

Demonstration Lesson

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Class: 7th Grade
Subject: General Science
Topic:
Dated: 23-06-2016
Time: 30 Minutes
Pupil Teacher:

General Objectives:

- To develop scientific temper among the students.
- To create interest in science.
- To develop logical thinking in the students.
- To inculcate scientific skills in students.

Specific Objectives

- To create love for living things.
- To make them understand importance of Plants.
- To make them understand basic structure of a plant
- To make them understand different functions of roots

Teaching Aids:

PPT, Some live plants and some modified roots.

Introduction

Dear students we know there are two main components of earth – Living things and Non- living things, and the living things are further of two main types do any body know what are they?

Exp. Answer: Plants and animals.

Which creatures of Nature provide greenery to earth?

Exp Answer: Plants

Announcement of the Topic

Dear students today we will try to understand
“The different parts of a Plant and functions of roots”

Parts of a Plant – Functions of Root

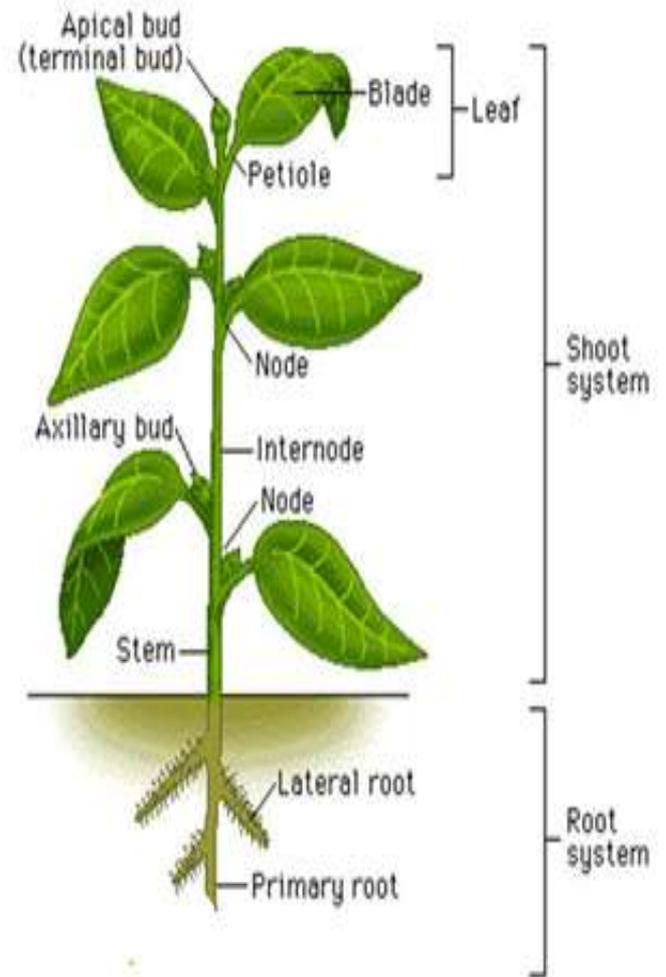
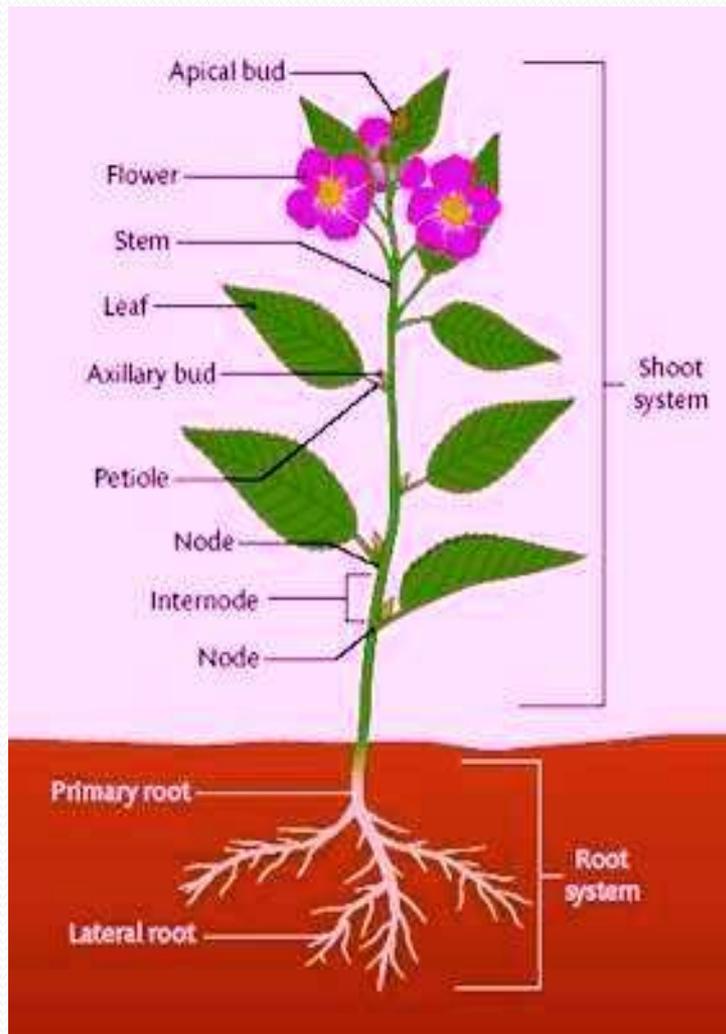
A Plant has two main Parts

