CHARGES OF COMMON IONS

(Note: *All italicized ions must be memorized for tests and quizzes!!!*)

Charges of Some Monatomic Ions			
1+	**2+**	**3+**	**4+**
Group 1A metals Ag^+, silver Cu^+, copper(I) or cuprous	*Group 2A metals* Cd^{2+}, cadmium Co^{2+}, cobalt(II) or cobaltous Cu^{2+}, copper(II) or cupric Cr^{2+}, chromium(II) or chromous Fe^{2+}, iron(II) or ferrous Pb^{2+}, lead(II) or plumbous Mn^{2+}, manganese(II) or manganous Hg^{2+}, mercury(II) or mercuric Ni^{2+}, nickel(II) Sn^{2+}, tin(II) or stannous Zn^{2+}, zinc	*Group 3A metals* Cr^{3+}, chromium(III) or chromic Fe^{3+}, iron(III) or ferric Co^{3+}, cobalt(III) or cobaltic Ni^{3+}, nickel(III)	Pb^{4+}, lead(IV) or plumbic Sn^{4+}, tin(IV) or stannic
1-	**2-**	**3-**	**4-**
Group 7A nonmetals H^-, hydride	*Group 6A nonmetals*	*Group 5A nonmetals*	C^{4-}, carbide

Charges of Common Polyatomic Ions			
1+		**2+**	
NH_4^+, ammonium *Hg_2^{2+}, mercury(I) or mercurous		none	
1⁻	**2-**	**3-**	**4-**
$C_2H_3O_2^-$, acetate ***HCO_3^-, bicarbonate(or hydrogen carbonate)* *ClO_3^-, chlorate* *ClO_2^-, chlorite* *CN^-, cyanide* *OH^-, hydroxide* HSO_4^-, hydrogen sulfate (or bisulfate) HS^-, hydrogen sulfide ClO^-, hypochlorite IO_3^-, iodate *NO_3^-, nitrate* *NO_2^-, nitrite* ClO_4^-, perchlorate MnO_4^-, permanganate	*CO_3^{2-}, carbonate* *CrO_4^{2-}, chromate* $Cr_2O_7^{2-}$, dichromate MnO_4^{2-}, manganate $C_2O_4^{2-}$, oxalate O_2^{2-}, peroxide SiO_3^{2-}, silicate *SO_4^{2-}, sulfate* *SO_3^{2-}, sulfite* $C_4H_4O_6^{2-}$, tartrate $B_4O_7^{2-}$, tetraborate $S_2O_3^{2-}$, thiosulfate	BO_3^{3-}, borate *PO_4^{3-}, phosphate* $Fe(CN)_6^{3-}$, ferricyanide [or hexacyanoferrate(III)]	$Fe(CN)_6^{4-}$, ferrocyanide [or hexacyanoferrate(II)]

* The Hg_2^{2+} ion's "effective" charge on each atom is 1+.

** The prefix "bi-" generally means that a hydrogen atom has been added to the root ion. eg. CO_3^{2-} is a carbonate while HCO_3^- is a bicarbonate.