

Lesson 2: Building Background Knowledge: Launching Research of Animal Defense Mechanisms



CCS Standards

- **RI.4.1:** Refer to details and examples in a text when explaining what the text says explicitly and when drawing inferences from the 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*.
- **W.4.7:** Conduct short research projects that build knowledge through investigation of different aspects of 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.
- **SL.4.2:** Paraphrase portions of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.
- **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.
- **L.4.4a:** Use context (e.g., definitions, examples, or restatements in text) as a clue to the meaning of a word or phrase.
- **L.4.4c:** Consult reference materials (e.g., dictionaries, glossaries, thesauruses), both print and digital, to find the pronunciation and determine or clarify the precise meaning of key words and phrases.



Daily Learning Targets

- I can paraphrase information presented in a read-aloud on animal defense mechanisms. (W.4.8, SL.4.2)
- I can find the gist and the meaning of unfamiliar vocabulary from an excerpt from *Animal Behavior: Animal Defenses*. (RI.4.4, L.4.4)

Ongoing Assessment

- Listening Closely note-catcher (W.4.8, SL.4.2)
- *Animal Behavior: Animal Defenses* Chapter 1: Gist chart (RI.4.4, L.4.4)

Agenda

1. Opening

- A. Reviewing Learning Targets (5 minutes)
- B. Beginning the Research Process: What Does It Mean to Research? (15 minutes)

2. Work Time

- A. Reading Aloud and Paraphrasing *Venom* (15 minutes)
- B. Reading for Gist: *Animal Behavior: Animal Defenses* (10 minutes)
- C. A Closer Look at Words: *Animal Behavior: Animal Defenses* (10 minutes)

3. Closing and Assessment

- A. Introducing the Word Wall (5 minutes)

4. Homework

- A. Accountable Research Reading. Select a prompt to respond to in the front of your independent reading journal.

Teaching Notes

Purpose of lesson and alignment to standards:

- This lesson begins with students revisiting the Performance Task anchor chart introduced in Lesson 1 to further frame the research they do throughout the module. Students co-create the What Do Researchers Do? anchor chart in Opening B (W.4.7); this anchor chart will be revisited throughout the module as students research and write about animal defense mechanisms.
- Reading *Venom* aloud in Work Time A serves two purposes: to engage students by having them examine the diagrams to build background knowledge and to give students practice with the routine of listening to a text and then paraphrasing it (W.4.8, SL.4.2). Students do not receive their own copy. You may invite students to look through *Venom* during independent reading or other flextime throughout the school day.
- During the read-aloud, the Listening Closely note-catcher is introduced and is used and expanded upon in later lessons. If it's difficult to read the text aloud and model using the note-catcher at the same time, consider inviting a "guest reader" to the class for the read-aloud; this guest reader might be the principal, another teacher, or a parent volunteer.
- This is the first of four lessons in which students read selections from *Animal Behavior: Animal Defenses*. This text helps them to build background knowledge on animal defense mechanisms and practice key reading skills they will have to use independently later in this unit and in Unit 2. In this lesson, students read a selection from Chapter 1 for the gist (RI.4.2, W.4.7, W.4.8). They also use vocabulary strategies as they reread this selection (RI.4.4, L.4.4a, L.4.4c).
- Consider where students will write their gist statements for each section of the text: on sticky notes, in the margin, on a separate sheet of paper.
- Students practice their fluency in this lesson by following along and reading silently as the teacher reads selections from Chapter 1 of *Animal Behavior: Animal Defenses* aloud in Work Times B and C.

- Students who finish quickly could write their own research questions about animal defense mechanisms.
- In this module, the habit of character focus is working to contribute to a better world. The characteristic they are reminded of in this lesson is: apply my learning as they review the performance task in preparation to begin the research process.

How it builds on previous work:

- The research reading students complete for homework will help to build both their vocabulary and knowledge pertaining to animals and specifically animal defense mechanisms. By participating in this volume of reading over a span of time, students will develop a wide base of knowledge about the world and the words that help to describe and make sense of it.
- Continue to use Goals 1 and 2 Conversation Cues to promote productive and equitable conversation.
- Students will continue to use their vocabulary log from Module 1 to collect new vocabulary in this module. As in Module 1, students will add new academic vocabulary to the front of the logbook and domain-specific vocabulary to the back of the book. You may wish to have students prepare the back of their books for the new module with a new section marked with flags or tabs.
- The Academic Word Wall will continue to be added to in this module. This is a permanent word wall that is added to across the year.

