large rocks from far away and drops them along a river, making the banks taller.
- D. The student's claim is not correct; the evidence in the picture shows that valley 1 was formed by the constructive force of deposition because flowing water carries large rocks from far away and drops them along a river, making the banks taller, but valley 2 was formed by the destructive forces of weathering and erosion because flowing water breaks down rock and carries the small pieces downstream.

---

**Correct Answer:** B

**Explanation of Correct Answer:** The correct answer is choice (B) The student's claim is correct; the evidence in the picture shows that both valleys were formed by the destructive forces of weathering and erosion because flowing water breaks down rock and carries the small pieces downstream. Choice (A) is incorrect because water depositing rocks in the river did not form the valleys. Choice (C) is incorrect because the student's claim is correct, and the same evidence of weathering and erosion is found in both valleys. Choice (D) is incorrect because the student's claim is correct, and the same evidence of weathering and erosion is found in both valleys.

## **SCIENCE CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS**

In this section, you will find information about what to study in order to prepare for the Grade 5 Science EOG assessment. This includes main ideas and important concepts. This section also contains practice questions, with an explanation 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.**

### **CONTENT DESCRIPTION**

- Investigate and identify how constructive or destructive processes form surface features on Earth.
- Investigate and explain the differences between physical and chemical changes.
- Investigate different types of electricity, circuits, and the flow of electricity through common materials.
- Investigate and explain the relationship between magnetism and electricity.
- Develop classification models for organisms.
- Compare and contrast inherited characteristics and acquired characteristics.
- Compare and contrast the parts of plant and animal cells.
- Investigate and explain how microorganisms can benefit or harm larger organisms.

## Cells and Microorganisms

In this section, you will study life science. You will explain how magnifiers such as microscopes or hand lenses are used to observe cells and their structures. You will recognize and determine the functions of plant and animal cell structures (e.g., cell membrane, cell wall, cytoplasm, nucleus, chloroplasts). You will distinguish between the structure and function of cells in multi-celled organisms and single-celled organisms. You will identify beneficial microorganisms and explain why they are beneficial, and you will identify harmful microorganisms and explain why they are harmful.

### KEY CONCEPTS

Very small objects and parts of objects can be seen by **magnifying** them so they appear larger. Magnification can also make it easier to see small details of an object. (S5L3a)

**Microscopes** and **hand lenses** are used to magnify objects. Some objects are too small to be seen without magnification. (S5L3a)

**Cells** are the smallest unit of life and make up all living things. Cell structures perform basic life functions for the cell, such as making energy, growing, repairing, and getting rid of waste. Cells can look different and perform different roles in an organism. (S5L3b)

Cells are made up of many different parts. This table shows where you will find some cell **structures**. (S5L3b, c)

	Animal Cell	Plant Cell
Cell Wall	no	yes
Cell Membrane	yes	yes
Cytoplasm	yes	yes
Nucleus	yes	yes
Chloroplast	no	yes

**Microorganisms** are living things that are too small to be seen without magnification. Some microorganisms are **beneficial** to people and the environment. Other microorganisms can be **harmful** and cause disease. (S5L4a, b)

**Bacteria** are single-celled microorganisms that can live in almost every environment and grow and reproduce on their own. Many types of bacteria are beneficial, like the ones that make cheese or break down chemicals and waste. Many other bacteria are harmful, like the ones that cause illness or spoil food. (S5L4a, b)

**Viruses** are even smaller than bacteria and cannot reproduce or grow unless they infect another organism. The virus uses the organism to stay alive and make copies of itself, eventually making the host organism sick. (S5L4b)

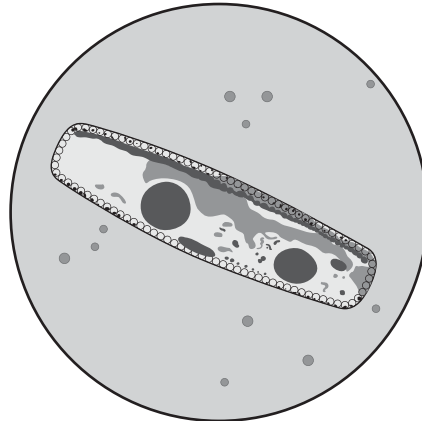
**Sample Items 1–4****Item 1****Selected-Response**

A student collects a sample of pond water in a jar to observe the microscopic algae that live in the water. The student then places a drop of the pond water on a microscope slide and observes it under a microscope. The drawings show what the student observed in the jar and on the slide.

**Pond Water Observations**

in jar

- cloudy water
- no visible algae in water



on slide

- sediments floating in water
- algae swimming in water

**Which claim is supported by evidence in the drawings?**

- A.** The student observed microscopic algae only on the slide because algae grow larger when placed on a microscope slide.
- B.** The student observed microscopic algae only on the slide because all of the algae cells were removed from the pond water on the microscope slide.
- C.** The student observed microscopic algae only on the slide because algae cells are too small to be seen without magnification by a microscope.
- D.** The student observed microscopic algae only on the slide because the water in the jar was too cloudy to see the algae.

**Item 2****Selected-Response**

A student observed a label found on raw chicken meat sold at the grocery store.

**Warning:**  
Cook thoroughly to kill bacteria.

**Which argument should the student use to support a claim that some bacteria are harmful to humans?**

- A. Some bacteria can harm humans because bacteria reproduce faster when they are cooked at high temperatures.
- B. Some bacteria can harm humans because bacteria become toxic when cooked at high temperatures.
- C. Some bacteria can harm humans because bacteria make food taste bad when it is not cooked properly.
- D. Some bacteria can harm humans because bacteria can cause food poisoning when contaminated food is not cooked properly.

### Item 3

#### Selected-Response

After a person takes an antibiotic to fight a bacterial infection in the body, some doctors recommend taking a pill called a probiotic every day. The list shows some facts about probiotics.

#### Facts about Probiotics

- They are made of living microorganisms.
- They improve food digestion and absorption of nutrients.
- They increase the body's ability to fight infections.
- They increase the number and types of normal bacteria in the gut.

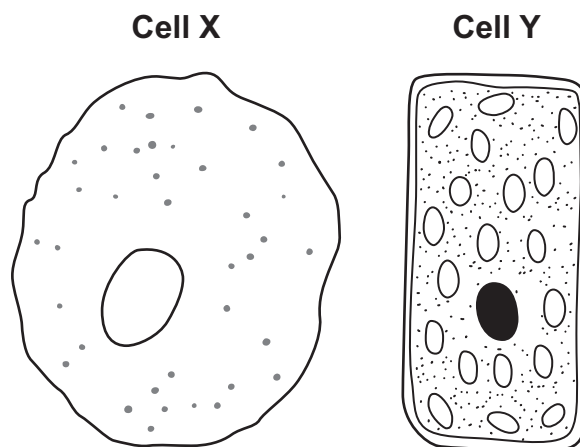
Which argument **BEST** supports the claim that humans benefit from taking probiotics?

- A. Humans benefit from probiotics because probiotics prevent people from getting sick.
- B. Humans benefit from probiotics because probiotics are made of living microorganisms.
- C. Humans benefit from probiotics because probiotics can be taken every day after having an infection.
- D. Humans benefit from probiotics because probiotics balance the number and types of bacteria that live in the gut.



**Item 4****Multi-Part Technology-Enhanced**

The pictures show the structure of two cells.

**Part A**

**Which sentence explains why the shape and structure of the two cells are different?**

- A. Cell X is shaped like a circle because it is an animal cell, which means it does not have a cell wall, and cell Y is shaped like a rectangle because it is a plant cell, which means it has a cell wall.
- B. Cell X is shaped like a circle because it is a plant cell, which means it does not have a cell wall, and cell Y is shaped like a rectangle because it is an animal cell, which means it has a cell wall.
- C. Cell X is shaped like a circle because it is an animal cell, which means it has a cell membrane, and cell Y is shaped like a rectangle because it is a plant cell, which means it does not have a cell membrane.
- D. Cell X is shaped like a circle because it is a plant cell, which means it has a cell membrane, and cell Y is shaped like a rectangle because it is an animal cell, which means it does not have a cell membrane.

**Part B**

**Which sentence describes how the differences between a plant cell and an animal cell can be determined by looking at the parts inside the cell?**

- A. Plant cells have a nucleus, but animal cells do not.
- B. Plant cells have chloroplasts, but animal cells do not.
- C. Plant cells do not have a nucleus, but animal cells do.
- D. Plant cells do not have chloroplasts, but animal cells do.

## Classification

In this life science section, you will learn how plants and animals are sorted into groups (e.g., fish, amphibian, reptile, bird, mammal) and how to classify organisms. You will classify things based on their characteristics by looking for similarities and differences. You will study vertebrates and invertebrates as well as producers, consumers, and decomposers.

### KEY CONCEPTS

You **classify** things when you organize them into **groups** based on **characteristics** they share. Scientists classify things so that they can study ways those things are similar or different. A classification system can be used to identify and study species. (S5L1a)

Scientists use similarities, or things that the organisms have in common, to help them classify organisms into different groups. (S5L1a, b)

Sometimes scientists learn more things about a particular organism, and that new information makes them modify or change the way that the organism is classified. (S5L1a, b)

Animals are classified into animals with backbones, known as **vertebrates**, and animals without backbones, known as **invertebrates**. Vertebrates have a backbone, or spine, that runs the length of their body, and they are sorted into five groups: **fish, amphibian, reptile, bird, and mammal**. Bass, tree frogs, alligators, brown thrashers, and deer are examples of vertebrates. (S5L1a)

Animals without backbones are known as **invertebrates**. They include insects, spiders, and crabs. (S5L1a)

**Plants** are organisms that make their own food. They can be classified by the way in which they transport materials within the organism. They can also be classified by the way in which they reproduce. (S5L1b)

Some plants use **seeds** to reproduce, while others do not. Some plants make their seeds in flowers, while other plants do not. Ferns are classified as plants that do not make seeds. Pine trees are classified as plants that make seeds without using flowers. Apple trees and roses are examples of plants that make seeds by using flowers. (S5L1b)

### Important Tip

✍ The ways scientists have classified organisms have changed over the years. In the earliest systems, organisms were either a plant or an animal. Over the years, scientists have learned to base their classification on similar body structures rather than on functions. For example, dolphins and sharks both live in the water, swim, and are gray. However, dolphins are mammals and have lungs, and sharks are fish and have gills. This has led scientists to classify organisms based on similar genetic backgrounds that have resulted in similar body structures. When you work on classifying organisms, keep in mind that you should look for similar traits and that new information may require you to modify your classification system. (S5L1a, b)

Sample Items 5 and 6

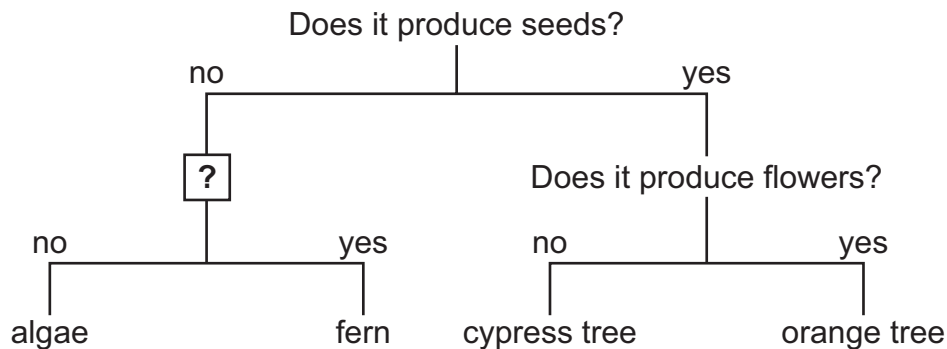
Item 5

Selected-Response

A student makes a model to sort plants using the information in the table.

Plant	Characteristics
algae	<ul style="list-style-type: none"> <li>• does not produce seeds</li> <li>• has no roots, stems, or leaves</li> </ul>
fern	<ul style="list-style-type: none"> <li>• does not produce seeds</li> <li>• has roots, stems, and leaves</li> </ul>
cypress tree	<ul style="list-style-type: none"> <li>• produces seeds from cones</li> <li>• has roots, stems, and leaves</li> </ul>
orange tree	<ul style="list-style-type: none"> <li>• produces seeds from flowers</li> <li>• has roots, stems, and leaves</li> </ul>

The student's model is not complete.



Which question should the student put in the box with a question mark to correctly complete the model?

- A. Does it produce cones?
- B. Does it grow into a tree?
- C. Does it produce flowers?
- D. Does it have roots, stems, or leaves?

**Item 6**

**Selected-Response**

A student uses a table showing characteristics of different animals to create a classification model.

**Animal Classification Facts**

Animal	Characteristics
eagle	<ul style="list-style-type: none"> <li>is a warm-blooded vertebrate</li> <li>has wings and feathers, lives on land</li> </ul>
shark	<ul style="list-style-type: none"> <li>is a cold-blooded vertebrate</li> <li>has gills and fins, lives in water</li> </ul>
beetle	<ul style="list-style-type: none"> <li>is a cold-blooded invertebrate</li> <li>has wings and six legs, lives on land</li> </ul>
cougar	<ul style="list-style-type: none"> <li>is a warm-blooded vertebrate</li> <li>has hair and four legs, lives on land</li> </ul>
snake	<ul style="list-style-type: none"> <li>is a cold-blooded vertebrate</li> <li>has scales and no legs, lives on land</li> </ul>

The student makes an incomplete model.

