

Energy Transformations

Picture Vocabulary

Force, Motion, and Energy

Energy Transformation



The change of energy from one form to another.

Conductor



A substance that allows the flow of electric charge or transfers thermal energy through matter.

Insulator



A substance that resists electric current or a material that resists the flow of heat.

Kinetic Energy



Energy of motion.

Chemical Energy



A form of energy produced through reactions that occur in chemical compounds as they react to each other or to some action.

Electrical Energy



A form of energy made available by the flow of electric charge through a conductor.

Light Energy



A form of energy that exhibits wave-like behavior as it travels through space; part of the electromagnetic spectrum.

Mechanical Energy



The sum of the motion (kinetic) energy and position (potential) energy of an object or the parts of a mechanical system.

Thermal Energy



Thermal energy is the total kinetic (motion) energy of the tiny particles that make up matter. The faster the particles move, the warmer the matter becomes.

Sound Energy



Sound energy is a form of energy that is made by vibrations and requires a medium (such as air, water, or solids) in order to travel. Sound waves travel slower than light waves.

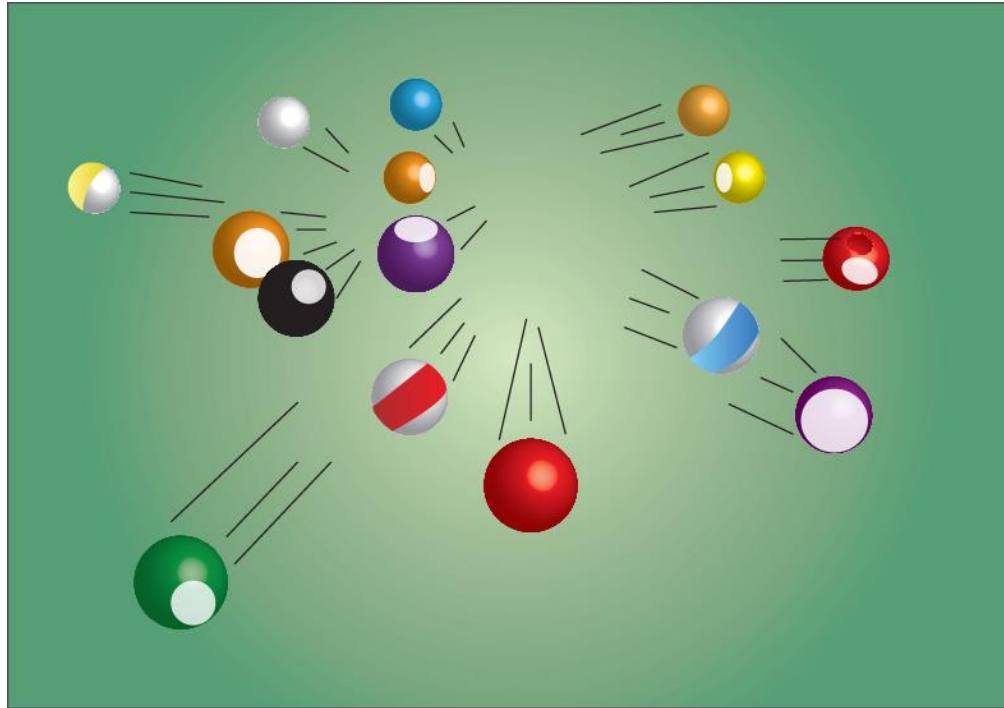
System



A group of interacting or interdependent elements forming a complex whole; for example, all the factors or variables in an environment or all the variables that might affect a science experiment.



Law of Conservation of Energy



Energy can neither be created nor destroyed;
energy just changes form.