Educator's Guide for The Honeycombers Book Club, 1st-3rd Grade

The Honey Makers

BY GAIL GIBBONS



以

MATERIALS & RESOURCES:

- Read Aloud Link
- What is a Langstroth Hive video for students
- How Do Honey Bees Get
 Their Jobs video for students
- What's My Job? assessment
- Make Your Own Bees Wax <u>Candle Kit</u> - includes wicks and wax fo 20 candles
- Colored pencils or crayons
- · Glue or glue sticks
- Ruler
- Scissors
- Butcher Block paper or paper bags

SUMMARY AND DETAILS

Get the buzz about honey bees in this brilliant, nonfiction title by Gail Gibbons. From jobs within the hive to modern-day beekeeping and all of the millions of flowers in between, these are some busy bees! Without the honey makers, the world would be a much different place. Help young readers learn to love the bees!

Lexile Level: 770L

Guided Reading Level: ○

Genre: Nonfiction

PRE-READING QUESTIONS

- Who do you think the honey makers might be?
- Did you know that honey bees have been on earth for about 80 million years? That is longer than humans, who scientists believe have only been on earth for about 6 million years.
- Do you like honey? The honey bee's scientific name, Apis mellifera, means "honey bearer." That means they hold the honey.
- Do you like strawberries, watermelon, blueberries, or cucumbers? Then you need to thank a honey bee, without honey bees to pollinate those plants, we would not have those delicious fruits!

POST-READING DISCUSSION QUESTIONS

- What is the main idea of this book? What is your evidence to support that?
- How do you think the author of this book feels about honey bees? Do you think she thinks that they are important or not important? What is your evidence?

- Turn and Talk: Do you think that honey bees are important? Why or why not?
- Let's look at this picture of the honey bee with the parts of the body labeled? Do you know what this text feature is called in a book? Why did the author add this part in the book?
- Can we find another example of a diagram in the book?
- Why do you think the bear is coming close to the beehive? What does it want? What will the bees do if the bear does not leave?
- How do the bees get the moisture or water out of the nectar?
- Why do bees dance?
- What are some of the containers that humans have used for bee hives?
- Let's look at the different jobs that worker bees have throughout their lives. The author says, "first she is a house bee, cleaning and polishing the cells." "After ten days of being a nurse bee she becomes a wax-making bee." "About a week later the wax-making bee becomes a guard bee." Why does the author use words like first, after, about a week later? What is she trying to tell the reader?

POST-READING DISCUSSION ANSWERS

- The main idea of the book is all about bees, types of bees, their jobs, how they make honey, how they pollinate, how they communicate, and how they help the earth.
- The author thinks that bees are important. She uses phrases like, "honey bees are building an amazing structure called a honeycomb," with the emphasis on the word amazing. She packed a lot of information into the book including what the bees are doing in the hive throughout the year, which would lead us to believe that she wants us to know a lot of information about these valuable insects.
- Open-ended answer.
- This text feature is called a diagram, it is a picture to communicate information. The author wants the reader to know the body parts of the honey bee and where to locate them on the bee.
- Diagram of the types of cells, diagram of the parts of the flower, diagram of the modern beehive, diagram of the beekeepers harvesting honey.
- The bear is coming to the hive to steal and eat the honey that the bees make. Bears, skunks, and raccoons are well-known predators of the honey bee. If the bear does not leave, the bees will sting it to protect their hive.
- · By passing it from tongue to tongue, the bees take moisture out. The house bees also fan their

wings to evaporate the moisture from the honey.

- Bees dance to communicate to the other foraging bees where the food source or flowers are located in relation to the hive.
- Humans have used hollow logs, clay pots, upside-down baskets, and hanging movable-frame beehive which is called a Langstroth Hive. <u>Video link</u> for students who want to know more about this type of hive.
- These are transition words that tell the reader that there is a relationship between the steps in this procedure. That means that she is telling us things happen in an order on purpose and the steps happen basically the same way for every worker bee.

ASSESMENT

What's My Job? -- This assessment tool will help the educator determine if the students understand the different jobs the worker bee has throughout her life. The book should be used as a resource for the students to be successful with this follow-up. The educator should continue to use the transition words first, next, then to push on the concept of sequence in the text.

The video, <u>How Do Honey Bees Get Their Jobs</u> can provide more information about how the hormones tell the bee's genetic makeup what job to do next and when to do it. This video also addresses how the queen bee determines the sex of the egg that she lays depending on what the hive needs most.

