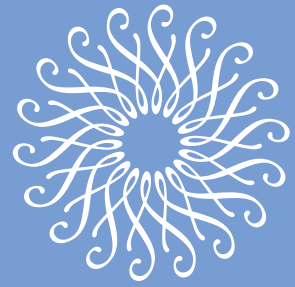


Flowering Perennials Activity



At a Glance

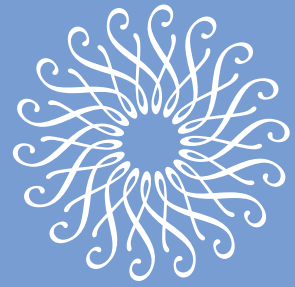
Discover how to recognize common perennials and learn about the parts of a perfect flower. Discover how the reproductive parts of a flower contribute to the survival of the plant.

Did you Know?

Flowers come in many shapes, sizes, and colors. Some have a major role to play in the ability of a plant to survive. Without flowers some plants would not be able to reproduce. Flowers can be complete, incomplete, perfect, or imperfect.

A perfect flower is one that has both male and female parts. An imperfect flower is one that only has male or female parts. A complete flower contains sepals, petals, pistils, and stamens. An incomplete flower is missing one of those parts. Imperfect flowers are always incomplete, but incomplete flowers may or may not be imperfect.

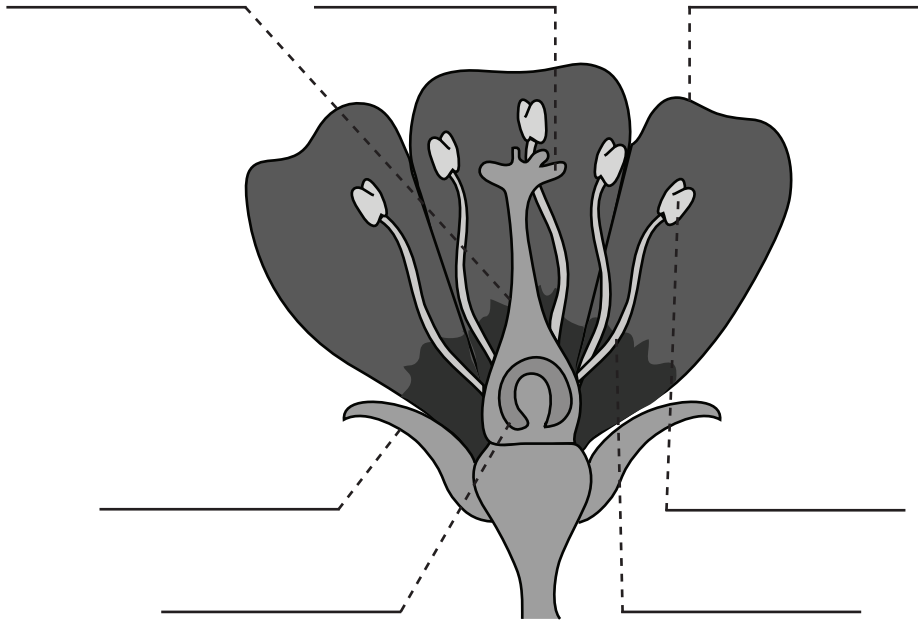
Flowering Perennials Activity



Parts of a Flower

Flowers are important in making seeds. Flowers can be made up of different parts, but the basic parts are the sepal and the petals. The sepal is the flower's outer part and is located at the base of the flower protecting the flower bud and supporting the petals when the flower is in bloom. The petals surround the reproductive parts of the flower. Petals are usually colorful to attract insects or pollinators.

Below you will find a diagram of a flower. Can you fill in the words to complete the diagram?



Female Parts of the Flower

Stigma – Is a bulb shaped part of the flower that is sticky and receives the pollen during pollination.

Style– Is the long slender stalk that connects the stigma and the ovary.

Ovary – Is the part of the reproductive organ located at the base of the petals and sepals. It is where the ovules are stored.

Pistil – Is the entire female organ of the flower which includes the stigma, style, and ovary.

Male Parts of the Flower

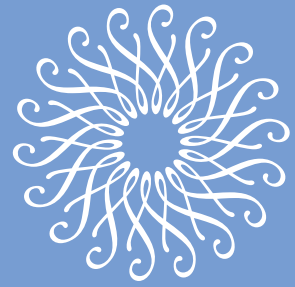
Pollen–This is a powdery substance produced by the anthers of the flower.

Anther – These tiny pads hold the pollen and rise high from the center of the flower on long filaments. Most flowers have five or six anthers.

Filament – This tube-like structure supports the anthers and allows nutrients to travel to the anther where pollen develops.

Stamen – This is the name given to the entire male reproductive organ made up of both the anthers and filament.

Flowering Perennials Activity



Perennials

Some flowering plants are called perennials. Perennials live for more than two growing seasons. The term perennial means “through the years.” A perennial plant can survive cold temperatures. The roots and base of the plant remain dormant during the cold season and begin growing again once the warmer temperatures return to mark the new season.

Gardeners love to use perennial plants in their garden beds. These plants still need care, but because they grow back each year, less planting is needed in the spring. Gardeners use perennials to ensure that there is always something interesting happening in the garden year-round.

