Science 9

Physics I

Name:
Date:
Block:

1. **Energy**
2. **Types of Energy**

Energy

_____ is all around us. It is defined as the _____ _____ ____ _____. If an object or organism does work (_____ a force over a distance to move an object), it uses energy.

- Examples: a _____ uses energy to carry people
  : electric _____ in a current uses energy to _____ _____ a _____

Energy is _____ _____ or _____. It can be _____from one kind of energy to another kind of energy. This means that energy is _____.

We are able to _____ many types of energy into forms of energy.

Forms of Energy

There are two main forms of energy: _____ _____ and _____ _____.

What is Kinetic Energy?
Kinetic energy is the _____ ___ _____.

We are able to categorize many types of energy as kinetic energy.

Examples of Kinetic Energy:

- _____ **Kinetic Energy**
  - Energy of an object that is in motion
- _____ **Energy**
  - Energy of _____ waves from an energy source. This source of energy generally comes from the _____.
- _____ **Energy (Heat)**
  - Energy of _____ _____ of particles in a substance; it is detected as _____.
    - Example: geysers, volcanoes, hot springs
- _____ **Energy**
  - Energy of _____ of particles
- _____ **Kinetic Energy**
  - Energy of electrons moving along a _____

What is potential energy?

_____ _____ is the _____ _____ of an object as a result of its condition or its _____.

We are able to categorize many types of energy as potential energy.

Types of Potential Energy

- _____ **Potential Energy**
  - Energy stored in a _____ or _____ object
- _____ **Potential Energy**
  - Energy stored in _____ _____
  - This is the form of energy we acquire from food and store in our muscles.
    - Example: batteries store chemical energy; fossil fuels (coal, oil, natural gas) store chemical energy.
- _____ **Potential Energy**
  - Energy due to the _____ of an object
- _____ **Energy**
  - Energy stored in the _____ of an atom
  - When the nucleus of an atom _____ or _____ (with another), nuclear energy is released.
  - This takes the form of _____ (solar) and _____.
  - This is the most _____ form of energy.
  - There are two main ways we can get nuclear energy:
    - Nuclear _____: New atoms are made as smaller atoms collide and fuse together (occur on the Sun and in stars)
    - Nuclear _____: New atoms are made by splitting larger atoms (carried out in reactors on Earth).
- _____ **Potential Energy**
  - Energy is stored by a _____ of positive and negative charges
- _____ **Potential Energy**
  - Energy stored in a _____ _____