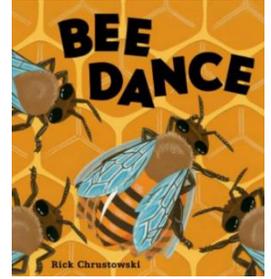


Honeybees!



A Pre-K Project-Based Lesson Plan based on
Cat in the Hat *Show Me the Honey*

Bee Dance by Rick Chrustowski



*This lesson was devised by Beth Williams of the
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Ready To Learn PBS Kids Science Curriculum Links:

- ✓ Life Science: Animals depend on other living things in their environment to survive
- ✓ Life Science: Animals have different body parts that are used to help meet their needs
- ✓ Life Science: Animals use sequences of behaviors to find and/or make food

Learning Goals- Children will:

- ✓ Use and understand the basic meanings of *nectar* and *pollen*
- ✓ Understand that honeybees depend on the nectar and pollen from flowers to make food (honey)
- ✓ Understand that bees extract nectar from flowers with their proboscis (a long tongue) and they collect pollen in hairy sacs on their legs.
- ✓ Through dramatization, model the sequence of how honeybees collect nectar and pollen

Vocabulary: *nectar*-a sugary juice from flowers; *pollen*-a yellow powder found inside flowers

Episode: The Cat in the Hat Knows a Lot about That! *Show Me the Honey*

Book: *Bee Dance* (by Rich Chrustowski)

Materials:

- Yellow swimming pool noodles, cut into 6-8" lengths for bee bodies
- For each child, pre-cut black chenille sticks for bee legs (6, about 1.5" each), wings (4, two for each side), antennae (2, about 1.5" long) and stingers (1, about 1" long)
- Black electrical tape for bee stripes
- Black permanent markers to mark bee eyes
- Paper strip or silicone wrist bands with a 2" Velcro strip (hook side only) affixed to one side (one for each child)
- 3-4 flowers (paper or real)
- Small yellow pom-poms for pollen
- Honeycomb cells fashioned from strips of a paper towel roll (see photo)

- Yellow construction paper for backing of honeycomb (see photo)
- Book and Episode
- Laptop, screen and speakers
- Optional: Pre-made headbands with bee antennae for each child (black plastic hair band with chenille stick antennae and Styrofoam balls at the top)

Activate Learning Once the children are seated, have all adults make a buzzing sound. Ask children what creature makes this sound and lead them to think about bees. For a few moments, solicit children’s prior knowledge, then ask, “Did you know *honey bees* are different from *bumble bees*? They are, and we’re going to explore **honey bees** today. Honey bees can communicate with one another about how to find food by doing something very unique! They *dance* to tell their hive-family where **nectar** and **pollen** can be found! Nectar and pollen are a kind of food for baby and adult bees.”

Episode Screening

- **Introduce** the video: Sally and Nick want to see how bees make honey. Set a listening purpose: “As we watch, let’s act out the important steps honey bees use to make honey!”
- **Screen** the *Show Me the Honey* episode. If you’re using them, have children put on their bee antennae headbands. After each step in the honey-making process, stop the video and have the children act out each step (dance, fly to flower, slurp the nectar, fly back to the hive, gargle the nectar, spit it into the comb). Tip: Remind kids to “pretend” spit!
- **Review** after the video- Talk about the steps honeybees use to collect nectar. Ask, “But what about pollen? We saw how bees collect nectar, but not pollen!” Introduce the book as a way to learn how bees use pollen to make food.

Read the book *Bee Dance* interactively. Emphasize the role of pollen as an additional or alternate food source to nectar and compare/contrast the book with the episode in appropriate places.

Activities

Pollen and Nectar Collecting Activity: Distribute the flowers in an open space along with a set of the yellow pom-pom balls on or near each flower. Place the honeycomb across the room from the flowers.



Divide the children into manageable groups and distribute the rubber bracelets with Velcro attached (hook side only). Have children place them on their wrists.

Now, group by group, the children become honeybees! One bee does a dance to communicate the location of the flowers. Then, all bees fly to the various flowers to collect nectar and pollen. As they visit a flower, bees stick pollen (pom-poms) to their bracelet (leg pouch) and pretend to slurp nectar with their tongues. Then, they fly back to the hive and put the nectar and pollen into the honeycomb! Rotate bee groups, supporting the process by prompting when necessary. Those who are waiting their turn can watch the fun and make suggestions too!



Honey Bee Craft: Using the photo as a guide, pre-assemble the pool noodle bee bodies by adding the electrical tape stripes. You may also want to pre-mark the eyes, or save this for the children. One-by-one, provide the other materials to the children, discussing their respective importance to the bee:

- Eyes (marker)
- wings (chenille sticks)
- legs (chenille sticks)
- stinger (chenille stick)
- antennae (chenille sticks)

Legs, wings, stingers and antenna can be easily poked into the soft surface of the noodle. Provide support to the children as needed.

Closing: Bring everyone back together and talk about some or all of the learning goals!

- Revisit the two food sources honeybees use to make honey.
- Reinforce the idea that bees dance to communicate where pollen and nectar can be found.
- Discuss the steps bees use to make honey.
- Ask children to tell about their favorite part of the Cat in the Hat episode or the *Bee Dance* book.

