

Cellular Respiration Review

Multiple Choice

Identify the choice that best completes the statement or answers the question.

- _____ 1. Which of the following is NOT a stage of cellular respiration?
- fermentation
 - electron transport
 - glycolysis
 - Krebs cycle
- _____ 2. Which of the following is the correct sequence of events in cellular respiration?
- glycolysis → fermentation → Krebs cycle
 - Krebs cycle → electron transport → glycolysis
 - glycolysis → Krebs cycle → electron transport
 - Krebs cycle → glycolysis → electron transport
- _____ 3. What is the correct equation for cellular respiration?
- $6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O} + \text{Energy}$
 - $6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 + \text{Energy} \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$
 - $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow 6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 + \text{Energy}$
 - $6\text{CO}_2 + 6\text{H}_2\text{O} + \text{Energy} \rightarrow 6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6$
- _____ 4. Cellular respiration releases energy by breaking down
- food molecules.
 - ATP.
 - carbon dioxide.
 - water.
- _____ 5. What are the reactants in the equation for cellular respiration?
- oxygen and lactic acid
 - carbon dioxide and water
 - glucose and oxygen
 - water and glucose
- _____ 6. Which of these is a product of cellular respiration?
- oxygen
 - water
 - glucose
 - lactic acid
- _____ 7. Cellular respiration is called an aerobic process because it requires
- light.
 - exercise.
 - oxygen.
 - glucose.

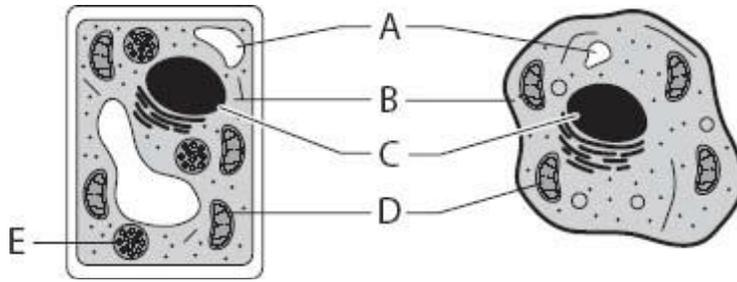


Figure 9-1

- ___ 8. Using Figure 9-1, which pairing matches the structures shown in the cell diagrams with the processes that take place within those structures?
- A: photosynthesis; B: cellular respiration
 - C: photosynthesis; D: cellular respiration
 - D: photosynthesis; E: cellular respiration
 - E: photosynthesis; D: cellular respiration
- ___ 9. Which of the following is one of the ways that cellular respiration and photosynthesis are opposite processes?
- Photosynthesis releases energy, and cellular respiration stores energy.
 - Photosynthesis removes carbon dioxide from the atmosphere, and cellular respiration puts it back.
 - Photosynthesis removes oxygen from the atmosphere, and cellular respiration puts it back.
 - Photosynthesis consumes glucose, and cellular respiration produces glucose.
- ___ 10. Photosynthesis is to chloroplasts as cellular respiration is to
- chloroplasts.
 - cytoplasm.
 - mitochondria.
 - nuclei.
- ___ 11. The products of photosynthesis are the
- products of cellular respiration.
 - reactants of cellular respiration.
 - products of glycolysis.
 - reactants of fermentation.
- ___ 12. Which of these processes takes place in the cytoplasm of a cell?
- glycolysis
 - electron transport
 - Krebs cycle
 - photosynthesis
- ___ 13. The starting molecule for glycolysis is
- ADP.
 - pyruvic acid.
 - citric acid.
 - glucose.

- _____ 14. The Krebs cycle produces
- a. oxygen.
 - b. lactic acid.
 - c. carbon dioxide.
 - d. glucose.
- _____ 15. The two main types of fermentation are called
- a. alcoholic and aerobic.
 - b. aerobic and anaerobic.
 - c. alcoholic and lactic acid.
 - d. lactic acid and anaerobic.

