

Grade 4: Module 2B: Overview





GRADE 4: MODULE 2B: OVERVIEW

Researching to Build Knowledge and Teach Others:

Animal Defense Mechanisms

In this eight-week module, students explore animal defense mechanisms. They build proficiency in writing an informative piece, examining the defense mechanisms of one specific animal about which they build expertise. Students also build proficiency in writing a narrative piece about this animal. In Unit 1, students build background knowledge on general animal defenses through close readings of several informational texts. Students will read closely to practice drawing inferences as they begin their research and use a science journal to make observations and synthesize information. Students will continue to use the science journal, using the millipede as a whole class model. They begin to research an expert animal in preparation to write about this animal in Units 2 and 3, again using the science journal. In Unit 2, students will continue to build expertise about their animal and

its defense mechanisms, writing the first part of the final performance task—an informative piece describing their animal, the threats to its survival, and how it is equipped to deal with them. With their new knowledge about animal defenses from Unit 1, students will read informational texts closely, using the same science journal to synthesize information about their animal. Unit 3 allows students to apply their research from Units 1 and 2 to write a narrative piece about their animal that incorporates their research. This narrative will take the format of a choose-your-own-adventure. For their performance task, students will plan, draft, and revise the introduction and one choice ending of the narrative with the support of both peer and teacher feedback. The second choice ending will be planned, written, and revised on-demand for the end of unit assessment.

Guiding Questions and Big Ideas

- How do animals' bodies and behaviors help them survive?
- · How can a writer use scientific knowledge to inform and entertain?
- To protect themselves from predators, animals use different defense mechanisms.
- Writers use scientific knowledge and research to inform and entertain.



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Performance Task

Choose-Your-Own-Adventure Animal Defense Narrative

This performance task gives students a chance to blend their research of animal defense mechanisms with narrative writing. In this task, students use their research about a specific animal as the basis for a choose-your-own-adventure story. The narrative opens with a short informational piece describing the student's animal and its defense mechanism. Then students write a narrative where their animal is featured as the main character that faces a dangerous predator and thus has to use a defense mechanism. The choose-your-own-adventure format lets students envision and write two different variations of the plot, with each variation featuring the use of a different defense mechanism. The first variation will be scaffolded during writing instruction throughout Unit 3, with students using teacher feedback and peer critique to improve and revise their work. The second variation will serve as the End of Unit 3 "on-demand" assessment. After this assessment, students will complete a final revision of their work based on teacher feedback from the end of unit assessment, and then present their final narrative, with both plots, to the class or another audience.

Content Connections

This module is designed to address English language arts standards as students read informational texts about animal defense mechanisms. However, the module intentionally incorporates science practices and themes to support potential interdisciplinary connections to this compelling content. These intentional connections are described below.

Big ideas and guiding questions are informed by the New York State Common Core K-8 Science Framework:

- Next-Generation Science Standards 4L-S1-1
- From Molecules to Organisms: Structure and Processes

Science Standard 4:

Students will understand and apply scientific concepts, principles, and theories pertaining to the physical setting and living environment and recognize the historical development of ideas in science. Key Idea 2: Organisms inherit genetic information in a variety of ways that result in continuity of structure and function between parents and offspring. Key Idea 5: Organisms maintain a dynamic equilibrium that sustains life. Key Idea 6: Plants and animals depend on each other and their physical environment.



NJSLS: Reading—Informational	Long-Term Learning Targets
• RI.4.1 Refer to details and examples in a text and make relevant connections when explaining what the text says explicitly and when drawing inferences from the text.	 I can explain what a text says using specific details from the text. I can make inferences using specific details from text.
• RI.4.2 Determine the main idea of a text and explain how it is supported by key details; summarize the text.	 I can determine the main idea using specific details from the text. I can summarize informational or persuasive text.
• RI.4.4 Determine the meaning of general academic and domain-specific words or phrases in a text relevant to a grade 4 topic or subject area.	 I can determine the meaning of academic words or phrases in an informational text. I can determine the meaning of content words or phrases in an informational text.
• RI.4.7 Interpret information presented visually, orally, or quantitatively (e.g., in charts, graphs, diagrams, time lines, animations, or interactive elements on Web pages) and explain how the information contributes to an understanding of the text in which it appears.	 I can interpret information presented through charts, graphs, timelines, or websites. I can explain how visual or graphic information helps me understand the text around it.
RI.4.9 Integrate and reflect on (e.g. practical knowledge, historical/cultural context, and background knowledge) information from two texts on the same topic in order to write or speak about the subject knowledgeably	I can accurately synthesize information from two texts on the same topic.

