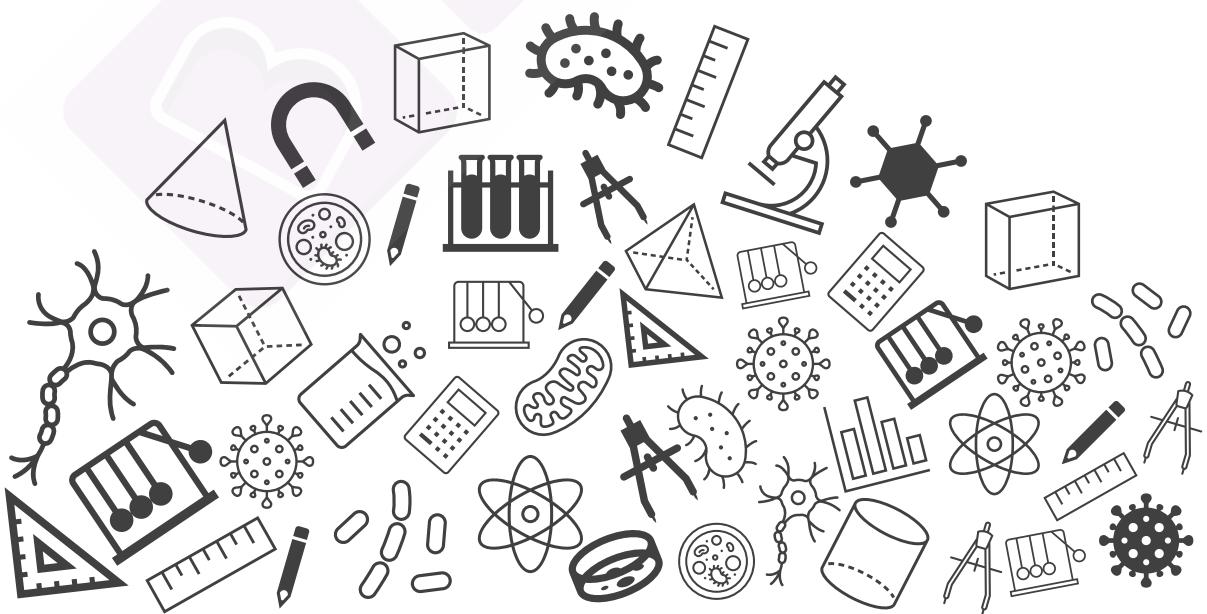




Grade 06

Chapter Notes



B I O L O G Y

BYJU'S
CHAPTER NOTES

Getting To Know Plants



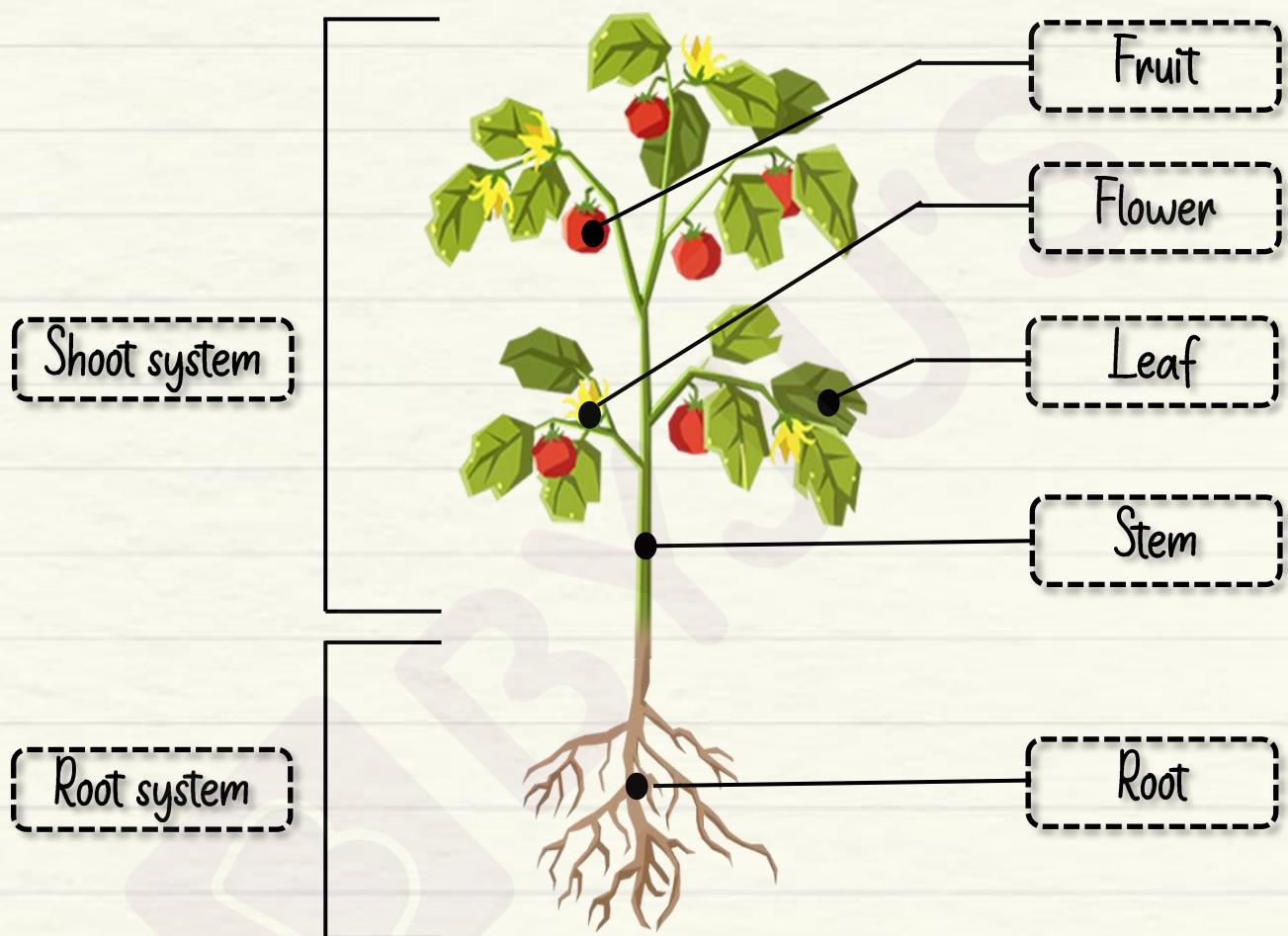
Topics to be covered



- 1 - **Parts of the plant**
- 2 - **Root**
 - 2.1 Functions of Root
 - 2.2 Types of Root
- 3 - **Stem**
 - 3.1 Functions of Stem
 - 3.2 Types of Stem
- 4 - **Leaf**
 - 4.1 Structure of Leaf
 - 4.2 Functions of Leaf
- 5 - **Flower**
 - 5.1 Structure of Flower



1. Parts of a Plant



2. Root

2.1 Functions of Root



- Roots provide anchorage to the plant.
- Roots absorb water and minerals from the soil.



- Roots of some plants perform the function of food storage.
- Example: Radish, Carrot, Turnip, Beetroot

