Unit 2: Force, Motion and Energy Test REVIEW ANSWERS

Give a definition and two examples for each type of energy below.

Light: the energy of light waves

1. Lightbulb, sun, flashlight, ipad screen, buttons on an oven, headlights, etc.

Sound: the energy of sound waves

1. Music, ipad clicking noise, yelling, singing, horn honking, etc.

Mechanical: the energy of movement- potential and kinetic

1. Running, swimming, driving a car, airplane flying, walking, writing, etc.

Thermal: the energy of heat waves

1. Fire, sun, microwave heating something, using a stove top

Electrical: the energy of electrical waves

1. Lamps, charging a phone, fan, plugging in a fridge, etc.

What does REFLECTION mean? Give an example.

Reflection is when light waves bounce off of something and change directions. Examples could be mirror, back of a CD, rearview mirror, etc.

What does REFRACTION mean? Give an example.

Refraction is when light waves are bent. Examples could be light going into a pool, camera lens, pencil in water, etc.

What does it mean to have pitch?

Pitch is the degree of high or low tone in a sound wave.

What is potential energy? Give an example.

The energy that COULD happen or is stored up. Example: standing, pushing down on the back of the plastic frog before releasing, a ball at the top stopped of a ramp, a car stopped at a stoplight, etc.

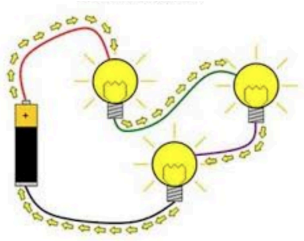
What is kinetic energy? Give an example.
The energy an object has due to motion. Example: ball rolling down a hill, jumping frog, car driving, walking down the hallway, etc.

What is a conductor? Give an example.
An object that allows energy to flow. Example: all metals, wires, etc.

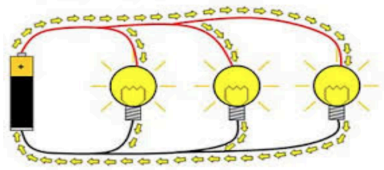
What is an insulator? Give an example.
An object that does NOT allow energy to flow. Example: plastic, glass, yarn, fabric, wood, etc.

Why is it necessary for a circuit to be CLOSED?
A circuit must be closed in order for electrical waves to completely flow. If it is open the electrical waves will stop and the light will not turn on.

Draw a picture of a SERIES circuit:



Draw a picture of a PARALLEL circuit:



What is a force?
A push or a pull.

What is friction? Give an example.
The action of one surface or object rubbing against another (resistance).
Example: sandpaper rubbing wod, rubbing your hands on your pant legs, etc.