

Science

The Green Plants

By :-

Ms Jyotika Guleria

The Green Plants

Leaves of different plants differ in shape, size and colour



Needle like



Coloured



Long

The Green Plants



LEAF

1. A leaf is a flat structure growing from the stem / branch of a plant.
2. Most plants have green leaves.
3. The green colour is due to the presence of pigment called chlorophyll in the leaves.

The Green Plants

Q: Why are most leaves green ?

Ans:

1. Most plants have green leaves.
2. The green colour of the leaves is due to presence of a pigment known as Cholorophyll.

The Green Plants

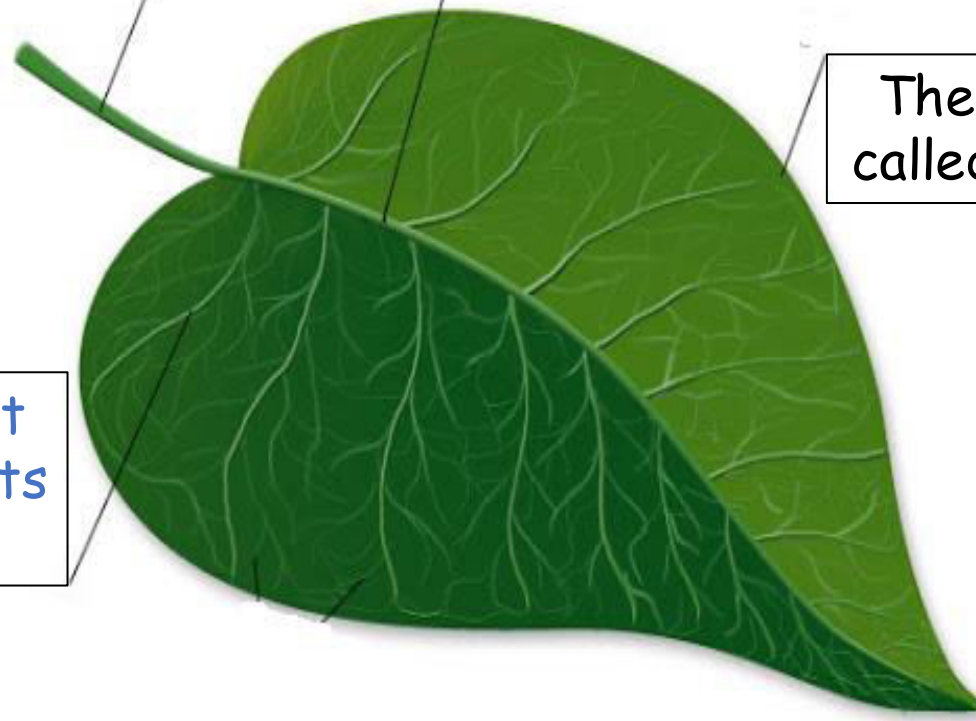
Parts of leaf

The part that attaches the leaf to the stem is called the **petiole**.

Leaf has a main vein called the **midrib** and many small veins branching off from it.

The flat part of the leaf is called the **leaf blade /lamina**.

These **small veins** transport **water, minerals and nutrients** to and from the leaves.

