

NAMING IONIC COMPOUNDS

- The name of the compound is based on the name of the ions in the compound
- Cation first, anion second (drop the word "ion")

Examples:



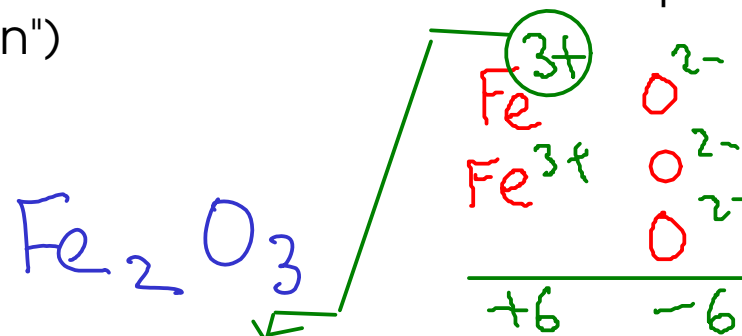
magnesium hydroxide



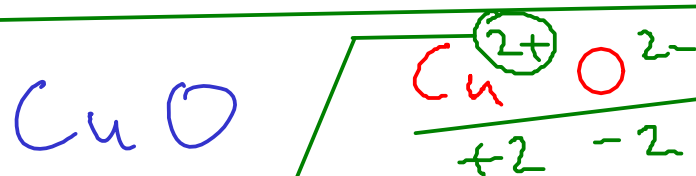
sodium sulfide



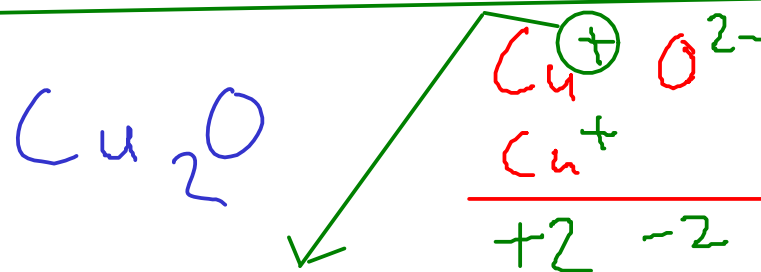
beryllium bromide



iron(III) oxide



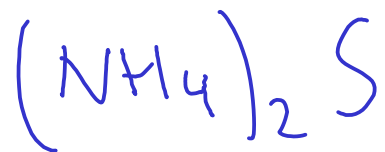
copper(II) oxide



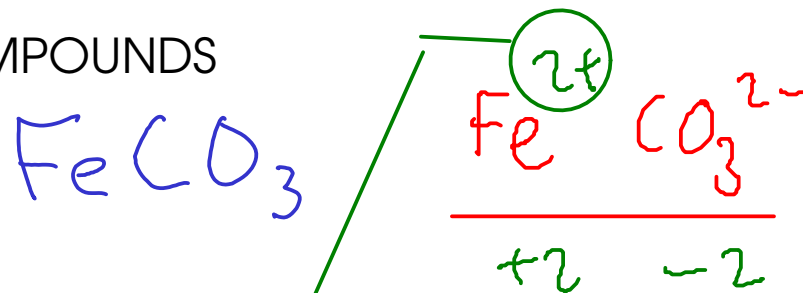
copper(I) oxide

Remember to include the Roman numeral for CHARGE in the name of transition metal compounds!

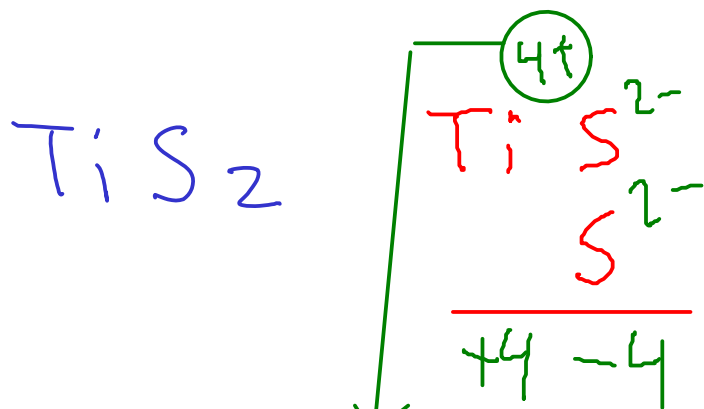
NAMING IONIC COMPOUNDS



ammonium sulfide



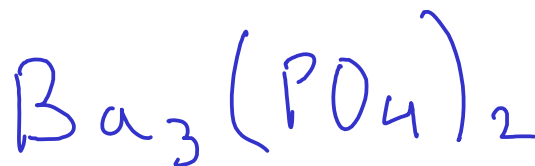
iron(II) carbonate



titanium(IV) sulfide



calcium nitrate



barium phosphate

Spelling matters!



