

LESSON PLAN**SPECIFIC OBJECTIVES**

The students will learn about

- ✧ production of sound
- ✧ different types of musical instruments
- ✧ the way through which humans produce sound
- ✧ propagation of sound, speed of sound
- ✧ 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; echolocation.

LESSON PLAN

- ✧ The teacher should start the chapter with Gear Up and ask students the questions given in this section.
- ✧ The teacher should discuss about the process of production of sound by demonstrating Activity 1.
- ✧ The teacher should explain the production of sound by vibration in objects or vibrating objects by demonstrating Activities 2 and 3.
- ✧ The teacher should discuss different types of musical instruments such as string, percussion, wind and keyboard instruments.
- ✧ The teacher should demonstrate Activities 4 and 5 and ask the students to perform Activity 6.
- ✧ The teacher should discuss the production of sound by human beings by demonstrating Activities 7 and 8.

- ✧ Now, the teacher should explain the propagation of sound by demonstrating Activity 9 and discuss the propagation in liquids and solids by demonstrating Activities 10 and 11 respectively.
- ✧ The teacher should discuss speed of sound.
- ✧ 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, echolocation, audible and inaudible sounds.
- ✧ The teacher should differentiate between music and noise, and discuss the measurement of sound and noise pollution.
- ✧ Students should be asked to solve Check Points 1, 2 and 3.
- ✧ At last, the teacher will sum up the lesson by going through the points given under the head 'Wrap Up Now'.
- ✧ The teacher will help the students to solve all the questions given in exercises under the head 'Practice Time' and will also discuss the topics given under the head 'Formative Tasks'.

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.
- ✧ The teacher should assign Activity 12 as Group activity in the class.

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.
- ✧ speed of sound.
- ✧ structure and functioning of human ear.
- ✧ characteristics of sound.
- ✧ music and noise, measurement of sound and noise pollution.

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?