2.2 Types of Root



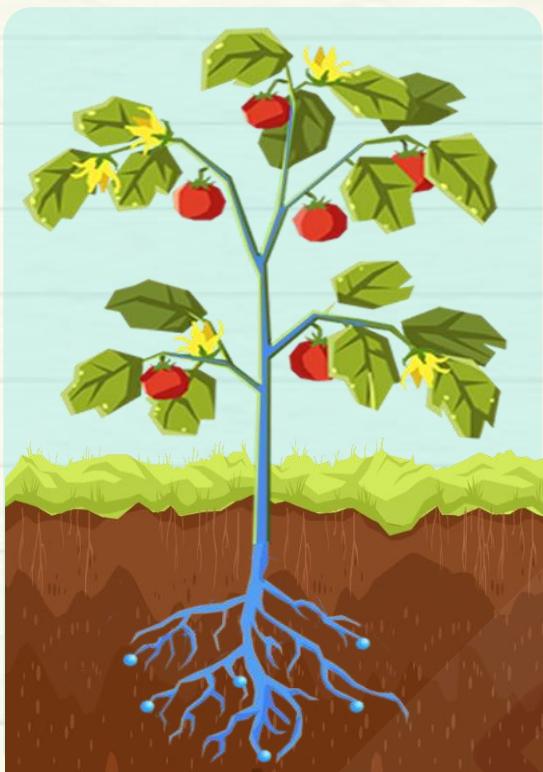
- The tap root system consists of one main, long slender root known as taproot out of which many short roots emerge, known as lateral roots.
- They penetrate deep into the soil.



- The fibrous root system has a very intricate network of similar-sized roots.
- Unlike tap roots, they do not penetrate deep into the soil.

3. Stem

3.1 Functions of Stem



- Provides support to the plant
- Bears flowers, fruits, leaves, and branches
- Transport of water and minerals absorbed by the roots to the other parts of the plant
- Transports food produced from the leaves to the rest of the plant.

- Stems of certain plants help in storage of food.
- Example:- Potato, ginger, onion, etc.



Potato



Ginger



Onion

3. Stem

3.2 Types of Stem



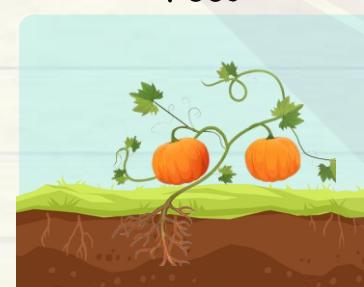
Herbs



Shrubs



Trees



Creepers



Climbers

- Herbs are the plants that have weak, thin, and green stems.
- Examples of herbs are mustard, coriander, etc.

- Shrubs are the plants that have small, single, and woody stem.
- They develop branches near the base of the stem.
- Examples of shrubs are Hibiscus, rose, etc.

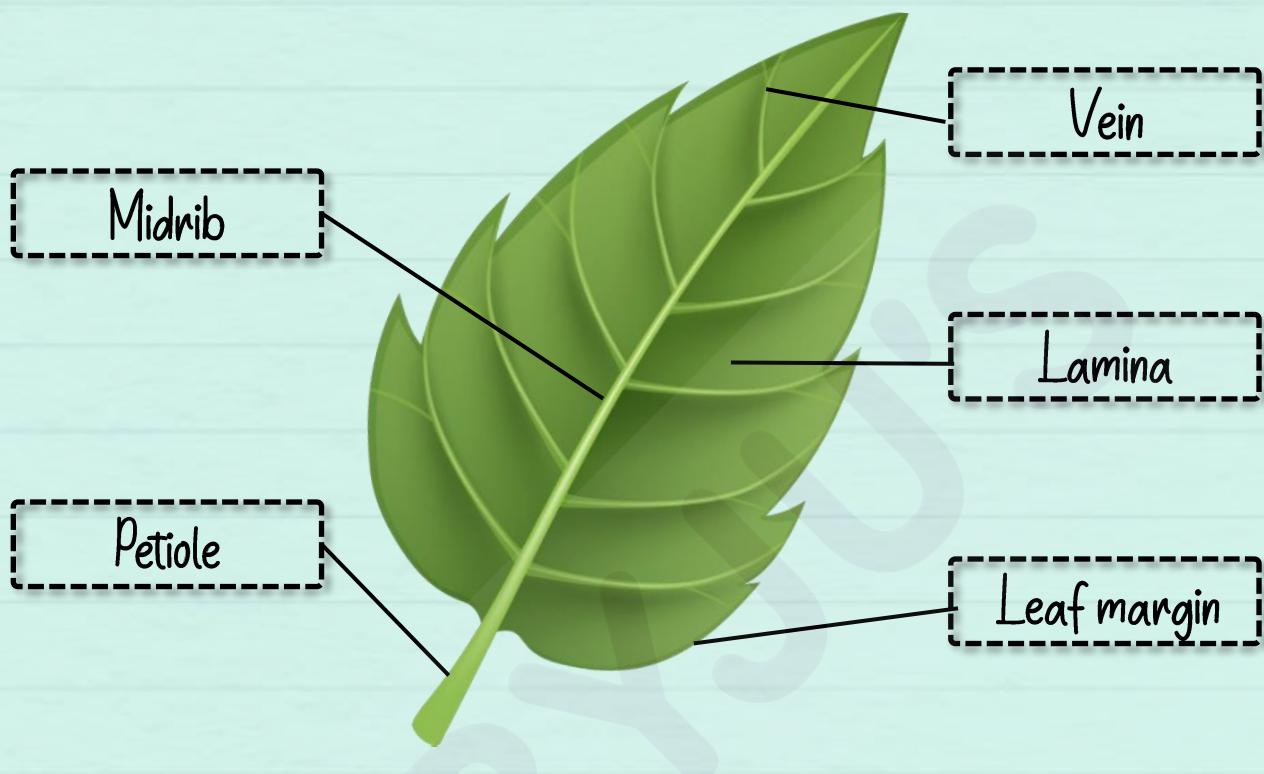
- Trees are the tall plants that have single, hard, thick, and woody stem called trunk.
- The stems have branches in the upper part, much above the ground.
- Examples of trees are banyan, apple, mango, etc.

