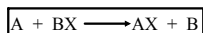


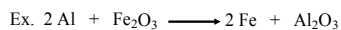
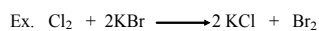
Types of Chemical Reactions

1. Single Displacement

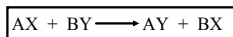


- One element replaces another in a chemical reaction

Element + Compound \longrightarrow Element + Compound

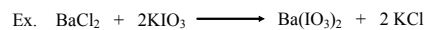
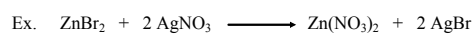
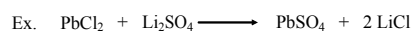


2. Double Displacement

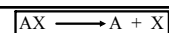


- positive or negative portions of a compound exchange places

Compound + Compound \longrightarrow Compound + Compound



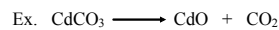
3. Decomposition



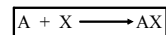
- substance breaks apart

1 reactant

Compound \longrightarrow two or more elements or compounds



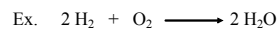
4. Synthesis



1 product

- two or more substances combine to form 1 new substance

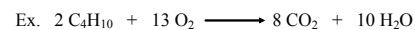
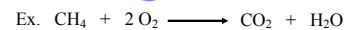
compound or element + compound or element \longrightarrow compound



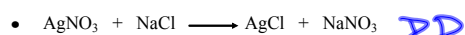
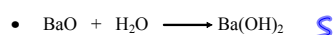
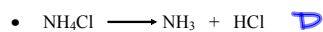
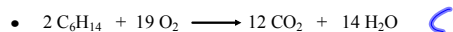
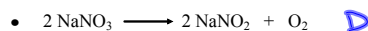
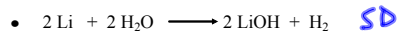
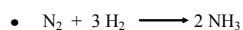
5. Combustion reaction

- when an organic (contains carbon) compound burns in air

hydrocarbon + oxygen \longrightarrow $\text{CO}_2 + \text{H}_2\text{O}$



Classify each of the following reactions...



Activity Series

- The ability of an element to react is known as its activity

- An activity series is a list of elements organized according to the ease with which the elements undergo certain chemical reactions