

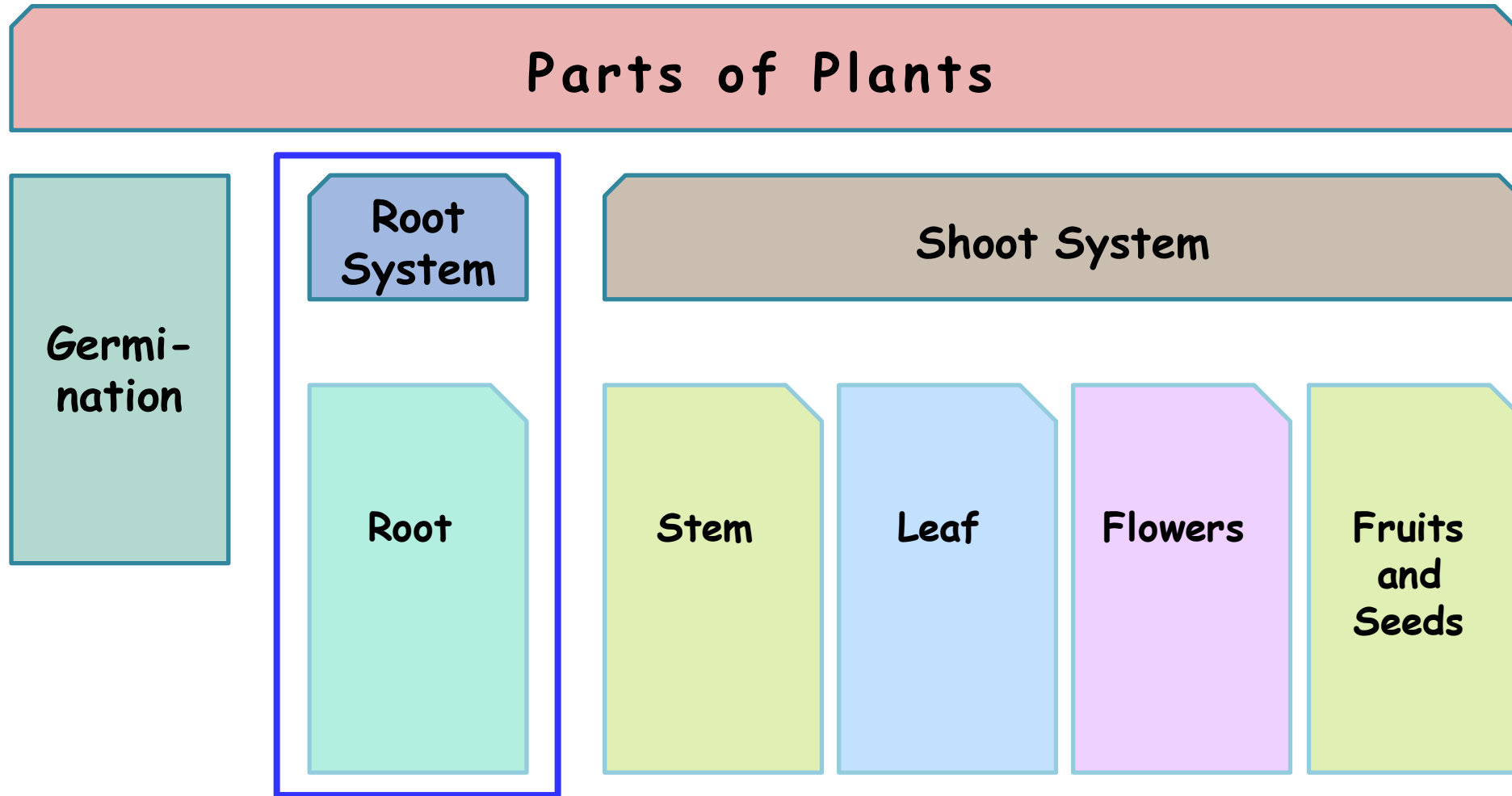
Science

Parts of Plants : The Root System

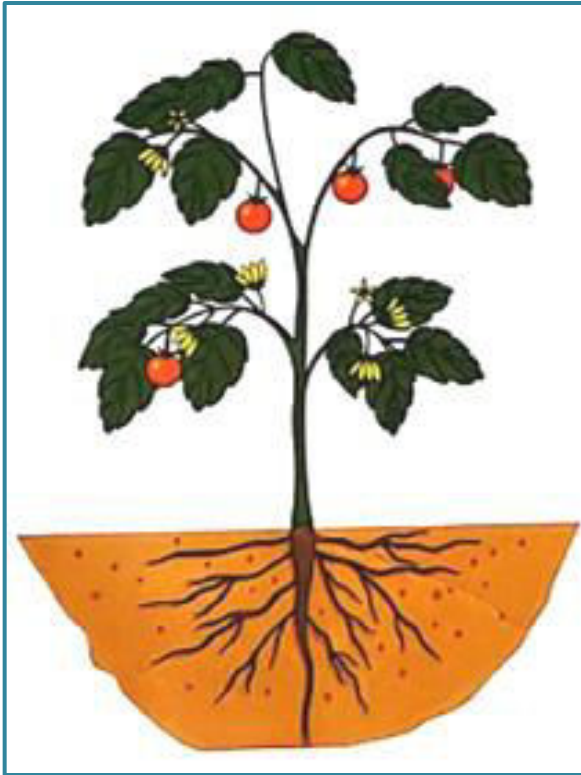
By :-

Ms Jyotika Guleria

What will we learn ?



Parts of a Plant



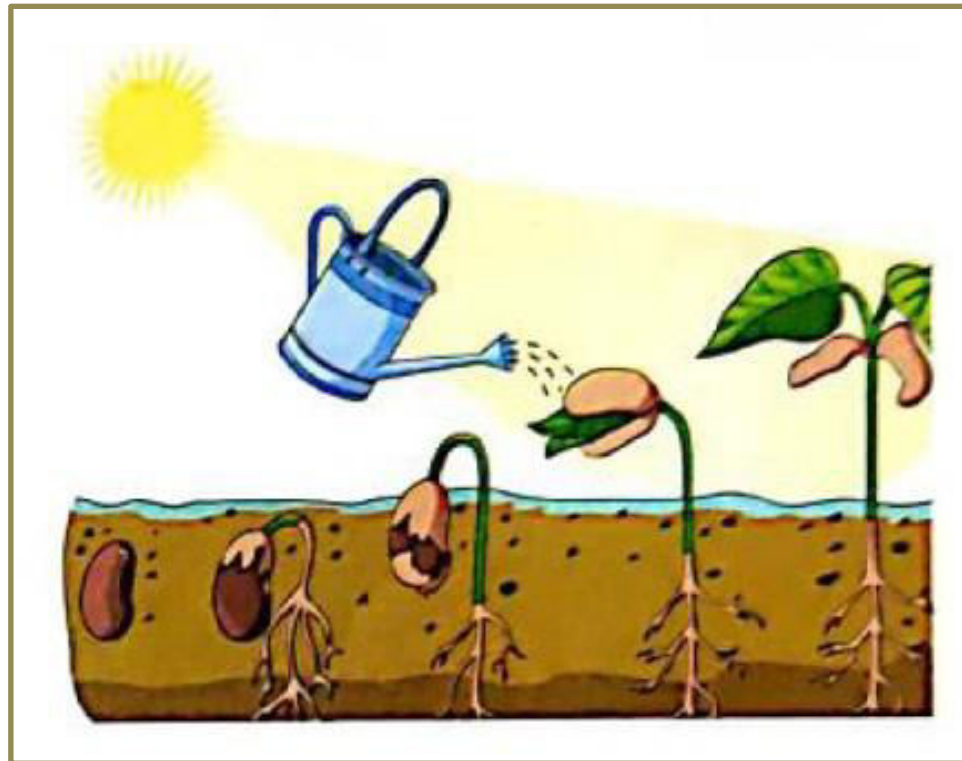
✦ Name any four parts that you have learnt earlier:-

1. Leaf
2. Fruit
3. Stem
4. Roots

Parts of a Plant

Germination

- ✦ Process of growth of a new plant from a seed when it gets right amount of water, sunlight and air is called germination.