**Classification Model**

1a has a backbone.....	go to 2
1b does not have a backbone .....	Insect
2a.....?	go to 3
2b.....?	go to 4
3a has feathers.....	Bird
3b has hair.....	Mammal
4a lives in water .....	Fish
4b lives on land.....	Reptile

How should the student complete the model to classify all of the animals in the table?

- A. 2a has gills.....go to 3  
2b has scales.....go to 4
- B. 2a is warm blooded .....go to 3  
2b is cold blooded .....go to 4
- C. 2a has wings .....go to 3  
2b does not have wings.....go to 4
- D. 2a has six legs.....go to 3  
2b does not have six legs.....go to 4

---

## Acquired and Inherited Characteristics

In this life science section, you will learn about the characteristics of learned behaviors and inherited traits.

### KEY CONCEPTS

The physical characteristics that are used to describe an organism can also be called traits. Some traits are unique to individual organisms, and some traits are common because they are shared by many individuals. Being right-handed is a common physical trait because most people are right-handed.

Physical traits can be divided into two main types: inherited and acquired. **Inherited traits** are passed from parent(s) to offspring. Fur color and beak shape are examples of inherited traits that are passed down from parents to offspring. **Acquired traits** are developed after the organism is born and are not passed to offspring by parents. Having a scar or being a fast runner are examples of acquired traits. (S5L2b)

In addition to physical traits, organisms can also be described by their learned and instinctive behaviors. Organisms interact with their environment, including other organisms, from the time they are born. Some interactions, like babies crying for food or being quiet in the nest when parents are away, are called **instincts** because the organism knows how to behave without being taught. By contrast, **learned behaviors** like where to find food or how to raise offspring are taught to an organism, or discovered through interactions with the environment. Being able to tie shoelaces is an example of a learned behavior. (S5L2a)

## Sample Items 7–10

### Item 7

#### Selected-Response

Two students listed some traits of their favorite football player.

#### Traits of a Football Player

- is the youngest of four children
- has brown hair and brown eyes
- is taller than the other teammates
- is good at throwing and catching a football

Which question would help the student determine which trait on the list is an acquired physical trait of the football player?

- A. How tall is the football player?
- B. Does the football player have any siblings?
- C. Why does the football player have brown eyes and hair?
- D. Has the football player always been good at catching a football?

### Item 8

#### Selected-Response

Bottlenose dolphins live off the coast of Georgia. The list shows some characteristics of bottlenose dolphins.

#### Characteristics of Bottlenose Dolphins

- have 86 to 100 sharp teeth
- are light gray to black in color
- can be eaten by sharks and killer whales
- live in groups of females and groups of males

Which question can be asked to find out which characteristic of bottlenose dolphins is an instinct?

- A. Why do bottlenose dolphins live in groups?
- B. Why do sharks and killer whales hunt bottlenose dolphins?
- C. How many teeth do bottlenose dolphins have when they are born?
- D. How does the color of bottlenose dolphins help them hide from predators?

**Item 9****Selected-Response**

The eastern box turtle lives in Georgia. The list shows some characteristics of the eastern box turtle.

**Characteristics of an Eastern Box Turtle**

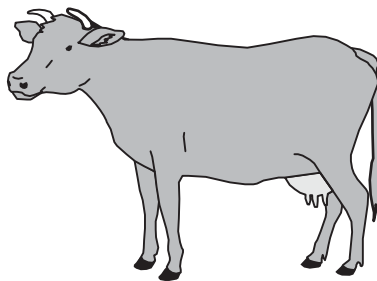
- can live 50 years or more
- will hide in its shell when frightened
- has a dark shell with many yellow or orange spots
- eats mushrooms, berries, fruits, worms, and insects

Which question can be asked to find out which characteristic is a learned behavior?

- A. Do all eastern box turtles like the same food?
- B. Do eastern box turtles in other states live for 50 years?
- C. Do eastern box turtles in other states have the same color of spots?
- D. Do all eastern box turtles hide in their shells when they are frightened?

**Item 10****Selected-Response**

The picture shows a cow.



Which question can be asked to learn about the inherited physical traits of the cow?

- A. How old is the cow?
- B. Has the cow been fed today?
- C. Is the cow tame enough to pet?
- D. Why does the cow have brown fur?

## Electricity/Magnetism

In this section on physical science, you will learn to carry out investigations to become familiar with the characteristics of magnetic forces and static electricity. You will understand that an object that has been electrically charged pulls on uncharged objects and may either push or pull other charged objects without touching the uncharged or charged objects. You will gain an understanding of the relationship between magnetism and electricity. You will also learn about the conditions necessary for electricity to flow through an electric circuit.

### KEY CONCEPTS

**Electricity** is the effect of the apparent flow of electrons through a conductor. People also refer to electricity when they talk about using electrical energy to power their homes, cars, and other things. (S5P2c)

**Electric current** is the flow of an electric charge through a conductor. When electric currents move through a conductor, they create heat and magnetic fields. Lightning, static electricity, and the movement of electricity in power lines are examples of electric currents. (S5P2a, c)

**Static electricity** is the buildup of an electrical charge in or on the surface of an object. When two objects, like a balloon and a piece of cloth, are rubbed together, some of the electrons from one object stick to the other object. This causes the buildup of a charge on one of the objects. When a second object is brought near the first object, the buildup of the electrical charge can jump across to that second object. When the electrical charge jumps from one object to another, it is said to have discharged. This is the spark you see. (S5P2a)

**Electric force** is the force of attraction between two electrically charged objects or a charged object and a neutral object. When you use a balloon to pick up pieces of paper, the electric force between the balloon and pieces of paper is great enough to pick up the pieces of paper. Objects cling to each other when there is enough electric force. (S5P2a)

To make an **electric circuit**, you need at least a **power source** and a path for the electric current to flow through. You can add objects, such as light bulbs, along the path. You can also add a **switch** to start and stop the flow of an electric current through the circuit. (S5P2b)

**Conductors** are any type of object through which an electric current can flow. Metal wire is the most common conductor. Conductors are used in electric circuits. **Insulators** are any type of object through which an electric current cannot flow. Glass and rubber are very common insulating materials. Insulators are used to protect people from electric currents. (S5P2c)

**Magnetism** is produced when **magnetic fields** are generated. Magnetism is a property of certain types of materials that allows them to attract or repel other objects that have this property. Magnetism is generated by the presence of magnetic fields or by the presence of an electric current. (S5P3a, b)

An **electromagnet** is created when an electric current flows through a wire. In general, the wire in an electromagnet is wrapped around a core made of a magnetic metal, such as iron or steel. A magnetic field is created around the wire, turning the core into a temporary magnet. When the electric current is turned off, the magnetic field quickly fades. You can make an electromagnet using a circuit with a battery, switch, and wire wrapped around a nail. (S5P3a)



**Important Tip**

- ✍ Electricity and magnetism are connected to each other. Electricity can produce magnetism. When an electric current flows through a wire, the current creates a very small magnetic field. The field is so small it can barely be measured. If you take a wire and create a bunch of loops around the wire, the current will generate a bigger magnetic field. If you wrap the wire around a magnetic metal core, the magnetic field generated from the wire will create a much stronger magnetic field. Magnetism can also create electricity. If you take the loops of wire and move a magnet by the wire, the magnetic field of the magnet will push the electrons in the wire around, creating an electric current. If you were to pass the magnet by the wire loops many times very, very quickly, you would create a stronger electric current. (S5P3a)

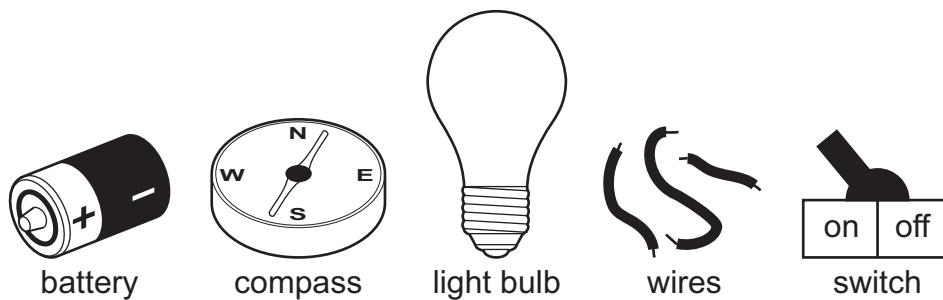
## Sample Items 11–14

### Item 11

#### Selected-Response

A student is investigating circuits. The student has the materials shown.

#### Materials Available



The student uses only three of the materials available to build a complete circuit that conducts electricity.

(Answer the question on the next page.)

Which table shows the materials used by the student and correctly explains why each material is needed to make the circuit work?

A.

Material Used	Why It Is Necessary
battery	to provide energy to the circuit
wire	to connect parts of the circuit
switch	to conduct electricity in the circuit

B.

Material Used	Why It Is Necessary
battery	to provide energy to the circuit
light bulb	to show that the circuit conducts electricity
wire	to connect parts of the circuit and conduct electricity

C.

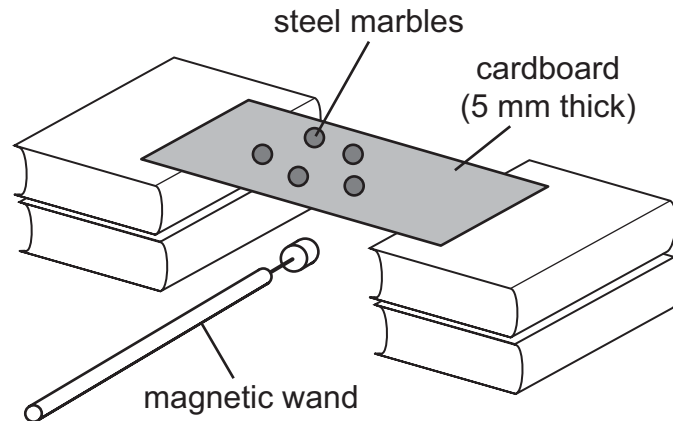
Material Used	Why It Is Necessary
compass	to show that the circuit conducts electricity
light bulb	to provide energy to the circuit
wire	to connect parts of the circuit and conduct electricity

D.

Material Used	Why It Is Necessary
compass	to provide energy to the circuit
wire	to connect parts of the circuit
switch	to show that the circuit conducts electricity

**Item 12****Selected-Response**

A student creates the setup and procedure shown below to investigate the interaction between a magnetic wand and steel marbles through a piece of cardboard that is 5 millimeters (mm) thick. A magnetic wand is a wooden stick with a small magnet attached to the end.



The student uses the following step to get started.

**step 1:** Slowly move the magnetic wand to different locations under the cardboard to see whether the marbles move with the wand.

The student has additional materials available to use during the investigation.

- piece of cardboard (10 mm thick)
- piece of iron (5 mm thick)
- piece of plastic (5 mm thick)

Which procedure would **BEST** demonstrate whether different materials affect the magnetic field of a magnetic wand and which result should the student expect?

- A. step 2:** Replace the 5-mm-thick cardboard with the 10-mm-thick cardboard and repeat step 1.  
**result:** The marbles will follow the magnetic wand on the thin and the thick cardboard because the magnetic field will pass through the cardboard.
- B. step 2:** Replace the 5-mm-thick cardboard with the 10-mm-thick cardboard and repeat step 1.  
**result:** The marbles will follow the magnetic wand on the thinner cardboard because the magnetic field passes through thin materials, but the magnetic field will not pass through the thicker material.
- C. step 2:** Replace the 5-mm-thick cardboard with the 5-mm-thick iron, and repeat step 1.  
**step 3:** Replace the 5-mm-thick iron with the 5-mm-thick plastic, and repeat step 1.  
**result:** The marbles will follow the magnetic wand on all of the materials because the magnetic field passes through nonmagnetic materials.
- D. step 2:** Replace the 5-mm-thick cardboard with the 5-mm-thick iron, and repeat step 1.  
**step 3:** Replace the 5-mm-thick iron with the 5-mm-thick plastic, and repeat step 1.  
**result:** The marbles will follow the magnetic wand on the cardboard and plastic because the magnetic field passes through nonmagnetic materials, but the magnetic field will not pass through the magnetic material.

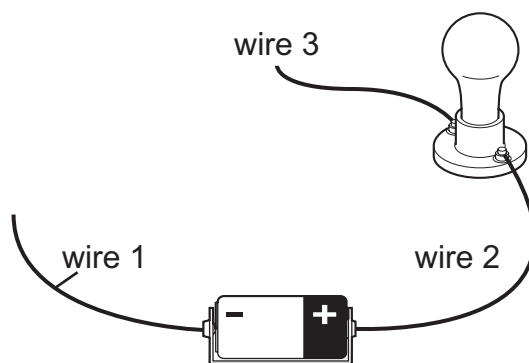
## Item 13

### Selected-Response

A student wants to test some materials to find out whether they conduct electricity or insulate electricity. The student uses the following steps to get started.

step 1: Attach wire 1 to the negative end of a battery.  
 step 2: Attach wire 2 to the positive end of the battery.  
 step 3: Attach the open end of wire 2 to a light bulb.  
 step 4: Attach wire 3 to the light bulb.  
 step 5: ?  
 step 6: ?

The diagram shows the result of steps 1 through 4.