- Creepers have weak and thin stems.
- They cannot stand upright and are found close to the ground.
- Examples of creepers are pumpkin, watermelon, etc.

- Climbers are plants with weak and thin stems that take support of neighbouring plants or other mechanical structures to climb up.
- Examples of climbers are bottle gourd, grapevines, etc.

4. Leaf

4.1 Structure of Leaf



Venation

- Venation is the arrangement of veins in a leaf lamina.
- There are two types of venation: Parallel venation and Reticulate venation



Parallel venation:
Veins are arranged parallel to each other.



Reticulate venation:
Veins are arranged in a net-like design

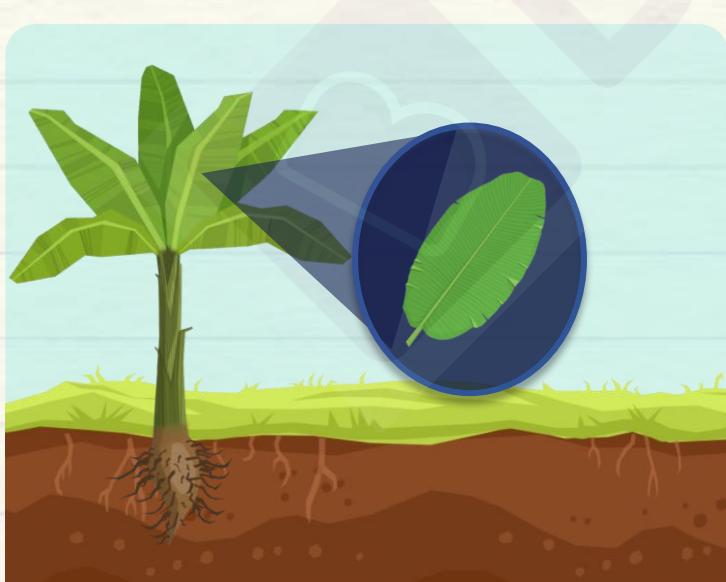
4. Leaf

Relationship between Venation and Root



Tap Root- Reticulate Venation

Plants that have leaves with reticulate venation possess tap root system.
Example: Hibiscus



