

Flower

Since early childhood, everyone is attracted to one unique part of the plants. This part of the plant determines its beauty. Not just humans, even animals, and insects are drawn to the flowers of plants. Flowers act as identifiers, and we can instantly name the plant on the basis of its flower. Flowers exist in different shapes and sizes, different colors and in some plants, the flower does not exist at all. Let's learn more about this interesting part of the plant.

Introduction to Plants

All around us, everywhere we go, we see plants. We can tell from our observation that there is a huge variety of plants. Some are tall, some are short. There are some which are just of one color, and some which have various colors. We classify plants into three categories.

- Herbs: Plants with green and tender stems are known as herbs. These are short, and may not have many branches. For example, thyme, basil, and lavender come under the category of herbs.

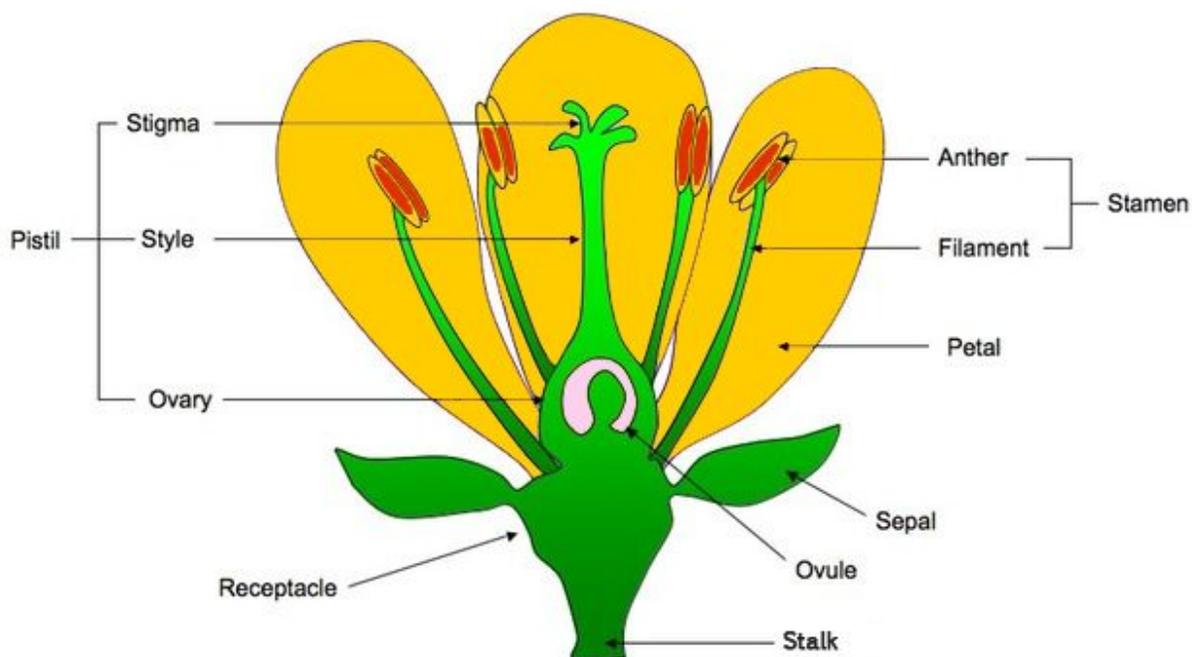
- Shrubs: Shrubs are plants that have the stem branching out near the base. The stems of these plants are not very thick but are hard. Acacia, hibiscus, and maple fall into the category of shrubs.
- Trees: There are some plants which are very tall. Their stem is very hard and thick. As the stem rises and becomes higher, it branches outward. These plants are called trees. For example, apple, mango, and walnut are trees.



The Flower

- The flower is the most prominent part of a plant.
- The open flower's most attractive parts are the petals. The petals may vary in color depending on the flower.

- The small prominent leaf-like structures on the bud are known as sepals.
- If we cut the flower open, we can see the parts inside, and we can identify the pistil and the stamen.
- The pistil is the innermost part of the flower. It is the female part of the flower.
- The stamen is the male part of the flower.
- The ovary is the swollen part at the base of the pistil. The small bead-like structures in the ovary are called ovules.