The student has a variety of materials to test. Which steps would **BEST** complete the procedure and which conclusion should the student make?

- A. **step 5:** Connect a test material to the open ends of wire 1 and wire 3.  
**step 6:** Make observations, and repeat step 5 with a different test material.  
**conclusion:** If the bulb lights up, the material is a conductor. If the bulb does not light up, the material is an insulator.
- B. **step 5:** Connect a test material to the open ends of wire 1 and wire 3.  
**step 6:** Make observations, and repeat step 5 with a different test material.  
**conclusion:** If the bulb lights up, the material is an insulator. If the bulb does not light up, the material is a conductor.
- C. **step 5:** Connect the open ends of wire 1 and wire 3 to each other to complete the circuit.  
**step 6:** Touch a test material to the completed circuit, and record observations.  
**conclusion:** If the bulb lights up, the material is an insulator. If the bulb does not light up, the material is a conductor.
- D. **step 5:** Connect the open ends of wire 1 and wire 3 to each other to complete the circuit.  
**step 6:** Touch a test material to the completed circuit, and record observations.  
**conclusion:** If the bulb lights up, the material is a conductor. If the bulb does not light up, the material is an insulator.

**Item 14****Multi-Select Technology-Enhanced**

A student is comparing two types of magnets. The student asks five questions and then finds the answers to the questions by experimenting with the magnets. The results are shown in the table.

**Student Results**

Question	Magnet 1	Magnet 2
Can it be turned on and off?	yes	no
Does it require an energy source?	yes	no
Can its strength be changed?	yes	no
Does it attract iron and steel objects?	yes	yes
Can it lift 50 paper clips?	no	yes

**Based on the evidence, which TWO arguments correctly match a magnet to its best use?**

- A. Magnet 1 should be used to pick up many small magnetic objects at once because the temporary magnet can pick up as many objects as the permanent magnet can.
- B. Magnet 1 should be used to pick up magnetic objects in one location and drop them off in another location because temporary magnets can be turned on and off.
- C. Magnet 1 can be used in all the ways magnet 2 is used because temporary magnets can be made stronger or weaker and permanent magnets cannot.
- D. Magnet 2 should be used to pick up magnetic objects in places where there is no power supply because permanent magnets do not run out of energy.
- E. Magnet 2 should be used to pick up large magnetic objects because permanent magnets are stronger than temporary magnets.
- F. Magnet 2 can be used in all the ways magnet 1 is used because permanent and temporary magnets can both pick up the same magnetic objects.

## Chemical and Physical Change

In this physical science section, you will explain the difference between chemical and physical changes. You will conduct basic experiments and determine whether matter has changed physically by separating mixtures or chemically by observing changes in the properties of substances before, during, and after a chemical reaction.

### KEY CONCEPTS

**Physical properties** are any properties that are measurable and can be seen. Physical properties can be determined without changing the chemical properties of an object. Color, hardness, area, length, strength, and temperature are some examples of physical properties. (S5P1a)

**Chemical properties** are any properties that can be measured only by chemically changing an object. Paper starts to burn at around 450°F. At this temperature, the paper combines with oxygen in the air and new substances are formed. (S5P1c)

A **physical change** happens when matter has a change in its physical properties but not its chemical properties. For example, salt can be dissolved in water, but, if the water evaporates, the salt is still there. (S5P1a)

A **chemical change** happens when matter breaks down into two or more substances or when more than one substance is combined to form a new substance. Hydrogen peroxide forming bubbles on its own is an example of matter breaking down into two substances. Vinegar and baking soda turning into bubbling foam is an example of two substances combining to create other substances. (S5P1c)

A **chemical reaction** is a process where two or more substances change chemically from one substance to one or more other substances. When iron is combined with air, the iron is slowly converted into rust. (S5P1c)

A **mixture** is something that contains two or more substances that are not combined chemically. Salted popcorn is an example of a mixture. (S5P1a)

Something is a mixture if you can physically **separate** the mixture into the substances that made up the mixture. You can tell that salt water is a mixture because you can evaporate the water and all that will be left is salt. (S5P1a)

**States of matter** are the different forms in which matter can be found. Water is a **liquid**, the state of matter that has a definite volume but no fixed shape. When water is ice, it is a **solid**. Solids have a definite shape and volume. Their shape and volume cannot be easily changed. When water is steam, or water vapor, it is a **gas**. Gases have no definite shape and take the shape of their container. (S5P1b)

**Matter** is anything that has mass and is in one of the states of matter. (S5P1a)

### Important Tip

✍ Determining if a physical or chemical change has occurred can be hard to figure out. Two good questions to ask are the following: Does the matter still look the same? Could you change the matter back to what it was before the change? A physical change is something that can be reversed. You can tear a piece of paper, but you still have a piece of paper because only the dimensions of the paper change. A chemical change is something that cannot easily be reversed and usually means there is a different form of matter. If you took the torn piece of paper and burned it, you would have some ash. Is that ash the same as the paper, and could you change the ash back to paper? The answer is no. (S5P1a, c)

## Sample Items 15–18

### Item 15

#### Selected-Response

**A student is investigating chemical changes by using different materials.**

**Which investigation would provide evidence of a chemical change and why?**

- A. Melting a solid with fire would provide evidence of a chemical change because the solid would change shape.
- B. Cutting cardboard into many smaller pieces would provide evidence of a chemical change because the pieces cannot be put back together.
- C. Placing a solid into hot water and stirring while the solid dissolves would provide evidence of a chemical change because the dissolved material is lost.
- D. Combining two liquids that give off heat and gas would provide evidence of a chemical change because the particles react to make a new material with different properties.

### Item 16

#### Selected-Response

**Which investigation would provide evidence of a chemical change?**

- A. Spray perfume into the air, and when the air and perfume mix, observe the change in odor that happens as they mix.
- B. Put an antacid tablet in water, and when the antacid and water mix, observe the bubbles that form as a new substance is created.
- C. Heat water in a pan on a stove, and observe the steam that forms as the state of matter of the water changes.
- D. Blow air through a wand filled with soap solution, and observe the bubbles that form as the air becomes trapped.



**Item 17****Selected-Response**

A student fills a tray with water and places the tray in the freezer. Three hours later, the student removes the tray from the freezer and makes observations.

**Student Observations**

- The water is solid.
- The water does not flow.
- The water keeps its shape in any container.
- The color of the water has changed to white.

The student claims that changing the temperature of water causes a physical change that turns water into ice.

Which argument **BEST** supports the student's claim?

- A. Ice forms because heat is added, causing the particles to move faster. This makes the ice flow.
- B. Ice forms because heat is removed, causing the particles to move slower. This makes the ice change its shape.
- C. Ice forms because heat is removed, causing the particles to move slower. This changes the water from a liquid to a solid.
- D. Ice forms because heat is added, causing the particles to move faster. This changes the color of the water from clear to white.

## Item 18

### Multi-Select Technology-Enhanced

Students are investigating chemical changes that occur in different materials.

Which TWO investigations would provide evidence of a chemical change?

- A. Placing a liquid in a freezer until the liquid becomes a solid would provide evidence of a chemical change because the state of matter changes.
- B. Using a saw to cut a solid into two different pieces would provide evidence of a chemical change because the pieces cannot be put back together.
- C. Using a hot plate to heat a solid until it changes color and releases an odor would provide evidence of a chemical change because the particles cannot be changed back.
- D. Placing two different liquids together in a beaker and observing that a solid forms when they mix would provide evidence of a chemical change because a new material is formed.
- E. Placing a mixture containing a solid and a liquid on a windowsill and letting the liquid evaporate would provide evidence of a chemical change because the evaporated material is lost.
- F. Using a magnet to remove a magnetic solid from a mixture that also contains nonmagnetic solids would provide evidence of a chemical change because the mixture cannot be mixed together again.

## Earth Science

In this section on earth science, you will identify surface features of Earth caused by constructive and destructive processes. These processes include, but are not limited to, volcanoes, earthquakes, erosion, and weathering. Students should also be able to relate the role of technology and human intervention to the control of constructive and destructive processes.

### KEY CONCEPTS

**Weathering** is a destructive process where Earth materials such as rocks and soil are broken down into smaller parts. Weathering can also break down roads, buildings, and other materials humans make. (S5E1a, b)

**Erosion** is the movement of materials from one place to another by natural methods. Erosion can be a destructive process, such as when a landslide moves material from the top of a mountain. (S5E1a, b)

**Deposition** is a constructive process whereby soil and rock that are eroded from one location are deposited as sediment in another location. As the sediment from a river is deposited at the mouth of a river over time, new land is created, which is called a delta. An example is the Mississippi delta. (S5E1a, b)

The surface of Earth, including under the ocean, is made up of **tectonic plates**. These plates form sections of the surface of Earth, and some plates move toward or away from each other. Plates can also slide past each other. (S5E1a)

The area where two or more tectonic plates meet and show movement is called a **fault**. (S5E1a, b)

**Trenches** can be found where faults are located under the ocean. Much smaller trenches, called valleys and canyons, are also created by erosion. **Glaciers**, sheets of very old ice that are the size of states and that move along Earth's surface, also create valleys as they slowly grind along the surface. (S5E1a, b)

**Ridges** are formed when tectonic plates collide and both push up. This creates hills and mountains. Ridges and individual mountains can also be formed in areas where magma, molten rock from Earth's core, pushes up between or through tectonic plates. Stone Mountain may be one of these magma-created mountains. (S5E1a, b)

A **volcano** is a break in Earth's crust that lets magma come out from the mantle and onto Earth's surface. Volcanoes can be found in the deep ocean and on Earth's surface. They are a constructive process. Volcanoes show up on Earth's surface where the magma can push through weakness in the crust. (S5E1a, b)

Magma is the molten rock below Earth's crust. When magma breaks the crust, it is called lava. Lava is thrown out by volcanoes. The islands of the state of Hawaii are **landforms** created by volcanoes. (S5E1a, b)

Tectonic plates move very slowly because they are pushing against each other with great force.

**Earthquakes** happen when tectonic plates suddenly slide around. The plates shake, and the energy from that creates waves that echo through Earth. (S5E1a, b)

Earthquakes and volcanoes can both happen underwater. When earthquakes happen underwater, they can cause **tsunamis**. This happens when the energy released by an earthquake is transferred to the column of water above it and creates waves that travel away from the area. Tsunamis happen where the ocean meets the shore. The water starts to rise as the waves from the earthquake push the water up. Tsunami waves are longer than regular water waves. As a tsunami wave hits the shore, it carries much more water and creates a lot of damage. (S5E1a, b)

Humans can affect constructive and destructive processes and may do so to protect people or landforms when the processes will result in undesirable results. Beach reclamation to reduce the effects of erosion on beaches can be accomplished by dredging sand from the ocean floor and depositing it back on the beach. **Floods** can be controlled by building dams to hold back floodwaters and to let the excess water move downstream more slowly or by building levees (earthen walls along riverbanks) to prevent rivers from going outside their banks onto surrounding land. Cities can also modify their storm drain systems or direct the drainage flows to retention ponds to slow the runoff of rainwater into streams and rivers to reduce the risk of flooding downstream. (S5E1c)

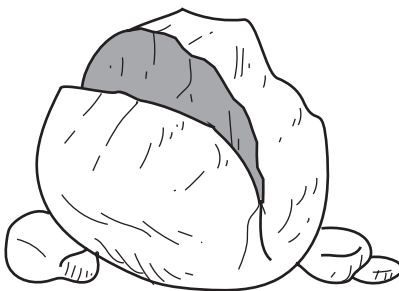
**Seismic waves** are vibrations that move through Earth. Scientists have a tool they can use to detect, measure, and record seismic waves. This tool is known as a **seismograph**. As an earthquake or volcanic eruption starts, a seismograph detects the increase in the strength and frequency of seismic waves. Earthquakes can trigger volcanic activity and tsunamis. Scientists can analyze the seismograph data to determine the likelihood of a tsunami forming. (S5E1c)

### **Important Tips**

- ✍ Some areas of Earth have more weathering and erosion than other areas. There are many reasons for this. Weathering can break down rocks when water freezes, so areas that are often rainy and cold are more likely to see weathering. Windy areas also experience weathering because the wind wears down the surface of the rock. Erosion is more likely to occur in areas of moving water, such as rivers and streams. Because soil and rock move downhill, higher areas of Earth will always see more erosion than lower areas. (S5E1a, b)

**Sample Items 19–22****Item 19****Selected-Response**

A student observes a large rock at the base of a volcano in a river valley that gets a lot of snow in the winter and floods in the spring. The student claims that the large crack in the rock was caused by a destructive process called weathering.



