

Conservation of Energy Concepts

A. What is the Law of Conservation of Energy? (There are two main ideas.)

B. What is meant by "type" or "form" of energy?

Ideas

1. Identify the following types of energy.
 - a. The energy an object has because it is moving.
 - b. The energy something has because of its height above the ground.
 - c. The energy something has because of its temperature.
 - d. The energy in a stretched rubber band.
 - e. The energy when two opposing magnets are held close together.
 - f. The energy in some gasoline.
 - g. The energy from the outlets in your house.
 - h. The energy in a battery. (There are two decent answers for this one.)

2. Identify the type(s) of energy present in each situation
 - a. A dancer is held up in the air.
 - b. A hot cup of tea.
 - c. A ball is moving up in the air.
 - d. A lit candle.
 - e. A roller coaster is speeding up going down a hill.
 - f. A rock is being held in a stretched elastic band (a sling shot.)

3. For each of the following situations, give the energy transformations that are taking place.
 - a. You walk to school.

 - b. You drive to school in a non-hybrid car.

 - c. You use your phone all day.

 - d. Dynamite explodes and breaks apart a building.