# **Changes Around Us**

# **LESSON PLAN**

### SPECIFIC OBJECTIVES

The students will learn about

- changes around us
- reversible and irreversible changes
- physical and chemical changes
- expansion and contraction

### **TEACHING AIDS**

**Pictures/charts/models/animation** on a sapling growing into a plant; a baby growing into an adult; coal, wood (as given in chapter).

# **LESSON PLAN**

- ♦ The teacher will start the chapter with Gear Up and ask the students to give reason of changing day to night and changing weather from sunny to cloudy.
- ♦ The teacher should name some changes occur around us.
- ♦ The teacher should define the reversible and irreversible changes.
- ♦ The teacher should explain the reversible changes by demonstrating Activity 1.
- ♦ The teacher should explain physical and chemical changes.
- ♦ The teacher should perform Activity 2 and 3 to make understand a chemical change.
- ♦ The teacher should explain the process of expansion and contraction and their applications.
- ♦ Students should be asked to solve Check Points 1 and 2.
- ♦ At last, the teacher will sum up the lesson by going through the points given under the head 'Wrap Up Now'.
- ♦ The teacher will help the students to solve the questions given in exercises under the head 'Practice Time' and will also discuss the topics given under the head 'Formative Tasks'.

#### **BOOST UP**

- 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.
- 12 Science Booster 6 (Lesson Plan)

- ♦ The students should be instructed to burn the materials with care in the presence of an elder.
- ♦ The teacher should ask each student to give one example each of reversible and irreversible changes.
- ♦ The teacher should also explain how permanent and temporary changes are related to reversible and irreversible changes.
- ♦ The teacher should also ask each student to give one example each of physical and chemical 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.

# **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?