

1. “All plants give out oxygen during day and CO₂ during night”. Do you agree with this statement? Give reason.
2. Two green plants are kept separately in oxygen free containers, one in the dark and the other in continuous light. Which one will live longer? Give reasons.
3. If a plant is releasing CO₂ and taking in oxygen during the day does it mean that there is no photosynthesis occurring? Justify your answer.
4. Give a diagrammatic representation to show the use of energy liberated in respiration?
5. Write an equation of aerobic respiration, also enumerate the structures for inlet of O₂ in plants.
6. Describe an experiment to prove that CO₂ is produced during respiration in germinating seeds.
7. Differentiate the following terms:
 - a. Respiration and Combustion
 - b. Aerobic and Anoxybiotic respiration
 - c. Stomata and Lenticels
 - d. Anabolic and Catabolic
8. Name the following:
 - a. The process in plants that links light energy with chemical energy.
 - b. Organisms that can prepare their own food.
 - c. The cell organelle where photosynthesis occurs
 - d. Cells that surround a stomata pore.
 - e. Organisms that can't prepare their own food.
 - f. An enzyme secreted from gastric glands in stomach that acts on proteins.
9. What happens to the energy liberated in respiration?
10. Give the equation of
 - (a) Aerobic respiration
 - (b) Anaerobic respiration in yeast or humans
11. Give one example of both anabolic and catabolic processes.
12. Mention the site of glycolysis and Krebs cycle.
13. What are the uses of following substances in the experiment on respiration ?
 - (a) Soda lime

- (b) Lime water
- 14.** Mention the three important characteristics of representation in aerobic respiration equation.
- 15.** Briefly explain an experiment to demonstrate anaerobic respiration
- 16.** Respiration and photosynthesis occur antagonistically to each other. Justify this statement.
- 17.** Answer the following questions in one word.
- (a) Energy currency of the cell
- (b) Site of glycolysis
- (c) Site of Krebs cycle in yeast.
- (d) Lactic acid is produced in which type of cells.
- 18.** Give reason for the following statements:
- (a) Why antiseptic is added in experiment to demonstrate oxygen is used in respiration?
- (b) Why boiled seed don't rise the mercury level in the thermometer?
- (c) Why one should not sleep under a tree at night?
- (d) Why respiration does not carry out by cells at high temperature.