

Lesson 1

Ask and Answer Questions About Key Ideas



Learning Target

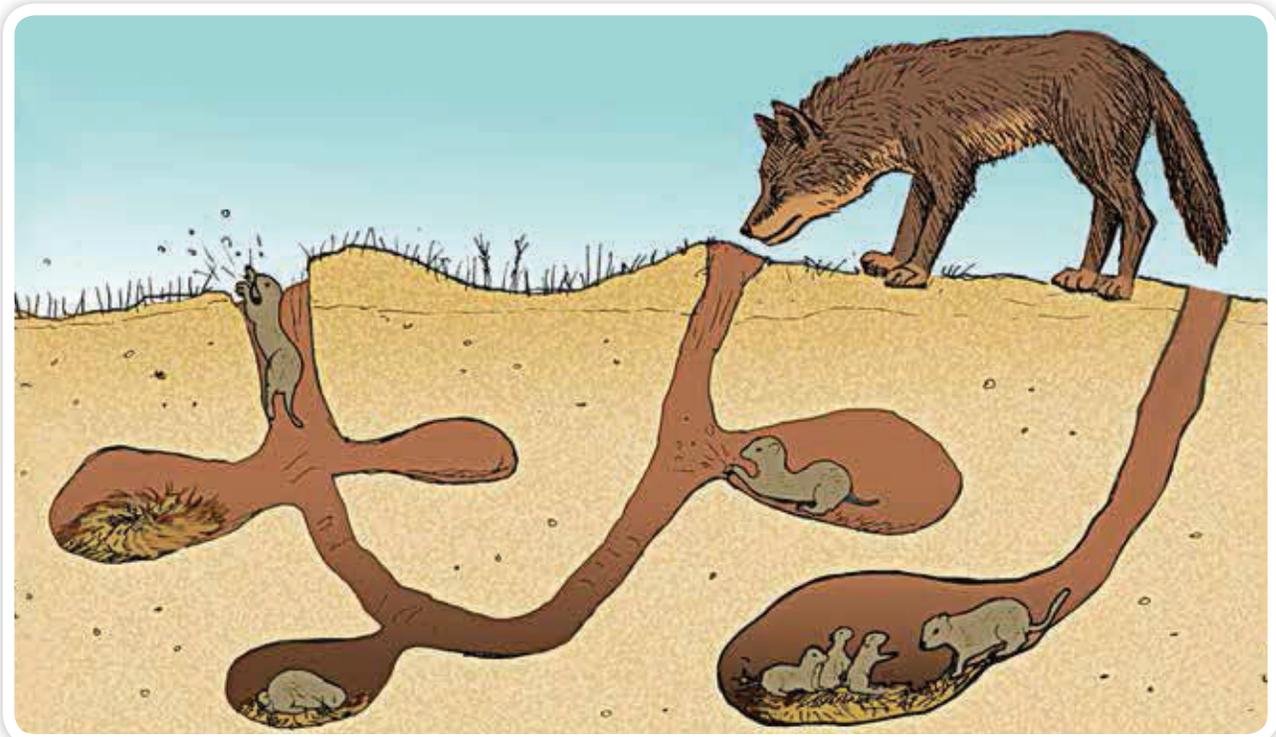


Asking and answering questions about what you read will help you understand the text.

- ▶ **Read** We ask questions to get information or to understand something. Often questions begin with words such as *who*, *what*, *when*, *where*, *why*, and *how*. As you read, ask yourself questions about the text. Then look for **key details** in the text to answer your questions. Asking and answering questions will help you understand the **topic** of the text.

Look at this picture. What questions do you have about what you see?

Prairie Dog Homes



► **Think** What are some questions you could ask about the picture?
 Read the questions in the first column. Then use key details from
 the picture to answer these questions.

Question	Answer	Key Details
1 What are most of the animals in the picture called?		The title of the picture is "Prairie Dog Homes."
2 Where do these animals live?		
3 Why do these animals live underground?		

► **Talk** Take turns with your partner asking and answering questions about the picture.



Academic Talk

Use this phrase and word to talk about the text.

