

POLLEN TRAP

When spring is in the air, you might be able to take a closer look at pollen. Find out how with this activity.

YOU WILL NEED

- small rectangles of white cardboard or stiff white paper
- string
- hole punch
- petroleum jelly
- pen or pencil
- magnifying glass or microscope (optional)



Different shaped flowers attract different pollinators.

Butterflies like flowers that flat petals that they can land on. Hummingbirds are drawn to long, tubular flowers that they can reach their beaks into.

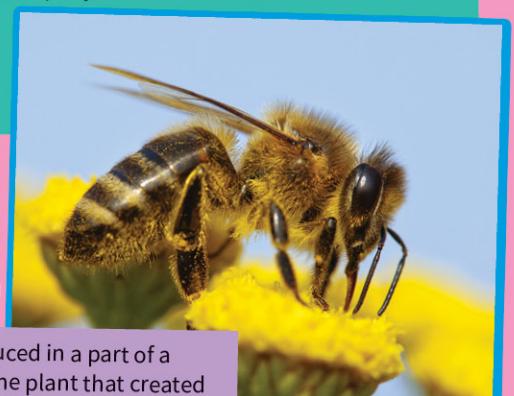


WHAT TO DO

1. Use the hole punch to make a hole in each piece of cardboard.
2. Smear a thin layer of petroleum jelly on one side of each piece of cardboard.
3. Using the string, hang the bits of cardboard outside in different places.
4. You can hang them from a tree, near some flowers, near your door or anywhere else you can think of.
5. If you are hanging them from a tree, just tie a loose loop around the branch, so you don't damage the tree.
6. On the back of the cardboard, write where you are hanging it.
7. After a few days, take the cardboard down again.
8. Look at what has stuck to the surface of the cardboard.

WHAT'S HAPPENING

On the card, you should see some dust and dirt. If you look closely, you may also notice some yellow grains. This is pollen. Depending on where you put them, you may find the cards have different amounts of pollen on them.



Flowering plants create pollen as part of their reproductive process. It is produced in a part of a flower called the stamen and contains some of the genetic information from the plant that created it. When the pollen from one plant is transferred to a part of a flower called a pistil, the genetic material in the pollen joins with particular cells in the flower, which then grow into seeds. This is called pollination. Pollination regularly takes place between two separate plants of the same species, although there are some plants that can pollinate themselves.

Pollen can travel from one plant to another in different ways. Some plants rely on insects that visit their flowers to spread the pollen. Others release the pollen into the air where it can float around and hopefully land on the pistils of another plant the same species.

It can be very hard to see pollen in the air, because it's so small, but this is what you have caught on your cardboard. It is this airborne pollen that often triggers hay fever. If you have a magnifying glass or microscope, use these. You might be able to see that pollen grains from different species have different shapes.

On its own, pollen doesn't harm people. People who suffer from hay fever, have immune systems that react to pollen as though it were a dangerous substance, such as a virus or bacterium. Hay fever is typically caused by specific types of pollen, so sometimes people will find they only suffer from hay fever in particular places, depending on what plants are found there.



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