

LESSON PLAN**SPECIFIC OBJECTIVES**

The students will learn about

- ✧ production of sound
- ✧ different types of musical instruments
- ✧ production of sound in human beings
- ✧ propagation of sound through solids, liquids and gases
- ✧ structure and functioning of human ear
- ✧ characteristics of sound
- ✧ music and noise
- ✧ measurement of sound and noise pollution

TEACHING AIDS

Pictures/charts/models/animations on string musical instruments; percussion musical instruments; wind musical instruments, keyboard musical instruments; human larynx; structure of human ear; oscillatory motion.

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.
- ✧ The teacher should explain the production of sound by vibration in objects or vibrating objects by demonstrating Activity 1.
- ✧ The teacher should discuss different types of musical instruments such as string, percussion, wind and keyboard instruments and demonstrate Activity 2.
- ✧ The teacher should discuss the production of sound in human beings by demonstrating Activities 3 and 4.
- ✧ Now, the teacher should explain the propagation of sound by demonstrating Activity 5 and discuss the propagation in solids, liquids and gases by demonstrating Activities 6 and 7.
- ✧ The teacher should explain the structure and functioning of human ear.

- ✧ The teacher should discuss the characteristics of sound by explaining amplitude, frequency, time period, etc., of sound, audible and inaudible sounds.
- ✧ The teacher should differentiate between music and noise, and discuss the measurement of sound.
- ✧ The teacher should discuss noise pollution, its sources, harmful effects and measures to control noise pollution.
- ✧ Students should be asked to solve Check Points 1, 2 and 3.
- ✧ 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 encourage the students to collect pictures of string, percussion, wind, keyboard and electronic musical instruments.
- ✧ The teacher should discuss the harms of noise and ways to reduce noise pollution.
- ✧ The teacher should discuss the care and health issues of ear.

EXPECTED LEARNING OUTCOMES

The students know about

- ✧ sound and production of sound.
- ✧ different kinds of musical instruments.
- ✧ sound production in humans.
- ✧ propagation of sound in different mediums.
- ✧ structure and functioning of human ear.
- ✧ characteristics of sound.
- ✧ music and noise.
- ✧ measurement of sound.
- ✧ noise pollution, its sources, harmful effects and measures to control it.

EVALUATIVE QUESTIONS

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

1. How is sound produced?
2. Write the names of two string instruments.
3. Mention three wind instruments.
4. What is larynx?
5. Define propagation of sound.
6. Describe the structure of human ear and its parts.
7. What is the difference between frequency and amplitude of sound?