NJSLS: Reading—Foundational	Long-Term Learning Targets
 RF.4.3. Know and apply grade-level phonics and word analysis skills in decoding. 	I can use a variety of strategies to read words.



NJSLS: Writing	Long-Term Learning Targets
 W.4.2 Write informative/explanatory texts to examine a topic and convey ideas and information clearly. a. Introduce a topic clearly and group related information in paragraphs and sections; include formatting (e.g., headings), illustrations, and multimedia when useful to aiding comprehension. b. Develop the topic with facts, definitions, concrete details, text evidence, or other information and examples related to the topic. c. Link ideas within paragraphs and sections of information using words and phrases (e.g., another, for example, also, because). d. Use precise language and domain-specific vocabulary to inform about or explain the topic. e. Provide a conclusion related to the information or explanation presented. 	 I can write informative/explanatory texts that convey ideas and information clearly. a. I can introduce a topic clearly. a. I can group supporting facts together about a topic in an informative/explanatory text a. I can use text, formatting, illustrations, and multimedia to support my topic. b. I can develop the topic with facts, definitions, details, and quotations. c. I can use linking words and phrases to connect ideas within categories of information (e.g., another, for example, also, because). d. I can use precise, content-specific language/vocabulary to inform or explain about a topic. e. I can construct a concluding statement or section of an informative/explanatory text.
 W.4.3 Write narratives to develop real or imagined experiences or events using narrative technique, descriptive details, and clear event sequences. a. Orient the reader by establishing a situation and introducing a narrator and/or characters; organize an event sequence that unfolds naturally. b. Use dialogue and description to develop experiences and events or show the responses of characters to situations. c. Use a variety of transitional words and phrases to manage the sequence of events. d. Use concrete words and phrases and sensory details to convey experiences and events precisely. e. Provide a conclusion that follows from the narrated experiences or events. 	 I can write narrative text about real or imagined experiences or events. a. I can establish a situation. a. I can introduce the narrator and/or characters of my narrative. a. I can organize events in an order that makes sense in my narrative. a. I can use dialogue and descriptions to show the actions, thoughts, and feelings of my characters. b. I can use transitional words and phrases to show the sequence of events in a narrative text. c. I can use sensory details to describe experiences and events precisely. d. I can write a conclusion to my narrative.



NJSLS: Writing	Long-Term Learning Targets
• W.4.4 Produce clear and coherent writing in which the development and organization are appropriate to task, purpose, and audience. (Grade-specific expectations for writing types are defined in standards 1-3 above.)	I can produce writing that is appropriate to task, purpose, and audience.
W.4.5 With guidance and support from peers and adults, develop and strengthen writing as needed by planning, revising, and editing.	With support from peers and adults, I can use the writing process to produce clear and coherent writing.
• W.4.7 Conduct short research projects that build knowledge through investigation of different aspects of a topic.	I can conduct a research project to become knowledgeable about a topic.
 W.4.8 Recall relevant information from experiences or gather relevant information from print and digital sources; take notes and categorize information, and provide a list of sources. 	 I can recall information that is important to a topic. I can document what I learn about a topic by taking notes. I can sort my notes into categories. I can provide a list of sources I used to gather information.
W.4.9b Draw evidence from literary or informational texts to support analysis, reflection, and research.	I can choose evidence from literary or informational texts to support analysis, reflection and research
b. Apply <i>grade 4 Reading standards</i> to informational texts (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").	• (e.g., "Explain how an author uses reasons and evidence to support particular points in a text").
• W.4.10. Write routinely over extended time frames (time for research, reflection, metacognition/self-correction and revision) and shorter time frames (a single sitting or a day or two) for a range of discipline specific tasks, purposes, and audiences.	I can write for a variety of reasons.