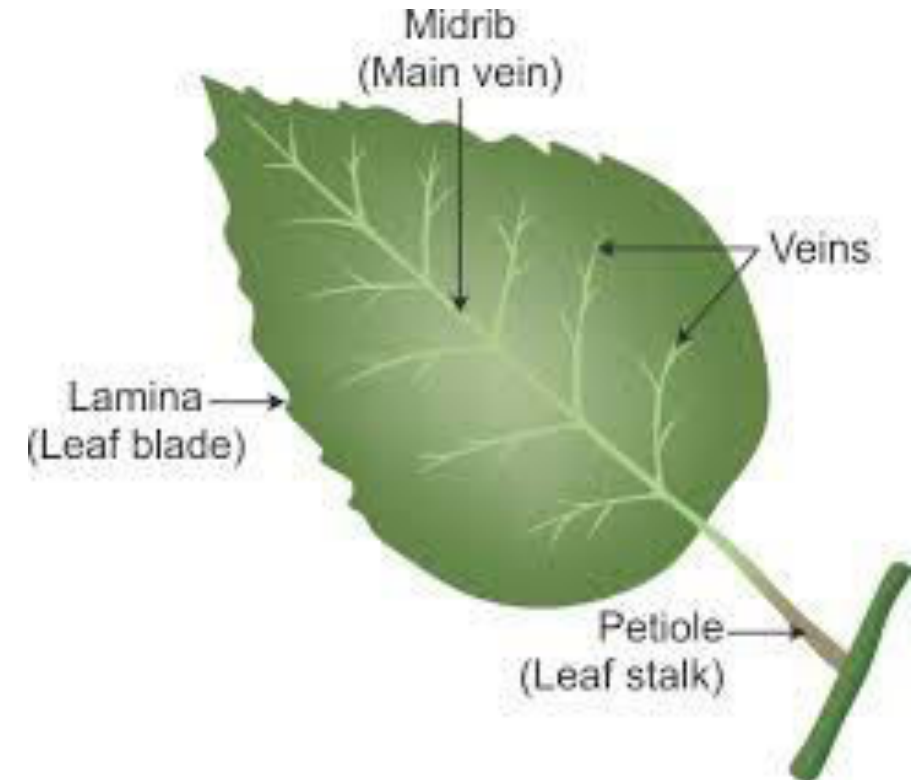


The Green Plants

Q: Draw and explain the structure of a leaf.

Ans:

1. The flat part of the leaf is called leaf blade or lamina.
2. The part of the leaf that attaches to the stem or branch is called Petiole.
3. Leaf has a main vein called the mid rib and many small veins branch off from it.
4. These small veins transport water, minerals and nutrients from the leaves of plant.

