

Cellular Respiration Objectives:

Define these key terms:

respiration cellular respiration Glycolysis ATP ADP Krebs cycle 2 pyruvic acids
NADH FADH₂ C₆H₁₂O₆ Electron Transport Chain cytoplasm mitochondria
aerobic respiration anaerobic respiration alcoholic fermentation lactic acid fermentation

- Describe the ATP and ADP cycle for storing and releasing energy in a cell
- Write the equations for photosynthesis & cellular respiration.
- Label the reactants & products for photosynthesis and cellular respiration using the chloroplast and mitochondria diagram with arrows.
- Explain what happens to glucose molecules in the process of cellular respiration.
- List 3 uses for ATP by cells.
- State the 3 steps for cellular respiration.
- Name the location for glycolysis.
- State the products for glycolysis.
- Name the location for the Krebs cycle and Electron Transport Chain.
- State the raw materials & the products for the Krebs cycle.
- Explain the importance of carrier molecules leaving the Krebs cycle.
- State the end products for the electron transport chain.
- State the 2 stages where O₂ is needed during the cellular respiration process.
- Explain the difference between aerobic and anaerobic respiration.
- Write the equations for the 2 types of fermentation.
- State the difference in the products made by alcoholic fermentation and lactic acid fermentation.
- Provide examples of foods that undergo the process of fermentation.