

Animal Defenses

1. Task Overview
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Task Overview (20 minutes for classroom activity, 105 for performance task = 125 total minutes)

Classroom Activity (20 minutes)

Evidence Statement

In order to adequately prepare for the Animal Defenses constructed-response questions and performance task, students will:

1. Be introduced to the concept of animal defenses.
2. Be engaged in a compare and contrast group activity.
3. Be reminded of the qualities of an explanatory article or essay.

The classroom activity is designed to take place BEFORE Part 1 and Part 2 of the performance task. The interaction increases students' basic understanding of the topic addressed in the constructed-response questions and the performance task, helps them access both assessment stimuli, and prepares students for the kind of thinking and writing they will be asked to demonstrate in the performance task.

During the classroom activity, the teacher will first introduce the topic of the assessment and the video stimulus—"Animal Defenses"—used in the writing assessment. The teacher will lead a whole class discussion about animal defenses using examples from the video. Students may take notes based on their ideas and the ideas of their classmates.

Students may refer to their notes from the classroom activity when they plan, draft, and revise a multi-paragraph explanatory essay in Part 2.

Part 1 (35 minutes)

Students will examine the sources and take notes. They will then respond to three (3) constructed-response questions.

Part 2 (70 minutes)

Students will have access to the sources they examined in Part 1. They will refer to their notes and their answers to the constructed-response questions to compose a full-length explanatory article. Students cannot change their answers to the constructed-response questions. They will pre-write, draft, and revise an article.

Scorable Products

Students will not generate scorable products during the classroom activity. Student responses to the constructed-response questions at the end of Part 1 and the article completed in Part 2 will be scored. Notes completed in Part 1 and pre-writing and drafting in Part 2 will not be scored.

Teacher Preparation / Resource Requirements

This is a computer-based test that requires an interface for each test-taker. The testing software will include access to spell check, but not to grammar check. The teacher should ensure that sufficient blank paper and writing tools are available for student note-taking.

Teacher Directions for the Classroom Activity

Introductory Classroom Activity (20 minutes)

STEP 1: Orientation to the Topic (~4 minutes)

Provide an introduction to the classroom activity by indicating that after this activity, students will be completing an assessment focused on the topic of *animal defenses*. Write the word *defense* on the board and ask students what it means. (They may be helped by being reminded of uses of the term like "self-defense.") Be sure that students understand that a defense is a protection from a threat or harmful condition.

Remind students that humans have to defend themselves too. Ask: "What are some of the things humans have to defend themselves from? Have you or someone you know ever had to find protection from a threat of some kind? What are some of the defenses that humans have created or used for protection?"

STEP 2: Accessing the Stimuli (~13 minutes)

1. Explain: "Now we will look at some animal defenses." Show the video "Animal Defenses" (3 minutes 5 seconds).
2. Lead a whole class discussion about the video using the questions below (10 minutes):

Question 1: In the video "Animal Defenses," what were the animals defending themselves against?

Question 2: How do these defenses help the animals protect themselves against enemies?

STEP 3: Clarify Expectations for the Writing Task (~3 minutes)

Explain: "In a few minutes you will read an article and answer some questions about animal defenses from both the article and the video we just saw. Then you will write an explanatory essay in response to a particular question."

Explain what students are expected to do in their explanatory essay:

An explanatory essay:

- Explains information clearly
- Is well organized and stays on the topic
- Provides evidence from the sources to support your main idea
- Uses clear language that suits your purpose
- Follows rules of writing (spelling, capitalization, punctuation, and grammar)

Answer questions that students might have about the task. Students will keep their notes from this classroom activity for the "Animal Defenses" assessment.

Teacher Directions for Parts 1 and 2

Part 1 (35 minutes)

Students should receive the sources, directions, questions, article assignment, and any other material related to the task. They should receive the constructed-response questions in Part 1 and the article assignment in Part 2.

