Mathematics Chart

LENGTH	
Metric	**Customary**
1 meter (m) = 100 centimeters (cm)	1 foot (ft) = 12 inches (in.)
1 centimeter (cm) = 10 millimeters (mm)	1 yard (yd) = 3 feet (ft)
1 kilometer (km) = 1000 meters (m)	1 yard (yd) = 36 inches (in.)
1 meter (m) = 1000 millimeters (mm)	1 mile (mi) = 5280 feet (ft)
Metric/Customary	
2.54 centimeters (cm) = 1 inch (in)	
1 meter (m) = 1.09 yards (yd)	
1.61 kilometers (km) = 1 mile (mi)	

CAPACITY AND VOLUME	
Metric	**Customary**
1 liter (L) = 1000 milliliters (mL)	1 cup (c) = 8 fluid ounces (fl. oz.)
1 cubic centimeter (cc or cm^3) = 1 milliliter (mL)	1 pint (pt) = 2 cups (c)
	1 quart (qt) = 2 pints (pt)
	1 gallon (gal) = 128 fluid ounces (fl. oz.)
	1 gallon (gal) = 4 quarts (qt)
Metric/Customary	
3.785 liters (L) = 1 gallon (gal)	

MASS AND WEIGHT	
Metric	**Customary**
1 kilogram (kg) = 1000 grams (g)	1 pound (lb) = 16 ounces (oz)
1 gram (g) = 1000 milligrams (mg)	1 ton (T) = 2000 pounds (lb)
Metric/Customary	
1 kilograms (kg) = 2.205 pounds (lb)	

TIME
1 minute (min) = 60 seconds (sec)
1 hour (hr) = 60 minutes (min)
1 day = 24 hours (hr)
1 week = 7 days
1 year (yr) = 52 weeks
1 year (yr) = 12 months (mo)
1 year (yr) = 365 days

Formula Chart Mathematics Chart

OTHER		
Simple Interest Formula		$I = prt$
Perimeter	Triangle	$P = a + b + c$
	Rectangle	$P = 2l + 2w$ or $P = 2(l + w)$
Circumference	Circle	$C = 2\pi r$ or $C = \pi d$
Area	Rectangle	$A = lw$
	Parallelogram	$A = bh$
	Triangle	$A = \frac{1}{2}bh$
	Trapezoid	$A = \frac{1}{2}(b_1 + b_2)h$
	Circle	$A = \pi r^2$
Volume	Rectangular prism	$V = lwh$
Pythagorean Theorem		$a^2 + b^2 = c^2$
Formulas concerning distance		$D = rt \qquad r = \frac{D}{t} \qquad t = \frac{D}{r}$
Formulas concerning temperature		$F = \frac{9}{5}C + 32 \qquad C = \frac{5}{9}(F - 32)$
Variation		**Direct:** $y = kx$ **Inverse:** $y = \frac{k}{x}$
Quadratic Formula		$x = \dfrac{-b \pm \sqrt{b^2 - 4ac}}{2a}$
Vertex Formula		$\left(-\dfrac{b}{2a}, \; f\left(-\dfrac{b}{2a}\right)\right)$
Slope Formula		$m = \dfrac{y_2 - y_1}{x_2 - x_1}$
Slope-Intercept Form of an Equation		$y = mx + b$
Point-Slope Form of an Equation		$y - y_1 = m(x - x_1)$
Standard Form of an Equation		$Ax + By = C$