Writing Names

Is "H" the element in the compound?

Yes

Does it have a polyatomic ion w/ oxygen in it?

Yes

It's an oxyacid.

- Look at the polyatomic ion:
  - if the name ends in -ate, change it to -ic acid
  - if the name ends in -ite, change it to -ous acid

Ex) HNO_3

nitrate

nitric acid

Ex) HNO_2

nitrite

nitrous acid

No

It's a binary acid.

- Write hydro
- Write 2nd element's name, change ending to -ic acid

Ex) H_2S

hydrosulfuric acid

No

It's type III.

- Write name of 1st element
- Write subscript as a prefix
- Write name of 2nd element, change end to -ide
- Write subscript as a prefix.

Ex) N_2S_3

dinitrogen trisulfide

No

Does it have a metal in it?

Yes

Is it a transition metal?

No

It's type I

- Write name of 1st element
- Write name of negative anion.
  - If it is binary, change ending to -ide
  - If it is a polyatomic ion, just write the name.

Ex) BeF_2

beryllium fluoride

Ex) $Ca(NO_3)_2$

calcium nitrate

Yes

It's type II

- Write name of 1st element
- write original charge of metal as a Roman numeral
- Write name of negative ion

Ex) $Co(OH)_3$

cobalt (III) hydroxide

Ex) $MnCl_2$

manganese (II) chloride.