Compound

Contain Metal & Nonmetal?

Ionic

Yes

Binary?

Yes

General Name:

CATION (CHARGE) ANION

Non-metal w/ide ending

NaCl Sodium chloride

$CrCl_3$ Chromium(III) chloride

No

General Name:

CATION (CHARGE) ANION

Polyatomic Anion Name

KNO_3 Potassium Nitrate

$Fe_2(SO_4)_3$ Iron(III) Sulfate

No

Covalent?

Yes

General Name:

(Prefix) 1st Nonmetal

(Prefix) 2nd Nonmetal

w/ide ending

Prefix used to denote number of each element present.

1. mono
2. di
3. tri
4 tetra
5. penta
6. hexa
7. hepta
8 octa
9. nona
10. deca

Acids (in solution)

Binary?

Yes

Hydro prefix + anion name

w/-ic ending

HCl - Hydrochloric acid

H_2S - Hydrosulfuric acid

No

Polyatomic anion name

w/changed ending

-ate = -ic

-ite = ous

ClO_3^- = chlorate ion ---> $HClO_3$ = chloric acid

ClO_2^- = chlorite ion ---> $HClO_2$ = chlorous acid