Areas where students may need additional support:

- During Lessons 2–3, students work with a reading partner. Strategically partner students so they can support one another well as they read this complex text.
- Students may struggle with using a dictionary in Work Time C. Consider spending some time prior to this lesson reviewing how a dictionary is structured and how to look up a word.

Assessment Guidance:

- Review students' gist charts and vocabulary logs to ensure that they understand that the gist is what the text is mostly about and to review the strategies they are using to determine the meaning of unfamiliar words.

Down the road:

- In Lesson 3, students will reread the selection of *Animal Behavior: Animal Defenses* for gist in this lesson, with a focus on determining the main idea and identifying supporting details.
- In Lessons 4 and 5, students will practice reading for gist, determining the meaning of unfamiliar words, determining the main idea and identifying supporting details in small groups as they read new selections from *Animal Behavior: Animal Defenses*.

In advance:

- In this lesson, students begin building the Domain-Specific Word Wall. Set up this wall in advance with the letters of the alphabet organized in order. New, topic-related words will be added underneath the appropriate letter. The word will be written on a piece of paper or card and then stuck under the letter.
- Consider whether you will have a guest reader for *Venom*.
- Locate the Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3) or re-create this chart to display. See Work Time B.

- Prepare chart paper for and post What Do Researchers Do? and Determining the Meaning of Unfamiliar Vocabulary anchor charts (see supporting materials).
- Prepare the Domain-Specific Word Wall.
- Post: Learning targets.

Technology & Multimedia

- Work Time B: For students who will benefit from hearing the text read aloud multiple times to find the gist, consider using a text-to-speech tool such as Google Chrome Speak (<https://chrome.google.com/webstore/detail/chrome-speak/diagnfimeecdcecpnkjgbnlelkclcpj>).
- Work Times B and C: Consider inviting students to use a web page annotation tool such as <https://www.diigo.com> for highlighting unfamiliar vocabulary words and adding gist annotations to a web page. Model this in Work Time B and invite students to use the tool for their own work in Work Time C.
- Work Times B and C: Student Expert Group Animal research notebooks could be completed by students online, for example on Google Docs in a folder for each student.
- Work Times B and C: Students complete their note-catchers in a word processing document, for example a Google Doc using Speech to Text facilities activated on devices, or using an app or software like Dictation.io (<https://dictation.io/speech>).

Supporting English Language Learners

Supports guided in part by CA ELD Standards 4.I.B.6

Important points in the lesson itself

- The basic design of this lesson supports ELLs by helping them learn to paraphrase, first by taking running notes. This is particularly valuable to ELLs who come from countries or cultures who share different values or copyright laws. Be clear with ELLs that paraphrasing means they can use an author's ideas, but they must retell the ideas in their own words and cite their sources. If they don't, they can get into serious trouble with US copyrights.
- ELLs may find the number of unfamiliar vocabulary words challenging. Consider enhancing the vocabulary strategies introduced in this lesson. Examples: Spell and pronounce the target word aloud. Encourage students to look up and write their home language translation and the English collocation (way the word is frequently used with other words). Encourage students to find the target word in different paragraphs or contexts, highlight the word, read the sentence aloud, and discuss the meaning of the sentence.

Levels of support

For lighter support:

- Encourage students to discuss classroom interaction norms. Example: They should politely stop you or their peers when they don't understand what is being said. Invite them to identify some sentence frames to use: Sorry, but I don't understand you. Could you repeat that slowly? Could you say that another way? Also encourage them to create frames to initiate

and extend conversations: I agree. And I would also say that _____. I'd like to share something. Here's another thing to think about:_____.

For heavier support:

- Offer continued practice taking running notes. Example: Help students create a graphic organizer they can use any time during class to take notes about what another student is saying. Every now and then, ask students to use their notes to verbally paraphrase what another student has just said. This type of activity will help students simultaneously develop their note-taking skills, prepare for the mid-unit assessment, and acquire language.
- Ask students to review their vocabulary logs and collect additional samples of the words in context.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** Students with limited background knowledge may need support coming up with questions. It may be helpful to provide them with some specific ideas about questions they could ask. In addition, some students may need extra practice paraphrasing. Offer these students a copy of sample running notes that they will use to paraphrase. Coach students on how to explain what was read *in their own words*.
- **Multiple Means of Action and Expression (MMAE):** Explain each step of the process in advance of today's class discussion about the performance task. Share the sequence of the units (from Opening B of this lesson) and tell them what the discussion questions will be so they have a chance to hear them in advance. This will allow students to think through their answers before they need to discuss with a partner.
- **Multiple Means of Engagement (MME):** In this lesson, students have opportunities to share ideas and thinking with classmates. Some students may need support for engagement during these activities, so encourage self-regulatory skills by helping them anticipate and manage frustration by modeling what to do if they need help from their partners. Consider offering sentence frames to strategically selected peer models. Offering these supports for engagement promotes a safe learning space for all students.