- key details
- topic

BEAVER LODGES

by Bryan Davis

- 1 Do you know the saying “busy as a beaver”? People say this because beavers are always working. These crafty creatures spend a lot of time building their homes.
- 2 Beaver homes are called lodges. Lodges are found along streams, rivers, ponds, and lakes. Beavers build these homes from branches and rocks. They use mud to hold them together.
- 3 When they can, beavers build their homes into the banks along the water. Other times, they need to make a safe spot, first. To do this, they build a dam from logs, branches, and mud. They get the logs by gnawing at trees until they fall down. A dam is like a wall that blocks water from flowing. It then forms a pond. Once the dam is built, beavers can get to the business of building their lodge.
- 4 Beaver lodges are shaped like a dome. They are usually about 10 feet high and 20 feet across. Most lodges have at least one underwater opening. To get inside, the beavers must swim underwater. These “secret” openings keep out unwanted predators.
- 5 Inside the beaver lodge are different “rooms.” There is an eating room and a nesting room. The floor of the lodge is built up out of the water. It is also made from rocks, branches, and mud. It is covered with plants and other soft materials.
- 6 A family of beavers lives in a lodge. Two parents and two sets of their offspring often live together.



Close Reader Habits

Think of two questions to ask about beaver lodges. Then **underline** words and phrases that help you answer your questions.

Explore

How can asking and answering questions as you read help you learn more about beavers and their homes?



You can ask questions that begin with *what*, *where*, *why*, and *how*.

Think

- 1 Complete the chart by asking questions about the passage. Then answer your questions with key details from the text.

Question	Answer	Key Details
<p><i>What do beavers use to build their lodges?</i></p>		

Talk

- 2 What does a beaver lodge look like? Using key details from the text, discuss the answer to the question.

Write

- 3 **Short Response** Why are the beaver lodge openings underwater? Use key details from the text in your response. Use the space provided on page 16 to write your answer.

HINT Reread the passage to find key details.



