

Respiration Quiz 2: Aerobic Respiration

Multiple Choice

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

- _____ 1. Which of the following is NOT a stage of cellular respiration?
a. fermentation b. electron transport c. glycolysis d. Krebs cycle
- _____ 2. Which of the following is the correct sequence of events in cellular respiration?
a. glycolysis → fermentation → Krebs cycle b. Krebs cycle → electron transport → glycolysis
c. glycolysis → Krebs cycle → electron transport d. Krebs cycle → glycolysis → electron transport
- _____ 3. Cellular respiration uses one molecule of glucose to produce
a. 2 ATP molecules. b. 34 ATP molecules. c. 36 ATP molecules. d. 38 ATP molecules.
- _____ 4. What is the correct equation for cellular respiration?
a. $6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O} + \text{Energy}$ b. $6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 + \text{Energy} \rightarrow 6\text{CO}_2 + 6\text{H}_2\text{O}$ c. $6\text{CO}_2 + 6\text{H}_2\text{O} \rightarrow 6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6 + \text{Energy}$ d. $6\text{CO}_2 + 6\text{H}_2\text{O} + \text{Energy} \rightarrow 6\text{O}_2 + \text{C}_6\text{H}_{12}\text{O}_6$
- _____ 5. In the presence of oxygen, glycolysis is followed by
a. lactic acid fermentation. b. alcoholic fermentation. c. photosynthesis. d. the Krebs cycle.
- _____ 6. Cellular respiration is called an aerobic process because it requires
a. light. b. exercise. c. oxygen. d. glucose.
- _____ 7. The starting molecule for the Krebs cycle is
a. glucose. b. NADH. c. pyruvic acid. d. coenzyme A.
- _____ 8. In eukaryotes, electron transport occurs in the
a. mitochondria. b. chloroplasts. c. cell membrane. d. cytoplasm.
- _____ 9. Breathing heavily after running a race is your body's way of
a. making more citric acid. b. repaying an oxygen debt. c. restarting glycolysis. d. recharging the electron transport chain.
- _____ 10. When the body needs to exercise for longer than 90 seconds, it generates ATP by carrying out
a. lactic acid fermentation. b. alcoholic fermentation. c. cellular respiration. d. glycolysis.
- _____ 11. How are cellular respiration and photosynthesis almost opposite processes?
a. Photosynthesis releases energy and cellular respiration stores energy. b. Photosynthesis removes carbon dioxide from the atmosphere and cellular respiration puts it back. c. Photosynthesis removes oxygen from the atmosphere and cellular respiration puts it back. d. all of the above
- _____ 12. Which of the following is released during cellular respiration?
a. oxygen b. air c. energy d. lactic acid
- _____ 13. What are the reactants in the equation for cellular respiration?
a. oxygen and lactic acid b. carbon dioxide and water c. glucose and oxygen d. water and glucose
- _____ 14. Which of these is a product of cellular respiration?
a. oxygen b. water c. glucose d. all of the above
- _____ 15. Which of the following passes high-energy electrons into the electron transport chain?
a. NADH and FADH₂ b. ATP and ADP c. citric acid d. acetyl – CoA

**Respiration Quiz 2: Aerobic Respiration
Answer Section**

MULTIPLE CHOICE

1. A
2. C
3. C
4. A
5. D
6. C
7. C
8. A
9. B
10. C
11. B
12. C
13. C
14. B
15. A

A 1.

 C 2.

 C 3.

 A 4.

 D 5.

 C 6.

 C 7.

 A 8.

 B 9.

 C 10.

 B 11.

 C 12.

 C 13.

 B 14.

 A 15.