



EXPEDITIONARY
LEARNING

Grade 4: Module 2B: Unit 2: Lesson 6

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



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Long-Term Targets Addressed (Based on NYSP12 ELA CCLS)	
<p>I can explain what a text says using specific details from the text. (RI.4.1)</p> <p>I can make inferences using specific details from text. (RI.4.1)</p> <p>I can summarize informational or persuasive text. (RI.4.2)</p> <p>I can conduct a research project to become knowledgeable about a topic. (W.4.7)</p> <p>I can document what I learn about a topic by taking notes. (W.4.8)</p> <p>I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4 a and b)</p>	
Supporting Learning Targets	Ongoing Assessment
<ul style="list-style-type: none">• I can make inferences based on information from a text.• I can support my inferences with details and examples from a text.• I can summarize a text using the main idea and supporting details found in the text.	<ul style="list-style-type: none">• Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish• Tracking My Progress, Mid-Unit 2 recording form



Agenda	Teaching Notes
<ol style="list-style-type: none">1. Opening<ol style="list-style-type: none">A. Engaging the Reader: Adding a Caption to Sketches (5 minutes)2. Work Time<ol style="list-style-type: none">A. Mid-Unit 2 Assessment: Reading and Synthesizing Information From Two Texts on the Pufferfish (50 minutes)3. Closing and Assessment<ol style="list-style-type: none">A. Reflecting on Learning Targets—Tracking My Progress (5 minutes)4. Homework<ol style="list-style-type: none">A. Continue reading your independent reading book for this unit.	<ul style="list-style-type: none">• In this lesson, students complete the Mid-Unit 2 Assessment. The texts and note-catchers used in the assessment will be used again by students in the End of Unit 2 Assessment. This mid-unit assessment builds toward the end of unit assessment by having students read two texts about the pufferfish and collect research notes about its defense mechanisms. In the end of unit assessment, they will use these texts and notes to write an informative page about the pufferfish. Be sure to hold on to students' copies of the text and research note-catchers so that they can be redistributed for use on the end of unit assessment in Lesson 12.• The Mid-Unit 2 Assessment contains excerpts from two texts, "Award-Winning Survival Skills" and "All Puffed Up." Students should be familiar with the excerpt from "Award-Winning Survival Skills," as that text has been read extensively in Unit 1. Even though this excerpt is not entirely new, it is used in this assessment because students will be working with the pufferfish section in a new way.• If students receive accommodations for assessment, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.• For some students, this assessment may require more than the 50 minutes allotted. Consider providing students time over multiple days if necessary.• After the Mid-Unit 2 Assessment, students reflect on the learning targets with Tracking My 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.• Post: Learning targets.



Lesson Vocabulary	Materials
track, reflect	<ul style="list-style-type: none">• Expert Group Animal research journals (from Lesson 2; one per student and one to display)• Sketch page (page 12 of Expert Group Animal research journal)• Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish(one per student)• Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish (answers, for teacher reference)• Tracking My Progress, Mid-Unit 2 recording form (one per student and one to display)

Opening	Meeting Students' Needs
<p>A. Engaging the Reader: Adding a Caption to Sketches (5 minutes)</p> <ul style="list-style-type: none">• Invite students to get out their Expert Group Animal research journal and turn back to their sketch on their Sketch page on page 12. Ask them to finish their a second draft sketch by writing a caption. Encourage students to use at least one of their vocabulary words in their caption.• Circulate and support as needed. If necessary, prompt students by asking:<ul style="list-style-type: none">* “How did you show a defense mechanism of your animal in a sketch? How will you capture this in your caption?”* “What vocabulary words from your research are you using in your caption?”• Invite students to share their sketch with a partner who is not in their expert animal group.• Use equity sticks to cold call students, asking them to share one detail their partner included in his or her sketch.	



