Types of Chemical Reactions

- 1.Combination reaction
- 2.Decomposition reaction
- 3. Displacement reaction
- 4. Double displacement reaction

Combination reaction

A reaction in which two or more substances combine to form a single substance is called combination reaction.

$$C + O_2 ----> CO_2$$

Homework

What do you observe when magnesium ribbon is burnt in oxygen?

Decomposition reaction

A reaction in which a compound breaks up due to the application of heat into two or more simpler substances is called decomposition reaction.

The above decomposition reactions are carried out by heating, they are called thermal decomposition reactions.

Displacement reaction

A reaction in which a more active element displaces a less active element from a compound is called displacement reaction.

More active metal displaces hydrogen from an acid.

$$Zn + 2HCl$$
 ----> $ZnCl_2 + H_2$

Double displacement reaction

(Reactions in which both the ions/radicals are exchanged)

It is a chemical reaction in which two compounds in their aqueous state exchange their ions or radicals to form new compounds.

Double displacement reactions are of two types:

a)Precipitation reaction :-Both the ions/radicals are exchanged and a precipitate is formed.

b) Neutralization reaction

Acid + Base ----> Salt + water