

## LESSON PLAN

SPECIFIC OBJECTIVES

The students learn about

- ✧ light, sources of light, luminous and nonluminous objects
- ✧ shadows, features of shadow
- ✧ sound, sound production in humans, music and noise
- ✧ force and effects of force on an object

TEACHING AIDS

Any light source such as torch/bulb/tube/candle; globe or ball; **Pictures/animation** of sunrise, sunset and noon (showing shadow of an object); **Picture/chart** of sound box of man; **Animation** on sound production in man; Clay, rubber band/string

LESSON PLAN

- ✧ Teacher will start the chapter with 'Gear Up' section by asking simple questions on pushing and pulling.
- ✧ Teacher will explain the need of light and tell that the sun is the only source of energy on the earth.
- ✧ Teacher will explain difference between natural and artificial sources of energy.
- ✧ With the help of teaching aids, teacher will explain difference between luminous and nonluminous objects.
- ✧ To demonstrate the need of light for looking objects around us, teacher can help students to perform Activity 1 given in the chapter.
- ✧ Now, teacher will explain the process of shadow formation by Activity 2, given in chapter under the head 'Shadows'.  
For performing Activity, teacher can use torch/candle or any light source and globe/ball or any other object.
- ✧ With the help of teaching aids, teacher will show the shadow formation on sunrise, at noon and on sunset emphasising the difference between their sizes.
- ✧ To evaluate the understanding of chapter taught so far, teacher will ask students to solve 'Check Point 1'.

- ✧ Now, before starting on sound, teacher will ask some sound-related simple questions based on previous knowledge of students.
- ✧ Teacher can demonstrate the sound production by vibrating a string or a stretched rubber band.
- ✧ Now, teacher will explain what vibration is and explain when an object vibrates, it produces sound.
- ✧ Now using teaching aids, teacher will show the sound producing organ of man and explain that sound is produced by the vibration in vocal cords.
- ✧ Now, teacher will explain the difference between music and noise and give the brief idea of noise pollution and its harms.
- ✧ Teacher will emphasise on to minimise noise pollution.
- ✧ Now, teacher will discuss on force and explain the changes that a force can bring in an object as described in the chapter.
- ✧ Using clay, teacher will demonstrate how force can change the shape of an object.
- ✧ Now, teacher will ask students to solve 'Check Point 2'.
- ✧ The teacher will sum up the chapter by going through the points given under the head 'Wrap up now'.
- ✧ Finally, the teacher will help students to solve all the exercises given under the head 'Practice Time'.

### **BOOST UP**

- ✧ Teacher can encourage the students to experiment themselves with different objects for shadow formation.
- ✧ Teacher can ask students to collect pictures of noisy areas and write 5 lines on the harms of noise.
- ✧ Students can check the effects of force themselves by experimenting with other objects.

### **EXPECTED LEARNING OUTCOMES**

The students understand

- ✧ about light, its sources and luminous and nonluminous objects.
- ✧ what a shadow is, its features and how it forms.
- ✧ about sound, how it produces, can differentiate between music and noise
- ✧ what the force is and how it brings different changes in an object.

### **EVALUATIVE QUESTIONS**

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

1. Name a natural and ultimate source of light on the earth.
2. What are man-made sources of light?

3. Name some natural luminous objects.
4. What is a shadow and how does it form?
5. How is sound produced?
6. What is a force?