


# Georgia Milestones

Assessment System



Melissa Fincher, Ph.D.  
Deputy Superintendent, Assessment & Accountability  
[mfincher@doe.k12.ga.us](mailto:mfincher@doe.k12.ga.us)



Dr. John D. Barge, State School Superintendent  
*"Making Education Work for All Georgians"*  
[www.gadoe.org](http://www.gadoe.org)

# Georgia Milestones

- Grades 3 – 8
  - End of Grade (EOG) in language arts, mathematics, science, social studies
- High School
  - End of Course (EOC) in 9<sup>th</sup> Grade Literature & Composition, American Literature & Composition, Coordinate Algebra, Analytic Geometry, Physical Science, Biology, US History, and Economics



# Georgia Milestones

## Features include:

- inclusion of constructed-response items in ELA and mathematics, in addition to selected-response items
- inclusion of a writing component (in response to text) at every grade level and course within the ELA assessment;
- inclusion of norm-referenced items in every grade and content area to complement the criterion-referenced information and to provide a national comparison; and
- transition to online administration over time, with online administration considered the primary mode of administration and paper-pencil back-up until transition is completed.

Addition of technology-enhanced items beginning in 2016-2017.



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Georgia Milestones

## Blended: Criterion-Referenced and Norm-Referenced

Georgia Milestones will provide:

- criterion-referenced performance information in the form of four performance levels, depicting students' mastery of state standards
- norm-referenced performance information in the form of national percentiles, depicting how students' achievement compares to peers nationally

Note: To provide norm-referenced information, some norm-referenced items may not align to Georgia's content standards. Only aligned NRT items will contribute to proficiency designations.



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Georgia Milestones

## Item Types

- **Selected-Response** [aka, multiple-choice]
  - all content areas
  - evidence-based selected response in ELA
- **Constructed-Response**
  - ELA and mathematics
- **Extended-Response**
  - ELA and mathematics
- **Technology Enhanced**
  - to begin in 2016-2017

Constructed response is a general term for assessment items that require the student to generate a response as opposed to selecting a response. Extended-response items require more elaborate answers and explanations of reasoning. They allow for multiple correct answers and/or varying methods of arriving at the correct answer. Writing prompts and performance tasks are examples of extended-response items.





# Examining Georgia Milestones Item Types

Example – Grade 3 Mathematics – Fractions



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Multiple Choice

Which fraction is largest?

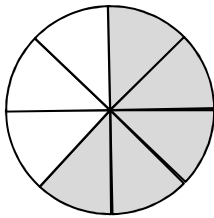
- (A)  $\frac{1}{4}$
- (B)  $\frac{1}{2}$
- (C)  $\frac{1}{6}$
- (D)  $\frac{1}{3}$



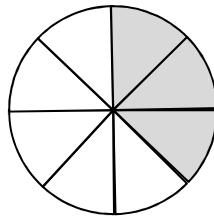
# Constructed Response

George and Ana each had a 12-inch pizza. Both pizzas were split into 8 equal pieces. The shaded pieces are the portion of their pizzas that George and Ana ate.

George



Ana



Express in fractions how much pizza George and Ana ate. Use the symbol  $<$ ,  $=$ , or  $>$  to show who ate more pizza.

George

$$\frac{5}{8}$$

$>$

Ana

$$\frac{3}{8}$$

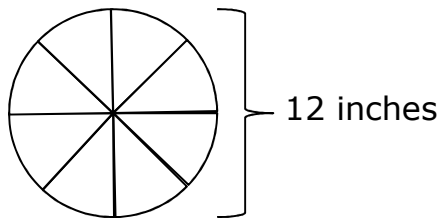




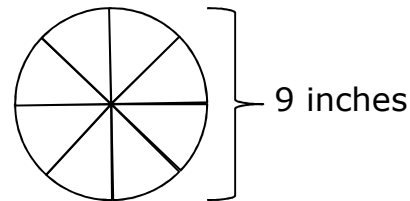
# Constructed Response

George has a 12-inch pizza. Ana has a 9-inch pizza. George and Ana both ate  $\frac{1}{2}$  of their pizza. George says he ate more than Ana. Is George right? Explain why or why not.