**Which argument BEST describes the student's claim?**

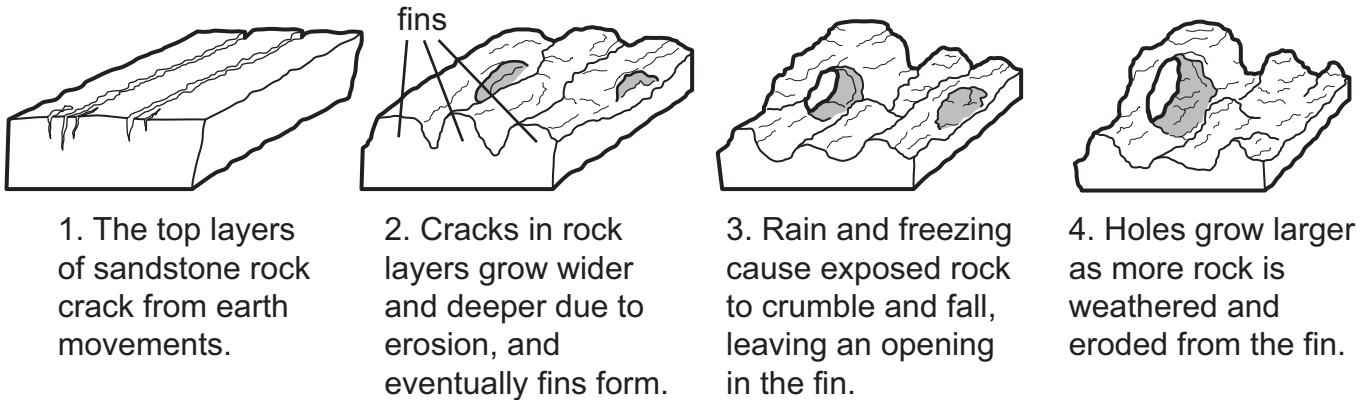
- A. The student's claim is correct because water fills small cracks in rocks, freezes, and expands, making the cracks larger over time.
- B. The student's claim is correct because the rock was carried from the top of the volcano to its base by a glacier, creating many cracks over time.
- C. The student's claim is not correct because the rock was picked up by moving water and rolled against other rocks, smoothing its surface and causing cracks in a short period of time.
- D. The student's claim is not correct because large cracks in rocks are caused when lava from a volcano covers the rock so its temperature rises and falls in a short period of time, causing it to break.

**Item 20**

**Selected-Response**

A student wants to model how arches form in the desert. The student finds a diagram on a website.

**Arch Formation**



The student designs a procedure to model the formation of an arch.

**Procedure**

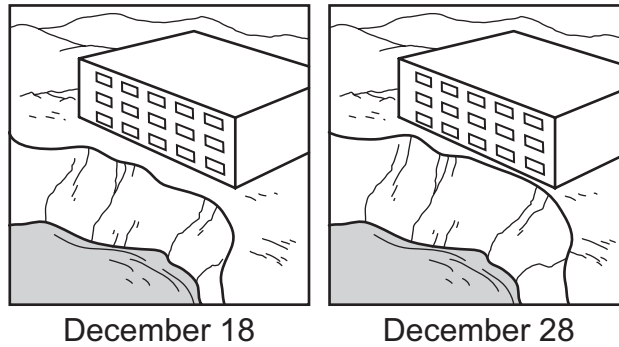
- step 1:** Mix sand, clay, and water in a shoebox and let it harden into a block.
- step 2:** Drop the block on the ground to form cracks in the surface.
- step 3:** Use a watering can to sprinkle 15 liters of water over the block every day until fins form from the cracks.
- step 4:** ?
- step 5:** ?

Which actions should be used in steps 4 and 5 to **BEST** model the formation of a desert arch?

- A. step 4:** Use a hammer to hit the block from the side until a hole is formed.  
**step 5:** Repeat step 4 every day until an arch is formed.
- B. step 4:** Continue to sprinkle 15 liters of water over the block every day until a hole is formed.  
**step 5:** Repeat step 4 every day until an arch is formed.
- C. step 4:** Sprinkle water over the block and place it in the freezer overnight. In the morning, place the block in sunlight to thaw and dry.  
**step 5:** Repeat step 4 every day until a hole forms and grows larger, forming an arch.
- D. step 4:** Place the block in an oven on low heat overnight. In the morning, place the block on a table and use a fan to blow air over the block during the day.  
**step 5:** Repeat step 4 every day until a hole forms and grows larger, forming an arch.

**Item 21****Selected-Response**

Some people who live in coastal areas along cliffs are using drones to take pictures of their neighborhoods. A drone is a flying vehicle without a pilot on board. The two pictures show changes in the cliff near a building on two days in December.



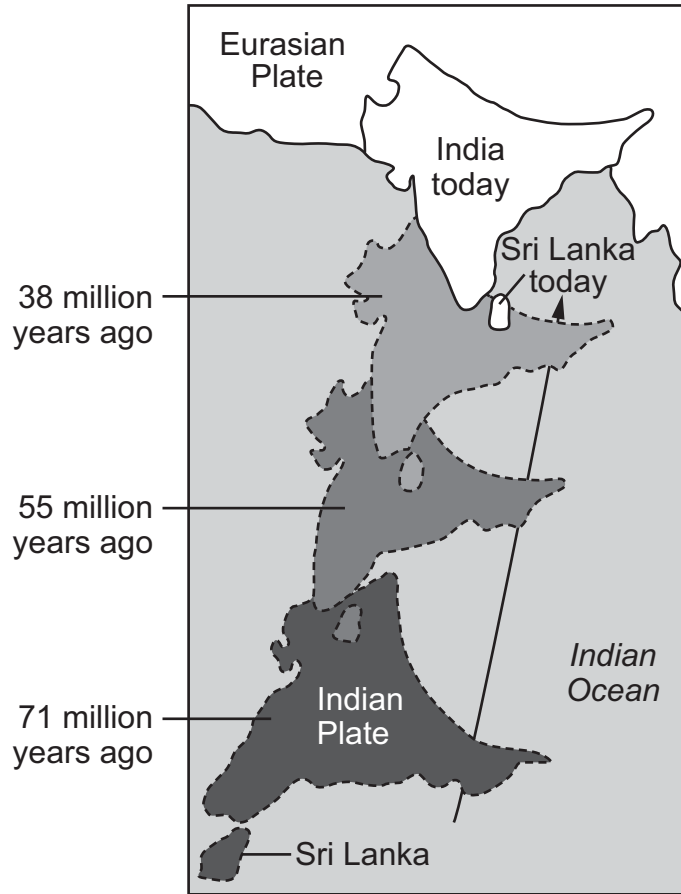
Which question can be studied by using a drone to observe recent changes in Earth's surface along coastal areas?

- A. How fast are the cliffs eroding?
- B. How many people live near cliffs?
- C. How old are rock layers at the bottom of the cliff?
- D. How can people stop the erosion of cliffs near the coast?

**Item 22**

**Multi-Part Technology-Enhanced**

A student is studying the formation of the Himalayas. The student finds a picture and learns that the mountain range formed when the Indian Plate collided with the Eurasian Plate. The student uses the picture to design a model that will show classmates how the Himalayas formed.



(Answer the questions on the next page.)



**Part A**

Based on the picture, which steps would produce the BEST model of how the Himalayas formed over time?

- A. **step 1:** Label one cardboard box as the Eurasian Plate.  
**step 2:** Label another cardboard box as the Indian Plate.  
**step 3:** Slowly push both plates toward each other.  
**step 4:** Observe and record how the sizes of both plates change when the edges push against each other.
- B. **step 1:** Label one cardboard box as the Eurasian Plate.  
**step 2:** Label another cardboard box as the Indian Plate.  
**step 3:** Slowly push the Indian Plate toward the Eurasian Plate.  
**step 4:** Observe and record how the size of the Indian Plate changes when it touches the edge of the Eurasian Plate.
- C. **step 1:** Use light-colored clay to make the shape of the Eurasian Plate.  
**step 2:** Use dark-colored clay to make the shape of the Indian Plate.  
**step 3:** Slowly push the dark-colored plate toward the light-colored plate.  
**step 4:** Observe and record how the shapes of both plates change when the edges push against each other.
- D. **step 1:** Use light-colored clay to make the shape of the Eurasian Plate.  
**step 2:** Use dark-colored clay to make the shape of the Indian Plate.  
**step 3:** Slowly push the light-colored plate toward the dark-colored plate.  
**step 4:** Observe and record how the shape of the Eurasian Plate changes when it touches the edge of the Indian Plate.

**Part B**

Which data could the student collect using the BEST model from part A?

- A. the changing distance between the two plates
- B. the time it takes for the two plates to collide
- C. the mass of the materials used to make the two plates
- D. the changing height of the edge where the two plates collide

## SCIENCE ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
1	S5L3a	2	C	The correct answer is choice (C) The student observed microscopic algae only on the slide because algae cells are too small to be seen without magnification by a microscope. Choice (A) is incorrect because the algae do not change size. Choice (B) is incorrect because the algae and water are both on the slide. Choice (D) is incorrect because even if the water were clear, the algae would be too small to see in the jar.
2	S5L4b	2	D	The correct answer is choice (D) Some bacteria can harm humans because bacteria can cause food poisoning when contaminated food is not cooked properly. Choice (A) is incorrect because bacteria die when they are cooked. Choice (B) is incorrect because cooking bacteria kills them. Choice (C) is incorrect because bad taste is not harmful.
3	S5L4a	2	D	The correct answer is choice (D) Humans benefit from probiotics because probiotics balance the number and types of bacteria that live in the digestive system. Choice (A) is incorrect because while probiotics reduce the chance of illness, they do not prevent illness. Choice (B) is incorrect because live microorganisms are not always a benefit. Choice (C) is incorrect because taking something every day does not make it a benefit.
4	S5L3c	3	A, B	<b>Part A:</b> The correct answer is choice (A) Cell X is shaped like a circle because it is an animal cell, which means it does not have a cell wall, and cell Y is shaped like a rectangle because it is a plant cell, which means it has a cell wall. Choice (B) is incorrect because cell X is an animal cell without a cell wall and cell Y is a plant cell with a cell wall. Choices (C) and (D) are incorrect because both cells have a cell membrane. <b>Part B:</b> The correct answer is choice (B) Plant cells have chloroplasts, but animal cells do not. Choices (A) and (C) are incorrect because both cells have a nucleus. Choice (D) is incorrect because plant cells have chloroplasts and animal cells do not have chloroplasts.
5	S5L1b	2	D	The correct answer is choice (D) Does it have roots, stems, or leaves? Choice (A) is incorrect because neither algae nor ferns do not produce seeds. Choice (B) is incorrect because neither algae nor ferns grow into trees. Choice (C) is incorrect because neither algae nor ferns produce flowers.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
6	S5L1a	3	B	The correct answer is choice (B) 2a is warm blooded.....go to 3 2b is cold blooded.....go to 4 Choice (A) is incorrect because eagles and cougars do not have gills or scales. Choice (C) is incorrect because cougars do not have wings. Choice (D) is incorrect because eagles and cougars do not have six legs.
7	S5L2b	2	D	The correct answer is choice (D) Has the football player always been good at catching a football? Choice (A) is incorrect because body height is an inherited trait. Choice (B) is incorrect because having siblings is not a physical trait of an individual. Choice (C) is incorrect because this is an inherited trait from parents, not an acquired trait.
8	S5L2a	2	A	The correct answer is choice (A) Why do bottlenose dolphins live in groups? Choice (B) is incorrect because predation is not a dolphin instinct. Choices (C) and (D) are incorrect because physical characteristics are not instincts.
9	S5L2a	2	A	The correct answer is choice (A) Do all eastern box turtles like the same food? Choice (B) is incorrect because length of lifespan is not a learned behavior. Choice (C) is incorrect because physical characteristics are not learned behaviors. Choice (D) is incorrect because this is instinctive behavior.
10	S5L2b	2	D	The correct answer is choice (D) Why does the cow have brown fur? Choice (A) is incorrect because age is not an inherited physical trait. Choice (B) is incorrect because feeding is not a physical trait. Choice (C) is incorrect because behavior is not an inherited physical trait.
11	S5P2b	2	B	The correct answer is choice (B). Choice (A) is incorrect because the wire also conducts the electricity, and a light bulb, not a switch, is needed. Choice (C) is incorrect because a compass will not be used in the circuit and a light bulb does not provide energy. Choice (D) is incorrect because a compass will not be used in the circuit and a switch opens and closes a circuit.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
12	S5P3b	2	D	<p>The correct answer is choice (D)</p> <p><b>step 2:</b> Replace the 5-mm-thick cardboard with the 5-mm-thick iron, and repeat step 1.</p> <p><b>step 3:</b> Replace the 5-mm-thick iron with the 5-mm-thick plastic, and repeat step 1.</p> <p><b>result:</b> The marbles will follow the magnetic wand on the cardboard and plastic because the magnetic field passes through nonmagnetic materials, but the magnetic field will not pass through the magnetic material.</p> <p>Choice (A) is incorrect because it would test the thickness of a single material, not different materials. Choice (B) is incorrect because it would test thickness of one material, and the magnetic field would pass through a piece of 10-mm-thick cardboard. Choice (C) is incorrect because the magnetic field would not pass through iron, which is a magnetic material.</p>
13	S5P2c	3	A	<p>The correct answer is choice (A)</p> <p><b>step 5:</b> Connect a test material to the open ends of wire 1 and wire 3.</p> <p><b>step 6:</b> Make observations and repeat step 5 with a different test material.</p> <p><b>conclusion:</b> If the bulb lights up, the material is a conductor. If the bulb does not light up, the material is an insulator.</p> <p>Choice (B) is incorrect because the student has reversed the definition of insulator and conductor. Choice (C) is incorrect because the circuit is already complete without the test material; this is not an effective way to test each material. Also, the student has reversed the definition of insulator and conductor. Choice (D) is incorrect because the circuit is already complete without the test material; this is not an effective way to test each material.</p>
14	S5P3a	3	B, D	<p>The correct answers are choice (B) Magnet 1 should be used to pick up magnetic objects in one location and drop them off in another location because temporary magnets can be turned on and off, and choice (D) Magnet 2 should be used to pick up magnetic objects in places where there is no power supply because permanent magnets do not run out of energy. Choice (A) is incorrect because magnet 1 is the temporary magnet and the permanent magnet can pick up more small magnetic objects. Choice (C) is incorrect because magnet 1 cannot pick up 50 paper clips like magnet 2 can, so magnet 1 cannot be used in all the same ways. Choice (E) is incorrect because permanent magnets are not always stronger than temporary magnets. Choice (F) is incorrect because magnet 2 cannot be turned on and off or made stronger like magnet 1 can, so magnet 2 cannot be used in all the same ways.</p>