Termite Mounds

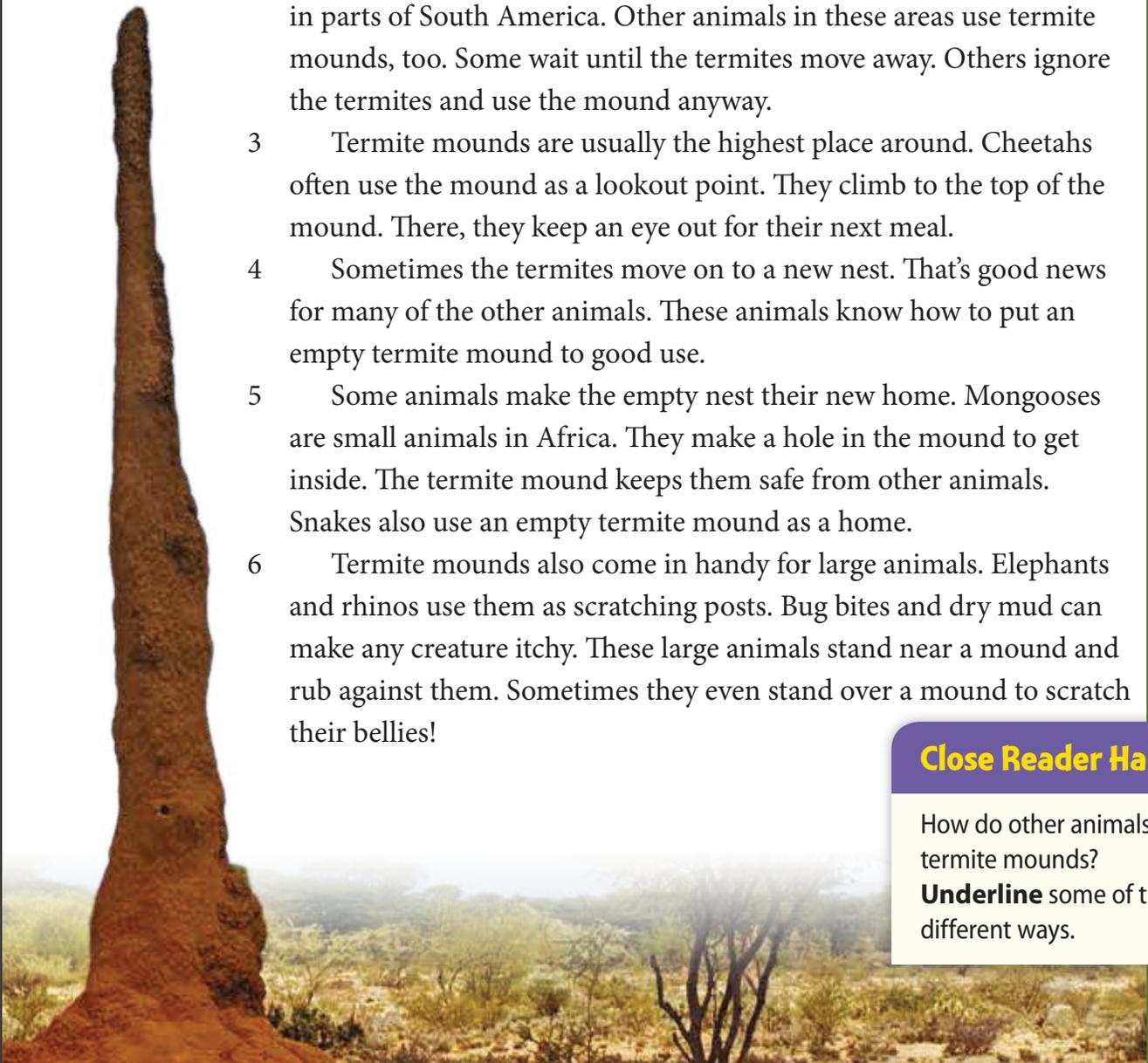
by Madeline Clark

- 1 Termites are insects that live together in nests. Some termites are called mound builders. They build their nests from mounds of clay. Some of these mounds are more like towers. They stand almost 35 feet tall!
- 2 Mound builders are found in Africa and Australia. They are also in parts of South America. Other animals in these areas use termite mounds, too. Some wait until the termites move away. Others ignore the termites and use the mound anyway.
- 3 Termite mounds are usually the highest place around. Cheetahs often use the mound as a lookout point. They climb to the top of the mound. There, they keep an eye out for their next meal.
- 4 Sometimes the termites move on to a new nest. That's good news for many of the other animals. These animals know how to put an empty termite mound to good use.
- 5 Some animals make the empty nest their new home. Mongooses are small animals in Africa. They make a hole in the mound to get inside. The termite mound keeps them safe from other animals. Snakes also use an empty termite mound as a home.
- 6 Termite mounds also come in handy for large animals. Elephants and rhinos use them as scratching posts. Bug bites and dry mud can make any creature itchy. These large animals stand near a mound and rub against them. Sometimes they even stand over a mound to scratch their bellies!

Close Reader Habits

How do other animals use termite mounds?

Underline some of the different ways.





Good questions often begin with the words *why*, *when*, *where*, and *how*.

Think

- 1** This question has two parts. Answer Part A. Then answer Part B.

Part A

Why do cheetahs climb up termite mounds?

- A** They can see farther to find animals to hunt.
- B** They can sleep safely on top of termite mounds.
- C** They use termite mounds as scratching posts.
- D** They can call to each other more easily.

Part B

Which sentence from the passage **best** supports the answer you chose for Part A above?

- A** "Other animals in these areas use termite mounds, too."
- B** "There, they keep an eye out for their next meal."
- C** "Some animals make the empty nest their new home."
- D** "Others ignore the termites and use the mound anyway."

- 2** Which question can be answered by reading paragraph 5?

- A** How tall is a termite mound?
- B** Why do mongooses move into termite mounds?
- C** What large animals use termite mounds?
- D** What animals are mound builders?

Talk

- 3** How do large animals use termite mounds? Refer to specific details from the article as you talk with your partner.

Write

- 4 Short Response** Why are termite mounds important to so many animals? Include details from the passage in your response. Use the space provided on page 17 to write your answer.

HINT What did you underline when you read the article?



Write Use the space below to write your answer to the question on page 13.

BEAVER LODGES

3 Short Response Why are the beaver lodge openings underwater? Use key details from the text in your response.

HINT Reread the passage to find key details.



Don't forget to check your writing.



Write Use the space below to write your answer to the question on page 15.