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary used in writing

- paraphrase, research (L)
- venom, poisonous, savannah, herd, gazelles, prey, graze, predator, quiver (T)

Materials

- ✓ Close Readers Do These Things anchor chart (from Module 1, Unit 1, Lesson 3)
- ✓ Affix lists (one per student; from Module 1)

- ✓ Vocabulary logs (one per student; begun in Module 1)
- ✓ Equity sticks (one per student)
- ✓ Academic Word Wall (begun in Module 1)
- ✓ Performance Task anchor chart (begun in Lesson 1)
- ✓ Working to Contribute to a Better World anchor chart (begun in Lesson 1)
- ✓ Researchers Do These Things anchor chart (one for display; see supporting materials)
- ✓ *Venom* (book; one to display)
- ✓ Animal Defenses research notebook (distributed in Lesson 1; one per student and one to display)
 - Listening Closely note-catcher (pages 2–3 of Animal Defenses research notebook)
 - *Animal Behavior: Animal Defenses* Reading for Gist and Unfamiliar Vocabulary (page 4 of Animal Defenses research notebook)
 - *Animal Behavior: Animal Defenses* Chapter 1: Gist chart (page 5 of Animal Defenses research notebook)
- ✓ Listening Closely note-catcher (example, for teacher reference)
- ✓ *Animal Behavior: Animal Defenses* Chapter 1: Gist chart (Answers, for Teacher Reference)
- ✓ *Animal Behavior: Animal Defenses* (book; one per student and one to display, cover and pages 7–12, 124–125)
- ✓ Dictionaries (one per student and one to display)
- ✓ Domain-Specific Word Wall (new; co-created with students during Closing A)
- ✓ Word Wall cards (four to display)

Opening

A. Reviewing Learning Targets (5 minutes)

- Tell students that in this lesson, they will learn what it means to be a researcher or someone who deeply studies a topic.
- Use equity sticks to call on a student to read the first learning target:
“I can paraphrase information presented in a read-aloud on animal defense mechanisms.”
- Point to the word *paraphrase* and explain that to understand this learning target, students need to know the meaning of this word.
- Invite students to clap the syllables of the word with you as you say them. Write the syllables on the board: par-a-phrase.
- Focus students on the vocabulary strategies listed on the **Close Readers Do These Things anchor chart** and use a total participation technique to invite responses from the group:
“We have probably seen parts of this word before, so which strategies could we use to determine the meaning of this word?” (student responses may vary, but could include using known affixes or root words)
- Cover the ‘para.’ Invite students to tell you in chorus what word is left (phrase).
- Tell students a phrase is a series of words.

- Point to the prefix para- and ask students to popcorn out any other words with this prefix (paragraph, parallel). Record the words on the board.
- Ask and use a total participation technique to invite responses from the group. Invite students to retrieve their **affix lists** if they need to:

“What do you think para- means based on how it is used in each of these words?” (to come from)

- Record on a table drawn on the board as follows:

Prefix	Root
para- (to come from)	phrase (a series of words)

- Invite students to say in their own words what they think this means to their elbow partner and cold call students to share with the group (to come from words; explaining something in your own words)
- Ask students to reread the learning target with this in mind, then turn to a partner and explain what they think it means to paraphrase information from a read-aloud. Give students a few minutes to think and share, then use the equity sticks to call on a few pairs to share out.
- Add paraphrase to academic word wall. Invite students to add translations of the words in their home languages in a different color next to the target vocabulary.
- Invite students to also add the words to their **vocabulary logs**.
- Read the second learning target:
“I can find the gist and unfamiliar vocabulary from an excerpt from Animal Behavior: Animal Defenses.”
- Explain to students that today they will begin working with one of the texts they will be reading to research animal defense mechanisms.
- Record any new vocabulary on the **Academic Word Wall**.