George

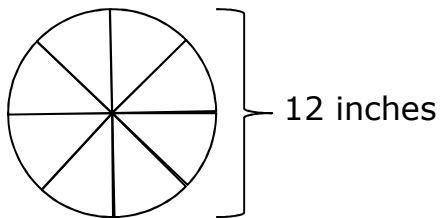


Ana

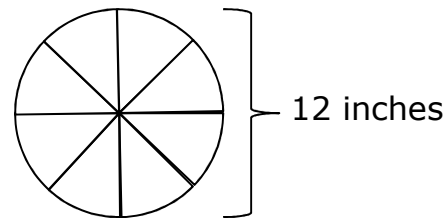


George is right. His pizza was bigger so  $\frac{1}{2}$  of a bigger pizza is more than  $\frac{1}{2}$  of a smaller pizza.

George



Carlos

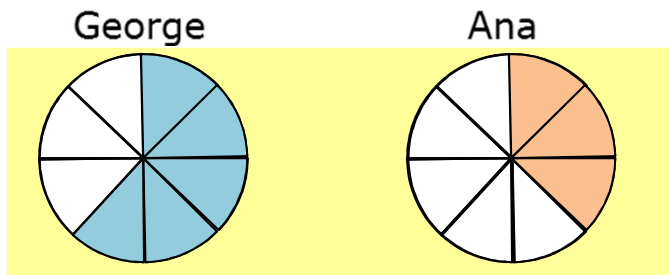


Carlos has a 12-inch pizza. He ate  $\frac{1}{4}$  of his pizza. Did George or Carlos eat more pizza? Explain your answer.

George ate more pizza. Their pizzas are the same size.  $\frac{1}{2}$  of the pizza is more than  $\frac{1}{4}$  of the pizza.

# Technology Enhanced

George and Ana each had a 12-inch pizza. George ate  $\frac{5}{8}$  of his pizza. Ana ate  $\frac{3}{8}$  of her pizza. Shade in the amount of pizza George and Ana ate.



Use the symbol  $>$ ,  $=$ , or  $<$  to show who ate more pizza.

$$\begin{array}{ccc} \text{George} & & \text{Ana} \\ \frac{5}{8} & > & \frac{3}{8} \end{array}$$





# Examining Georgia Milestones Item Types

Example – Grade 3 Mathematics – Fractions



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Multiple Choice

Which fraction is largest?

A

$\frac{1}{4}$

B

$\frac{1}{2}$

C

$\frac{3}{8}$

D

$\frac{2}{8}$

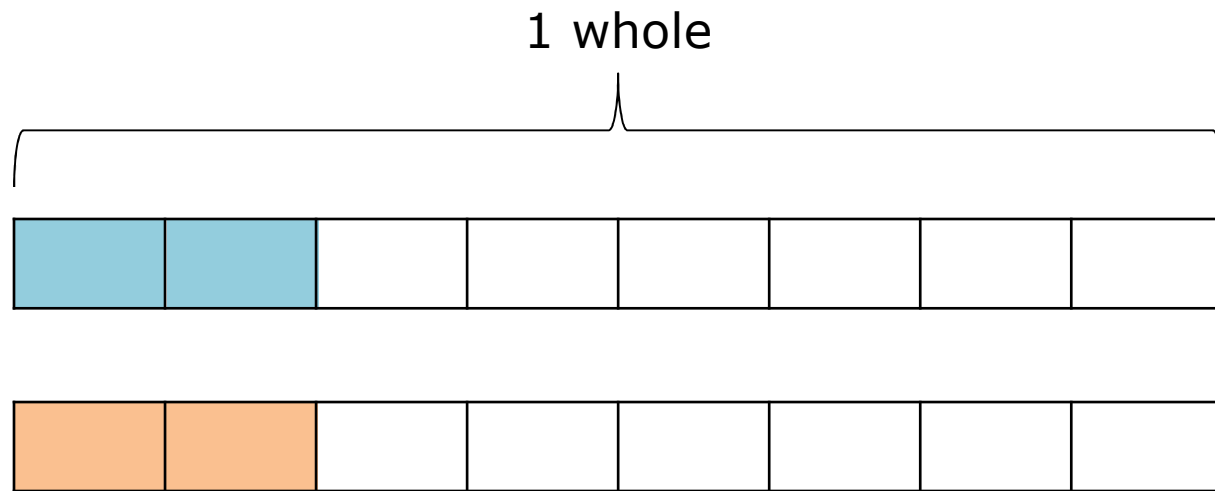


# Controlled Response

$$\frac{1}{4} \quad \frac{1}{2} \quad \frac{3}{8} \quad \frac{2}{8}$$

Which two fractions are the same? Show why by shading in the bar models.

fraction



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

The content and presentation of these items are for illustrative purposes only.

