

Name _____

Flower Power: Anatomy and Function

The Basic Parts of a Flower

A flower is made up of many different parts. The sepal and petals are usually easy to see. The **petals** are the colorful, often bright part of the flower. Colorful petals attract pollinators and are usually the reason why we buy flowers or grow them in a flower bed. The **sepals** look like little green leaves growing at the base of the petals. Collectively the sepals make up the **calyx** of the flower which serves to protect the flower's reproductive organs. The sepals enclose and protect the developing flower bud before it opens up into a fully developed flower. Flowers contain the reproductive system of the plant. Some of the most important parts of a flower are the male and female parts that carry the traits the parent plant will pass on to its offspring.

The male part of the flower is called the stamen. The **stamen** is the pollen producing part of the plant, and it is made up of two parts: the anther and filament. The **filament** is the stalk that holds the anther and attaches it to the flower. The **anther** produces and holds the pollen, which will hopefully be transported to the female part of the flower by wind, animals, or insects.

The female part of the flower is called the **pistil**, and it is made up of the stigma, style, and ovary. The **stigma** is the head of the pistil; it often looks like a sticky bulb on a long stalk in the center of a flower. The stigma receives the pollen grains. The **style** is the stalk that the stigma sits on top of, and the **ovary** is usually at the base of the style.

When a plant is pollinated, the pollen that has landed on the stigma grows a tube that reaches down through the style to the ovary. If pollen from an incompatible plant of a different species lands on the stigma, it won't grow a pollen tube. When the pollen tube reaches the ovary, the ovules inside the ovary can be fertilized by the pollen. Then the ovules become **seeds**, and the ovary swells. Seeds can be sown to grow new plants, and they can also be important food sources. We eat the seeds of wheat, corn, beans, and many other plants. We also eat many fruits, which are enlarged ovaries that contain the seeds of the plant.

Some flowers are considered *perfect*, meaning they have both male parts and female parts in the same flower. Roses, lilies, and dandelions have perfect flowers. Other flowers are called *imperfect*, meaning each flower has either all male parts or all female parts. Cucumbers, pumpkins, and melons have imperfect flowers.

Glossary of Flower Anatomy:

1. **Stem:** _____
2. **Sepal:** _____
3. **Calyx:** _____
4. **Petals:** _____
5. **Anther:** _____
6. **Filament:** _____
7. **Stigma:** _____
8. **Style:** _____
9. **Ovary:** _____