Work Time	Meeting Students' Needs
<p>A. Mid-Unit 2 Assessment: Reading and Researching Defense Mechanisms of the Pufferfish (50 minutes)</p> <ul style="list-style-type: none">• Distribute the Mid-Unit 2 Assessment: Reading and Researching the Defense Mechanisms of the Pufferfish. Give students 50 minutes to complete it.• While students are taking the assessment, circulate to monitor their test-taking skills. This is an opportunity to analyze their behaviors while taking an assessment. Document strategies 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.	<ul style="list-style-type: none">• If students receive accommodations for assessment, communicate with the cooperating service providers regarding the practices of instruction in use during this study as well as the goals of the assessment.• For some students, this assessment may require more than the 50 minutes allotted. Consider providing time over multiple days if necessary.



Closing and Assessment	Meeting Students' Needs
<p>A. Reflecting on Learning Targets—Tracking My Progress (5 minutes)</p> <ul style="list-style-type: none">• Congratulate students on their hard work on the mid-unit assessment.• Distribute the Tracking My Progress, Mid-Unit 2 recording form. Remind students that successful learners keep <i>track</i> and <i>reflect</i> on their own learning. Point out that they have been doing this informally all year, during debriefs, when they consider how well they are doing making progress toward the learning targets.• Review Step 1 in the self-assessment and remind students that this is where you would like them to explain what the target means to them. For example, the first target uses the phrase “based on information from a text.” They should write what the target means in their own words by explaining what it means to infer.• Point out the second step and explain that this is similar to the thumbs-up, -sideways, or -down that they have used in previous lessons. They should also explain why they think they “need more help,” “understand some,” or are “on the way,” and give examples. Consider giving students an example such as: “I circled that I need more help, because I can’t remember what the word <i>summary</i> means.”• Ask students to complete the Tracking My Progress, Mid-Unit 2 form.• Collect these self-assessments to use as a formative assessment to guide instructional decisions during the remainder of this unit and Unit 3.	<ul style="list-style-type: none">• Developing self-assessment and reflection supports all learners, but research shows it supports struggling learners most.
Homework	Meeting Students' Needs
<ul style="list-style-type: none">• Continue reading your independent reading book for this unit.	



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Grade 4: Module 2B: Unit 2: Lesson 6

Supporting Materials



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

Name:

Date:

Long-Term Learning Targets Assessed:

I can explain what a text says using specific details from the text. (RI.4.1)

I can make inferences using specific details from text. (RI.4.1)

I can summarize informational or persuasive text. (RI.4.2)

I can conduct a research project to become knowledgeable about a topic. (W.4.7)

I can document what I learn about a topic by taking notes. (W.4.8)

I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4 a and b)

Part 1: Read both texts for the gist. Then, reread the texts and use them to answer the questions that follow.

From “Award-Winning Survival Skills”:

“Best Action Hero: The Spiny Pufferfish”

Ordinarily, the meek spiny pufferfish (*Diodon holocanthus*) drifts slowly in its native coral-reef habitats around the world. Its round body and small fins make it a sluggish swimmer—and perfect prey. But just try to eat it, and get ready to be BLOWN AWAY! When threatened, the puffer inflates to three times its normal size. “It just swallows water until its stomach is completely full,” says biologist and pufferfish expert Ralph Turingan at the Florida Institute of Technology. How does the fish change shape? Its skin and stomach are super-stretchable. Also, it lacks a rib cage—no bones to impede an expanding stomach. Dare to swallow an uninflated puffer? “Sharks have actually died from a pufferfish inflating in their esophagus,” says Turingan. Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!



Mid-Unit 2 Assessment:

Reading and Researching the Defense Mechanisms of the Pufferfish

“All Puffed Up”:

In the warm tropical ocean, there are fish of many shapes and sizes. Some are harmless vegetarians like the parrotfish. Others are dangerous predators like the tiger shark. And some fish that seem harmless are really quite dangerous.

