

Lesson 6: Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish



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.4.2:** Determine the main idea of a text and explain how it is supported by key details; summarize the text.
- **RI.4.10:** By the end of year, read and comprehend informational texts, including history/social studies, science, and technical texts, in the grades 4-5 text complexity band proficiently, with scaffolding as needed at the high end of the range.
- **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.
- **L.4.1:** Demonstrate command of the conventions of standard English grammar and usage when writing or speaking.
- **L.4.1c:** Use modal auxiliaries (e.g., *can*, *may*, *must*) to convey various conditions.



Daily Learning Targets

- I can determine the main idea of a text and explain how it is supported by key details. (RI.4.1, RI.4.2)
- I can summarize a text. (RI.4.1, RI.4.2)
- I can organize research information into appropriate categories. (W.4.7, W.4.8)
- I can identify modal auxiliaries in a text. (L.4.1c)

Ongoing Assessment

- Mid-Unit 2 Assessment Parts I and II (RI.4.1, RI.4.2, W.4.7, W.4.8, L.4.1c)
- Tracking Progress: Research

Agenda

1. Opening

- A. Returning End of Unit 1 Assessment (5 minutes)
- B. Reviewing Learning Targets (5 minutes)

2. Work Time

- A. Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish (35 minutes)
- B. Identifying Modal Auxiliaries (5 minutes)

3. Closing and Assessment

- A. Tracking Progress (10 minutes)

4. Homework

- A. Accountable Research Reading. Select a prompt and respond in the front of your independent reading journal.
- B. Continue to categorize research from your independent research reading. Determine categories depending on the information you are research reading. Use the Categorizing and Organizing Information graphic organizer.

Teaching Notes

Purpose of lesson and alignment to standards:

- In this lesson, students complete the Mid-Unit 2 Assessment—which builds toward the End of Unit 2 Assessment—by reading two texts about the pufferfish and collecting research notes about its defense mechanisms. Students use the texts and note-catchers from this assessment in the End of Unit 2 Assessment.
- In Opening A, students' End of Unit 1 Assessments are returned with feedback. The purpose of this is for students to have the opportunity to see how they performed in order to improve in their next assessment, and to ask questions if they don't understand the feedback.
- After the Mid-Unit 2 Assessment, students reflect on the learning targets using the Tracking Progress, Mid-Unit 2 recording form. This exercise is meant to provide them with time to formally keep track of and reflect on their own learning.
- The research reading that students complete for homework will help build both their vocabulary and knowledge pertaining to animals and specifically animal defenses. 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 describe and make sense of it.
- In this lesson, the habit of character focus is working to become an effective learner. The characteristics they are reminded of specifically are perseverance and taking responsibility, as they will be working independently on their assessments, which may be challenging for some students, and then reflecting on their learning after the assessment.

How it builds on previous work:

- Students have been practicing determining the main idea and summarizing the text throughout the first half of the unit with the "Fight to Survive!" text and their web page. In

Lesson 5, they practiced categorizing their research. In this lesson, they are assessed on all these areas.

- Continue to use Goals 1-3 Conversation Cues to promote productive and equitable conversation.

Areas where students may need additional support:

- For some students, this assessment may require more than the 50 minutes allotted. Consider providing time over multiple days if necessary.

Assessment guidance:

- All assessment materials (student copy, answer key, student exemplar) are included in the Assessment Overview and Resources.
- When assessing and providing feedback to students on this assessment, use the teacher answer key, and sample student responses (see the Assessment Overview and Resources) to help you complete the student Tracking Progress sheet. It is suggested that you make notes in the appropriate column for each criteria and mark evidence with flags/sticky notes on student work in a different color to student responses. There is also space for you to respond to student comments.
- In this assessment students are tracking progress towards anchor standards W.7: Conduct short as well as more sustained research projects based on focused questions, demonstrating understanding of the subject under investigation, and W.8: Gather relevant information from multiple print and digital sources, assess the credibility and accuracy of each source, and integrate the information while avoiding plagiarism.

Down the road:

- For the End of Unit 2 Assessment, students will use the same texts and notes (from the Mid-Unit 2 Assessment) to write an informative piece about the pufferfish. Be sure to hold on to these resources so that they can be redistributed in Lesson 12.

In advance:

- Prepare students' End of Unit 1 Assessments with feedback from Unit 1, Lesson 10.
- Post: Learning targets.

Technology & Multimedia

- Work Time A: Play this pufferfish video before students begin working on their assessments to give them an idea of what the pufferfish looks like and how it defends itself before they have to read about it: <https://youtu.be/dBXhZAcIT8Q>.
- Work Time A: Students complete the Mid-Unit 2 Assessment online with the Part I questions set up on a Google Form, for example.
- Work Time A: Students complete their Mid-Unit 2 Assessment 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>).
- Closing and Assessment A: Students complete a sketch using online art tools—for example, Sketchpad: <https://galactic.ink/sketchpad/>.

