

C 1.2 Cellular Respiration SL MC

1. What is the primary function of cellular respiration?
 - a) Produce oxygen
 - b) Produce ATP
 - c) Produce glucose
 - d) Produce water
2. Which of the following molecules are the primary substrates for cellular respiration?
 - a) Glucose and oxygen
 - b) Glucose and fatty acids
 - c) Water and carbon dioxide
 - d) Ethanol and lactic acid
3. Which molecule acts as the energy currency in a cell?
 - a) ADP
 - b) ATP
 - c) DNA
 - d) NADH
4. What kind of reaction converts ATP into ADP?
 - a) Condensation
 - b) Hydrolysis
 - c) Oxidation
 - d) Reduction
5. Which type of transport requires ATP?
 - a) Simple diffusion
 - b) Osmosis
 - c) Active transport
 - d) Facilitated diffusion
6. What is the primary purpose of glycolysis?
 - a) Convert pyruvate into glucose
 - b) Convert glucose into pyruvate
 - c) Produce oxygen
 - d) Generate fatty acids
7. Where does glycolysis take place within a cell?
 - a) Nucleus
 - b) Cytoplasm
 - c) Mitochondria
 - d) Golgi apparatus
8. What is the main difference between aerobic and anaerobic respiration?
 - a) Aerobic respiration requires oxygen, anaerobic does not
 - b) Anaerobic respiration produces water, aerobic does not
 - c) Aerobic respiration occurs in the cytoplasm, anaerobic occurs in the mitochondria
 - d) Anaerobic respiration generates more ATP than aerobic

9. Which of the following is a byproduct of anaerobic respiration in animals?

- a) Ethanol
- b) Lactic acid
- c) Carbon dioxide
- d) Water

10. What is the word equation for aerobic respiration?

- a) Glucose → Lactic acid + ATP
- b) Glucose + Oxygen → Carbon dioxide + Water + ATP
- c) Glucose + Oxygen → Ethanol + Carbon dioxide + ATP
- d) Glucose → Ethanol + Carbon dioxide + ATP

Answers:

1. b
2. b
3. b
4. b
5. c
6. b
7. b
8. a
9. b
10. b