

Lesson 1.02 Practice Text Only Version

1. ___ states that energy cannot be created or destroyed, but can be transferred from one form to another.

Answer: Law of Conservation of Energy

Feedback: Remember that energy is never “used up”. It simply changes form.

2. What form of energy would best describe a boulder hanging off the side of a mountain?

Answer: Gravitational Energy

Feedback: Gravitational energy is the potential energy that an object possesses based on its position above the earth’s surface.

3. What form of energy is the vibration of waves through material?

Answer: Sound

Feedback: Sound is a form of energy that travels in waves and can be received by the eardrum and processed as sound by the brain.

4. What form of energy would best describe the energy trapped within a candy bar?

Answer: Chemical Energy

Feedback: Energy is trapped with the bonds that hold the molecules of the candy bar together which is a form of potential energy known as chemical energy.

5. What type of energy conversion is it when a battery operated flashlight is turned on?

Answer: chemical energy to light energy

Feedback: A battery is a form of chemical potential energy that is turned into light energy when a flashlight is turned on.

6. What form of energy is used by the sun to produce light?

Answer: Nuclear Energy

Feedback: A nuclear reaction occurs that generates the sun’s energy through nuclear fusion—combining nuclei of atoms to release energy.

7. What form of energy best describes lightening?

Answer: Electrical Energy

Feedback: Lightening is a form of static electricity in which negative charges travel from a cloud to the ground. Electrical energy is the movement of electrons which are negative charges.

8. When fuel in a rocket is ignited what is the energy conversion?

Answer: chemical energy to mechanical energy

Feedback: Fuel is a form of chemical energy and when ignited it causes the rocket to move.

9. What forms of energy are present after a match is struck?

Answer: light and thermal

Feedback: The flame is the light energy that you see and the heat coming that you feel is thermal energy.