

Frozen Home

Meet the creatures whose homes are frozen, floating mountains.

Icebergs melt and fall apart as they drift through the ocean. Researchers saw a huge waterfall pouring off one of the icebergs as it melted.



James Slaughter/National Science Foundation

A giant petrel chick. Petrels and other birds fly between icebergs.

Scientists recently discovered that some of the world's coolest critters live around icebergs.

Researchers explored two icebergs in the Weddell Sea near Antarctica. The icebergs began floating after they broke off a sheet of ice that was connected to land. One of the icebergs was 13 miles long. The other iceberg reached 1,000 feet below the surface of the sea. That's longer than three football fields!

The research team discovered that water from the melted icebergs had **nutrients**. Nutrients are the parts of food that help animals and plants grow.

The nutrients from the icebergs helped make an ecosystem. An **ecosystem** is an environment in which animals and plants depend on one another to live. Take a look at the animals and plants that live in the iceberg ecosystem.

Petrels and other birds fly between icebergs. They eat the krill and fish that live around icebergs.

Some fish, such as **silverfish**, live in very cold water. They eat plankton, krill, and other small animals.

Plankton are animals and plants that float in seawater. They absorb nutrients from water and sunlight. They are too small to see with your eyes.

Krill are tiny animals that look like shrimp. Krill eat plankton.

Name: _____

Date: _____

1. Which of the following is true of plankton?

- A Plankton eat krill.
- B Plankton fly between icebergs.
- C Plankton look like shrimp.
- D Plankton are too small to see with your eyes.

2. What is the same about all the animals described in this text?

- A All the animals swim in the waterfalls from the icebergs.
- B All the animals are part of the iceberg ecosystem.
- C All the animals fly between icebergs.
- D All the animals eat plankton.

3. It can be inferred from the passage that

- A krill can only be found in the Waddell Sea
- B krill are very tasty
- C krill are animals and plants that float in seawater
- D krill are larger than plankton

4. Read the following sentence: "Icebergs melt and fall apart as they drift through the ocean."

Drift most nearly means

- A move slowly
- B point forward
- C melt suddenly
- D fall quickly

5. The author's primary purpose in writing this passage is to

- A present the problems sea creatures face living among icebergs and suggest possible solutions
- B describe the exploration of two icebergs in the Weddell Sea
- C describe different creatures that live around icebergs
- D provide the sequence of events that led to scientists finding an iceberg with a waterfall

6. What discovery did scientists make about the water from melted icebergs?

7. What are two things that petrels and silverfish have in common?

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Water that melts from an iceberg contains nutrients, _____ an ecosystem is created near the iceberg.

- A but
- B because
- C so
- D however

9. Answer the following questions based on the sentence below.

Scientists in the Weddell Sea near Antarctica explored icebergs to study the water melting from the icebergs.

Who? scientists

(did) What? _____

Where? _____

Why? _____

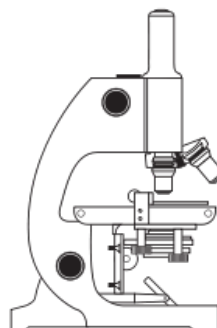
Directions: Read the vocabulary word and definition below to complete questions 10a, 10b, and 11.

Vocabulary Word: **explore** (ex · plore): to go somewhere to learn more about it or to find something.

10a. Read the sentences below and underline all forms of the word **explore**.

1. There were several famous trips in the early 1900s to explore Antarctica.
2. There is still a lot of land left to explore in the Amazon.
3. When I visit my grandmother's house, I like to go upstairs and explore the attic.
4. As we read the Declaration of Independence, we will explore the idea that people are born equal.
5. I decided to explore some different ways of cooking rice to find the best one.

10b. Which object would a scientist more likely use to explore space?



11. Is scuba diving a good way to explore the ocean? Why or why not?

Teacher Guide & Answers

Passage Reading Level: Lexile 760

Featured Text Structure: Enumerative – the writer includes a list, giving examples of something. This text structure is often combined with cause/effect or problem/solution.

