

# Click®

## The Buzz on Bees

Students will buzz happily through this month's issue of CLICK magazine as they learn all about bees. Articles focus on different aspects of a bee's life and emphasize why bees are deservedly referred to as "the world's most important insect."

## CONVERSATION QUESTION

Why are bees special insects?

## TEACHING OBJECTIVES

- Students will learn about the physical characteristics of bees.
- Students will learn how honey is harvested.
- Students will learn that a successful hive is the result of hard-working bees.
- Students will study the structure and function of a bee's body parts.
- Students will demonstrate the ability to properly sequence a studied process.
- Students will obtain information from a nonfiction article.
- Students will learn about compound words.
- Students will work in small groups to create a batch of "honey" modeling dough.
- Students will take part in the Great Sunflower Project.



In addition to supplemental materials focused on core STEM skills, this flexible teaching tool offers vocabulary-building activities, questions for discussion, and cross-curricular activities.

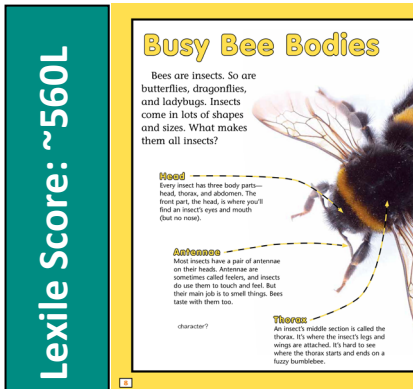
## SELECTIONS

- **Busy Bee Bodies**  
Expository Nonfiction, ~560L
- **Got Honey?**  
Expository Nonfiction, ~500L
- **How to Bee**  
Narrative Nonfiction, ~530L

## Busy Bee Bodies

pp. 8–12, Expository Nonfiction

Students should “bee” prepared to learn about the anatomy of bees, from antennae to stinger. Bright photographs and simple captions enhance the learning experience for young readers.



## RESOURCES

Let It Bee: Structure and Function

## OBJECTIVES

- Students will learn about the physical characteristics of bees.
- Students will study the structure and function of a bee's body parts.
- Students will learn about compound words.

## KEY VOCABULARY

- **thorax (p. 8)** the middle section of an insect's body, where the legs and wings are attached
- **abdomen (p. 9)** the rear part of an insect's body, where the digestive organs are located

## ENGAGE

**Conversation Question:** Why are bees special insects?

Display and read aloud these three sentences: They have three pairs of legs. They have two pairs of wings. They have one pair of antennae. Discuss meaning of the word *pair*. Ask students to predict the topic of the article based on these sentences. Use the vocabulary activity below to confirm correct responses.

## INTRODUCE VOCABULARY

Display the following statements and underline the key vocabulary terms. Demonstrate how to infer the meanings of new words by using context clues and background knowledge. Then have partners work together to determine the meaning of each word. Reveal definitions.

- The bee's wings are attached to its thorax.
- The abdomen breaks down the bee's food.

## READ & DISCUSS

Reinforce comprehension of the details in the article by using the following prompts to direct discussion.

1. How many body parts do insects have?
2. How is a bee's exoskeleton similar to and different from your skeleton?
3. List three colors (other than yellow and black) that a bee can be.
4. What is special about a bee's eyes?
5. How and what do bees eat?
6. Explain the two types of bee stingers.

## SKILL FOCUS: Structure and Function

**INSTRUCT:** Elicit from students that the main idea of the article is to provide a detailed description of the physical attributes of bees. Present the *Let It Bee: Structure and Function* worksheet. Tell students they will be using information from the article to show and tell how each part of a bee's body performs a special function.

**ASSESS:** Circulate and have mini-conversations with students as they are working. Remedial readers may work with a partner to reread the text. Collect and review their work to further assess understanding.

## EXTEND

**Language Arts** Remind students that butterflies, dragonflies, and ladybugs are all types of insects. Tell students that another thing these bugs have in common is that their names are compound words. Explain that compound words are formed when two or more words are connected to create a new word that has an entirely new meaning. Ask volunteers to break the words apart (butter/flies, dragon/flies, lady/bugs) and have students offer their own examples of compound words. Guide students to notice the many compound words that fill the pages of this month's issue of CLICK magazine.

## Let It Bee

**Structure and Function** Gather information from the words and photographs in the article to explain the special purpose of each body part.

<b>Bee's Body Part</b>	<b>What does it look like?</b> (Write or draw.)	<b>What does it do?</b> (Write or draw.)
head		
antennae		
thorax		
legs		
wings		

## Got Honey?

pp. 13–15, Expository Nonfiction

Using nectar from flowers, bees are able to produce nature’s sweetest elixir, honey. Young readers will learn through photographs and words the steps that are taken before this golden treat can be jarred.



