

Answer on Question #46213, Physics, Mechanics | Kinematics | Dynamics

An object weighing 900 N is placed at an height of 3 meters. What is its potential energy in joules?

Potential energy of the object in gravitational field is:

$$E_p = mgh$$

Weight of an object is $P = mg$.Then:

$$E_p = Ph = 900N \cdot 3m = 2700J = 2.7kJ$$

Answer: potential energy of an object is $E_p = 2.7kJ$