1. Initiate the online testing session.
2. Alert the students when there are 15 minutes remaining in Part 1.
3. Alert the students when there are 5 minutes remaining in Part 1.
4. Have students write their names on any notes. Collect all student notes.
5. Close the testing session.

Stretch Break

Part 2 (70 minutes)

1. Initiate the testing Part 2.
2. Allow students to access the sources, their notes, and their answers to the constructed-response questions presented in Part 1. They will not be allowed to change their answers.
3. Once 15 minutes have elapsed, suggest students begin writing the article.
4. Alert the students when 30 minutes remain.
5. Alert students when 15 minutes remain and suggest they begin revising their articles.
6. Close the testing session.

Student Directions for Parts 1 and 2

Part 1 (35 minutes)

Your task

You will read an article and watch a video about what animals do to defend themselves from danger. Then you will answer three questions about what you have learned. In Part 2, you will write an article that explains how some animals defend themselves.

Steps to follow

In order to plan and write your article, you will do the following:

1. Examine two sources.
2. Make notes about the information from the sources.
3. Answer three questions about the sources.

Directions for beginning

You will now examine two sources. Take notes on both sources. You may use the graphic organizers to organize your notes if you like. You will want to refer to your notes while writing your article, but your notes will not be scored. You can re-read the article and watch the video as often as you like.

NOTES

SOURCE 1: "Animal Roll-Ups" (*Ranger Rick* article)

Animal	Type of Defense

NOTE: Your notes will not be scored.

NOTES

SOURCE 2: "Animal Defenses" (*National Geographic* video)

Animal	Type of Defense

NOTE: Your notes will not be scored.

Research Questions

After examining the research sources, use the remaining 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 research sources you have read and viewed, which should help you write your explanatory article.

You may click on the source buttons to refer back to the sources when you think it would be helpful. You may also refer to your notes. Answer the questions in the spaces provided below them.

1. What does the article "Animal Roll-Ups" tell you about why some animals curl up? Use details from the article to support your answer.
2. Think about the **armadillo** and the **hedgehog** described in the article "Animal Roll-Ups." In what way are their defenses similar or different? Explain your answer using details from the article.
3. In the video "Animal Defenses," the **puffer fish** and the **crab** were both successful in protecting themselves from the same enemy—the sea otter. Do the puffer fish and the crab have the same type of defense? Explain your answer and include details from the video in your response.

Part 2 (70 minutes)

You will now have 70 minutes to review your notes and sources, plan, draft, and revise your article. You may use your notes and refer to the sources. You may also refer to the answers you wrote to questions in Part 1, but you cannot change those answers. Now read your assignment and the information about how your article will be scored; then begin your work.

Your Assignment

Your class is preparing a *museum display* that will include photos of a variety of animals and interesting facts about them. You have been asked to write an article for the museum display explaining about **animal defenses**.

In your article

Choose one animal from the article "Animal Roll-Ups" and one animal from the video "Animal Defenses." In your article, identify your two animals, explain how each animal protects itself from its enemies, and explain how the two animals' defenses are similar to or different from one another. Include details from your sources.

Now begin work on your article. Manage your time carefully so that you can:

- plan your article
- write your article
- revise and edit for a final draft

Word-processing tools and spell check are available to you.

Type your response in the space provided. Write as much as you need to fulfill the requirements of the task; you are not limited by the size of the response area on the screen.

REMEMBER: A well-written explanatory article:

- has a clear main idea
- is well-organized and stays on the topic
- provides evidence from the sources to support your topic
- uses clear language that suits your purpose
- follows rules of writing (spelling, punctuation, and grammar)

Source Information:

Stimulus #1

Read this article about animals that roll up to defend themselves.

"Animal Roll-Ups" by Kathy Kranking, from *Ranger Rick* Magazine. Copyright © September 2011 by the National Wildlife Federation.

Stimulus #2

Now watch this video about animals and how they defend themselves.

"Animal Defenses." Teachers' Domain. 26 Sept. 2003. Web. 18 Sept. 2012.