Meeting Students' Needs

- For students who may need additional support with vocabulary: On the posted learning targets, write synonyms or descriptions above key vocabulary words to support student understanding of these terms. For example, above the word *researcher*, write “someone who reads to learn about a topic” or above the word *gist*, write “what the text is mostly about.” (MMR)
- For ELLs: Give a model of paraphrasing. Example: “I enjoy cheetahs, turtles, and deer. = I like many wild animals.” Emphasize that the paraphrase has to be your own words, different from the original.
- For ELLs and students who may need additional support with comprehension: Repeat and rephrase the learning targets. Example: “I can read part of *Animal Behavior: Animal Defenses* and tell you what it’s mostly about.” (MMR)

Opening

B. Beginning the Research Process: What Does It Mean to Research? (15 minutes)

- Display the **Performance Task anchor chart** and reread the performance task prompt. Remind students that they will be working toward writing a choose-your-own-adventure narrative during this module.
- Focus students on the **Working to Contribute to a Better World anchor chart**, specifically apply my learning. Remind students that as they will be creating their choose-your-own-adventure narratives, they will be applying what they have learned to teach others about animal defense mechanisms.
- Ask them to think about what it means to research and then turn and share their thinking with an elbow partner. Invite students to share out whole group. (It means to study or collect information about a new topic.) Clarify the meaning of *research* if necessary.
- Invite students to continue discussing the following questions with their elbow partners, sharing out whole group after each:

“Why is it important for writers to research?” (They need to know a lot about what they are going to write about, so that it will be interesting.)

“What are different ways writers might conduct, or do, research?” (They read about the topic, or They look online to learn about what they are going to write about.)

- Explain that writers often have to conduct research to learn about a topic they will write about. Preview the sequence of the three units in this module so students are oriented.
 - Under the performance task prompt, write: “Unit 1—Research: Animal Defense Mechanisms.” Explain that in this unit, they will learn about general animal defense mechanisms.
 - Next, write: “Unit 2—Research and Write: Build Expertise on a Selected Animal.” Tell students that in Unit 2, they will research in expert groups on different animals, and that this animal will be the main character in their narratives. However, before they can write their narrative, they have to research and write an informational piece about their animal and its defense mechanism.
 - Finally, write: “Unit 3—Write Narratives.” Explain that in this unit, students will read and examine a choose-your-own-adventure story to learn about this format and then plan and write their own narratives using the animal they researched as the main character.
- Ask students to give you a thumbs-up, -sideways, - down based on their general understanding of the module’s structure.
- Introduce the **Researchers Do These Things anchor chart**. Invite volunteers to read the criteria aloud for the whole group.
- Ask students to Think-Pair-Share:
 - *“How can we make sure we are studying and collecting information about animal defense mechanisms effectively?”*
- If productive, cue students to expand the conversation by giving an example, and to listen carefully and seek to understand:

“Can you give an example?” (Responses will vary.)

“Who can tell us what your classmate said in your own words?” (Responses will vary.)

- Record any new ideas to the anchor chart.
- Explain that students will do all of these things as they research animal defense mechanisms and that they will refer to this anchor chart throughout the module.
- Ask students to Think-Pair-Share:
“What questions should we try to answer as we research animal defense mechanisms?”
- Be sure to point out that they will try to answer one of the guiding questions for the module: “How do animals’ bodies and behaviors help them survive?”

Meeting Students’ Needs

- For students who may need additional support with information processing: Consider repeated this examination of the performance task, either by meeting with them in advance or again after the class discussion. This repetition will help solidify the purpose and plan for their learning. (MMR, MMAE)
- For students who may need additional support with auditory processing: Consider posting the Back-to-Back and Face-to-Face questions or writing the questions down and giving these students an opportunity to preview them before this discussion. (MMR)
- For ELLs and students who may need additional support with auditory processing: Repeat and rephrase all questions. Provide sentence frames for ELLs who need heavier support to assist in responses. Example: “One way we can do a good job researching animal defense mechanisms is to ____.” (MMR)
- For ELLs: Discuss the meaning of each of the ways students can effectively study and collect information as written on the anchor chart. Example:
 “What does *investigate* mean? What kind of people *investigate*? What are we going to investigate?”
 “What does *different aspects of a topic* mean? What are some different aspects of animal defense?” (Body, behavior, etc.) “Are *nose* and *smell* different aspects?”
- If a small group of students met after Lesson 1 to work on coming up with research questions, remind these students that these are some of the questions that they can try to answer as they research animal defense mechanisms.