Flower Hunt

Below you will find six common perennial plants found in USDA Zone 7. Zone 7 is where Longwood Gardens is located in Kennett Square, Pa. USDA Plant Hardiness Zones are the standard by which gardeners and growers determine which plants are most likely to thrive at a location. The map is based on the average annual minimum winter temperature. <https://planthardiness.ars.usda.gov/PHZMWeb/>

Go outside and see if you can find these perennials growing in your yard or local park. Check off the ones you find.



Dahlia



Daylily



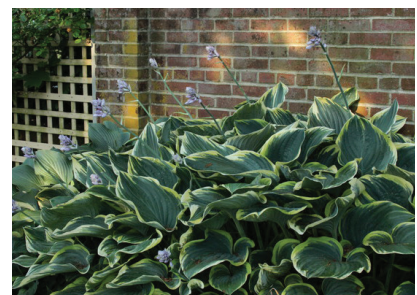
Hydrangea



Hibiscus

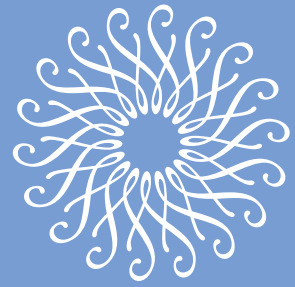


Black Eyed Susan



Hosta

Dissecting a Flower Activity



Materials:

- 1 flower from the garden
- Magnifying glass
- Paper towel
- Tweezers

Extension:

Complete the dissecting activity with other flowers and compare the parts.

- Does each flower have the same parts? What did you observe?
- Is the stigma always taller than the anthers?
- Which flowers are easy to dissect? Why?
- Were you able to find different kinds of flowers (complete, incomplete, perfect or imperfect)?

Dissecting a Flower

Did you know that while every flower can look completely different, most flowers contain both male and female parts? In this experiment you will discover the male and female parts of a flower and how each part is important to the survival of the plant.

Directions:

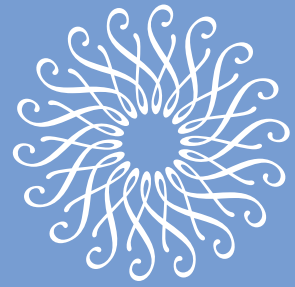
1. Go outside in your yard and search for a plant that is flowering. Pick one flower from the plant. Be careful to keep the plant intact while removing the flower from the stem. Optional: Download the **iNaturalist Seek** app on your cell phone to help you identify the type of flower you are looking at. You can also ask an adult to help you identify the flower.



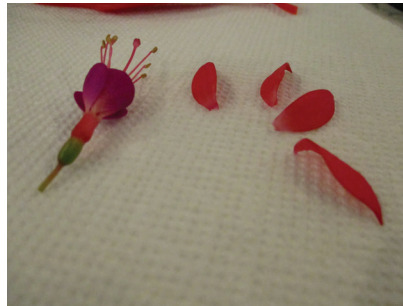
2. Use your magnifying glass to take a close look at the outer parts of the flower. Can you identify the sepal? It is usually green, but can be colored, and is at the base of the petals.



Dissecting a Flower Activity

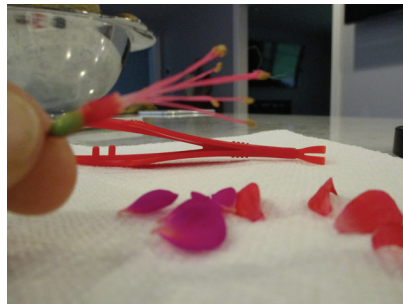


3. Next, count the number of petals. Remember, petals vary in color. Pick off the petals one at a time and place them on the paper towel.



Plants usually have the same number of stamen as petals. So, let's investigate.

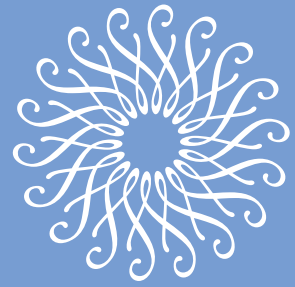
5. Count the number of anthers at the top of the filaments. Are there the same number of filaments as petals?



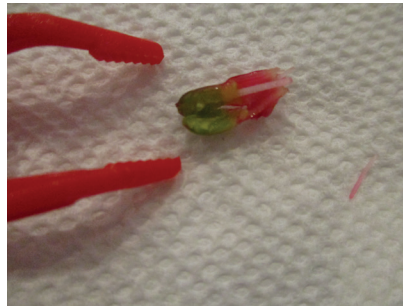
6. Carefully, pluck each filament from the flower base. Use your tweezers to help do this. Place the filaments and anthers on the paper towel. You can now get a good look at the female stigma. Does it feel sticky?



Dissecting a Flower Activity



7. Using your tweezers, pluck the stigma from the base and lay it on the paper towel.



8. Next, let's look at the ovary. Split the ovary in half to reveal the ovule inside. Lay this out on the paper towel.



What kind of flower did you dissect? Was it complete or incomplete? Perfect or imperfect?