Fibrous root- Parallel Venation

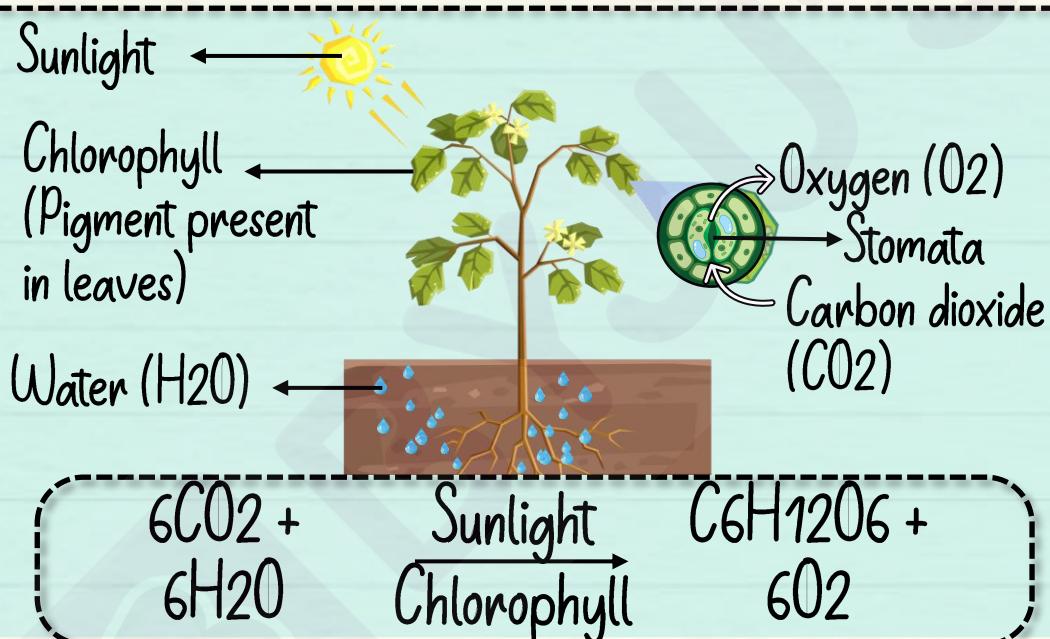
Plants that have parallel venation in their leaves possess fibrous root system.
Example: Maize

4. Leaf

4.2 Functions of Leaf

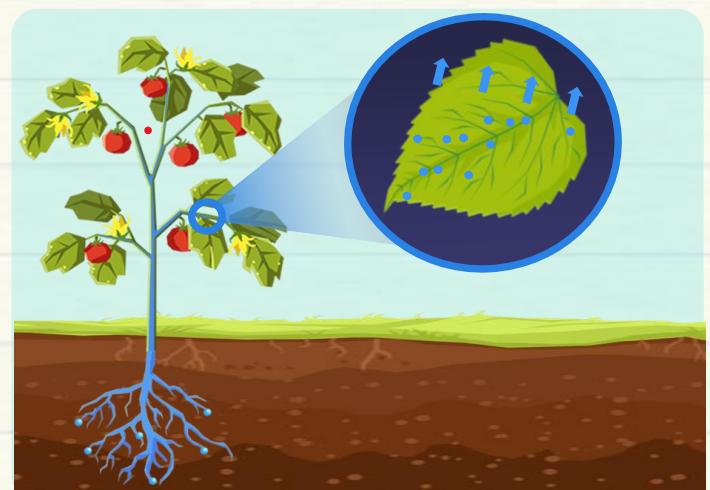
Photosynthesis

The process by which leaves prepare food in the presence of sunlight by using water, chlorophyll, and carbon dioxide is called photosynthesis. The product of photosynthesis is carbohydrates, and oxygen is given out during this process.



