Honey Storage

Larva Cells

Wax
Walls

Queen
Chamber

Read the short story and answer each question.

How Bees Build a Hive

If you've ever seen a beehive hanging from a tree branch or tucked beneath a rooftop, you've witnessed one of nature's most incredible construction projects. Bees don't just live in hives—they build them from scratch. But how do these tiny insects know how to do it?

The process begins with worker bees collecting wax from glands in their abdomens. They chew the wax until it softens, then carefully shape it into hexagons. Why hexagons? Scientists have discovered that hexagons fit together without leaving gaps, which makes the hive both strong and space-efficient. This structure allows bees to store honey and raise young using as little wax as possible.

Building a hive takes teamwork. Each worker bee has a specific job, from guarding the entrance to feeding larvae. It can take weeks to complete a full hive, depending on the weather and the size of the bee colony.

In the diagram below, you can see how the hive is organized. Each section has a purpose—from storing honey to housing developing bees. The hive's design helps the colony survive, thrive, and stay organized.



How Bees Build a Hive

- 1. What is one reason bees build their hives using hexagons?
- A. They look the prettiest in nature.
- B. Hexagons are the strongest shape and don't leave empty space.
- C. Other shapes can't hold honey well.
- D. Bees learn hexagons from other insects.

- 2. How does the diagram help you better understand the text?
- A. It explains the bee's life cycle in more detail.
- B. It shows what kinds of flowers bees visit.
- C. It visually shows the parts of the hive described in the text.
- D. It shows how bees defend themselves from predators.

3. Fill in the blank:	
Bees create wax from specialshape it into hexagons for the hive.	in their bodies, then
4. What jobs do worker bees have, and how do build a hive?	they work together to
5. Use both the text and the diagram to explain how the hive's structure helps the bees survive.	



Parent and Teacher Guide

Guide Reading Level: S Lexile Level: 850L-1000L

Grade Level: 5th Grade, Beginning of the Year

Genre: Informational (Life Science)

Introducing the Text

"Today we're reading about how bees build their hives. As we read, we'll focus on how the text and diagram work together to help us understand the hive's structure. We'll learn how bees use their bodies and teamwork to create a strong home."

Vocabulary: hexagon, abdomen, efficient, colony, larvae

Before Reading Discussion Questions

- 1. What do you already know about bees or their hives?
- 2. Have you ever seen a beehive in real life? What did it look like?
- 3. Why do you think bees build their own homes instead of living in something already made?

During Reading Discussion Questions

- 1. Why do bees use hexagons instead of another shape?
- 2. What are some of the jobs worker bees do during hive construction?
- 3. What does the diagram show that the words alone do not?

After Reading Discussion Questions

- 1. How do the text and diagram work together to explain hive structure?
- 2. What would be harder to understand without the diagram?
- 3. Why is teamwork important to the bees' success?

Activity Idea

Have students build their own model of a beehive using hexagon paper tiles. Assign each section (honey, eggs, larvae, queen) a different color. Students label each section and write a short description of its purpose, reinforcing understanding of both structure and function.

