

Quiz: Cellular Respiration

Read each question. Circle the letter of the correct answer.

1. What is the term for an organism that makes its own source of chemical energy?
 - A. chloroplast
 - B. decomposer
 - C. producer
 - D. protist
2. Which of these is a reactant in photosynthesis?
 - A. O₂
 - B. CO₂
 - C. COOH
 - D. C₆H₁₂O₆
3. Which phrase describes the function of mitochondria?
 - A. packages proteins
 - B. breaks down chemicals
 - C. supplies energy to the cell
 - D. fluid-filled sac used for storage
4. Through photosynthesis, plants convert energy from sunlight into _____.
 - A. light energy
 - B. thermal energy
 - C. chemical energy
 - D. mechanical energycarbon dioxide
5. Which of these statements best describes cellular respiration?
 - A. Sunlight and carbon dioxide are used to make ATP.
 - B. ATP and oxygen are used to make sugars and starches.
 - C. ATP and carbon dioxide are used to make ADP and water.
 - D. Carbon-based molecules from food and oxygen are used to make ATP.
6. A cell that requires a lot of energy might contain large numbers of _____.
 - A. vacuoles
 - B. lysosomes
 - C. mitochondria
 - D. chromosomes
7. What is the function of oxygen in cellular respiration?
 - A. to give a source of energy to the Krebs cycle
 - B. to provide oxygen for the production of
 - C. to deliver hydrogen ions to the electron transport chain
 - D. to pick up electrons at the end of the electron transport chain
8. Which of these statements is true of ATP?
 - A. It stores energy as glucose.
 - B. It stores energy for cellular processes.
 - C. It converts sunlight into chemical energy.
 - D. It contains less stored energy than ADP.

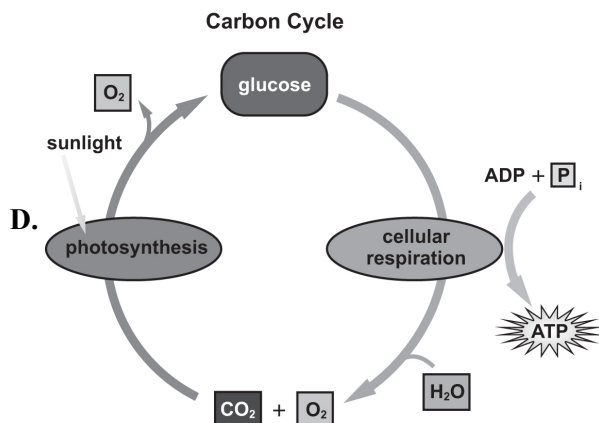
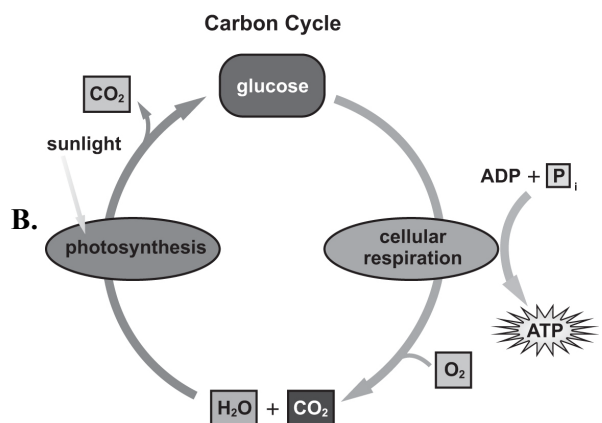
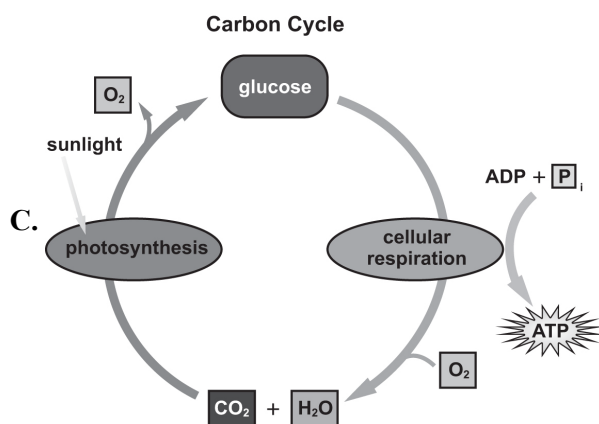
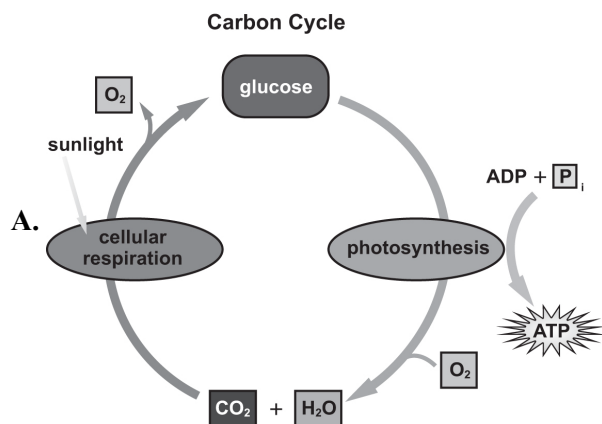
9. What happens to the sugars that are made during photosynthesis?
- A. They go back into the Calvin cycle.
 - B. They make ATP by bonding together.
 - C. They can be used for cellular respiration.
 - D. They move directly into an electron transport chain.