PLANT

1- Root System
(Underground)

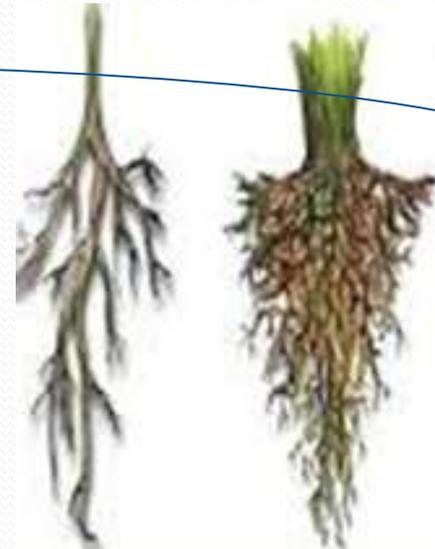
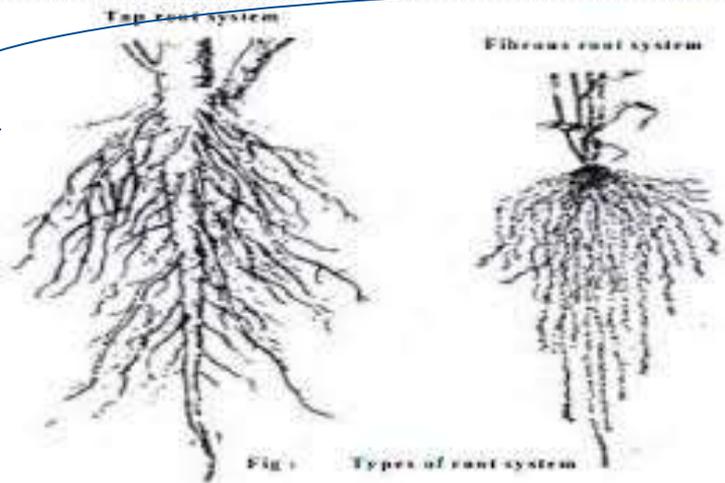


2- Shoot System
(Over ground)



- **Root System:**

The underground parts of a plant constitute the root system which usually remain hidden underground and are mostly geotropic.



- **Shoot System:**

The shoot system which usually remain above the ground has following parts:-

1. **Stem:**

The stem which keeps the plant upright is the first part of shoot system in a plant.



