

Question #64484, Physics / Classical Mechanics

Stone(weight 10kg) falls form 80m height. Neglect air resistance. Kinetic energy just before it hits the ground is?

Solution

According to the conservation of energy, $\Delta GPE = \Delta KE$;

The initial kinetic energy is zero because the stone starts from rest. Thus,

$$KE = \Delta GPE = mg\Delta h = 10 \times 80 = 800 \text{ J}$$

Answer: 800 J.

Answer provided by <https://www.AssignmentExpert.com>