

What is pollination?



Pollination is the process by which plants reproduce and continue to grow. Plant reproduction relies on pollinators: insects and animals that move pollen from one plant to another. Let's explore how pollination works!

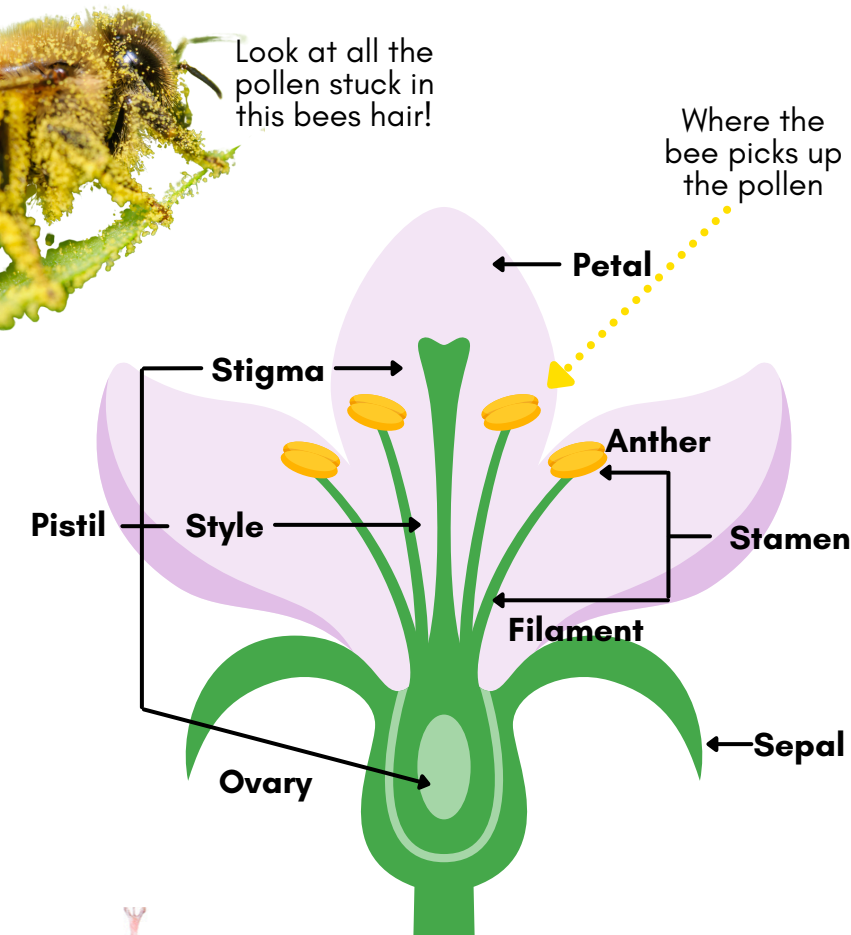
How it works:

Plants have male and female organs. Flowers produce pollen in the **stamen** (male reproductive organ). Pollinators land on the flower to drink the nectar (a sweet liquid that gives them energy).

When the pollinator lands on the flower, the pollen on the **anthers** gets onto the pollinator's body.

When the pollinator moves to the next flower for more nectar, they bring the pollen with them and deposit it on the **stigma** (female reproductive organ) of another flower.

The pollen **fertilizes** the flower and allows the flower to reproduce and grow!



Who pollinates our plants?



Bats



Bees



Birds



Moths



Butterflies

Pollinators are so important!

We need pollinators! More than **80% of flowering plants** (these include trees, vegetable plants, fruit trees, and bushes) need pollinators to grow and reproduce. More than **100 crops** in the United States rely on pollinators. According to the United States Department of Agriculture, the added revenue to crop production from pollinators is valued at **\$18 billion**. That's a LOT of money! Those are some important insects and animals.

Pollination Practice

Pollinators are essential to plant growth! Pollinators like bees and butterflies help plants reproduce. Flowers have anthers that create the pollen and pistils that lead to the eggs. Pollinators move pollen from the anther of one flower to the pistil of another flower and fertilize flower so it can reproduce. This exercise shows students how pollinators move pollen from flower to flower in order for the plants to reproduce.



Materials

- cheese powder or glitter powder
- construction paper
- scissors
- black pipe cleaners
- lid of a jar or small bowl

Instructions

1. Cut construction paper into flower shapes (around 6 inches wide) and set on tables around the room.
2. Choose one flower to top with a small bowl or jar lid. fill jar lid or bowl with cheese dust/glitter. This will be the first flower visited by the 'bees'.
3. Make bee fingers with students. using a 2 black pipe cleaners, wrap the pipe cleaners around your pointer and middle finger together until its secure. Use the four ends to make the legs: they should stick our from the bottom of your fingers by at least an inch.
4. Students will begin at the flower with the cheese powder/glitter.
5. Students will land their bee on the first flower and get the pollen (cheese dust) on their fingers.
6. Now the students can explore the rest of the room and land on other flowers of their choosing. When they land, their bee will drop some pollen on to the flower.
7. Once students have visited all the flowers, they will all have pollen on them.
8. Great job pollinating the flowers!