Honors Chemistry

**Polyatomic Ions List**

These must be **MEMORIZED**!!!

You must know the **NAMES**, **FORMULAS**, and **CHARGES** of each polyatomic ion!

This is crucial for writing formulas of ionic compounds correctly.

 Months of future success depend upon knowing these polyatomic ions **BY HEART**!

|  |  |  |
| --- | --- | --- |
| **Ion Charge:** | **Ion Formula & Charge:** | **Ion Name:** |
| +1 | NH4+ | Ammonium |
|  | H3O+ | Hydronium |
| –1 | OH– | Hydroxide |
|  | CN– | Cyanide |
|  | SCN– | Thiocyanate |
|  | NO2 – | Nitrite |
|  | NO3 – | Nitrate |
|  | ClO– | Hypochlorite |
|  | ClO2 – | Chlorite |
|  | ClO3 – | Chlorate |
|  | ClO4 – | Perchlorate |
|  | BrO3 – | Bromate |
|  | IO3 – | Iodate |
|  | MnO4 – | Permanganate |
|  | HCO3 – | Bicarbonate (aka: Hydrogen Carbonate) |
|  | C2H3O2 –  or CH3COO– | Acetate |
| –2 | SO3 2– | Sulfite |
|  | SO4 2– | Sulfate |
|  | S2O3 2– | Thiosulfate |
|  | C2O4 2– | Oxalate |
|  | CO32– | Carbonate |
|  | CrO4 2– | Chromate |
|  | Cr2O7 2– | Dichromate |
| –3 | PO3 3– | Phosphite |
|  | PO4 3– | Phosphate |