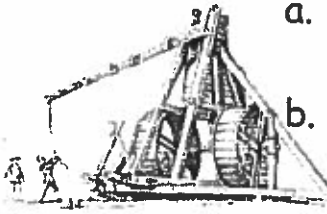


# Forms of Energy NOTES


There are 2 basic kinds of energy:

1. Kinetic energy- the energy an object has due to its motion
2. Potential energy- stored energy that results from the position or shape of an object.



- a. Gravitational Potential Energy- potential energy related to an object's height. Ex: roller coaster
- b. Elastic Potential Energy- potential energy associated with objects that can be stretched or compressed. Ex: trebuchet, catapult


There are 6 different forms of energy:

1. Mechanical energy- the position and motion of an object.  
Ex: a football thrown by a quarterback 



2. Thermal energy- total potential and kinetic energy of the particles in an object.  
Ex: ice cream on a hot day; fast moving particles in the air make the particles in ice cream move faster

3. Electrical energy- energy of electrical charges.  
Ex: getting a shock from a metal chair, energy for a battery

4. Chemical energy- potential energy stored in the chemical bonds that hold chemical compounds together.  
Ex: using a match to light a birthday candle 

5. Nuclear energy- stored in the nucleus of an atom.  
Ex: nuclear power plants use fission reactions to produce electricity

6. Electromagnetic energy (light)- energy that travels in waves; some have electrical properties and some have magnetic properties.  
Ex: microwaves, x-ray machines, sunlight 