

Title:	Grand Canyon
Grade:	6
Claim(s):	<p>Claim 2: Students can produce effective writing for a range of purposes and audiences.</p> <p>Claim 4: Students can engage in research/inquiry to investigate topics, and to analyze, integrate, and present information.</p>
Assessment Target(s):	<p>Claim 2: 4. COMPOSE FULL TEXTS: Write full informational/explanatory texts, attending to purpose and audience: organize ideas by stating and maintaining a focus, develop a topic including citing relevant supporting evidence (from sources when appropriate) and elaboration, with appropriate transitional strategies for coherence, and develop an appropriate conclusion.</p> <p>Claim 4: 2. INTERPRET/INTEGRATE INFORMATION: Analyze information within and among sources of information (print and non-print texts, data sets, conducting procedures, etc.). 4. USE EVIDENCE: Cite evidence to support analyses, arguments, or critiques.</p>
Standard(s):	<p>Part 1: C4T2: RI-1, RI-6, RI-9, W-8, W-9; C4T4: RI-9, W-8, W-9 Part 2: C2T4: W-2a, W-2b, W-2c, W-2d, W-2e, W-2f, W-3d, W-4, W-5, W-8, W-9b</p>
Revised Bloom's Taxonomy Level:	<p>Part 1: Understand, Analyze, Apply Part 2: Analyze, Evaluate, Create</p>
DOK Level:	<p>Part 1: 3, 4 Part 2: 4</p>
Score Points:	15 points possible
Difficulty:	High
Resources:	<p>(2015). Grand Canyon's native American tribes and Indian nations. <i>My Grand Canyon Park</i>. Retrieved from http://www.mygrandcanyonpark.com/native-american-tribes/.</p> <p>(2015). Ancestral Puebloans and their world. <i>Mesa Verde</i>. Retrieved from www.nps.gov/meve/learn/education/upload/ancestral_puebloans.pdf.</p> <p>(2015). The Grand Canyon facts. <i>Soft Schools</i>. Retrieved from http://www.softschools.com/facts/wonders_of_the_world/the_grand_canyon_facts/416/.</p> <p>(2015). Grand Canyon facts for kids. <i>Science Kids</i>. Retrieved from http://www.sciencekids.co.nz/sciencefacts/earth/grandcanyon.html.</p>

	<p>(2009). The geology of the Grand Canyon. <i>Grand Canyon Explorer</i>. Retrieved from http://www.bobspixels.com/kaibab.org/geology/gc_geol.htm.</p> <p>(2001). Life along the rim. <i>Plan Your Visit</i>. Retrieved from http://www.nps.gov/grca/planyourvisit/upload/life_geology.pdf.</p>
Notes:	N/A
Task Overview:	<p>Task should take approximately 120 minutes in total.</p> <p>Part 1: (Approximately 50 minutes) Students will examine and take notes on the texts provided to them. Students will answer the research questions which ask students to evaluate the sources provided to them.</p> <p>Part 2: (Approximately 70 minutes) Students will refer to their answers from the research questions in part 1. Students will compose a full-length informational essay based on the given prompt. Students are allowed to access the texts that they read and their answers to the research questions within part 1 but cannot modify their responses.</p>
Teacher Preparation/Resource Requirements:	The teacher should assure that sufficient blank paper and writing utensils are available for student note taking.
Time Requirements:	Task should take approximately 120 minutes.

