Georgia

Milestones

Assessment System

Grade 5

English Language Arts and Mathematics

Item and Scoring Sampler

2015

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INTRODUCTION

The Georgia Milestones Grade 5 English Language Arts (ELA) EOG assessment and the Grade 5 Mathematics EOG assessment are criterion-referenced tests designed to provide information about how well a student has mastered the grade-level state-adopted content standards in English Language Arts (ELA) and mathematics. These assessments consist of a variety of item types, including selected-response, constructed-response, extended constructed-response, and extended writing-response items.

TYPES OF ITEMS INCLUDED IN THE SAMPLER AND USES OF THE SAMPLER

The purpose of this sampler is to provide samples of the type of constructed-response items that appear on the operational Georgia Milestones Grade 5 ELA EOG assessment and the operational Georgia Milestones Grade 5 Mathematics EOG assessment. The items in this sampler may be used for classroom instruction purposes. The samples may be copied, and classroom teachers may find it beneficial to have students respond to one or more of the samples. Teachers can then use the information in the sampler as a guide to score responses written by their own students.

ELA CONSTRUCTED-RESPONSE ITEM TYPES

The **constructed-response** item asks a question and solicits the student to provide a response constructed on his or her own, as opposed to selecting a response from options provided. On the ELA EOG assessment, these items are worth two points, and partial credit may be awarded if part of the response is correct. On the ELA EOG assessment, the **extended constructed-response** item elicits a longer, more complex and detailed response from the student. The four-point narrative extended constructed-response item requires the student to respond to a prompt based on a passage he or she has read; the response will fully develop a real or imagined experience based on the text and will be scored for the Writing and Language domain.

The seven-point **extended writing-response** item requires the student to write an opinion piece or develop an informative/explanatory response. As part of the extended writing task in an actual Milestones assessment, the student must first read two passages and then respond to three selected-response items and one constructed-response item. All of these items help focus the student on the main idea(s) and key details in the passages prior to writing the extended essay. Two of the selected-response items address each of the passages separately. One selected-response item and the constructed-response item address both of the passages together. All four items contribute to the Reading and Vocabulary domain. These items are followed by the extended writing prompt, which requires the student to draw from reading experiences when writing the essay response and to cite evidence from the passage(s) to support claims and conclusions in the essay. The extended writing task is worth up to seven points.

The extended writing task and the narrative constructed-response item are considered “on-demand writing in response to text.” Students write their responses in a somewhat limited amount of time without the benefit of time allocated for revision and rewrites. For this reason, the scoring process takes into account that the student responses are to be viewed as first drafts and are not expected to be polished papers. The scoring process is approached in such a manner as to award students for what they do well according to the prompt and rubric. Errors are not counted unless they permeate the response and impact or interfere with overall understanding.

INTRODUCTION

MATHEMATICS CONSTRUCTED-RESPONSE ITEM TYPES

A mathematics **constructed-response** item asks a question and solicits the student to provide a response constructed on his or her own, as opposed to selecting from options provided. The constructed-response items on the Grade 5 Mathematics EOG assessment are worth up to two points. Partial credit may be awarded if part of the response is correct.

An **extended constructed-response** item is a specific type of constructed-response item that elicits a longer, more detailed response from the student than does a two-point constructed-response item. The extended constructed-response items on the Mathematics EOG assessment are worth up to four points. Partial credit may be awarded if part of the response is correct.

ITEM ALIGNMENT

Each constructed-response item included in this sampler has been through a rigorous review process with Georgia educators to ensure alignment with the content standards. The content standard for each sample item is provided in this sampler in the item information tables.

DEPTH OF KNOWLEDGE

In addition to being aligned to the standards, the sample items included in this sampler were developed with a particular emphasis on cognitive complexity, or Depth of Knowledge (DOK). The DOK level is provided for each item in this sampler in the item information tables. DOK measures the level of cognitive demand required to complete an assessment item. The following descriptions show the expectations of the DOK levels in greater detail.

Level 1 (Recall of Information) generally requires students to identify, list, or define, often asking them to recall who, what, when, and where. Consequently, this level usually asks students to recall facts, terms, concepts, and trends and may ask them to identify specific information contained in documents, excerpts, quotations, maps, charts, tables, graphs, or illustrations. Items that require students to "describe" and/or "explain" could be classified at Level 1 or Level 2, depending on what is to be described and/or explained. A Level 1 "describe" and/or "explain" would require students to recall, recite, or reproduce information.

Level 2 (Basic Reasoning) includes the engagement of some mental processing beyond recalling or reproducing a response. A Level 2 "describe" and/or "explain" would require students to go beyond a description or explanation of recalled information to describe and/or explain a result or "how" or "why."

Level 3 (Complex Reasoning) requires reasoning, using evidence, and thinking on a higher and more abstract level than Level 1 and Level 2. Students will go beyond explaining or describing "how and why" to justifying the "how and why" through application and evidence. Level 3 questions often involve making connections across time and place to explain a concept or "big idea."

Level 4 (Extended Reasoning) requires the complex reasoning of Level 3 with the addition of planning, investigating, applying significant conceptual understanding, and/or developing that will most likely require an extended period of time. Students should be required to connect and relate ideas and concepts within the content area or among content areas in order to be at this highest level. The distinguishing factor for Level 4 would be evidence (through a task, a product, or an extended response) that the cognitive demands have been met.

ITEM AND SCORING SAMPLER FORMAT

Sample constructed-response items are provided in this sampler, along with any related stimulus information such as a passage or graphic. Following each constructed-response item is the scoring guide for the constructed-response item. The scoring guide includes the item information table, the item-specific scoring guideline, and annotated sample student responses at each score point.

For mathematics items, each item-specific scoring guideline includes an exemplar as one possible correct response. Readers are trained to give credit to alternate valid responses.

The Georgia Milestones assessments may be administered in paper-and-pencil format or online. As a result, this sampler includes samples of students' responses in both formats. This symbol  is used to note the format of a sample online item. It also indicates a sample online response.

Example Constructed-Response Item Information Table

Standard:	**Item Depth of Knowledge:**

Grade 5

ENGLISH LANGUAGE ARTS

Sample Constructed-Response Items

PASSAGE 1

Family of Potters

Today I am going with my friend Ella to visit her Grandmother Loreen. She is a Native American potter who lives in a pueblo in New Mexico.

Ella and her family are descendants of the Anasazi, who are known for their beautiful pottery. Making pottery is a tradition for Ella's family that is handed down from generation to generation.

Grandmother Loreen greets us with warm tortillas when we arrive at her house. After we finish eating, we follow her outside, where Ella's uncle is preparing a fire. He is burning some wood in a pit on the ground in order to fire Grandmother Loreen's pottery.

Everyone in Ella's family helps make the pottery. When Ella was a baby, her mother carried her on her back to collect the clay. Ella and her family go to nearby canyons and caves to search for clay. They dig it out in chunks and then soak it in water. Next, they lay the clay in slabs to dry in the sun so that it can be ground into powder. They must do this several times to remove the twigs and rocks. Sand and broken pieces of pottery are then added before grinding it down again. When the clay is finally ready, it's mixed with water again and kneaded until smooth. Sometimes people use their feet to work the clay.

Grandmother Loreen uses the *coil method* when she creates her pottery. She shows me how she makes a seed pot. Seed pots are used to hold seeds that will be planted the following year. Ella and I help roll out coils of clay. They look like long snakes when we finish, and I make a small coil pot of my own. Ella shows me a pot she painted with a *yucca brush*. A yucca brush is a leaf from a yucca plant that grows like a tall bush. Grandmother Loreen chews on the end of the leaf to make it into a brush and then uses it to draw elaborate designs on pots. Ella and I try it too. I draw a small bird on my pot.

Grandmother Loreen makes many of her pots shiny by rubbing them with a stone. Some of her pots are decorated with colored rock that is ground down and mixed with spinach juice called *guaco*.