NJSLS: Speaking and Listening	Long-Term Learning Targets
 SL.4.1. Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 4 topics and texts, building on others' ideas and expressing their own clearly. a. Explicitly draw on previously read text or material and other information known about the topic to explore ideas under discussion. b. Follow agreed-upon rules for discussions and carry out assigned roles. c. Pose and respond to specific questions to clarify or follow up on information, and make comments that contribute to the discussion and link to the remarks of others. 	 I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. a. I can prepare myself to participate in discussions. a. I can draw on information to explore ideas in the discussion. b. I can follow our class norms when I participate in a conversation. c. I can ask questions that are on the topic being discussed. c. I can answer questions about the topic being discussed. c. I can connect my questions and responses to what others say.
d. Review the key ideas expressed and explain their own ideas and understanding in light of the discussion.	d. After a discussion, I can explain what I understand about the topic being discussed.
SL.4.2. Paraphrase portions of a text read aloud or information presented in diverse media and formats (e.g. visually, quantitatively, and orally).	 I can paraphrase portions of a text that are read aloud to me. I can paraphrase information that is presented in pictures and/or numbers.



NJSLS: Language	Long-Term Learning Targets
• L.4.1 Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.	• I can use grammar conventions to send a clear message to a reader or listener. a. I can use relative pronouns (e.g., who, whose, whom, which, that).
a. Use relative pronouns (<i>who, whose, whom, which, that</i>) and relative adverbs (<i>where, when, why</i>).	a. I can use relative adverbs (e.g., where, when, why)b. I can use progressive verb tenses (e.g., I was walking; I am walking; I will
b. Form and use the progressive (e.g., <i>I was walking</i> ; <i>I am walking</i> ; <i>I will be walking</i>) verb tenses.	be walking).
c. Use modal auxiliaries (e.g., can, may, must) to convey various conditions.d. Order adjectives within sentences according to conventional patterns (e.g., a	c. I can use 'can,' 'may,' and 'must' correctly.d. I can use conventional patterns to order adjectives within sentences (e.g., a small red bag rather than a red small bag).
small red bag rather than a red small bag).e. Form and use prepositional phrases.	e. I can use prepositional phrases.f. I can write complete sentences.
f. Produce complete sentences, recognizing and correcting inappropriate fragments and run-ons.	f. I can recognize fragmented and run-on sentences.
g. Correctly use frequently confused words (e.g., to, too, two; there, their).	g. I can correctly use homophones (e.g., to, too, two; there, their).



NJSLS: Language	Long-Term Learning Targets
 L.4.2 Demonstrate command of the conventions of standard English capitalization, punctuation, and spelling when writing. a. Use correct capitalization. b. Use commas and quotation marks to mark direct speech and quotations from a text. c. Use a comma before a coordinating conjunction in a compound sentence. d. Spell grade-appropriate words correctly, consulting references as needed. 	 I can use conventions to send a clear message to my reader. a. I can use correct capitalization in my writing. b. I can use commas and quotation marks to identify speech and quotations from a text. c. I can use a comma before a coordinating conjunction in a compound sentence. d. I can spell grade-appropriate words correctly. d. I can use resources to check and correct my spelling.
 L.4.3 Use knowledge of language and its conventions when writing, speaking, reading, or listening. a. Choose words and phrases to convey ideas precisely. b. Choose punctuation for effect. c. Differentiate between contexts that call for formal English (e.g., presenting ideas) and situations where informal discourse is appropriate (e.g., small-group discussion). 	 I can express ideas using carefully chosen words. I can choose punctuation for effect in my writing. I use formal English when appropriate.
• L.4.4 Determine or clarify the meaning of unknown and multiple-meaning words and phrases based on grade 4 reading and content, choosing flexibly from a range of strategies.	I can use a variety of strategies to determine the meaning of words and phrases.



Texts

- 1. Christina Wilsdon, Animal Behavior: Animal Defenses (New York, NY: Chelsea House, 2009), ISBN: 978-1-60413-089-8.
- 2. Marilyn Singer, Venom (Plain City, OH: Darby Creek Publishing, 2007), ISBN: 978-1-58196-043-3.
- 3. Matt Doeden, Can You Survive the Wilderness? (North Mankato, MN: Capstone Press, 2012), ISBN: 978-1-4296-7996-1.

Note: Units 1 and 2 will include additional informational texts; see separate unit overview documents for details.





