

CHEM 1000 Nomenclature List (Fall 2017)

Elements

Name, symbol and atomic number of elements #1-36.

Cations of elements 1-36 (same name as element name).

Transition metal cations need oxidation state listing in Roman numerals. e.g. Fe^{3+} is iron(III)

Monoatomic and Other Simple Anions

H ⁻	hydride
F ⁻	fluoride
Cl ⁻	chloride
Br ⁻	bromide
I ⁻	iodide

O ²⁻	oxide
S ²⁻	sulfide
N ³⁻	nitride

Polyatomic Ions

OH ⁻	hydroxide
NH ₄ ⁺	ammonium
CN ⁻	cyanide

PO ₄ ³⁻	phosphate
PO ₃ ³⁻	phosphite
SO ₄ ²⁻	sulfate
SO ₃ ²⁻	sulfite
CO ₃ ²⁻	carbonate
NO ₃ ⁻	nitrate
NO ₂ ⁻	nitrite

ClO ₄ ⁻	perchlorate
ClO ₃ ⁻	chlorate
ClO ₂ ⁻	chlorite
ClO ⁻	hypochlorite

Also, know that adding H⁺ to a polyatomic ion with charge more negative than -1 adds "hydrogen" to the name.

e.g. CO₃²⁻ is carbonate; HCO₃⁻ is hydrogen carbonate.

Acids

HF	hydrofluoric acid
HCl	hydrochloric acid
HBr	hydrobromic acid
HI	hydroiodic acid

H ₃ PO ₄	phosphoric acid
H ₃ PO ₃	phosphorous acid
H ₂ SO ₄	sulfuric acid
H ₂ SO ₃	sulfurous acid
H ₂ CO ₃	carbonic acid
HNO ₃	nitric acid
HNO ₂	nitrous acid

HClO ₄	perchloric acid
HClO ₃	chloric acid
HClO ₂	chlorous acid
HOCl	hypochlorous acid