What do we remember about chemical reactions?

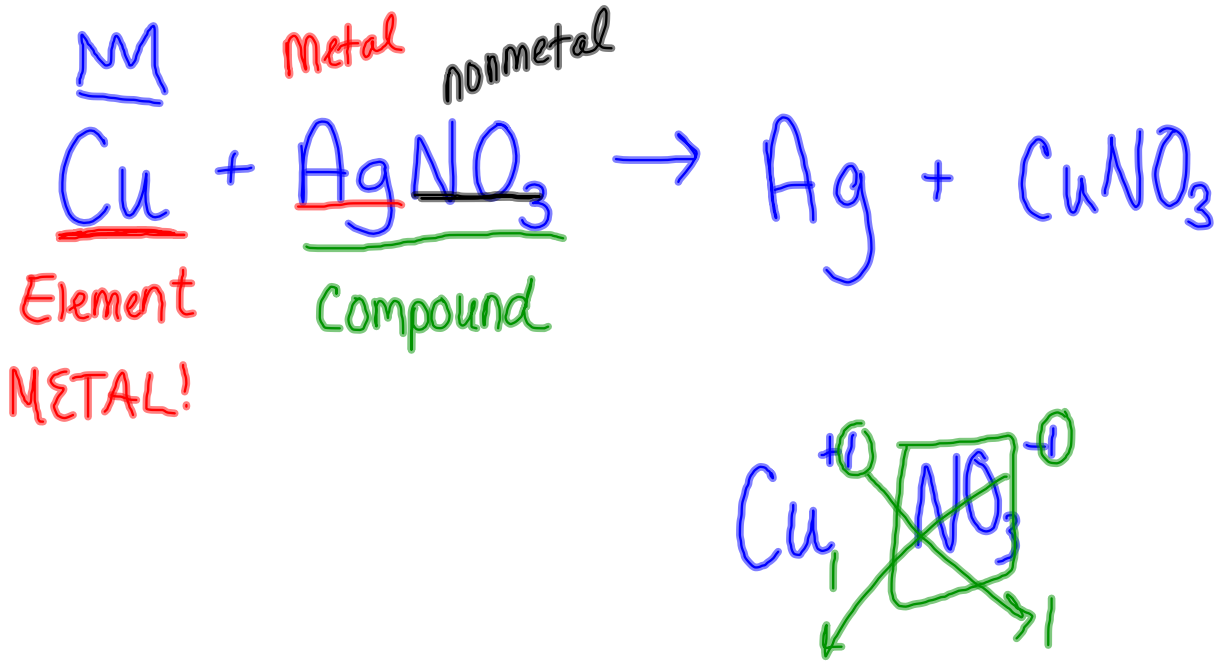
products
reactants

yield
coefficients
subscripts

catalysts
indications
precipitate

5 types
- synthesis
- combustion
- decomp
- single rep
- double rep

BALANCE!


M
Metal
nonmetal
Cu + AgNO3 → Ag + CuNO3
Element
Compound
METAL!
+1
-1
Cu
NO3
1

How to Predict Single Replacement Rxns

1. Determine which two elements you are comparing

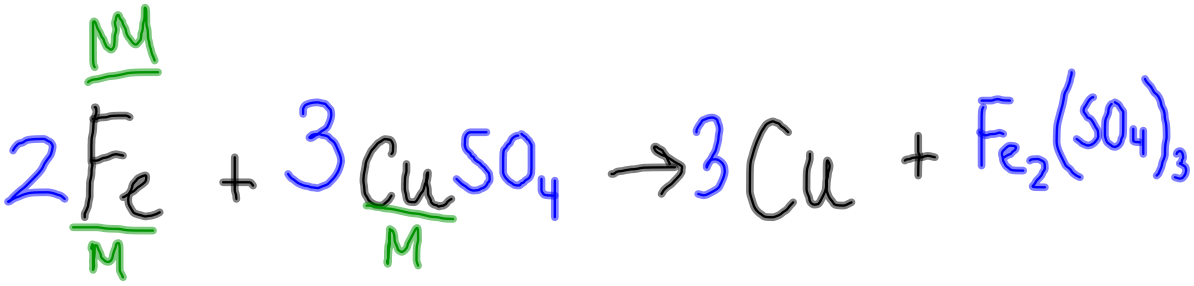
2. Determine which is the KING (more reactive!)

3. If the King is in the compound = NO REACTION

4. If the King is NOT in the compound = predict the products

5. Use the criss cross method to write the proper formula

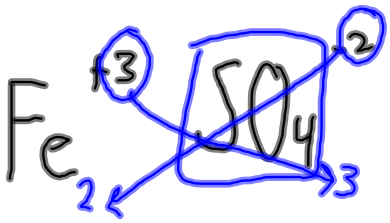
6. Balance the equation



Not in cmpd!

Fe^{+3}

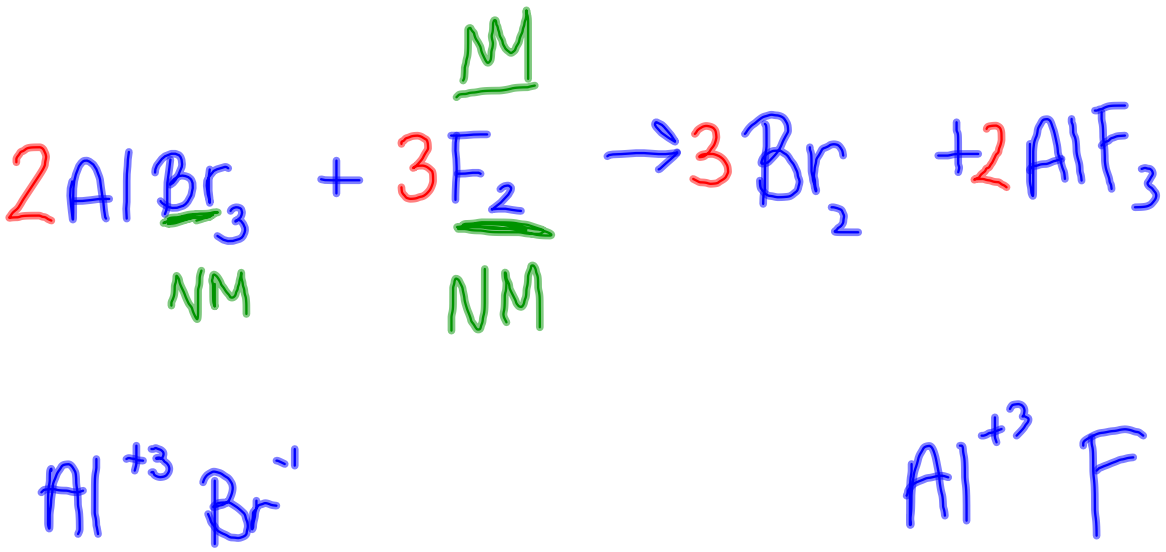
Cu^{+2}



M

$Ba(OH)_2 + Zn \rightarrow NR$

in the cmpd.


MM
2AlBr3 + 3F2 → 3Br2 + 2AlF3
NM
NM
Al+3 Br-1
Al+3 F-1