# Constructed Response

Jimmy and Owen are painting the walls of their dog's house.



Jimmy has painted  $\frac{1}{2}$  of one wall. Owen has painted  $\frac{1}{2}$  of another wall. Jimmy says he painted more than Owen, but Owen says they have painted the same amount.

Explain how Jimmy could be right. Use words and pictures to show that Jimmy is right.

Jimmy is correct. The walls of the dog house are different sizes. Jimmy is painting the larger wall and Owen is painting the shorter wall. Because the walls are different sizes, then the  $\frac{1}{2}$  doesn't mean the same thing.  $\frac{1}{2}$  of the longer wall is bigger than  $\frac{1}{2}$  of the shorter wall.

Jimmy's wall



Owen's wall



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

The content and presentation of these items are for illustrative purposes only.

# Resources Available NOW

- Content standards
  - frameworks, formative lessons, PARCC evidence statements
- Sample items
  - formative items/benchmarks via Georgia OAS→GOFAR;
  - released items via PARCC, SBAC, other states (KY, NY), NAEP
  - parent's guide to Georgia's new assessment developed by the National PTA [<http://www.pta.org/advocacy/content.cfm?ItemNumber=3816>]
- CRCT Readiness Indicators
- Lexiles

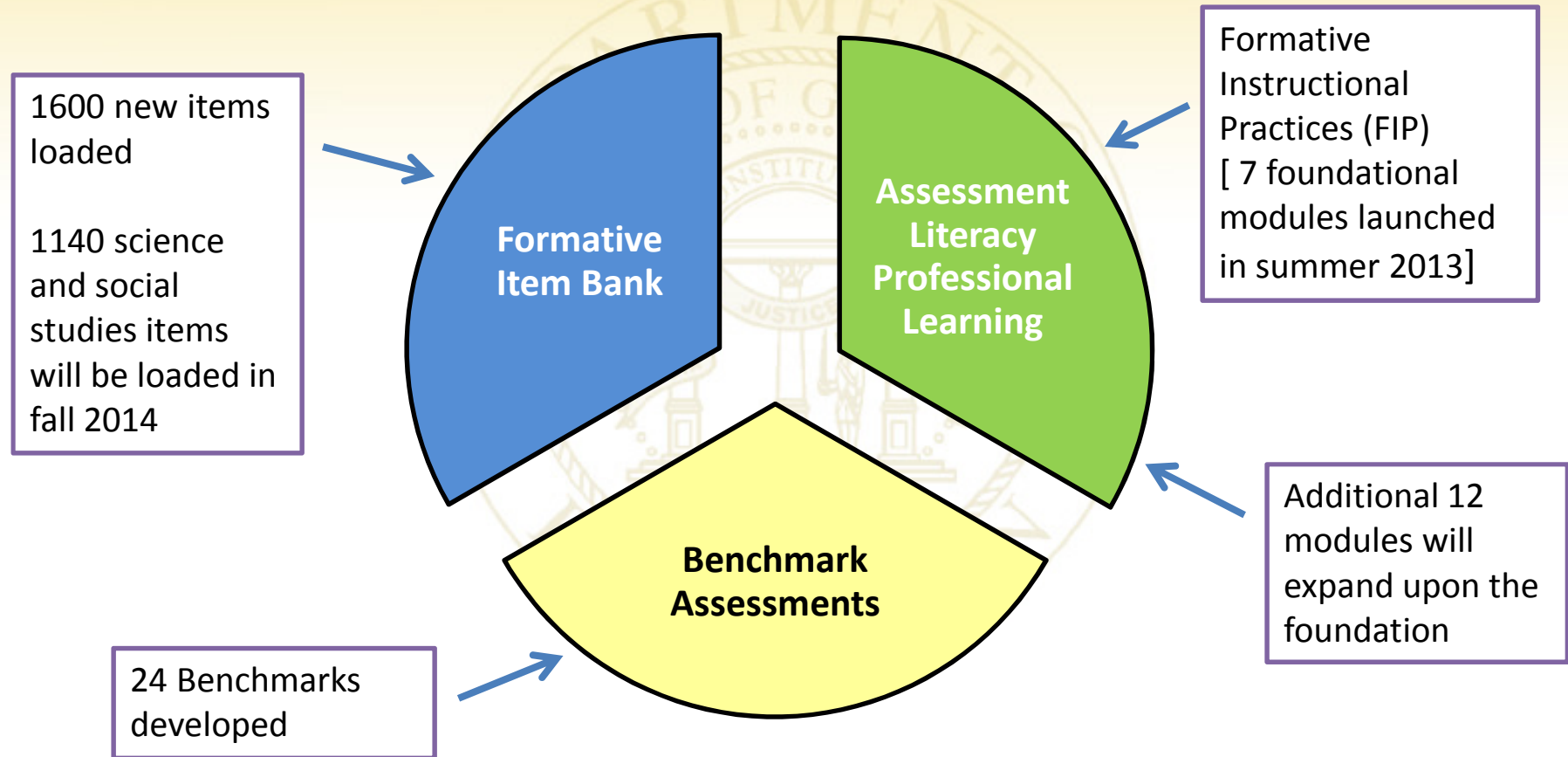
Focus on teaching and learning – eliciting evidence of student learning during instruction and adjusting as needed.



