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STUDY NOTES

CLASS- VI (All Section)

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Science

CHAPTER: 6 Changes around us

Today's Topic: Chemical change

Chemical change:

Whenever a chemical reaction occurs, the atoms are rearranged and new products are formed. Most chemical changes happen between molecules. For example, the rusting of iron happens over a long period of time and in the process the iron atoms gradually combine with oxygen and become iron oxide molecules, which are reddish brown in colour. The rust cannot be turned back into iron except by a chemical reaction.



If we mix flour, butter, sugar and other ingredients and bake a cake, it would be impossible to separate the various ingredients to their original form. During the process of baking, the ingredients combine and change in a manner that produces new compounds, which give taste and flavour to the cake. Similarly, if coal is burnt, carbon dioxide and water vapour are produced along with the production of heat. The original coal cannot be brought back. That is, the change is **irreversible.**



Wax can be melted by heating and the molten wax can be brought back to the solid form by cooling. But when a candle is lighted, the molten wax rising through the wick becomes vapour, which burns, producing light. When a candle burns, it produces carbon dioxide, water vapour and heat, which cannot be recombined to get back solid wax.

A chemical change when accompanied by the production of heat, is known as an **exothermic** reaction. The explosion of dynamite is a violent exothermic reaction.

When a chemical reaction is accompanied by the absorption of heat, it is called an **endothermic** reaction.

Melting of Wax:





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