

Common Nonmetallic ROOTS

H = hydr-	B = bor-
C = carb-	N = nitr-
O = ox-	F = fluor-
Si = silic-	P = phosph-
S = sulf-	Cl = chlor-
As = arsen-	Se = selen-
Br = brom-	Sb = antimony-
I = iod-	

Common NONMETAL Ions

S ²⁻ sulfide	Br ¹⁻ bromide
F ¹⁻ fluoride	H ¹⁻ hydride
Cl ¹⁻ chloride	I ¹⁻ iodide
P ³⁻ phosphide	O ²⁻ oxide
N ³⁻ nitride	Se ³⁻ selenide

Greek PREFIXES

mono- one	hexa- six
di- two	hepta- seven
tri- three	octa- eight
tetra- four	nona- nine
penta- five	deca- ten

Common METAL Ions

Cu ⁺ copper (I) (cuprous)	Mn ²⁺ manganese (II)
Cu ²⁺ copper (II) (cupric)	Ni ²⁺ nickel (II)
Fe ²⁺ iron (II) (ferrous)	Cr ²⁺ chromium (II)
Fe ³⁺ iron (III) (ferric)	Cr ³⁺ chromium (III)
Hg ₂ ²⁺ mercury (I) (mercurious)	Co ²⁺ cobalt (II)
Hg ²⁺ mercury (II) (mercuric)	
Pb ²⁺ lead (II) (plumbous)	
Pb ⁴⁺ lead (IV) (plumbic)	
Sn ²⁺ tin (II) (stannous)	
Sn ⁴⁺ tin (IV) (stannic)	

Polyatomic Ions

BrO ₃ ⁻ bromate ion	
BrO ₄ ⁻ perbromate	
B ₄ O ₇ ²⁻ tetraborate	
C ₂ H ₃ O ₂ ⁻ acetate ion (CH ₃ COO ⁻)	
C ₆ H ₅ O ₇ ³⁻ citrate ion	
ClO ⁻ hypochlorite ion	
ClO ₂ ⁻ chlorite ion	
ClO ₃ ⁻ chlorate ion	
ClO ₄ ⁻ perchlorate ion	
CN ⁻ cyanide ion	
CO ₃ ²⁻ carbonate ion	
C ₂ O ₄ ²⁻ oxalate ion	
CrO ₄ ²⁻ chromate ion	
Cr ₂ O ₇ ²⁻ dichromate ion	
HPO ₄ ²⁻ hydrogen phosphate ion	
HSO ₄ ⁻ hydrogen sulfate ion	
HCO ₃ ⁻ hydrogen carbonate ion	
H ₂ PO ₄ ⁻ dihydrogen phosphate ion	
IO ₃ ⁻ iodate ion	
IO ₄ ⁻ periodate ion	
MnO ₄ ⁻ permanganate ion	
NH ₄ ⁺ ammonium ion	
NO ₂ ⁻ nitrite ion	
NO ₃ ⁻ nitrate ion	
O ₂ ²⁻ peroxide ion	SiO ₄ ⁴⁻ silicate ion
OH ⁻ hydroxide ion	S ₂ O ₃ ²⁻ thiosulfate ion
PO ₃ ³⁻ phosphite ion	SO ₃ ²⁻ sulfite ion
PO ₄ ³⁻ phosphate ion	SO ₄ ²⁻ sulfate ion
SCN ⁻ thiocyanate ion	
SeO ₃ ²⁻ selenite ion	
SeO ₄ ²⁻ selenate ion	