Work Time

A. Reading Aloud and Paraphrasing *Venom* (15 minutes)

- Display the cover of *Venom* and read the title and author aloud to students. Ask:
“What do you think venom means?”
- Use equity sticks to call on a few students. Accept all responses but do not clarify the meaning at this point.
- Ask:
“What do you notice about this book? What do you think you will learn from it?”
- Read the back cover of the book, then ask:
“Now what do you think venom means?”

- Display pages 4 and 5 and read the heading: “Introduction: Don’t Eat, Don’t Touch, Don’t ... Well, Just Don’t!” Ask:

“What do you notice about these pages? What do you wonder about these pages?” (Students should notice the text features, headings, color, and use of punctuation, all of which are to capture readers’ attention and cue them to the topic’s dangerous nature.)

- Read aloud the three paragraphs on page 4. Invite students to turn and talk, sharing one interesting thing they learned while listening to page 4. After a minute, use equity sticks to cold call several students and ask:

“What is one thing your partner learned while listening to page 4?”

- As students share their partner’s learning, ask students to give a thumbs-up to show if they found the same thing interesting.
- Validate responses, then ask the following questions and continue to use equity sticks to cold call students:

“According to this text, what does poisonous mean?” (Something that has poison, or Something that can make you sick.)

- Ask:

“After reading this page, did your definition of venom change? Why or why not?” (poison; reasons may vary)

****Why do you think the author titled this book Venom?”***

- Validate responses. If it did not come up in the discussion, explain that this book is all about animals that use venom and poison to survive.
- Invite students to look at the visual on page 4. Read aloud the title and question. Read about each pair of animals. Ask students to hold up one finger if they think the animal on the left is poisonous, or two fingers if they think the animal on the right is poisonous (e.g., hold up one finger for the American toad or two fingers for the bullfrog for the first set of animals).
- Read aloud the title and two paragraphs on page 5. Invite students to turn and talk, sharing one interesting thing they learned while listening to page 5. After a minute, use equity sticks to cold call several students and ask:

“What is one thing your partner learned while listening to page 5?”

- As students share their partner’s learning, ask students to give a thumbs-up to show if they also think what the student is sharing is interesting. Validate responses. Ask:

“Why might an animal use venom?” (To catch prey, for self-defense, or to defend its family or community.)

- If productive, cue students to listen carefully and seek to understand:

“Who can tell us what your classmate said in your own words?” (Responses will vary.)

- Invite students to look at the diagram on page 5. Read aloud the title and directions. Invite students to match the animal with how it injects venom.
- Explain that students will use this text throughout the unit to learn how animals use venom to protect themselves and to practice how a listener can take notes and paraphrase a text.
- Explain to students that to paraphrase a text, they will need to retell the text. Explain that this is different from summarizing a text, because when summarizing a reader needs to determine the importance of the ideas presented in a text and say the big ideas concisely. When paraphrasing, readers need to simply tell everything they read or heard in their own words.

- Explain that they will practice paraphrasing a text that is read aloud to them and that to do this effectively, they will need to take notes while listening to what is being read. Tell students that taking notes is an important step in paraphrasing because it will help them include specific details from the text, and that they should not try to paraphrase a text from memory because they may miss details from the text.
- Explain that this type of note-taking can be described as running notes. Tell students that as they listen to the text, they will jot down notes about what they observe or hear. Then they will review their notes and paraphrase the text.
- Introduce the guest reader (if necessary), sharing that he or she will read *Venom* aloud as you model how a listener can take notes and then paraphrase a text.
- Ask students to get out their **Animal Defenses research notebook** and turn to the **Listening Closely note-catcher** on pages 2–3. Display a blank copy of the note-catcher. Explain that students will use this note-catcher to record their running notes during the read-aloud.
- Use equity sticks to call on a student to read the directions and headings of the table in the note-catcher. Answer any clarifying questions.
- Point out the research question on the note-catcher: “How do animals’ bodies and behaviors help them survive?” Explain that researching to answer this question is the purpose for reading this text, and they should keep this in mind as they work.
- Tell students that the text will be read aloud twice: one time for them to simply listen for gist and a second time for them to take running notes.
- Explain that today they will practice paraphrasing pages 4 and 5 of *Venom*. Tell them that since they have already listened to these pages read aloud once, they should be able to determine the gist.
- Invite students to turn and talk. Ask, and then use equity sticks to call on a student to share out:
“What was the gist of these pages?” (Some animals use venom and poison to survive.)
- Tell students that they will now hear page 4 read aloud a second time, and that you will model how to take running notes about what you hear while listening to the text read aloud. Explain that they do not need to write anything on their note-catchers at this time.
- Invite the guest reader to reread the first paragraph on page 4. Ask:
“After hearing this paragraph read again, what notes could we take?” (Students will name various details from this section of the text.)
- Model recording these notes in the “What do you OBSERVE/HEAR?” box on the note-catcher. Invite students to record these details on their note-catchers. Refer to the **Listening Closely note-catcher (Example, for Teacher Reference)**.
- Continue in this manner for each paragraph on pages 4–5, stopping after each paragraph and discussing and modeling what kind of running notes could be recorded on the note-catcher.
- Remind students of the purpose for reading this text: to research how animals’ bodies and behaviors help them survive. Invite students to write down any questions they have after hearing this text in the “What QUESTIONS do you have?” box.
- Invite students to turn to the next page of their note-catchers. Explain that now that they have completed their running notes, they can paraphrase the text. Remind them what it means to paraphrase as necessary.

