

PHSC 1011 Exam 2

$$F = ma$$

$$W = mg$$

$$g = 10m / s^2$$

$$a = \frac{\Delta v}{t}$$

$$v_{ave} = \frac{d}{t}$$

$$d = \frac{1}{2}at^2$$

$$v = at$$

$$F = G \frac{m_1 m_2}{r^2}$$

$$1000m = 1km$$

$$1km = 0.622mi$$

$$1hr = 3600s$$

$$1m = 3.28ft$$

$$T_F = \frac{9}{5}T_C + 32^\circ$$

$$T_C = \frac{5}{9}(T_F - 32^\circ)$$

$$T_K = T_C + 273$$

$$f = \frac{1}{T}$$

$$v = f\lambda$$

$$v = 331 + .6 \times T(\text{in } ^\circ\text{C})$$

$$F = k \frac{q_1 q_2}{r^2}$$

$$I = \frac{q}{t}$$

$$W = F_{\parallel}d \text{ (work)}$$

$$P = \frac{W}{t}$$

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

$$PE = mgh$$

$$p = mv$$

$$\Delta p = F \Delta t$$

Material	$\frac{\text{kcal}}{\text{kg } ^\circ\text{C}}$
Air	0.241
Aluminum	0.215
Brass	0.094
Copper	0.092
Glass	0.20
Gold	0.031
Iron	0.108
Lead	0.031
Platinum	0.032
Silver	0.057
Steel	0.108
Tin	0.054
Tungsten	0.032
Zinc	0.093
Water	1.000
Ice	0.500
Steam	0.481