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
15	S5P1c	2	D	The correct answer is choice (D) Combining two liquids that give off heat and gas would provide evidence of a chemical change because the particles react to make a new material with different properties. Choice (A) is incorrect because the solid would retain its properties despite melting, so this is only a physical change. Choice (B) is incorrect because the cardboard retains its properties, so this is only a physical change. Choice (C) is incorrect because the solid can be regained by evaporation of the water so this is only a physical change.
16	S5P1c	2	B	The correct answer is choice (B) Put an antacid tablet in water, and when the antacid and water mix, observe the bubbles that form as a new substance is created. Choice (A) is incorrect because no chemical reaction takes place, and state of matter is a physical change. Choice (C) is incorrect because no chemical reaction takes place. Choice (D) is incorrect because no chemical reaction takes place.
17	S5P1b	2	C	The correct answer is choice (C) Ice forms because heat is removed, causing the particles to move slower. This changes the water from a liquid to a solid. Choices (A) and (D) are incorrect because the particles will move slower. Choice (B) is incorrect because ice keeps its shape.
18	S5P1c	3	C, D	The correct answers are choice (C) Using a hot plate to heat a solid until it changes color and releases an odor would provide evidence of a chemical change because the particles cannot be changed back and choice (D) Placing two different liquids together in a beaker and observing that a solid forms when they mix would provide evidence of a chemical change because a new material is formed. Choices (A) and (E) are incorrect because a change in the state of matter is a physical change. Choices (B) and (F) are incorrect because no chemical reaction takes place.
19	S5E1a	2	A	The correct answer is choice (A) The student's claim is correct because water fills small cracks in rocks, freezes, and expands, making the cracks larger over time. Choice (B) is incorrect because movement of rock to another location is erosion not weathering. Choice (C) is incorrect because erosion in a river tends to smooth the surface of rocks not crack them as shown. Choice (D) is incorrect because the heating and cooling of rocks by lava is not an example of weathering.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
20	S5E1b	3	C	<p>The correct answer is choice (C)</p> <p><b>step 4:</b> Sprinkle water over the block and place it in the freezer overnight. In the morning, place the block in sunlight to thaw and dry.</p> <p><b>step 5:</b> Repeat step 4 every day until a hole forms and grows larger, forming an arch.</p> <p>Choice (A) is incorrect because a hammer strike does not model frost wedging and rainwater erosion. Choice (B) is incorrect because rainwater erosion alone is not likely to form a hole or an arch. Choice (D) is incorrect because any one of these—wind without sand blasting, rainwater erosion, or frost wedging—alone is not enough to form the hole or an arch.</p>
21	S5E1c	2	A	<p>The correct answer is choice (A) How fast are the cliffs eroding? Choice (B) is incorrect because drones cannot see into the houses to count people. Choice (C) is incorrect because knowing the age of the rocks does not address the recent change in Earth’s surface. Choice (D) is incorrect because drones can be used to document erosion but not to prevent it.</p>
22	S5E1b	3	C, D	<p><b>Part A:</b> The correct answer is choice (C)</p> <p><b>step 1:</b> Use light-colored clay to make the shape of the Eurasian Plate.</p> <p><b>step 2:</b> Use dark-colored clay to make the shape of the Indian Plate.</p> <p><b>step 3:</b> Slowly push the dark-colored plate toward the light-colored plate.</p> <p><b>step 4:</b> Observe and record how the shapes of both plates change when the edges push against each other.</p> <p>Choices (A) and (B) are incorrect because cardboard boxes are not going to change size when they are pushed together. Choice (D) is incorrect because the Indian Plate should move toward the Eurasian Plate.</p> <p><b>Part B:</b> The correct answer is choice (D) the changing height of the edge where the two plates collide. Choice (A) is incorrect because measuring the distance between the two plates does not help the student understand how the Himalayas formed. Choice (B) is incorrect because the time it took to form the Himalayas is not being demonstrated by this model. Choice (C) is incorrect because the mass of the materials does not help the student to understand how the Himalayas formed.</p>

---

# SOCIAL STUDIES

## DESCRIPTION OF TEST FORMAT AND ORGANIZATION

The Grade 5 Social Studies EOG assessment has a total of 75 items.

The test will be given in two sections.

- You may have up to 70 minutes per section to complete Sections 1 and 2.
- You will have about 90 to 140 minutes for the complete Social Studies EOG assessment.

## CONTENT

The Grade 5 Social Studies EOG assessment will measure the Grade 5 Social Studies standards that are described at [www.georgiastandards.org](http://www.georgiastandards.org).

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

- History
- Geography
- Government and Civics
- Economics

## ITEM TYPES

Operational items in the Social Studies portion of the Grade 5 EOG consist of selected-response (multiple-choice) and technology-enhanced items.

## SOCIAL STUDIES DEPTH OF KNOWLEDGE EXAMPLE ITEMS

Example items that represent applicable DOK levels of the Social Studies assessment are provided 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 recall basic information.

**Social Studies Grade 5 Content Domain:** History

**Standard:** SS5H3c. Discuss important cultural elements of the 1930s; include Duke Ellington, Margaret Mitchell, and Jesse Owens.

**Who is BEST known for being an Olympic athlete in the 1930s?**

- A. Babe Ruth
- B. Jesse Owens
- C. Duke Ellington
- D. Margaret Mitchell

**Correct Answer:** B

**Explanation of Correct Answer:** The correct answer is choice (B) Jesse Owens. Choice (A) is incorrect because Babe Ruth was a famous baseball player in the 1920s. Choice (C) is incorrect because Duke Ellington was a famous composer, pianist, and bandleader of jazz. Choice (D) is incorrect because Margaret Mitchell is best known for authoring *Gone with the Wind*.



---

## Example Item 2

### Selected-Response

**DOK Level 2:** This is a DOK level 2 item because it requires the student to understand the purpose of a constitutional amendment.

**Social Studies Grade 5 Content Domain:** Government and Civics

**Standard:** SS5CG3a. Explain how voting rights are protected by the 15th, 19th, 23rd, 24th, and 26th Amendments.

**What was the MAIN effect of the 24th Amendment to the U.S. Constitution?**

- A. More low-income people were able to register to vote.
- B. African Americans or Blacks were able to vote.
- C. Women were granted the right to vote.
- D. Citizens 18 years of age were allowed to vote.

**Correct Answer:** A

**Explanation of Correct Answer:** The correct answer is choice (A) More low-income people were able to register to vote. The 24th Amendment banned poll taxes as a condition for voting. Poll taxes had been one of many methods used in some southern states to discourage certain groups, especially African Americans or Blacks, from voting. Choice (B) is incorrect because the 15th Amendment gave African Americans or Blacks the right to vote. Choice (C) is incorrect because the 19th Amendment gave women the right to vote. Choice (D) is incorrect because the 26th Amendment gave citizens 18 and over the right to vote.

### Example Item 3

#### Selected-Response

**DOK Level 3:** This is a DOK level 3 item because it requires the student to analyze a source, have knowledge of the event, understand its significance, and recall the broad outline of World War I.

**Social Studies Grade 5 Content Domain:** History

**Standard:** SS5H2a. Explain how German attacks on U.S. shipping during the war in Europe ultimately led the U.S. to join the fight against Germany; including the sinking of the *Lusitania* and concerns over safety of U.S. ships, U.S. contributions to the war, and the impact of the Treaty of Versailles in 1919.

Read the newspaper headline.



Which event can be **MOST** directly linked to the event described in the headline?

- A. the dropping of bombs on Nagasaki
- B. the attack on Pearl Harbor, Hawaii
- C. the United States' entry into World War I
- D. the election of Franklin Roosevelt as president

**Correct Answer:** C

**Explanation of Correct Answer:** The correct answer is choice (C) the United States' entry into World War I. The sinking of the *Lusitania* turned American public opinion against Germany and led to America's involvement in World War I. Choices (A) and (B) are incorrect because those events are associated with World War II. Choice (D) is incorrect because it was not directly related to the sinking of the *Lusitania* or World War I.

---

## SOCIAL STUDIES CONTENT DESCRIPTION AND ADDITIONAL SAMPLE ITEMS

In this section, you will find information about what to study in order to prepare for the Grade 5 Social Studies EOG assessment. This includes main ideas and important vocabulary words. This section also contains practice questions, with an explanation of the correct answers, and activities that you can do with your classmates or family to prepare for the test.

The organization of Social Studies units in this guide is based on Frameworks developed by the Curriculum and Instruction Division of the Georgia Department of Education. The Social Studies section begins with Unit 2. Unit 1 focuses on over-arching themes and concepts, rather than specific standards. Unit 1 will, therefore, not be a part of the End-of-Grade assessment. These Frameworks can be accessed at <https://www.georgiastandards.org/Georgia-Standards/Pages/Social-Studies-Grade-5.aspx>.

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

### CONTENT DESCRIPTION

The four domains (History, Geography, Government/Civics, and Economics) are fully integrated.

Some of the topics you will study in this guide are the following:

- United States history starting at the end of the 19th century and focusing on immigration, industrialization, and urbanization, continuing to the present
- Influence of geography on United States history
- Rights outlined in the amendments to the United States Constitution
- Historical events and their connection to the United States economy
- The interdependence and functions of the United States economy
- Personal budgeting and spending

## Unit 2: Citizenship, Business, and the Government

In this unit, you will learn to explain the responsibilities and freedoms of citizens. Students will understand due process of law and demonstrate understanding of its connection to the U.S. Constitution and citizens' rights. Students will also explore and explain the purpose of the amendment process, the relationship between constitutional amendments and our representative democracy, and the impacts of particular amendments on citizens of our society.

### KEY TERMS

**Citizenship:** Membership of an individual in a country. A citizen is expected to give allegiance to the government. The government is expected to protect the safety, rights, and freedoms of the citizen in the United States. (SS5CG1a)

**Rights of a citizen:** Freedoms protected by the U.S. Constitution. In the United States, these include the rights to assemble peacefully, to worship or not worship as one pleases, to freely express one's opinion, and to own property. (SS5CG1)

**Responsibilities of a citizen:** The responsibilities of citizens include such things as paying taxes, serving on juries, and voting. (SS5CG1a)

**Markets:** Places where producers and consumers engage in the exchange of goods and services for money or barter. (SS5E3a)

**Price:** The cost a consumer must pay to purchase a good or service from a producer. (SS5E3a)

**Due process:** The U.S. Constitution's guarantee of fair treatment for any citizen accused of a crime. (SS5CG1b)

**23rd Amendment:** An amendment to the U.S. Constitution. It allowed residents of the District of Columbia to vote in presidential elections. (SS5CG3a)

### **AMENDING THE U.S. CONSTITUTION (CG2)**

**There are two ways to propose a constitutional amendment:**

1. An amendment can be proposed by two-thirds of both houses of Congress.
2. Two-thirds of the nation's state legislatures can call upon Congress to hold a Constitutional Convention where amendments can be proposed. (This has never been done.)

**There are also two ways to ratify (approve) a constitutional amendment:**

1. Three-fourths of the nation's state legislatures can vote for ratification.
2. Three-fourths of all states can hold ratifying conventions during which they approve an amendment. (This has only been done once.)

---

## Sample Items 1–3

### Item 1

#### Selected-Response

The U.S. Constitution guarantees that the federal government will extend “due process of the law” to all citizens. What is the purpose of this law?

- A. It permits voting rights for women.
- B. It grants voting rights for minorities.
- C. It protects a person who is accused of a crime.
- D. It guarantees that all citizens stay informed on community issues.

### Item 2

#### Selected-Response

What would **MOST LIKELY** increase a store’s sales of a product?

- A. reducing the store’s hours
- B. reducing the store’s employees
- C. lowering the price of the product
- D. limiting advertising of the product

### Item 3

#### Multi-Select Technology-Enhanced

Examine the table.

#### Starting a Business

- |   |
|---|
| <ol style="list-style-type: none"><li>1. Make a plan.</li><li>2. Take a loan from a bank.</li><li>3. Develop a new product.</li><li>4. Sell your product.</li></ol> |
|---|

Which **TWO** groups face the greatest financial risk when a business is started?

- A. banks providing the loan
- B. laborers building the product
- C. consumers buying the product
- D. industries providing resources
- E. individuals marketing the product
- F. entrepreneurs starting the business

## Unit 3: Bigger, Better, Faster: The Changing Nation

In this unit, you will learn how the United States became an industrial and world power. Some of the famous historical figures you will study are George Washington Carver, Thomas Alva Edison, and the Wright brothers. You will learn about the Chisholm Trail and the Panama Canal.