Parts of a Plant

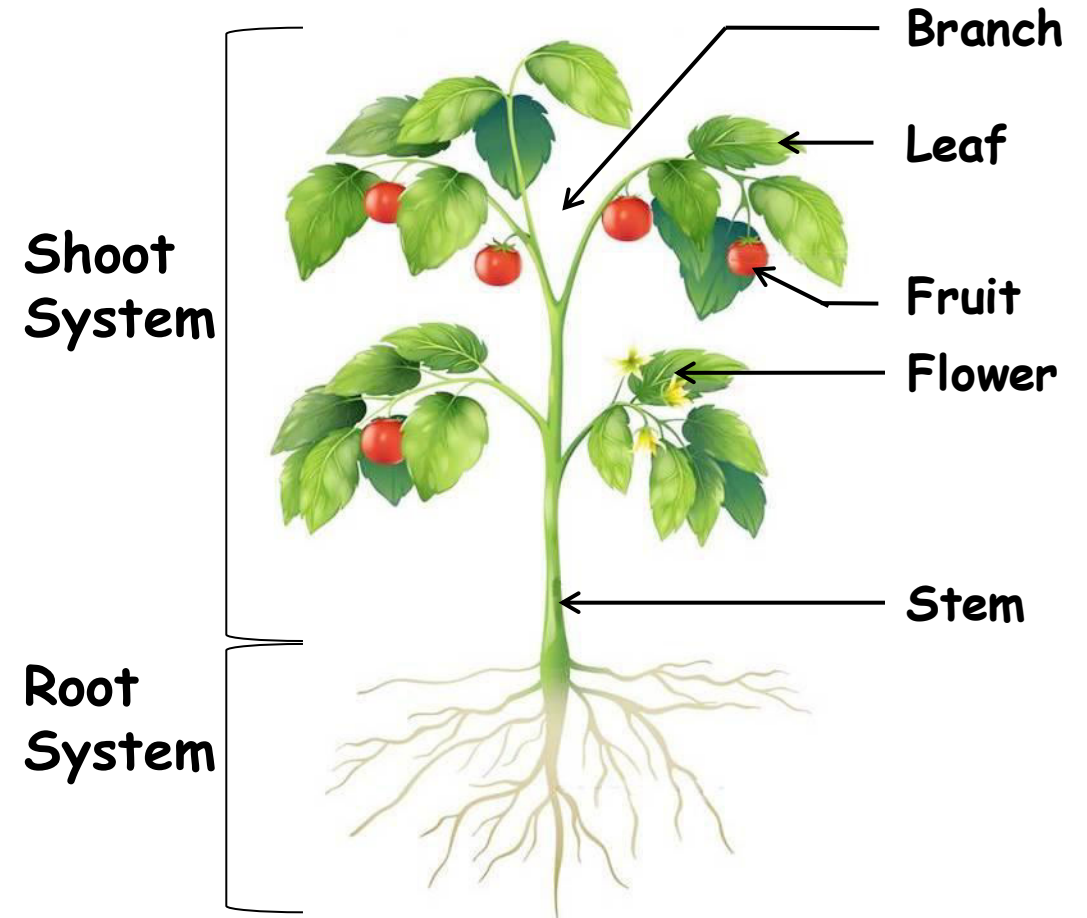
✦ A plant is divided into two major parts:-:-

Shoot System

- ◆ The part of plant that grows above the ground is called the shoot system.
- ◆ It consists of stem, branches, leaves, flowers and fruits.

