Chapter 6 - Review

Work → $W = F_{\parallel} \Delta d$

$W = F \Delta d \cos\theta$

W = Area under F-d graph

When no work is done (3 situations)

Kinetic Energy → $E_k = \frac{1}{2}mv^2$

Gravitational Potential Energy → $E_g = mgh$

Work Energy Theorem

$W = \Delta E$

Hooke's Law → $F_a = kx$

Elastic Potential Energy → $E_e = \frac{1}{2}kx^2$

Power → $P = \frac{W}{\Delta t}$ (units watts (W))

Efficiency → $\text{Efficiency} = \frac{E_O}{E_I} \times 100\%$