

How do you write the formulas for binary ionic compounds with a transition metal?

- Same as rule #1 :
- Write the symbols of the two elements (metal before the non-metal)
- Write the charge of each element (use the roman numeral given to you in the brackets for the charge of the transition metal)
- Drop and cross the charges!

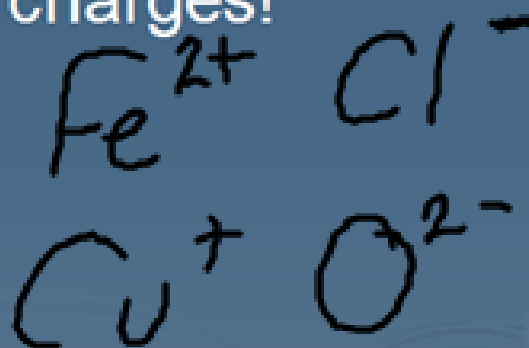
Example :

iron (II) chloride

- FeCl_2

copper (I) oxide

- Cu_2O



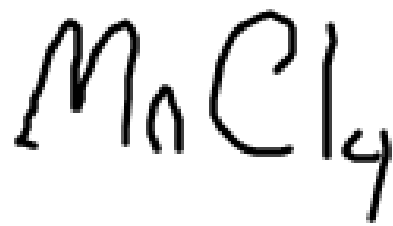
iron (III) oxide
 $\text{Fe}^{3+} \text{O}^{2-}$

vs iron (II) oxide
 $\text{Fe}^{2+} \text{O}^{2-}$



1	2	3	4	5	6
I	II	III	IV	V	VI

manganese (IV) chloride



How do you write the name?

➤ Same as before but you must also write the charge of the transition metal in brackets.

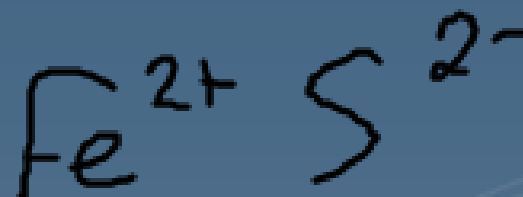
➤ To find the charge, Drop and cross in reverse

➤ CuCl_2

- Copper (II) chloride

➤ FeS

- Iron (II) sulphide



PbO_2
lead (IV) oxide

Cu_2Se
Copper (I) selenide

CoN
cobalt (III) nitride

Mg_3N_2
magnesium nitride

- Notes and practice sheet
- Review sheet – Write names and formulas