

## LESSON PLAN

### SPECIFIC OBJECTIVES

- The students will learn about
- ❖ reversible and irreversible changes
  - ❖ physical and chemical changes
  - ❖ expansion and contraction and their applications

### TEACHING AIDS

Pictures/charts/models/animation on a sapling growing into a plant; a baby growing into an adult; freezing of water, melting of ice; blowing of balloon, etc. (as given in the chapter).

### LESSON PLAN

- ❖ Teacher will start the chapter by going through the points given in 'Know these points before you start' section.
- ❖ Teacher will name some changes which occur around us and will also discuss the types of changes.
- ❖ Teacher will define the reversible and irreversible changes by demonstrating activities given in the chapter.
- ❖ Now, teacher will ask students to solve Check Point 1.
- ❖ Teacher will explain physical and chemical changes by performing activities given in the chapter.
- ❖ Teacher will explain the process of expansion and contraction and their applications.
- ❖ Teacher will define conditions required for a change to take place.
- ❖ Now, teacher will ask students to solve Check Point 2.
- ❖ Teacher will make students revise the new terms given under the head 'Know These Terms'.
- ❖ Finally, teacher will help students to solve the questions given in exercises under the head 'Practice Time' and 'Think Zone'.

## BOOST UP

- ❖ Teacher should demonstrate and explain activities given in the chapter.
- ❖ Teacher should discuss the conversation of Annu and Mannu given in between the topics.
- ❖ Teacher should discuss the facts given in the table.
- ❖ Teacher may demonstrate the stretching of rubber band and blowing of a balloon while explaining physical changes, and the burning of candle or incense stick while explaining chemical changes.
- ❖ Students should be instructed to burn the materials with utmost care in the presence of an elder.
- ❖ Teacher should also explain how permanent and temporary changes are related to reversible and irreversible changes.

## EXPECTED LEARNING OUTCOMES

The students understand and know the

- ❖ different kinds of changes in the surroundings.
- ❖ reversible and irreversible changes.
- ❖ physical and chemical changes.
- ❖ expansion, contraction and their applications.
- ❖ conditions required for a change to take place.

## EVALUATIVE QUESTIONS

The teacher may ask the following questions for evaluating the learning and understanding of students:

1. Give two examples each of reversible and irreversible changes.
2. Are folding of paper and melting of ice physical changes? Why or why not?
3. Why is cooking called an irreversible change?
4. Mention two differences between physical and chemical changes.
5. Which type of change is burning of coal and why?
6. Give one example each of expansion and contraction.
7. Which type of change is breaking a glass and why?