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SCI/230

July 20, 2012

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Cell Energy Worksheet

Answer the following questions:

Cellular respiration:

What is cellular respiration and what are its three stages?

Cellular respiration is a chemical process that harvest energy this is stored in sugars and other organic molecules. The three stages are glycolysis, citric acid cycle, and electron transport.

What is the role of glycolysis? Include the reactants and the products. Where does it occur?

Glycolysis is the division of a glucose molecule creating two molecules of the compound pyruvic acid. The initial division of the glucose molecule requires two ATP molecules per glucose. The divided molecules donate NAD+, as well as ATP molecules. This process happens in the cytoplasm.

What is the role of the citric acid cycle? Include the reactants and the products. Where does it occur?

The citric acid cycle finishes depleting the energy of sugar by breaking the acetic acid molecules all the way down to CO_2. The acid joins a four-carbon acceptor molecule to

[illegible]

What is the role of the electron transport system? Include the reactants and the products. Where does it occur?

[illegible]