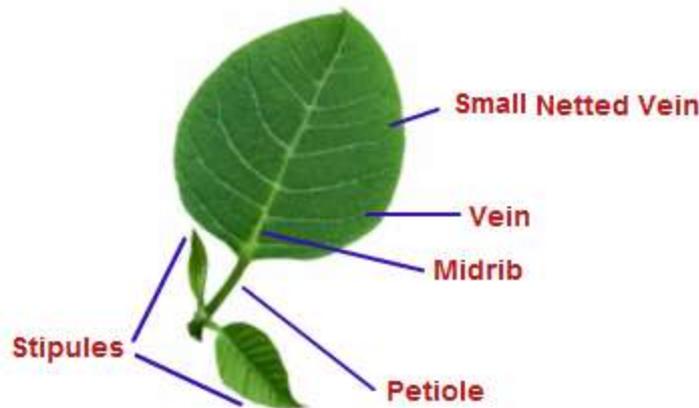
2. Branches:

A **branch** is a woody structural part connected to but not part of the central stem of a plant. Large branches are known as **boughs** and small branches are known as **twigs**.



3. Leaves:

The **plant leaves** are the part of the shoot system in the plant which serve as the primary food-producing organ and are usually green in colour and all the greenery of earth is due to leaves. They produce oxygen by photosynthesis.



4. Flowers:

A **flower** is the reproductive part of a **plant** that produces seeds. **Plants** that produce **flowers** and fruit are called angiosperms.



5. Fruit:

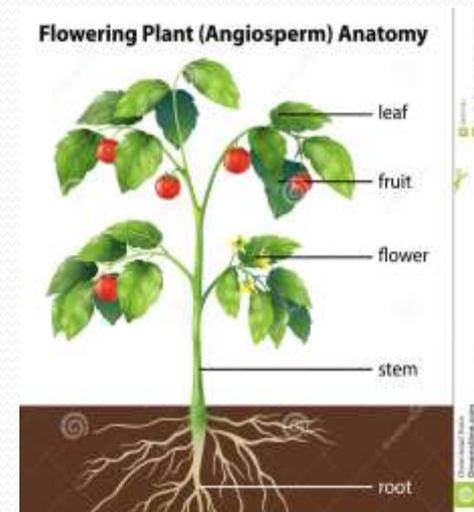
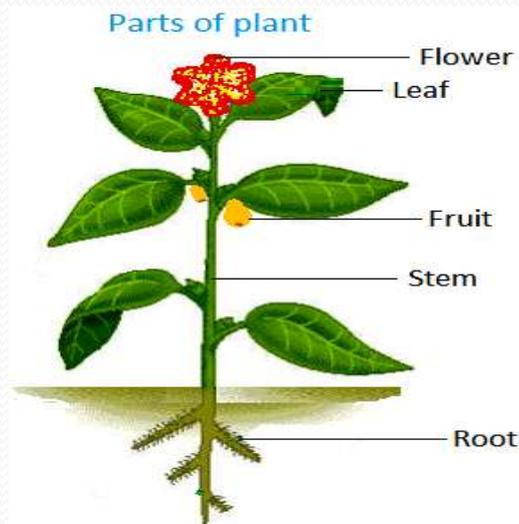
The fruit is the ripened ovary of a plant containing the seeds. After fertilization, the ovary swells and becomes either fleshy or hard and dry to protect the developing seeds.



Functions of Roots in a Plant

Roots perform four major **functions** in a plant these are:

1. Anchoring of the **plant** body to the ground, and supporting it.



2. Absorption of water and inorganic nutrients.
3. storage of food and nutrients,



4. vegetative reproduction and competition with other plants.

Generalization

The plants have two main parts- the root system and Shoot system, the root system consists of roots which hold the plant in the soil and the shoot System consists of Stem, branches, leaves, flowers and fruits.

The roots help in absorption of water and nutrients from soil and they also store food for future use.

Application

After learning the lesson “ Parts of a plant and functions of the roots” the students will learn to protect the plants and grow more and more plants in their surroundings.

Recapitulation

The teach will show some plants and roots to the students and make them recognize the same.