Instructions:	<p>Your assignment:</p> <p>Your class has been chosen by the local museum to create an informational brochure on the Grand Canyon. For your piece, you must write an informational essay on the Grand Canyon. To help you with your writing, you will read three sources on the Grand Canyon.</p> <p>After you have reviewed these sources, you will answer some questions about them. Briefly scan the sources and the three questions that follow. Then, go back and read the sources carefully so you will have the information to answer the questions and finalize your research. You may take notes on the information you find in the sources as you read.</p> <p>In part 2, you will write an informational essay on a topic related to the sources.</p> <p>Directions for beginning:</p> <p>You may now look at the sources. You can look back to these sources as much as you would like. Be sure to take notes when reading. You may want to use them while you are writing your essay.</p> <p>Research questions:</p> <p>After examining the sources, use the rest of the time in part 1 to answer three questions about them. Your answers to these questions will be scored. Also, your answers will help you think about the information you have read, which should help you write your essay in part 2.</p> <p>You may refer back to your scratch paper to review your notes when you think it would be helpful. Answer the questions in the spaces below the items.</p> <p>Your written notes on scratch paper will be available to you in part 1 and part 2 of the performance task.</p>
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Passages/ Stimuli:	Source 1
	<p>This article, written by historian Sara Maverick, was published on April 12, 2014, in the journal <i>Traveling History</i>. It explains the history and culture of the Grand Canyon.</p> <p style="text-align: center;">History and Culture of the Grand Canyon By: Sara Maverick</p> <p>When first looking at the Grand Canyon, one may wonder how anyone ever risked exploring the Grand Canyon with the animals that may have lived there or risked the chance of a fall. The massive size of the Grand Canyon did not scare the prehistoric people. The Grand Canyon has rich human history dating back to the Ice Age, when mammoths, giant sloths, and other prehistoric mammals roamed the Earth. In fact, the Paleo-Indians, who called the Grand Canyon home, made large spearheads made of stone to hunt these mammals. These stone spearheads are some of the clues left behind. These clues tell us that humans inhabited the canyon thousands of years ago. The Grand Canyon is known for its appeal to tourists, but there is much more history involved. The Grand Canyon has had many Native American tribes, explorers, and miners come and go through the years.</p> <p>Around 500 A.D., a group called the Anasazi, now known as the Ancestral Puebloans, lived in the rim and inner canyon. Anasazi translates to ancient ones, or ancient enemies in Navajo. They were known as basket makers because of their basket making skills. As their skills developed, they learned to make pottery. Initially the Puebloans lived in small caves and mud structures called pit houses. With time, the basket makers started building homes above ground using poles and mud. As their skills continued to grow, they started building homes using stone. These homes had walls two to three stories high and units with 50 or more rooms. Along with their building skills, their hunting skills also developed. The Puebloans went from a hunting and gathering society to a farming based society. Eventually, the quality of their baskets declined as the use of pottery became more common.</p> <p>Around 1200 A.D. the Puebloans started migrating into cliffs as a form of defense against nomadic groups. They started building their homes within the cliffs. By 1300 A.D. something occurred that forced the Puebloans to move away from the Grand Canyon completely. Many scientists believe a severe drought caused a shortage of food and resources. This forced the Puebloans to leave the Grand Canyon.</p> <p>The next tribe to live around the Grand Canyon is the Havasupai Tribe. This tribe has been living there for the last 800 years. Multiple tribes have been known to live there over the past century. Some tribes are the Hualapai Tribe, the Navajo Tribe, and the Hopi Tribe. There have also been non-Puebloan people who have lived in the Grand Canyon. These people were known as the Pai and Paiute. Their economy was based on trade. This group of people also made baskets, mats, sandals, and twine. Europeans also traveled to the Grand Canyon, along with Spanish missionaries, and mining and tourism entrepreneurs.</p>

There have been Spanish explorers who have also gone through the Grand Canyon. In September 1540, Garcia Lopez de Cardenas came to explore with a group of Spanish soldiers. They asked the Hopi Tribe to lead them through the Grand Canyon, but instead had to turn back because of lack of water. After this the Europeans did not come back for another two hundred years.

In 1869, John Wesley Powell, a geologist, explored the entire Grand Canyon. He put together a group of Civil War veterans to explore the Grand Canyon with him. They spent three months exploring the Grand Canyon. So many of his notes were lost because of the currents and rapids that there was a second expedition in 1872. Then in the 1890s and 1900s, mining began in the Grand Canyon. Dan Hogan built a mine, and tourist sites. Hogan eventually sold his business to Madeleine Jacobs in 1946. Jacobs focused the business on mining. When the mine closed in 1969, it had produced many substances, such as ore, uranium oxide, copper, silver, and vanadium oxide. The uranium that was produced has been valued at \$40 million!