barium phosphide

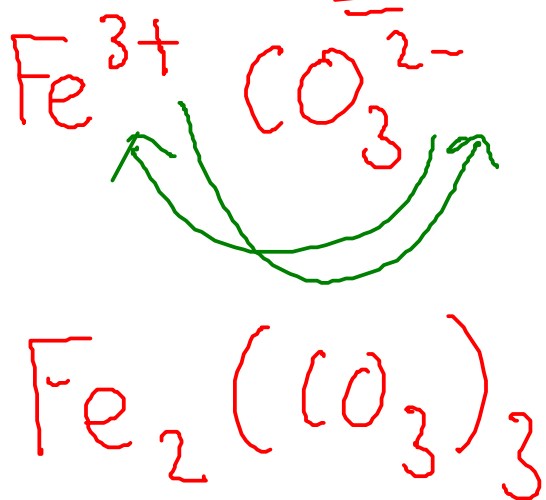
* p130 - table of polyatomic ions

DETERMINING THE FORMULA OF AN IONIC COMPOUND FROM THE NAME

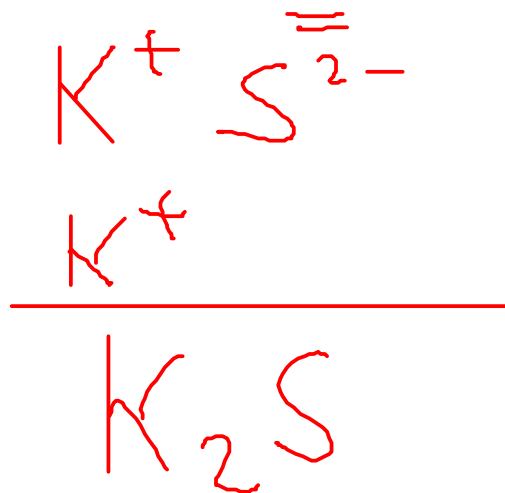
- The name of an ionic compound is made of the names of the CATION and ANION in the compound.
 - To get the FORMULA, you must figure out the SMALLEST RATIO of cation to anion that makes the charges balance out
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Examples:

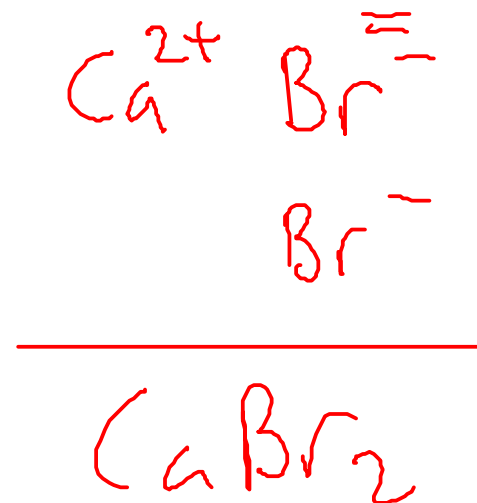
iron(III) carbonate



potassium sulfide

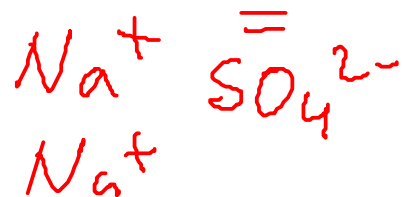


calcium bromide

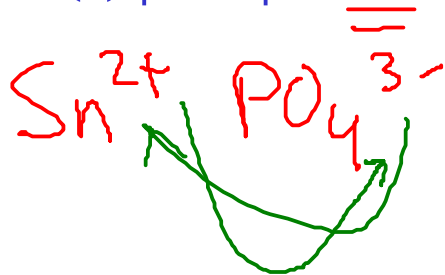


DETERMINING IONIC FORMULAS

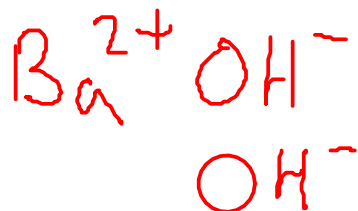
sodium sulfate



tin(II) phosphate



barium hydroxide



be careful with compounds that contain more than one hydroxide, cyanide, or hypochlorite ion ... don't forget the parenthesis before you add the subscript!

strontium oxide

chromium(III) nitrate

chromium(III) nitride

titanium(IV) chloride

titanium(IV) oxide