Task Specifications:

Title:	“Animal Defenses”
Grade:	4
Claim(s):	2: Students can produce effective writing for a range of purposes and audiences. 4: Students can engage in research/inquiry to investigate topics and to analyze, integrate, and present information.
Primary Target(s):	These claims and targets will be measured by scorable evidence collected. Claim 2 4: COMPOSE FULL TEXTS: Write full informational/explanatory texts on a topic, attending to purpose and audience: organize ideas by stating a focus, include structures and appropriate transitional strategies for coherence, include supporting evidence (from sources when appropriate to prompt) and elaboration, and develop an appropriate conclusion. 8: LANGUAGE AND VOCABULARY USE: Strategically use language and vocabulary (including academic and domain-specific vocabulary) appropriate to the purpose and audience when revising or composing texts. 9: EDIT/CLARIFY: Apply or edit grade-appropriate grammar usage and mechanics to clarify a message and edit narrative, informational, and opinion texts. Claim 4 2: INTERPRET AND INTEGRATE INFORMATION: Locate information to support central ideas and subtopics; select and integrate information from data or print and non-print text sources. 3: ANALYZE INFORMATION/SOURCES: Distinguish relevant-irrelevant information (e.g., fact/opinion).
CCSS/Standard(s):	W-8, W-9
DOK:	4
Difficulty:	Medium
Score Points:	Up to 10
Task Source:	SBAC / CTB / Revisions by Stanford Center for Assessment, Learning, & Equity (SCALE)
Item Type:	Performance Tasks
Target-specific attributes (e.g., accessibility issues):	Students with visual impairments may need alternative formats to access written texts, graphic stimuli, and video or audiovisual material. Students with physical or other impairments may need to be provided with appropriate alternative means to entering lengthy text using a keyboard.
Grade level of stimuli:	3/4
Stimuli:	Animal Roll-Ups: Informational article This article talks about animals that roll up to protect themselves from predators. Animal Defenses: Educational video This National Geographic video talks about animals and their different

	defenses.
<p>How this task contributes to sufficient evidence for the claims:</p>	<p>In order to complete the performance task, students</p> <ol style="list-style-type: none"> 1. Analyze and select information from multiple sources 2. Answer various questions about research and the evidence the authors present as support 3. Write an explanatory article, attending to purpose and audience 4. Organize ideas by stating and maintaining a focus 5. Develop a topic, including citing supportive evidence, details, and elaboration consistent with the sources, purpose, and audience 6. Effectively organize ideas, appropriate transitions, and include a conclusion for coherence 7. Adhere to conventions and rules of grammar, usage, and mechanics 8. Control language for purpose and audience

Scoring information for questions:

1. Claim 4, Target 3

2-point Research (Grades 4–5) Evaluate Information/Sources Rubric (Claim 4, Target 3)	
2	<p>The response gives sufficient evidence of the ability to distinguish relevant from irrelevant information such as fact from opinion.</p> <p>The response includes detailed information from the text about how some animals roll up to defend themselves rather than for other purposes (such as keeping warm). The response is supported with relevant details from the text.</p>
1	<p>The response gives limited evidence of the ability to distinguish relevant from irrelevant information such as fact from opinion.</p> <p>The response includes limited information from the text about how some animals roll up to defend themselves rather than for other purposes (such as keeping warm). The response is supported with limited relevant details from the text.</p>
0	<p>A response gets no credit if it provides no evidence of the ability to distinguish relevant from irrelevant information such as fact from opinion.</p> <p>The response does not include an explanation of how some animals roll up to defend themselves rather than for other purposes (such as keeping warm) or confuses the reasons why animals roll up. The response does not include relevant details and may be vague, incorrect, or completely absent.</p>

Sample 2-Point Response:

The information in the article tells about many animals that roll up in different ways. Many animals roll up to protect themselves from danger. For example, the armadillo rolls up into a ball by pulling its ears and legs into the ball and has armor covering it. Some animals, like the red fox, curl up to keep warm. The stone centipede rolls up into a ball to protect her eggs.