One such fish swims slowly along. He looks like easy prey. He is the porcupine pufferfish, and his cute cartoon face hides a deadly secret. If a tiger shark or barracuda approaches, he will not try to swim away. Instead, he will quickly swallow water until he is completely full and round. This makes his spines stick out in all directions. He is now impossible to swallow. A predator could manage to sneak up and swallow him, but it would be in for another surprise because he is also toxic.

These defenses won't stop one predator, though. Mankind. In Japan, the porcupine pufferfish is considered a delicacy. The puffer is a rare and expensive food, but it is also deadly to eat if you don't know how to prepare it. Chefs in Japan have to be specially trained to remove the poisonous parts of this fish before they serve it.

Today there are no fishing nets close by and no predators in sight. This little puffer is safe. He continues to swim along, looking for a tasty crab or sea urchin to eat. He may look cute and harmless and like perfect prey, but his deadly defenses keep him quite safe.

Written by Expeditionary Learning for Instructional Purposes. Lexile 810

Sources:

<http://www.flmnh.ufl.edu/fish/Gallery/Descript/Porcupine/Porcupine.htm>

<http://animals.nationalgeographic.com/animals/fish/pufferfish/>

<http://www.bristolzoo.org.uk/porcupine-pufferfish>

<http://www.britannica.com/EBchecked/topic/482954/puffer>



Mid-Unit 2 Assessment:

Reading and Synthesizing Information From Two Texts on the Pufferfish

1. Find and reread the following sentence from Paragraph 1 of “Best Action Hero: The Spiny Pufferfish”:

“When threatened, the puffer inflates to three times its normal size.”

Which explanation is most appropriate for how the pufferfish inflates?

- a. The pufferfish fills up its stomach with air.
- b. The pufferfish fills up its stomach with water.
- c. The pufferfish fills up its spines with air.
- d. The pufferfish fills up its spines with water.

2. Which line from the text “All Puffed Up” best supports your answer for Question 1?

- a. “If a tiger shark or barracuda approaches, he will not try to swim away.”
- b. “Instead, he will quickly swallow water until he is completely full and round.”
- c. “This makes his spines stick out in all directions.”
- d. “He continues to swim along, looking for a tasty crab or sea urchin to eat.”

3. In “Best Action Hero: The Spiny Pufferfish,” the text says, “Its skin and stomach are super-stretchable.” Using your knowledge of affixes, write the definition of the word *super-stretchable* as used in the context of this sentence:



Mid-Unit 2 Assessment:
Reading and Synthesizing Information From Two Texts on the Pufferfish

4. Which line from the text best supports your answer for Question 3?
- a. "Its round body and small fins make it a sluggish swimmer—and perfect prey."
 - b. "When threatened, the puffer inflates to three times its normal size."
 - c. "Sharks have actually died from a pufferfish inflating in their esophagus."
 - d. "Other predators who've witnessed Superman in action stay clear of the Big Puffer!"

5. Read the following sentence from "Best Action Hero: The Spiny Pufferfish":

"Other predators who've witnessed Superman in action stay clear of the Big Puffer!"

Which explanation is most appropriate for why other predators stay clear of the pufferfish?

- a. The predators know it is dangerous from watching it in action.
- b. The predators were poisoned by the pufferfish before.
- c. The predators think the pufferfish is harmless.
- d. The predators think the pufferfish is easy prey.



Mid-Unit 2 Assessment:

Reading and Researching the Defense Mechanisms of the Pufferfish

Part 2: Summarizing the text: After thinking more closely about “Best Action Hero: The Spiny Pufferfish,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

After thinking more closely about “All Puffed Up,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.



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

Part 3: Reread the texts and complete the research note-catcher.

Focus question: How does the pufferfish use its body and behaviors to help it survive?

Expert Group Animal: Pufferfish

Source: “Award-Winning Survival Skills”

Details about the Defense Mechanism <ul style="list-style-type: none">• How does the animal use its body to survive?• How does the animal use its behavior to survive?	How This Helps the Animal Survive



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

Focus question: How does the pufferfish use its body and behaviors to help it survive?