### KEY TERMS

**Alexander Graham Bell:** A Scottish immigrant credited with inventing the first practical telephone. (SS5H1b)

**Business sector:** In our nation's free-market economy, the business sector is the segment that includes the production of goods and services. (SS5E2b)

**George Washington Carver:** An African American or Black, born into slavery in Missouri, who revolutionized American agriculture with his research into new crops, new uses for crops, and effective methods of soil conservation. (SS5H1b)

**Chisholm Trail:** A trail used to drive longhorn cattle from Texas to Kansas during the period following the Civil War. The Chisholm Trail is one of the major cattle trails that developed during this period. (SS5H1a, SS5G1a, SS5E1b)

**Thomas Edison:** An American inventor who received more than 1,000 patents. He is credited with the development of the phonograph, the motion picture, and the electric light bulb. (SS5H1b)

**Entrepreneur:** Someone who takes a risk to start and maintain a business. (SS5E3c)

**Panama Canal:** A man-made water passage located in the nation of Panama. It connects the Atlantic Ocean to the Pacific Ocean. (SS5H1c, SS5E1d)

**Spanish-American War:** A conflict between Spain and the United States. It brought about the end of Spanish colonization in North and South America. At the end of the war, the United States gained control of Guam, Puerto Rico, and the Philippines and expanded its influence in world affairs. (SS5H1c)

**Wright brothers:** Orville and Wilbur Wright were two American inventors who are credited with inventing the first successful airplane. They made the first heavier-than-air human flights at Kitty Hawk, North Carolina, at the start of the 20th century. (SS5H1b)

**Voluntary exchange:** The economic principle that buyers and sellers will willingly engage in free-market transactions. For this to occur, both the buyer and the seller must believe that they are better off as a result of the transaction. (SS5E1d)

**William McKinley:** Served as president of the United States from March 4, 1897, until he was assassinated in September of 1901. He was president during the Spanish-American War. This short conflict between the United States and Spain led to the removal of the Spanish from Cuba and increased American popular interest in obtaining colonies abroad. (SS5H1c)

**Theodore Roosevelt:** Emerged as a hero of the Spanish-American War and succeeded McKinley as president when McKinley was assassinated in 1901. During Roosevelt's tenure as president, construction began on the Panama Canal. The building of the canal radically decreased shipping times between the East and West Coasts. (SS5H1c)

**Black Cowboys of Texas:** Gained historical fame for their unique existence in the legacy of the American West. Some had been born enslaved, and others were the descendants of formerly enslaved people. These cowboys were able to distinguish themselves by their hard work and expertise, regardless of the color of their skin. However, following the end of the open range, Black Cowboys faced the same racial discrimination as other African Americans or Blacks. (SS5H1a)

**The Great Western Cattle Trail:** Existed both north and south of Dodge City, Kansas, and allowed ranchers to move large numbers of cattle to this railroad hub for transport farther East. (SS5H1a)

## Sample Items 4–6

### Item 4

#### Selected-Response

**Which of these describes a function of private business?**

- A. collecting property taxes for the government
- B. producing goods and services for the public
- C. providing loans and checking accounts to the public
- D. controlling the supply of natural resources

### Item 5

#### Selected-Response

**What was the MAIN reason Pittsburgh became an industrial center during the late 1800s?**

- A. It had a mild climate.
- B. It had rich soil for farming.
- C. It had good public education.
- D. It had good access to waterways.

### Item 6

#### Selected-Response

**What did the opening of the Panama Canal accomplish?**

- A. It brought about an end to World War I.
- B. It divided North America from South America.
- C. It created a new route for trade between nations.
- D. It marked the beginning of a new period of industrialization.



## Unit 4: War and Prosperity: World War I and the 1920s

In this unit, you will move into the 20th century with a focus on history, culture, and economics. You will learn about World War I and the economic and cultural changes of the 1920s.

### KEY TERMS

**World War I:** An international conflict that primarily involved European nations until the United States entered the war in 1917. (SS5H2a)

**Lusitania:** A British cruise ship attacked and sunk by a German submarine. There were nearly 2,000 civilians on board, including several Americans. The attack was one reason for the United States' entry into World War I. (SS5H2a)

**15th Amendment:** A Reconstruction constitutional amendment that prohibits federal and state governments from denying a citizen the right to vote based on his or her race. (SS5CG3a)

**19th Amendment:** Guaranteed women the right to vote. The amendment was ratified in 1920. (SS5CG3a)

**Harlem Renaissance:** A period of intense African American artistic creativity in literature, art, and music that originated in Harlem, New York, and expanded across the country. (SS5H2b)

**Jazz Age:** The period when the genre of music known as jazz became popular. Louis Armstrong and Duke Ellington helped make jazz popular. (SS5H2b)

**Babe Ruth:** A famous baseball player who increased the popularity of the sport. (SS5H2b)

**Langston Hughes:** An important American writer of the 20th century. He contributed to the Harlem Renaissance movement through poems and literature. (SS5H2b)

**Henry Ford:** An entrepreneur who improved the assembly line and created a car (the Model T) that was affordable for most Americans. He contributed to the economic boom of the 1920s and put the United States on the move. (SS5E1c)

**Charles Lindbergh:** The first person to fly solo across the Atlantic Ocean. (SS5H2b)

**Kitty Hawk, North Carolina:** Was where the Wright brothers had their first successful airplane flight. Kitty Hawk is located on the coast of North Carolina. (SS5G1a)

**Assembly line:** An arrangement of machines, equipment, and workers in which work passes from operation to operation in a direct line until the product is assembled. It allows products to be made faster, which reduces the price of the products, making them more affordable. (SS5E1c)

### Sample Items 7 and 8

#### Item 7

##### Selected-Response

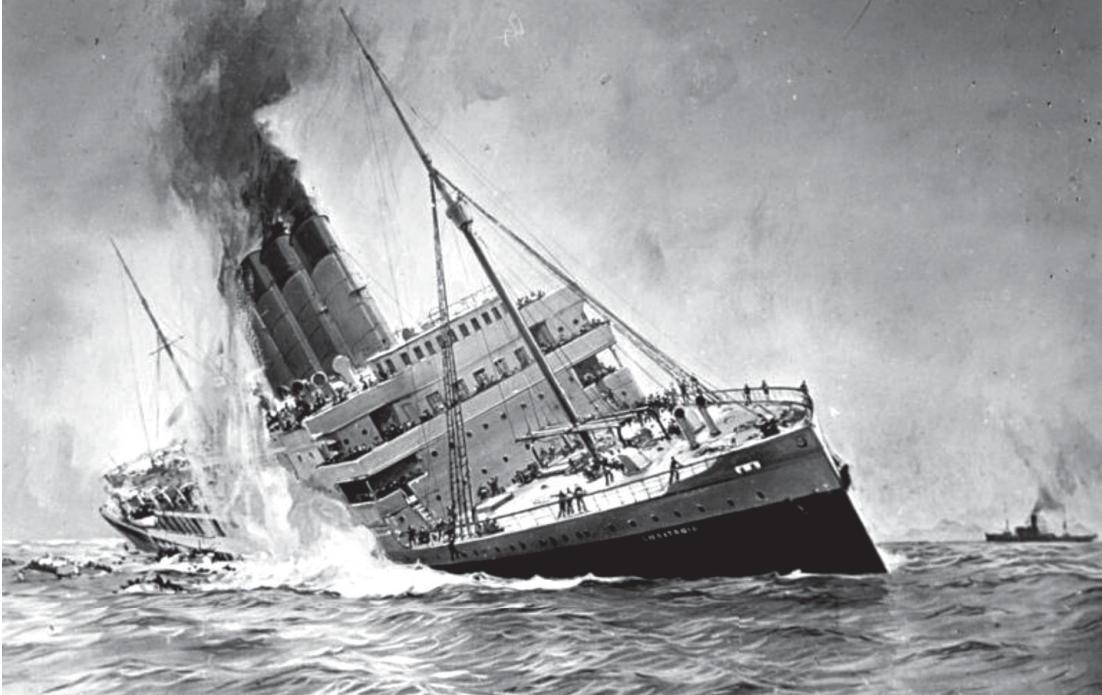
**What did the 15th and 19th Amendments to the U.S. Constitution change?**

- A. They expanded the Jim Crow laws and practices.
- B. They ended the practice of slavery.
- C. They helped the due process rights of citizens.
- D. They expanded voting rights.

**Item 8**

**Selected-Response**

**Examine the photograph.**



**The Sinking of the British passenger ship, *Lusitania*, May 1915.**

*Source: Bundesarchiv, DVM 10 Fild-23-61-17/CC-BY-SA 3.0*

**Why were U.S. leaders MOST concerned about the event shown in the photograph?**

- A. Passenger ships were used to hide their cargoes of weapons.
- B. The Germans wanted the United States to lift their blockade of Europe.
- C. Loss of ships could change the direction of the war in Europe.
- D. The strategies used by the Germans at sea could cause the United States to join the war.

---

## Unit 5: The Great Depression

In this unit, you will study the Great Depression and the government's efforts to recover from it. You will learn about World War I, the New Deal, key amendments, business and banking sectors, and the Harlem Renaissance.

### KEY TERMS

**Herbert Hoover:** A president of the United States. He took office shortly before the Great Depression and was defeated by Franklin Roosevelt after a single term. (SS5H3a)

**Franklin Delano Roosevelt:** A president of the United States. He was the first president to take office after the beginning of the Great Depression. He was reelected three times, presided over the nation's economic recovery, and died in Warm Springs, Georgia, while he was still president. (SS5H3a)

**The Great Depression:** A period of economic hardship affecting the United States and other nations. It began with the stock market crash of 1929 and lasted into the 1940s. (SS5H3a)

**Banking sector:** The part of the economy that provides financial support for individuals and businesses. (SS5E2c)

**Business sector:** In a free-market economy, the business sector is the segment that produces goods and provides services. (SS5E2b)

**Government sector:** The part of the economy that collects taxes and provides and manages public services. (SS5E2d)

**Dust Bowl:** The name given to the south-central area of the Great Plains during the 1930s, when drought and soil erosion resulted in a period of severe dust storms. (SS5H3a)

**New Deal:** The name given to President Franklin Roosevelt's economic policies and programs designed to lift the U.S. economy from the Great Depression. (SS5H3b)

**Margaret Mitchell:** An author who wrote *Gone with the Wind*. (SS5H3c)

**Jesse Owens:** An African American athlete who won gold medals at the 1936 Olympic Games in Berlin. (SS5H3c)

## Sample Items 9–11

### Item 9

#### Selected-Response

Read the quotation in this box.

“I pledge you, I pledge myself, to a new deal for the American people.”  
– Franklin D. Roosevelt, accepting the Democratic Party nomination for president, 1932

**What was one way President Franklin D. Roosevelt worked to accomplish this promise?**

- A. by asking Congress to end poll taxes
- B. by authorizing food rationing during World War II
- C. by establishing the Works Progress Administration
- D. by freezing wages after the U.S. stock market crash

### Item 10

#### Selected-Response

**Ms. Weston owns a hair salon. She cuts and styles customers' hair. Which statement BEST describes why she is part of the private business function in the U.S. economy?**

- A. She pays taxes.
- B. She provides a service.
- C. She consumes products.
- D. She uses a bank account.

**Item 11****Multi-Select Technology-Enhanced**

Read the list in the box.

**President Franklin Roosevelt's Goals for the New Deal**

- relief for the needy
- economic recovery
- bank reform

**Which actions by President Roosevelt during the Great Depression MOST helped meet the goals listed in the box? Choose TWO responses.**

- A. He reorganized the executive branch of government.
- B. He delivered regular speeches to the public on the radio.
- C. He created a program to build public buildings and highways.
- D. He promised to fight the economic problem as if it were a war.
- E. He signed a bill that guaranteed workers the right to join unions.
- F. He created dams that provided electricity.

## Item 12

### Multi-Part Technology-Enhanced

Examine the photograph.



Employment Agency, San Francisco, 1930

Source: Library of Congress

#### Part A:

What MAIN event contributed to the men standing in line in the photograph?

- A. the Stock Market Crash
- B. creation of the New Deal
- C. collapse of the Soviet Union
- D. rationing during World War II

#### Part B:

Who was president of the United States when this event occurred?

- A. Harry Truman
- B. Herbert Hoover
- C. John F. Kennedy
- D. Lyndon B. Johnson

---

## Unit 6: Another World War

In this unit, you will learn about the causes, leaders, and events of World War II. You will also study specific individuals and groups and their roles during this period.