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Formative Assessment Initiatives

*Bringing a Balanced Assessment Focus to the Classroom*



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)



# Purpose of the Formative Item Bank

The purpose of the Formative Item Bank is to provide items and tasks used to assess students' knowledge while they are learning the state-mandated standards.

The items will provide an opportunity for students to show what they know and for teachers to gain a better understanding of what students do and do not understand.



# Formative Item Bank Use

The Georgia Formative Item Bank can be used in order to:

- Prepare students for the increased expectations of the state-mandated standards.
  - To show these expectations, students must engage with a variety of item formats beyond multiple-choice
- Provide students with experience with open- and constructed-response items
- Provide educators insight into students' understanding



# The Georgia Formative Item Bank

- Approximately 3000 new formative items aligned with the state's content standards in ELA, mathematics, science, and social studies
- Created for use in Georgia classrooms
- Piloted with Georgia students
- Reviewed by Georgia educators
- Preponderance of items at DOK 3 and 4
- Item, rubric and scored student sample papers provided

These formative tools are available for all Georgia educators!



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Extended Response Items

- May address multiple standards, multiple domains, and/or multiple areas of the curriculum
- Allow for multiple correct responses and/or varying methods of arriving at a correct answer
- Scored through use of a rubric and associated student exemplars



# Example of Extended Response Item

## ELA–Grades 11-12

In the “The Denver Express,” the author describes the passengers on the train as “a curious study for a thoughtful observer, this motley crowd of human beings sinking all differences of race, creed, and habits in the common purpose to move westward—to the mountain fastnesses, the sage-brush deserts, the Golden Gate.”

### Part A

What theme does this excerpt convey about the American West?

### Part B

Write a response identifying a theme about the American West portrayed in the passage and analyzing how the main characters exemplify this theme. Support your analysis with examples from the passage.



# Sample Mathematics Item

Grade 6

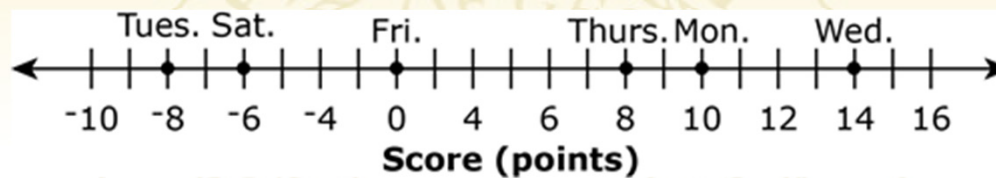


Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Extended Response Item

**6.NS.7; 6.EE.2; 6.EE.7**

Tanya played a computer game in which the score was calculated using the equation where  $s$  is the score,  $t$  is the number of points Tanya earned, and  $c$  is the number of points her computer opponent earned. Tanya recorded her scores for one week on the number line shown in the diagram.