Scoring note: The response could also mention the pill bug, hedgehog, or wheel spider.

Sample 1-Point Response:

The article “Animal Roll-Ups” did a good job of explaining how animals roll up. It also explains why they roll up. The pill bug rolls up like an armadillo.

Sample 0-Point Response:

I liked reading about animals that roll up.

2. Claim 4, Target 2

2-point Research (Grades 3–5) Interpret & Integrate Information Rubric (Claim 4, Target 2)	
2	<p>The response gives sufficient evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.</p> <p>The response is a thorough explanation of how the defenses of the armadillo and the hedgehog are similar or different. The response is supported with relevant details from the text.</p>
1	<p>The response gives limited evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.</p> <p>The response is a limited explanation of how the defenses of the armadillo and the hedgehog are similar or different. The response is supported with limited details from the text.</p>
0	<p>A response gets no credit if it provides no evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.</p> <p>The response does not relate to the similarities or differences of the defenses of the armadillo and the hedgehog. The response does not include relevant details and may be vague, incorrect, or completely absent.</p>

Sample 2-Point Response:

Armadillos and hedgehogs defend themselves in similar ways because they both try to fool their enemies and protect their bodies. Armadillos curl up into a ball and pull their head and tail inside their armor. Hedgehogs also curl up into a ball and hide their soft parts under their sharp spines. These defenses help the animals protect themselves.

Sample 1-Point Response:

Armadillos and hedgehogs curl up into balls to defend themselves.

Sample 0-Point Response:

I enjoyed reading the article.

3. Claim 4, Target 2

2-point Research (Grades 3–5)	
Interpret & Integrate Information Rubric (Claim 4, Target 2)	
2	<p>The response gives sufficient evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.</p> <p>The response is a thorough explanation of whether or not the puffer fish and the crab have the same type of defense. The response is supported with relevant details from the video.</p>
1	<p>The response gives limited evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.</p> <p>The response is a limited explanation of whether or not the puffer fish and the crab have the same type of defense. The response is supported with limited relevant details from the video.</p>

0

A response gets no credit if it provides no evidence of the ability to locate, select, interpret, and integrate information within and among sources of information.

The response does not include an explanation of whether or not the puffer fish and the crab have the same type of defense. The response does not include relevant details and may be vague, incorrect, or completely absent.

Sample 2-Point Response:

The puffer fish and the crab have very different types of defenses. The puffer fish puffs up to make itself so large that an enemy can't bite it. It also makes itself hard to bite with thousands of prickles on it. The crab has sharp claws that it snaps at the otter in the video, and this keeps the otter away from it. They have very different responses, but they are both successful at defending themselves.

Sample 1-Point Response:

The puffer fish puffs up to make itself so large that the otter can't bite it. The crab in the video uses its claws to snap at the otter. In these ways they are different.

Sample 0-Point Response:

Otters like to try to eat puffer fish and crabs.

Rubric and scoring information for full-write:

