

Material Preparation

MATERIALS

- CD player
- ECHOS CD
- five paper flowers from Lesson #1: *Pollination*
- piece of sidewalk chalk
- masking tape

For each child:

Ask Me About Bees sticker

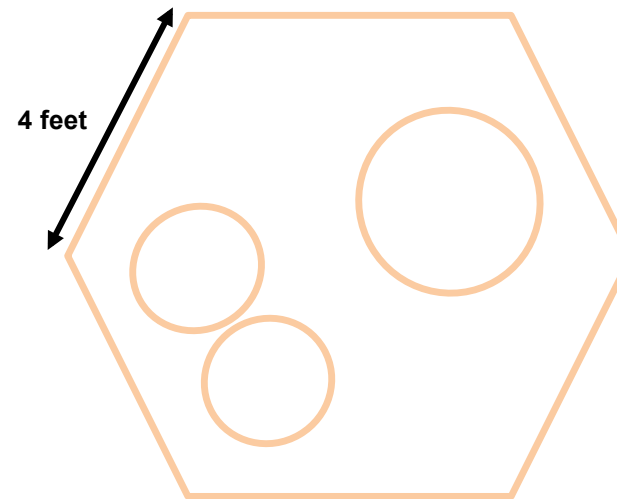
PREPARE IN ADVANCE

Set up the CD player and test *Track #1* on ECHOS CD.



SET UP THE LESSON AREA

- Use masking tape to outline a large hexagon shape on the floor to be a “beehive,” large enough for the whole group to sit around (about 4’ per side).
- Use sidewalk chalk to draw a large figure 8 and a large circle inside the “beehive.”
- Place the five paper flowers around the room.
- Place the CD player in the ECHOS lesson area.



beehive



OBJECTIVE

Children will be able to describe how honeybees use body movement to communicate the location of a flower.

EXCITE

1. Gather the children in the ECHOS lesson area. Invite them to sit in the “beehive” on the floor. **Today, I am going to use my hands to say something special to you. Watch carefully.**
2. Hide one hand behind your back, then dramatically bring your hand forward signing the phrase “I love you” as shown in the photo to the right. **I used my hand and not my words to tell you something. Do you know what I just said to you?** Listen to the children’s responses. Tell the children that you said “I love you” in sign language. Encourage them to make the sign themselves. Prompt the children to notice they did not use words.



“I love you”
(American Sign Language)

INTRODUCE

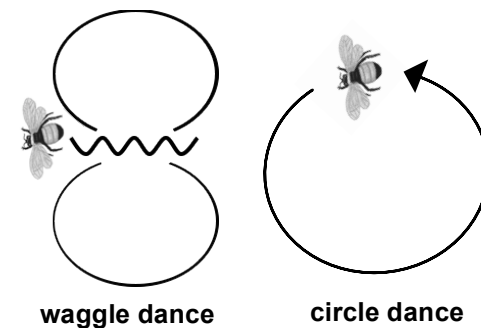
1. **There are many ways to say things without talking. I just used sign language to tell you with my hand movements that I love you. Can you think of any other ways to say something without talking?** Children may suggest pointing, drawing, waving, nodding, throwing a kiss, clapping, etc.
2. **Did you know that bees have a special way of talking to each other? When bees find flowers, they tell all the other bees in their hive where the flowers are. Can a bee fly back to the hive and use words to tell the other bees where the flowers are? No. Why not?** Remind children that bees do not use words to communicate. **We’re going to learn one way bees *communicate*, how they tell each other things.** Demonstrate a dance to help build anticipation. **They do it by dancing!**



3. **I am going to show you how a bee communicates to other bees where to find flowers. I have found a flower and will show you where it is by doing a dance. Is this flower *near* the beehive or *far* from the beehive?** Prompt children to notice that the flower is near. **If the flower is near the hive, the bee will dance in a circle.** Walk over to the circle shape inside of the beehive and demonstrate the dance by dancing in a circular figure, flapping your arms and buzzing like a bee.



4. Point to a flower that is far from the beehive. **If the flower is far from the hive, the bee will do a special dance called the *waggle dance*.** Walk over to the figure 8 shape inside of the beehive and demonstrate the dance by dancing in a figure 8, flapping your arms and buzzing like a bee. When you get to the middle of the figure 8 stop and rapidly move your hips from side to side.



5. **Let's all practice. If the flower is near you will dance in a... circle. Yes, everyone stand up. Let's dance in a circle.** Provide time for children to practice. **Now let's practice the waggle dance.** Give each child an opportunity to perform the waggle dance on the figure 8 on the floor inside of the beehive.

EXPLORE

1. **We're going to act like bees and look for flowers. When I turn the music on, I am going to ask two children at a time to search for flowers. As you find a flower, you should return to the inside of the hive and show us whether the flower is near or far by doing a dance. Everyone will get a turn to search for flowers.**

2. Play Track #1, *Bee Dance* on the ECHOS CD to begin. Select two children to look for flowers, while the remaining children sit around the hive. Remind children to dance in a circle if the flowers are near, and to do the waggle dance if the flowers are far.




INTERACT

Interact to accommodate children's individual needs and strengths. Use these suggested strategies as needed:

- While the children are moving around the room as bees they may get overly excited. Select only a few children at a time to look for flowers.
- Encourage the children to use slow movements during this activity.
- Remind children that bees fly and dance quietly.
- Further explanation of the words near and far may be needed. To help children better understand the concepts, have them stand close to you to demonstrate "near;" then have them move a few steps away from you to demonstrate "far."

OUTCOMES

1. Regroup the children in the ECHOS lesson area. **What did we discover today?**
Listen to the children's responses. If needed, use suggested prompts to elicit key concepts and vocabulary. Encourage responses from everyone.
 - **How do bees "talk" to each other?**
 - **What does a bee do to communicate that a flower is near?**
 - **What does a bee do to communicate that a flower is far away?**
2. Recap and review the unit key concepts by asking and prompting children to recall something they learned from any of the prior *Busy Buzzing Bees* lessons.
3. Give each child an *Ask Me About Bees* sticker.

Remind the children to tell their family something they have learned about bees.

VOCABULARY

- communicate
- near/far
- waggle dance

