



The Pollinator

Skill: Develop a simple model that mimics a bee pollinating plants.

Estimated Lesson Time: 30 minutes

Materials for the class:

flowerpot or bucket
construction paper flower petals
individually wrapped candy
puffed cheese balls
scissors
tape
pencil

Teacher Preparation:

1. Cover the outside of a flowerpot or bucket with green paper.
2. Cut colored construction paper so it represents flower petals.
3. Curl each flower petal around a pencil; then tape each petal to the inside of the flowerpot as shown.
4. Fill the bottom of the pot with a class supply of individually wrapped candies (nectar).
5. Cover the candies with a layer of puffed cheese balls (pollen).



Materials for each student:

science notebook
pencil





“The Pollinator” Lesson

1. Explain to students that besides making honey and beeswax, honeybees are an important pollinating insect. Ask the following guided questions:
 - What does *pollinate* mean? (*To transfer pollen from the male part of a flower, or the stamen, to the female part of a flower, the pistil.*)
 - Why is pollination important? (*Most plants need help with pollination to produce fruit or seeds.*)
2. Invite one student to reach into the pot and take out one piece of candy. Point out how his or her hand attracted powder from the cheese balls. Ask the following questions:
 - How is this similar to the way bees collect pollen from flowers? (*When a bee lands on and crawls around a flower, it becomes dusted with pollen. Then, when the bee lands on another flower, some of the pollen falls off the bee and onto that flower.*)
 - What part of the model represents nectar? Why? (*The candy represents nectar. Nectar is a sugary liquid that honeybees use to produce honey. Hummingbirds, butterflies, and moths also feed on nectar.*)

Fun Fact: About one-third of our crops rely on pollinators to increase their yield.

- What part of the model represents pollen? Why? (*The puffed cheese balls represent pollen. When you reach into the flower to get candy [nectar], some of the powdered cheese rubs off onto your hands. This mimics the way pollen collects on insects' bodies and is spread from flower to flower.*)
 - What part of the model represents the honeybee? (*Your hand represents the bee. When you reach inside the flower to get a piece of candy, your actions mimic a bee landing on the flower to get nectar.*)
3. Allow time for each student to reach into the pot to see how pollen is transferred. Ask students to record what they learned in their science notebooks.