Transpiration

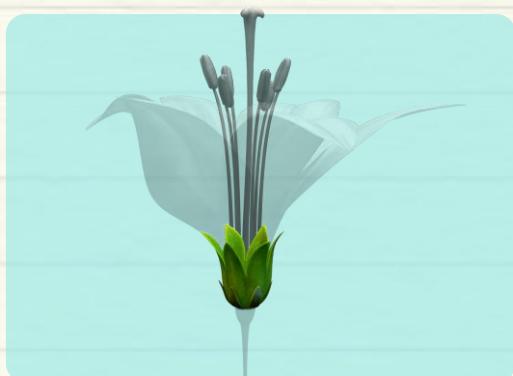
Transpiration is the loss of excessive water in the form of water vapour through the aerial parts of the plant.



5. Flower

5.1 Structure of Flower

Sepals



Sepals are the green leaf-like structures which enclose the flower bud.

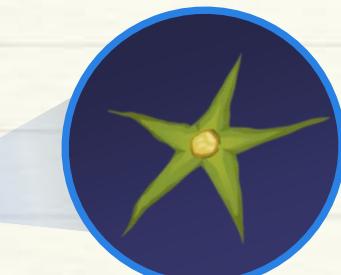
Sepals can be found free or fused in different flowers.



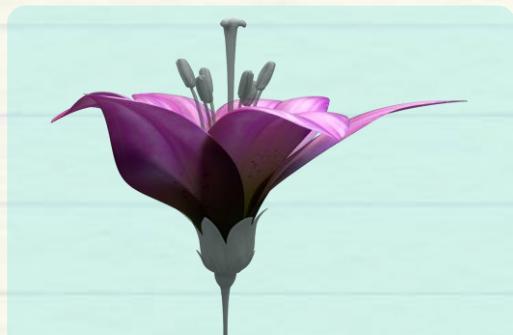
Hibiscus – Fused sepals



Rose – Free sepals



Petals



Petals are the most attractive and brightly coloured part of the flower.

5. Flower

5.1 Structure of Flower

Petals can be found free or fused in different flowers.

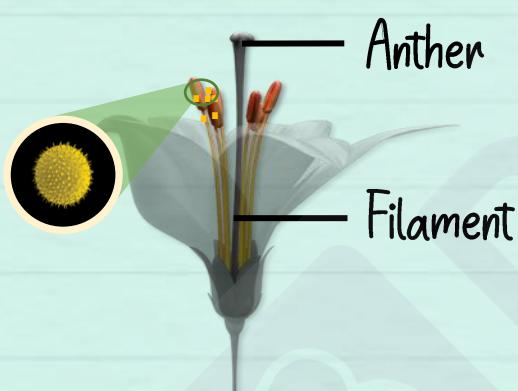


Water lily – Free petals



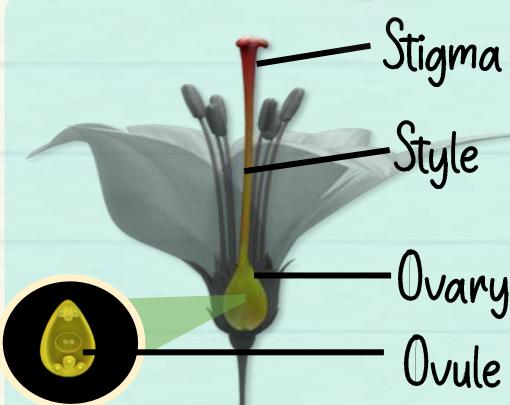
Datura – Fused petals

Stamen



- Stamen is the male reproductive part of the flower.
- It consists of two main parts.
- The bulged structure at the top is known as anther which produces a yellowish powdery substance called pollen grains.
- These pollen grains contain the male gamete.
- The stalk-like portion is known as the filament.

Pistil



- Pistil is the female reproductive part of the flower.
- Stigma, style, and ovary together form the pistil.
- The ovary consists of ovules which further contain the female gamete.

Fibrous Root

Tap Root

Parallel
Venation

Reticulate
Venation

Functions of
Root

Types of Root

Structure of
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