

The Nature of Energy Worksheet

Directions: Define the following terms.

Energy – the ability to do work or make a change. (or) Exerting a force over a distance to move an object.
ENERGY= WORK -----> WORK= FORCE X DISTANCE

Kinetic Energy- is the energy that an object possesses due to its motion

Potential Energy- is stored energy due to a objects relative height and position, or it chemical natural.

Law of Conservation of Energy- energy cannot be created or destroyed but merely transformed or transferred.

Directions: In the chart below, place an **X** in the column that best describes the kind of energy each object has.

Situation	Kinetic Energy	Potential Energy
1.A stretched rubber band		X
2.Automobile moving along level surface at constant speed	X	
3.Rock at the edge of a cliff		X
4.Wound-up watch spring		X
5.A leaf falling from a tree	X	

Directions: Write the letter next to each definition that best describes the term.

Definition	Term
<u> B </u> 6.energy caused by an objects vibrations	A. thermal energy
<u> E </u> 7.energy that comes from changes in the nucleus of an atom	B. sound energy
<u> A </u> 8.all of the kinetic energy due to random motion of the particles that make up an object	C. electrical energy
<u> C </u> 9.energy of moving electrons	D. radiant energy
<u> F </u> 10.energy of a compound that changes as its atoms are re-arranged	E. nuclear energy
<u> D </u> 11.energy travels in electromagnetic waves	F. chemical energy