The winner is determined by the highest score.

**Part A**

On Tuesday, Tanya's computer opponent scored 33 points. How many points did Tanya score? Explain your answer or show your work.

**Part B**

On which day were the scores of Tanya and the computer the closest, but not the same? Who won that day? Explain your answer.

**Part C**

Explain what Friday's score means about the number of points Tanya and the computer earned. Justify your answer using words and a mathematical statement.

**Part D**

On which day(s) did Tanya win? Using  $t$  and  $c$ , write a mathematical statement to support your answer.



# Exemplar Response

## Part A

Tanya scored 25 points.

Substitute the values into the equation and solve.

## Part B

Their scores were closest on Saturday, and the computer won.

The difference on Saturday is 6 points. Since  $t - c$  is negative,  $c$  is greater than  $t$ . This means the computer's score was higher.

Or

To compare scores, use the absolute value of the difference, which is The absolute value of all of the scores is the smallest on Saturday. Since  $t - c$  is negative,  $c$  is greater than  $t$ . This means the computer's score was higher.

## Part C

On Friday Tanya and the computer earned the same number of points (or, they tied). This is true because if then

## Part D

Tanya won on Thursday, Monday, and Wednesday. Tanya will win whenever her score is greater than the computer's, or whenever  $t > c$ .





# Rubric

Score	Designation	Description
<b>4</b>	Thoroughly Demonstrated	The student successfully completes all elements of the item by demonstrating an understanding of ordering and absolute value of rational numbers (6.NS.7), in particular those related to number line comparisons (6.NS.7a, 6.NS.7c). The student demonstrates the ability to write, read, and evaluate expressions in which letters stand for numbers (6.EE.2), and to solve real-world and mathematical problems by solving equations (6.EE.7).
<b>3</b>	Clearly Demonstrated	The student shows clear understanding of the skills listed above, but one of the explanations is weak or insufficient Or All parts of the item are correctly done except for a minor computational error Or The student successfully completes three of the four parts of the item.
<b>2</b>	Basically Demonstrated	The student shows basic understanding of the skills listed above, but provides insufficient explanations Or The student successfully completes two of the four parts of the item.
<b>1</b>	Minimally Demonstrated	The student shows minimal understanding of the skills listed above by completing only one of the four parts of the item Or The student had some correct answers, but provided no explanations.
<b>0</b>	Incorrect or irrelevant	The response is incorrect or irrelevant to the skill or concept being measured.



# Student Response

## Score 3

A. Tanya scored 25 points. She scored 25 points because on the number line it says that she lost by 8. If you subtract 8 from 33 you get 25.  $S = F - C$

B. Tanya and her opponent were closest on Saturday. That day Tanya's opponent won. The closest score was Saturday because it can't be Friday because they got the same score. It can't be Thursday because Tanya beat her opponent by 8. So it has to be Saturday when she lost by 6. 6 is a smaller number than 8.

Part A has the correct answer of 25, with support.

Part B has the correct answer, Saturday, with explanation.



# Student Response

## Score 3

C. Frida's score means that they scored an equal amount of points. This is because if you subtract the opponent's score from Tanya's score you have to have zero, so the points are the same.

D. Tanya won on Thursday, Monday, and Wednesday. I know this because if you subtract  $8$  minus  $0$  you have to either get  $8$ ,  $10$ , or  $14$ . Another way I know is because the numbers are positive not negative.

Part C correctly explains the meaning of a zero on the graph with a correct justification but is missing a mathematical statement.

Part D has the correct answer, with correct support.



# Student Response

## Score 2

part A	25 points	$\begin{array}{r} 33 \\ - 8 \\ \hline 25 \text{ points} \end{array}$	Part A has a correct answer, with work shown.
part B	Saturday	computer	Tanya tied on Friday so the next closest score was 27 points
part C	They both scored 33 which was a tie		
part D	Thursday	$8 = 41 - 33$	$8 = T - C$
	Monday	$10 = 48 - 33$	$10 = T - C$
	Wednesday	$14 = 47 - 33$	$14 = T - C$

Part B has the correct answer of Saturday, indicates the winner as the computer but does not provide a sufficient explanation.

