

Polyatomic Ion Chart

The Polyatomic Ions with an * next to them are to be memorized for quiz.

1+ Charge	1- Charge	2- Charge	3- Charge
*Ammonium NH_4^+	*Nitrate NO_3^-	*Carbonate CO_3^{2-}	*Phosphate PO_4^{3-}
Hydronium H_3O^+	*Nitrite NO_2^-	*Sulfite SO_3^{2-}	Phosphite PO_3^{3-}
	Hypochlorite ClO^-	*Sulfate SO_4^{2-}	Borate BO_3^{3-}
	Chlorite ClO_2^-	Chromate CrO_4^{2-}	Arsenite AsO_3^{3-}
	*Chlorate ClO_3^-	*Dichromate $\text{Cr}_2\text{O}_7^{2-}$	Arsenate AsO_4^{3-}
	*Perchlorate ClO_4^-	Oxalate $\text{C}_2\text{O}_4^{2-}$	
	*Hydroxide OH^-	Thiosulfate $\text{S}_2\text{O}_3^{2-}$	
	*Cyanide CN^-	Hydrogen Phosphate HPO_4^{2-}	
	Cyanate OCN^-	Silicate SiO_3^{2-}	
	*Hydrogen carbonate HCO_3^- (bicarbonate)	Peroxide O_2^{2-}	
	Iodate IO_3^-	Tartrate $\text{C}_4\text{H}_4\text{O}_6^{2-}$	
	Periodate IO_4^-	Tetraborate $\text{B}_4\text{O}_7^{2-}$	
	Bromate BrO_3^-		
	*Acetate $\text{C}_2\text{H}_3\text{O}_2^-$		
	Bisulfite HSO_3^-		
	Bisulfate HSO_4^-		
	Thiocyanate SCN^-		
	Aluminate AlO_2^-		
	*Permanganate MnO_4^-		
	Dihydrogen Phosphate H_2PO_4^-		
	Amide NH_2^-		
	Formate HCOO^-		

Classical Names

Fe^{2+} Ferrous	Fe^{3+} Ferric	Hg^+ Mercurous	Hg^{2+} Mercuric
Cu^+ Cuprous	Cu^{2+} Cupric	Cr^{2+} Chromous	Cr^{3+} Chromic
Pb^{2+} Plumbous	Pb^{4+} Plumbic	Au^+ Aurous	Au^{3+} Auric
Mn^{2+} Manganous	Mn^{3+} Manganic	Sn^{2+} Stannous	Sn^{4+} Stannic
Co^{2+} Cobaltous	Co^{3+} Cobaltic		

PREFIXES

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

ORGANICS

Acetylene C_2H_2	Ethylene C_2H_4	Methane CH_4
Ethane C_2H_6	Propane C_3H_8	Butane C_4H_{10}
Benzene C_6H_6	Methyl Alcohol CH_3OH	Ethyl Alcohol $\text{C}_2\text{H}_5\text{OH}$
Propyl Alcohol $\text{C}_3\text{H}_7\text{OH}$	Formaldehyde CH_2O	

Diatomic molecules: H, N, O, F, Cl, Br, I

Transition metals with **NO Roman Numerals** Al, Ga, In, Zn, Cd, Ag