The educator should introduce this assignment by reading through the directions, the logical steps for completion, and demonstrate how to color, cut, and place the bees in their correct jobs with one of the bees as a starting point. The students should be able to continue independently.

ACTIVITY: MAKING BEESWAX CANDLES

This is a great activity for students to make something to share with someone else, possibly for the holidays, Mother's Day, Father's Day or simply to give to someone they care for. Remind the students that they should **never have a lit candle without an adult present.**

The recommended kit comes in many color choices. The educator could survey the students before purchasing to pick a color or multiple colors for this project.

- · Make Your Own Bees Wax Candle Kit makes 20 candles
- Image for example

STEPS FOR MAKING BEESWAX CANDLES

- 1. Cover the work area with butcher block paper or paper bags for easy cleanup. The sheets of wax can stick to surfaces as the students are working with them.
- 2. Cut each sheet of the beeswax from the kit in half so that you have two sheets that are 8 inches by 8 and 1/8 inches. Each student will get one of the halves for rolling their candle. (the recommended kit has 10 sheets, when cut in half will provide 20 sheets for a total of 20 candles)
- 3. Cut the cotton wicks 9 inches long for each candle.
- 4. Demonstrate for the students that you will need to lay the wick at the right edge of the piece of beeswax so that the bottom of the wick meets the bottom of the sheet. The top will have an inch of wick that is longer and will hang out. This will be the part that is lit when completed.
- 5. Press the wick into the wax with your fingertips before beginning to roll.
- 6. Demonstrate for the students how to roll the beeswax, keeping it tight and even as you roll the wax around the wick. You can press gently on the roll as you work but be careful not to press too hard.
- 7. If the wax is hard to roll at first, a low amount of heat from a hairdryer will help warm the wax-up. Careful not to melt it!



JOURNAL PROMPTS

- The author tells us that honey bees have a Crop or Honey Stomach for storing the nectar that they bring back to the hive. It is separate from her stomach that digests her food, it is more like a storage container. If you had a Crop, what would you store in it to take with you? Why would you choose that?
- Choose one of the months from A Beekeeper's Yearbook at the end of the book. Pretend you are a bee in the hive during that month and write about how you would feel. What would you be doing? Use descriptive words like tired, excited, nervous, busy, dangerous, etc. What might you be looking forward to doing next month? What is happening with the other bees?

The Honeycombers Book Club - The Honey Makers lesson standards

ELA COMMON CORE

WRITING STANDARDS FOR LITERATURE / INFORMATIONAL TEXT

 $1^{st} \; \mathsf{Grade} \colon \underline{\mathsf{RI}.1.1}, \; \underline{\mathsf{RI}.1.2}, \; \underline{\mathsf{RI}.1.3}, \; \underline{\mathsf{RI}.1.5}, \; \underline{\mathsf{RI}.1.6}, \; \underline{\mathsf{RI}.1.7}, \; \underline{\mathsf{RI}.1.8}, \; \underline{\mathsf{W}.1.1}, \; \underline{\mathsf{W}1.8}$

 $2^{nd} \; \text{Grade:} \; \underline{\text{RI.2.1, RI.2.2, }} \; \underline{\text{RI.2.3, }} \; \underline{\text{RI.2.5, }} \; \underline{\text{RI.2.6, }} \; \underline{\text{RI.2.7, }} \; \underline{\text{RI.2.8, }} \; \underline{\text{W.2.1, }} \; \underline{\text{W.2.8}}$

3rd Grade: RI.3.1, RI.3.2, RI.3.3, RI.3.6, RI.3.7, RI.3.8, W.3.1, W.3.2, W.3.8

NEXT GENERATION SCIENCE STANDARDS

1st Grade: 1-LS1-2

2nd Grade: 2-LS4-1

3rd Grade: 3-LS4-2



Name:	

WHAT'S MY JOB?

Read each of the bee's jobs. Color and cut out your bees and their job. Glue the bees anywhere in the correct **What's My Job?** box. Draw your bee doing her job.

I clean and polish the cells. What is my job? I'm a	I feed the larva beemilk and beebread. I seal the cell with wax for the pupa. What is my job? I'm a
I make wax from my body to make new or fix old cells. What is my job? I'm a	I work outside of the hive and I protect it. What is my job? I'm a

I zip from flower to flower to get the nectar for making honey. What is my job? I'm a...

BEE JOBS









