**STUDY, STUDY, STUDY!   
We use this ALL YEAR…**

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| MEMORIZE!!!!! | |
| Name | Formula |
| Ammonium | (NH4)1+ |
| Silver | Ag1+ |
| Cadmium | Cd2+ |
| Zinc | Zn2+ |
| Hydride | H1- |
| Hydroxide | (OH)1- |
| Chlorate | (ClO3)1- |
| Chlorite | (ClO2)1- |
| Nitrate | (NO3)1- |
| Nitrite | (NO2­)1- |
| Carbonate | (CO3)2- |
| Peroxide | (O2)2- |
| Sulfate | (SO4)2- |
| Sulfite | (SO3)2- |
| Phosphate | (PO4)3- |
| Phosphite | (PO3)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. *Example: Fe+2 is Iron(II) and Fe+3 is Iron(III)* |
| Monoatomic ions | Polyatomic ions |
| Made of a single type  of atom  O22- | Made of several types of atoms  PO43- |
| Cations | Anions |
| Lose electrons  Make pos. charges | Gain electrons Make neg. charges |

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| Will use, don’t need to memorize | |
| Name | Formula |
| Hydronium | (H3O)1+ |
| Mercury (I) | (Hg2)2+ |
| Mercury (II) | (Hg)2+ |
| Acetate | (C2H3O2)1- |
| Bromate | (BrO3)1- |
| Cyanide | (CN)1- |
| Thiocyanate | (SCN)1‑ |
| Hydrogen Carbonate (Bicarbonate) | (HCO3)1- |
| Hydrogen Sulfate (Bisulfate) | (HSO4)1- |
| Hydrogen Sulfite (Bisulfite) | (HSO3)1- |
| Hypochlorite | (ClO)1- |
| Perchlorate | (ClO4)1- |
| Iodate | (IO3)1- |
| Permanganate | (MnO4)1- |
| Chromate | (CrO4)2- |
| Dichromate | (Cr2O7)2- |
| Hydrogen Phosphate (Biphosphate) | (HPO4)2- |
| Thiosulfate | (S2O3)2- |
| Borate | (BO3)3- |