Ask students to reread their notes; then give the following instructions:

1. Reread your notes from today's reading of *Venom*.
 2. Think about how we could paraphrase what we heard today.
 3. Share with an elbow partner how you would explain this text in your own words.
- As students work, point out that they should include the source when they paraphrase and that referring to their running notes can help them include many specific details when they paraphrase. Invite students to write their paraphrased version of the text on their note-catchers.
 - Use equity sticks to call on several pairs to share how they would paraphrase the text. This allows students to hear the text paraphrased in a variety of ways. (This section of *Venom* was about how some animals are toxic. Some animals are poisonous and can make you sick if you eat them or touch them. This is how they protect themselves from predators. For example, if a dog bites a toxic toad, it would spit it out and the toad would not get eaten. Some animals are venomous and inject their poison by biting or stinging their enemy, like snakes or spiders. Animals use venom to catch their prey and to protect themselves or their community.)
 - Encourage students to thank the guest reader. Tell them that they will use this book throughout the module to learn about animal defense mechanisms and to practice paraphrasing. They will have many more opportunities to read this book and can read through it on their own during independent reading or in their free time during the school day if they wish.

Meeting Students' Needs

- Reading the complex text aloud slowly, fluently, and without interruption or explanation promotes fluency for students by allowing them to hear a strong reader read with accuracy and expression.
- For students who may need additional support with perception: Consider displaying the text for students to read along silently during the read-aloud. (MMR)
- For ELLs: Pair students with a partner who has more advanced or native language proficiency. The partner with greater language proficiency can serve as a model in the pair, initiating discussions and providing implicit sentence frames, for example.
- For students who may need additional support with sustained effort: Consider jotting running notes or key words on the board as you read *Venom* aloud. (MMR, MME)
- For ELLs: Mini Language Dive. Ask students about the meaning of the chunks of a key sentence from *Venom*: Write and display student responses next to the chunks. Highlight language structures that are critical to understanding the gist of *Venom*. A relatively high-frequency structure is: *One reason animals use venom/a second major reason animals use venom/a third reason animals use venom*. Work on comprehension by eliciting paraphrases of the sentence each structure is used in. Ask questions about the structures. Example:

“What does reason mean? What does major reason mean? What is one reason you come to school? What is a major reason animals use poison?”
- For ELLs: Chorally pronounce and spell key words on the board, such as *diagram* and *paraphrase*, *gist*. Encourage students to add them to their vocabulary log.
- For ELLs: Explain that *gist* is what a text is mostly about; the most important ideas.

- Some students will need support coming up with questions for their Listening Closely note-catcher. It may be helpful to provide them with some general ideas about things they could ask, such as, "Is there anything you wonder about the (choose something specific from the text)?"

