TENDER HEART HIGH SCHOOL

Class - VII Subject - Biology
Chapter - 4 Photosynthesis and Respiration
Teacher - Ms. Nidhi Rana

REVISION

Q.1 Why do leaves generally look green?
Ans. The green colour of a leaf is due to the presence of a green pigment called chlorophyll.

Q2. What is the source of energy for photosynthesis?
Ans. The ultimate source of energy for photosynthesis is the light energy from the Sun. Plants take in this solar energy along with carbon dioxide and water to convert into glucose.

Q3. Which gas is taken in and which one is given out by the leaf in bright sunlight?
Ans. The gas which is taken in is carbon di-oxide and the gas which is given out is oxygen.

Q4. What is the role of chlorophyll in photosynthesis?
Ans. The chlorophyll present in the leaves is the green pigment which gives them green colour. This pigment traps the energy of the Sun for the process of photosynthesis which takes place inside the chloroplast of the leaf.

Q5. Which four of the following are needed for photosynthesis in a leaf?
Ans. 1 Carbon di-oxide from air
2. Water from soil
3. Chlorophyll contained in leaf
4. Light from sunlight.

TENDER HEART HIGH SCHOOL

Class - VII Subject - Biology

Chapter - 4. Photosynthesis and Respiration

Teacher - Ms. Nidhi Rana

REVISION

Q1. Define photosynthesis.

Ans. Photosynthesis is a process which occurs in the mesophyll cells of the leaf. During this process water is combined with carbon dioxide in the presence of light and chlorophyll to produce glucose and oxygen.

$$CO_2 + H_2O \xrightarrow[\text{chlorophyll}]{\text{sunlight}} C_6H_{12}O_6 + O_2$$

(glucose) (oxygen)

Q2. In order to carry out photosynthesis, what are the substances that a plant must take in? Also mention their sources.

Ans. For preparing food by the process of photosynthesis, the plants require the following:

1. Water (from soil)
2. Carbon dioxide (from air)
3. Chlorophyll (contained in the leaf)
4. Energy (from sunlight)

Q3. Do plants need oxygen? If so, what is its source?

Ans. Yes, plants need oxygen for respiration. All the free oxygen in the atmosphere is the result of photosynthesis. No animal can survive without oxygen as it is needed for respiration. Even the plants use the same oxygen in dark for their own respiration.

Q4. Match the following

(i) Cells in the leaf - Machinery

(ii) Chloroplast - Work room

Class - VII Subject - Biology
Chapter - 4 Photosynthesis and Respiration
Teacher - Ms. Nidhi Rana

(iii) Sunlight - Power
(iv) Oxygen and water - By product
(v) Carbon dioxide and water - Raw materials
(vi) Glucose - End product.