Expert Group Animal: Pufferfish

Source: “All Puffed Up”

Details about the Defense Mechanism <ul style="list-style-type: none">• How does the animal use its body to survive?• How does the animal use its behavior to survive?	How This Helps the Animal Survive



Mid-Unit 2 Assessment:

Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

Long-Term Learning Targets Assessed:

I can explain what a text says using specific details from the text. (RI.4.1)

I can make inferences using specific details from text. (RI.4.1)

I can summarize informational or persuasive text. (RI.4.2)

I can conduct a research project to become knowledgeable about a topic. (W.4.7)

I can document what I learn about a topic by taking notes. (W.4.8)

I can use a variety of strategies to determine the meaning of words and phrases. (L.4.4 a and b)

Part 1: Read both texts for the gist. Then, reread the texts and use them to answer the questions that follow.

From “Award-Winning Survival Skills”:

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Ordinarily, the meek spiny pufferfish (*Diodon holocanthus*) drifts slowly in its native coral-reef habitats around the world. Its round body and small fins make it a sluggish swimmer—and perfect prey. But just try to eat it, and get ready to be BLOWN AWAY! When threatened, the puffer inflates to three times its normal size. “It just swallows water until its stomach is completely full,” says biologist and pufferfish expert Ralph Turingan at the Florida Institute of Technology. How does the fish change shape? Its skin and stomach are super-stretchable. Also, it lacks a rib cage—no bones to impede an expanding stomach. Dare to swallow an uninflated puffer? “Sharks have actually died from a pufferfish inflating in their esophagus,” says Turingan. Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!



Mid-Unit 2 Assessment:

Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

“All Puffed Up”:

In the warm tropical ocean, there are fish of many shapes and sizes. Some are harmless vegetarians like the parrotfish. Others are dangerous predators like the tiger shark. And some fish that seem harmless are really quite dangerous.

One such fish swims slowly along. He looks like easy prey. He is the porcupine pufferfish, and his cute cartoon face hides a deadly secret. If a tiger shark or barracuda approaches, he will not try to swim away. Instead, he will quickly swallow water until he is completely full and round. This makes his spines stick out in all directions. He is now impossible to swallow. A predator could manage to sneak up and swallow him, but it would be in for another surprise because he is also toxic.

These defenses won't stop one predator, though. Mankind. In Japan, the porcupine pufferfish is considered a delicacy. The puffer is a rare and expensive food, but it is also deadly to eat if you don't know how to prepare it. Chefs in Japan have to be specially trained to remove the poisonous parts of this fish before they serve it.

Today there are no fishing nets close by and no predators in sight. This little puffer is safe. He continues to swim along, looking for a tasty crab or sea urchin to eat. He may look cute and harmless and like perfect prey, but his deadly defenses keep him quite safe.

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<http://animals.nationalgeographic.com/animals/fish/pufferfish/>

<http://www.bristolzoo.org.uk/porcupine-pufferfish>

<http://www.britannica.com/EBchecked/topic/482954/puffer>



Mid-Unit 2 Assessment:

Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

1. Find and reread the following sentence from Paragraph 1 of “Best Action Hero: The Spiny Pufferfish”:

“When threatened, the puffer inflates to three times its normal size.”

Which explanation is most appropriate for how the pufferfish inflates?

- a. The pufferfish fills up its stomach with air.
- b. The pufferfish fills up its stomach with water.**
- c. The pufferfish fills up its spines with air.
- d. The pufferfish fills up its spines with water.

2. Which line from the text “All Puffed Up” best supports your answer for Question 1?

- a. “If a tiger shark or barracuda approaches, he will not try to swim away.”
- b. “Instead, he will quickly swallow water until he is completely full and round.”**
- c. “This makes his spines stick out in all directions.”
- d. “He continues to swim along, looking for a tasty crab or sea urchin to eat.”

