

**BAHRIA COLLEGE
ISLAMABAD**

WORK SHEET

GENERAL SCIENCE

CLASS VII

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UNIT: 20

FOOD- TO MAKE OR TO BREAK

QNO1: Encircle the correct answer.

1. _____ pigment called chlorophyll.
a. **Green** b. red c. yellow d. white
2. Aerobic respiration requires _____
a. **Oxygen** b. nitrogen c. calcium d. phosphorus
3. Inhaled air has more _____.
a. Carbon dioxide **b. oxygen** c. vapor d. both a & c

4. How/Where do plants store glucose?
- (a) In leaves (b) In cytoplasm
(c) As chlorophyll **(d) As starch**

5. In photosynthesis, carbon gets transferred:
- (a) from the cell to the air
(b) from the living to the nonliving environment
(c) from the nonliving to the living environment
(d) from the air into the cell

QNO2:

Fill in the Blanks:

1. _____ is the process of releasing energy from the breakdown of food.
2. In unicellular animals, _____ gas is absorbed directly from the water or air and carbon dioxide is released by diffusion.
3. Most aquatic animals such as fishes use special organs called _____ for breathing.
4. The gills of the fish are like slits and are made up of a large number of thread-like structures called _____.
5. The filaments in fishes are richly supplied with tiny blood vessels called _____.

Fill in the Blanks:

1. Respiration
2. Oxygen
3. Gills
4. Filaments
5. Capillaries

QNO3: Answer the following question.

1. What are the raw materials needed by plants for photosynthesis?

Ans: Hydrogen & Oxygen = Water

2. CO₂ is made up of what two atoms and what is its common name?

Ans: Carbon & Oxygen = carbon dioxide

3. What is the first product of photosynthesis and what is it made up of?

Ans: carbon + hydrogen + oxygen = glucose (C₆ H₁₂ O₆)

4. What is O₂ made up of and what does it do for us?

Ans. It is made up of oxygen atoms and it is what we breathe.

5. where do plants get water? When it rains, plants get water.

6. From where do plants get carbon dioxide?

Ans. From animals when they breathe, they release carbon dioxide.

7. Where does photosynthesis begin? Inside the leaves of plants.

8. Write out each part of the following chemical equation for photosynthesis:

Ans. H₂O + CO₂ = C₆H₁₂O₆ + O₂ = photosynthesis

9. Where does the oxygen go from inside the plant?

Ans. The oxygen goes into the atmosphere for us to breathe.

10. What remains in the plant as energy?


Ans. Glucose remains in the plant as energy.

11. Where does the process of photosynthesis happen?

Ans. Photosynthesis happens in all plants.

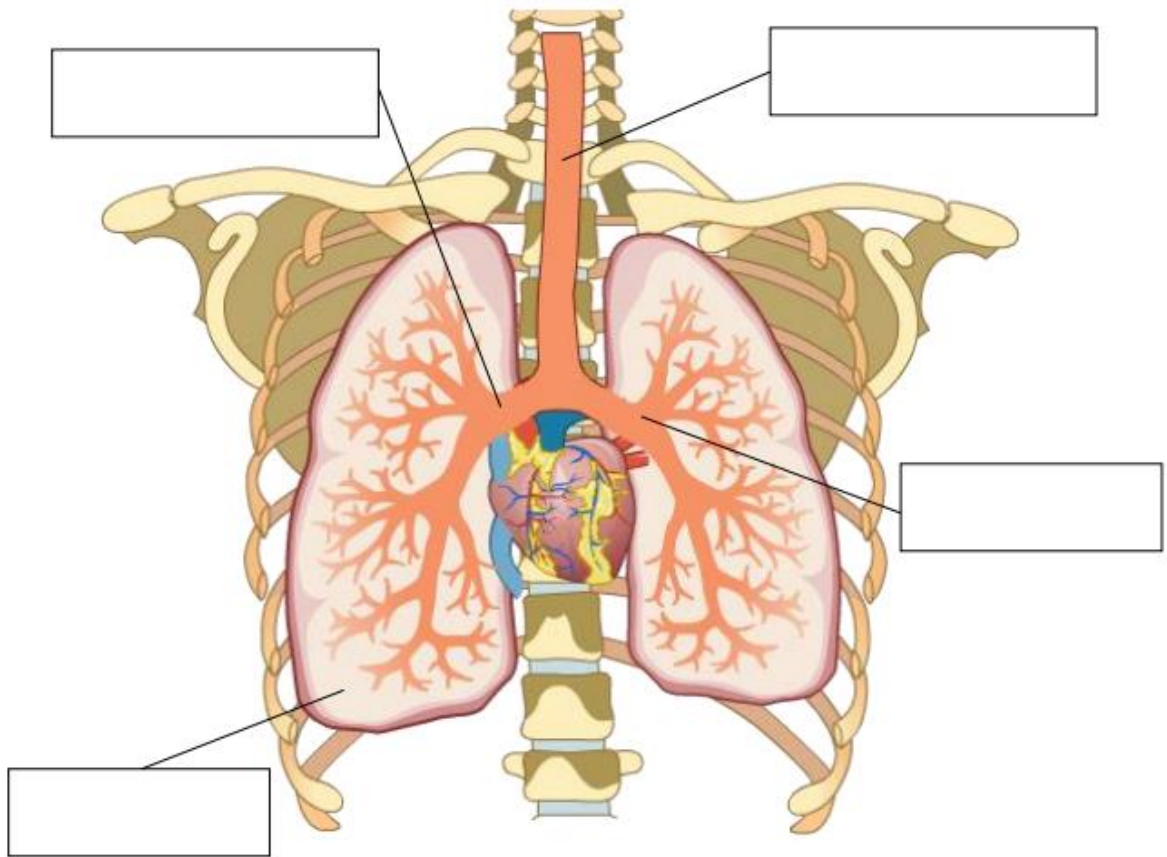
QNO4: fill these

Energy-producing process	Reaction	Location in cell
Photosynthesis	11. $\text{CO}_2 + \text{H}_2\text{O} + \text{sunlight} \rightarrow \text{C}_6\text{H}_{12}\text{O}_6 + \text{O}_2$	Chloroplast
Cellular respiration	$\text{C}_6\text{H}_{12}\text{O}_6 + 6 \text{O}_2 \rightarrow 6 \text{H}_2\text{O} + 6\text{CO}_2 + \text{energy}$	12. Mitochondria

 **Reflection Question:** Explain the relationship between photosynthesis and cellular respiration. Be sure to include the main purpose of both and where they occur inside the cell.

The products of one process are the reactants of another process. For example: water carbon dioxide, and sunlight are converted to glucose and oxygen in the chloroplasts during photosynthesis. Water, carbon dioxide and energy are the reactants in photosynthesis. Glucose and oxygen are the products in photosynthesis. In cellular respiration, glucose and oxygen are converted into energy, water and carbon dioxide. Glucose and oxygen are the reactants in cellular respiration and energy, water and carbon dioxide are the products in cellular respiration.

a. Label the diagram.



1. Left primary Bronchus
 2. Wind pipe
 3. Lungs
 4. Right primary bronchus
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- MISSION