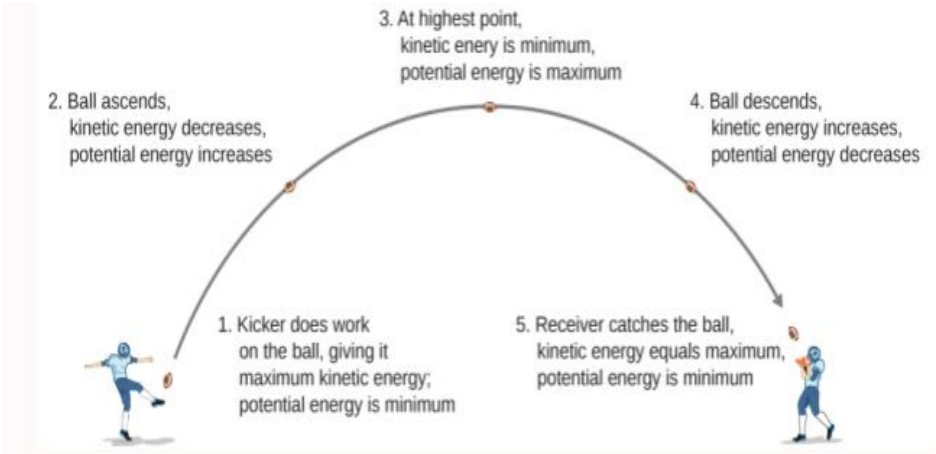
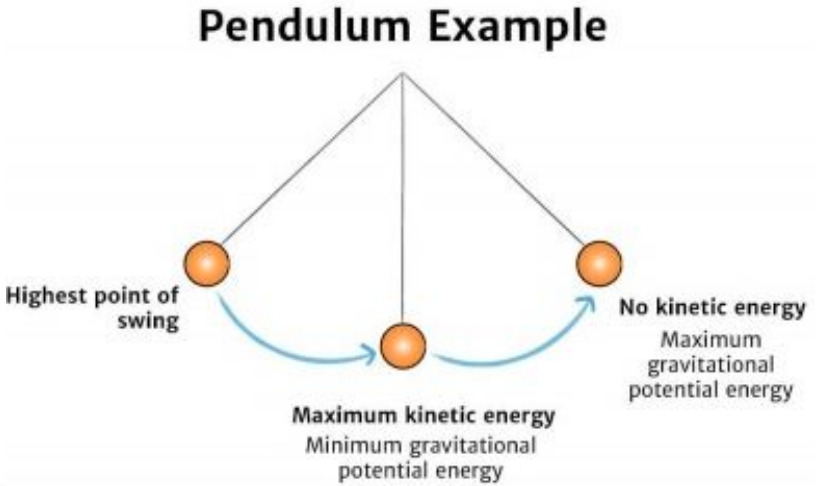
U1L1B Energy

I. FORMS OF POTENTIAL ENERGY

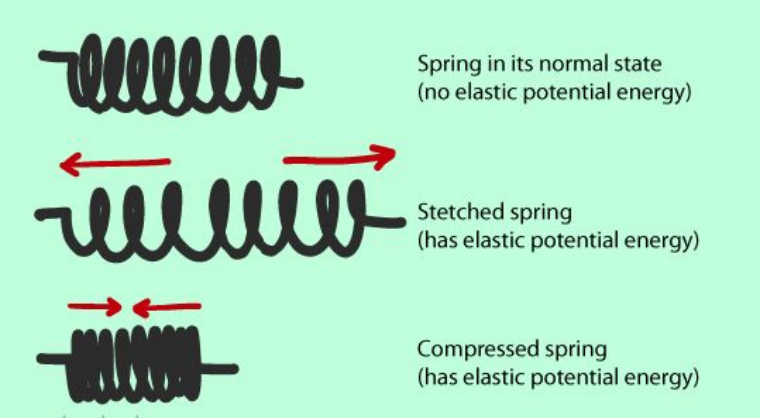
A. **GRAVITATIONAL POTENTIAL ENERGY** the energy a physical object with mass has in relation to another massive object due to gravity. It is potential energy associated with the gravitational field. Gravitational energy is dependent on the masses of two bodies, their distance apart and the gravitational constant





I. FORMS OF POTENTIAL ENERGY (Cont'd)

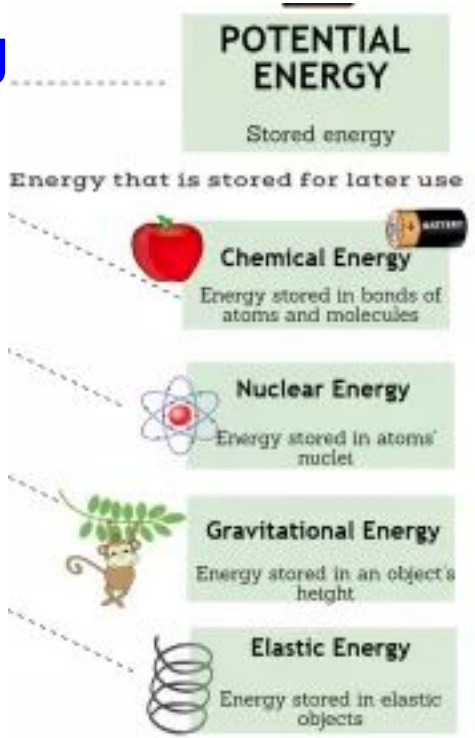
B. Elastic Potential Energy = the energy associated with an object that can be stretched or compressed. **Ex When an archer pulls back an arrow the bow changes shape and has an elastic potential energy.**



I. FORMS OF POTENTIAL ENERGY- Cont'd

C. The various types of potential energ

- Gravitational **PE**
- Elastic **PE**
- Nuclear **PE**.
- Chemical **PE**.
- Electric **PE**.



II. FORMS OF KINETIC ENERGY-

A. MECHANICAL ENERGY - the sum of the object's potential and kinetic energy or the energy of an object due to its motion and its position.

Mechanical Energy

Energy that can be used to do work.

It is the sum of an object's kinetic and potential energy.

Examples: elevator, Car, hammer in motion

II. FORMS OF KINETIC ENERGY- Cont'd

B. The different **types of energy** see page 10

III. ENERGY IN SYSTEMS

A. System - is a group of interacting parts that move together or work together and needs energy.

B. Energy in the system can be transferred or transformed