

CHEMICAL SYMBOLS

Chemical symbols are abbreviations for names of elements. These consist of one or two letters; the first letter is always capitalized, and the second letter is never capitalized. Single letter chemical symbols are always capitalized. Some symbols are derived from English names: Al from aluminum; Ca from calcium; N from nitrogen; Cl from chlorine. Some symbols are derived from foreign names: Fe from ferrum (Latin for iron); Sn from stannum (Latin for tin); Na from natrium (Latin for sodium); K from kalium (Latin for potassium); W from wolfram (German for tungsten).

STUDENTS SHOULD MEMORIZE THE SYMBOLS FOR THE FOLLOWING ELEMENTS AND IONS:

<u>Symbol</u>	<u>Element</u>	<u>Symbol</u>	<u>Element</u>	<u>Symbol</u>	<u>Element</u>
Al	Aluminum	Kr	Krypton	Sn	Tin
Ar	Argon	Pb	Lead	Ti	Titanium
As	Arsenic	Li	Lithium	V	Vanadium
Ba	Barium	Mg	Magnesium	Xe	Xenon
Bi	Bismuth	Mn	Manganese	Zn	Zinc
B	Boron	Hg	Mercury	Be	Beryllium
Br	Bromine	Ne	Neon	Sb	Antimony
Ca	Calcium	Ni	Nickel		
C	Carbon	N	Nitrogen		
Cs	Cesium	O	Oxygen		
Cl	Chlorine	P	Phosphorus		
Cr	Chromium	Pt	Platinum		
Co	Cobalt	K	Potassium		
Cu	Copper	Rb	Rubidium		
F	Fluorine	Sc	Scandium		
Au	Gold	Si	Silicon		
He	Helium	Ag	Silver		
H	Hydrogen	Na	Sodium		
I	Iodine	Sr	Strontium		
Fe	Iron	S	Sulfur		

<u>Polyatomic Ion</u>	<u>Name</u>	<u>Polyatomic Ion</u>	<u>Name</u>
NH_4^+	Ammonium	CO_3^{-2}	Carbonate
SO_4^{-2}	Sulfate	$\text{C}_2\text{H}_3\text{O}_2^-$	Acetate
SO_3^{-2}	Sulfite	OH^-	Hydroxide
NO_3^-	Nitrate	PO_4^{-3}	Phosphate
NO_2^-	Nitrite	HCO_3^-	Bicarbonate (or hydrogen carbonate)
ClO^-	Hypochlorite	HSO_4^-	Bisulfate (or hydrogen sulfate)
ClO_2^-	Chlorite	HSO_3^-	Bisulfite (or hydrogen sulfite)
ClO_3^-	Chlorate	H_3O^+	Hydronium
ClO_4^-	Perchlorate	CN^-	Cyanide
CrO_4^{-2}	Chromate	MnO_4^-	Permanganate
$\text{Cr}_2\text{O}_7^{-2}$	Dichromate	$\text{C}_2\text{O}_4^{-2}$	Oxalate