10. Complete this comparison statement.
photosynthesis : oxygen : _____ :

- A. oxygen : carbon dioxide
- B. cellular respiration : oxygen
- C. cellular respiration : enzymes
- D. cellular respiration : carbon dioxide

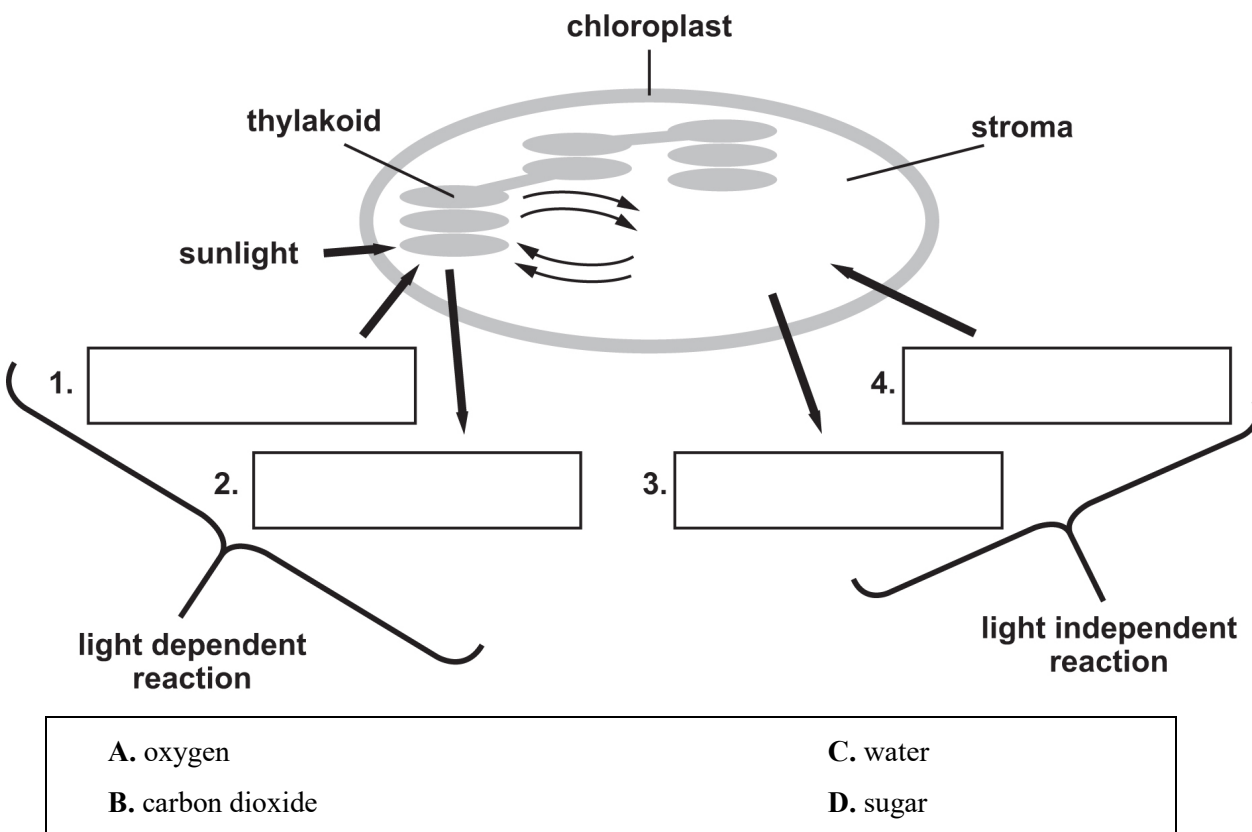
11. Which of these statements best describes the process of photosynthesis?
- A. Plants use oxygen to make simple sugars.
 - B. Chlorophyll builds sugars in the thylakoid membrane.
 - C. Chloroplasts absorb sunlight and store chemical energy.
 - D. Light breaks down water molecules and releases carbon dioxide.

12. Which diagram shows the relationship between the reactants and products of photosynthesis and cellular respiration?



Read each statement. Write your answer on the lines.

13. The process of photosynthesis includes multiple steps. Write one letter in each box in the diagram to create a model of the process of photosynthesis.



14. What two inputs are needed for cellular respiration?

15. The relationship between photosynthesis and cellular respiration is usually described as a cycle. Explain briefly.
