

Flowering Plants

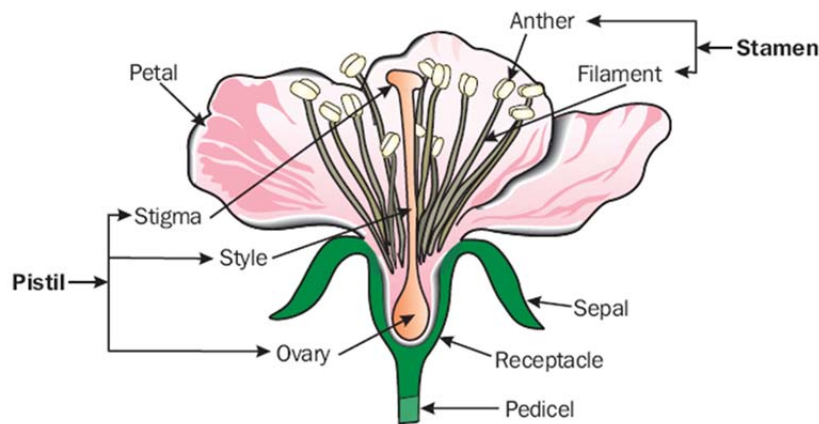
6.L.1.1 Summarize the basic structures and functions of flowering plants required for survival, reproduction and defense.

Flower Anatomy

- The male part of a flower is called the _____.
- The stamen is made of the stalk-like filament which holds up the sac-like anther.
- The anther contains _____ which contains the sperm.
- Flowers that have only male parts are called _____.
- The female part of a flower is called the _____ or carpel.
- It is made up of a sticky tissue at its end called the stigma receptive to pollen.
- Below the stigma is a rod-shaped middle part called the style and a swollen base containing eggs called the _____.
- Flowers that have only female parts are called _____.

What are the parts of a flower and their functions?

PARTS OF A FLOWER



Once the pollen reaches the stigma, it forms a pollen _____ down through the style to the ovary where sperm is deposited.

What are the types of flowers?

- Plants may produce flowers that are _____ or _____.
- A flower that has both male and female parts is called a _____ flower.
- A flower that is missing either male or female parts is called an _____ flower.
- Plants may have flowers that are complete or incomplete.
- If a flower has sepals, petals, pistils, and stamens, it is referred to as a _____ flower.

- If a flower is _____ one of these parts, it is referred to as an incomplete flower.
- Imperfect flowers are always incomplete. Incomplete flowers may or may not be imperfect.

Root Anatomy

What are the functions of a plant's roots?

- A. _____ all of the water and minerals that a plant needs to live.
- B. _____ the plant to the ground and support the above ground part of the plant.
- C. _____ food made through photosynthesis.

What are the parts of a root and their functions?

- The first structure to emerge from the germinating seed is a root called a _____.
- This root becomes the _____ root, and on some plants it is the most important root in the whole root system.
- Other roots eventually branch out from the primary root. These are called secondary or _____ roots.

What are the characteristics of a healthy root system?

- _____ in color
- Fresh _____

Parts of a Flower (Descriptions):

1. Stamen - this is the male part of the flower. It is made up of the filament and anther, it is the pollen producing part of the plant. The number of stamen is usually the same as the number of petals.
2. Anther - this is the part of the stamen that produces and contains pollen. It is usually on top of a long stalk that looks like a fine hair.
3. Filament - this is the fine hair-like stalk that the anther sits on top of.
4. Pistil - this is the female part of the flower. It is made up of the stigma, style, and ovary. Each pistil is constructed of one to many rolled leaflike structures.
5. Stigma - one of the female parts of the flower. It is the sticky bulb that you see in the center of the flowers, it is the part of the pistil of a flower which receives the pollen grains and on which they germinate.
6. Style - another female part of the flower. This is the long stalk that the stigma sits on top of.
7. Ovary - the part of the plant, usually at the bottom of the flower, which has the seeds inside and turns into the fruit that we eat. The ovary contains ovules.
8. Ovule - the part of the ovary that becomes the seeds.
9. Petal - the colorful, often bright part of the flower. They attract pollinators and are usually the reason why we buy and enjoy flowers.
10. Sepal - the parts that look like little green leaves that cover the outside of a flower bud to protect the flower before it opens.
11. Pollen tube - reaches the ovule by growing down through the style, carrying the male gametes inside.