



SCIENCE FESTIVAL FAMILY EXPERIMENT GUIDE: BUSY AS A BEE

We know that bees can sting people but do you know why bees are so important to humans? How do they help plants grow?

Instructions:

Adult: Take the pipe cleaner and cut off a two or three-inch piece. Set the short piece to the side.

Student: Push the longer piece of pipe cleaner through the center of the coffee filter. Roll about an inch of the pipe cleaner into a ball so the coffee filter won't fall off. Scrunch the coffee filter around the end of the pipe cleaner.

Adult: Wrap the short piece of pipe cleaner around the scrunched-up coffee filter/pipe cleaner to hold them together. Take the brown paper bag and cut it down to about half of its size. Using the stapler, attach the coffee filter "flower" to the outside of the brown paper bag.

Volunteer: Place a handful of cheese puff snacks inside the brown paper bag.

Student: Pretending that your hand is a "bee," touch the cheese puffs in the bag so that some of the "pollen" is on your fingers. Now fly your "bee" to the flower on your bag and have it land (touch the flower with your hand). Congratulations! Your "bee" just pollinated the flower.

Together: Enjoy your snack!

Questions to ask after:

Can you describe how a bee collects pollen?

Why do plants need bees to help them pollinate?

How It Works:

Pollen is a part of flowering plants that resembles a fine, yellow, powdery dust. The transfer of pollen between flowers is needed for plants to grow.

Vocabulary:

Pollinator: An animal or insect (such as a bee), that helps fertilize plants by transferring pollen from one flower to another.

Real-World Application:

Worldwide, roughly 1,000 different types of plants are grown for food, spices, fibers and medicines. Every plant needs to be pollinated to grow. We depend on bees (as well as birds, bats, butterflies, moths and wind) for this to happen.

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