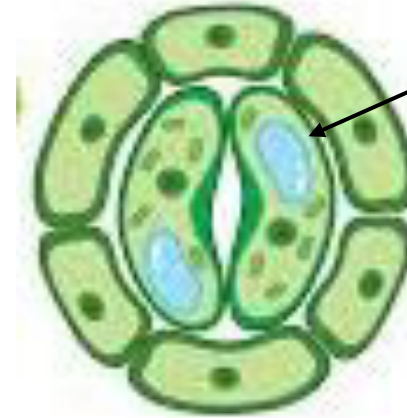


The Green Plants

The Stomata



The underside of every leaf has a tiny openings called **stomata**.



Guard Cells

- Two **bean shaped structures** called **guard cells** surround the stomata.
- Guard cells control the opening and closing of stomata.

Leaves are also called the **food factories/kitchen** of a plant.

The Green Plants

Q: Write a short note on Stomata.

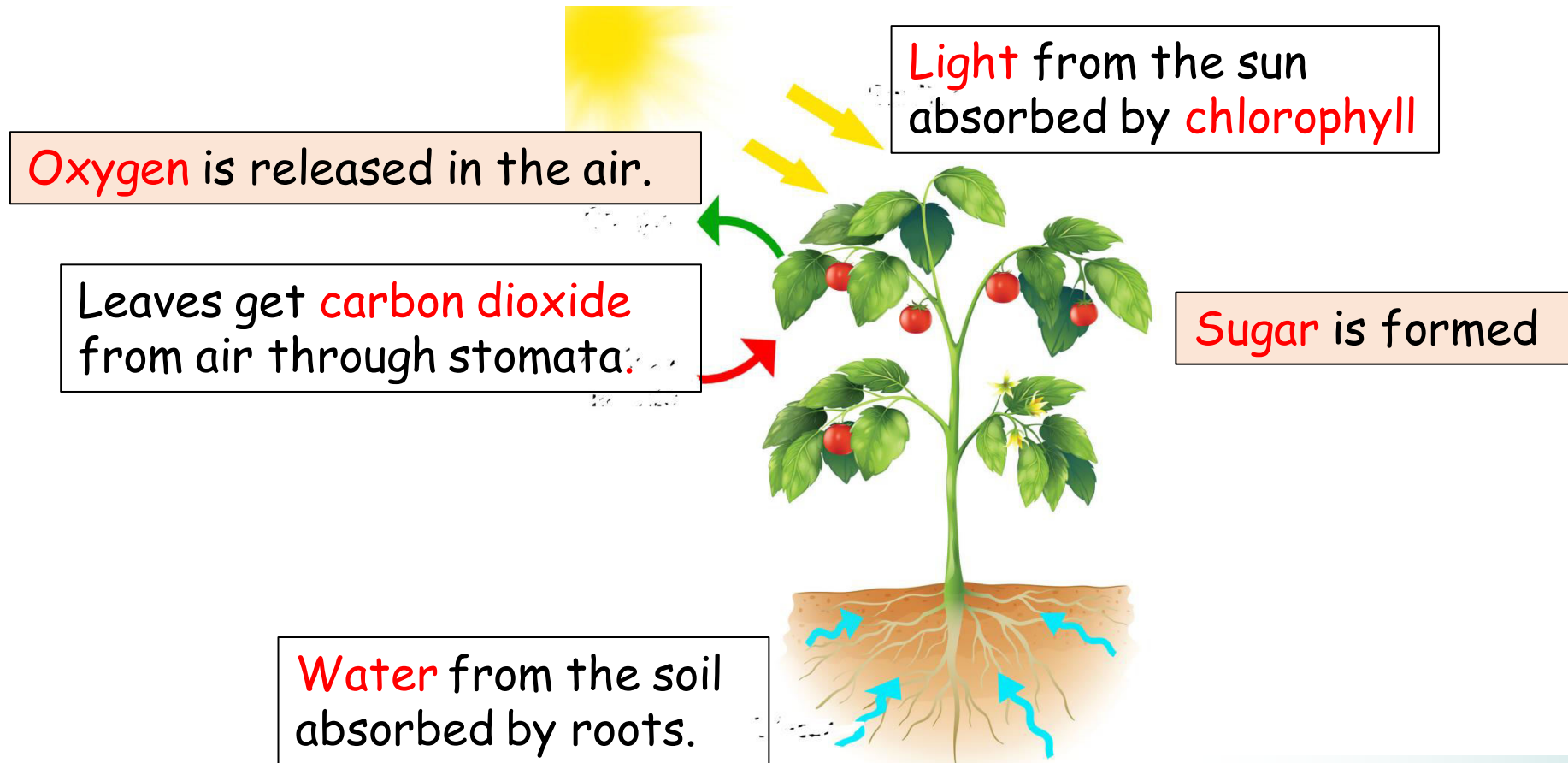
Ans:

1. The underside of a leaf has a small opening called Stomata.
2. Stomata helps the plant to breathe.
3. Two bean shaped structures called as guard cells surround the stomata.
4. Guard cells control the opening and closing of stomata.

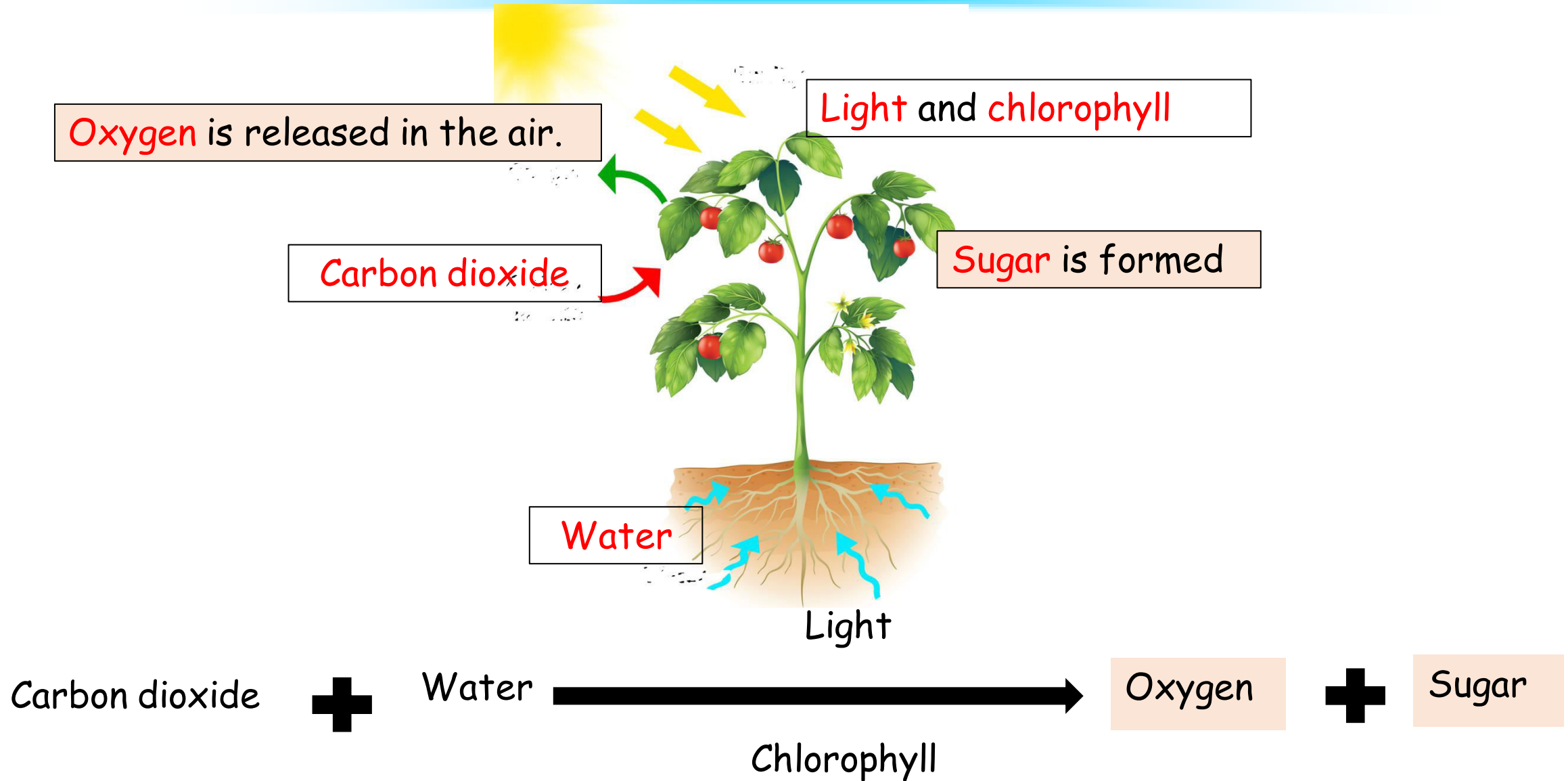
Photosynthesis

Green plants green make their own food by a process called photosynthesis.

"**photo**" means "light" and "**synthesis**" means "to put together"



Photosynthesis



The Green Plants

Plants use the **prepared food** for **its own growth** and other functions.
Extra food is stored in the form **starch** in different parts of the plant.