Root System

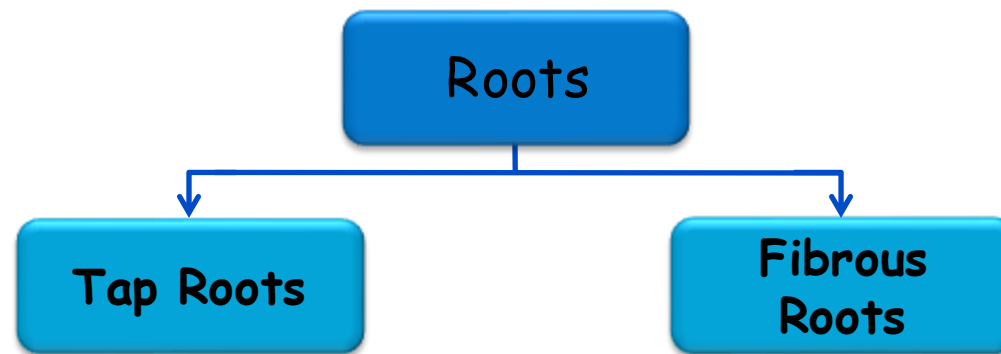
- ◆ The part of plant that grows below the ground is called the root system.
- ◆ It consists of roots which fix the plant to the soil.



Parts of a Plant

The Root

- ◆ It is the underground part of plant.
- ◆ They grows deep and spreads wide into the soil in search of water.
- ◆ They hold the plant firmly to the soil.
- ◆ There are two types of roots:- Tap root and Fibrous root.



Parts of a Plant

Types of Roots

Tap Root

- ◆ It has one main root at the base of the stem of the tree.
- ◆ It is the first root that appears from the seed.
- ◆ Many small roots grow from the main root.
- ◆ Examples:- Carrot, Bean, Balsam.



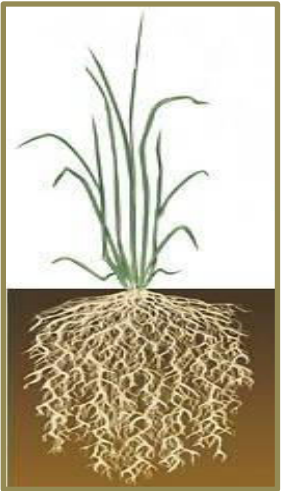
Fibrous Root

- ◆ It is bunch of small, thin roots that grow from the base of the stem.
- ◆ Examples:- Grass, Paddy, Wheat.



Quiz - Types of Roots

Grass



Fibrous
Root

.....

Carrot



Tap
Root

.....

Rice Plant



Fibrous
Root

.....

Wheat Plant



Fibrous
Root

.....

Turnip



Tap
Root

.....

Beetroot



Tap
Root

.....

Parts of a Plant

Functions of Roots

- ♦ Roots help the plants to remain fixed to the soil.
- ♦ Roots absorb water, nutrients and minerals from the soil.
- ♦ Some roots store food.
 - ♦ We can eat roots of such plants.
 - ♦ Examples : Reddish, Carrot, Potato, Beetroot., Turnip



Reddish



Potato



Beetroot



Turnip

Parts of a Plant

Keywords

Root System

The part of the plant that grows below the ground.

Shoot System

The part of the plant that grows above the ground.

Tap Root

The main root that grows from the base of a stem into the soil.

Fibrous Root

A bunch of small, thin roots that grow from the base of the stem.

Germination

The process of the growth of a seed into a new plant.

Think and Answer

Q: What are the two main parts of a plant?