Outside, Ella's uncle is getting ready to fire the pots. All of the wood has burned, and he smoothes out the ashes. Ella and her mother show me how to put a layer of fuel on top of the ashes. Then we add some pieces of broken pottery. Grandmother Loreen carefully positions her pots between them. Another layer of fuel and pottery pieces is placed on top, and it looks like a dome. We stick newspapers and twigs into the base, and Ella's uncle lights the fire. The flames shoot up into the sky. Ella says sometimes people can see the fire from miles away.

We stand outside and watch the fire to make sure it is burning right. By paying attention to the temperature, Grandmother Loreen is able to predict what color the pots will be when they're done. Ella says that, even after the fire has gone out, we still must wait for the pots to cool.

The fire is still burning when it's time for me to go home. Grandmother Loreen gives me one of her seed pots before I leave. She says next time I visit I can see the pots that I helped fire. I can't wait to bring home my own coil pot too.

CONSTRUCTED-RESPONSE ITEM

ELAGSE5.RL.2

1. Explain how the author supports the theme that items found in nature can be useful.

Use details from the story to support your explanation. **Type your answer in the space provided.**

Scoring Guide

#1 Item Information

Standard: ELAGSE5.RL.2 Determine a theme of a story, drama, or poem from details in the text, including how characters in a story or drama respond to challenges or how the speaker in a poem reflects upon a topic; summarize the text.	**Item Depth of Knowledge:** 3 Strategic Thinking Student uses reasoning and develops a plan or sequence of steps; process has some complexity.

ITEM-SPECIFIC SCORING GUIDELINE

Score	Description
2	• Gives sufficient evidence of the ability to explain how the author supports the theme that items found in nature can be useful • Includes specific examples/details that make clear reference to the text • Adequately explains and supports the explanation with clearly relevant information based on the text The response: *Explains the different items from nature and how they are used to create clay pots (e.g., clay from the canyons, a leaf from the yucca plant for painting, decorations from colored rocks that are ground down and mixed with spinach juice). Explains how the different items from nature are all used to create a pot.*
1	• Gives limited evidence of the ability to explain how the author supports the theme that items found in nature can be useful • Includes vague/limited examples/details that make reference to the text • Explains and supports the conclusion with vague/limited information based on the text
0	• Gives no evidence of the ability to explain or support a conclusion from the text

STUDENT RESPONSES

ELAGSE5.RL.2

Response Score: 2 points 

1. Explain how the author supports the theme that items found in nature can be useful.

Use details from the story to support your explanation. **Type your answer in the space provided.**

The author supports the theme that items in nature can be useful by talking about all the things from nature and how they are used to make pottery. For example, in the story they use a leaf from a tall plant, the yucca, to paint designs on pots instead of a paintbrush. Her grandmother also uses a rock to make her pots shiny and will decorate them with a mixture of ground rock and spinach juice called guaco. All of these things can be found in nature.

The student provides an accurate and descriptive explanation of how the author supports the theme that items found in nature can be useful ("*all the things from nature and how they are used to make pottery*").

Specific examples from the passage are used to support the explanation ("*use a leaf from a tall plant, the yucca, to paint designs,*""*uses a rock to make her pots shiny,*" "*will decorate them with a mixture of ground rock and spinach juice called guaco*").

ELAGSE5.RL.2

Response Score: 1 point

1. Explain how the author supports the theme that items found in nature can be useful.

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

The author supports this theme by talking about all the natural items that Ella's grandma uses instead of real tools when making pottery, like rocks and leafs.

The student provides a limited explanation of how the author supports the theme that items found in nature can be useful.

The evidence provided for this explanation from the passage is brief and lacks specific details ("*natural items that Ella's grandma uses . . . like rocks and leafs*").

ELAGSE5.RL.2

Response Score: 0 points 

1. Explain how the author supports the theme that items found in nature can be useful.

Use details from the story to support your explanation. **Type your answer in the space provided.**

He or she supports the theme by talking about stuff in nature and how they are used.

The student gives no evidence of an ability to explain how the author supports the theme that items found in nature can be useful.

The response contains a general statement that the author refers to "*stuff in nature and how they are used*" without providing any specific item from the passage or how it is useful.

CONSTRUCTED-RESPONSE ITEM

ELAGSE5.W.3

2. Ella has invited you to visit her Grandmother Loreen again. You and Ella are excited to see the pots you made from your last visit and hope to help Grandmother Loreen make more pottery. Think about the process the Anasazi people use to make pottery. Write an original story about your second visit to see Grandmother Loreen.

Use details from the story to help you develop details in your story. **Type your answer in the space provided.**

Scoring Guide

#2 Item Information

Standard: ELAGSE5.W.3 Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences.	**Item Depth of Knowledge:** 4 Extended Thinking Student conducts an investigation, needs time to think and process multiple conditions of the problem or task.

SCORING GUIDELINE FOR NARRATIVE ITEM

Score	Description
4	*The student's response is a well-developed narrative that fully develops a real or imagined experience based on text as a stimulus.* • Effectively establishes a situation and introduces a narrator and/or characters • Organizes an event sequence that unfolds naturally • Effectively uses narrative techniques, such as dialogue, description, and pacing, to develop rich, interesting experiences and events or show the responses of characters to situations • Uses a variety of words and phrases consistently to signal the sequence of events • Uses concrete words, phrases, and sensory language consistently to convey experiences or events precisely • Provides a conclusion that follows from the narrated experiences or events • Integrates ideas and details from source material effectively • Has very few or no errors in usage and/or conventions that interfere with meaning
3	*The student's response is a complete narrative that develops a real or imagined experience based on text as a stimulus.* • Establishes a situation and introduces one or more characters • Organizes events in a clear, logical order • Uses narrative techniques, such as dialogue and description, to develop experiences and events or show the responses of characters to situations • Uses words and/or phrases to indicate sequence • Uses words, phrases, and details to convey experiences and events • Provides an appropriate conclusion • Integrates some ideas and/or details from source material • Has a few minor errors in usage and/or conventions that interfere with meaning
2	*The student's response is an incomplete or oversimplified narrative based on text as a stimulus.* • Introduces a vague situation and at least one character • Organizes events in a sequence but with some gaps or ambiguity • Attempts to use a narrative technique, such as dialogue or description, to develop experiences and events or show the responses of characters to situations • Uses occasional signal words to indicate sequence • Uses some words or phrases inconsistently to convey experiences and events • Provides a weak or ambiguous conclusion • Attempts to integrate ideas or details from source material • Has frequent errors in usage and conventions that sometimes interfere with meaning

Score	Description
1	*The student's response provides evidence of an attempt to write a narrative based on text as a stimulus.* • Response is a summary of the story • Provides a weak or minimal introduction of a situation or a character • May be too brief to demonstrate a complete sequence of events • Shows little or no attempt to use dialogue or description to develop experiences and events or show the responses of characters to situations • Uses words that are inappropriate, overly simple, or unclear • Provides few, if any, words that convey experiences or events • Provides a minimal or no conclusion • May use few, if any, ideas or details from source material • Has frequent major errors in usage and conventions that interfere with meaning
0	*The student's response is flawed for various reasons:* • Blank • Copied • Too Limited to Score/Illegible/Incomprehensible • Non-English/Foreign Language • Off Topic/Off Task/Offensive

STUDENT RESPONSES

ELAGSE5.W.3

Response Score: 4 points

2. Ella has invited you to visit her Grandmother Loreen again. You and Ella are excited to see the pots you made from your last visit and hope to help Grandmother Loreen make more pottery. Think about the process the Anasazi people use to make pottery. Write an original story about your second visit to see Grandmother Loreen.

Use details from the story to help you develop details in your story. **Write your answer on the lines on your answer document.**

I learned so many interesting things about making pottery when I went with Ella to visit her grandmother. So, when she asked me if I wanted to go back this weekend, I was excited. "Are we going to be able to see the finished pots we made the last time?" I asked her. "Of course, silly. We may even get to paint them," Ella said with a laugh. The weekend couldn't come soon enough. After lots of waiting and a long car ride, the moment finally came. Ella ran up and gave her grandmother a big hug while I quietly snuck off to find the pots we made. It didn't take me long before I found them. They were beautiful, but they felt unfinished. Ella and her grandmother soon found me. "Would you like to paint your pots, girls?" she asked us as she handed us each a special yucca leaf that we could use as a brush. I painted a couple of fluffy, orange kittens on mine, while Ella painted a picture of her family on her pot. After we were done painting, it was time to go home. The next time we come, I hope that Ella and I can make bigger and more beautiful pots!