3. In “Best Action Hero: The Spiny Pufferfish,” the text says, “Its skin and stomach are super-stretchable.” Using your knowledge of affixes, write the definition of the word *super-stretchable* as used in the context of this sentence:

can be expanded beyond the norm



Mid-Unit 2 Assessment:
Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

4. Which line from the text best supports your answer for Question 3?
- a. “Its round body and small fins make it a sluggish swimmer—and perfect prey.”
 - b. “When threatened, the puffer inflates to three times its normal size.”**
 - c. “Sharks have actually died from a pufferfish inflating in their esophagus.”
 - d. “Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!”

5. Read the following sentence from “Best Action Hero: The Spiny Pufferfish”:

“Other predators who’ve witnessed Superman in action stay clear of the Big Puffer!”

Which explanation is most appropriate for why other predators stay clear of the pufferfish?

- a. The predators know it is dangerous from watching it in action.**
- b. The predators were poisoned by the pufferfish before.
- c. The predators think the pufferfish is harmless.
- d. The predators think the pufferfish is easy prey.



Mid-Unit 2 Assessment:
Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

Part 2: Summarizing the text: After thinking more closely about “Best Action Hero: The Spiny Pufferfish,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

The pufferfish protects itself by inflating to three times its normal size. Its body doesn’t have bones and is super-stretchable.

After thinking more closely about “All Puffed Up,” summarize what you think this reading is mostly about. Use several specific details from the text in your summary.

The pufferfish looks harmless but is very dangerous. It protects itself by swallowing water and inflating, and its spikes make it hard to swallow. It is also toxic.



Mid-Unit 2 Assessment:
Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

Part 3: Reread the texts and complete the research graphic organizers.

Focus question: How does the pufferfish use its body and behaviors to help it survive?

Expert Group Animal: Pufferfish

Source: “Award-Winning Survival Skills”

Details about the Defense Mechanism <ul style="list-style-type: none">• How does the animal use its body to survive?• How does the animal use its behavior to survive?	How This Helps the Animal Survive
<ul style="list-style-type: none">• “The puffer inflates to three times its normal size.”	<ul style="list-style-type: none">• It is too big to swallow.
<ul style="list-style-type: none">• “It swallows water until its stomach is completely full.”	<ul style="list-style-type: none">• This is how it is able to inflate to three times its normal size.
<ul style="list-style-type: none">• The pufferfish’s skin and stomach are stretchy.	<ul style="list-style-type: none">• This allows the puffer to be able to inflate.



Mid-Unit 2 Assessment:
Reading and Researching the Defense Mechanisms of the Pufferfish
(Answers, for Teacher Reference)

Focus question: How does the pufferfish use its body and behaviors to help it survive?

Expert Group Animal: Pufferfish

Source: “All Puffed Up”

Details about the Defense Mechanism <ul style="list-style-type: none">• How does the animal use its body to survive?• How does the animal use its behavior to survive?	How This Helps the Animal Survive
<ul style="list-style-type: none">• A pufferfish won’t swim away if a tiger shark or barracuda comes close to it.	<ul style="list-style-type: none">• He’s not fast enough to escape these predators, so he inflates instead.
<ul style="list-style-type: none">• “He will quickly swallow water until he is completely full and round.”	<ul style="list-style-type: none">• This makes his spikes stick out in all directions, which makes it impossible for predators to swallow him.
<ul style="list-style-type: none">• “He is also toxic.”	<ul style="list-style-type: none">• He will kill his predator or make it sick.



Tracking My Progress, Mid-Unit 2

Name: _____

Date: _____

Learning target: I can make inferences based on information from a text.

1. The target in my own words is:

2. How am I doing? Circle one.

**I need more help to
learn this**



I understand some of this



I am on my way!



3. The evidence to support my self-assessment is:



Tracking My Progress, Mid-Unit 2

Learning target: I can summarize a text using the main idea and supporting details found in the text.

1. The target in my own words is:

2. How am I doing? Circle one.

**I need more help to
learn this**



I understand some of this



I am on my way!



3. The evidence to support my self-assessment is:
