

# Class X Science

## Different Types of Chemical Reactions

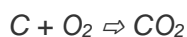
The types of chemical reaction are:

1. Combination reaction
2. Decomposition reaction
3. Displacement reaction
4. Double Displacement reaction
5. Precipitation Reaction

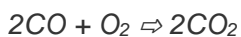
### 1. Combination Reaction

- A reaction in which **two or more reactants combine to form a single product** is known as a combination reaction.
- It takes the form of  $X + Y \rightarrow XY$
- Combination reaction is also known as a synthesis reaction.
- Example of combination reaction:  $2\text{Na} + \text{Cl}_2 \rightarrow 2\text{NaCl}$

#### 1.Element + Element $\rightarrow$ Compound



#### 2. Element + Compound $\rightarrow$ Compound



#### 3. Compound + Compound $\rightarrow$ Compound



Important activity- Write activity and observation of quick lime with water and slaked lime for white wash in your language of Pg 13 of Dinesh reference book

Write chemical equations of 7 examples given in Dinesh.

## 2. Decomposition Reaction

- A reaction in which a ***single compound breaks into two or more simpler compounds*** is known as a decomposition reaction.
- It takes the form of  $XY \rightarrow X + Y$
- A decomposition reaction is just the opposite of combination reaction.
- Example of a decomposition reaction:  $\text{CaCO}_3 \rightarrow \text{CaO} + \text{CO}_2$
- The reaction in which a compound decomposes due to heating is known as a thermal decomposition reaction.