

**PARAGON CONVENT SCHOOL**

**SECTOR: 24B, CHANDIGARH**

**LESSON - 7**

**GREEN PLANTS**

**Summary:**

- Stalk, leaf blade, main vein and side veins are the parts of leaf.
- Leaves are the kitchen or food factories of plant.
- Plants take in carbon dioxide and give out oxygen and water vapour through stomata.
- Plants prepare food in the form of simple sugar or glucose by photosynthesis.
- Plants use food to grow, get energy and repair damaged cells and tissues. They store extra food as starch.
- Leaves cannot make food without chlorophyll and sunlight.
- Energy flows in living organisms through food chain.
- Animals and plants depend on each other for their survival.

**Multiple Choice Questions (Page No. 50)**

1. (c)      2. (a)      3. (b)

**Multiple Choice Questions (Page No. 52)**

1. (a)      2. (c)      3. (a)

## **EXERCISES**

### **Section A**

#### **Oral Questions**

Q1.- Why are leaves mostly green in colour?

Ans.- Leaves are mostly green in colour due to the presence of a green pigment called chlorophyll.

Q2.- What will happen if the number of animals increase suddenly?

Ans.- If the number of animals increases suddenly, the plants will not be able to provide food and oxygen (to breathe) for each of them. It will disturb the complete balance in nature.

Q3.- What happens to the oxygen made by leaves?

Ans.- The oxygen produced by leaves is used for breathing by the plants and the animals.

#### **Science Quiz**

Q1.- In which form plants prepare their food?

Ans.- Glucose

Q2.- Name the process by which plants make their food.

Ans.- Photosynthesis

Q3.- Name the solution which is used to test the presence of starch in leaves.

Ans.- Iodine solution

#### **Worksheet**

##### **Multiple Choice Questions**

1. (b)          2.(a)

**Circle the odd ones. Give reason for your choice**

1. Mango tree                      Dodder plant                      Rose plant

Ans.- Dodder - Others make their own food, whereas dodder is a parasitic plant.

2. Main vein                      Stomata                      Stem

Ans.- Stem - Others are parts of a leaf.

3. Carbon dioxide                      Sunlight                      Oxygen

Ans.- Oxygen - Other are used by the plants during photosynthesis whereas it is released during photosynthesis.

**Fill in the blanks with the help of the given words**

1. sunlight                      2. glucose                      3. Dodder                      4. stalk

**Identify the following plants. Write their names in the spaces provided.**

1. Cactus                      2. Croton                      3. Dodder

**Section B**

**Multiple Choice Questions**

1. (b)                      2. (b)

**Very short answer questions**

Q1.- A food chain always starts with which organism - plant, herbivore or carnivore?

Ans.- A food chain always starts with plant.

Q2.- Name the vein that runs through the middle of a leaf.

Ans.- Main vein or midrib.

### **Short answer questions**

Q1.- What is the role of stomata in photosynthesis?

Ans.- During photosynthesis, stomata help in the exchange of gases, i.e., intake of carbon dioxide and giving out of oxygen.

Q2.- What is a food chain?

Ans.- Food chain is the flow of energy in the form of food from one living organism to another.

Q3.- Leaves are called the kitchen of plants but cactus doesn't have any. Still, it manages to prepare its food with the help of green fleshy stem and survives in a desert.

a) Why are leaves called kitchen of the plant?

b) What can we learn from cactus plant?

Ans.- (a) Leaves are called kitchen of the plant because they prepare food for the plant.

(b) From the cactus plant, we learn to survive even in the extreme difficult conditions.

### **Long answer questions**

Q1.- How can you check that chlorophyll is necessary for photosynthesis?

Ans.- To check that chlorophyll is necessary for photosynthesis, we will do the following:

(i) Take a plant with variegated (partly green and partly white) leaves.

(ii) Keep it in sunlight for 2-3 hours.

(iii) Pluck a leaf from this plant.

- (iv) Bleach the leaf by boiling it first in water and then in alcohol.
- (v) Now, wash the leaf in water again.
- (vi) Add a few drops of iodine to it.
- (vii) You observe blue-black colour in green part of the leaf.
- (viii) The white part of the leaf does not become blue-black. This activity shows that chlorophyll is necessary for photosynthesis.

Q2.- How do plants use their food?

Ans.- Plants use their food in the following ways:

- (i) They burn it to produce energy.
- (ii) They use it for their growth and repairing damaged cells and tissues.
- (iii) They store extra food in the form of starch in their different parts like leaves, roots, fruits, stems or flowers. We eat the parts of a plant in which food is stored.