The student effectively writes a complete narrative essay that flows naturally from beginning to end and uses information from the passage "Family of Potters" in a consistent manner.

The student establishes a situation (a girl making a return visit to her friend's grandmother who is a potter) and characters (the friend Ella, Ella's grandmother, the girl/first-person narrator).

The essay provides a clear beginning (*"she asked me if I wanted to go back this weekend"*), middle *("After lots of waiting and a long car ride," "I quietly snuck off to find the pots we made," "she handed us each a special yucca leaf," "I painted a couple of fluffy, orange kittens"*), and ending *("it was time to go home"*). The events flow naturally and use ideas from the original passage (clay pots, yucca-leaf brush) integrated with the student's own story elements (anticipation of the trip, searching for the pots, hoping for a third trip).

The writing uses a variety of words *("interesting," "quietly," "snuck," "unfinished," "fluffy"*) with some variety of sentence structure *("So, when she asked me if I wanted to go back this weekend, I was excited," "They were beautiful, but they felt unfinished"*).

The student successfully uses dialogue to advance the plot *("Are we going to be able to see the finished pots we made the last time," "Of course, silly. We may even get to paint them," "Would you like to paint your pots, girls"*). There are no errors in usage or conventions that interfere with the meaning.

ELAGSE5.W.3

Response Score: 3 points 

2. Ella has invited you to visit her Grandmother Loreen again. You and Ella are excited to see the pots you made from your last visit and hope to help Grandmother Loreen make more pottery. Think about the process the Anasazi people use to make pottery. Write an original story about your second visit to see Grandmother Loreen.

Use details from the story to help you develop details in your story. **Write your answer on the lines on your answer document.**

"The pots we made last weekend have cooled," said my friend Ella. "Do you want to come with me to Grandma Loreen's to finish them?" "Yes," I said. When we got there, Ella's grandma welcomed us and showed us where we could find the pots we made the last time. They were nice but we wanted to paint them. We made brushs out of some leefs from a tall bush and painted them until we were happy with how they looked. Now it was time to make new pots. This time, we didn't need any help until it was time to fire the pots. I can't wait to see our new, finished pots when we come back next week!

The student writes a narrative essay about making a second visit to Ella's grandmother that establishes the situation and introduces characters (Ella, Grandma Loreen, a girl/first-person narrator).

The story has a beginning *("Do you want to come with me to Grandma Loreen's"*), middle (*"Ella's grandma welcomed us and showed us where we could find the pots," "painted them," "time to make new pots," "time to fire the pots"*), and ending (*"I can't wait to see our new, finished pots when we come back next week").* The events develop in a logical fashion, but tend to unfold quickly without much in the way of details.

Sufficient information from the passage is included in the story ("*pots . . . have cooled," "made brushs out of some leefs from a tall bush," "fire the pots"*), although without specifics.

The story includes some variety of word choice ("*cooled," "welcomed," "finished"*).

The student uses dialogue to advance the plot ("*The pots we made last weekend have cooled," "Do you want to come with me to Grandma Loreen's to finish them"*).

The relatively few errors do not interfere with meaning ("*brushs,*" "*leefs*").

ELAGSE5.W.3

Response Score: 2 points 

2. Ella has invited you to visit her Grandmother Loreen again. You and Ella are excited to see the pots you made from your last visit and hope to help Grandmother Loreen make more pottery. Think about the process the Anasazi people use to make pottery. Write an original story about your second visit to see Grandmother Loreen.

Use details from the story to help you develop details in your story. **Type your answer in the space provided.**

We always have fun when we visit Ellas grandma. Today she going to let us paint the pots we made the last time we visited. Ella and me are going to paint them so they both look a like. We will use a yucca brush and we will make a pretty pattern. Before we go home I hope she lets us make more interesting coil pots!

The student has written a narrative essay with the passage as a stimulus about two girls visiting Ella's grandma, but the story feels rushed and incomplete.

We are introduced to three characters (the friend Ella, Ella's grandmother, the girl/first-person narrator), but we are told little about any of them. The narrative includes a weak opening ("*We always have fun when we visit Ellas grandma*") and a vague ending (*"Before we go home"*). The middle is a brief list of events (*"paint the pots we made the last time," "we will use a yucca brush," "I hope she lets us make more interesting coil pots"*). The entire story is told in a future tense, and when it abruptly ends, the reader is left to wonder whether the events have taken place or if the girl is merely anticipating the visit.

The story includes a couple of elements from the original passage (*"yucca brush," "coil pots"*).

The story doesn't include many narrative elements, such as dialogue, plot (beginning, middle, end), or descriptive details.

There are a variety of errors in usage and conventions, primarily relating to missing punctuation and incorrect grammar, that do not greatly interfere with meaning.

ELAGSE5.W.3

Response Score: 1 point

2. Ella has invited you to visit her Grandmother Loreen again. You and Ella are excited to see the pots you made from your last visit and hope to help Grandmother Loreen make more pottery. Think about the process the Anasazi people use to make pottery. Write an original story about your second visit to see Grandmother Loreen.

Use details from the story to help you develop details in your story. **Type your answer in the space provided.**

i'm so ecsited to go back a second time and naue even more fun. i will get too see wht i made the last time and lern even more. i know well make more iersting pots.

The student's response provides little evidence of an ability to write a narrative essay.

The story introduces one character, a first-person narrator, about whom we learn nothing, and an unclear situation. Little is established in the way of an opening, a conclusion, or a sequence of events.

The narrative raises more questions than it resolves. The reader does not get any idea of the speaker, the place to which the speaker is returning, and what he/she will do once there until the final sentence (*"well make more inersting pots"*). The response is written in a future tense, discussing what will happen rather than what has happened or is happening.

There is nothing to suggest information has been integrated from the passage beyond what is found in the prompt (*"pots"*).

For such a brief piece of writing, there is a high quantity of conventions/usage errors present. The writing lacks any capitalization, is missing punctuation, and contains basic spelling errors ("*ecsited," "wht," "lern," "inersting"*). These errors do interfere with meaning.

ELAGSE5.W.3

Response Score: 0 point 

2. Ella has invited you to visit her Grandmother Loreen again. You and Ella are excited to see the pots you made from your last visit and hope to help Grandmother Loreen make more pottery. Think about the process the Anasazi people use to make pottery. Write an original story about your second visit to see Grandmother Loreen.

Use details from the story to help you develop details in your story. **Type your answer in the space provided.**

Make more coil pots!

The student has provided a brief, on-topic statement. Neither a situation nor any characters have been established. It is unclear whether this is the start of a narrative essay or merely an imperative command.

PASSAGE 2

A Schoolyard Butterfly Garden

Ms. Murphy's fifth grade class wanted to plant a schoolyard garden. Her class discussed several different kinds of gardens. Some students wanted to plant a fruit and vegetable garden. Other students wanted to plant a flower garden. A few students wanted to create a pond habitat. The class finally decided to plant a butterfly garden. Ms. Murphy's students learned many new things by planting a butterfly garden.

The students started by exploring what butterflies need to live. They learned that butterflies need food and water. They read that butterflies eat flower nectar and drink water from puddles. Their studies showed that butterflies like to rest on rocks in sunny areas.

Then they looked into where the garden plot should be. The students learned that their garden would need at least six hours of sunlight every day. They also learned that the garden plot should not be too windy. Trees, buildings, and shrubs could protect their garden from the wind. The students found the perfect spot for their garden near trees and a shed.

Then the students studied plants that would draw butterflies. They learned that butterflies like brightly colored flowers that smell sweet. They were taught that several nectar flowers would be easy to grow. They decided to plant lantanas, black-eyed Susans, lavender, zinnias, and marigolds. These flowers bloom at different times. This means that there will always be plants in bloom to draw butterflies.

