Potential Energy
ΔPE=mgΔh

1) A weight lifter lifts a 20kg mass from the floor to a height of 2.0m. Find the change in potential energy.

2) A 50g cup of coffee is on a table 100cm above the floor.
   A)The owner of the cup raises the coffee to 1.4 m above the floor while taking a drink. What is the change in potential energy of the cup?

   B) If instead, the cup is knocked off the table and falls to the floor, what is its ΔPE?

3) A 1.2kg vase is lifted to a shelf. The vase's ΔPE is 23.5J. What is the height of the shelf?

4) Which has greater PE? A 1kg marble at a height of 5000m or an 1100kg car at a height of 2m?

5) A 70kg man lifts a 12kg box from the floor to a table 1.3m high?
   A) How much work does the man do?

6) A 30kg cart is pushed up a ramp that is 4m long inclined at an angle of 15⁰. Find the cart's change in potential energy.

4m