

CHAPTER 6: Work and Energy

Work done by constant force: $W = Fs \cos \theta$

Kinetic Energy: $K = \frac{1}{2}mv^2$

Work - Energy Theorem: $W_{net} = K_f - K_i$

Potential Energy: $PE = mgh$

Work done by gravitational force: $W_{mg} = mg(h_0 - h_f)$

Total mechanical energy: $E = K + PE$

Work - energy theorem & Energy conservation:

$$W_{nc} = E_f - E_i$$