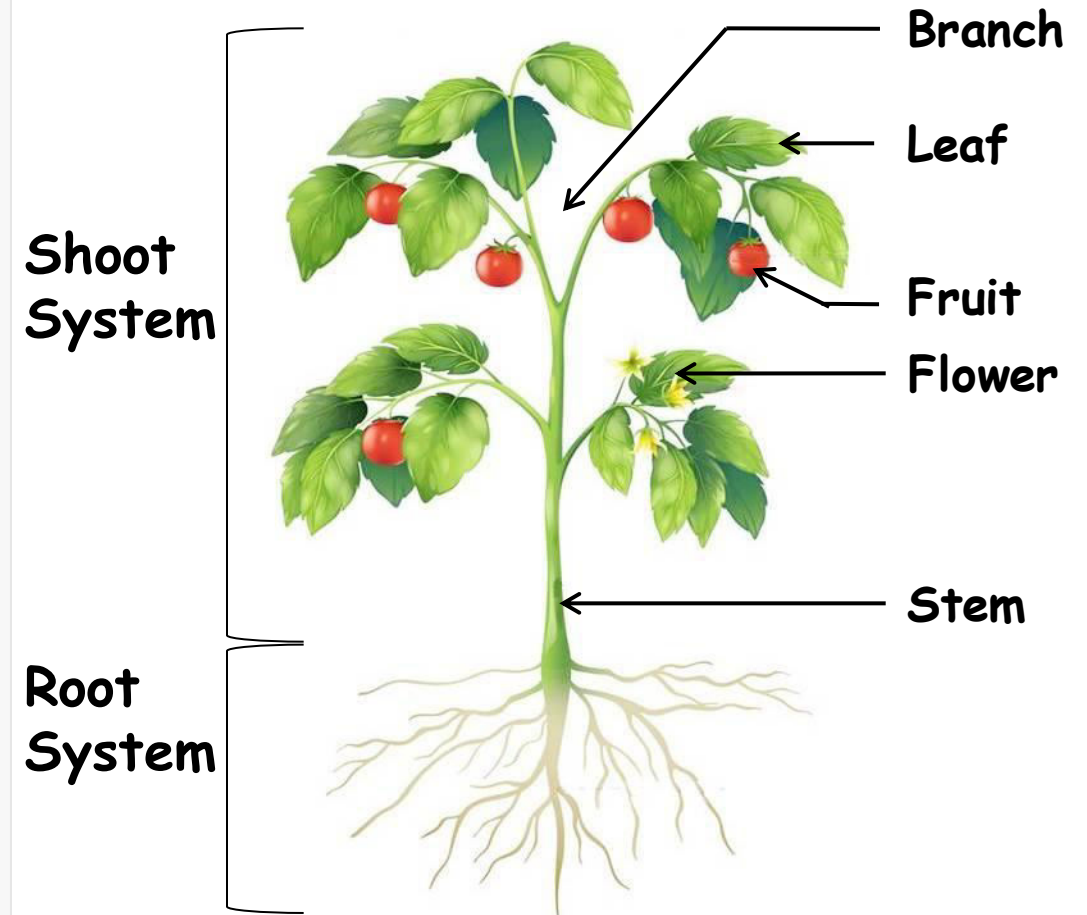
Key words to be used in the answer:-

♦ Root System:-

- ♦ Grows below the ground.
- ♦ Fixes the plant to the ground.

♦ Shoot System:-

- ♦ Grows above the ground.
- ♦ Consists of stem, branches, leaves, flowers and fruits.



Think and Answer

Q: Draw and explain Tap root?

Key words to be used in the answer:-

- ◆ Main root at the base of the stem.
- ◆ First root to appear from the seed.
- ◆ Many small roots grow from it.
- ◆ Examples:- Carrot, Bean, Balsam.



Think and Answer

Q: Draw and explain Fibrous root?

Key words to be used in the answer:-

- ◆ Bunch of small, thin roots which grow from the base of the stem.
- ◆ Examples:- Grass, Paddy, Wheat.



