

## Cellular Respiration Flashcards PDF

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What is cellular respiration?

Cellular respiration is the process by which cells convert glucose and oxygen into energy, carbon dioxide, and water.

What are the three main stages of cellular respiration?

The three main stages of cellular respiration are Glycolysis, the Krebs Cycle (Citric Acid Cycle), and the Electron Transport Chain.

Where does glycolysis occur?

Glycolysis occurs in the cytoplasm of the cell.

What is the main product of glycolysis?

The main product of glycolysis is pyruvate, along with a small amount of ATP and NADH.

Where does the Krebs Cycle take place?

The Krebs Cycle takes place in the mitochondria of the cell.

What are the products of the Krebs Cycle?

The products of the Krebs Cycle include carbon dioxide, ATP, NADH, and FADH<sub>2</sub>.

What is the role of the Electron Transport Chain?

The role of the Electron Transport Chain is to use electrons from NADH and FADH<sub>2</sub> to create a proton gradient that drives the production of ATP.

What is the final electron acceptor in the Electron Transport Chain?

The final electron acceptor in the Electron Transport Chain is oxygen, which combines with electrons and protons to form water.

What is anaerobic respiration?

Anaerobic respiration is a type of respiration that occurs without oxygen, resulting in the production of energy through processes like fermentation.

What is the difference between aerobic and anaerobic respiration?

The difference between aerobic and anaerobic respiration is that aerobic respiration requires oxygen and produces more ATP, while anaerobic respiration does not require oxygen and produces less ATP.