

Chapter 2

Physical and Chemical Changes

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ❖ changes in the surroundings, i.e., slow, fast, desirable and undesirable changes
- ❖ physical changes, uses and processes involved in them
- ❖ chemical changes and their uses
- ❖ differences between physical and chemical changes
- ❖ reversible and irreversible changes
- ❖ changes of states in matter

Teaching Aids

Pictures/charts/models/animation on different physical and chemical changes (as given in the chapter); uses of physical and chemical changes; differences between physical and chemical changes; reversible and irreversible changes (as given in the chapter)

Teaching Strategy

- ❖ Teacher will start the chapter by defining change and its different types, i.e., slow, fast, desirable or undesirable changes occurring in the surroundings.
- ❖ Then, teacher will discuss temporary changes and explain physical changes by demonstrating Activities 1, 2 and 3 and will give more examples of physical changes.
- ❖ Teacher will discuss processes involved in physical changes.
- ❖ Teacher will discuss chemical changes by demonstrating Activities 4, 5, 6 and 7.
- ❖ Teacher will then give more examples of chemical changes and will discuss uses of chemical changes in everyday life.
- ❖ Now, teacher will explain differences between physical and chemical changes.
- ❖ Teacher will ask the students to solve 'Check Point 1'.
- ❖ Teacher will discuss reversible and irreversible changes, and will demonstrate Activity 8.
- ❖ Teacher will discuss change of states of matter with the help of Activities 9 and 10.

- ❖ Now, teacher will ask students to solve 'Check Point 2'.
- ❖ At last, teacher will sum up the lesson by going through the points given under the head 'Wrapping It Up'.
- ❖ Teacher will finally help students to answer the questions given under the head 'Test Yourself'.

Boost Up

- ❖ Teacher can help students to perform the activities given in chapter.
- ❖ Teacher can make students revise new terms given under the head 'Know These Terms'.
- ❖ Teacher can encourage students to learn the facts given under the head 'Something More'.
- ❖ Teacher can show animations related to the topics taught, if possible.
- ❖ Teacher should ask students to give examples of physical and chemical changes from everyday life other than those given in the book.
- ❖ Teacher should ask the students to explain the differences between reversible and irreversible changes and how these changes are associated with physical and chemical changes.

Expected Learning Outcomes

The students understand and know:

- ❖ different types of changes occurring around us.
- ❖ physical and chemical changes, and their uses.
- ❖ reversible and irreversible changes.
- ❖ change of states of matter.

Evaluative Questions

The teacher should ask the following questions to evaluate the students.

1. What is meant by slow changes?
2. Define a chemical change.
3. Write two examples of physical changes.
4. Define reversible changes. Are all physical changes reversible?
5. What is meant by irreversible changes?
6. Write one change which is physical as well as chemical change?
7. Define change of states of matter.
8. What is meant by sublimation?