

# [Adefasdf college essay](https://assignbuster.com/adefasdf-college-essay/)

Biology 101 Exam III Study Guide Chapters: 5, 6, 7, 10Chapter 5: The Working Cell1). What is energy? = The capacity to cause change, especially to perform work.

Kinetic and Potential energy? = Kinetic Energy = The energy of motion; the energy of a mass of matter that is moving. Potential Energy = The energy that matter possesses because of its location or arrangement. Water behind a dam possesses potential energy, and so do chemical bonds. What is heat? = Thermal energy; the amount of energy associated with the movement of atoms and molecules in a body of matter. Heat is energy in its most random form.

What is temperature? = A measure of the intensity of heat in degrees, reflecting the average kinetic energy or speed of molecules. 3). What are the first and second laws of thermodynamics? = First law, The principle of conservation of energy. Energy can be transferred and transform, but it cannot be created or destroyed. Secound law, The principle stating that every energy conversion reduces the order of the universe, increasing its entropy.

Ordered forms of energy are least partly converted to heat. What is entropy? = A measurement of disorder. One form of disorder is heat, which is random molecular motion. 3). What are endergonic reactions? = An energy- requiring chemical reaction, which yields products with more potential energy than the reactants. exergonic reactions? = An energy-releasing chemical reaction in which the reactants contain more potential energy than the products.

What is coupling? = The use of energy released from exergonic reactions to drive essential endergonic reactions. 4). What is ATP?= The main energy source for cells. How is it produced?= Cellular respiration, energy release from glucose by cellular respiration escape as heat, but a substantial amount is converted to the chemical energy of ATP.

What is an enzyme? = Molecules that function as biological catalysts, increasing the rate of a reaction without…