

How Pollinators Pollinate



Alabama Wildlife Federation Outdoor Classroom Field Journal Activity

To use this interactive PowerPoint with your students:

1. Click on "**Enable Editing.**"
2. Click the "**Slide Show**" tab at the top of the screen.
3. Then choose "**From Beginning**" from the menu.

Do all living things **reproduce**?

Do ALL animals create baby animals?

Reproduce - make a copy or "baby" with the same characteristics and traits

Yes!



gray squirrel

box turtle



© Liam McGranaghan



Carolina wren

Monarch caterpillar
(baby butterfly)



Do ALL plants create baby plants?



baby oak tree



baby mint plant

Yes!

Why do they reproduce?

If they don't reproduce then that **species** will die and no longer exist.

Species - A group of organisms (living things) that have the same traits and characteristics, and they can exchange genetic material and reproduce.

How can plants reproduce?
How do adult plants make baby plants?

They create seeds.



Example: dandelions

How does a seed make a new plant?



A seed contains:

- **Genetic Material** - information about "mom" and "dad"
- **Building Instructions** - to create a new "baby" plant that has the same traits and characteristics as the "parent" plants.

How does a plant create seeds?



A plant uses its flowers to create seeds.

For example, a sunflower has hundreds of tiny little flowers.

Each tiny flower can produce one seed, so one sunflower plant can produce hundreds of seeds.

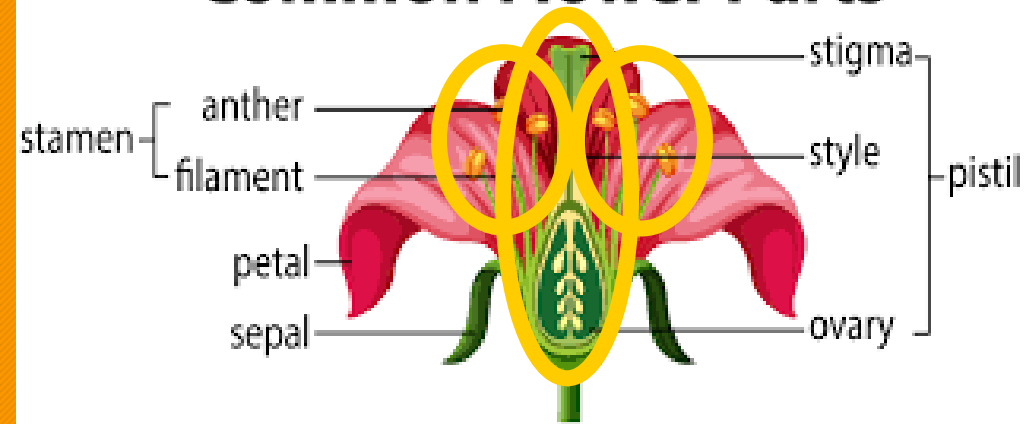


How do the parts of a flower (or flowers) work together to create a seed?

Plants require a male and female of the same species to create a seed...

just like animals need a male and female of the same species to create a baby.

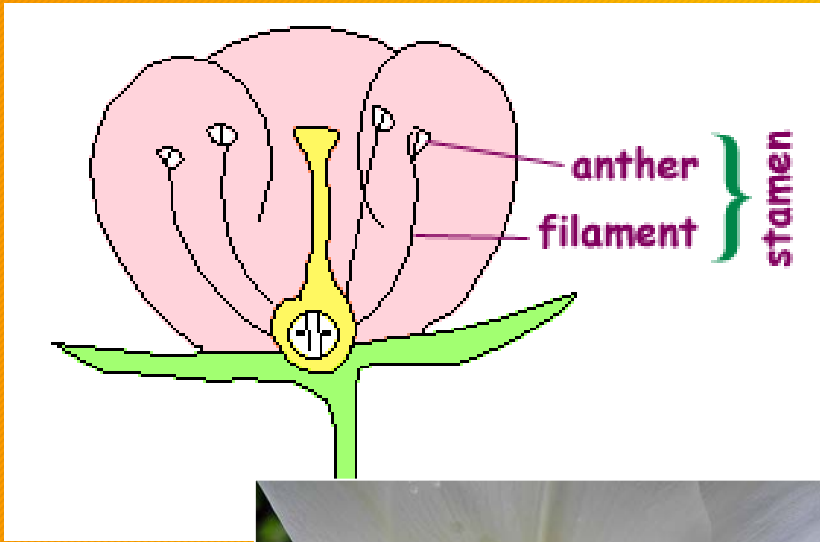
Common Flower Parts



The male part is called the stamen, and it includes the **filament** and the **anther**.

