Common Polyatomic Ions

-1 charge	
OH^-	Hydroxide
CN^-	Cyanide
NO_3^-	Nitrate
NO_2^-	Nitrite
ClO_3^-	Chlorate
FO_3^-	Fluorate
BrO_3^-	Bromate
IO_3^-	Iodate
$CH_3CO_2^-$ or $C_2H_3O_2^-$	Acetate
$H_2PO_4^-$	Dihydrogen phosphate
HCO_3^-	Hydrogen carbonate
HSO_4^-	Hydrogen sulfate
HSO_3^-	Hydrogen sulfite
MnO_4^-	Permanganate
-2 charge	
SO_4^{2-}	Sulfate
SO_3^{2-}	Sulfite
CO_3^{2-}	Carbonate
HPO_4^{2-}	Hydrogen phosphate
CrO_4^{2-}	Chromate
$Cr_2O_7^{2-}$	Dichromate
-3 charge	
PO_4^{3-}	Phosphate
+1 charge	
NH_4^+	ammonium

Examples of polyatomic compounds:

$NaNO_3$ sodium nitrate

$Ca(NO_2)_2$ calcium nitrite NOTE: because Ca is +2 and NO_2 is -1, we need 2 nitrites which are placed in brackets

K_2SO_4 potassium sulfate

$Cu(OH)_2$ copper (II) hydroxide

NH_4Br ammonium bromide

Common Acids

Binary Acids (hydrogen and a non-metal): all begin with the prefix: *hydro*	
$HCl_{(aq)}$	Hydrochloric acid
$HF_{(aq)}$	Hydrofluoric acid
$HBr_{(aq)}$	Hydrobromic acid
$HCI_{aq)}$	Hydroiodic acid
$HCN_{(aq)}$	Hydrocyanic acid
$H_2S_{(aq)}$	Hydrosulfuric acid
Oxyacids (hydrogen and a polyatomic ion): none begin with the prefix *hydro*	
$HNO_{3(aq)}$	Nitric acid
$HNO_{2(aq)}$	Nitrous acid
$H_2CO_{3(aq)}$	Carbonic acid
$H_2SO_{4(aq)}$	Sulfuric acid
$H_2SO_{3(aq)}$	Sulfurous acid
$H_3PO_{4(aq)}$	Phosphoric acid
$HClO_{3(aq)}$	Chloric acid
$HFO_{3(aq)}$	Fluoric acid
$HBrO_{3(aq)}$	Bromic acid
$HIO_{3(aq)}$	Iodic acid

NOTE: all acids contain hydrogen. Only the binary acids begin with *hydro* in the name; oxyacids omit the *hydro* to distinguish them from binary acids. All acids are dissolved in water therefore the subscript (aq) is always included; aq is the short form for *aqueous* which means *dissolved in water*.