

Naming a compound

If Covalent
(2 non metals)

Use prefixes to put in the name before each element to tell how many of each element is in the formula (do not use mono if it is the first element)

example CO_2 = carbon dioxide

if Ionic
(metal and a nonmetal)

If metal is a transition metal

find the charge of the metal (total must be neutral) Use the charge as a roman numeral in the name for the cation. Then name the anion by using the root and ending in ide
example Fe_2O_3
= Iron (III) oxide

If metal is not a transition metal

Name the cation with the same name as the element then name the anion by using the root of the word and then adding ide
example NaCl = sodium chloride

Writing a formula

if ionic
(metal and a
nonmetal)

write the symbol
and charge for each
element

Use the crisscross
method to
determine how
many of each
element to put in
the formula.
reduce to the
lowest whole
number ratio

If Covalent
(2 non metals)

use the prefixes in the
name to tell you how
many of each element
to put in the formula
example dinitrogen
tetraoxide = N_2O_4