### KEY TERMS

**Eleanor Roosevelt:** American politician, diplomat, and activist. She was married to President Franklin Delano Roosevelt. She was a significant supporter of the United Nations and became its first delegate. (SS5H4f)

**Franklin Delano Roosevelt:** A president of the United States and leader of the nation during most of World War II. He died in office, and Vice President Harry S. Truman took office after him. (SS5H4d)

**Harry S. Truman:** A president of the United States. He authorized the use of atomic bombs on the cities of Hiroshima and Nagasaki during World War II, which led to Japan's surrender. (SS5H4d)

**Winston Churchill:** Prime Minister of Great Britain during World War II. (SS5H4d)

**Hirohito:** Emperor of Japan during World War II who fought against the United States. He ruled Japan as a monarch for over 62 years. (SS5H4d)

**Adolf Hitler:** Dictator of Germany during World War II. He ordered attacks on neighboring countries in Europe, which started World War II, and founded the Nazi Party. (SS5H4d)

**Benito Mussolini:** Fascist dictator of Italy and ally of Adolf Hitler during World War II. (SS5H4d)

**Joseph Stalin:** Communist dictator of the Soviet Union during and after World War II. Under his rule, the Soviet Union was a member of the Allies. (SS5H4d)

**The Holocaust:** The organized mass murder of European Jews and other targeted groups by Hitler's Nazi Party during World War II. (SS5H4b)

**Pearl Harbor:** Hawaiian site of the U.S. naval base that was attacked by Japan in 1941. The United States responded by declaring war on Japan and entering World War II. (SS5G1a)

**Rosie the Riveter:** A fictional character who symbolized American female factory workers during World War II. (SS5H4e)

**Tuskegee Airmen:** Group of African American or Black aviators who served with distinction during World War II. Their success helped pave the way for integration of the U.S. armed forces. (SS5H4e)

**Opportunity cost:** An economic term for what you must give up to obtain something else. It is always your second-best alternative. (SS5E1a)

**D-day:** The name given to June 6, 1944. It was on that day that Allied forces invaded Western Europe, setting the stage for Allied victory in World War II. (SS5H4b)

**Iwo Jima:** An island in the West Pacific taken from Japan by the United States during World War II. (SS5H4b)

**Hiroshima and Nagasaki:** Japanese cities that the United States dropped atomic bombs upon during World War II. These acts led to Japan's surrender. (SS5H4c)

**VE Day:** May 8, 1945. This was the day that Germany's Nazi forces surrendered to the Allies, marking the end of World War II in Europe. The abbreviation "VE" stands for "Victory in Europe." (SS5H4b)

**VJ Day:** September 2, 1945. This was the day of Japan's official surrender to the Allies, marking the end of World War II in the Pacific arena. The abbreviation "VJ" stands for "Victory over Japan." (SS5H4b)

**United Nations:** An international organization formed after World War II to promote cooperation among nations. It is headquartered in New York City. (SS5H4f)

## Sample Items 13–15

### Item 13

#### Selected-Response

The U.S. government had a food rationing program during World War II. This was an example of which economic concept?

- A. specialization
- B. opportunity cost
- C. entrepreneurship
- D. voluntary exchange



**Item 14****Selected-Response**

Look at the poster of Rosie the Riveter.



Source: The National Archives

**Which event led to changing roles for women as shown in the poster?**

- A. involvement in World War II
- B. the beginning of the Cold War
- C. the formation of the United Nations
- D. establishment of the Works Progress Administration

## Item 15

### Selected-Response

Examine the list in the box.

- June 6, 1944
- American and British soldiers invaded a coast in Europe
- attack was planned in an effort to make Germany withdraw

Which World War II event is **MOST** associated with the information in the list?

- A. D-Day invasion
- B. Battle of Iwo Jima
- C. Pearl Harbor attack
- D. bombing of Hiroshima

---

## Unit 7: War Turns Cold

In this unit, you will study the Cold War and how the United States worked to stop the spread of communism to democratic countries. You will also study the Korean War and Vietnam War.

### KEY TERMS

**NATO:** The North Atlantic Treaty Organization, an alliance of Western democratic nations formed after World War II to defend themselves against communist aggression. (SS5H5b)

**Berlin Airlift:** A military operation led by the United States after World War II. The residents of West Berlin, Germany, were blockaded by the Soviet Union. Led by the United States, Western nations delivered food and supplies to them by airplane. (SS5H5b)

**Cold War:** The battle for international influence that arose between communist and democratic nations following the end of World War II. (SS5H5)

**Iron Curtain:** The name given to the physical and political division between Eastern, or communist, countries and Western, or capitalist, nations during the Cold War. The United States fought a “cold war,” or nonmilitary battle, against the Soviet Union to prevent the spread of communism into democratic countries. During this time the Berlin Wall was built with concrete and barbed wire. The wall separated East and West Berlin. It prevented people from fleeing from East Berlin (which was communist) to West Berlin (which was democratic). (SS5H5a)

**Communism:** The political idea that all property should be publicly owned and managed by a central government. (SS5H5b)

**Korean War:** A conflict between communist North Korea hoping to unify the country under a Communist government and democratic South Korea. North Korea was allied with the Chinese, and South Korea was allied with UN forces led by the United States. The war ended and divided Korea into communist North Korea and democratic South Korea. (SS5H5b)

**Cuban missile crisis:** A dispute during the Cold War between the United States and the Soviet Union. The Soviet Union had built missile sites in Cuba. President John F. Kennedy set up a naval blockade of the island until Soviet leader Nikita Khrushchev ordered the missiles removed. (SS5H5d)

**Joseph McCarthy:** The U.S. senator who believed that some other congressmen and senators were secretly communist. He led investigations of his peers, as well as of many military officials and civilians, during the early 1950s. (SS5H5c)

**Vietnam War:** Conflict between Communist and anti-Communist forces that began in Vietnam. The United States was heavily involved in the war. In 1973, the United States pulled its forces from the Southeast Asian country. Afterward, the nation became united under a Communist government. (SS5H5d)

**26th Amendment:** Guaranteed citizens of the United States, 18 years or older, the right to vote. (SS5CG3a)

## Sample Item 16

### Item 16

#### Selected-Response

**How did the 26th Amendment to the U.S. Constitution expand voting rights?**

- A. by granting women the right to vote
- B. by granting citizens 18 years and older the right to vote
- C. by granting African Americans or Blacks the right to vote
- D. by granting the residents of our nation's capital the right to vote

## Unit 8: Civil Rights Address Civil Wrongs

In this unit, you will move into the latter part of the 20th century. Major events during the period included the Civil Rights movement, the assassinations of political leaders, and technological advancements.

### KEY TERMS

**24th Amendment:** An amendment to the U.S. Constitution that banned poll taxes as a condition for voting. Poll taxes had been one of many methods used in some Southern states to discourage certain groups, especially African Americans or Blacks, from voting. (SS5CG3a)

**Cesar Chavez:** An American labor leader and a Latin American civil rights activist. He founded an organization that supported fair treatment of farm workers. (SS5H6b)

**Lyndon B. Johnson:** A president of the United States. He was known for initiating social service programs, and he signed the Civil Rights Act into law. (SS5H6b)

**Poll taxes:** Taxes required in order to vote in elections. These taxes often prevented African Americans or Blacks and poor whites from being able to vote. (SS5CG3a)

**Thurgood Marshall:** African American or Black attorney who successfully argued *Brown v. Board of Education* before the Supreme Court. He became the first African American or Black Supreme Court justice when he was appointed by President Lyndon B. Johnson in 1967. (SS5H6b)

***Brown v. Board of Education:*** The 1954 Supreme Court case ruling that racial segregation of public schools is unconstitutional. Previously, many districts had maintained separate schools for white and African American or Black children. After the decision, the federal government required that public schools be racially integrated. (SS5H6b)

**Civil Rights Act:** Legislation passed by Congress that outlawed discrimination based on race, color, religion, sex, or national origin. The act required any business that operated in the public sector to provide equal access to its goods and services to all Americans. (SS5H6b)

**Jim Crow laws:** These laws were passed by Southern states following Reconstruction. Their purpose was to establish and enforce racial segregation (separation of the races) in everyday life. (SS5H6a)

**Montgomery Bus Boycott:** A mass campaign by African American or Black citizens in Montgomery, Alabama that began in 1955. The public transportation system in that city was segregated by race, and Rosa Parks's refusal to give up her bus seat to a white man resulted in her arrest. In protest, African Americans or Blacks stopped using the bus system. This campaign continued for 381 days until the Supreme Court ruled racial segregation of public transit unconstitutional. (SS5H6b, SS5G1a)

**Voting Rights Act:** Legislation passed by Congress and signed by President Lyndon B. Johnson. The act made it illegal to require African Americans or Blacks to take literacy tests in order to vote. (SS5H6b)

## Sample Items 17–19

### Item 17

#### Selected-Response

Read this excerpt from *Brown v. Board of Education*.

We conclude that, in the field of public education, the doctrine of “separate but equal” has no place. Separate educational facilities are inherently unequal. Therefore, we hold that the plaintiffs and others similarly situated for whom the actions have been brought are, by reason of the segregation complained of, deprived of the equal protection of the laws guaranteed by the Fourteenth Amendment.

—*Brown v. Board of Education* (1954)

What was the MAIN result of this decision?

- A. Public schools were required to integrate.
- B. Public schools would offer the same courses.
- C. Public schools were considered equal under the law.
- D. Public schools would receive the same amount of money.

### Item 18

#### Selected-Response

Whose action initiated the Montgomery Bus Boycott?

- A. Rosa Parks
- B. John F. Kennedy
- C. Thurgood Marshall
- D. Margaret Mitchell

**Item 19**

**Selected-Response**

**How were African Americans or Blacks affected by Jim Crow laws?**

- A. They received more job opportunities.
- B. They lost their freedom to move to northern states.
- C. They received equal pay and work benefits.
- D. They attended schools with fewer resources.

## Unit 9: United States from 1975 to the Digital Age

Major events of this time period include the collapse of the Soviet Union, the impact of 9/11, and the birth of the Internet.

### KEY TERMS

**Collapse of the Soviet Union:** The former Soviet Union collapsed in 1991, as member states individually broke away to become independent countries. (SS5H7a)

**Events of September 11, 2001:** On September 11, 2001, a terrorist group hijacked four commercial airplanes and deliberately crashed them into the World Trade Center in New York City, the Pentagon, and a field in Pennsylvania (after passengers took action to prevent it from being used to crash into the U.S. Capitol building). This event changed U.S. policy on travel, immigration, and national security. (SS5H7b)

**The Internet:** The informal name for a worldwide digital communication system that links individuals and businesses. Since the early 1980s, this development has revolutionized how people interact and conduct business. (SS5H7c)

**Ronald Reagan:** A president of the United States. He is best known for being president during the Cold War and encouraging reform in the Soviet Union. (SS5H7a)

**Personal computer:** A small computer designed for use by one person at home or in an office. (SS5H7c)



---

## Sample Items 20–21

### Item 20

#### Multi-Part Technology-Enhanced

Examine the information in the box.

- The Soviet government made major reforms in how the economy was run.
- The Soviet government gave citizens increased freedom of speech.
- Countries under Soviet control began to declare independence.

#### Part A:

Which of these was a result of the actions listed in the box?

- A. The Soviet Union collapsed as a nation.
- B. The Soviet Union experienced an increase in immigration.
- C. The Soviet Union increased its influence in Eastern Europe.
- D. The Soviet Union improved trade agreements with Western Europe.

#### Part B:

What was the MAIN reason the Soviet Union took the actions listed in the box?

- A. The Soviet Union wanted to improve its failing economy.
- B. The Soviet Union discovered new natural resources in rural areas.
- C. The Soviet Union wanted more citizens to participate in government.
- D. The Soviet Union passed new laws to improve education for citizens.

### Item 21

#### Selected-Response

What was President Ronald Reagan's response as the Soviet Union was collapsing?

- A. He encouraged the continuation of the Cold War.
- B. He discouraged the United States from having diplomatic relations with communist nations.
- C. He encouraged the leader of the Soviet Union to initiate reforms.
- D. He discouraged the Soviet Union from becoming a democratic nation.

## Unit 10: Building a Budget

In this unit, you will be studying the concept of creating a budget. You will learn about income, saving, expenditures, and how they relate to budgeting money.

### KEY TERMS

**Personal finance:** The set of financial choices made by individuals. Responsible personal finance includes sensible budgeting, investment, and saving. (SS5E4)

**Income:** The total of all the wages, salaries, and profits earned. (SS5E4)

**Expenditures (spending):** The amount of money a person or business spends. (SS5E4)

**Saving:** An amount of money saved by a person or business. (SS5E4)

**Personal budget:** A saving and spending plan which will help you cover all of your needs, wants, expenses, and saving goals. (SS5E4)

### Sample Item 22

#### Item 22

##### Selected-Response

What are the two MAIN elements of a personal budget?

