

Sound

ORAL QUESTIONS

A. Answer these questions orally.

1. Name the sound producing organ in humans.
2. Name two wind instruments.
3. Name two keyboard instruments.
4. Inside our voice box, there are two ligaments. What are these called?
5. Can sound travel through vacuum?

B. Match the columns.

COLUMN I

1. Pitch
2. Dogs
3. Frequency
4. Time period
5. Loudness

COLUMN II

- (a) Second
- (b) Amplitude
- (c) Shrillness of a sound
- (d) As high as 40,000 Hz
- (e) Hertz

PUZZLES/QUIZ

C. Find at least nine terms that are related to Sound from the given word maze.

F	H	E	R	T	Z	A	B	Y	I	A
R	V	R	O	I	M	K	L	L	N	N
E	I	A	L	M	D	L	J	H	F	D
Q	B	E	M	E	Q	M	B	N	R	E
U	R	B	U	P	B	U	N	T	A	C
E	A	N	R	E	L	S	P	E	S	I
N	T	M	Y	R	I	I	I	V	O	B
C	I	Q	E	I	O	C	T	Z	U	E
Y	O	W	I	O	R	T	C	U	N	L
O	N	Z	T	D	E	W	H	Q	D	T
N	O	I	S	E	Q	B	E	W	O	E

CLASS TEST

D. Very short answer questions.

1. What is sound?

2. Name three string instruments.

3. Name three percussion instruments.

4. Where is larynx located?

5. In which state of matter is the speed of sound highest—solid, liquid or a gas?

6. What is the speed of light in air?

7. What is a vibration?

8. What does the pitch of a sound depends on?

9. What does the loudness of a sound depends on?

10. What is the audible range for humans?

12. What is a 'decibel'?

13. Can sound travel through vacuum?

14. What is the SI unit to measure amplitude?

E. Short answers questions.

1. How can you say that sound is produced by vibrations?

2. Differentiate between the following.

(a) Music and Noise

MUSIC	NOISE

(b) Pitch and Loudness

PITCH	LOUDNESS

3. How is sound produced in string instruments? Explain.

4. How is sound produced in percussion instruments Explain.

5. How is sound produced in wind instruments?

6. How is sound produced in keyboard instruments?

7. We always see the lightning much before the thunder. Why?

8. What is 'amplitude'? What is its SI unit?

9. What is the relationship between frequency and time period?

10. An object completes 1600 vibrations in 20 seconds. Calculate its frequency.

11. Calculate the time period of a vibrating particle, if its frequency is 250 Hz.

12. What is the frequency of a vibration, if the time taken by 850 vibration is 17 sec?

13. Find the frequency of a vibration, if its time period is 0.08 sec.

14. 'Different animals can listen different frequency ranges.' Justify this statement with few examples.

15. What do you understand by 'noise pollution'?

16. List some sources of noise pollution.

F. Long answer questions.

1. How do humans produce sound? Explain.

2. Explain the structure and functioning of a human ear.

3. Noise pollution affects both health and behaviour. How?

4. What can be done to control noise pollution?

5. Draw a neat, labelled diagram of a human ear.

HOME ASSIGNMENT

G. Think and answer.

1. Purnima was standing in the balcony of her house on the second floor on a dark evening. She saw three men standing under a dim glowing lamp post and talking normally to each other. She could see the men but not hear the men talking. Can you say why?

2. Dheeraj struck a steel tumbler with a metal spoon very lightly. He heard a very feeble sound. He then hit the tumbler hard. This time he heard a louder sound. Can you say why?

3. Sakshi was putting a sharp pencil into her ear. Her mother stopped her from doing so. Why?

WORKSHEET

H. Give reasons for the following.

1. A verbal communication without an aid is not possible on the surface of moon.

2. Sound cannot travel through vacuum.
