

Chapter 9 Review Worksheet

Metabolic Pathways

Part 1

Match the next set of terms with the description below.

Mitochondria
Aerobic Respiration
Anaerobic process
Acetyl CoA
Cellular Respiration
Electron Transport Chain
FAD
NAD⁺
Krebs Cycle
Pyruvic Acid
CoEnzyme A
Calorie
calorie
glycolysis

- a. _____ The complete breakdown of glucose to carbon dioxide and water with the result of 36 ATP molecules.
- b. _____ Anaerobic breakdown of glucose that results in a gain of 2 ATP molecules and end products such as alcohol and lactate.
- c. _____ First set of reactions present in both aerobic and anaerobic metabolic pathways.
- d. _____ Equivalent to 1000 calories.
- e. _____ Cycle of reactions in mitochondria that begins with citric acid, produces carbon dioxide, ATP, NADH, FADH₂.
- f. _____ Organelle where Cellular Respiration takes place.
- g. _____ Metabolic pathway that uses oxygen.
- h. _____ Metabolic pathway that does not use oxygen.
- i. _____ Molecule made up of a 2-carbon molecule bonded with CoEnzymeA.
- j. _____ Passage of electrons along a series of protein carriers from a higher to a lower energy level.
- k. _____ Carrier that must be recycled during the process of fermentation.
- l. _____ Carrier only found in the Citric Acid Cycle but not found in the process of fermentation.
- m. _____ Final product of glycolysis, first reactant of the Krebs cycle.
- n. _____ Major enzyme involved in the Krebs Cycle.

Part 2