Parts of a flower

Questions For You

Q1. Which of the following statements are true for flowers?

- a. Flowers are always bisexual
- b. They are the sexual reproductive organs
- c. They are produced in all groups of plants
- d. After fertilization, they give rise to fruits
- e. Both B and D

Sol: e. Both B and D

Flowers are the sexual reproductive organ of the plant because they contain male and female reproductive organ- stamen and pistil which form male and female gametes (pollen, ovule). Flowers can be unisexual (having only stamen or pistil) or bisexual (contain both stamen and pistil). After fertilization male and female gametes fuse to form zygote and ovary develop into fruit. Some plants do not produce flower like-moss, fern etc. These plants reproduce by spores.

Q2. The swollen part of the pedicel is known as:

- a. Petiole
- b. Stipule
- c. Sessile
- d. Thalamus

Sol: d. Thalamus

Flowering Plant

Imagine a world without flowering plants. What do you see when you try to think of that? A dull, colorless and dead world is what you would see. Flowering plants provide us with everything we need for happiness. A world full of colors and a way to make the world a happier and a better place.

We see these plants everywhere around us – inside and outside our house, in school, on the roadsides, in the parks, and in so many other places. There are so many different kinds of plants. To differentiate between them all, it is important to learn more about flowering plants.

What are the types of flowering plants?

All around us, everywhere we go, we see plants. We can tell from our observation that there are various types plants. Some are tall, some are short. There are some which are just of one color, and some which have various colors. We classify plants into three categories.

- **Herbs:** Plants with green and tender stems are known as herbs. These are short, and may not have many branches. For example, thyme, basil, and lavender come under the category of herbs.
- **Shrubs:** Shrubs are plants that have the stem branching out near the base. Their stem is not very thick, but it is hard. Acacia, hibiscus, and maple fall into the category of shrubs.
- **Trees:** These plants are very tall. Their stem is very hard and thick. As the stem rises and becomes higher, it branches outward. These plants are called trees. For example, apple, mango, and walnut are trees.



There are two more categories of plants:

- Creepers are plants with weak stems that cannot stand upright and spread on the ground. For example, pumpkins and watermelons.
- Climbers are plants with weak stems that take support from the neighbouring structures and climb up trees. For example, grapevine and money plant.

The Stem

The stem conducts water upwards. We can prove this with a small activity. Fill one-third of a glass with water and add a few drops of red

colored liquid. Cut the base of the stem of a herb and put it in the glass. After a day, you will observe that parts of the herb have turned red.

This proves that water moves up the stem. Along with water, minerals dissolved in the water also move upwards. Thus, through the stem, water is conducted to the leaves and other parts of the plant.

The Leaf

Leaves exist in various different varieties. They can be broad or thin, long or short, green or colorless. Let's learn more about the leaf. The part of the leaf that attaches it to the stem is the petiole. The broad and green part of the leaf is the lamina.

The lines on the leaf are called veins. The thick vein in the middle is called the midrib. The designs made by these veins are called leaf venations. If it is like a net on both sides of the midrib, then it is known as reticulate venation. If the veins are parallel to each other, it is known as parallel venation.

The leaf releases water through transpiration. Plants release a lot of water into the air by this process. Leaves prepare their food through

photosynthesis. They use water, and carbon dioxide from the air to do so. They release oxygen in the process. The plant stores the prepared food in different parts of the plant in the form of starch.

The Root

The roots are the part of the plant that is in the soil. The roots help in holding the plant firmly in the soil. They anchor the plant to the soil. There are two kinds of roots. Firstly, we have the type of roots in which there is one main root and smaller roots come out of it. This main root is known as taproot, and the roots that come out of it are known as lateral roots.

Secondly, there are roots in which there is no main root, and all roots are similar. We call this type of roots as fibrous roots. Roots absorb water and minerals from the ground, and the stem conducts them to the other parts of the plant.

The Flower

The flower is the attractive part of the plant that contains the reproductive organs of the plant. You can learn more about the flower [here](#).

Solved Question For You

Q. The starch is produced in the part of leaf which is:

- a. Exposed to light
- b. Covered with black paper.
- c. Kept in closed dark room.
- d. Watered daily.

Sol: a. Exposed to light