Vegetables



Beetroot



Spinach



Turnip



Cauliflower

Fruits as food



Mango



Orange



Apple



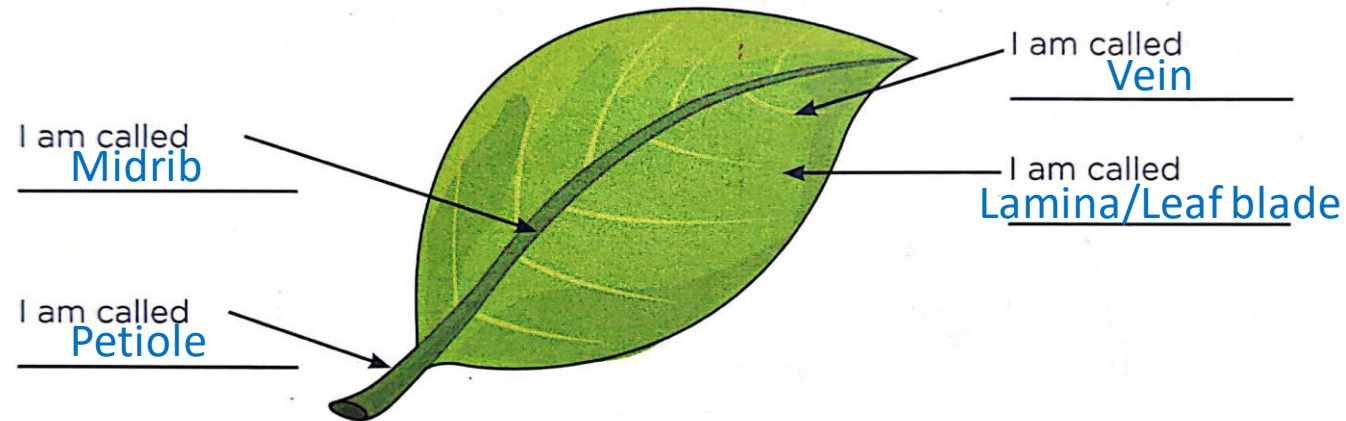
Grape



The Green Plants

Revise and recall

1. Look at the picture of a leaf shown below and fill in the names of its parts.



2. Select the words from the help box and fill in the blanks.

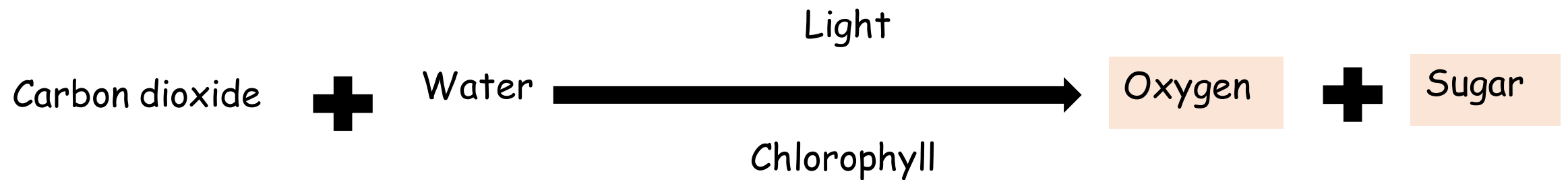
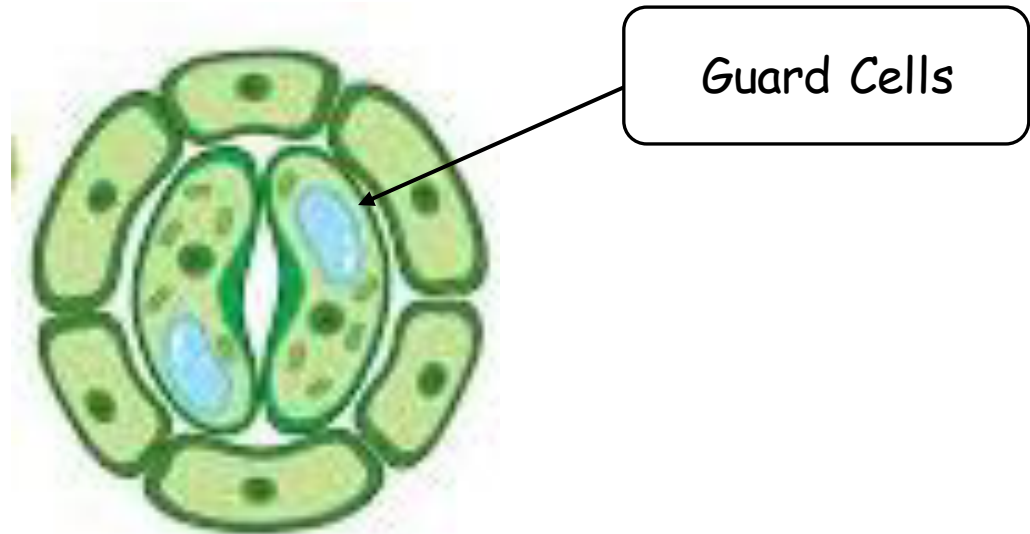
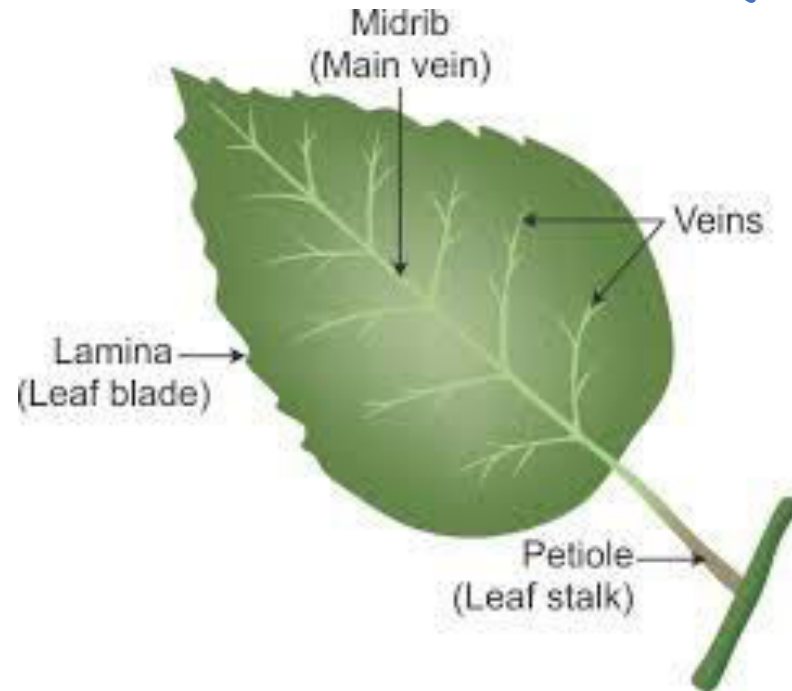
Oxygen, Light, Chlorophyll, Sugar, Carbon dioxide, Water

Photosynthesis is:

$$\text{Carbon di-oxide} + \text{Water} \xrightarrow[\text{Chlorophyll}]{\text{Light}} \text{Oxygen} + \text{Sugar}$$

The Green Plants

(Recapitulation)



The Green Plants

IMPORTANT TERMS

Chlorophyll

Petiole

Lamina

Midrib

Vein

Stomata

Guard Cells

Photosynthesis