After planting the flowers, the students remembered that butterflies need water. They weren't sure if there would always be a puddle nearby, so they came up with an idea. They dug a hole and put a container in the hole. They added some stones and water to the container. This way there would always be water for the butterflies. Finally, they put a few large rocks for the butterflies to rest on in a sunny spot.

Ms. Murphy's class learned not only how to plant a butterfly garden, but also how plants and insects depend on each other to live!

PASSAGE 3

A Three Sisters Garden in the Schoolyard

The students in Mr. Miller's fifth grade class were interested in planting a vegetable garden.

Mr. Miller said the schoolyard didn't have space for a large vegetable garden. The students discussed having either a container garden or a garden with only a few plants. They used the Internet to learn about different kinds of vegetable gardens. The students learned that some Native Americans planted corn, beans, and squash together. This kind of planting is called a Three Sisters garden.

A Three Sisters garden contains only corn, bean, and squash plants. These three plants benefit each other in different ways. Bean plants tend to fall over. The cornstalks are tall and strong, so they help support the bean plants. Bean plants absorb nitrogen—a gas that helps plants grow—from the air. This nitrogen helps corn plants, since they need a lot of nitrogen. Squash plants have leaves that shade the soil. Shade helps prevent weed growth, so fewer animals will attack the plants.

A gardening area should be selected first. The area should have full sunlight during the day and a water source nearby. Some Native Americans planted these crops in circular plots. Some Three Sisters gardens are still planted like this. Because the circular plots are only three feet in diameter, several plots can be built three or four feet apart. Each plot should be marked off. Then the ground should be dug up and shaped into a mound that is twelve to eighteen inches high.

Four to seven corn seeds are then planted in the center of each mound. The bean and squash seeds are planted after the corn grows to be about four inches high. Then six bean seeds are planted in a circle about six inches away from the corn plants. Four squash seeds are planted just off each mound. These seeds should be planted about a foot away from the bean seeds. Soon, it will be time to watch the garden grow!

CONSTRUCTED-RESPONSE ITEM

ELA5.RI.9

3. Using the information in "A Schoolyard Butterfly Garden" and "A Three Sisters Garden in the Schoolyard," explain why it is important to have the different plant types in a garden.

Use details from BOTH passages to support your answer. **Type your answer in the space provided.**

Scoring Guide

#3 Item Information

Standard: ELA5.RI.9 Integrate information from several texts on the same topic in order to write or speak about the subject knowledgeably.	**Item Depth of Knowledge:** 3 Strategic Thinking Student uses reasoning and develops a plan or sequence of steps; process has some complexity.

ITEM-SPECIFIC SCORING GUIDELINE

Score	Description
2	• Gives sufficient evidence of the ability to determine/summarize the authors' message/claim/point/central idea or to explain the support for a central idea • Includes specific, developed examples that make reference to the passages • Thoroughly explains the authors' message/claim/point/central idea or explanation with specific details based on the passages The response: *Identifies the key ideas in each passage that explain the relationship between plants and butterflies (passage 1 addresses plants that attract butterflies, and passage 2 addresses how three plants help each other grow). The response gives specific examples to support the authors' messages (e.g., butterflies need nectar; beans give nitrogen to nearby plants; corn and squash provide shade).*
1	• Gives limited evidence of the ability to determine/summarize the authors' message/claim/point/central idea or to explain the support for a central idea • Includes vague/limited examples that make reference to the passages • Explains the authors' message/claim/point/central idea or explanation with specific details based on the passages
0	• Gives no evidence of the ability to determine/summarize the authors' message/claim/point/central idea or to explain the support for a central idea

STUDENT RESPONSES

ELA5.RI.9

Response Score: 2 points 

3. Using the information in "A Schoolyard Butterfly Garden" and "A Three Sisters Garden in the Schoolyard," explain why it is important to have the different plant types in a garden.

Use details from BOTH passages to support your answer. **Type your answer in the space provided.**

You need to have different plant types in a garden because the plants depend on one another. Each plant plays a big role in how the plants and their habitat survive. For instance take a Three Sisters Garden. A Three Sisters Garden uses squash, corn, and bean plants. The squash provides shade, the corn is tall which helps the bean plants stand up, and the bean plants give all three plants nitrogen. Nitrogen is needed for the three plants survival. Also a butterfly garden helps each other by nector plants drawing in butterflys, and shrubs and trees protect it from the wind.

The student demonstrates the ability to determine the reasons why it is important to have different plant types in a garden, starting with the central idea ("*plants depend on one another*").

The response includes specific details from both passages ("*squash provides shade, . . . corn is tall which helps the bean plants stand up, . . . bean plants give all three plants nitrogen*" from "A Three Sisters Garden in the Schoolyard," "*shrubs and trees protect it from the wind*" from "A Schoolyard Butterfly Garden") and receives full credit.

ELA5.RI.9

Response Score: 1 point 

3. Using the information in "A Schoolyard Butterfly Garden" and "A Three Sisters Garden in the Schoolyard," explain why it is important to have the different plant types in a garden.

Use details from BOTH passages to support your answer. **Type your answer in the space provided.**

On the passage A Schoolyard Butterfly Garden that the students wants to attract butterflies to their garden so there gonna plant different types of plants and they decide to plant lantanas, black-eyed Susans, lavender, zinnias, and marigolds so their gonna plant all differnt types of plants the blooms at differnt times to help attract butterflys and A three Sisters Garden uses differnt plants like corn, beans, and squash to help thier garden and will neeed shade to their garden to help grow Therefore you will need different types of plants.

The student mainly summarizes both passages, giving limited evidence of an ability to explain the importance of different plants in a garden.

The student does include some specific details from both passages ("*differnt types of plants the blooms at differnt times to help attract butterflys*," "*uses differnt plants like corn, beans, and squash to help thier garden*") but does not explain why this is important well enough to receive full credit.

ELA5.RI.9

Response Score: 0 points 

3. Using the information in "A Schoolyard Butterfly Garden" and "A Three Sisters Garden in the Schoolyard," explain why it is important to have the different plant types in a garden.

Use details from BOTH passages to support your answer. **Type your answer in the space provided.**

I think that it is important because most of the time you don`t want to have the same plants.It gets boring after a while.I think you should plant all kinds of plants.It isn`t going to hurt.You can plant daisies,marigolds,and even vedgtables.I do think it is important to have different types of plants in a garden. Not only can you watch them grow but you can also learn about them.

The student gives no evidence of the ability to explain the importance of different plants in a garden based on the author's message, instead providing vague reasons of his/her own ("*. . . don't want to have the same plants. It gets boring,*" "*It isn't going to hurt,*" "*Not only can you watch them grow but you can also learn about them*"). None of the response is based on either source.

You have read "A Schoolyard Butterfly Garden" and "A Three Sisters Graden in the Schoolyard" and have answered some questions about what you have read. Now write your informational piece on your answer document.

Writing Task

4. Planning and planting different types of gardens requires learning about how plants and insects live together.

Think about the ideas in the passages, and then write an informational essay in your own words about how to plan a schoolyard garden.

Be sure to use information from BOTH passages as you write an essay that informs or explains. **Write your answer on the lines on your answer document.**

Before you write, be sure to

- think about ideas, facts, definitions, details, and other information and examples you want to use;
- think about how you will introduce your topic and what the main topic will be for each paragraph;
- 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; and
- use scratch paper if needed.

Now write your informational piece on your answer document. Be sure to

- introduce the topic clearly;
- use information from the two passages so that your piece includes important details;
- develop the topic in a clear order, with facts, definitions, and details related to the topic;
- use linking words to connect ideas;
- use clear language and vocabulary;
- have a strong conclusion; and
- check your work for correct usage, grammar, spelling, capitalization, and punctuation.

