

Deep-Sea Danger



Whales sometimes mistake plastic pollution for food. A new study from Duke University explains why.

LEXILE: 970L

SCIENCE (NGSS) STANDARD: Earth and Human Activity

COMMON CORE (CCSS) STANDARDS: RI.6-8.1, RI.6-8.3, RI.6-8.4, SL.6-8.4

ENGAGE THE READER

Ask students what they think is the world's loudest animal. After some guesses, tell them the answer is sperm whales. Can anyone guess why they're so loud? Explain that sperm whales make noise to communicate and to find prey in deep ocean waters.

QUESTIONS FOR CLOSE READING AND DISCUSSION

- Why do sperm and beaked whales rely on echolocation? Explain the process.
- What did the team at the Duke University Marine lab find?
- How does Greg Merrill feel about the results of the study? Do you agree with him?

EXTEND LEARNING

Take a poll. Ask: Has anyone seen plastic waste in or around a river or ocean? Have students consider how plastic makes its way to the sea. Write a list. Then ask students to name some other ways that plastic waste can be harmful to wildlife.

Ask students if they think they could go a day without any plastic. Explain that many clothes are made with plastic. Polyester, acrylic, and nylon are all forms of plastic. Have students check their clothing labels. Then have students research other everyday items that contain plastic. Assign them to keep track of all the things they use each day that contain plastic. Ask them to also keep track of the plastic they dispose of each day. Then come up with a class challenge either to raise awareness or to reduce waste. Examples include a contest to see who can use the fewest plastic-based items in a day. Or you can provide students with a jar in which they'll collect all the waste they create in a day. See if they can fit everything into the jar. End with a discussion of whether the challenge made them more aware, and whether it will cause them to change their habits.

COVER STORY QUIZ + ANSWER KEY

The cover quiz can be found on page 2 of this guide.

1. C (RI.1) **2. A** (RI.4) **3. C** (RI.3) **4. B** (RI.2) **5. D** (RI.1)

To create a digital quiz, you can use our template [here](#).

6. A (RI.6) **7. Answers will vary.** (W.1)

Name _____ Date _____

Use this week's cover story, "Deep-Sea Danger," to answer the questions below. For questions 1–6, circle the letter next to the best answer. If you need more space to write your response to question 7, use the back of this page.

<p>1. What can you learn from the first section of the text?</p> <ul style="list-style-type: none"> A. the number of animal species in the ocean B. how whales use echolocation to navigate C. the amount of plastic in the ocean D. how whales mix up plastic and prey 	<p>4. What is the main problem in the article?</p> <ul style="list-style-type: none"> A. Whales aren't able to hunt. B. Whales are eating plastic. C. Kids are littering. D. Kids are concerned about marine life.
<p>2. What is echolocation?</p> <ul style="list-style-type: none"> A. the process by which whales hear objects deep in the ocean B. the sounds made by objects in the darkest depths of the sea C. a study of how whales communicate D. a type of whale 	<p>5. How does Greg Merrill suggest that people address the problem discussed in the article?</p> <ul style="list-style-type: none"> A. Make changes in their daily lives. B. Advocate for solutions. C. Join studies of sperm whales. D. both A and B
<p>3. What do whales do first when using echolocation to hunt?</p> <ul style="list-style-type: none"> A. follow sounds B. identify prey C. make a sound D. listen 	<p>6. Why did the author write this story?</p> <ul style="list-style-type: none"> A. to illustrate the dangers of pollution for marine life B. to inform readers about different whales' hunting habits C. to persuade readers to put trash in the bin D. to entertain readers with stories of whales hunting

7. Draft a persuasive letter to a leader of your choice. Encourage them to take action against plastic pollution.