The vast culture and history that resides within the Grand Canyon is one of the main reasons why many people today choose to visit the Grand Canyon. The Grand Canyon is full of history. It contains Native American history and history of mining and exploration.

Maverick, S. (2014). History and Culture of the Grand Canyon. *Traveling History*. Retrieved from <http://Historyandcultureofgrandcanyon>

Source 2

This article, written by journalist Marisol West, was published on an educational blog on January 12, 2015. This article describes facts about the Grand Canyon.

Did You Know?

By: Marisol West

The Grand Canyon is known as one of the seven natural wonders of the world. It is known because of its natural features. The layers of rock rise over a mile above the Colorado River. These layers represent one of the most complete records of geological history in the world.

One of the rocks found at the bottom of the Grand Canyon is called schist. This rock is around 2 billion years old. Another rock, called limestone, is found on the upper rim of the Grand Canyon. This rock is around 230 million years old.

Did you know that one of the reasons the Grand Canyon came to be is by a process called "erosion"? Erosion is when something slowly gets broken down. The Colorado River wound its way through the rock and slowly swept away the layers. This created the gigantic canyon we see today. Water has had the biggest impact because of the location of the Grand Canyon. The Grand Canyon is located in a desert. The desert weather causes the soil to be hard. The hard soil makes the soil unable to absorb water. When the Colorado River ran through the Grand Canyon it created a flash flood. Flash floods are very powerful and created the Grand Canyon because of the pressure.

It is hard to measure canyons because of their large sizes. The Grand Canyon is the second largest canyon in the world. In fact, the widest point of the Grand Canyon is about 18 miles. The Grand Canyon stretches 277 miles from end to end.

Many people around the world know the Grand Canyon to be a tourist location. Except the Grand Canyon is still home to the Navajo Indians. The Navajo Indians have been at the Grand Canyon long before tourists were coming to see its beautiful sites and historic scenery.

The weather in the Grand Canyon is very unpredictable. Some days the weather can be above 100° F and other days it can be below 0° F. Because the weather is so unpredictable, the Grand Canyon's visitors are always surprised. Some leave with hypothermia, dehydration, and/or sunburn.

The Grand Canyon is home to many different creatures. The Grand Canyon has 1500 different plants, 355 different birds, and 91 different mammals. The Grand Canyon also has 47 different reptiles, 17 different fish, and 9 different amphibians.

The Grand Canyon has rocks that are older than dinosaurs. However, no dinosaur fossils have been found here. There have been other fossils found, such as fossils of corals, sponges, and trilobites. There were also fossilized reptile footprints found.

Besides its natural beauty, there are historical buildings in the Grand Canyon to see too. There is also rafting, hiking, running, and helicopter tours.

These facts make it easy to see why over 5 million tourists visit the Grand Canyon each year. The Grand Canyon is a place where people go to relax, exercise and learn more about the history that surrounds the Grand Canyon. There are also more than 2,000 people that live in the Grand Canyon.

(2001). Did you know? *Educational Blog Weekly*. Retrieved from <http://www.ebw.com/didyouknow.html>

Source 3

This article, published by the Grand Canyon National Park in cooperation with Grand Canyon Association, was published in 2001. It outlines life along the Grand Canyon.

Life Along the Rim

Nowhere on this planet are the scope of geologic time and the power of geologic processes as superbly and beautifully exposed as in these canyon walls. Rocks similar to many of these layers may be found scattered throughout the United States, and flowing water has sculpted other landscapes.

The South Rim of Grand Canyon marks the northern edge of a high plateau. The plateau's gray-green forests stand out in vivid contrast to the arid lands below the rim. From here the cliffs of Grand Canyon drop 5,000 feet to the Colorado River, crossing several biotic zones. This is a landscape characterized by abundant sunshine. This area also has extremes of temperature, and long periods of drought, punctuated by downpours in summer and snow in winter. Precipitation on the South Rim averages fifteen inches per year. This is twice the amount received at the river but half that received on the North Rim.

It is not what most plants and animals would call a paradise. The soil is thin; bedrock lies just a few inches below the surface. The competition for moisture in this arid land is keen. All the plants and animals that live here must adapt to the lack of moisture and extremes of temperature that characterize the region.

Rugged as it looks, it is a fragile land whose scars persist for many years. Walk softly. Be alert to the sights, sounds, and smells that surround you, for there is much to experience here.

The plants and animals described here are common throughout the South Rim and may be seen wherever you choose to walk along the Rim Trail. There are no numbered stops to follow. Use caution near the edge—; humans are among the less surefooted creatures at Grand Canyon.

The tallest tree on the South Rim is the ponderosa pine. It has an extensive root system to acquire as much moisture as possible. Stiff competition for water results in an open, park-like forest. The bark on young trees is dark, but by the time ponderosa pine trees mature, the bark is cinnamon in color and smells faintly of vanilla. This is the only long-needled pine in the park. Wherever you see ponderosa pines, look for evidence of the Abert's squirrel. It is one of two varieties of tassel-eared squirrels found in the park. The other being the Kaibab squirrel, found only on the North Rim.

	<p>Although many people expect to encounter poisonous snakes at Grand Canyon, the handsome gopher snake is the only snake you are likely to see on the rim. A non-poisonous predator, it mimics the threatening behavior of poisonous species. It kills its prey by squeezing it until it suffocates. Most of the water this snake needs is obtained from the rodents it consumes.</p> <p>Among the reptiles commonly seen along the rim are eastern fence lizards. Look for a blue patch on either side of their throat. They prefer open, rocky areas along the rim and, like most reptiles, are very well adapted to arid environments.</p> <p>While standing on the rim, listen for the "whoosh" of white-throated swifts and violet-green swallows. Swift, agile fliers, they dive through the air in relentless pursuit of insects. The large black bird commonly seen perched along the rim or soaring above the Grand Canyon is the raven. Larger than crows, these birds are extremely intelligent and mimic a wide variety of animal noises.</p> <p>On the far side of the Grand Canyon lies the North Rim, ten miles away as the raven flies. Although it is not apparent, the north wall of the Grand Canyon rises a thousand feet higher than the South Rim. This gives the North Rim nearly twice the annual precipitation received here. This considerable difference in elevation results from the fact that the apparently flat-lying rocks of the Kaibab Plateau are dipping gently to the south.</p> <p>Public Domain</p> <p>(2001). Life along the rim. <i>Plan Your Visit</i>. Retrieved from http://www.nps.gov/grca/planyourvisit/upload/life_geology.pdf</p>
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Pework:	None
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Part 1	<p>Using the information you have just read from the three articles, answer the questions below.</p> <ol style="list-style-type: none">1. Which option explains how "History and Culture of the Grand Canyon" is different from "Did You Know?".<ol style="list-style-type: none">A. "History and Culture of the Grand Canyon" focuses only on different tribes that visited the Grand Canyon, and "Did You Know?" focuses on people and animals in the Grand Canyon.B. "History and Culture of the Grand Canyon" focuses only on the various people and tribes that have passed through the Grand Canyon, and "Did You Know?" focuses on various facts about the Grand Canyon.C. "History and Culture of the Grand Canyon" focuses on many diverse facts about the Grand Canyon, and "Did You Know?" focuses on the geology and formation of the Grand Canyon.D. "History and Culture of the Grand Canyon" focuses on the current residents of the Grand Canyon, and "Did You Know?" focuses on many aspects of the Grand Canyon.2. Explain one way in which the information within, "History and Culture of the Grand Canyon" is different from the information within "Life Along the Rim." Support your answer using details from both articles.3. Explain why you agree or disagree with the following statement: "Although the Grand Canyon served as a home to many in the past, it now holds little importance as it is just a tourist attraction." Use details from the sources to support your claim.
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End of Part 1

Part 2	<p>Directions:</p> <p>You will now review your notes and sources and plan, draft, edit, and revise your writing. You may use your notes and refer to the sources. Now read your assignment and the information about how your writing will be scored, then begin your work.</p> <p>Your assignment:</p> <p>Your class is putting together an informational brochure about the Grand Canyon for the local museum. Each person in your class has been assigned a different task to help complete the brochure.</p> <p>Your assignment is to write an informational essay about the Grand Canyon. In your informational essay, you should explain why the Grand Canyon is important, and present three different examples of what makes the Grand Canyon important and special. Make sure that you include specific details from the sources that you have read.</p> <p>Explanatory Scoring: Your essay will be scored using the following:</p> <ol style="list-style-type: none"> 1. Statement of Purpose/Focus - How well you clearly state and maintain your controlling idea or main idea? 2. Organization - How well the ideas progress from the introduction to the conclusion using effective transitions, and how well you stay on topic throughout the essay? 3. Elaboration of Evidence - How well you provide evidence from sources about your topic and elaborate with specific information? 4. Language and Vocabulary - How well you effectively express ideas using precise language that is appropriate for your audience and purpose? 5. Conventions - How well you follow the rules of usage, punctuation, capitalization, and spelling? <p>Now begin writing your essay. Manage your time carefully so that you can:</p> <ul style="list-style-type: none"> • plan your multi-paragraph essay • write your multi-paragraph essay • revise and edit your final draft of your multi-paragraph essay <p>For part 2, you are being asked to write a multi-paragraph essay, so be as thorough as possible.</p> <p>Remember to check your notes and your prewriting/planning as you write and then revise and edit your essay.</p>
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End of Part 2

Scoring Rubric For Part 1:

Scoring Rubric 1 Analyze/Integrate Information (Claim 4, Target 2)	
A. Student(s) may have understood that the first source talks about the people that passed through the Grand Canyon; however, student(s) may not have realized that the second source talks about more than the animals and people in the Grand Canyon.	
B. Correct answer	
C. Student(s) may have confused the two sources.	
D. Student(s) may not have realized that the first source talks about past residents, rather than current residents.	

Scoring Rubric 2 Analyze/Integrate Information (Claim 4, Target 2)	
2 Points:	The response gives sufficient evidence of the ability to gather, examine and integrate information within and among multiple sources of information.
1 Point:	The response gives limited evidence of the ability to gather, examine and integrate information within and among multiple sources of information.
0 Points:	A response gets no credit if it provided no evidence of the ability to gather, examine and integrate information within and among multiple sources of information.

Scoring Rubric 3 Use of Evidence (Claim 4, Target 4)	
2 Points:	The response gives sufficient evidence of the ability to cite evidence to support arguments and/or ideas.
1 Point:	The response gives limited evidence of the ability to cite evidence to support arguments and/or ideas.
0 Points:	A response gets no credit if it provides no evidence of the ability to cite evidence to support arguments and/or ideas.

Scoring Rubric For Part 2:

Scoring Rubric Explanatory Writing for Statement Purpose/Focus and Organization	
4 Points:	<p>The response:</p> <ul style="list-style-type: none"> • Is sustained, consistent, and purposefully focused on the given topic • Has a controlling idea or topic that is focused, clearly stated, and strongly maintained throughout the writing • Contains a controlling idea or main idea of the topic that is well introduced and communicated • Has a clear and effective organizational structure creating unity and completeness • Uses a variety of effective transitional strategies • Has a fluid progression of ideas from beginning to end • Has an effective introduction and conclusion appropriate for audience and purpose • Shows strong connections among ideas, with some syntactic variety
3 Points:	<p>The response:</p> <ul style="list-style-type: none"> • Is adequately sustained and generally focused on the given topic • Is clear and focused for the most part and has somewhat related material that is on topic • Contains some context for the main idea • Has an evident organizational structure and a sense of completeness, though there may be minor flaws and some ideas may be loosely connected • Has adequate variety in their use of transitions • Has adequate progression of ideas from beginning to end • Has adequate introduction and conclusion • Has adequate, however slightly inconsistent connections among their ideas
2 Points:	<p>The response:</p> <ul style="list-style-type: none"> • Is somewhat sustained and may be a bit off focus/topic • May be clearly focused on the main idea, but is inadequately sustained • Has a main idea that may be blurred and somewhat unfocused • Has an inconsistent organizational structure, and errors are evident • Has inconsistent use of transitional strategies with little variety • Unevenly progresses from beginning to end • Contains a conclusion and introduction; however, if present are weak • Contains weak connections among ideas