The female part is called a pistil, and it includes the **stigma**, **style**, and **ovary**.

What is the purpose of the stamen?



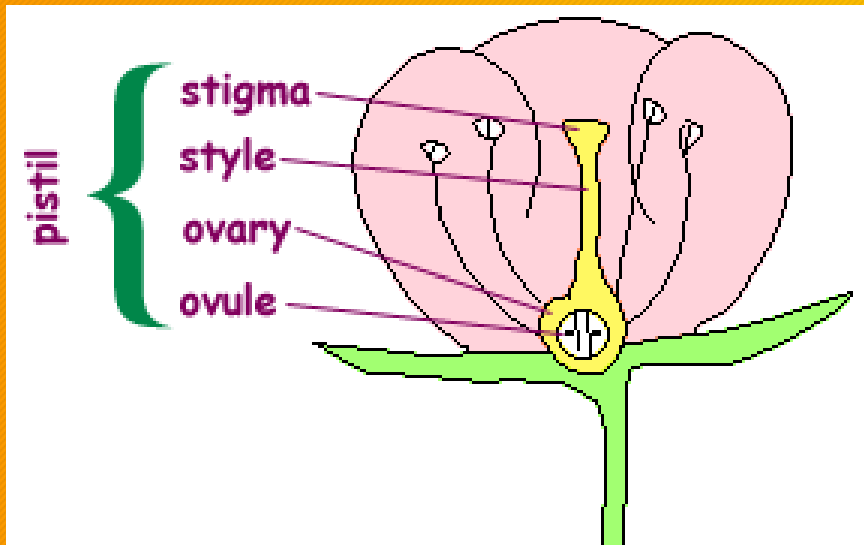
The stamen is the male parts of the flower.

- **Filament** - the long, thin tube that supports the anther
- **Anther** - the oval-shaped structure that produces the pollen



Pollen is the yellow-orange, sticky powder on the anthers.

What is the purpose of the pistil?

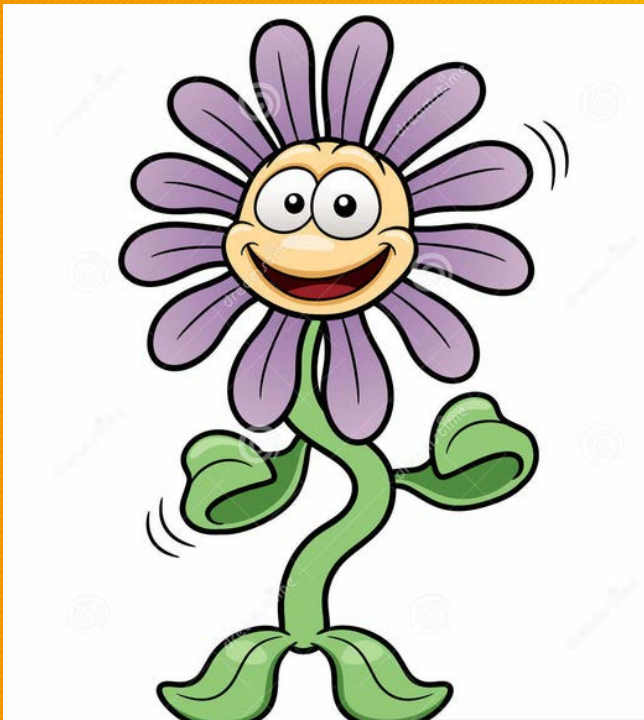


The pistil is the female part of the flower.

- **Stigma** - the sticky tip that collects the pollen (from the male part)
- **Style** - the tube that the pollen travels down to get to the ovary
- **Ovary** - holds the **ovules** that join the pollen to become seeds, and then the ovary becomes the fruit that holds and protects the seeds

How does the pollen move from the stamen to the pistil?