Part C correctly interprets the zero score on the graph as a tie, but lacks a sufficient justification.

Part D has the correct answer of Thursday, Monday, and Wednesday and gives mathematical statements for each day as support, but not a general statement.



# Student Response

## Score 1

Part A 25 points

Part A has a correct answer, but no explanation or work shown.

Part B Wednesday her opponent won

Part B is incorrect.

Part C they scored the same amount of points 0=0+0

Part C correctly interprets the meaning of the zero score on the graph but the justification is insufficient.

Part D Thursday Monday Wednesday

Part D has the correct answer, but with no support.



# Sample Language Arts Item

Grade 6



Dr. John D. Barge, State School Superintendent  
"Making Education Work for All Georgians"  
[www.gadoe.org](http://www.gadoe.org)

# Sample Open-Ended Item

## English Language Arts - Grade 6

Passage: *The Tall Rock*

A story told by a boy who is visiting his grandfather's house. He describes climbing "Mountain Rock" with his younger brother and how the rock seems to have gotten smaller as he has grown up.



# Constructed Response Item

**W.6.3; RL.6.6; W.6.3b; W.6.4; L.6.1**

Write a conclusion to the story, told from the narrator's point of view twenty years later. Your narrative should describe the narrator's conclusions about the childhood experiences with Mountain Rock, but now from the perspective of an adult.

Use details from the text to support your answer. Answer with complete sentences, and use correct punctuation and grammar.





# Rubric

Score	Designation	Description
4	Thoroughly Demonstrated	The student demonstrates a thorough understanding by writing a conclusion from the narrator's point of view as an adult. The conclusion describes the narrator's conclusions in a way that logically relates to events from the story, and that refers to many specific details from the story. For example, the adult narrator would logically have fond memories of Mountain Rock. The student uses complete sentences, correct punctuation and grammar.
3	Clearly Demonstrated	The student demonstrates a clear understanding by writing a conclusion from the narrator's point of view. The conclusion presents the narrator's conclusions as an adult, and it logically follows from events in the story. The conclusion includes a few relevant details from the story; some details may be general. The student uses mostly correct sentences, punctuation and grammar.
2	Basically Demonstrated	The student demonstrates a basic understanding by writing a conclusion about the narrator's childhood experiences with Mountain Rock. The conclusion deviates somewhat from the scenario set up in the task, either by failing to plausibly establish the narrator as an adult, or by creating inconsistencies. The student uses minimal support from the story; some support may be incorrect or irrelevant. The student uses some correct sentences, punctuation and grammar.
1	Minimally Demonstrated	The student demonstrates a minimal understanding by writing a conclusion that fails to address the topic of the narrator's childhood experiences, but rather continues where the story leaves off, or presents the narrator as an adult in a way that does not relate to childhood experiences. Examples could include a conclusion in which the narrator's family unpacks the car and then enjoys a picnic by Mountain Rock, or a conclusion in which the narrator describes his/her job or family as an adult. The student includes no support from the story. The response has significant errors in constructing complete sentences, and/or in using correct punctuation and grammar.
0	Incorrect or irrelevant	The response is incorrect or irrelevant.



# Exemplar Response

It was a long time ago the last time I visited Mountain Rock. My grandparents sold their house about ten years ago and moved to an apartment. Even though I am now an adult, I still like to think about the fun I had on Mountain Rock. Of course I got taller and taller until finally I could just step on top of the rock without any help. It was cool to think that when I was just a little kid I needed Grandpa to help me climb the rock. Even when the rock didn't seem like a big mountain, Grandpa still had to lift me to the top for a long time. One summer when I was a teenager we took our five-year-old cousin Tracy with us to visit my grandparents. On the way there I shouted "I get to climb first." Nick thought that was hilarious and said, "You kids and your rock!" just like our mom used to say. I'll always have happy memories of Mountain Rock.



