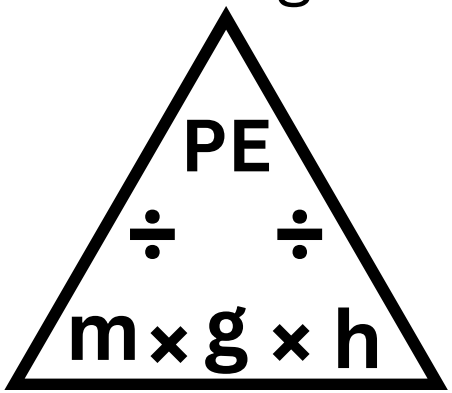
ENERGY, WORK, AND POWER FORMULA SHEET

Potential Energy

Gravitational

$PE = m\,g\,h$



Elastic

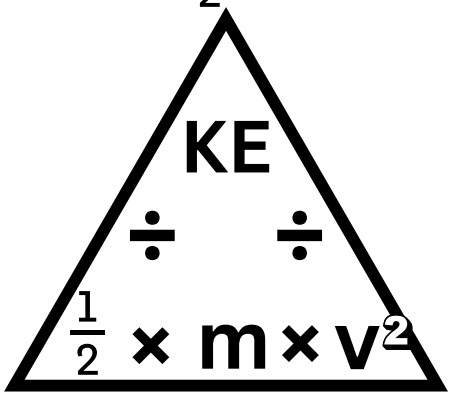
$U = \frac{1}{2} k \Delta x^2$

Conservation of Energy

$KE_i + PE_i = KE_f + PE_f$

Kinetic Energy

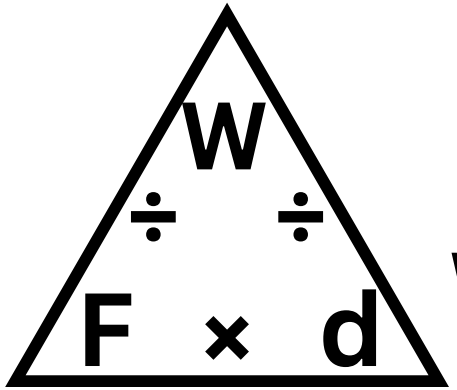
$KE = \frac{1}{2} m\ v^2$



Units:
m-mass- kg
t-time- s
g- 9.8 m/s
h-height- m
d/x-distance-m
v-velocity- m/s
KE/PE/U-energy- J
W-work- J
P-power- W

Work

$W = F\,d$



Also!

$W = \Delta KE$

Power

$P = W / t$