

## List of Common Polyatomic Ions:

### Cations:

<u>Symbol</u>	<u>Name</u>	<u>Charge</u>	<u>Symbol</u>	<u>Name</u>	<u>Charge</u>
NH <sub>4</sub> <sup>+</sup>	Ammonium	+1	Hg <sub>2</sub> <sup>+2</sup>	Dimercury (I)	+2

### Anions:

<u>Symbol</u>	<u>Name</u>	<u>Charge</u>	<u>Symbol</u>	<u>Name</u>	<u>Charge</u>
C <sub>2</sub> H <sub>3</sub> O <sub>2</sub> <sup>-</sup>	Acetate	-1	CO <sub>3</sub> <sup>2-</sup>	Carbonate	-2
C <sub>6</sub> H <sub>5</sub> COO <sup>-</sup>	Benzoate	-1	CrO <sub>4</sub> <sup>2-</sup>	Chromate	-2
HCO <sub>3</sub> <sup>-</sup>	Bicarbonate	-1	Cr <sub>2</sub> O <sub>7</sub> <sup>2-</sup>	Dichromate	-2
HSO <sub>4</sub> <sup>-</sup>	Bisulfate	-1	HPO <sub>4</sub> <sup>2-</sup>	Hydrogen Phosphate	-2
HSO <sub>3</sub> <sup>-</sup>	Bisulfite	-1	MoO <sub>4</sub> <sup>2-</sup>	Molybdate	-2
BrO <sub>3</sub> <sup>-</sup>	Bromate	-1	C <sub>2</sub> O <sub>4</sub> <sup>2-</sup>	Oxalate	-2
ClO <sub>3</sub> <sup>-</sup>	Chlorate	-1	O <sub>2</sub> <sup>2-</sup>	Peroxide	-2
ClO <sub>2</sub> <sup>-</sup>	Chlorite	-1	SiO <sub>3</sub> <sup>2-</sup>	Silicate	-2
CN <sup>-</sup>	Cyanide	-1	SO <sub>4</sub> <sup>2-</sup>	Sulfate	-2
H <sub>2</sub> PO <sub>4</sub> <sup>-</sup>	Dihydrogen Phosphate	-1	SO <sub>3</sub> <sup>2-</sup>	Sulfite	-2
OH <sup>-</sup>	Hydroxide	-1	S <sub>2</sub> O <sub>3</sub> <sup>2-</sup>	Thiosulfate	-2
ClO <sup>-</sup>	Hypochlorite	-1	WO <sub>4</sub> <sup>2-</sup>	Tungstate	-2
IO <sub>3</sub> <sup>-</sup>	Iodate	-1	AsO <sub>4</sub> <sup>3-</sup>	Arsenate	-3
NO <sub>3</sub> <sup>-</sup>	Nitrate	-1	AsO <sub>3</sub> <sup>3-</sup>	Arsenite	-3
NO <sub>2</sub> <sup>-</sup>	Nitrite	-1	BO <sub>3</sub> <sup>3-</sup>	Borate	-3
ClO <sub>4</sub> <sup>-</sup>	Perchlorate	-1	PO <sub>4</sub> <sup>3-</sup>	Phosphate	-3
IO <sub>4</sub> <sup>-</sup>	Periodate	-1	PO <sub>3</sub> <sup>3-</sup>	Phosphite	-3
MnO <sub>4</sub> <sup>-</sup>	Permanganate	-1			
SCN <sup>-</sup>	Thiocyanate	-1			
Fe(CN) <sub>6</sub> <sup>3-</sup>	Hexacyanoferrate (III)	-3			
Fe(CN) <sub>6</sub> <sup>4-</sup>	Hexacyanoferrate (II)	-4			

### Diatomic Molecules:

Bromine	Br <sub>2</sub>
Chlorine	Cl <sub>2</sub>
Fluorine	F <sub>2</sub>
Hydrogen	H <sub>2</sub>
Iodine	I <sub>2</sub>
Nitrogen	N <sub>2</sub>
Oxygen	O <sub>2</sub>

### Variable Valence Cations:

Antimony (III) and (V)
Arsenic (III) and (V)
Cobalt (II) and (III)
Chromium (II), (III), and (VI)
Copper (I) and (II)
Gold (I) and (III)
Indium (I) and (III)
Iron (II) and (III)
Lead (II) and (IV)
Manganese (II), (III), (IV), and (VII)
Mercury (II) Hg <sup>2+</sup>
Mercury (I) Hg <sub>2</sub> <sup>2+</sup>
Platinum (II) and (IV)
Tin (II) and (IV)
♣Silver (1+)
♣Zinc (2+)
♣Cadmium (2+)
♣Forms only one type of ion and Roman numerals are not used.

### Prefixes (for non-metals):

1 – Mono
2 – Di
3 – Tri
4 – Tetra
5 – Penta
6 – Hexa
7 – Hepta
8 – Octa
9 – Nona
10 – Deca