- A. needs and wants
- B. goods and services
- C. competition and market
- D. income and expenses

## SOCIAL STUDIES ADDITIONAL SAMPLE ITEM KEYS

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
1	SS5CG1b	2	C	The correct answer choice is (C) It protects a person who is accused of a crime. Choice (A) is incorrect because the 19th Amendment granted women the right to vote. Choice (B) is incorrect because the 26th Amendment gives citizens aged 18 and older the right to vote. Choice (D) is incorrect because “due process” does not guarantee that all citizens stay informed on community issues.
2	SS5E3a	2	C	The correct answer is choice (C) lowering the price of the product. Choices (A) and (B) are incorrect because reducing store hours and store employees would most likely decrease the sales of a product. Choice (D) is incorrect because advertising a product less would be more likely to decrease that product’s sales.
3	SS5E3c	3	A, F	The correct answer choices are (A) banks providing the loan, and (F) entrepreneurs starting the business. These two groups would face the greatest financial risk because the bank could lose money if entrepreneurs do not pay back their loans. Entrepreneurs also take a great risk because they invest so much of their own money and time. If their business fails, they are at risk of losing all of their investments. Choice (B) is incorrect because laborers do not make a financial investment in the product. Choice (C) is incorrect because while consumers face a risk in buying a new product, that risk is limited to the cost of the product. Choice (D) is incorrect because industries providing resources may face a limited risk of not being paid for resources used by the entrepreneur. It is highly unlikely that nonpayment on one account would significantly impact the financial stability of multiple industries. Choice (E) is incorrect because while individuals marketing the product may face the risk of not being paid, they most likely would not lose all business of other clients because of one instance of nonpayment.
4	SS5E2b	1	B	The correct answer is choice (B) producing goods and services for the public. The private business sector provides goods and services to consumers, stimulating the economy. Choice (A) is incorrect because it describes a function of the government. Choice (C) is incorrect because it describes the banking sector of the economy. Choice (D) is incorrect because it describes controlling natural resources.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
5	SS5G2a	2	D	The correct answer is choice (D) It had good access to waterways. This made it easy for the area to ship in raw materials and ship out finished goods. Choice (A) is incorrect because Pittsburgh’s climate cannot accurately be described as mild. Choice (B) is incorrect because the area’s farmland was poorer than that of the South. Choice (C) is incorrect because public education at the time, while improving, still left many without access to learning.
6	SS5E1d	2	C	The correct answer is choice (C) It created a new route for trade between nations. The Panama Canal allowed trade ships easy passage between the Atlantic and Pacific Oceans. Choice (A) is incorrect because the canal did not play a significant role in ending World War I. Choice (B) is incorrect because the canal created no significant new division between North and South America. Choice (D) is incorrect because industrialization was already well under way by the time the Panama Canal was finished.
7	SS5CG3b	2	D	The correct answer is choice (D) They expanded voting rights. The 15th Amendment let all races and former slaves vote, and the 19th Amendment guaranteed suffrage to women. Choice (A) is incorrect because Jim Crow laws and practices were not a part of an amendment. Choices (B) and (C) are incorrect because they refer to other amendments. Choice (B) is the 13th Amendment, and choice (C) is the 14th Amendment.
8	SS5H2a	2	D	The correct answer choice is (D) The strategies used by the Germans at sea could cause the United States to join the war. They were concerned with Germany’s attacks on all ships approaching Britain, especially since the United States continually sent ships to Great Britain to deliver supplies. The loss of American lives on ships attacked by Germans was of great concern, too. Choice (A) is incorrect because while passenger ships were used to hide cargo, this is not why the United States was concerned about being pushed into the war. Choice (B) is incorrect because while the United States did not blockade Europe during World War I, the British did. Choice (C) is incorrect because while ships were lost, it was early in the war and did not create a concern over entering the war.
9	SS5H3b	3	C	The correct answer is choice (C) by establishing the Works Progress Administration. It was one of many programs Roosevelt established in an effort to end the Great Depression. Choice (A) is incorrect because the 24th Amendment prohibiting poll taxes was not passed until well after Roosevelt’s presidency. Choice (B) is incorrect because food rationing was a part of the war effort, not the New Deal. Choice (D) is incorrect because the stock market crash occurred well before Roosevelt took office.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
10	SS5E2b	2	B	The correct answer is choice (B) She provides a service. Choice (A) is incorrect because while she will pay taxes, this is not the BEST reason why she is part of the private business function. Choice (C) is incorrect because while she may consume products, this is not the BEST reason why she is part of the private business function in the U.S. economy. Choice (D) is incorrect because while she may use a bank account, this is not the BEST reason she is part of the private business function.
11	SSH3a	3	C, F	The correct answer choices are (C) He created a program to build public buildings and highways, and (F) He developed a program to create dams that provided electricity. Choice (A) is incorrect because he did not reorganize the executive branch of government. Choice (B) is incorrect because while he did give speeches, that was not what helped most to meet the goals listed in the box. Choice (D) is incorrect because while he worked on helping the economy, he did not promise to fight it as if it were a war. Choice (E) is incorrect because he did not sign a bill that guaranteed workers the right to join unions.
12	SS5H3a	3	A, B	<b>Part A:</b> The correct answer choice is (A) the Stock Market Crash. The Stock Market Crash of 1929 led to business closures and high unemployment rates, causing men to go to employment agencies to find work. Choice (B) is incorrect because the New Deal programs were created in 1933 to help the unemployed. Choice (C) is incorrect because the collapse of the Soviet Union did not happen until decades later in the 20th century. Choice (D) is incorrect because World War II didn't start until 1939. <b>Part B:</b> The correct answer choice is (B) Herbert Hoover. Herbert Hoover was president from 1929 to 1933. Choice (A) is incorrect because Harry Truman didn't begin his presidency until 1945. Choice (C) is incorrect because John F. Kennedy didn't begin his presidency until 1961. Choice (D) is incorrect because Lyndon B. Johnson didn't begin his presidency until 1963.
13	SS5E1a	3	B	The correct answer is choice (B) opportunity cost. Roosevelt restricted the supply of food to civilians in order to provide food to soldiers during World War II. Choices (A), (C), and (D) are incorrect because they are not the MOST precise descriptions of the economic concept illustrated here.
14	SS5H4e	3	A	The correct answer is choice (A) involvement in World War II. As men enlisted in the service, women entered the workplace in record numbers. This caused a new appreciation for women's abilities in all areas of society. Choices (B) and (C) are incorrect because they occurred after the poster was first created. Choice (D) is incorrect because the establishment of the Works Progress Administration employed men almost exclusively.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
15	SS5H4b	2	A	The correct answer is choice (A) D-Day Invasion. D-Day Invasion occurred on June 6, 1944. The attack, which occurred on a coast in Europe, was planned in order to make Germany withdraw. Choice (B) is incorrect because the Battle of Iwo Jima occurred in the Pacific in 1945. Choice (C) is incorrect because the attack on Pearl Harbor occurred in Hawaii in 1941. Choice (D) is incorrect because the bombing of Hiroshima took place in Japan.
16	SS5CG3a	2	B	The correct answer choice is (B) by granting citizens 18 years and older the right to vote. The amendment lowered the voting age for Americans from 21 to 18. This is the same age at which young men could be drafted to serve in the military. Choice (A) is incorrect because women received the right to vote through the 19th Amendment. Choice (C) is incorrect because African Americans or Blacks received the right to vote through the 15th Amendment. Choice (D) is incorrect because residents of our nation's capital earned the right to vote and representative seats in the electoral college through the 23rd Amendment.
17	SS5H6b	2	A	The correct answer is choice (A) Public schools were required to integrate. This case overturned the Supreme Court's <i>Plessy v. Ferguson</i> decision, which had supported the legal principle of "separate but equal." Choices (B), (C), and (D) are incorrect because they provide incorrect information about schools.
18	SS5H6b	1	A	The correct answer is choice (A) Rosa Parks. Her refusal to give up her bus seat to a white person resulted in her arrest and a mass boycott of public transportation in the city of Montgomery, Alabama. Choice (B) is incorrect because Kennedy was not involved in the boycott. Choice (C) is incorrect because Marshall did not start the boycott but did help end it. Choice (D) is incorrect because Margaret Mitchell was the author who wrote <i>Gone with the Wind</i> .
19	SS5H6a	2	D	The correct answer choice is (D) They attended schools with fewer resources. Jim Crow laws enforced racial segregation in parts of the United States. Schools for African Americans or Blacks were provided with fewer resources. Choice (A) is incorrect because Jim Crow laws did not provide more job opportunities for African Americans or Blacks. Choice (B) is incorrect because Jim Crow laws did not cause African Americans or Blacks to lose their freedom to move to northern states. Choice (C) is incorrect because Jim Crow laws were not written so African Americans or Blacks would receive equal pay or work benefits.

Item	Standard/ Element	DOK Level	Correct Answer	Explanation
20	SS5H7a	3	A, A	<p><b>Part A:</b> The correct answer choice is (A) The Soviet Union collapsed as a nation. After nearly a half-century of Cold War conflict, the Soviet Union began to dismantle. The government of the Soviet Union made major reforms, and many countries that were part of the Soviet Union declared independence. Choice (B) is incorrect because the Soviet Union did not experience an increase in immigration during this time. Choice (C) is incorrect because during this time period the Soviet Union lost its influence on Eastern Europe and many of these countries became independent of the Soviet Union. Choice (D) is incorrect because the relationship between Western Europe and the Soviet Union was poor during this time.</p> <p><b>Part B:</b> The correct answer choice is (A) The Soviet Union wanted to improve its failing economy. The Soviet Union had serious economic problems that needed to be solved. The leader of the country introduced new policies in hopes of helping the economy revive itself. Choice (B) is incorrect because the Soviet Union did not discover new natural resources during this time. Choice (C) is incorrect because while the citizens were allowed more government involvement, this is not the main reason for the actions listed in the box. Choice (D) is incorrect because the Soviet Union did not pass new laws to improve education during this time.</p>
21	SS5H7a	2	C	<p>The correct answer is choice (C) He encouraged the leader of the Soviet Union to initiate reforms. President Ronald Reagan encouraged Mikhail Gorbachev to enact reforms in the Soviet Union to help stabilize the economy. Choice (A) is incorrect because President Ronald Reagan wanted the Cold War to end. Choice (B) is incorrect because President Ronald Reagan encouraged the United States to improve their relations with communist nations. Choice (D) is incorrect because President Ronald Reagan encouraged the Soviet Union to end communism and embrace democratic principles.</p>
22	SS5E4	1	D	<p>The correct answer is choice (D) income and expenses. To budget properly, you must know how much money you have coming in and how much you are obliged to spend for things that you need.</p> <p>Choice (A) is incorrect because the main elements of a personal budget are not needs and wants. Choices (B) and (C) are incorrect because a personal budget is not based on goods and services or competition and market.</p>

## ACTIVITY

The following activity develops skills in Unit 2: Citizenship, Business, and the Government.

**Standard:** SS5CG3a

Find a family member or friend to partner with on this activity.

You are going to take a closer look at the 15th, 19th, 23rd, 24th, and 26th Amendments.

- Each person will pick one amendment.
- Divide a sheet of paper into 3 columns.
- Next, write your amendment in the first column.
- In the middle column, use reference materials to describe how the amendment protects voting rights.
- In the right column, draw an illustration of your amendment.
- Finally, fold your paper so that only your illustration is showing. Find a family member or friend and ask them to look at your illustration and guess which amendment it is.



---

**ACTIVITY**

The following activity develops skills in Unit 3: Bigger, Better, Faster: The Changing Nation.

**Standard:** SS5H1b

Choose one of the following people:

The Wright brothers, George Washington Carver, Alexander Graham Bell, or Thomas Edison.

- Your role is to choose one invention your inventor created (example: Alexander Graham Bell and the telephone)
  - Get a large sheet of paper from your teacher and write the inventor and invention on the top.
  - Research the invention using the Internet or other reference materials.
  - On your sheet of paper, write facts about the invention (when it was created, what it was used for, how did it impact people's lives when it was created, how did it impact people at the turn of the century, how has this invention changed over time, how does this invention impact us today).
  - Next, you will create a visual flow chart/timeline showing the history of the invention (include important dates, facts, and pictures). Be creative! You may create your flow chart/timeline on the computer or using a poster board.
  - Next, present your display to your family or to a friend. Make sure to include the history of the invention and all of the important facts you brainstormed.
  - Finally, present your visual display to the class.

## APPENDIX A: LANGUAGE PROGRESSIVE SKILLS, BY GRADE

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

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

\* Subsumed by L.7.3a

† Subsumed by L.9-10.1a

‡ Subsumed by L.11-12.3a

## APPENDIX B: CONDITION CODES

### Condition Codes (Non-Score)

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

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

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

Non-Score (Code)	Performance Scoring: Non-Score (Code) Description	Full Description
<b>B</b>	<b>Blank</b>	<ul style="list-style-type: none"> <li>• Blank</li> <li>• Student's response did not contain words.</li> <li>• In some instances, student may have drawn pictures.</li> </ul>
<b>C</b>	<b>Copied</b>	<ul style="list-style-type: none"> <li>• Student's response is not his/her own work.</li> <li>• Student does not clearly attribute words to the text(s).</li> <li>• Student copies from the text(s) that serve(s) as writing stimulus.</li> </ul>
<b>I</b>	<b>Too Limited to Score</b>	<ul style="list-style-type: none"> <li>• Student's response is not long enough to evaluate his/her ability to write to genre or his/her command of language conventions.</li> </ul>
<b>F</b>	<b>Non-English/Foreign Language</b>	<ul style="list-style-type: none"> <li>• Written in some language other than English</li> <li>• The writing items/tasks on the test require the student to write in English.</li> </ul>
<b>T</b>	<b>Off Topic/Off Task</b>	<ul style="list-style-type: none"> <li>• Student may have written something that is totally off topic (e.g., major portion of response is unrelated to the assigned task).</li> <li>• Student response did not follow the directions of the assigned task (i.e., off task).</li> </ul>
<b>U</b>	<b>Unreadable/Illegible/Incomprehensible</b>	<ul style="list-style-type: none"> <li>• Response is unreadable.</li> <li>• An illegible response does not contain enough recognizable words to provide a score.</li> <li>• An incomprehensible paper contains few recognizable English words or it may contain recognizable English words arranged in such a way that no meaning is conveyed.</li> </ul>
<b>S</b>	<b>Offensive</b>	<ul style="list-style-type: none"> <li>• Student uses inappropriate or offensive language or pictures.</li> </ul>

Study/Resource Guide  
for Students and Parents  
Grade 5  
End-of-Grade