Work Time

B. Reading for Gist: *Animal Behavior: Animal Defenses* (10 minutes)

- Move students into their reading partnerships. Let them know they will continue to research animal defense mechanisms by reading excerpts from a text closely for the next few lessons.
- Post and review the *Close Readers Do These Things anchor chart* (from Module 1, Unit 1, Lesson 3).
- Tell students that the text they will read is challenging and may have unfamiliar words. Reassure them that just like when they read other texts this year, they are not expected to understand it fully the first time. Remind them that one key to being a strong reader of difficult text is being willing to struggle.
- Display and distribute *Animal Behavior: Animal Defenses*. Build up the excitement; this text will be the first text they read and examine closely for their research.
- Invite students to look through the book, thinking about what they notice and wonder. Have students share these observations and questions with an elbow partner. Use equity sticks to call on students to share out.
- Display page 7 of *Animal Behavior: Animal Defenses* and invite students to turn to this page in their copies. Read pages 7-12 aloud for students without stopping, stopping at the end of the section "A Life in Hiding."
- Ask students to turn and talk and use total participation techniques to invite students to share their responses with the whole group:
"What is the text about?" (Student responses may vary, but could include it's about how different animals protect themselves.)
- Invite students to turn to ***Animal Behavior: Animal Defenses Reading for Gist and Unfamiliar Vocabulary*** on page 4 of their Animal Defenses research notebook and display so all students can see. Cold call students to read the directions aloud for the whole group as they read along silently in their heads. Point out how these directions are based on the Close Readers Do These Things anchor chart.
- Display page 7 of *Animal Behavior: Animal Defenses*. Read the first three paragraphs aloud for the whole group and invite students to read along silently in their heads.
- As a group, follow the directions to find the gist and unfamiliar vocabulary words in the first three paragraphs.
- Ask students to discuss with an elbow partner:
"What is the gist of these paragraphs? What are they mostly about?" (They are about how gazelles protect themselves from cheetahs.)
- Display the ***Animal Behavior: Animal Defenses Chapter 1: Gist chart*** and invite students to refer to their research notebooks to find the Gist and Unfamiliar Vocabulary directions on page 4 and the Gist chart on page 5.

- Model recording the gist in the chart and invite students to record on their own charts. Refer to the ***Animal Behavior: Animal Defenses Chapter 1: Gist chart (Answers, for Teacher Reference)***. Tell students that they will have a chance to discuss the unfamiliar vocabulary words they circled later on in the lesson.
- Continue in this manner as you read the remainder of this selection from *Animal Behavior: Animal Defenses*, recording the gist of each section (the remainder of the introduction to the chapter on pages 7–9, “Self-Defense” on page 9, “Lying Low” on page 10, and “A Life in Hiding” on pages 11–12).

Meeting Students’ Needs

- For students who may need additional support with writing fluency: Graphic organizers and recording forms engage students more actively and provide the necessary scaffolding. Consider providing a partially filled-in graphic organizer. (MMAE)
- For ELLs and students who may need additional support with organizing ideas for written expression: Provide a sentence starter or frame to aid in language production. For example: *In the visual I see....* (MMAE)
- For ELLs: Mini Language Dive. Ask students about the meaning of the chunks of a key sentence from the *Animal Behavior* text: Write and display student responses next to the chunks. Highlight language structures that are critical to understanding the gist. Higher-frequency language includes: *avoid being noticed, may be caught, animals such as, species.*
- For ELLs: Note that the first two examples contain passive language. Ask students: “What does *noticed* mean?” (Seen.) “What’s another way to say *avoid being noticed*?” (Not be seen.) “Who might notice the animals?” (Other animals.) “Why do animals want to avoid being noticed?”

Work Time

C. A Closer Look at Words: *Animal Behavior: Animal Defenses* (10 minutes)

- Explain that students will now have a chance to discuss the unfamiliar vocabulary words from this selection of *Animal Behavior: Animal Defenses*. Invite them to skim page 7 and ask the following, then use equity sticks to call on students to share out, listing the words shared on the board:
“What words did you circle that you didn’t know the meaning of?” (Answers will vary; students may identify savannah, herd, gazelles, prey, graze, predator, and quiver.)
- Ask students to turn to their partner and choose a word to try to figure out the meaning of. After a few minutes, invite students to share out whole group which word they tried to decipher and the strategy they used to do this.
- Tell students that they have learned a lot about how to figure out new words. Now, they get to use that knowledge. Focus students on the strategies for determining unfamiliar vocabulary on the Close Readers Do These Things anchor chart.
- Use the strategies to determine the meanings of the following challenging words from the text. Encourage students to help you.

