Chapter-3 Parts of Plants

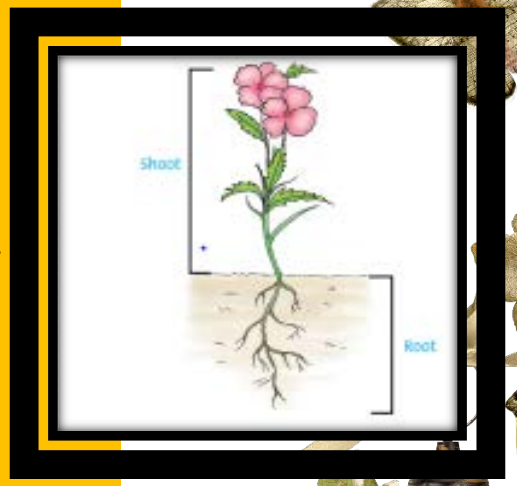
CLASS- 3

E.V.S

There are different kinds of plants. Some are big while some are small. Some grow in water while some grow in desert.

The plants have different parts. Each part has its own function. These parts work together and keep the plant alive.

Aplant is mainly divided into two parts : root and shoot.



ROOT

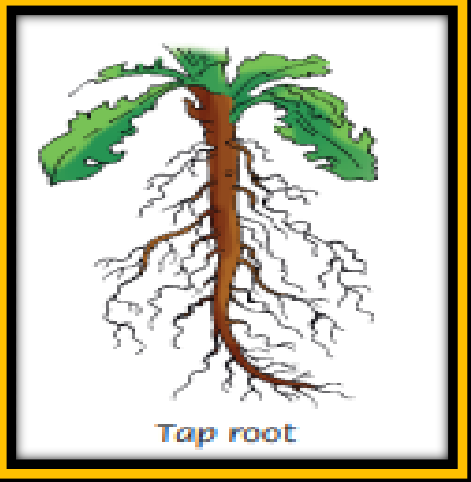
The part of a plant that grows inside the soil is called root. It has very fine hair all over its surface which are called root hair.

Root is mainly of two types:

- Tap root
- Fibrous root

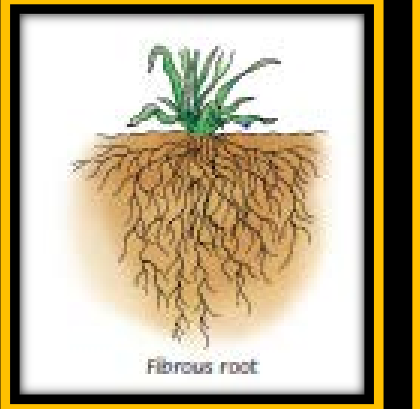
Tap Root

When the main root grows from the end of the stem and goes deep into the soil and many small roots grow from the main root, it is called tap root. Plants like Rose, Carrot and Radish have tap roots.



Fibrous Root

When a bunch of thin and small roots grow from the end of the stem, it is called fibrous root. Plants like Wheat, Onion and Grass have fibrous root.

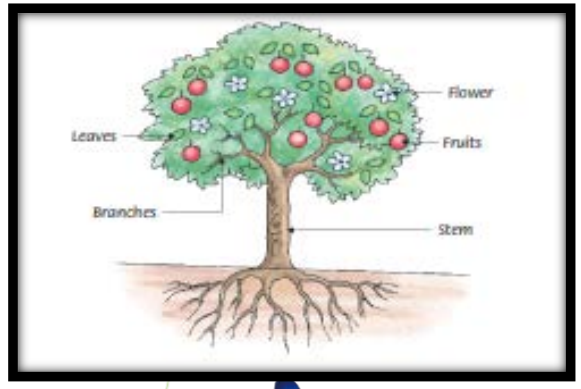


Functions of the Root

- It holds the plant firmly to the soil.
- It absorbs water and minerals from the soil.
- It holds the soil firmly and prevents it from washing away with rainwater.
- Vegetables like carrot and radish have thick and swollen roots. They store food in them.

SHOOT

The part of the plant that grows above the ground is called shoot. Stem, branches, leaves, flowers and fruits are the different parts of the shoot.



Stem

Stem forms the main part of the shoot. Branches, leaves, flowers and fruits grow on the stem. In young plants or in herbs, climbers and creepers the stem is green and tender. In shrubs and trees stem becomes hard and woody. Trees (i.e. Mango, Neem) have hard, thick, strong and woody stems called trunk.

