Formulas
(you need very few of these!!)

$v_{avg} = \frac{\Delta l}{\Delta t}$	$a_{avg} = \frac{\Delta v}{\Delta t}$			
$s = v_0 t + \frac{1}{2}at^2$	$v_f = v_i + at$	$v_f^2 = v_i^2 + 2as$	$s = \frac{1}{2}(v_i + v_f)t$	
$\sin = \frac{o}{h}$	$\cos = \frac{a}{h}$	$\tan = \frac{o}{a}$	$\tan 45° = 1$	
$\sin 30° = 0.5 = \cos 60°, \cos 30° = 0.866 = \sin 60°$			$\sin 45° = 0.707 = \cos 45°$	
use $g = 10\frac{m}{\sec^2}$	1in = 2.5cm	$2\pi\ rad = 360°$	$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$	
$\sum \vec{F} = m\vec{a}$	$f_s = \mu_s N$	$f_k = \mu_k N$	$a_c = \frac{v^2}{r}$	$F_g = mg$
$F_g = \frac{GMm}{r^2}$	$\vec{p} = m\vec{v}$	$v_{1f} = \frac{m_1 - m_2}{m_1 + m_2} v_{1i}$	$v_{2f} = \frac{2m_1}{m_1 + m_2} v_{1i}$	
$C = 2\pi r$	$A_{cylinder} = \pi r^2 h$	$V = \frac{4}{3}\pi r^3$	$A_{sphere} = 4\pi r^2$	$A = \pi r^2$
$s = \theta r$	$v = \omega r$	$a = \alpha r$	$T = \frac{1}{f} = \frac{2\pi}{\omega}$	
$\theta = \omega_i t + \frac{1}{2}\alpha t^2$	$\omega = \omega_0 + \alpha t$	$\omega_f^2 = \omega_i^2 + 2\alpha\theta$	$L = I\omega$	
$I = \sum m_i R_i^2$	$I_{hoop} = MR^2$	$I_{disk} = \frac{1}{2}MR^2$	$I_{sphere} = \frac{2}{5}MR^2$	$\tau = Fr_\perp$
$W = Fd\cos\theta$	$KE = \frac{1}{2}mv^2$	$KE = \frac{1}{2}I\omega^2$	$\sum \vec{\tau} = I\vec{\alpha}$	$U_g = mgh$

$P_0 + \frac{1}{2}\rho v^2 + \rho gh = const.$		$Av = const.$	$W_s = -\frac{1}{2}kx^2$	$P = \frac{F}{A}$
$y = y_{\max}\cos\omega t$	$\omega = \frac{2\pi}{T} = 2\pi f$	$v = \sqrt{\frac{\tau}{\mu}}$	$\omega = \sqrt{\frac{k}{m}}$	$F_s = -kx$
$\omega = \sqrt{\frac{g}{L}}$	$v = f\lambda = \frac{\lambda}{T}$	$I = \frac{P_s}{4\pi r^2}$	$\beta = (10\,dB)\log\frac{I}{I_0}$	
$\Delta L = L_0\alpha\Delta T$	$\Delta V = V_0\beta\Delta T$	$T_K = T_c + 273°$	$T_F = \frac{9}{5}T_C + 32°$	
$Q = cm(T_f - T_i)$	$Q = Lm$	$\Delta U = Q + W$	$H = \frac{Q}{t} = kA\frac{T_h - Tc}{L}$	
$pV = nRT$	$N_A = 6.02 \times 10^{23}\,\text{mol}^{-1}$	$W = -P\Delta V$	$W_{isothermal} = nRT\ln(\frac{V_f}{V_i})$	
1cal = 4.186J	$\eta = 1 - \frac{\lvert Q_c\rvert}{\lvert Q_h\rvert} = 1 - \frac{T_c}{T_h}$	$\Delta S = \frac{Q}{T}$		