

Ionic + Covalent Compound Naming

Does it contain a metal?

Yes

NO

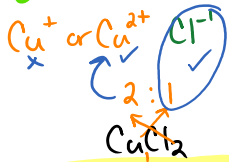
Ionic Compound

Is the metal multivalent?

Yes

- Name transition metal first
 - Determine charge of transition metal and write as Roman Numeral after name
 - Name nonmetal second and change ending to "-ide"

eg. $CuCl_2$



copper (II) chloride

Does it contain a polyatomic ion?

Yes
more than 2 elements

- Name metal first
 - Name polyatomic ion second
 - DO NOT change ending to "-ide"

eg. $MgSO_4$ ← polyatomic ion (look on list!)
magnesium sulphate

eg. NH_4F
polyatomic ion
ammonium fluoride

Binary Ionic Compound

- ① name the metal
 - ② name the non-metal and change the ending to "-ide"
- * NO Prefixes.

eg. $CaCl_2$ = calcium chloride

Covalent Compound

- ① Name the first element using prefixes (except for mono-)
 - ② Name the second element using prefixes AND change the ending to "-ide"
- eg. N_2O_3 = dinitrogen trioxide