

## CASE STUDY || CHAPTER 6 CHANGES AROUND US

### THEME 1

Changes occurring around us can be physical or chemical. A physical change is one in which physical properties of the substance change without a change in its chemical composition. As a result, a substance changes its form, but not its chemical composition.

Physical changes are usually reversible and temporary. Everyday examples of physical changes are drying of wet clothes, tearing paper into pieces, melting of wax, chopping of wood and freezing water to get ice.

A chemical change is one in which new and different substances are formed. The substance or substances formed have properties different from those of the materials that combined during the change. The change is usually irreversible and permanent. Some examples of chemical changes are digestion of food, rusting of iron, respiration, cooking of food, formation of compost and photosynthesis in plants.

Answer the following questions by choosing the correct options given below.

1. Only physical properties change in this.

(a) Physical change (b) chemical change (c) slow change (d) periodic change

2. Chemical changes are usually

(a) reversible (b) irreversible (c) both of these (d) none of these

3. New substances are formed in a

(a) physical change (b) both of these (c) chemical change (d) none of these

### THEME 2

Some changes in nature occur by themselves. Human beings cannot control these changes. These changes are called natural changes. Change of day and night, change of seasons, phases of the moon, ripening of fruits, vegetables and crops, earthquakes, floods, forest fires are all examples of natural changes. In each of these changes, man is unable to do anything. If you observe carefully, you will also notice that all these natural changes are continuous

We also see some changes around us that are brought about by human beings. These changes are controlled and performed by human beings. These are called artificial changes. Some of these such as burning of fuels, manufacturing sugar from sugar cane juice, producing things in factories are all artificial changes.

1. What are natural changes?

2. What are artificial changes?

3. Explain one natural change.

4. Explain one artificial change.

5. The growth of a baby into a child and then into an adolescent, and finally into an adult. What sort of change is being described here? Explain with reason.