



4 APIARY

Bees have jobs and a language.

PK–2ND GRADE

Learn about the different jobs of the bees and how they communicate with one another.

1. GET STARTED

Take a look at the apiary. What do you notice?

There are bees flying in and out of boxes. Those boxes have the hives where the bees live. All those boxes together are called an apiary.

It may look like they are just flying around but there are as many bees in these hives as in a small city. That's why they need to be well-organized!

All the bees in the hive have one of three jobs. They are either a Queen, a Drone, or a Worker, and they use their bodies to communicate with each other.

2. DIVE IN

What are the different jobs for bees?

- ▶ **Queen** – the queen's job is to lay eggs. There is only one queen in each colony.
- ▶ **Drone** – the drone is the male honey bee. His job is to mate with the queen.
- ▶ **Workers** – worker bees are all female and have many different jobs in the hive. They are the ones you see outside buzzing from flower to flower and, at the same time, pollinating flowers.

What do you think bees might need to tell each other?

They might need to communicate about jobs to be done in the hive or where to find the best food? Although they can't talk, bees use their bodies to share important information with one another.

Let's see if we can communicate just like bees do.

- ▶ If the flowers are close by, the **bee dances in a circle around the hive** to encourage bees to search for nearby flowers. *Let's practice by dancing in a circle.*

- ▶ For flowers that are further away, the **bees do a wag-tail dance** meaning they wag their tails towards the flower. The quicker they wag their tails, the farther away the flowers are. *Let's practice!*

You can make this into a game by choosing one person to be near the flower source. Invite the others to move forward the number of times they wag their tail. For example, if the leader waggles once, everyone moves one step closer, two waggles, two steps, etc. Be careful, though, the leader can send you back to the hive if you don't follow directions.

LEARN MORE

During the summer, help yourself to a taste of fresh honey from the hive.

Watch the FoodPrints TV video on [Pollinators at Work](#) to learn more about the important role bees play.

Check out FoodPrints' [Strawberry-Mint Lemonade](#) and [Summer-Ripe Greek Salad](#) recipes to taste some of the produce bees help us grow!

WHAT'S HAPPENING IN OUR APIARY?

The JK Community Farm has 7 hives. During the summer, there are 50,000 bees in each hive that produce about 300 pounds of honey. Each hive has three kinds of adult bees: workers, drones (male) and a queen. Most of the bees are worker bees. There is a single queen and several hundred drones. The workers are responsible for keeping the hive going, starting with cleaning and caring for the queen and then foraging for nectar and pollen.

FIELD TRIP MAP

parking lot



1 HUMAN SUNDIAL

picnic tables



2 GREENHOUSES



3 RAISED BEDS



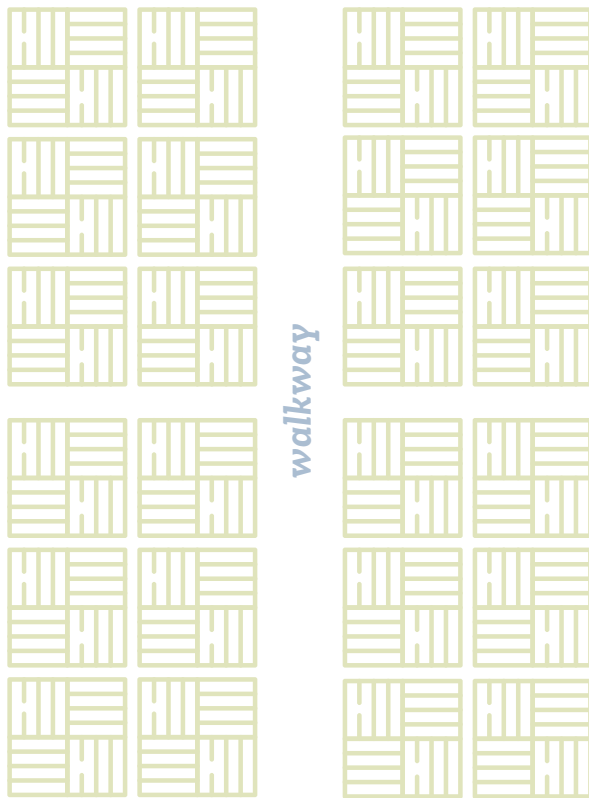
4 "APIARY" BEE HIVES



5 THREE TIER COMPOST SYSTEM



6 BLUEBIRD TRAIL STARTING POINT



7 BEE HOTEL



10 EDIBLE FLOWERS



9 SENSORY FOOTPATH



8 POLLINATOR HABITAT