4-Point Informative-Explanatory Performance Task Writing Rubric (Grades 3–5)					
Score	4	3	2	1	NS
Statement of Purpose/Focus and Organization	<p>The response is fully sustained and consistently and purposefully focused:</p> <ul style="list-style-type: none"> controlling idea or main idea of a topic is clearly stated, focused, and strongly maintained controlling idea or main idea of a topic is introduced and communicated clearly within the purpose, audience, and task <p>The response has a clear and effective organizational structure creating a sense of unity and completeness:</p> <ul style="list-style-type: none"> consistent use of a variety of transitional strategies to clarify the relationships between and among ideas logical progression of ideas from beginning to end effective introduction and conclusion for audience and purpose 	<p>The response is adequately sustained and generally focused:</p> <ul style="list-style-type: none"> controlling idea or main idea of a topic is clear and mostly maintained, though some loosely related material may be present some context for the controlling idea or main idea of the topic is adequate within the purpose, audience, and task <p>The response has an evident organizational structure and a sense of completeness, though there may be minor flaws and some ideas may be loosely connected:</p> <ul style="list-style-type: none"> adequate use of transitional strategies with some variety to clarify the relationships between and among ideas adequate progression of ideas from beginning to end adequate introduction and conclusion 	<p>The response is somewhat sustained and may have a minor drift in focus:</p> <ul style="list-style-type: none"> may be clearly focused on the controlling or main idea, but is insufficiently sustained, or controlling idea or main idea may be unclear and/or somewhat unfocused <p>The response has an inconsistent organizational structure, and flaws are evident:</p> <ul style="list-style-type: none"> inconsistent use of transitional strategies and/or little variety uneven progression of ideas from beginning to end conclusion and introduction, if present, are weak 	<p>The response may be related to the topic but may provide little or no focus:</p> <ul style="list-style-type: none"> may be very brief may have a major drift focus may be confusing or ambiguous <p>The response has little or no discernible organizational structure:</p> <ul style="list-style-type: none"> few or no transitional strategies are evident frequent extraneous ideas may intrude 	<p>Insufficient, illegible, in a language other than English, incoherent, off-topic, or off-purpose writing</p>

**4-Point
Informative-Explanatory
Performance Task Writing Rubric (Grades 3–5)**

Score	4	3	2	1	NS
Evidence/Elaboration	<p>The response provides thorough and convincing support/evidence for the controlling idea or main idea that includes the effective use of sources, facts, and details:</p> <ul style="list-style-type: none"> • use of evidence from sources is integrated, comprehensive, and relevant • effective use of a variety of elaborative techniques <p>The response clearly and effectively expresses ideas, using precise language:</p> <ul style="list-style-type: none"> • use of academic and domain-specific vocabulary is clearly appropriate for the audience and purpose 	<p>The response provides adequate support/evidence for the controlling idea or main idea that includes the use of sources, facts, and details:</p> <ul style="list-style-type: none"> • some evidence from sources is included, though citations may be general or imprecise • adequate use of some elaborative techniques <p>The response adequately expresses ideas, employing a mix of precise with more general language:</p> <ul style="list-style-type: none"> • use of domain-specific vocabulary is generally appropriate for the audience and purpose 	<p>The response provides uneven, cursory support/evidence for the controlling idea or main idea that includes partial or uneven use of sources, facts, and details:</p> <ul style="list-style-type: none"> • evidence from sources is weakly integrated, and citations, if present, are uneven • weak or uneven use of elaborative techniques <p>The response expresses ideas unevenly, using simplistic language:</p> <ul style="list-style-type: none"> • use of domain-specific vocabulary that may at times be inappropriate for the audience and purpose 	<p>The response provides minimal support/evidence for the controlling idea or main idea that includes little or no use of sources, facts, and details:</p> <ul style="list-style-type: none"> • use of evidence from the source material is minimal, absent, incorrect, or irrelevant <p>The response's expression of ideas is vague, lacks clarity, or is confusing:</p> <ul style="list-style-type: none"> • uses limited language or domain-specific vocabulary • may have little sense of audience and purpose 	<p>Insufficient, illegible, in a language other than English, incoherent, off-topic, or off-purpose writing</p>

**2-Point
Informative-Explanatory
Performance Task Writing Rubric (Grades 3–5)**

Score	2	1	NS
Conventions	<p>The response demonstrates an adequate command of conventions:</p> <ul style="list-style-type: none"> • errors in usage and sentence formation may be present, but no systematic pattern of errors is displayed and meaning is not obscured • adequate use of punctuation, capitalization, and spelling 	<p>The response demonstrates a partial command of conventions:</p> <ul style="list-style-type: none"> • errors in usage may obscure meaning • inconsistent use of punctuation, capitalization, and spelling 	<p>Insufficient, illegible, in a language other than English, incoherent, off-topic, or off-purpose writing</p>