

Chemical Effects of Current

LESSON PLAN

SPECIFIC OBJECTIVES

The students will learn about

- ♦ conduction of electric current through liquids
- ♦ LED
- \diamond electrical conductivity of water
- \diamond chemical effects of electric current
- \diamond electrolysis and its applications
- ♦ electroplating and its applications

TEACHING AIDS

Pictures/charts/models/animations on an electric circuit consisting of cell, bulb and key; coloured LED; electroplated objects, chrome-plated objects, silver-plated objects, etc.

LESSON PLAN

- ♦ The teacher will start the lesson with 'Science Vocabulary' section by telling the meaning/definition of new terms which are used in the chapter.
- Now, the teacher should define conductors of electricity and explain the conduction of electric current through liquids. The teacher should demonstrate Activities 1 and 2.
- $\diamond~$ The teacher should discuss about LED.
- ♦ The teacher should discuss electrical conductivity of water.
- ♦ The teacher should discuss chemical effects of electric current by defining the process of electrolysis and electroplating and by demonstrating the Activities 3 and 4.
- \diamond Students should be asked to solve Check Points 1 and 2.
- ♦ The teacher will help the students to solve the questions given in exercises under the head 'Let's Drill Our Skills' and to complete the flowchart given under the head 'Let's Memorise'.

BOOST UP

- ♦ The teacher should ask students to learn the names of good conductors and bad conductors of electricity.
- ♦ Students should be asked to explore more applications of LED, electrolysis and electroplating in everyday life.

EXPECTED LEARNING OUTCOMES

The students know about

- ♦ good and bad conductors of electricity.
- ♦ conduction of electric current through liquids.
- ♦ LED
- ♦ electrical conductivity of water.
- ♦ chemical effects of electric current electrolysis and electroplating.
- ♦ applications of electrolysis and electroplating.

EVALUATIVE QUESTIONS

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

- 1. Define good conductors of electricity.
- 2. Write two examples of bad conductors of electricity.
- 3. Why is distilled water called poor conductor of electricity?
- 4. What is an LED?
- **5.** What is electrolysis?
- 6. Define voltameter.
- 7. Why is electroplating of a metal done?