kinetic energy equation –

ex: A shot-putter heaves a 7.2 kg shot with a velocity of 6.9 m/s.

a. What is the K.E. of the shot?

b. How much work did the shot-putter do on the shot?

Problem Set #1: (1-3) *on back*

potential energy equation –

Can you measure an object's potential energy? _____
Can you measure an object's change in PE? _____

ex: A 2.0 kg book is lifted from a table to a shelf 1.8 m above the floor. What is the gravitational potential energy of the book...

a. relative to the floor?

b. relative to the table 0.6 m above the floor?

Problem Set #2 (1-2) *on back*

Energy can be _____ from potential to _____ and vice versa.

Law of Conservation of Energy:

-

-

Problem Set #3: Draw diagram here.

Conservation of Energy equation:

Conservation Ex. Problem:
A 12 kg rock is at the edge of a 95 m cliff.

a. What is the rock's initial PE and KE?

b. If the rock falls to the ground, what is its final PE and KE just before it hits?

c. What is the rock's velocity just before it hits the ground?

Problem Set #4 (1-2) *on back*

During **elastic** collisions, KE is -

During **inelastic** collisions KE is -
because some energy is –

How are momentum (p = ___) and kinetic energy (KE = _____):

- similar?

- different?