Name: _____

Types of Energy Activity

Background Info:

Energy is defined as the ability to do work, causing displacement. The force of work in the form of energy has allowed for society to learn, change and grow through the continued improvements of converting energy to do more efficient work.

The Law of Conservation of Energy states that all available energy in the world is never changing, meaning the total amount of energy cannot be added to or taken away from. Instead, energy is convertible and can be used in one form, and then converted into another.

The types of energy being converted are kinetic and potential energy. Moving energy or kinetic energy is energy that is in motion. When that energy stops moving it converts to stored energy or potential energy. Both kinetic and potential energy are measured in the unit of joules. The number of joules tells scientists how much work is being done on or by an object.

Kinetic Energy			Potential Energy		
Heat	Light	Motion	Chemical	Electrical	Elastic
Electrical	Sound	Mechanical	Gravitational	Mechanical	Nuclear

Types of Energy:

Label the Following Examples as Being Stored **(PE)** or Motion **(KE)** Energy

1.) Burning wood in a campfire _____

2.) A pitcher throwing a baseball across home plate _____

3.) The force binding protons and neutrons together in the nucleus _____

4.) Listening to music play through headphones _____

5.) Turning a door knob _____

6.) A bicyclist riding his bike down a hill _____

7.) An archer with their bow drawn _____

8.) Stretching a rubber band _____

9.) Sitting in a car on top of a hill _____

LIVEWORKSHEETS

Directions:

Around the classroom are 15 different energy scenarios. Using each card, explain the scenario, the type of energy, and if the energy is in motion (KE) or being stored (PE).

Card #	Explain the Scenario	Type of Energy	Stored or Moving?	Circle One
1	Lightning strike in the evening sky			KE or PE
2	A cheeseburger			KE or PE
3	Protons and neutrons inside the nucleus of an atom			KE or PE
4	A woman running			KE or PE
5	A campfire			KE or PE
6	A guitar playing music			KE or PE
7	The rays of the sun causing a sunburn			KE or PE
8	An archer with their bow drawn			KE or PE
9	Two Batteries			KE or PE
10	A person pushing a lawnmower over grass			KE or PE
11	A basketball bouncing			KE or PE
12	Apples sitting in a tree, the ground and in a bucket			KE or PE
13	A stretched spring			KE or PE
14	A radio producing radio waves			KE or PE

LIVEWORKSHEETS

15	A large boulder balancing on another boulder			KE or PE

LIVEWORKSHEETS