

Pre-AP Chemistry
Unit #2—Measurement

Common SI Units

Quantity	Unit	Symbol	Relationship		
Length width Height Thickness	millimeter	mm	1000 mm	=	1 m
	centimeter	cm	100 cm	=	1 m
	meter	m	1 m	=	1 m
	kilometer	km	1 km	=	1000 m
Mass					
Time	seconds	s	60 s	=	1 min
	minutes	min	60 mins	=	1 hr
	hours	hr	24 h	=	1 day
Temperature	Kelvins	K			
Area	square meter	m ²			
	hectare	ha	1 ha	=	10000 m ²
	square kilometer	km ²	1 km ²	=	100 ha
Volume	milliliter	mL	1000 mL	=	1 L
	cubic centimeter	cm ³	1 cm ³	=	1 mL
	liter	L	1000 L	=	1 m ³
	cubic meter	m ³			
Pressure	atmospheres	atm	1 atm		
	kilopascals	kPa	101.3 kPa	=	1 atm
	torr	torr	760 torr	=	1 atm
	millimeters of mercury	mm Hg	760 mm Hg	=	1 am
Density	grams per milliliters	g/mL			
	grams per cubic centimeters	g/cm ³			

Metric Prefixes

Prefix	Symbol	Factor	Numerical	Name
giga	G	10 ⁹	1 000 000 000	billion
mega	M	10 ⁶	1 000 000	million
kilo	k	10 ³	1 000	thousand
centi	c	10 ⁻²	0.01	hundredth
milli	m	10 ⁻³	0.001	thousandth
micro	μ	10 ⁻⁶	0.000 001	millionth
nano	n	10 ⁻⁹	0.000 000 001	billionth