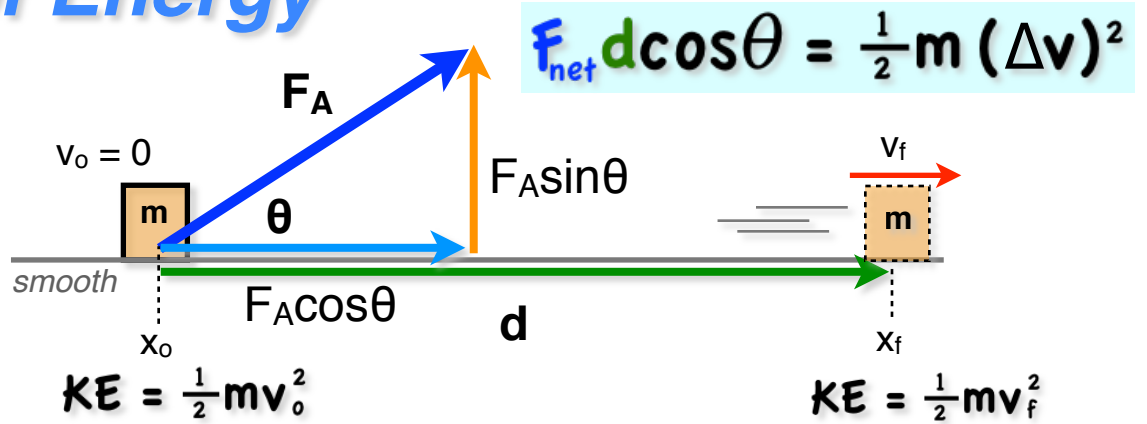
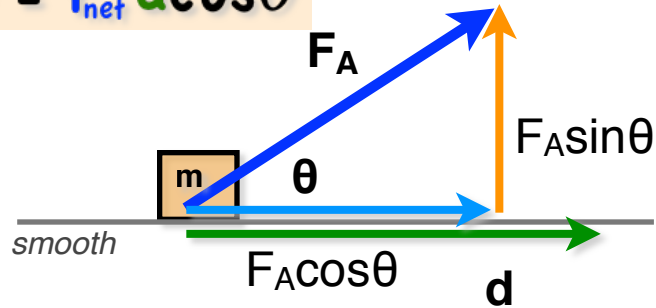


Conservation of Energy

$$W = F_{\text{net}} d \cos\theta$$



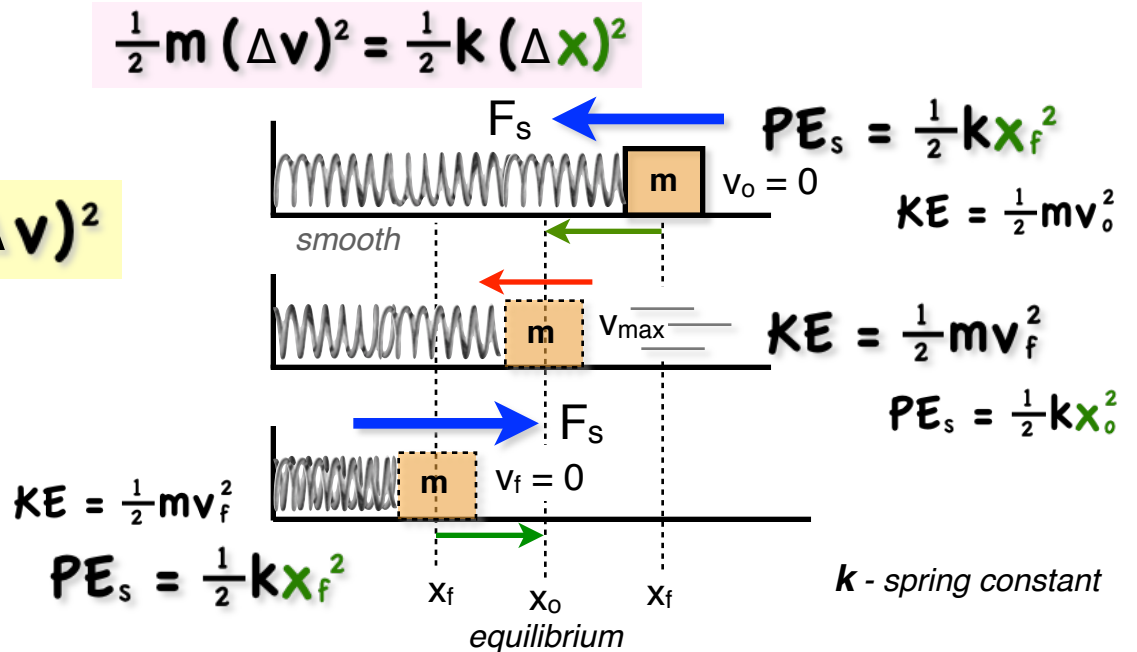
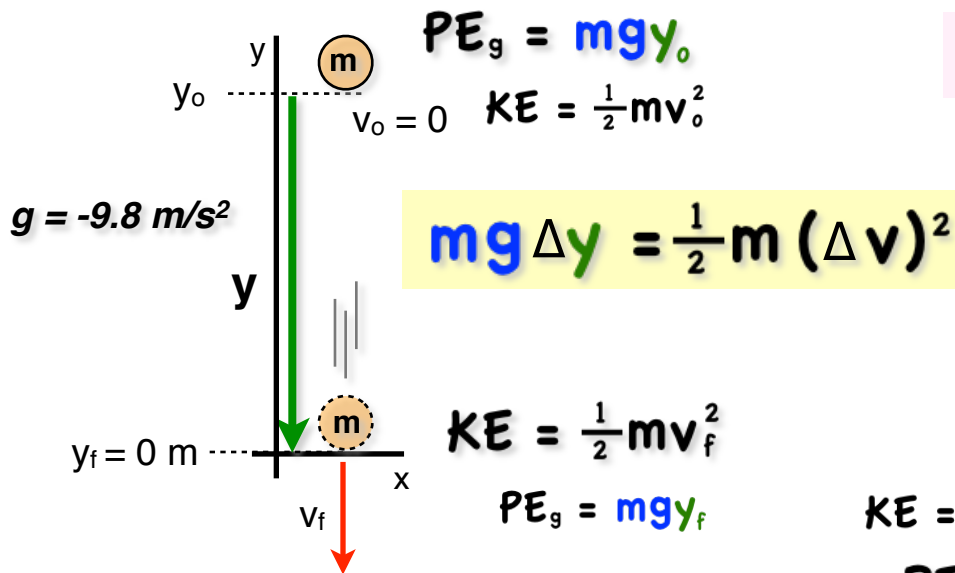
Work

Gravitational Potential Energy
energy of position

$$= F_{\text{net}} d \cos\theta = \frac{1}{2} m (\Delta v)^2 = mg \Delta y = \frac{1}{2} k (\Delta x)^2$$

Kinetic Energy
energy of motion

Spring Potential Energy
energy of position



k - spring constant