

Quiz Topic: Respiration

1. What is the primary gas involved in the process of respiration?

- 1 Nitrogen
- 2 Carbon Dioxide
- 3 Hydrogen
- 4 Oxygen

Answer: Oxygen

2. Which part of the cell is responsible for aerobic respiration?

- 1 Nucleus
- 2 Mitochondria
- 3 Endoplasmic Reticulum
- 4 Ribosomes

Answer: Mitochondria

3. What are the byproducts of aerobic respiration?

- 1 Lactic Acid
- 2 Heat and Nitrogen
- 3 Oxygen and Glucose
- 4 Water and Carbon Dioxide

Answer: Water and Carbon Dioxide

4. What is the term for the breakdown of glucose without oxygen?

- 1 Anaerobic Respiration
- 2 Photosynthesis
- 3 Fermentation
- 4 Cellular Respiration

Answer: Anaerobic Respiration

5. In which organisms does anaerobic respiration primarily occur?

- 1 Animals
- 2 Plants
- 3 Bacteria and Yeasts
- 4 All of the above

Answer: Bacteria and Yeasts

6. During respiration, what is the primary purpose of oxygen?

Answer: To help convert glucose into energy (ATP) by accepting electrons at the end of the electron transport chain.

7. What is the chemical equation for cellular respiration?

Answer: $C_6H_{12}O_6 + 6O_2 \rightarrow 6CO_2 + 6H_2O + ATP$

8. Which of the following processes occurs in the cytoplasm of the cell?

- 1 Glycolysis
- 2 Calvin Cycle
- 3 Electron Transport Chain
- 4 Krebs Cycle

Answer: Glycolysis