**Introduction to Biology and Scientific Method (18 terms) Biology Keystone Vocabulary**

**Adenosine triphosphate (ATP)** – molecule that provides energy for cellular reactions and processes

**Biology** – study of life

**Cell –** basic unit of life (can carry out all life processes)

**Cellular Respiration –** chemical reactions where the chemical energy stored in the bonds of food molecules is transformed and captured in the bonds of ATP

**Energy Transformation –** process where energy changes from one form to another

**Evolution** – change in inherited traits in a species over generations **or** process where a new species develops from preexisting species

**Homeostasis –** maintaining constant internal conditions in spite of external conditions (regulate temperature, oxygen, water)

**Hypothesis –** proposed explanation for something observed, is scientifically testable

**Inheritance** – process in which genetic material is passed from parents to offspring

**Law** – generalizes a body of observations for which no exceptions have been found, explains them but does not describe them

**Metabolism** – sum of all chemical reactions carried out by an organism (builds up and breaks down materials)

**Organism –** a single living thing

**Photosynthesis** – process where light energy is transformed with the help of chlorophyll into chemical energy stored in the bonds of a carbohydrate

**Principle –** concept based upon scientific laws where general agreement is present

**Science –** body of evidence based knowledge gained through observation and experimentation

**Species** – similar organisms that can reproduce and produce fertile offspring

**System –** organized group of related parts that interact to form a whole (ex. Organ system, ecosystem)

**Theory –** explanation of observations based on data and guided by a system of logic, (summarizes a hypothesis or group of hypotheses that have been supported with repeated testing)