Passage Summary: This passage describes the discovery of the iceberg ecosystem. The passage then presents a list of animals and plants that live in this ecosystem.

1. Which of the following is true of plankton?

- A Plankton eat krill.
- B Plankton fly between icebergs.
- C Plankton look like shrimp.
- D **Plankton are too small to see with your eyes.**

2. What is the same about all the animals described in this text?

- A All the animals swim in the waterfalls from the icebergs.
- B **All the animals are part of the iceberg ecosystem.**
- C All the animals fly between icebergs.
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5. The author's primary purpose in writing this passage is to

- A present the problems sea creatures face living among icebergs and suggest possible solutions
- B describe the exploration of two icebergs in the Weddell Sea
- C **describe different creatures that live around icebergs**
- D provide the sequence of events that led to scientists finding an iceberg with a waterfall

6. What discovery did scientists make about the water from melted icebergs?

Suggested answer: Scientists discovered that the water from melted icebergs contains nutrients, which help plants and animals grow. [paragraph 4]

7. What are two things that petrels and silverfish have in common?

Suggested answer: Both petrels and silverfish are part of the iceberg ecosystem, and both eat krill. [paragraphs 5-7]

8. The question below is an incomplete sentence. Choose the word that best completes the sentence.

Water that melts from an iceberg contains nutrients, _____ an ecosystem is created near the iceberg.

- A but
- B because
- C **so**
- D however

9. Answer the following questions based on the sentence below.

Scientists in the Weddell Sea near Antarctica explored icebergs to study the water melting from the icebergs.

Who? scientists

(did) What? **explored the icebergs**

Where? **in the Weddell Sea near Antarctica**

Why? **to study the water melting from the icebergs**

To the Teacher: ReadWorks recommends that you teach this vocabulary word to the whole class out loud using the four steps listed below.

Vocabulary Word: **explore** (ex · plore): to go somewhere to learn more about it or to find something.

Step 1: Introduce the word

- a. Teacher writes the word on the board and divides it into syllables: (ex · plore)
- b. Teacher says: "This word is explore. What is the word?" [All students reply together out loud: "explore."]

Step 2: Provide a child-friendly definition

- a. Teacher says: "Explore means to go somewhere to learn more about it or to find something."
- b. Teacher says: "In the text, we read that researchers explored two icebergs. This means that they went to the icebergs to learn more about them."
- c. Teacher says: "What is the word?" [All students reply together out loud: "explore."]

Step 3: Practice the word

Teacher provides examples and additional opportunities to repeat the word. Read the first sentence out loud to your students. Begin reading it again and when you come to the vocabulary word, prompt students to say the vocabulary word out loud. Then, finish reading the sentence out loud to your students.

Directions: Read the vocabulary word and definition below to complete questions 10a, 10b, and 11.

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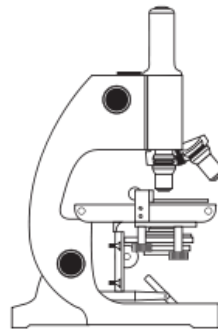
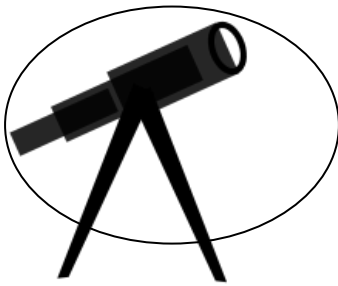
10a. Read the sentences below and underline all forms of the word **explore**.

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4. As we read the Declaration of Independence, we will explore the idea that people are born equal.
5. I decided to explore some different ways of cooking rice to find the best one.

Step 4: Check for student understanding

To the Teacher: This step can be completed as a whole class activity or as an independent practice.

10b. Which object would a scientist more likely use to explore space?



11. Is scuba diving a good way to explore the ocean? Why or why not?

Suggested answer: Yes, because it gives you an opportunity to see and learn about the ocean's sea life and environment.

Suggested Additional Vocabulary: icebergs, drift, depend