## RESOURCES

Bee-fore the Jar: Sequencing a Process

## OBJECTIVES

- Students will learn how honey is harvested.
- Students will demonstrate the ability to properly sequence a studied process.
- Students will work in small groups to create a batch of “honey” modeling dough.

## KEY VOCABULARY

- **frame (p. 14)** an open structure that holds something
- **farmers’ market (p. 15)** a place where farmers sell their fruits, vegetables, and other things they have grown directly to consumers

## ENGAGE

**Conversation Question:** Why are bees special insects?

Ask students to share what they know about where honey comes from and how it gets from a beehive into the jars sold at the supermarket. Then motivate students to read the article by showing them a video clip of honey harvesting on the internet, such as “How to Harvest Honey!”

## INTRODUCE VOCABULARY

Post and discuss the two vocabulary words and definitions. Have students Think-Pair-Share with a partner. Give them the following brainstorming directives, one at a time:

- Discuss why honey bees need a **frame**.
- Discuss what you might buy at a **farmers’ market**.

Emphasize the key words when they are revealed in the reading.

## READ & DISCUSS

As a post-reading activity, lead a discussion based on the following questions.

1. Why do Mom and Dad blow smoke on the bees?
2. Describe the special suit that beekeepers wear.
3. How is the wax removed from both sides of the frame?
4. Why are the frames put into a spinning machine?
5. How is the dirt and wax removed from the honey?

## SKILL FOCUS: Sequencing a Process

**INSTRUCT:** Review the article and guide students to notice that there is an important process involved in getting the honey from the hive to the jar. Distribute the *Bee-fore the Jar: Sequencing a Process* graphic organizer and help students condense the process into four important steps that detail the sequence. Depending on the abilities of students, they can complete the organizer using words and/or pictures.

**ASSESS:** Circulate as children are working and have students retell the process in their own words.

## EXTEND

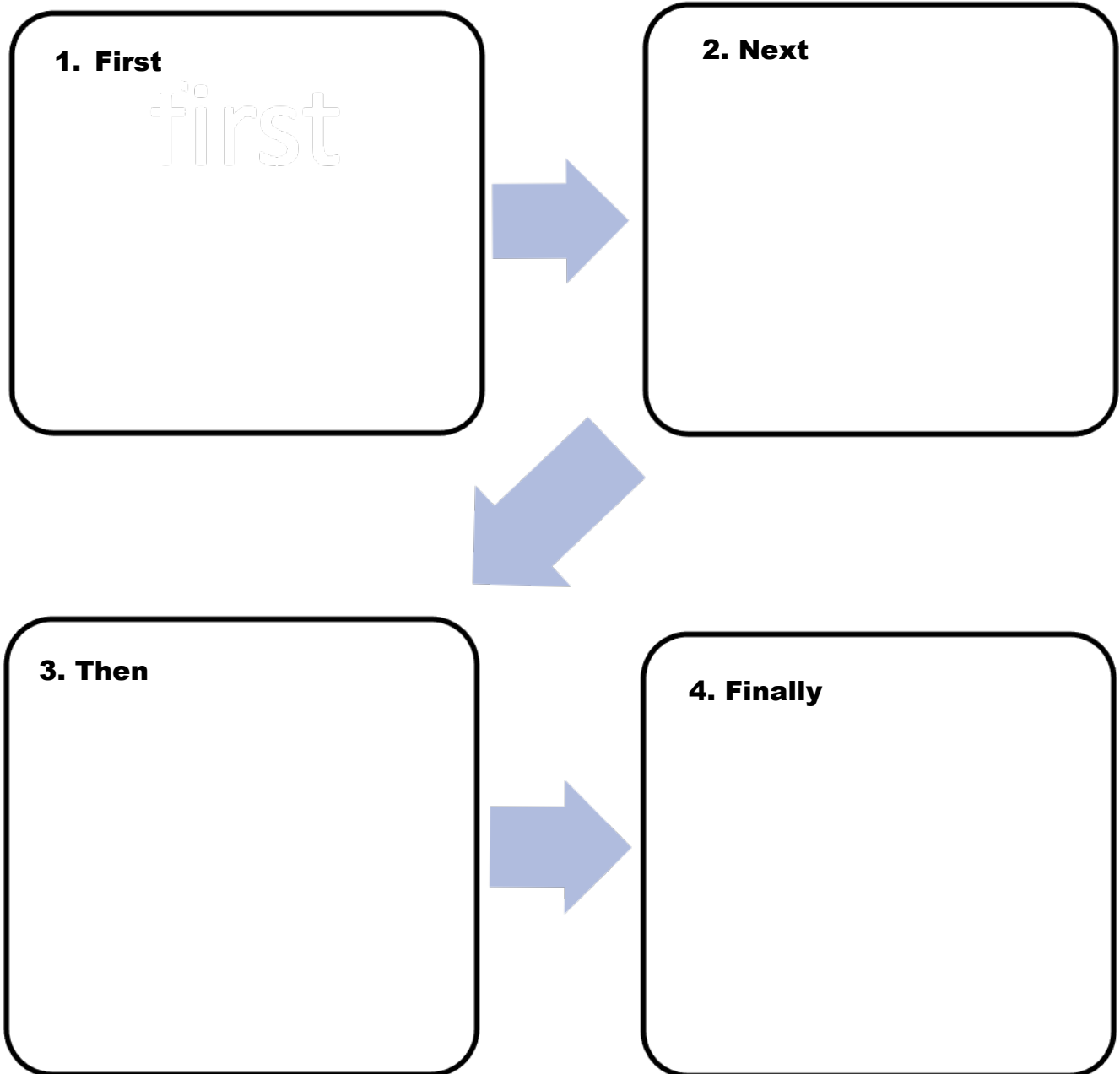
**Creative Play** Work with students in small groups to create sweet-smelling “honey” modeling dough using the recipe below. Emphasize the mathematical measurements in the recipe. Store the dough in airtight containers. Use for strengthening fine motor muscles in hands.

