

<p>MASS CONVERSIONS one mg (milligram) = 1/1000 g one g (gram) = 1000 mg, 14.4 gr, .035 oz one kg (kilogram) = 1000 g, 35 oz, 2.2 lbs one gr (grain) = 0.65 g one oz (ounce) = 28.35 g one lb (pound) = 16 oz, 454 g, .45 kg</p>	<p>LENGTH CONVERSIONS one μ (micron) = 1/1000 mm one mm (millimeter) = 1/10 cm, 1000 μ, 1/1000 m one cm (centimeter) = 10 mm, 0.39 in, 1/100 m one m (meter) = 1000 mm, 100 cm, 39.37 in one km (kilometer) = 1000 m, 3280 ft one in (inch) = 25.4 mm, 2.54 cm one ft (foot) = 12 in, 30.48 cm, 0.3m one yd (yard) = 3 ft, 91.44 cm, 0.91 m one mile = 5280 ft, 1760 yd</p>
<p>TIME CONVERSIONS one millisecond (ms) = 1/1000 sec one second (sec) = 1000 ms, 1/60 min one minute (min) = 60 seconds one hour (hr) = 60 min, 3600 sec one day = 24 hrs one year (yr) = 365.25 days</p>	<p>ANGULAR MEASURE CONVERSIONS one second (") = 1/60', 1/3600 deg one minute (') = 60", 1/60 deg one degree (deg) = 1/360 of a circle one second (sec) = 1/60 min, 1/3600 hr one minute (min) = 60 sec, 1/60 hr one hour (hr) = 15 deg</p>

Formulas that may be useful:

$$d = v \cdot t$$

$$a = (v_f - v_i) / t$$

$$v_{\text{average}} = (v_f + v_i) / 2$$

$$d = 0.5 \cdot a \cdot t^2$$

$$F = m \cdot a$$

$$w = m \cdot g$$

$$p = m \cdot v$$

$$a_r = v^2 / r$$

$$F = (m \cdot v^2) / r$$

$$v_f = (a \cdot t) + v_i$$

$$F = (G \cdot m \cdot M) / d^2$$

$$W = F \cdot d$$

$$KE = 0.5 \cdot m \cdot v^2$$

$$PE = m \cdot g \cdot h$$

$$Q = m \cdot c \cdot \Delta T$$

$$T = 1 / f$$

$$f = 1 / T$$

$$v = \lambda \cdot f$$

$$F = (k \cdot q_1 \cdot q_2) / d^2$$

$$I = q / t$$

$$V = I \cdot R$$

$$P = I \cdot V$$

$$n = c / v$$

$$E = h \cdot f$$

$$R_t = R_1 + R_2 \quad \text{or} \quad 1 / R_t = 1 / R_1 + 1 / R_2$$

Acceleration due to gravity is 9.8 m/s^2

1 kilocalorie = 4184 Joules

$$t = t_0 / \sqrt{(1-v^2/c^2)}$$

$$l = l_0 \cdot \sqrt{(1-v^2/c^2)}$$

$$m = m_0 / \sqrt{(1-v^2/c^2)}$$

$$E = mc^2$$