# Light

## **LESSON PLAN**

## SPECIFIC OBJECTIVES

The students will learn about

- ♦ light
- ♦ rectilinear propagation of light
- ♦ reflection of light—changing the path of light
- ♦ images formed by plane mirrors and uses of plane mirrors
- curved or spherical mirrors, i.e., concave and convex mirrors, image formation and their uses
- ♦ lenses, types, image formation and uses of lenses
- ♦ colours of light

#### **TEACHING AIDS**

**Pictures/charts/models/animations** on plane mirror, curved mirrors, rear-view mirror, lenses, dispersion of light through prism and rainbow.

#### **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 light and rectilinear propagation of light by demonstrating Activity 1.
- ♦ Now, the teacher should discuss the reflection of light by demonstrating Activities 2 and 3.
- ♦ The teacher should describe uses and image formation by plane mirror.
- ♦ Now, teacher should discuss spherical mirrors, i.e., concave and convex mirrors, image formation by them and their uses.
- ♦ Now, the teacher should define lenses, i.e., concave and convex lenses, image formed by lenses by Activities 4 and 5 and uses of lenses.
- ♦ Now, the teacher should define colours of light by demonstrating Activities 6 and 7.
- ♦ Students should be asked to answer '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 students should be encouraged to explore more uses of plane and spherical mirrors and lenses in everyday life and scientific studies.
- ♦ Students should also be asked to practise for drawing incident ray, reflected ray, normal, angle of reflection and angle of incidence.

## EXPECTED LEARNING OUTCOMES

The students know about

- concept of light and rectilinear propagation of light.
- ⇒ reflection of light
- plane and spherical mirrors, nature of the images formed and uses.
- ♦ lenses, nature of the images formed by them and their uses.
- different colours of light.

## **EVALUATIVE QUESTIONS**

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

- **1.** How are we able to see the objects?
- **2.** What is the difference between a real image and a virtual image?
- **3.** Write the nature of image formed by a plane mirror.
- 4. Write two uses of plane mirrors.
- **5.** Define radius of curvature.