Physics

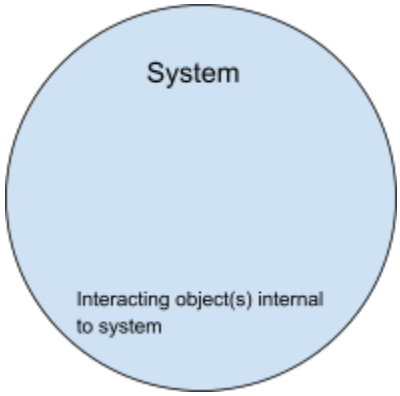
Name_____

Hr._____

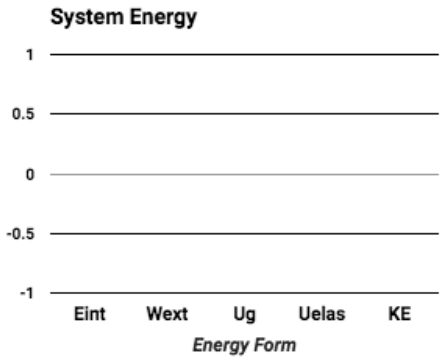
Using a Systems Approach for Energy Problems

$Work_{fric} = \Delta E_{int}$ $KE = \frac{1}{2}mv^2$ $U_g = mgh$ $U_{elas} = \frac{1}{2}kx^2$

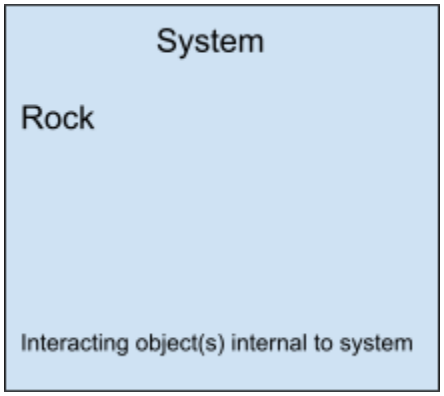
$W_{ext} = F \cdot \Delta x \cdot cos\theta$



Interacting object(s) external to system

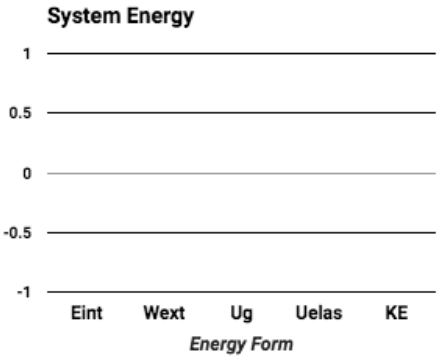


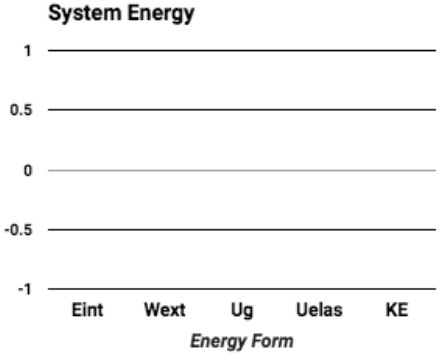
1. 5 kg rock falling from 15 meters. What is the velocity just before hitting the ground?



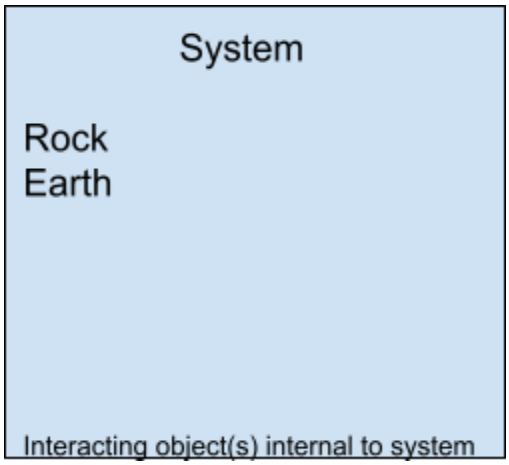
Interacting object(s) external to system:

Earth





2. 5 kg rock falling from 15 meters. What is the velocity just before hitting the ground?



Interacting object(s) external to system:
None