

# Chapter 13 -Sound

## Very Short Answer Type Questions

1. Lightning can be seen the moment it occurs. Paheli observes lightning in her area. She hears the sound 5 s after she observed lightning. How far is she from the place where lightning occurs? (speed of sound = 330 m/s).
2. Does any part of our body vibrate when we speak? Name the part.
3. Boojho saw a cracker burst at night at a distance from his house. He heard the sound of the cracker a little later after seeing the cracker burst. Give reason for the delay in hearing the sound.
4. When we hear a sound, does any part of our body vibrate? Name the part.
5. Name two musical instruments which produce sound by vibrating strings?

## Short Answer Type Questions

1. A simple pendulum makes 10 oscillations in 20 seconds. What is the time period and frequency of its oscillation?
  2. We have learnt that vibration is necessary for producing sound. Explain why the sound produced by every vibrating body cannot be heard by us?
  3. Suppose a stick is struck against a frying pan in vacuum. Will the frying pan vibrate? Will we be able to hear the sound? Explain.
  4. Two astronauts are floating close to each other in space. Can they talk to each other without using any special device? Give reasons.
  5. List three sources of noise pollution in your locality.
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1. We have a stringed musical instrument. The string is plucked in the middle first with a force of greater magnitude and then with a force of smaller magnitude. In which case would the instrument produce a louder sound?
  2. How is sound produced and how is it transmitted and heard by us?
  3. An alarm clock is kept inside a vessel as shown in Fig. 13.1. A person standing close to it can distinctly hear the sound of alarm. Now if the air inside the vessel is removed completely how will the loudness of alarm get affected for the same person?

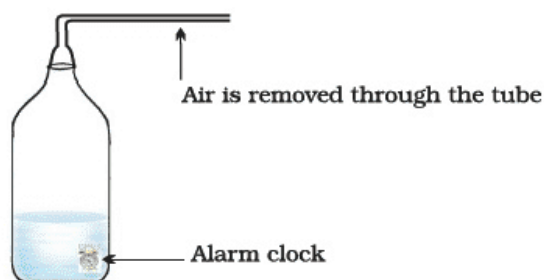


Fig. 13.1

4. The town hall building is situated close to Boojho's house. There is a clock on the top of the town hall building which rings the bell every hour. Boojho has noticed that the sound of the clock appears to be much clearer at night. Explain.
5. Suggest three measures to limit noise pollution in your locality.