

Common Polyatomic Ions, by Charge

2+	1-	2-
Hg ₂ ²⁺ <i>mercury (I)</i> <i>or mercurous</i>	C ₂ H ₃ O ₂ ¹⁻ <i>acetate</i>	CO ₃ ²⁻ <i>carbonate</i>
	ClO ₃ ¹⁻ <i>chlorate</i>	CrO ₄ ²⁻ <i>chromate</i>
	ClO ₂ ¹⁻ <i>chlorite</i>	Cr ₂ O ₇ ²⁻ <i>dichromate</i>
	CN ¹⁻ <i>cyanide</i>	HPO ₄ ²⁻ <i>hydrogen phosphate</i>
	H ₂ PO ₄ ¹⁻ <i>dihydrogen phosphate</i>	O ₂ ²⁻ <i>peroxide</i>
	HCO ₃ ¹⁻ <i>hydrogen carbonate</i> <i>or bicarbonate</i>	SO ₄ ²⁻ <i>sulfate</i>
	HSO ₄ ¹⁻ <i>hydrogen sulfate</i> <i>or bisulfate</i>	SO ₃ ²⁻ <i>sulfite</i>
		S ₂ O ₃ ²⁻ <i>thiosulfate</i>
1+		3-
NH ₄ ¹⁺ <i>ammonium</i> H ₃ O ¹⁺ <i>hydronium</i>	OH ¹⁻ <i>hydroxide</i>	PO ₄ ³⁻ <i>phosphate</i>
	ClO ¹⁻ <i>hypochlorite</i>	
	NO ₃ ¹⁻ <i>nitrate</i>	
	NO ₂ ¹⁻ <i>nitrite</i>	
	ClO ₄ ¹⁻ <i>perchlorate</i>	
	MnO ₄ ¹⁻ <i>permanganate</i>	
	SCN ¹⁻ <i>thiocyanate</i>	

Common Transition Metal Charges

Formula	Name
Cu ¹⁺	Copper (I) ion
Cu ²⁺	Copper (II) ion
Fe ²⁺	Iron (II) ion
Fe ³⁺	Iron (III) ion
Hg ₂ ²⁺	Mercury (I) ion
Hg ²⁺	Mercury (II) ion
Pb ²⁺	Lead (II) ion
Pb ⁴⁺	Lead (IV) ion
Sn ²⁺	Tin (II) ion
Sn ⁴⁺	Tin (IV) ion
Cr ²⁺	Chromium (II) ion
Cr ³⁺	Chromium (III) ion
Mn ²⁺	Manganese (II) ion
Mn ³⁺	Manganese (III) ion
Co ²⁺	Cobalt (II) ion
Co ³⁺	Cobalt (III) ion
Zn ²⁺	Zinc (II) ion
Ni ²⁺	Nickel (II) ion
Ni ³⁺	Nickel (III) ion
Ag ¹⁺	Silver (I) ion

Prefixes for Molecular Names

Prefix	Number
mono-	1
di-	2
tri-	3
tetra-	4
penta-	5
hexa-	6
hepta-	7
octa-	8
nona-	9
deca-	10

Element Electronegativities

H 2.1																He	
Li 1.0	Be 1.5											B 2.0	C 2.5	N 3.0	O 3.5	F 4.0	Ne
Na 0.9	Mg 1.2											Al 1.5	Si 1.8	P 2.1	S 2.5	Cl 3.0	Ar
K 0.8	Ca 1.0	Sc 1.3	Ti 1.5	V 1.6	Cr 1.6	Mn 1.5	Fe 1.8	Co 1.8	Ni 1.8	Cu 1.9	Zn 1.6	Ga 1.6	Ge 1.8	As 2.0	Se 2.4	Br 2.8	Kr 3.0
Rb 0.8	Sr 1.0	Y 1.2	Zr 1.4	Nb 1.6	Mo 1.8	Tc 1.9	Ru 2.2	Rh 2.2	Pd 2.2	Ag 1.9	Cd 1.7	In 1.7	Sn 1.8	Sb 1.9	Te 2.1	I 2.5	Xe 2.6
Cs 0.7	Ba 0.9	La 1.1	Hf 1.3	Ta 1.5	W 1.7	Re 1.9	Os 2.2	Ir 2.2	Pt 2.2	Au 2.4	Hg 1.9	Tl 1.8	Pb 1.8	Bi 1.9	Po 2.0	At 2.2	Rn 2.4
Fr 0.7	Ra 0.7	Ac 1.1	Unq	Unp	Unh	Uns	Uno	Une									
Ce 1.1	Pr 1.1	Nd 1.1	Pm 1.1	Sm 1.1	Eu 1.1	Gd 1.1	Tb 1.1	Dy 1.1	Ho 1.1	Er 1.1	Tm 1.1	Yb 1.1	Lu 1.2				
Th 1.3	Pa 1.5	U 1.7	Np 1.3	Pu 1.3	Am 1.3	Cm 1.3	Bk 1.3	Cf 1.3	Es 1.3	Fm 1.3	Md 1.3	No 1.3	Lr				