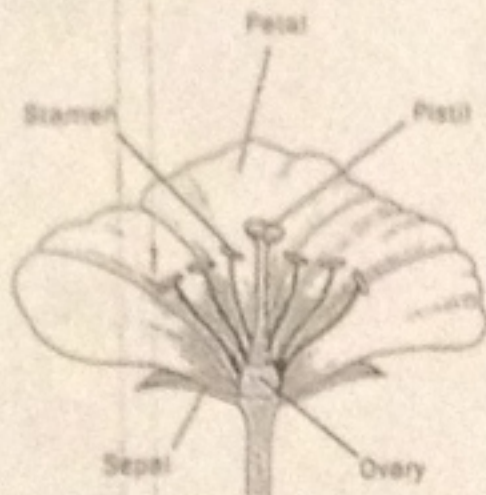




UNIT 2 - Flowers

The Parts of a Flower



When you think of a flower, you might imagine colored petals and a nice smell. But flowers are more than just pretty to look at and pleasant to smell. They are important parts of seed plants. Flowers make the seeds that plants reproduce from.

Look at the drawing of the flower. Find the **sepals**. Sepals are green and look like leaves. They protect the flower when it is a bud.

Flower **petals** have many shapes, sizes, and colors. Their bright colors and smells help bring different kinds of animals to the flowers. Many flowers attract insects. Others attract birds. Some even attract bats!

Many flowers have both male and female parts. The male parts are the **stamens**. A yellow powder called **pollen** is made in the top part of the stamens.

The female part of the flower is the **pistil**. The top of the pistil is sticky. If pollen grains land on the pistil, they stay there. Then the pollen grows a tube down into the **ovary**. The ovary is at the bottom of the pistil.

In the ovary, male cells from the pollen tube join egg cells, or **ovules**. The pollen cells fertilize the ovules. The fertilized cells start to form seeds. The ovary develops into a **fruit**. A fruit holds the seeds that form in the flower. A fruit can be soft and fleshy, like a peach. Or it can be hard, like a walnut.



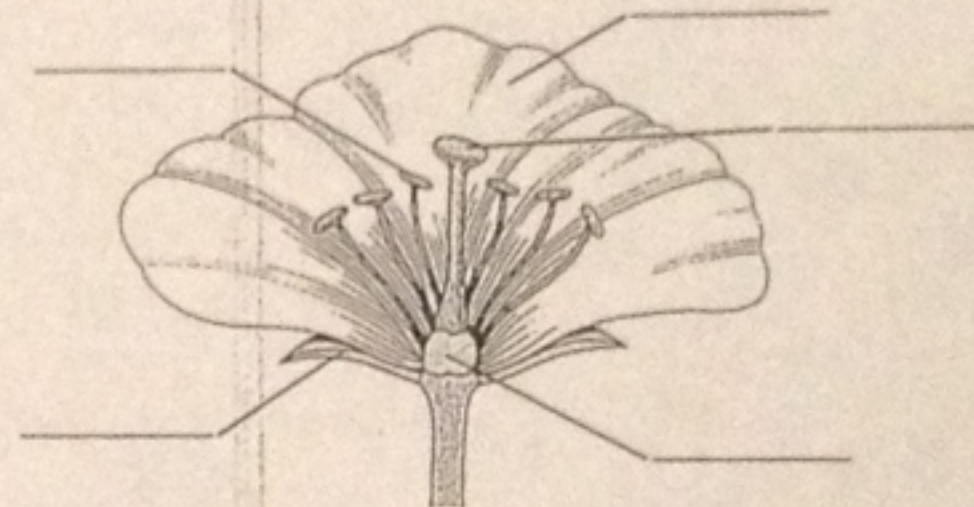
Pistil Stamens

Draw lines to complete the sentences.

1. Petals have many _____ in the top part of the stamens.
2. Pollen is made _____ down into the ovary.
3. The pistil is _____ shapes, sizes, and colors.
4. Pollen grows a tube _____ the female part of the flower.

Label the parts of a flower. Use the words below.

ovary	pistil	stamen
petal	sepal	



Answer the questions.

1. What is made in the top part of the stamens? _____
2. What happens to pollen grains that stick on the pistil? _____
3. What do fertilized cells start to form in the ovary? _____
4. What does a fruit hold? _____

Pollination



Many flowers are pollinated by bees.

For seeds to form, pollen from the male part of a flower has to reach the female part. Moving pollen from the stamens of a flower to the pistil is called **pollination**. A flower may get pollen from its own stamens. It can also get pollen from another flower.

Pollination can take place in many ways. The wind can carry pollen. Trees and grasses are often pollinated by the wind. Wind can carry pollen as far as 100 miles from a plant!

Flowers that are brightly colored or that have strong smells are often pollinated by insects. More flowers are pollinated by bees than by any other kind of insect. Butterflies and moths are attracted to flowers that make a lot of **nectar**. Nectar is a sweet liquid that is made inside a flower. Some insects feed on the nectar inside flowers.

As an insect moves around in a flower, it picks up pollen from the stamens. Some of the pollen rubs off on the pistil. The flower is pollinated. Suppose the insect flies to another flower. It may still have pollen on its body. Then the pollen can rub off onto the pistil of the second flower. In that way, the second flower is pollinated.

Banana flowers open only at night. How are they pollinated? Some bats are active at night and feed on nectar. So when the banana flowers open, bats are there to feed on them. Then the flowers are pollinated.

Answer True or False.

1. All flowers are pollinated by bees. _____
2. Colors and smells may attract insects to flowers. _____
3. When pollen reaches the pistil of a flower, pollination takes place. _____
4. The wind cannot carry pollen. _____
5. Some insects feed on nectar inside flowers. _____

Fill in the missing words.

1. Moving pollen to the pistil of a flower is called _____ (photosynthesis, pollination)
2. Grasses are often pollinated by the _____. (wind, bees)
3. Flowers that are brightly colored are often pollinated by _____. (wind, insects)
4. _____ pollinate flowers that open at night. (Bats, People)
5. In pollination, pollen moves from the stamens to a _____. (pistil, petal)

Answer the questions.

1. What is pollination? _____

2. What are two ways that flowers can be pollinated? _____

3. How does an insect help pollination take place? _____