# Student Response

## Score 4

Twenty Years later,I still remember those olden days we used to vist my grandparent's big white house right up the hill on summer days. when i was little he'd swing me up through the air.the whole hill spun me around the sky was blue and bright.and, the tree's everywhere looked green and enormus.I used to climb the mountain rock.Oh how we loved mountain rock.everytime my brother said" I get to climb first. my mother would say "you kids and your rock.When we reached their house my brother would run and start to climb the rock my arents would just smile put their hands around each other and watch.And i'd just watch looking down.after my grandpa welcolmed us for a second i thought the rock got smaller but it was just that i was getting taller.But all at once i had a though no matter how big,tall or the older i got this would always be the tallest place.I sure do love those memories and i will always keep them!!

The response presents the narrator's conclusion in a way that logically relates to events from the story and that refers to many specific details from the story. While on the surface this response may appear to summarize the story, the way in which the student handles the language and retelling makes it clear that the narrator truly is reliving fond childhood events twenty years later. The student demonstrates a thorough command of the conventions of standard English. Though there are a few minor errors, primarily typographical, meaning is clear throughout the response.



# Student Response

## Score 3

20 years later, I had grown into a full grown, mature adult. When we would visit my grandparents i would travel with my mom, dad, and brother. Now that I am an adult I travel with my wife and two girls. I still climb on the "Mountain Rock" just not as much as I did when I was a kid. Now that I am grown I help my kids climb the wall. They love climbing the wall even more than I did when I was their age. They are always arguing on the trip to my grandparent's house. The main argument is "Who is going to get to clim bthe wall first." Maybe, I will be a grandparent someday and have a "Mountain Rock" for my grandkids to climb on.

The response includes a few relevant details from the story. In order to achieve a higher score, the student needs one or two additional specific details from the story. The student demonstrates command of the conventions of standard English. There are a few distracting errors in grammar and usage but meaning is clear.



# Student Response

## Score 2

I used to enjoy the climb on the boulder at grandpa's house and how tall i used to feel , and i would anticapate all six hours of the ride there. The rock used to be like a mouantian to me, but now when I revisit I can tell that I have grown alot throughout the years. But I will always remember the thrill of being so high, and to this day it is still the tallest place in the world to me.

The student does not plausibly establish the narrator as an adult. While the student appears to show the narrator reflecting on the past, it is difficult to determine whether or not he or she places the narrator twenty years later or merely summarizes the narrator's feelings in the story provided. The student uses a few details from the article, but, in order to achieve a higher score, he or she needs to more clearly show that the setting is twenty years later. The student demonstrates an inconsistent command of the conventions of standard English. There are a few distracting errors in grammar and usage, but they do not impede understanding.



# Student Response

## Score 1

I realized it was the rock that made it worth while,even thought the rock was not big to my eyes it was big to my mind,which made the whole trip alot more memorible,and i couldnt wait to come back next year.

The student demonstrates a minimal understanding by writing a conclusion that does not address the narrator's childhood experiences but rather continues where the story leaves off. While the student does include support from the story, his or her approach is not acceptable for a higher score. The student demonstrates an inconsistent command of the conventions of standard English. There are a few errors in grammar and usage, but they do not impede understanding.



# Student Response

## Score 0

The twenty-year old later was confuse about what was going on because the way he saw the mountain. As the big thing but as he got older he was get taller. So now the mountain is now smaller than it really. Is of whaen he was a little boy.

This response is incorrect. While the student opens with a reference to twenty years, he or she merely follows that phrase with a summary of the narrator's view of the mountain in the story, not twenty years later. In addition, the errors in the conventions make it even more difficult to determine the student's intent in the response.



# Observations from Scoring

- Some students wrote a non-narrative:
  - *20 years later, the narrator could bring his on children to Mountain Rock and remember the good times he had on Mountain rock himself.*
- Some students wrote in third person:
  - *the kids really loved that rock, and they will all ways remeber it as if it was there home. When they have kids they will show them the rock too so they can climb it too.*
- Some responses were too brief to adequately address the prompt:
  - *I may have gotten older, but it`s times like these that make me still feel how I felt when I was little.*
  - *It has been more than 20years since I have climbed the mountions.*
  - *He Rerember Those Experiences Because They Where Fun*





# Georgia Milestones

Georgia Milestones represents a significant change and importantly – *an opportunity* – for our state.

This opportunity allows us to *recalibrate*, as a state, and *refocus* on **teaching and learning** as a primary emphasis with assessment and accountability serving a *supporting* role.

