

Conversion Factors:**Length:**

12 in = 1 ft

3 ft = 1 yd

1 mile = 5280 ft

1.00 km = 0.621 mile

1.00 m = 39.4 in

1.00 m = 3.28 ft

1.00 inch = 2.54 cm

Mass:

1 pound = 16 ounces

1.00 kg = 2.20 pounds

1.00 ounce = 28.3 grams

Volume:

1 quart = 4 cups

1 gallon = 4 quarts

1.00 L = 0.264 gallon

1.00 quart = 0.946 liter

1.00 mL = 0.0338 fluid ounce

Temperature conversion equations:

$$^{\circ}\text{F} = 1.8(^{\circ}\text{C}) + 32$$

$$^{\circ}\text{C} = (^{\circ}\text{F} - 32)/1.8$$

$$\text{K} = ^{\circ}\text{C} + 273$$

$$^{\circ}\text{C} = \text{K} - 273$$

Common Polyatomic Ions:

Ion	Name	Ion	Name
NH_4^+	ammonium	CO_3^{2-}	carbonate
NO_2^-	nitrite	HCO_3^-	bicarbonate
NO_3^-	nitrate	ClO^-	hypochlorite
SO_3^{2-}	sulfite	ClO_2^-	chlorite
SO_4^{2-}	sulfate	ClO_3^-	chlorate
HSO_4^-	hydrogen sulfate	ClO_4^-	perchlorate
OH^-	hydroxide	$\text{C}_2\text{H}_3\text{O}_2^-$	acetate
CN^-	cyanide	MnO_4^-	permanganate
PO_4^{3-}	phosphate	$\text{Cr}_2\text{O}_7^{2-}$	dichromate
HPO_4^{2-}	hydrogen phosphate	CrO_4^{2-}	chromate
H_2PO_4^-	dihydrogen phosphate	O_2^{2-}	peroxide

The Periodic Table of the Elements

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1A										8A					
2A										7A					
4										9					
Be Beryllium 9.012182										F Fluorine 18.9984032					
12										17					
Mg Magnesium 24.3050										Cl Chlorine 35.4527					
22.989770										39.948					
19										36					
K Potassium 39.0983										Kr Krypton 83.80					
37										54					
Rb Rubidium 85.4678										Xe Xenon 131.29					
55										86					
Cs Cesium 132.90545										Rn Radon (222)					
87															
Fr Francium (223)															
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21										27					
Sc Scandium 44.955910										Co Cobalt 58.933200					
39										45					
Y Yttrium 88.90585										Rh Rhodium 102.90550					
41										47					
Nb Niobium 92.90638										Ag Silver 107.8682					
42										78					
Mo Molybdenum 95.94										Pt Platinum 195.078					
73										109					
Ta Tantalum 180.9479										Ir Iridium 192.217					
72										108					
Hf Hafnium 178.49										Os Osmium 190.23					
104										107					
Rf Rutherfordium (261)										Bh Bohrium (262)					
89										106					
Ac Actinium (227)										Sg Seaborgium (263)					
105										111					
Db Dubnium (262)										Hg Mercury 200.59					
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La Lanthanum 138.9055										Tl Thallium 204.3833					
57										81					
Ce Cerium 137.327										Pb Lead 207.2					
56										82					
Ba Barium 137.327										Po Polonium (209)					
38										51					
Sr Strontium 87.62										Sb Antimony 121.760					
20										32					
Ca Calcium 40.078										Ge Germanium 72.61					
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