



STUDY, STUDY, STUDY!
We use this ALL YEAR...



MEMORIZE!!!!	
Name	Formula
Ammonium	$(\text{NH}_4)^{1+}$
Silver	Ag^{1+}
Cadmium	Cd^{2+}
Zinc	Zn^{2+}
Hydride	H^{1-}
Hydroxide	$(\text{OH})^{1-}$
Chlorate	$(\text{ClO}_3)^{1-}$
Chlorite	$(\text{ClO}_2)^{1-}$
Nitrate	$(\text{NO}_3)^{1-}$
Nitrite	$(\text{NO}_2)^{1-}$
Carbonate	$(\text{CO}_3)^{2-}$
Peroxide	$(\text{O}_2)^{2-}$
Sulfate	$(\text{SO}_4)^{2-}$
Sulfite	$(\text{SO}_3)^{2-}$
Phosphate	$(\text{PO}_4)^{3-}$
Phosphite	$(\text{PO}_3)^{3-}$
From Periodic Table	Transition metals
Use periodic table Group 1A makes +1, Group 2A makes +2, etc...	All except Silver, Cadmium and Zinc need roman numerals. <i>Example: Fe^{+2} is Iron(II) and Fe^{+3} is Iron(III)</i>
Monoatomic ions	Polyatomic ions
Made of a single <u>type</u> of atom O_2^{2-}	Made of several <u>types</u> of atoms PO_4^{3-}
Cations	Anions
Lose electrons Make pos. charges	Gain electrons Make neg. charges

Will use, don't need to memorize	
Name	Formula
Hydronium	$(\text{H}_3\text{O})^{1+}$
Mercury (I)	$(\text{Hg}_2)^{2+}$
Mercury (II)	$(\text{Hg})^{2+}$
Acetate	$(\text{C}_2\text{H}_3\text{O}_2)^{1-}$
Bromate	$(\text{BrO}_3)^{1-}$
Cyanide	$(\text{CN})^{1-}$
Thiocyanate	$(\text{SCN})^{1-}$
Hydrogen Carbonate (Bicarbonate)	$(\text{HCO}_3)^{1-}$
Hydrogen Sulfate (Bisulfate)	$(\text{HSO}_4)^{1-}$
Hydrogen Sulfite (Bisulfite)	$(\text{HSO}_3)^{1-}$
Hypochlorite	$(\text{ClO})^{1-}$
Perchlorate	$(\text{ClO}_4)^{1-}$
Iodate	$(\text{IO}_3)^{1-}$
Permanganate	$(\text{MnO}_4)^{1-}$
Chromate	$(\text{CrO}_4)^{2-}$
Dichromate	$(\text{Cr}_2\text{O}_7)^{2-}$
Hydrogen Phosphate (Biphosphate)	$(\text{HPO}_4)^{2-}$
Thiosulfate	$(\text{S}_2\text{O}_3)^{2-}$
Borate	$(\text{BO}_3)^{3-}$