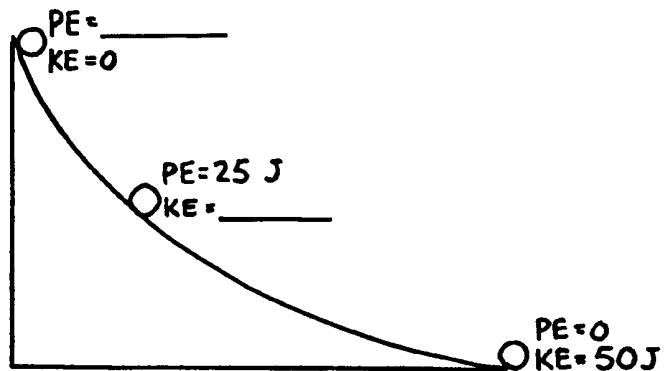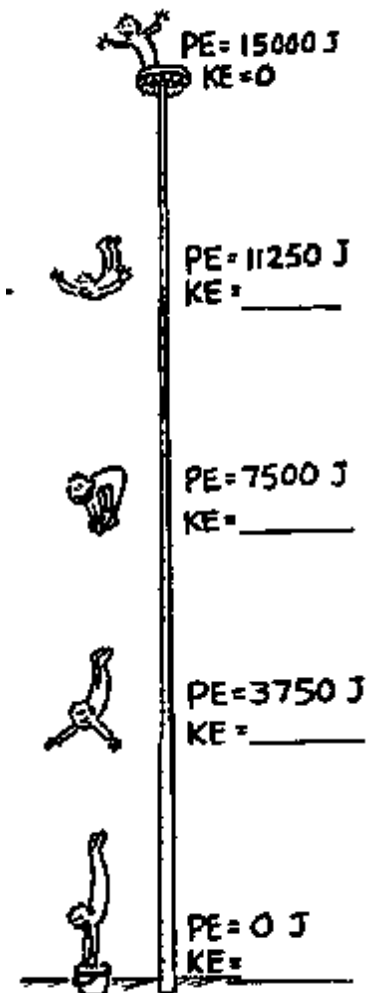# POTENTIAL ENERGY

1. Your 1500 kg car is being serviced and is on the elevated platform 5.3 m above your head. What is the gravitational <u>potential energy</u> of your car?

2. A ball has a 26.32 J of gravitational potential energy while it is 5.6 m in the air. What is the <u>mass</u> of the ball?

3. A 2.18 kg textbook is placed on a shelf. The textbook now has a potential energy of 42.73 J. How <u>high</u> is the shelf?

Apply the <u>Law of Conservation of Energy</u> to the situations below. Provide the missing values in the figures. Ignore resistance/drag.

PE= 15000 J
KE =0

PE= 11250 J
KE =_____

PE= _____
KE =0

PE= 25 J
KE =_____

PE=7500 J
KE =_____

PE=3750 J
KE =_____

PE=0
KE= 50J

PE= 0 J
KE=

ENERGY

Name _____ Date _____ Block _____

Potential Energy   **Kinetic Energy**