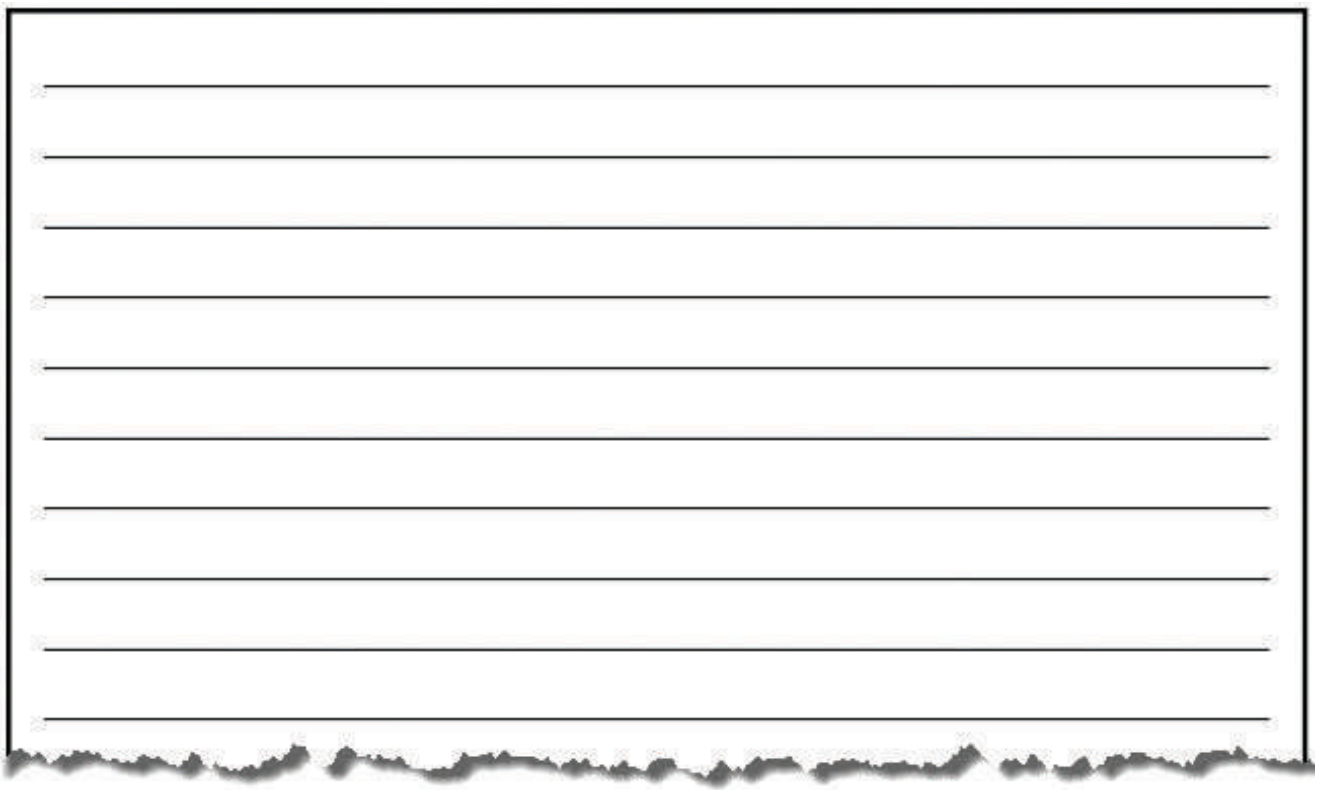
CONSTRUCTED-RESPONSE ITEM

ELA5.W.2

4. Planning and planting different types of gardens requires learning about how plants and insects live together.

Think about the ideas in the passages, and then write an informational essay in your own words about how to plan a schoolyard garden.

Be sure to use information from BOTH passages as you write an essay that informs or explains. **Write your answer on the lines on your answer document.**



Scoring Guide

#4 Item Information

Standard: ELA5.W.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly.	**Item Depth of Knowledge:** 4 Extended Thinking Student conducts an investigation, needs time to think and process multiple conditions of the problem or task.

SEVEN-POINT, TWO-TRAIT RUBRIC

Trait 1 for Informational/Explanatory Genre

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

SEVEN-POINT, TWO-TRAIT RUBRIC

Trait 2 for Informational/Explanatory Genre

Writing Trait	Score	Description
Language Usage and Conventions *This trait examines the writer's ability to demonstrate control of sentence formation, usage, and mechanics as embodied in the grade-level expectations of the language standards.*	**3**	*The student's response demonstrates full command of language usage and conventions.* • Has clear and complete sentence structure, with appropriate range and variety • Shows knowledge of language and its conventions when writing • Any errors in usage and conventions do not interfere with meaning
	2	*The student's response demonstrates partial command of language usage and conventions.* • Has complete sentences, with some variety • Shows some knowledge of language and its conventions when writing • Has minor errors in usage and conventions with no significant effect on meaning
	1	*The student's response demonstrates weak command of language usage and conventions.* • Has fragments, run-ons, and/or other sentence structure errors • Shows little knowledge of language and its conventions when writing • Has frequent errors in usage and conventions that interfere with meaning
	0	*The student's response is flawed for various reasons:* • Blank • Copied • Too Limited to Score/Illegible/Incomprehensible • Non-English/Foreign Language • Off Topic/Off Task/Offensive

STUDENT RESPONSES

ELA5.W.2

Response Scores: 

Idea Development, Organization, and Coherence: 4
Language Usage and Conventions: 2

4. Planning and planting different types of gardens requires learning about how plants and insects live together.

Think about the ideas in the passages, and then write an informational essay in your own words about how to plan a schoolyard garden.

Be sure to use information from BOTH passages as you write an essay that informs or explains. **Type your answer in the space provided.**

To make any kind of garden you need a plan. If your making a butterfly garden you will need some stuff.So you might have to go to the store for this, unless you already won half the stuff your going to need to make a garden!!

First you will need nectar and flowers that smell good. Butterflies also like to rest on rocks that are in sunlight. Make sure to put your garden in a spot were it's not to windy. Try putting your butterfly garden between a building or some trees. Next make a small pond by your garden for your butterflies to drink from, remember they need to drink also!

Butterflies are very fragile creatures, so its best not to put anything heavy around your garden. Just for the butterflies safty anyway.When you see a butterfly by your plant and a bug is there trying to eat it do the best thing possible, but make sure to be careful, spary your flower with bug spray.

Now if your making a fruit or vegetable garden, make sure to give it lots of food and water. Also you may want to give it shelter. If you want to keep your garden/gardens happy and healthy never leave it alone for a long time.

Make sure some bugs dont get to finding your plants and eating them. When you see holes or nibble bites on your plants steam, leaf, and flower pettels then a bug has been eating on your plant! You can stop this simple little problem by using bug spray.

Here are some steps for both a butterfly garden and a fruit or vegetable garden. Step 1: Get a plow and get outside. Step 2: always check if the seeds you bought are the correct kind before you plant them. Step 3:If you see a unwanted gust by your garden run up to it and shoo it off or just scare it away with a "BOO!" or "GET OFF MY FLOWER YOU UNWANTED BUG!"

Now that you learned how to plan and make a garden im sure your ready to take action on your own and get dirty and get started!

The student has provided a well-developed informative essay that explains how to plant a schoolyard garden.

The essay begins with an introduction that clearly states the topic ("*To make any kind of garden you need a plan*"). For the most part, ideas are organized in logical groupings, although some details are listed without development. The essay concludes with a brief call to action (*"im sure your ready to take action on your own and get dirty and get started"*).

The response includes specific details from the passage "A Schoolyard Butterfly Garden" *("you will need nectar and flowers that smell good," "like to rest on rocks that are in sunlight," "were its not to windy," "make a small pond by your garden"*), and some more general ideas from "A Three Sisters Garden in the Schoolyard," including water for the garden, working the soil with a plow, and planting seeds. The student adds his/her own thoughts that are not from the passages (*"holes or nibble bites on your plant steam," "using bug spray"*).

