

Getting to know about plants

Subject: Science(biology)

Notes (to be copy in class work copy)

Plants are present all around us in different shape, size, colour.

- Plants are broadly classified flowering and non flowering plants.
- Plants are grouped into following on the basis of their heights, stem and branches.
- Herbs: Plants with green and tender stem are called herbs. These are usually short and sometimes do not have branches.
Eg: grass, wheat, rice etc
- Shrubs : Plants with medium height and narrow but woody stem are called shrubs. These live for short periods.
- Trees: plants with hard and thick stem are called trees.
Eg: mango, coconut etc
- Creepers: Plants which have a weak stem and are extended horizontally along with the soil on the ground as they cannot stand upright.
Eg: Mint, lily, watermelon,
- Climbers: Plants with long ,weak and very thin green stem, which use external support to grow and carry their weight.
Eg: money plant,

ROOTS:

➤ functions of root

- Roots absorb water and mineral from the soil.
- It holds the soil firmly to keep the plant upright.
- Some roots store food and become plump.

➤ Types of root:

- Fibrous root: the branches of root come out from the base of the stem.
Eg: grass, rice

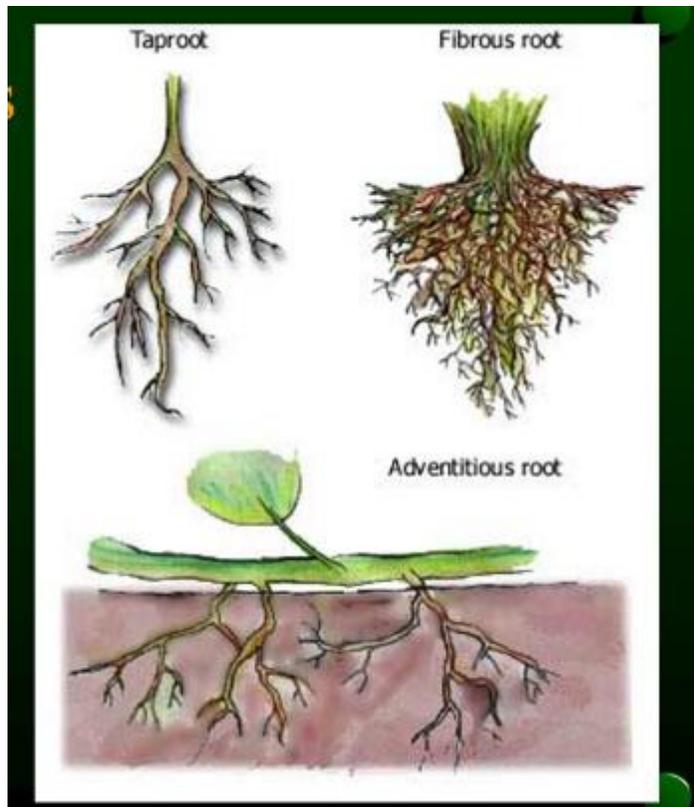
- Tap root: The root which grows vertically downward and gives off small lateral roots are called taproot.

- Adventitious root: These roots arise from an organ other than the root – usually a stem, sometimes a leaf.
Eg: Mangrove, banyan tree

➤ Plants having leaves with reticulate venation have taproot and plants having leaves with parallel venation have fibrous root.

➤ Root hair: The fine hair like structures on the branches of root is called root hair.

➤ Lateral roots: The smaller roots arising from taproot are called lateral roots.



+ **SHOOT SYSTEM:** It comprises of

Stem

Leaves

Flowers

Fruits and seeds

+ **STEM :**

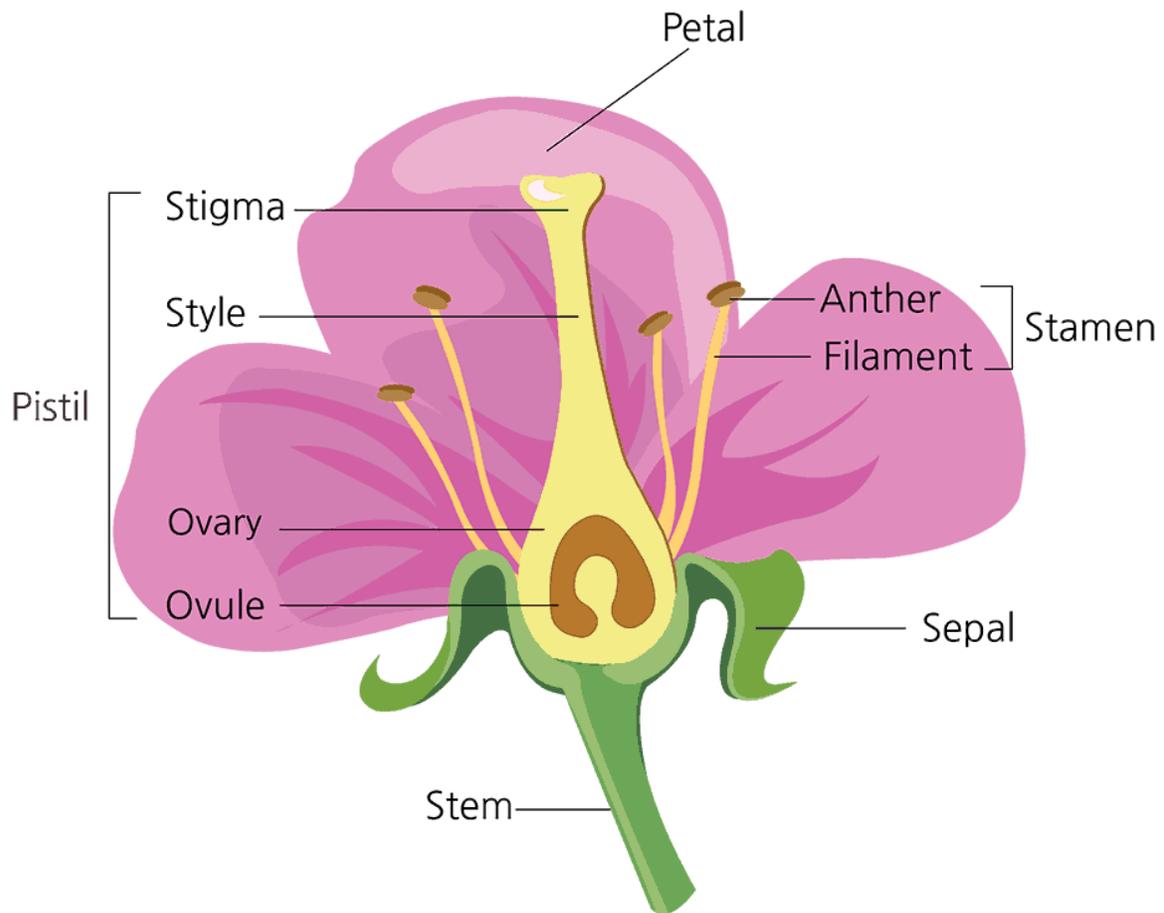
It is present above the ground.