Week	Instructional Focus	Long-Term Targets	Assessments		
Unit 1: Building	Jnit 1: Building Background Knowledge: Animal Defenses and the Research Process				
Weeks 1–3	 Building Background Knowledge: What are defense mechanisms and how do they help animals survive? Building Background Knowledge: What do researchers do? Listening Closely to Paraphrase Information about Animal Defenses Reading Closely about Animals and Their Defenses 	 I can explain what a text says using specific details from the text. (RI.4.1) I can make inferences using specific details from the text. (RI.4.1) I can determine the main idea using specific details from the text. (RI.4.2) I can determine the meaning of academic words or phrases in an informational text. (RI.4.4) I can determine the meaning of content words or phrases in an informational text. (RI.4.4) I can interpret information presented through charts or graphs. I can explain how that information helps me understand the text around it. (RI.4.7) I can paraphrase portions of a text that are read aloud to me. (SL.4.2) I can use a variety of strategies to read words. (RF.4.3) I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4) 			



Week	Instructional Focus	Long-Term Targets	Assessments
Weeks 1-3, continued	 Science Talk: Synthesizing What We Know about the Animal Defense Mechanisms Listening Closely: Learning about Millipedes and Their Defenses 	 I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) I can explain what a text says using specific details from the text. (RI.4.1) I can make inferences using specific details from the text. (RI.4.1) I can determine the main idea using specific details from the text. (RI.4.2) I can summarize informational or persuasive text. (RI.4.2) I can determine the meaning of academic words or phrases in an informational text. (RI.4.4) 	Mid-Unit 1 Assessment: Reading about Caterpillars, Answering Questions, and Determining the Main Idea (RI.4.2 , RI.4.4, and RI.4.7)
	 Reading Closely about Millipedes Science Talk: Synthesizing What We Know about the Millipede Setting the Purpose for a Deeper Study of Animal Defense Mechanisms 	 I can determine the main idea using specific details from the text. (RI.4.2) I can determine the meaning of academic words or phrases in an informational text. (RI.4.4) I can determine the meaning of content words or phrases in an informational text. (RI.4.4) I can accurately synthesize information from two texts on the same topic. (RI 4.9) I can effectively engage in discussions with diverse partners about fourth-grade topics and texts. (SL.4.1) 	End of Unit 1 Assessment: Answering Questions and Summarizing Texts about Animal Defense Mechanisms (RI.4.1, RI.4.2, and SL.4.2)



Week	Instructional Focus	Long-Term Targets (continued)	Assessments
Weeks 1-3, continued		• I can use a variety of strategies to read words. (RF.4.3)	
		• I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4)	
Unit 2: Using V	Writing to Inform		
Weeks 4–5	Reading Scientific Text: Reading Closely about an Chosen Animal	• I can explain what a text says using specific details from the text. (RI.4.1)	Mid-Unit 2 Assessment: Reading and Synthesizing Information from Two Texts on
	Science Talk: Synthesizing What We Know about Our Researched Animal	• I can make inferences using specific details from the text. (RI.4.1)	the Pufferfish (RI.4.1, RI.4.2, RI.4.4, RI.4.8, and RI.4.9)
	• Setting a Purpose for Writing: Creating a Rubric for Informative Paragraphs	• I can determine the main idea using specific details from the text. (RI.4.2)	
		• I can summarize informational or persuasive text. (RI.4.2)	
		• I can produce writing that is appropriate to task, purpose, and audience. (W.4.4)	
		• I can accurately synthesize information from two texts on the same topic. (RI.4.9)	
		 I can write informative/explanatory texts that convey ideas and information clearly. (W.4.2) 	
		I can use text, formatting, illustrations, and multimedia to support my topic. (W.4.2a)	
		• I can produce writing that is appropriate to task, purpose, and audience.(W.4.4)	

Week	Instructional Focus	Long-Term Targets (continued)	Assessments
Weeks 4-5, continued	 Writing Informative Texts: Sequencing Ideas and Using Research Notes Writing Informative Texts: Revising Paragraphs for Organization, Concrete Details 	 I can write informative/explanatory texts that convey ideas and information clearly. (W.4.2) I can introduce a topic clearly. (W4.2a) I can group supporting facts together about a topic in an informative/explanatory text. (W.4.2a) I can use text, formatting, illustrations, and multimedia to support my topic. (W.4.2a) I can develop the topic with facts, definitions, details, and quotations. (W.4.2b) I can use linking words and phrases to connect ideas within categories of information (e.g., another, for example, also, because). (W.4.2c) I can use precise, content-specific language/vocabulary to inform or explain about a topic. (W.4.2d) I can construct a concluding statement or section of an informative/explanatory text. (W.4.2e) 	• End of Unit 2 Assessment: Writing about the Defense Mechanisms of the Pufferfish (RI.4.9, W.4.2, W.4.4, W.4.7, and W.4.8)