The response demonstrates partial command of language usage and conventions. Sentence structures/beginnings/lengths vary. Sentence construction is generally correct; missing punctuation/fragments/run-ons are evident ("*Just for the butterflies safty anyway. When you see a butterfly by your plant and a bug is there trying to eat it do the best thing possible, but make sure to be careful, spary your flower with bug spray*"). Errors in Grammar/Usage/Punctuation/Spelling are present and begin to impede meaning ("*your"* for *you're, "to"* for *too, "its"* for *it's, "dont"* for *don't, "steam"* for *stem, "pettels"* for *petals, "gust"* for *guest, "im"* for *I'm).*

ELA5.W.2

Response Scores:

Idea Development, Organization, and Coherence: 3
Language Usage and Conventions: 3

4. Planning and planting different types of gardens requires learning about how plants and insects live together.

Think about the ideas in the passages, and then write an informational essay in your own words about how to plan a schoolyard garden.

Be sure to use information from BOTH passages as you write an essay that informs or explains. **Write your answer on the lines on your answer document.**

Have to ever heard of a butterfly garden or a Three Sisters Garden? Well, if you haven't, Im going to tell you all about them. These two gardens are easy and fun to make. It is very simple, once you've learned. Get ready to be inspired!

A butterfly garden has a couple of easy steps to it. First, you find a shaded area maybe near a tree or some other shady place. Second, Make sure that the place that you put the garden will get at least six hours of sunlight. Third, add the soil, plants, and a container of water for the butterflies to sip on. Fourth, put some loose grass, rocks, and leaves to make it look like a real butterfly habitat. Finally, wait for the butterflies to come explore!

A Three Sister Garden is a easy-to-make garden that has a couple steps, too. First, grab some soil. Second, you plant squash, beans and corn. These plants help each other grow and are the plants to use in a three sisters garden. Third, Let them grow!

I think it would be fun to make these two gardens. Don't you? They can also help things, too. The butterfly garden helps butterfly have the nectar,

some water, and lay down on some comfortable rocks. The Three Sisters garden helps us get out of the house and grow some good food!

The student has provided a complete informative essay that explains how to plant a schoolyard garden.

The well-written introduction (*"I'm going to tell you all about them. . . . Get ready to be inspired!"*) and conclusion (*"I think it would be fun to make these two gardens. Don't you?"*) engage the reader. One body paragraph presents details from the passage "A Schoolyard Butterfly Garden" and a second covers "A Three Sisters Garden in the Schoolyard."

The writer gives specific details ("*six hours of sunlight;*" "*container of water;*" "*squash, beans, and corn*") but provides little elaboration beyond a brief list of steps to follow.

The response demonstrates full command of language usage and conventions. It includes a variety of sentence structures that are purposeful. Word choice is appropriate and varied (*"inspired," "explore," "comfortable"*). The few errors present in usage and conventions (*"a easy"*) do not interfere with meaning.

ELA5.W.2

Response Scores: 

Idea Development, Organization, and Coherence: 2
Language Usage and Conventions: 1

4. Planning and planting different types of gardens requires learning about how plants and insects live together.

Think about the ideas in the passages, and then write an informational essay in your own words about how to plan a schoolyard garden.

Be sure to use information from BOTH passages as you write an essay that informs or explains. **Type your answer in the space provided.**

What you need to do for a shcoolyard garden is you need the plant that your going to plant. you also need the anmale that your going to let live around it but make sure the tow live in the same inviermint and that thier not hameful to each and geve the plant water becuse if you dont it want feed the anmael so it would mes up evrey thing in the garden. also get diffrint plants and insects it will help the garden inviermeint . depanding on what insects and what plant bay be you could have a small pond so the the plant and the insects could get a dreinck. also get a flower that is easy to grow also get some the are colerful so the insects will ilke it so the inects will like the stay ther and atract some more of it kind.

The student has provided an incomplete informative essay that cursorily explains how to plant a schoolyard garden.

The introduction is minimal, consisting of a brief phrase (*"What you need to do for a shcoolyard garden is"*) before abruptly transitioning into the body. The response lacks a conclusion entirely. The writing is poorly organized, jumping quickly between listed ideas.

The writing suggests that some of the ideas are inspired by the passages (*"get diffrint plants," "have a small pond," "get a dreinck," "get some the are colerful"*), but it lacks specific details.

The response demonstrates limited command of language usage and conventions. Sentence construction consists mainly of overextended and run-on sentences. Variety is hampered by an overuse of the word *"also."* Vocabulary is basic with only an occasional attempt to include more advanced words (*"inviermint"*). Errors in usage and conventions are frequent, varied, and impede meaning, in particular the lack of capitalization and the high number of spelling errors, including common words (*"shcoolyard," "anmale," "geve," "becuse," "mes," "evrey," "diffrint," "depanding," "dreinck," "ilke," "inects," "ther," "atract"*).

ELAGSE3.W.2

Response Scores:

Idea Development, Organization, and Coherence: 1
Language Usage and Conventions: 2

4. Planning and planting different types of gardens requires learning about how plants and insects live together.

Think about the ideas in the passages, and then write an informational essay in your own words about how to plan a schoolyard garden.

Be sure to use information from BOTH passages as you write an essay that informs or explains. **Write your answer on the lines on your answer document.**

Yes I have planted a garden right before. I have learned a little bit about gardens. this essay, all you have to do is get the seeds, put a hole in the ground, water the plants, watch it grow, and then when it get done, you can pull it out of the ground and wash it off, cook something with it, and keep on growing other things.

The student has provided a brief response that references the prompt, but the ideas are unclear and minimally developed.

The response lacks an introduction and conclusion. The body is mainly a list of steps.

There is no indication that the student is using information from the passages provided as instructed. All ideas presented are general.

The response demonstrates partial command of language usage and conventions. The entire response consists of two simple sentences and one long, overextended sentence. Vocabulary is basic. Phrasing is awkward and suggests words are missing (*"a garden right before,"* "*This essay"*). There is only one usage error (*"it get done"*), but because of the brevity of the response, the student has not demonstrated a full command of language.

Grade 5

MATHEMATICS

Sample Constructed-Response Items

CONSTRUCTED-RESPONSE ITEM

MGSE5.NBT.7

5. Peyton has a goal to walk 10,000 steps each day. On Tuesday afternoon, Peyton walked 7,338 steps. She averages 2.5 feet per step.

How many more feet does Peyton need to walk to reach her goal of 10,000 steps? Explain how you found your answer. **Write your answer in the space provided on your answer document.**

#5 Item Information

Standard: MGSE5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	**Item Depth of Knowledge:** 2 Basic Application of Skill/Concept Student uses information, conceptual knowledge, and procedures.

ITEM-SPECIFIC SCORING GUIDELINE

Score Point	Description
2	Response demonstrates a complete understanding of the standard. Give 2 points for student identifying that there are 6655 feet remaining and providing a correct explanation. ***Exemplar Response:*** 6655 feet (*1 point*) AND Subtract 7338 steps from 10,000 to get 2662 steps remaining. 2662 steps multiplied by 2.5 feet per step equals 6655 feet remaining. (*1 point*) OR Other valid response
1	Response demonstrates partial understanding of the standard. Student earns 1 point for answering 1 key element.
0	Response demonstrates limited to no understanding of the standard. Student earns 0 points because the student does not show understanding of adding, subtracting, multiplying, and dividing decimals.

STUDENT RESPONSES

MGSE5.NBT.7

Response Score: 2

5. Peyton has a goal to walk 10,000 steps each day. On Tuesday afternoon, Peyton walked 7,338 steps. She averages 2.5 feet per step.