1 Point:	<p>The response:</p> <ul style="list-style-type: none"> • May be related to the topic, but may provide little to no focus • Is brief • Drifts from topic • Contains an unclear or confusing focus • Has little or no discernible organizational structure • Contains no or few transitional strategies • Frequent extraneous ideas that may intrude with the overall focus
0 Points:	<p>A response gets no credit if it provides no evidence of the ability to write full informational/explanatory texts about topics or sources, attending to purpose and audience. The response gets no credit if it is in a language other than English, is illegible, off-topic, or off-purpose.</p>

Scoring Rubric Explanatory Writing for Evidence and Elaboration of Evidence:	
4 Points:	<p>The response:</p> <ul style="list-style-type: none"> • Provides thorough and convincing support/evidence for the controlling idea or main idea that includes the effective use of sources, facts, and details • Achieves substantial depth that is specific and relevant • Uses evidence from sources and smoothly integrates it in a comprehensive, relevant, and concrete way • Effectively uses a variety of elaborative techniques • Clearly and effectively expresses ideas, using precise language. • Uses academic and domain-specific vocabulary that is clearly appropriate for the audience and purpose
3 Points:	<p>The response:</p> <ul style="list-style-type: none"> • Provides adequate support/evidence for the controlling idea or main idea that includes the use of sources, facts, and details • Has some evidence from sources that is integrated, though citations may be general or imprecise • Adequately uses some elaborative techniques • Adequately expresses ideas, employing a mix of precise with more general language • Uses domain-specific vocabulary, which is generally appropriate for the audience and purpose
2 Points:	<p>The response:</p> <ul style="list-style-type: none"> • Provides uneven, cursory support/evidence for the controlling idea or main idea that includes partial or uneven use of sources, facts, and details • Includes evidence from sources that is weakly integrated, and citations, if present, are uneven • Includes weak or uneven use of elaborative techniques • Expresses ideas unevenly, using simplistic language • Uses domain-specific vocabulary that may at times be inappropriate for the audience and purpose

1 Point:	<p>The response:</p> <ul style="list-style-type: none"> • Provides minimal support/evidence for the controlling idea or main idea that includes little or no use of sources, facts, and details • Has minimal, absent, in error, or irrelevant uses of evidence from sources • Has an expression of ideas that is vague, lacks clarity, or is confusing. • Uses limited language or domain-specific vocabulary • May have little sense of audience and purpose
0 Points:	<p>A response gets no credit if it provides no evidence of the ability to write full informational/explanatory texts about topics or sources, attending to evidence and elaboration. The response gets no credit if it is in a language other than English, is illegible, off-topic, or off-purpose.</p>

Scoring Rubric Explanatory Writing Rubric for Conventions:	
2 Points:	<p>The response:</p> <ul style="list-style-type: none"> • Has adequate use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling
1 Point:	<p>The response:</p> <ul style="list-style-type: none"> • Has limited use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling
0 Points:	<p>The response gets no credit if it demonstrates little or no command of conventions, has infrequent use of correct sentence formation, punctuation, capitalization, grammar usage, and spelling. The response gets no credit if it is in a language other than English, is illegible, off-topic, or off-purpose.</p>