Week	Instructional Focus	Long-Term Targets	Assessments
Unit 3: Using	Writing to Entertain		
Weeks 6–8	 Writing Informative Texts: Revising Paragraphs Based on Peer Critique Introducing the Format: Choose-Your-Own-Adventure Setting a Purpose for Writing: Understanding the Performance Task Setting a Purpose for Writing: Creating a Rubric for Narrative Writing Writing Narrative Texts: Creating a Character Profile 	 With support from peers and adults, I can use the writing process to produce clear and coherent writing. (W.4.5) I can write for a variety of reasons. (W.4.10) I can write narrative text about real or imagined experiences or events. (W.4.3) I can introduce the narrator and/or characters of my narrative. (W.4.3a) 	
	 Writing Narrative Texts: Orienting the Reader and Introducing the Characters Writing Narrative Texts: Including Dialogue and Description Writing Narrative Texts: Using Transition Words 	 I can introduce the narrator and/or characters of my narrative. (W.4.3a) I can establish a situation. (W.4.3a) I can organize events in an order that makes sense in my narrative. (W.4.3a) I can use dialogue and descriptions to show the actions, thoughts, and feelings of my characters. (W.4.3a) I can use transitional words and phrases to show the sequence of events in a narrative text. (W.4.3b) 	Mid-Unit 3 Assessment: Planning for and Drafting an Introduction for the Choose-Your-Own Adventure Animal Defense Narrative (W.4.3a and d, and W.4.4)



Week	Instructional Focus	Long-Term Targets	Assessments
Weeks 6-8, continued	 Writing Narrative Texts: Using Concrete Words and Phrases and Sensory Details Publishing the Performance Task: Citing Sources and Authors' Celebration 	 I can use sensory details to describe experiences and events precisely. (W.4.3c) I can write a conclusion to my narrative. (W.4.3d) With support from peers and adults, I can use the writing process to produce clear and coherent writing. (W.4.5) I can recall information that is important to a topic. (W.4.8) I can document what I learn about a topic by taking notes. (W.4.8) I can sort my notes into categories. (W.4.8) I can provide a list of sources I used to gather information. (W.4.8) I can use conventions to send a clear message to my reader. (L.4.2) I can express ideas using carefully chosen words. (L.4.3a) 	 End of Unit 3 Assessment: Writing Choice 2 of the Animal Defense Narrative (W.4.3b, c, d, e, W.4.2a, and W.4.4) Choose-Your-Own-Adventure Animal Defense Narrative (RI.4.9, W.4.2, W.4.3, W.4.7, W.4.8, and W.4.9b)



GRADE 4: MODULE 2B: OVERVIEW

Reading Closely and Writing to Learn:
Animal Defense Mechanisms

Preparation and Materials

Released along with this module is a stand-alone document entitled the Foundational Reading and Language Standards Resources Package for Grades 3-5. This resource package is designed to give teachers resources and guidance for addressing the CCSS foundational reading and language ELA standards. The package includes resources for literacy instruction that occurs alongside the modules. It also cites example lessons within the modules in which these standards are addressed.

The package includes the following resources:

- Overview:
 - Organization and Contents Chart: A visual representation and written description of the resources in this package
 - Research Base: Research review, implications for instruction, and associated resources for each aspect of foundational reading and language standards instruction.
 - Sample Schedule: A sample two-week alternating schedule that outlines one way to organize a foundational reading and language instructional block.
 - **RF and L Standards within the Module Lessons**: A list of examples of foundational reading and language instruction in the 6-minute module lessons, by grade.
 - References: Citations for those who would like to do further study.
- Word Study Criteria: Specific suggestions and criteria for approaches to word work that teach phonics and word analysis.
- Additional Work with Complex Text: Guidance for how to provide additional and more heavily scaffolded support with the complex texts found in the modules.
- Fluency Resource: Resources and guidance for fluency instruction.
- *Show the Rule™* Strategy¹: Resources and guidance for contextualized grammar and conventions instruction.
- Independent Reading Grades 3-5: Resources and guidance for launching independent reading with students.

This resource will be referenced throughout Module 2B, when opportunities exist for connecting and differentiating instruction in the module lessons. Before launching this module, review the Foundational Reading and Language Standards Resources Package for Grades 3-5 and determine how your current literacy schedule aligns with the guidelines in this package.

For grade 4, review the Fluency Resource aligned with RF.3 and RF.4, before Unit 1, as this unit provides opportunities for fluency work with students. The *Show the Rule*TM sample lesson is included in Unit 3.

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