Does the plant use its hands to move the pollen?



No! Plants don't have hands!

Can a plant pull its roots out of the ground and walk around to give its pollen to other plants?

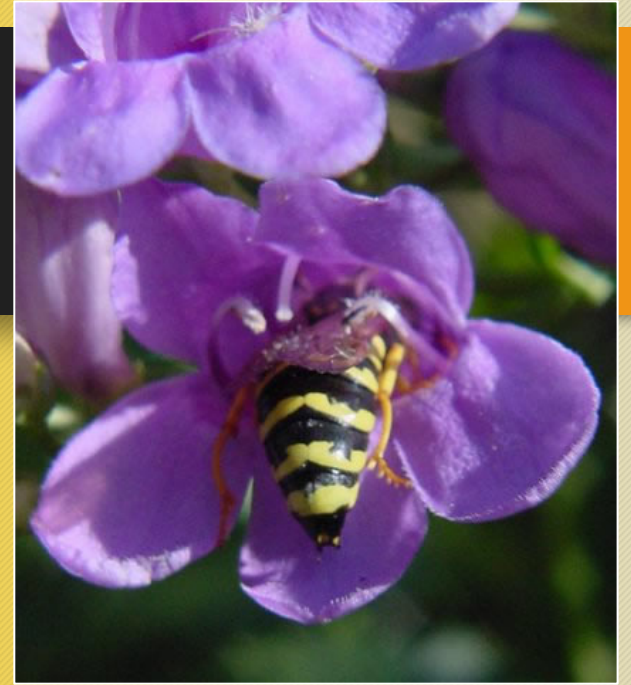
No! Plants don't have feet!

How does the pollen get from the stamen to the pistil?

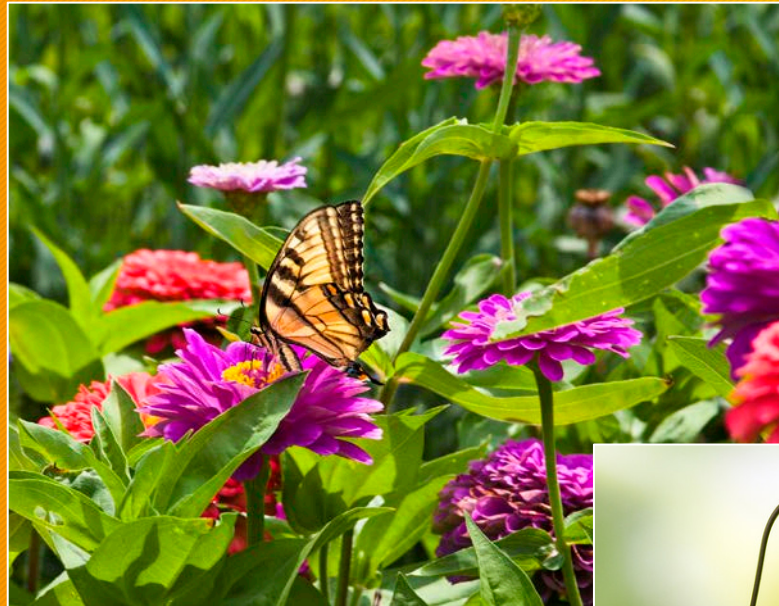
Plants use their flowers to attract animals like bees, butterflies, and other bugs to transfer pollen from flower to flower and plant to plant.

This process is called **pollination**.

These animals that help move the pollen are called **pollinators**.



How do the flowers attract the pollinators?



The flowers have bright colors.

The flowers smell good.



The flowers provide nectar which tastes like honey.

How do the pollinators move the pollen from flower to flower and plant to plant?

The pollen becomes attached to parts of a pollinator's body...

...and is deposited on other plants as the pollinator searches for more nectar to eat.



Where can we find pollen in the outdoor classroom?

IN FLOWERS!



in the woods



on trees



in gardens



on vines

What types of pollinators could we find in the outdoor classroom?



Wasps like the Braconid wasp

Bumble bees like the Eastern bumble bee



Beetles like the Flower longhorn beetle



Ants like the Pavement ant



Butterflies like the Common buckeye butterfly

Spiders like the Jumping spider