How many more feet does Peyton need to walk to reach her goal of 10,000 steps? Explain how you found your answer. **Type your answer in the space provided.**

6655

10000-7338=2662
2662 x 2.5 = 6655

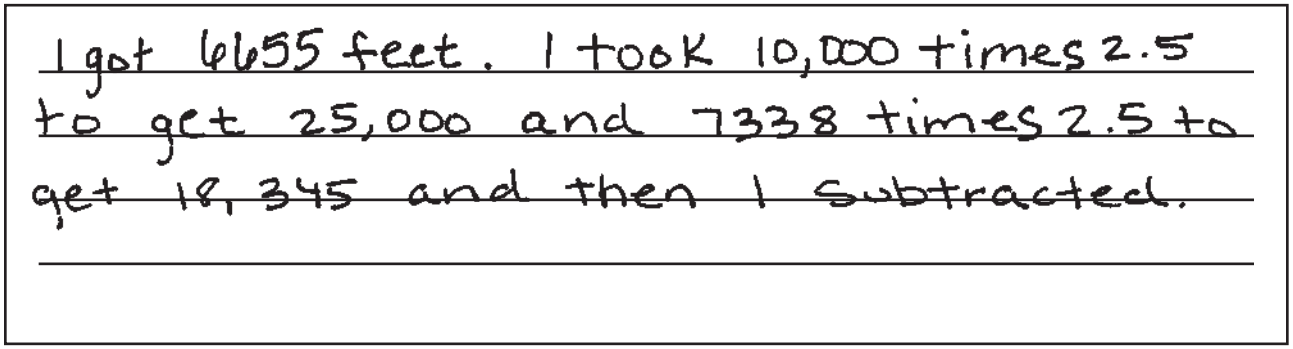
The response demonstrates complete understanding by providing the correct answer (6655) with an explanation of how to calculate the number of remaining feet. The student subtracts 7,338 from 10,000 to get 2,662 remaining steps. The student then calculates the number of feet remaining by multiplying 2662 by 2.5 feet per step.

MGSE5.NBT.7

Response Score: 2

5. Peyton has a goal to walk 10,000 steps each day. On Tuesday afternoon, Peyton walked 7,338 steps. She averages 2.5 feet per step.

How many more feet does Peyton need to walk to reach her goal of 10,000 steps? Explain how you found your answer. **Write your answer in the space provided on your answer document.**



The response demonstrates complete understanding by providing the correct answer (6655) and an explanation that shows how to calculate the number of remaining feet. The student selects the total number of steps (10,000) and the number of steps walked (7,338) and converts them to number of feet by multiplying by 2.5 feet per step. The student subtracts the number of feet walked (18,345) from the total feet (25,000) to get the number of remaining feet.

MGSE5.NBT.7

Response Score: 1

5. Peyton has a goal to walk 10,000 steps each day. On Tuesday afternoon, Peyton walked 7,338 steps. She averages 2.5 feet per step.

How many more feet does Peyton need to walk to reach her goal of 10,000 steps? Explain how you found your answer. **Type your answer in the space provided.**

I took 7,338 from 10,000 to get 3,662 steps. 3,662 steps times 2.5 feet per step is 9,115 feet.

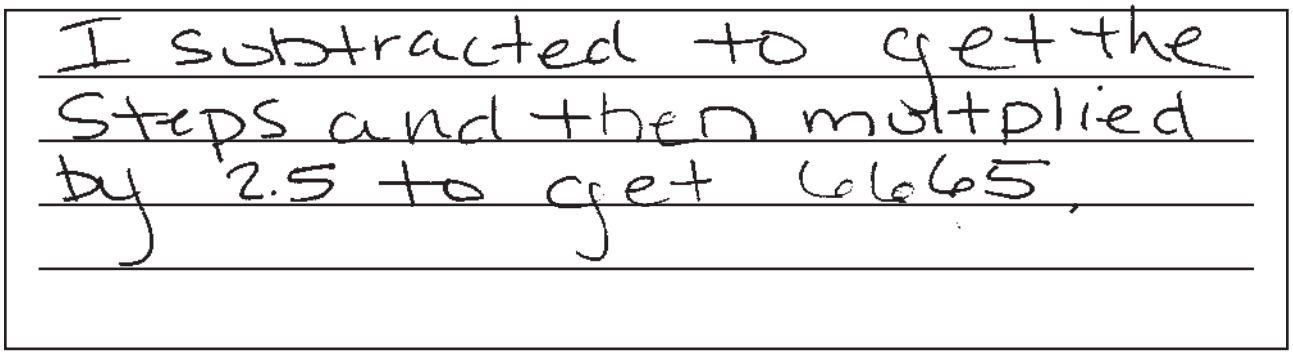
The response demonstrates partial understanding by providing an explanation that shows how to calculate the number of remaining feet. The student subtracts 7,338 from 10,000 and makes a calculation error, getting 3,662 instead of 2,662. The student understands that this is the number of steps remaining and calculates the number of remaining feet by multiplying 3,662 by 2.5 feet per step. The product 9,115 is incorrect due to the calculation error in the first step.

MGSE5.NBT.7

Response Score: 1

5. Peyton has a goal to walk 10,000 steps each day. On Tuesday afternoon, Peyton walked 7,338 steps. She averages 2.5 feet per step.

How many more feet does Peyton need to walk to reach her goal of 10,000 steps? Explain how you found your answer. **Write your answer in the space provided on your answer document.**



The response demonstrates partial understanding by providing a valid but incomplete explanation that shows the number of remaining feet. The student subtracts to get the remaining steps, but the values subtracted are not shown. The student understands that to calculate the number of remaining feet, the number of steps is multiplied by 2.5 feet per step. The answer of 6665 is incorrect.

MGSE5.NBT.7

Response Score: 0

5. Peyton has a goal to walk 10,000 steps each day. On Tuesday afternoon, Peyton walked 7,338 steps. She averages 2.5 feet per step.

How many more feet does Peyton need to walk to reach her goal of 10,000 steps? Explain how you found your answer. **Type your answer in the space provided.**

Peyton needs to walk 2662 more

I got this by taking 10,000 minus 7,338 and got 2,662

The response demonstrates inadequate understanding of the concepts being tested. The student begins the process correctly by subtracting 7,338 from 10,000 but does not convert the value of 2,662 remaining steps to the number of remaining feet.

CONSTRUCTED-RESPONSE ITEM

MCC5.NBT.7

6. Chris has 70 jpeg files on his computer. Each file is 6.8 megabytes in size.

Part A: What is the total size, in megabytes, of Chris's jpeg files? **Write your answer in the space provided on your answer document.**

Part B: If Chris deletes 8 jpeg files, what will be the total size, in megabytes, of Chris's remaining jpeg files? Explain how you found your answer. **Write your answer in the space provided on your answer document.**

Part C: Amaya has 81 jpeg files that have a total size of 583.2 megabytes. If each jpeg file is the same size, what is the size, in megabytes, of each of Amaya's jpeg files? **Write your answer in the space provided on your answer document.**

#6 Item Information

Standard: MCC5.NBT.7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.	**Item Depth of Knowledge:** 3 Strategic Thinking Student uses reasoning and develops a plan or sequence of steps; process has some complexity.

ITEM-SPECIFIC SCORING GUIDELINE

Score Point	Rationale
4	Response demonstrates a complete understanding of the standard. Give 4 points for correctly identifying the total size of Chris's files, identifying the total size of Chris's files after 8 files are deleted, explaining how the new total size was determined, and identifying the size of each of Amaya's files. ***Exemplar Response:*** **Part A:** 476 (*1 point*) **Part B:** 421.6 (*1 point*) AND 8 jpegs are 54.4 megabytes. I subtracted 54.4 from 476. (*1 point*) **Part C:** 7.2 (*1 point*) OR Other valid response
3	Response demonstrates nearly complete understanding of the standard. Student earns 3 points for answering 3 key elements.*
2	Response demonstrates partial understanding of the standard. Student earns 2 points for answering 2 key elements.*
1	Response demonstrates minimal understanding of the standard. Student earns 1 point for answering 1 key element.*
0	Response demonstrates limited to no understanding of the standard. Student earns 0 points because the student does not show understanding of adding, subtracting, multiplying, and dividing decimals.

