

Chapter 8

Conservative force	If an object is constrained to move around a closed path, any conservative force acting on the object does no net work.
Potential energy associated with a conservative force	$-(U_f - U_i) =$ work done on an object by a conservative force as the object moves from point i to point f .
gravitational potential energy (GPE)	$U = m \cdot g \cdot h$, where h is the height above some reference point

elastic potential energy (EPE)	$0.5 * k * x^2$ where x is the difference between the actual position of the free end of the spring and its equilibrium position.
Total energy	KE + GPE + EPE (plus heat if present)

Conservation of energy

total energy initial = total
energy final