Some plants (like Banana) have soft but thick and strong stems.

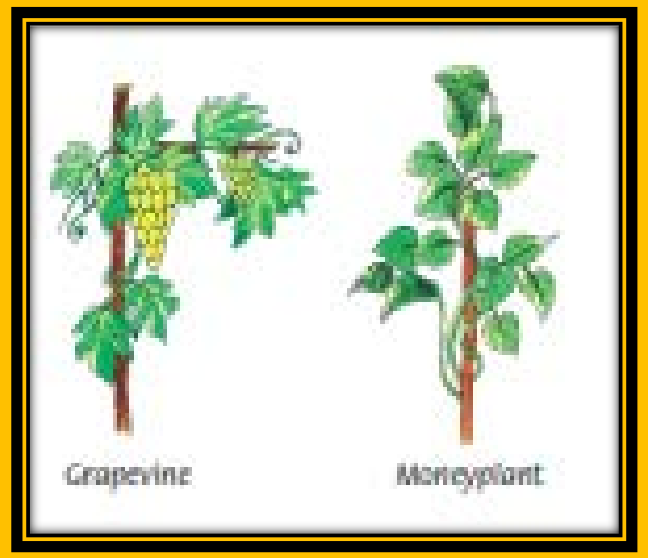
Some plants (for example, rose, wheat, maize etc.) have thin stems.

Check Your Knowledge

Fill in the blanks.

1. Trees have thick and woody stem called _____.
2. The root holds the _____ firmly to the soil.
3. The _____ have thin hair called the root hair.
4. Each part of a _____ has its own function.

Some plants have soft, green and weak stem. They cannot hold the plant upright. They need support to climb up. Such plants are called climbers. Moneyplant and Grapevine are the climbers. Some plants creep on the ground. They are called creepers.



Functions of the Stem

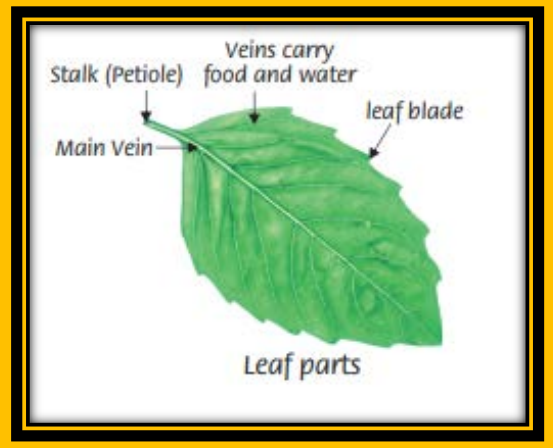
It keeps the plant upright and gives support. It carries water and nutrients from the roots to the other parts of the plant. It bears branches and leaves. It also carries food prepared by the leaves to other parts of the plant. It stores extra food.

BRANCH

Branch is a part of tree that grows out from the main stem and on which leaves, flowers and fruits grow.

LEAF

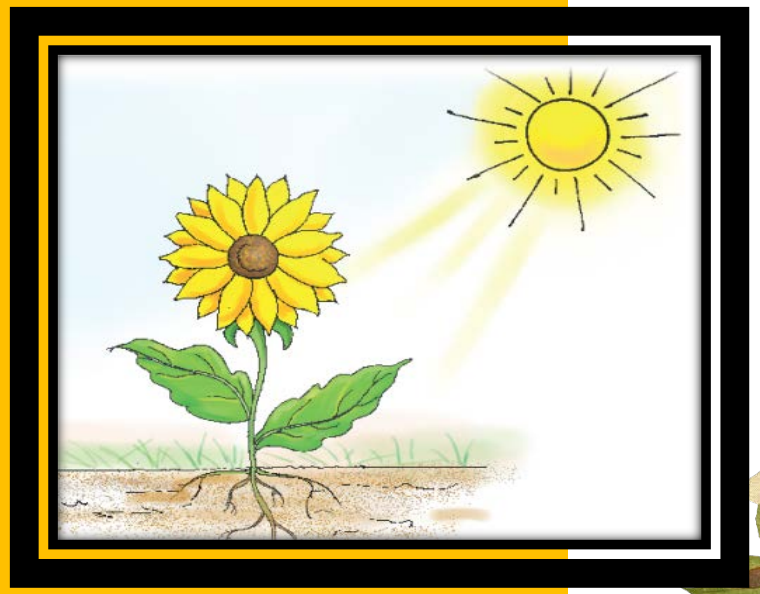
Leaf is called the food factory of the plant. It prepares food for the plant. It has a broad flat surface called lamina. It has tiny pores on its surface for breathing called stomata. The stalk with which the leaf is attached to the branch is called petiole.