- *savannah* (a grassland)
- *herd* (a group of animals)
- *gazelles* (a kind of antelope living in Africa)
- *prey* (an animal that is eaten by other animals)
- *graze* (to eat grass)
- *predator* (an animal that eats other animals)
- *quiver* (to shake)
- Tell students that they now will use some of these strategies while rereading this selection of *Animal Behavior: Animal Defenses* to determine the meaning of some more challenging words.
- Invite students to continue to use the back of their vocabulary log to keep track of the words they learn related to animal defenses throughout the module.
- Show students the glossaries in the backs of *Animal Behavior: Animal Defenses* and *Venom* and remind them that a *glossary* is a text feature authors often use in nonfiction texts and is found at the end of a book. Also remind students that glossaries are formatted so the words appear in alphabetical order.
- Model adding a new word to the back of the vocabulary log using the word *prey* on page 7 of *Animal Behavior: Animal Defenses*:
 - Reread the first paragraph and circle the word *prey* in the third sentence.
 - Explain that the text makes you think this word means “an animal that is hunted by another animal,” but that you want to confirm this.
 - Demonstrate using the strategies for determining unfamiliar vocabulary on the Close Readers Do These Things anchor chart to select a strategy for determining the word and tell students that your strategy will be to use the glossary. Point out that you are using this strategy because the word is in bold, which is a clue to the reader that the definition is in the glossary.
 - Turn to the glossary on page 124.
 - Think aloud in a way similar to the following: “The glossary is organized in alphabetical order, so I need to skim the words to find the words starting with the letter p. Here is the word *prey*, and the definition after says, ‘an animal that is eaten by other animals.’”
- Complete the entry for this word as a class in the vocabulary logs.
- Distribute **dictionaries** and explain that students will use them to look up another word from this selection of *Animal Behavior: Animal Defenses*.
- Reread the third paragraph on page 7 and point out the word *quiver*.
- Allow students a few minutes to reread the paragraph and look the word up in the dictionary. Point out that this word has several meanings, as outlined in the dictionary:
 - *n* a case for carrying arrows
 - *v* to move with a slight shaking motion
 - *n* the act or action of quivering
- Invite students to turn and talk with their partners, and then use equity sticks to call on a few pairs to share how they determined the meaning of this word:

“Which meaning of the word *quiver* makes the most sense in the context of this text?”
(Quiver is describing what the gazelles are doing, so is used as a verb in this text. The

first definition of a case for carrying arrows does not make sense within the context of the text—the gazelles are not carrying arrows.)

- Ask students to help you add this word to their vocabulary log as a class.
- Answer clarifying questions.
- Focus students on the learning targets. Read each one aloud, pausing after each to use a checking for understanding protocol for students to reflect on their comfort level with or show how close they are to meeting each target. Make note of students who may need additional support with each of the learning targets moving forward.

Meeting Students' Needs

- For ELLs: Chorally pronounce all unfamiliar vocabulary.
- Pair students with strategic elbow partners to ensure that struggling readers have a strong, politely helpful person to support their efforts to determine the meaning of unfamiliar vocabulary words.
- For students who may need additional support with vocabulary: Identify the vocabulary word they should focus on and tell them which vocabulary strategy to use to figure out its meaning. Partially complete their Animal Defense Mechanisms glossary in advance. This will give students direction and purpose and get them using the strategy right away. (MMR)

Closing and Assessment

A. Introducing the Word Wall (5 minutes)

- Point out the new **Domain-Specific Word Wall**. Remind students that this Word Wall is a place to gather words about the topic they are studying. Explain that they will use their vocabulary logs as individuals, but that this Word Wall is where the class will keep track of topic-related vocabulary; this will help during class discussions.
- Remind students of the format of the Domain-Specific Word Wall—words are grouped alphabetically; only words are displayed, no definitions; words will be added to the Word Wall over the course of the module. Explain that students can refer to the Word Wall during discussions with peers or when writing as a way to use scientific vocabulary when discussing a topic.
- Show students the new **Word Wall cards** with the words *defense mechanisms*, *prey*, *quiver*, and *venom*. Use equity sticks to choose students to add the cards to the Word Wall.
- Invite students to show a thumbs-up, -down, or -sideways to briefly reflect on the last learning target. Tell students that they will revisit this target and practice using the glossary and the strategies for determining unfamiliar vocabulary on the Close Readers Do These Things anchor chart throughout this unit and will continue to figure out more about it.
- Repeat, inviting students to self-assess against how well they applied their learning in this lesson.

Meeting Students' Needs

- For ELLs and visual learners: add visuals and simpler synonyms for each word on the Word Wall. The class can co-construct these, and it will help to make the meanings of these words more memorable for all students. (MMR)

Homework

A. Accountable Research Reading. Select a prompt to respond to in the front of your independent reading journal.

Meeting Students' Needs

- For ELLs and students who may need additional support with writing: For all homework assignments in this unit, read the prompts aloud. Students can discuss and respond to prompts orally, either with you, a partner, family member, or student from Grades 1 or 2, or record an audio response. If students have trouble writing sentences, they can begin by writing words. Consider providing a sentence starter or inviting students who need lighter support to provide sentence starters. (MMAE)