**If a student makes an error in Part A that is carried through to Part B (or subsequent parts), then the student is not penalized again for the same error.*

STUDENT RESPONSES

MCC5.NBT.7

Response Score: 4

6. Chris has 70 jpeg files on his computer. Each file is 6.8 megabytes in size.

Part A: What is the total size, in megabytes, of Chris's jpeg files? **Type your answer in the space provided.**

Part B: If Chris deletes 8 jpeg files, what will be the total size, in megabytes, of Chris's remaining jpeg files? Explain how you found your answer. **Type your answer in the space provided.**

Part C: Amaya has 81 jpeg files that have a total size of 583.2 megabytes. If each jpeg file is the same size, what is the size, in megabytes, of each of Amaya's jpeg files? **Type your answer in the space provided.**

A: 70 x 6.8 = 476

B: 62 x 6.8 = 421.6

C: 583.2 ÷ 81 = 7.2

The response demonstrates a complete understanding by providing the correct answer in Part A (476) and in Part C (7.2) and by providing an explanation of how to determine the correct size of the files (421.6) if 8 of the files are deleted. The calculation shown in Part B is equivalent to a correct written explanation. The student multiplies 6.8 megabytes per file by 62 files (the number of files remaining if 8 files are deleted from the total of 70) to get the total file size of 421.6 megabytes.

MCC5.NBT.7

Response Score: 3

6. Chris has 70 jpeg files on his computer. Each file is 6.8 megabytes in size.

Part A: What is the total size, in megabytes, of Chris's jpeg files? **Type your answer in the space provided.**

Part B: If Chris deletes 8 jpeg files, what will be the total size, in megabytes, of Chris's remaining jpeg files? Explain how you found your answer. **Type your answer in the space provided.**

Part C: Amaya has 81 jpeg files that have a total size of 583.2 megabytes. If each jpeg file is the same size, what is the size, in megabytes, of each of Amaya's jpeg files? **Type your answer in the space provided.**

476-6.8-6.8-6.8-6.8-6.8-6.8-6.8-6.8-6.8=421.6

The response demonstrates a partially complete understanding by providing a correct answer in Part A (476) and in Part B (421.6) and by providing an explanation (or work shown) that correctly shows how the total file size is diminished as files are deleted. The student shows a correct strategy of subtracting 6.8 megabytes from the total of 476 for each file that is removed. The student does not address Part C.

MCC5.NBT.7

Response Score: 3

6. Chris has 70 jpeg files on his computer. Each file is 6.8 megabytes in size.

Part A: What is the total size, in megabytes, of Chris's jpeg files? **Type your answer in the space provided.**

Part B: If Chris deletes 8 jpeg files, what will be the total size, in megabytes, of Chris's remaining jpeg files? Explain how you found your answer. **Type your answer in the space provided.**

Part C: Amaya has 81 jpeg files that have a total size of 583.2 megabytes. If each jpeg file is the same size, what is the size, in megabytes, of each of Amaya's jpeg files? **Type your answer in the space provided.**

476

421.6, I got it by subtracting

7.2

The response demonstrates a partially complete understanding by providing the correct answer in Part A (476) , Part B (421.6), and Part C (7.2). The explanation provided in Part B ("I got it by subtracting") is insufficient to demonstrate complete understanding.

MCC5.NBT.7

Response Score: 2 

6. Chris has 70 jpeg files on his computer. Each file is 6.8 megabytes in size.

Part A: What is the total size, in megabytes, of Chris's jpeg files? **Type your answer in the space provided.**

Part B: If Chris deletes 8 jpeg files, what will be the total size, in megabytes, of Chris's remaining jpeg files? Explain how you found your answer. **Type your answer in the space provided.**

Part C: Amaya has 81 jpeg files that have a total size of 583.2 megabytes. If each jpeg file is the same size, what is the size, in megabytes, of each of Amaya's jpeg files? **Type your answer in the space provided.**

The total number of megabytes for Chris's files is 474. To get the number of megabytes for Chris's files if he deletes 8 files I took 8 times 6.8 to get 54.4 and then I took 474 minus 54.4 to get 419.6. Each of Amaya's files is 6.8 megabytes.

The response demonstrates partial understanding by providing an explanation of how to determine the correct size of the files if 8 files are removed. The student has an incorrect answer in Part A but used that answer (474) to correctly determine the total size of the files if 8 files were deleted by subtracting 8 x 6.8 = 54 from the total of 474. The total remaining file size of 419.6 is correct based on the previous incorrect value, so credit is given for both the answer and the process in Part B. The response for Part C is a restatement of the file size of Chris's files, not the file size of Amaya's files.

MCC5.NBT.7

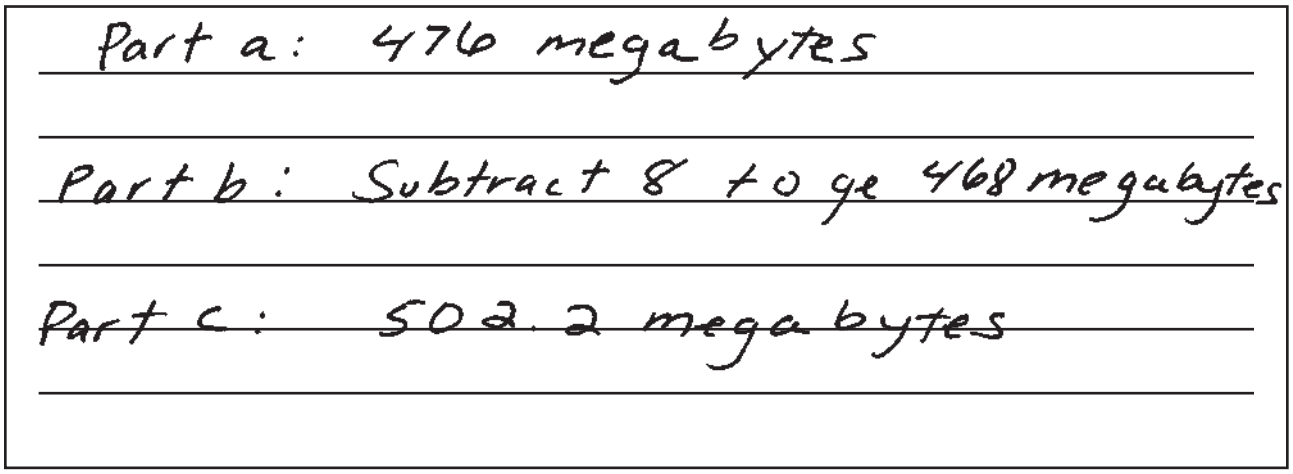
Response Score: 1

6. Chris has 70 jpeg files on his computer. Each file is 6.8 megabytes in size.

Part A: What is the total size, in megabytes, of Chris's jpeg files? **Write your answer in the space provided on your answer document.**

Part B: If Chris deletes 8 jpeg files, what will be the total size, in megabytes, of Chris's remaining jpeg files? Explain how you found your answer. **Write your answer in the space provided on your answer document.**

Part C: Amaya has 81 jpeg files that have a total size of 583.2 megabytes. If each jpeg file is the same size, what is the size, in megabytes, of each of Amaya's jpeg files? **Write your answer in the space provided on your answer document.**



The response demonstrates minimal understanding, providing the correct answer for Part A only (476 megabytes). The process provided for Part B is incorrect, as the student subtracts the number of files being deleted from the total file size rather than subtracting the total size of the files being deleted. This misconception is carried forward to Part C, where the answer is incorrect and is the difference between the total file size and the number of files.

MCC5.NBT.7

Response Score: 0

6. Chris has 70 jpeg files on his computer. Each file is 6.8 megabytes in size.

Part A: What is the total size, in megabytes, of Chris's jpeg files? **Type your answer in the space provided.**

Part B: If Chris deletes 8 jpeg files, what will be the total size, in megabytes, of Chris's remaining jpeg files? Explain how you found your answer. **Type your answer in the space provided.**

Part C: Amaya has 81 jpeg files that have a total size of 583.2 megabytes. If each jpeg file is the same size, what is the size, in megabytes, of each of Amaya's jpeg files? **Type your answer in the space provided.**

70 plus 6.8 is 76.8

The response demonstrates inadequate understanding of the concepts being measured. The process shown is not appropriate for finding the size of an individual file. The student adds the number of files and the size of the files.

END OF SAMPLER

QUESTIONS

END OF SAMPLER

QUESTIONS