## **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 = 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 <sup>3</sup> ) = 1 milliliter (mL)	1 pint (pt) = 2 cups (c)		
	1 quart = 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 = 2000 pounds (lb)			
Metric/Customary				
1 kilogram (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		

OTHER						
Simple Interest Formula	Simple Interest Formula		I = prt			
	Triangle		P = a + b + c			
Perimeter	Rectangle		P = 2l + 2w or $P = 2(l + w)$			
Circumference	Circle		$C = 2\pi r$ or $C = \pi d$			
Area	Rectangle		A = Iw			
	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 = Iwh			
Pythagorean Theorem		$a^2 + b^2 = c^2$				
Formula concerning distance		$D = rt \qquad r = \frac{D}{t} \qquad t = \frac{D}{r}$				
Formula concerning temperature		$F = \frac{9}{5}C + 32$ $C = \frac{5}{9}(F-32)$				
Quadratic Formula		$x = \frac{-b \pm \sqrt{b^2 - 4ac}}{2a}$				
Vertex Formula		$\left(-\frac{b}{2a}, f\left(-\frac{b}{2a}\right)\right)$				
Slope Formula		$m = \frac{y_2 - y_1}{x_2 - x_1}$				
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				