**Useful constants**

gearth = 9.8 N/kg gmoon = 1.6 N/kg Mass of Earth= 5.98 x 10 24 kg Radius of Earth=6.38 x 106m

G= 6.67 x 10 –11 N•m2/kg2

**Useful Equations:** FG= Ff= μFN Fnet= ma g = Fg=mg

a =ΔΔ Δd=½( v1+v2) Δt Δd=v2 Δt – ½ a (Δt)2 Δd=v1 Δt + ½ a (Δt)2 Δd=

Eg = mgh Ek = ½ mv2  W=FΔd Wtotal = Ekfinal - Ekinitial

%Eff= Eout/Ein x 100% P = Δ= ΔΔ

