Potential & Kinetic Energy

Potential Energy
- Energy of Position
- Stored Energy (capable of becoming active)

Potential Energy shows a relationship between
- Mass of object
- Height of object
- Acceleration of gravity

An object's potential energy is equal to the amount of work the object can do.
- Work= force x distance
  - Force= mass x gravity (weight)
  - Distance = height

$$\text{Potential Energy} = \text{Mass} \; x \; \text{Gravity} \; x \; \text{Height}$$
$$E_P = mgh$$

Units: Potential Energy (E_P)   Joules
          Mass (m)   Kg
          Gravity (g) m/sec^2
          Height (h)   m