- Closing and Assessment A: Students complete a sketch using online art tools—for example, Sketchpad: <http://mudcu.be/sketchpad/>.
- Consider that YouTube, social media video sites, and other website links may incorporate inappropriate content via comment banks and ads. Although some lessons include these links as the most efficient means to view content in preparation for the lesson, be sure to preview links and/or use a filter service, such as www.safeshare.tv, for viewing these links in the classroom.

Supporting English Language Learners

Supports guided in part by CA ELD Standards 4.I.B.6, 4.I.C.10, 4.I.C.12

Important points in the lesson itself

- The basic design of this lesson supports ELLs by inviting them to complete assessment tasks similar to the classroom tasks completed in Lessons 1-5.
- ELLs may find the Mid-Unit 2 Assessment challenging, as it may be a big leap from the heavily scaffolded classroom interaction for some ELLs. Students are asked to independently apply not only the cognitive skills they developed in Lessons 1-5, but also the new linguistic knowledge introduced in those lessons.
- Make sure ELLs understand the assessment directions. See additional support in the lesson.
- Make time to show and discuss a pufferfish video or several pufferfish images to help build background knowledge and language skills specific to the assessment.
- Point to and review charts posted around the classroom to set context for the assessment. For example, remind students of the Academic Word Wall and the animal research questions (appearance? habitat? diet? body and behaviors that help it survive?).
- After the assessment, ask students to discuss which assessment task was easiest and which was most difficult, and why. In future lessons and for homework, focus on the language skills that will help students address these assessment challenges.

Universal Design for Learning

- **Multiple Means of Representation (MMR):** In order to set themselves up for success for the mid-unit assessment, students will need to generalize the skills that they learned from the previous sessions. Before administering the assessment, activate their prior knowledge by recalling the learning targets from the previous sessions and the narrative writing that they have already completed. Additionally, make sure that you are presenting the directions for the assessment both visually and verbally. Facilitate comprehension by displaying a map of the assessment parts.
- **Multiple Means of Action & Expression (MMAE):** Support a range of fine motor abilities and writing need by offering students options for writing utensils. For example, pencil grips, slanted desk, and alternative writing tools. Alternatively, consider supporting students'

expressive skills by offering partial dictation of student responses as appropriate. Varying tools for construction and composition supports students' ability to express information during the assessment.

- **Multiple Means of Engagement (MME):** Some students may require support with limiting distractions during the assessment (e.g., using sound-cancelling headphones or dividers between workspaces). Similarly, some students may require variations in time for the assessment. Consider breaking the assessment into more manageable parts and offering breaks at certain times. During the assessment, provide scaffolds that support executive function skills, self-regulation, and students' abilities to monitor progress before and after the assessment (e.g., visual prompts, reminders checklists, rubrics, etc.).

Vocabulary

Key:

(L): Lesson-Specific Vocabulary

(T): Text-Specific Vocabulary

(W): Vocabulary used in writing

- track, reflect (L)

Materials

- ✓ End of Unit 1 Assessments with Feedback (one per student; completed in Unit 1, Lesson 10)
- ✓ Mid-Unit 2 Assessment Parts I and II: Reading and Researching the Defense Mechanisms of the Pufferfish (see Assessment Overview and Resources; one per student)
- ✓ Expert Group Animal research notebook (from Lesson 1; one per student)
- ✓ Working to Become Effective Learners anchor chart (from Module 1)
- ✓ Tracking Progress: Research (one per student)
- ✓ Evidence flags or sticky notes (three per student)

Opening

A. Returning End of Unit 1 Assessment (5 minutes)

- Return students' **End of Unit 1 Assessments with Feedback**.
- Invite students to spend a few minutes reading the feedback. If they require teacher support to understand the feedback, encourage them to write their names on the board so you can visit with them in this lesson.

Meeting Students' Needs

- For ELLs and students who need support with reading: Reassure them that if they don't understand or cannot read the feedback, they will have an opportunity to review it with you during the lesson. (MME)

- Build an accepting and supportive by reminding students that everyone is working toward individual goals and that learning is about continued growth and development. (MME)

Opening

B. Reviewing Learning Targets (5 minutes)

- Direct students' attention to the posted learning targets and ask for volunteers to read them aloud while other students follow along, reading silently in their heads:

"I can determine the main idea of a text and explain how it is supported by key details."

"I can summarize a text."

"I can organize research information into appropriate categories."

"I can identify modal auxiliaries in a text."

- Remind students that they have been practicing these skills throughout the first half of this unit. Explain that in this lesson, they will have the opportunity to show just how much they have learned using some exciting new texts about an animal they haven't worked with yet.

