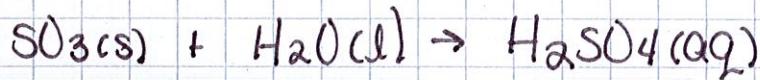
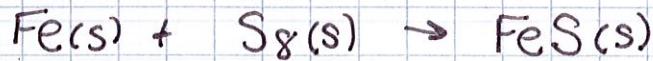
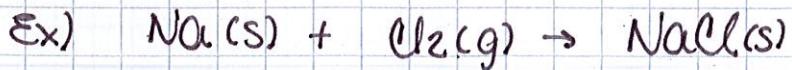
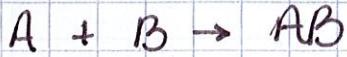


Types of Chemical Reactions

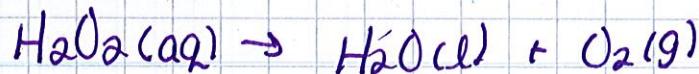
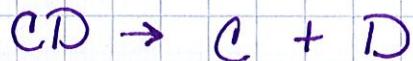
1. Synthesis (combination)

2 reactants form 1 product



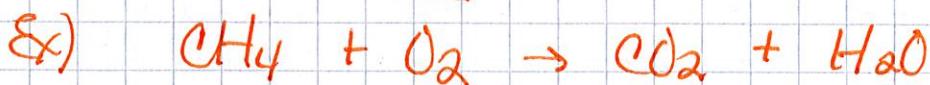
2. Decomposition

1 reactant breaks down into 2 or more products



3. Combustion

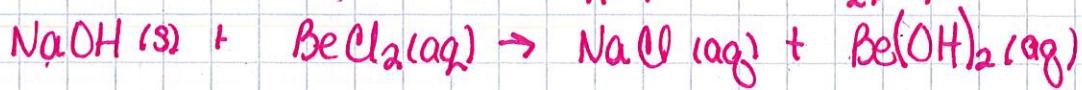
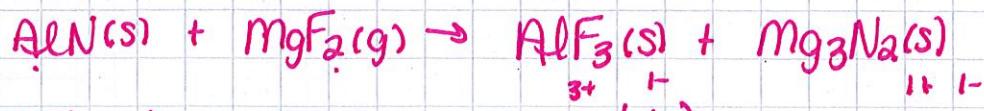
a hydrocarbon reacts w/oxygen to form carbon dioxide & water



4. Double - Replacement (do-si-do) 2 ionic compounds switch ions



Ex.)

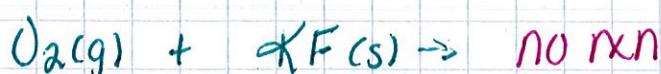
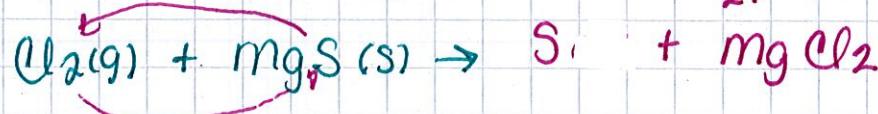
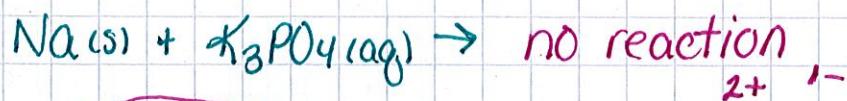
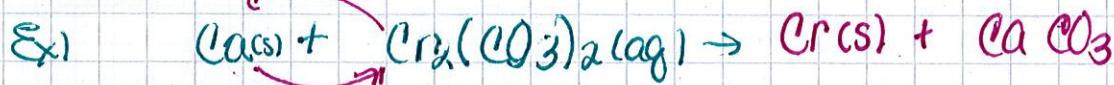
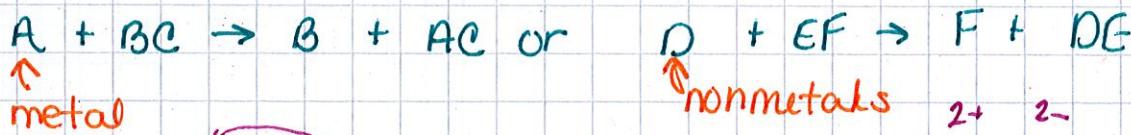
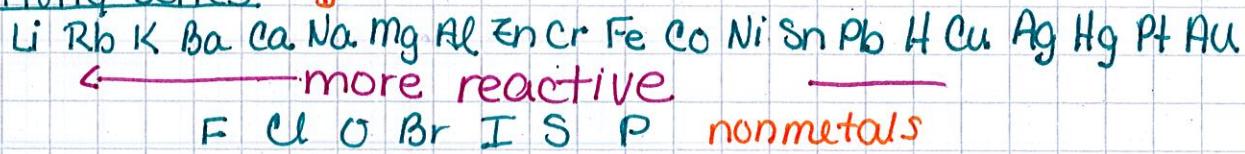


5. Single - Replacement

an element replaces another inside a compound

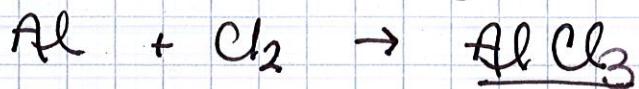
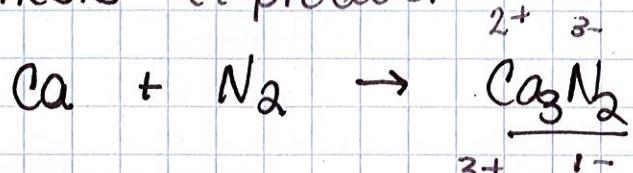
ONLY if the element doing the replacing is more reactive than the 1 in the compound.

Activity Series ↗ metals

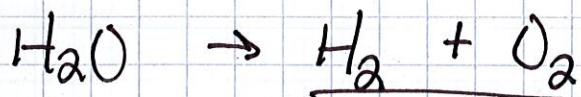


Predicting Products

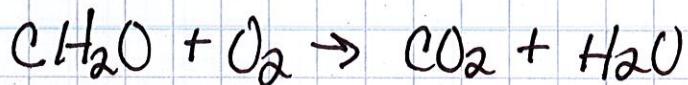
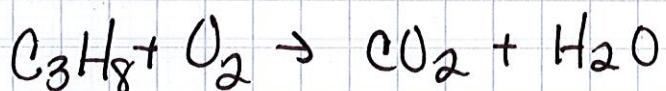
Synthesis (1 product)



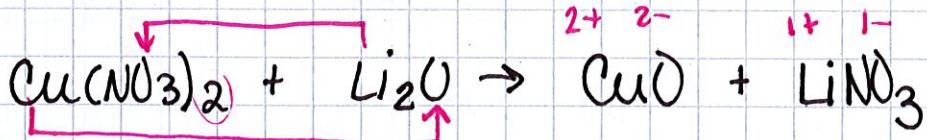
Decomposition (1 reactant)



Combustion (products are $\text{CO}_2 + \text{H}_2\text{O}$)



Double - Replacement (switch ions)



Single - Replacement (switch 1 ion - maybe)
✓ the activity series