2 cups of flour	3/4 cup of salt	1 cup of water
1/4 cup of honey	1 tablespoon olive oil	food coloring/optional

Combine ingredients. Lightly flour work surface and knead dough. Dough should be soft but not sticky. Add coloring last.

## Bee-fore the Jar

**Sequencing a Process** Reread the article and highlight sentences that detail the process involved in getting honey from the hive to the jar. Condense the process into four steps and explain each step with words and/or pictures in the proper order.



## How to Bee

### pp. 22–26, Narrative Nonfiction

Students will learn that the phrase “busy as a bee” is an acknowledgment of the productive life of worker bees. From larvae to adult, worker bees perform many services for the queen and the hive.



## RESOURCES

Busy as a Bee: Obtaining Information

## OBJECTIVES

- Students will learn that a successful hive is the result of hard-working bees.
- Students will obtain information from a nonfiction article.
- Students will become part of the Great Sunflower Project.

## KEY VOCABULARY

- **hive** (p. 22) a nest for bees
- **larvae** (p. 23) a very young form of an insect that looks like a worm
- **cell** (p. 23) one of many similar sections that come together to make a larger structure; in a beehive, cells are made from wax

## ENGAGE

**Conversation Question:** Why are bees special insects?

Distribute the article “How to Bee” and have students take a picture walk through the pages. Guide students to notice the shape that is repeated throughout the article (hexagon). Discuss the attributes of this shape: six sides, six angles, six vertices. Evoke prior geometry knowledge by asking if the number of sides, angles, and vertices/points are the same in more common shapes such as squares, triangles, and rectangles. Have students explain the correlation. Tell students that a bee’s hive is made up of many hexagons and is a “sweet” example of geometry in nature.

## INTRODUCE VOCABULARY

Post the words and definitions and read them aloud. Discuss the **hive**, **larvae**, and **cells** that the students saw on the picture walk in the activity above. Give each student ten paper hexagons and have them glue them to a larger piece of paper, effectively building a **hive**. They should draw the **larvae** in the **cells**, and add further details to their scene after reading the article.

## READ & DISCUSS

Post and discuss questions prior to reading. Read the article aloud, pausing for discussion when answers to the questions are revealed.

1. List the three types of bees that live in a hive.
2. Where does the queen bee lay her eggs?
3. How do bees store nectar?
4. Why do bees fan the nectar with their wings?
5. What body parts does a bee use when on guard duty?
6. How do bees find good flowers for collecting pollen and nectar?

## SKILL FOCUS: Obtaining Information

**INSTRUCT:** Guide students to obtain information from the text and photos in the article. Remind them that the article was written to teach readers about the many jobs that the worker bees perform to maintain a successful hive. Introduce the *Busy as a Bee: Obtaining Information* organizer. Instruct students to write a brief sentence and/or draw pictures to describe the work a bee does in each of the six jobs she has in her lifetime.

**ASSESS:** Review graphic organizers with the class and discuss.

## EXTEND

**Science** Enrich your students’ learning experience by having them become citizen scientists for the Great Sunflower Project. The program offers students the opportunity to observe the environment, track and submit findings, and help scientists to gather information about pollinators in their region. Becoming part of this project is free and appropriate for all grade levels. “BEE” proactive! Use the internet to find out more about this project.

## Busy as a Bee

**Obtaining Information** In the chart below, describe each job a bee performs. Remember, a worker bee will do ALL of these jobs in her lifetime!

<b>Job</b>	<b>Description</b>
<b>Cell Cleaner</b>	
<b>Baby Feeder</b>	
<b>Queen Caretaker</b>	
<b>Cell Capper</b>	
<b>Guard Duty</b>	
<b>Pollen/Nectar Collector</b>	