Leaves have a green coloured pigment called chlorophyll which helps in the preparation of food.

Functions of the Leaf

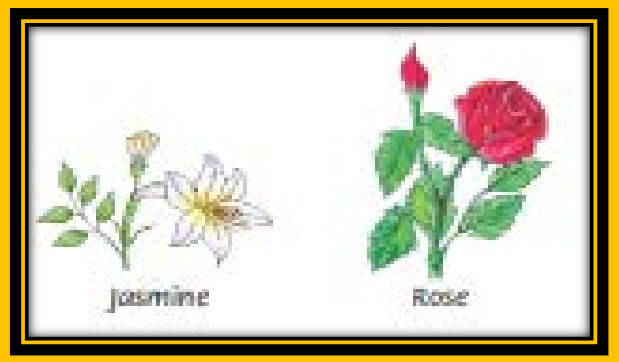
- It has tiny pores called stomata for breathing.
- Leaves prepare food for the plant with water, carbon dioxide, sunlight and chlorophyll. The process of preparing food by the leaves is called Photosynthesis.



- It releases oxygen during photosynthesis which purifies air.
- Extra water is evaporated through stomata.
- Some leaves like cabbage also store food.

FLOWER

When the plant grows fully, it starts flowering. Flower is the most beautiful part of the plant. Some flowers such as Rose and Jasmine give pleasant fragrance. Flowers have bright and attractive colours.



Functions of the Flower

- Flowers are used for decoration.
- They help in reproduction.
- Some flowers like Rose and Jasmine are used to make perfumes.
- Honeybees make honey from the nector of the flowers.
- Some flowers like cauliflower store food and are used as vegetables.
- Flowers bear fruits and seeds that give birth to a new plant.

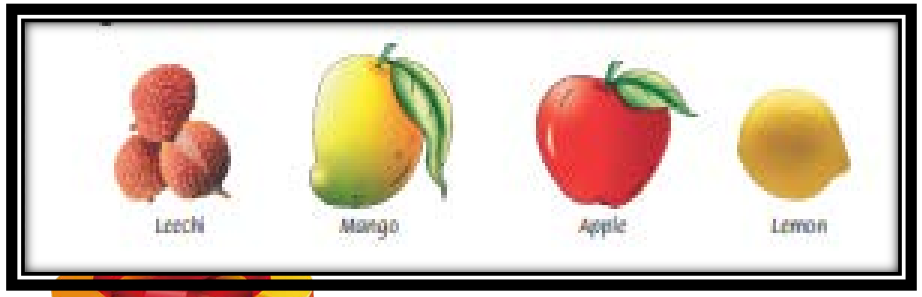
Check Your Knowledge

Choose the correct answer from the following.

1. Leaves release this gas during photosynthesis.
   a. oxygen b. nitrogen c. neon
2. The stem of one of these stores extra food in it.
   a. wheat b. maize c. sugarcane
3. One of these plants is a creeper.
   a. watermelon b. pea c. grapevine.

FRUITS AND SEEDS

Flowers take the form of fruits. Fruits contain seeds. Fruits store food in them. Some fruits bear only one seed like mango and leechi. Some bear many seeds like guava, papaya, apple and orange. Some fruits have no seeds like banana.



Functions of Fruits and Seeds

- Fruits are the important part of food.
- Fruits protect seeds inside them.
- Seeds grow into new plant when sown in the soil.
- Seeds of some plants like rice, wheat and gram are used as food.

Fact File

- Leaves of some plants like basil and neem are used as medicine.
- The smallest seeds are the orchid seeds.
- The banana fruit does not bear any seed.

Things to Remember

- The part of the plant inside the soil is called the root.
- The part of the plant above the ground is called the shoot.
- Shoot bears the stem, branches, leaves, flowers, fruits and seeds.
- Roots absorb water from the soil.
- Leaf is the food factory of the plant.
- A flower develops into a fruit.
- Fruit bears the baby plant inside it.

THANK
YOU