***Formula Sheet***

$$v={d}/{t}$$

$$a=\frac{v\_{f}-v\_{i}}{Δt}$$

$$F=am$$

*M1V1 + M2V2 = M1V3 + M2V4*

*M1V1 + M2V2 = (M1 + M2)V3*

$$p=mΔv$$

$$I=FΔt$$

 $FΔt=mΔv$ I = $ΔP$

$$W=Fd$$

$$P=W∕t$$

$$PE=mgh$$

$$KE=\frac{1}{2}mv^{2}$$

$$W=ME$$

 ME = PE + KE

 speed = wavelength x frequency

$g=10 m∕s^{2}$ (rate of acceleration)

$$Freqency =1/seconds$$