

Nomenclature

- Binary
- Polyatomic

Given name → Formula

Formula → Name

ACIDS



No ambiguity

Simple Binary nomenclature

	Cation	-	anion				
	metal		nonmetal		N	O	F
	Fixed charge				↓	↓	↓
Li ⁺	Be		Al ⁺³				
↓	↓		Zn ⁺²				
+1	+2		Ag ⁺¹		-3	-2	-1

KCl - Potassium chloride

MgO - Magnesium oxide

Na₂O - Sodium oxide

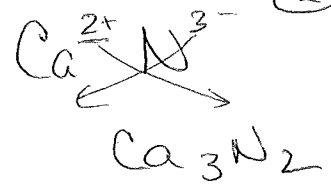
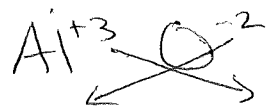
Name metal + name non-metal
-ide suffix

Magnesium⁺² chloride⁻¹ - MgCl₂

Aluminum⁺³ oxide⁻² - Al₂O₃

Calcium⁺² nitride⁻³ - Ca₃N₂

∅
net charge



Binary Inorganic Type II

Metal + non-metal

Variable



Iron (II) oxide

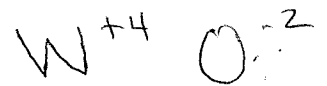
Cobalt (II) chloride

Cobalt (III) chloride

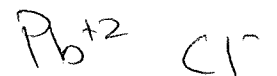
charge of the metal in roman numerals.

name metal (charge) non-metal-ide suffix.

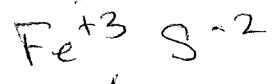
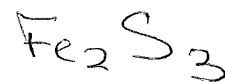
Tungsten (IV) oxide



Lead (II) chloride



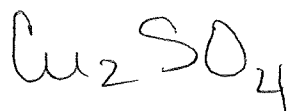
Iron (III) sulfide



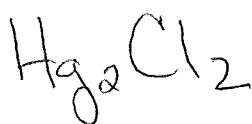
Potassium nitrate



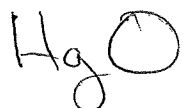
Copper (II) sulfate



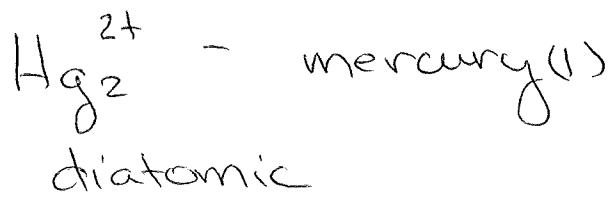
Copper (I) sulfate



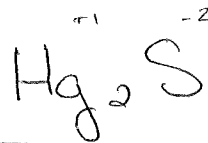
Mercury (I) chloride



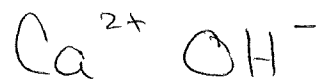
mercury (II) oxide



Mercury(I) sulfide



Calcium hydroxide

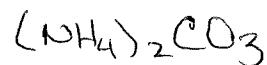
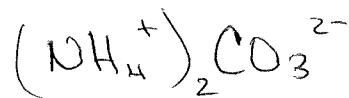


Peroxide O_2^{2-}



NH_4^+ - ammonium

ammonium carbonate



Covalent / Molecular

2 non metals

mono - 1

di - 2

tri - 3

tetra - 4

penta - 5

hexa - 6

hepta - 7

Octa - 8

nona - 9

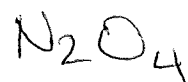
deca - 10



Phosphorous trichloride



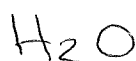
Carbon monoxide



Dinitrogen tetroxide



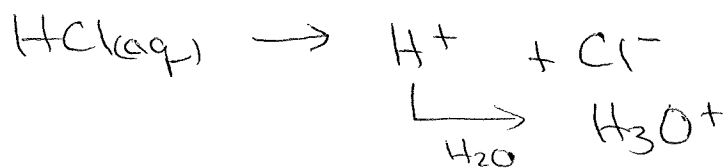
ammonia



water

Acids:

$\text{HCl}_{(g)}$ - hydrogen chloride



HCl - hydrochloric acid

HF - hydrofluoric acid

HI - hydroiodic acid.

HNO_3

hydrogen nitrate

-ic + acid

nitric acid

H_2SO_4

hydrogen sulfate

-ic + acid

sulfuric acid.

HNO_2

hydrogen nitrite

~~nit~~ -ous + acid

nitrous acid

H_2SO_3

hydrogen sulfite

-ous + acid

sulfurous acid.

HClO_4

hydrogen perchlorate

perchloric acid.