Meeting Students' Needs

- For students who may need additional support with persistence: Students who have been sketching definitions of key words in learning targets throughout the first half of this unit should refer to those sketches to help them remember the meanings of these words. (MME)
- For ELLs: Highlight and discuss the meaning of "appropriate categories." This particular collocation has not been introduced yet. Model with a piece of evidence and two or three categories and ask: "Which category is appropriate? Which is not appropriate?"
- For ELLs: Point students to the Academic Word Wall to remind them of the meaning of some of the words in these targets.
- For ELLs: Ask students comprehension questions about these targets. Examples:
 - "What does the armadillo do to protect itself? Cite some evidence from the text."
 - "What is the main idea of the gazelle text? What is a key detail that supports that main idea?"

Work Time

A. Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish (35 minutes)

- Distribute the **Mid-Unit 2 Assessment Parts I and II: Reading and Researching the Defense Mechanisms of the Pufferfish**. Give students 50 minutes to complete it. Explain that students who finish their assessment should check over their work and then work on a second-draft sketch of their expert group animal on the last page of their **Expert Group Animal research notebook**.

- Focus students on the **Working to Become Effective Learners anchor chart**, specifically perseverance. Remind students that as they will be working independently in this lesson for an assessment, they may find it challenging, so they will need to persevere.
- While students take the assessment, circulate to monitor their test-taking skills. Remind them how much time they have left and encourage them to continue working. This is an opportunity to analyze their behaviors while taking an assessment. Document strategies that students use. For example, look for those who are annotating their texts, using their graphic organizers to take notes before answering questions, and returning to the text as they answer questions.

Meeting Students' Needs

- For ELLs: Read the test directions and answers aloud. Rephrase test directions as necessary. Monitor during the assessment to see that students are completing the assessment correctly. Stop students who are on the wrong track and make sure they understand the directions.

Work Time

B. Identifying Modal Auxiliaries (5 minutes)

- Refer to the Academic Word Wall and remind students of what a modal auxiliary is. (a word that expresses the condition of a verb)
- Invite students to give you some examples of using a modal auxiliary to change the sentence "I run." (I can run. I will run. I could run. I shall run.)
- Invite students to look at their two assessment texts and to circle any modal auxiliaries.
- Select volunteers to share out with the whole group.
- Text 1: Pufferfish: *can*, *cannot*, and *could*.
- Text 2: Spiky Surprise: *will*, *can't*, and *may*.

Closing and Assessment

A. Tracking Progress (10 minutes)

- Congratulate students on their hard work on the Mid-Unit 2 Assessment.
- Congratulate students on their hard work on the end of unit assessment.
- Distribute **Tracking Progress: Research**. Remind students that successful learners keep track and reflect on their own learning. Remind students that they have done this after every assessment.
- Focus students on the Working to Become Effective Learners anchor chart again, specifically taking responsibility. Remind students that as they will be reflecting on their learning and setting goals, so they will be taking responsibility of their own learning.
- Point out that this is a new tracking progress form. Select volunteers to read aloud each criterion for the whole group. After hearing it read aloud, invite students to tell the person next to them what each means in their own words.

- Ensure students have access to **evidence flags or sticky notes** to mark up their work with evidence. Guide students through completing the form.
- If students have time, invite them to revisit their previous Tracking Progress: Research to discuss in pairs how they think they have progressed.
- Distribute the **Exit Ticket** and explain that in Unit 2, students are going to have the opportunity to research more about the defense mechanisms of one particular animal. Explain to students that the animals on the exit ticket are the different options. They have already started to learn about these animals through the texts in this unit.
- Explain that they are to rank the animals in the order of interest with 1 being their first choice and 4 being their last choice. It is important at this stage to also explain that some of the texts will be more challenging than others – the gazelle works well for students who generally need extra support in reading and research tasks; the ostrich and the armadillo are appropriate for most students at this grade level; and the monarch butterfly works well for students who need a challenge.
- Tell students that when you group them you will try to incorporate their choices, but also emphasize that not everyone will be able to have their first choice because it is important that the groups are equal.
- Use a checking for understanding protocol (for example Red Light, Green Light or Thumb-O-Meter) for students to self-assess against how well they persevered and took responsibility in this lesson.

Meeting Students' Needs

- For students who may need additional support with monitoring their own learning: Invite students to explain why self-assessment is important for learning. (MME)
- For students who may need additional support with comprehension: Consider highlighting key phrases on the Tracking Progress sheet to lift up the focus for each criterion. (MMR)
- For ELLs: Ask students to orally paraphrase the meaning of the targets with a partner before they begin writing.

Homework

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

B. Continue to categorize research from your independent research reading. Determine categories depending on the information you are research reading. Use the Categorizing and Organizing Information graphic organizer.

Meeting Students' Needs

- For ELLs and students who may need additional support with reading and writing: Refer to the suggested homework support in Lesson 1. (MMAE, MMR)
- For ELLs: Check that students have developed appropriate categories for their independent research reading. Highlight and discuss any language errors in the category labels.