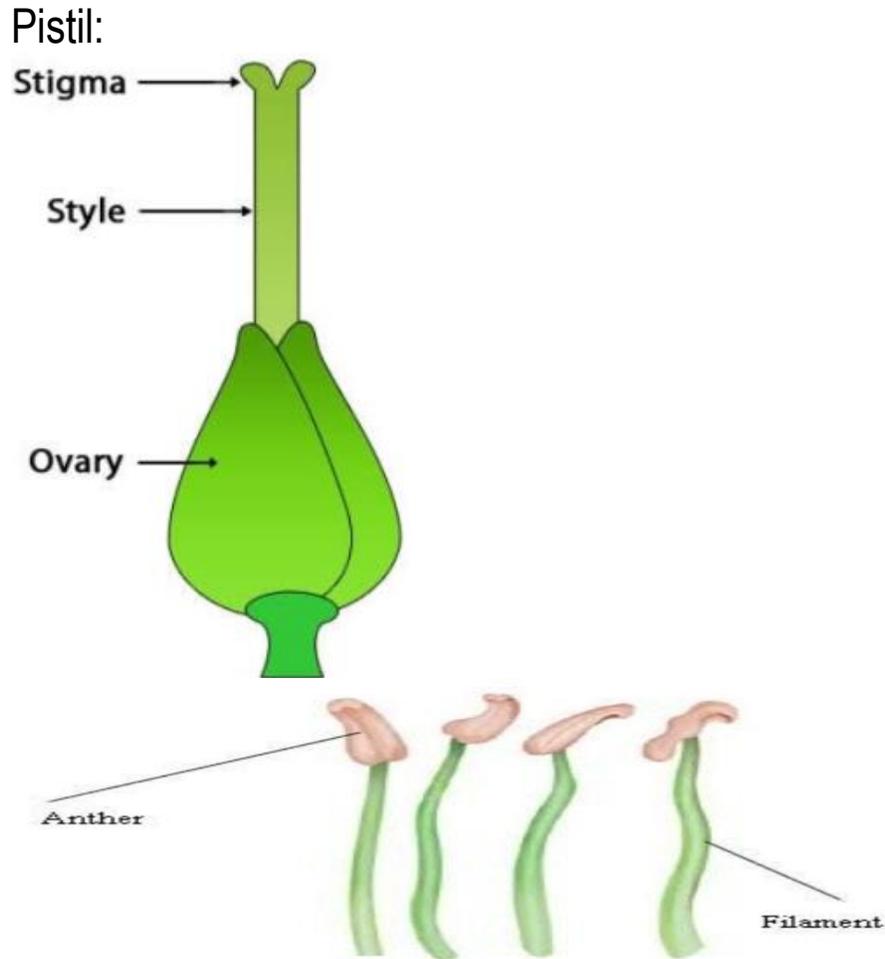
+ **Functions of stem:**

- It bears leaves, buds ,flowers, fruits, etc
- The stem conducts water from the roots to the leaves and to the other parts
- It also transports food from leaves to all parts of the plants

- Sometimes food is stored in the stem(potato,yams,ginger,onion)
- Node: place where leaves and branches are joined to stem are called nodes
- Internodes: The part of the stem between two nodes is called internode.

FLOWER:





stamen

The flowers are the colourful, seed-bearing parts of the plant that grows at the end of the stem. A typical flower exhibits the following structure:

Petals: These are bright, colourful and broad parts of the flower. Taken together, the petals of the flower form what is called a Corolla. Petals attract the pollinators.

Sepal: This is the green, leaf-like structure of the flower that encloses the petals and is responsible for protecting the flower when it is in its bud form and supporting it when it is in its bloom stage.

Stamen: It consists of an anther (which produces pollen grains) i.e. the head of the stamen and a filament i.e. the long cream-colored stick. The stamen is also known as the male reproductive part of the plant.

Pistil: This is the innermost part of the flower, typically consisting of a stigma i.e. the head of the pistil, a style, which is the long sticky part that attaches the stigma to the ovary i.e. the small and swollen sphere at the base of the pistil. Pistil is the female reproductive part of any flower. The ovary contains small bead-like structures which are called ovules.