# BACKYARO ECOSYSTEM

PARTS OF A FLOWER SCIENCE @ HOME

**ACTIVITY** 



Grades 7-9

CHARLES COUNTY PUBLIC SCHOOLS 5305 Piney Church Road Waldorf, MD 20602 301.934.7464 www.ccboe.com/ScienceCenter





# Flowers: More than just something pretty to look at

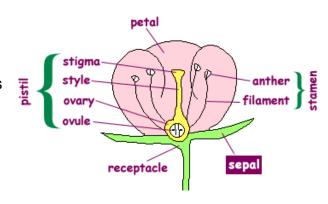
A plant has many parts: roots that soak up nutrients, water, and provide support, a stem for stability, leaves that make food (photosynthesis) and the flower. The flower is the reproductive part of the plant and its primary purpose is to produce seeds that will pass on the traits of the plant to the next generation.

As the reproductive organs of the plant, the flower facilitates the joining of the sperm, contained within pollen, to the ovules — contained in the ovary. This process is called fertilization and the moving of the pollen is called Pollination.

## A flower has four main components or parts

### Sepal

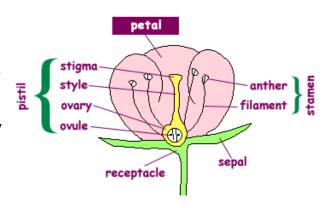
Sepals are the exterior parts of a flower that creates a bud around the emerging flower. Its main purpose is to protect the flower as it grows and prevent it from drying out. Sepals are actually modified leaves and are usually green, but depending on the type of plant could be any color. Sometimes the colored sepals may attract more attention than the actual flower.



Flower Sepals: Function & Definition - Video & Lesson Transcript | Study.com

#### **Petals**

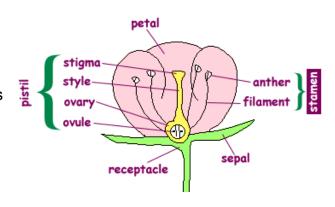
The petals of the flower are often brightly colored, attention attracting, and of interesting patterns and varying sizes. All of this for the specific purpose of attracting pollinators to the flower. Petals are the part of the flower that are the most different from one type of plant to another. Not only are they different colors, patterns, shapes and sizes, but some flowers have hundreds of pedals while others only seem to have one petal. The petals together are called the corolla.



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#### **Stamens**

The stamen is the male reproductive organ of a flower, made up of two parts, the filament and the anther. The filament is a long structure that holds up the anther and extending it up to be accessible. At the top of the filament is the anther which is a sac where many grains of pollen are produced and stored, each containing male reproductive cells. The function of the stamen is to produce pollen and make it available for pollinators to allow reproduction.

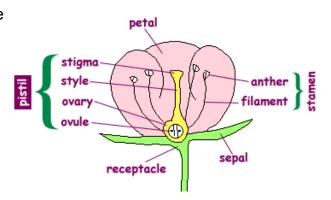


Depending on the type of flower there may be only a few stamens, or many. When a pollinator touches the anther the pollen will stick to them and then be transported to other flowers they travel to them.

Anther of a Flower: Function & Definition - Video & Lesson Transcript | Study.com

#### **Pistil**

The pistil is the female reproductive organ of a flower, made up of three parts. The Pistil is usually bowling pin-shaped, featuring a sac at its base in the center of a flower. This larger sac is the ovary that produces and contains the developing seeds, or ovules. Extending from the ovary is a tube-like structure called the style, leading up to the stigma at the very top. The stigma has a flat, sticky surface which is ideal for capturing any pollen that has been transported to the flower.



Watch the following two videos:

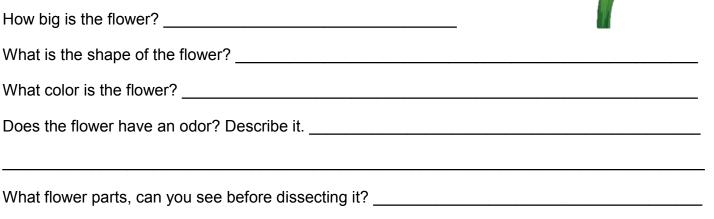
https://www.youtube.com/watch?v=SiFaN2xQg5g

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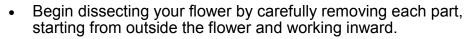
#### Flower Dissection

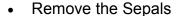
You are about to become a botanist which is a scientist that studies plants and Flowers.

Find a flower to study and make some observations before you pick the flower.



## Remove the flower from the plant by cutting the stem, leaving about 2 inches of stem.





- After removing the sepals observe this structure and complete the chart on page 4.
- Tape or glue one sepal to the chart.

#### Remove the Petals

- After removing the petals observe this structure and complete the chart on page 4.
- Tape or glue one petal to the chart.

#### Remove the Stamens

- After removing the stamens observe this structure and complete the chart on page 4.
- Tape or glue one stamen to the chart.

#### Remove the Pistil

- After removing the pistil observe this structure and complete the chart on page 4.
- Cut the pistil in half long ways to expose what is inside.
- Tape or glue the pistil to the chart.





Stamen

Sepal

Part of Flower	How Many Parts of this Structure are Present	Description of this Structure	Function of this Structure	Attach Sample of this Struc- ture (glue or tape)
Sepal				
Petals				
Stamens				
Pistil				