

Anions (negative ions)

Monoatomic

Rule:
Stem of the element name + "ide"

Examples:
H⁻ hydride ion
F⁻ fluoride ion
O²⁻ oxide ion
N³⁻ nitride ion
C⁴⁻ carbide ion

Oxyanions (containing oxygen)

Rule:
least oxygen hypo ___ ite ion
less oxygen ___ ite ion
more oxygen ___ ate ion
most oxygen per ___ ate ion

Examples:
ClO⁻ hypochlorite ion
ClO₂⁻ chlorite ion
ClO₃⁻ chlorate ion
ClO₄⁻ perchlorate ion
SO₃²⁻ sulfite ion
SO₄²⁻ sulfate ion

Comment:
Halogens (except F) form all four ions. When only two of the four exist, they are the -ite and -ate ions.

Others and Exceptions

Rule:
These items do not follow any rules; they must be memorized. The rules referred to are those in the box just to the left.

Examples:
OH⁻ hydroxide ion
CN⁻ cyanide ion
SCN⁻ thiocyanate ion
OCN⁻ cyanate ion
O₂²⁻ peroxide ion
O₂⁻ superoxide ion
MnO₄²⁻ manganate ion
MnO₄⁻ permanganate ion
C₂H₃O₂⁻ acetate ion
Cr₂O₇²⁻ dicromate ion
C₂O₄²⁻ oxalate ion

Comment:
H₂CO₃ is not named using this rule because it is a compound and not an ion.

Oxyanions which contain hydrogen

Rule:
H plus oxyanion: "hydrogen" + name of oxyanion
H₂ plus oxyanion: "dihydrogen" + name of oxyanion

Examples:
HCO₃⁻ hydrogen carbonate ion or bicarbonate ion
HSO₄⁻ hydrogen sulfate ion or bisulfate ion
HPO₄²⁻ hydrogen phosphate ion or biphosphate ion
H₂PO₄⁻ dihydrogen phosphate ion

see comment just to the left.