Mechanical Energy Key Terms On-level Physics

The following are the terms you should be familiar with in order to properly complete this unit. You are expected to be able to define each as well as apply these terms in any situation during this and subsequent units of study.

energy - The "something" that enables work to be done. The total energy of a system consists of all the kinetic and potential energies.

potential energy - Stored energy; chemical, electrical, magnetic, mechanical, gravitational, nuclear

gravitational potential energy - Energy that an object possesses because of its position relative to another object; the earth is most often the reference object for our daily activities.

kinetic energy - Energy of motion.

work - Amount of energy required to move an object, or released by the motion of an object, over a certain distance; motion must be in the same direction of the applied force.

power - Rate at which work is done or energy is transformed; equal to the work done or energy transformed divided by time.

mechanical energy – Energy involved in the physical position or motion of object; the total potential and kinetic energy of an object.

law of conservation of energy - energy cannot be created or destroyed; in can be transferred from one object to another; it can change from one form of energy to another.