

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

| | |
|---|---|
| BO ₃ ³⁻ borate ion | |
| 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 ⁻ hypoiodite ion | |
| IO ₂ ⁻ iodite ion | |
| IO ₃ ⁻ iodate ion | |
| IO ₄ ⁻ periodate ion | |
| MnO ₄ ⁻ permanganate ion | |
| NH ₄ ⁺ ammonium ion | SeO ₃ ²⁻ selenite ion |
| NO ₂ ⁻ nitrite ion | SeO ₄ ²⁻ selenate ion |
| NO ₃ ⁻ nitrate ion | SiO ₄ ⁴⁻ silicate ion |
| O ₂ ²⁻ peroxide ion | S ₂ O ₃ ²⁻ thiosulfate ion |
| OH ⁻ hydroxide ion | SO ₃ ²⁻ sulfite ion |
| PO ₃ ³⁻ phosphite ion | SO ₄ ²⁻ sulfate ion |
| PO ₄ ³⁻ phosphate ion | SCN ⁻ thiocyanate ion |