

Chapter 8

Materials and Solutions

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ❖ solvent, solute and solution
- ❖ soluble and insoluble substances
- ❖ methods of separation

Teaching Aids

Pictures/charts/models/animation on the topics given in the chapter.

Lesson Plan

- ❖ Teacher will start the chapter with 'Gear Up' section by asking questions on objects heavier or lighter than water and help students to complete the task given in the section.
- ❖ Now, teacher will revise basic properties of water which students learnt in the previous class.
- ❖ To check the understanding of students about the topic, teacher will ask them to solve 'Check Point 1'.
- ❖ Teacher will define a solution and explain its different parts.
- ❖ Teacher will demonstrate the method of preparation of a solution.
- ❖ By giving examples, teacher will define aqueous and nonaqueous solutions.
- ❖ By giving examples, teacher will define soluble and insoluble substances.
- ❖ Now, teacher will discuss different methods and their applications used for the separation of parts of a mixture.
- ❖ Now, teacher will ask students to solve 'Check Point 2'.
- ❖ At last, teacher will sum up the chapter by going through all the points given under the head 'Wrap up now' and revising the 'New Words'.
- ❖ Finally, teacher will help students to solve all the exercises given under the head 'Practice Time'.

Boost Up

- ❖ Teacher should demonstrate activities given in the chapter to the students for the better understanding of topic.
- ❖ Teacher should encourage students to explore more examples and uses of aqueous and nonaqueous solutions.
- ❖ Teacher should encourage students to explore more examples of substances soluble and insoluble in water.

Expected Learning Outcomes

The students understand and know

- ❖ solvent, solute and solution.
- ❖ method of preparation of a solution.
- ❖ aqueous and nonaqueous solutions and their examples.
- ❖ soluble and insoluble substances and their examples.
- ❖ different methods for separation of parts of a mixture.

Evaluative Questions

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

1. What is a solution?
2. What are aqueous and nonaqueous solutions?
3. Which substances are insoluble in water?
4. What are different methods for separating parts of a mixture?
5. How is salt obtained from sea water?