Termite Mounds

4 Short Response Why are termite mounds important to so many animals? Include details from the passage in your response.

HINT What did you underline when you read the article?

Check Your Writing

- Did you read the prompt carefully?
- Did you put the prompt in your own words?
- Did you use the best evidence from the text to support your ideas?
- Are your ideas clearly organized?
- Did you write in clear and complete sentences?
- Did you check your spelling and punctuation?



Teeny Tiny Tardigrades

by Mary Reina, *Highlights*

WORDS TO KNOW

As you read, look inside, around, and beyond these words to figure out what they mean.

- radiation
- survive
- thrive
- function

1 What would you say if someone asked you to name Earth's toughest survivor? Camels can go a week without drinking. A cockroach can survive more radiation than a person. But there is a teeny tiny creature that can go without food or water for years. It is so small that it can be seen only under a microscope. Its real name is tardigrade. Most people call it a water bear.

→ Surviving Everything

2 Water bears look like soft, squishy bugs. People call them bears because they walk the way bears do. Most water bears are smaller than the period at the end of this sentence. Don't let their size fool you. They are found in places that would kill most living things.

3 Some water bears survive in the boiling water found in hot springs. Others live miles below the ocean surface. They survive with tons of water pressing down on them.

4 Not all water bears live in extreme places. They can be found in parks, forests, and gardens. They thrive in damp, woody areas where mosses and other plant life grow. Many feed by sucking juices out of plants. Others eat creatures that are smaller than they are.

This photograph of a water bear was taken with a microscope. A *microscope* is a tool that lets you see tiny objects or creatures.



→ Drying Up

- 5 Water bears must have water to stay active. It helps them eat, move, and breathe. So what happens when the water around one of these tiny creatures dries up? First, it pulls in its eight legs. Then it curls its body into a barrel shape called a tun. It loses 99 percent of its water. Then every single life function of the water bear stops.
- 6 When conditions get better, the water bear stretches its little legs and starts moving and eating again.
- 7 Water bears can survive the extreme cold and radiation of outer space. Scientists sent some water bears into space as part of an unmanned mission. They came back fine!
- 8 Not so long ago, most scientists believed life did not exist beyond Earth. Now, many think it is possible. If water bears can survive a visit to outer space, who knows what other creatures might live there?

Thousands of water bears spent more than a week in space before they were returned to Earth.



Think Use what you learned from reading the selection to respond to these questions.

1 Which **two** questions can be answered by reading paragraph 2?

- A** How do water bears survive in extreme surroundings?
- B** What do tardigrades look like?
- C** What do water bears need to stay active?
- D** How and what do water bears eat?
- E** How large are water bears?
- F** Why does a tardigrade need water?

2 Why are tardigrades called “water bears”?

- A** They have sharp claws like bears.
- B** They are named after a type of bear.
- C** They walk like bears.
- D** They look something like bears.

3 Read the sentence from paragraph 4.

Not all water bears live in extreme places.

Based on how it is used in the passage, what does the word *extreme* mean? Use key details from the text in your response.

- 4** Based on details in the passage, what **three** types of places is this sentence talking about?

They are found in places that would kill most living things.

- A** damp woody areas
 - B** the boiling water of hot springs
 - C** the deepest parts of the ocean
 - D** parks and gardens
 - E** inside volcanoes
 - F** outer space
- 5** This question has two parts. First, answer Part A. Then answer Part B.

Part A

Read these sentences from paragraph 5.

Water bears must have water to stay active. It helps them eat, move, and breathe.

Which question can be answered after reading these sentences?

- A** How long can a water bear survive without water?
- B** What types of food do water bears eat?
- C** Where do water bears get their water?
- D** Why is water so important to water bears?

Part B

Which other sentence from the text also helps answer the question you chose in Part A?

- A** "Then every single life function of the water bear stops."
- B** "Some water bears survive in the boiling water found in hot springs."
- C** "When conditions get better, the water bear stretches its little legs and starts moving and eating again."
- D** "But there is a teeny tiny creature that can go without food or water for years."



Write

6 Short Response Why are tardigrades important to scientists who are studying outer space? Use details from the article in your response.



Learning Target

Explain how asking and answering questions can help you better understand any text.
