

Energy and Electricity Vocabulary

Potential Energy	Stored energy that results from the position or shape of an object. An object has potential energy when it is not in motion
Kinetic Energy	The energy of an object due to its motion
Chemical Energy	Potential energy stored in the chemical bonds that hold compounds together (ex. chemical energy is stored in the food, matches, cells, etc.)
Electromagnetic Energy	The energy of light and other forms of radiation (ex. sunlight)
Mechanical Energy	The form of energy associated with position and motion of an object (ex. football thrown by a quarterback, a trophy sitting on a shelf). Mechanical energy = potential energy + kinetic energy
Thermal Energy	The total potential and kinetic energy of the particles in an object (ex. lava flowing from a volcano has a large amount of thermal energy)
Nuclear Energy	Potential energy stored in an atom. It is released during a nuclear reaction
Electric Energy	Energy of electric charges (ex. lightning, flashlights)
Energy Transformation	A change from one form of energy to another
Electric Current	A continuous flow of electric charges through a material (like a wire)
Electric Circuit	A complete, unbroken path through which electric charges flow
Conductor	A material through which charge can flow easily (ex. metals such as silver, copper, aluminum, iron)
Insulator	A material through which charges cannot flow easily (ex. rubber, glass, plastic, wood)
Series Circuit	An electric circuit in which there is only one path for the current to take
Parallel Circuit	An electric circuit in which there are several paths for the current to take