

Chemical Equations

- ❖ The substances that undergo chemical change in the reaction are the reactants.
- ❖ The new substance formed during the reaction, is product.

Balanced Chemical Equation

The number of atoms of each element remains the same, before and after a chemical reaction.

Types of Chemical Equations

Combination Reaction	Reaction in which a single product is formed from two or more reactants is known as a combination reaction
Decomposition Reaction	Reaction in which one single product breaks down in simpler products.
Displacement Reaction	Reaction in which one element is replaced by another.
Double Displacement Reaction	Reactions in which there is an exchange of ions between the Reactants are called double displacement reactions.
Oxidation and Reduction	If a substance gains oxygen during a reaction, it is said to be oxidised. If a substance loses oxygen during a reaction, it is said to be reduced.

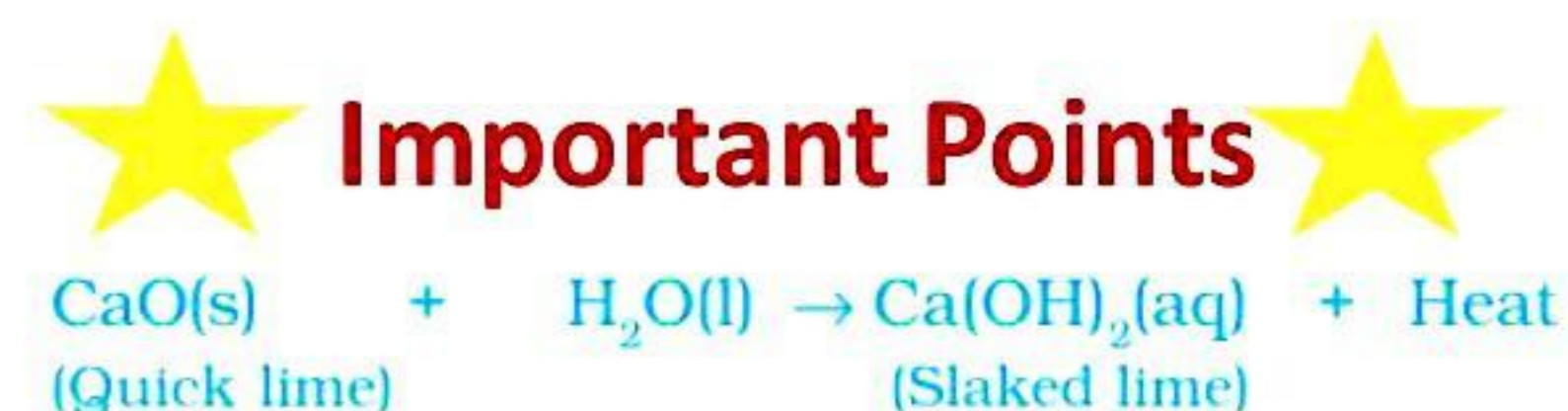
Chemical Reactions and Equations

Corrosion

When a metal is attacked by substances around it such as moisture, acids, etc., it is said to corrode and this process is called corrosion.

Rancidity

When fats and oils are oxidised, they become rancid and their smell and taste change.



- ❖ A solution of slaked lime is used for whitewashing walls.
- ❖ The chemical formula for marble is CaCO_3 .
- ❖ Respiration is an exothermic process.
- ❖ The decomposition of vegetable matter into compost is also an example of an exothermic reaction.
- ❖ When a decomposition reactions are carried by heating it is called thermal decomposition.
- ❖ The below reaction are used in black and white photography.
$$2\text{AgBr(s)} \xrightarrow{\text{Sunlight}} 2\text{Ag(s)} + \text{Br}_2\text{(g)}$$
- ❖ This insoluble substance in reaction is known as a precipitate. Any reaction that produces a precipitate can be called a precipitation reaction.
- ❖ Chips manufacturers usually flush bags of chips with gas such as nitrogen to prevent the chips from getting oxidized.