

Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Sound

Q1. What differences will you hear in a sound if there is an increase in (i) amplitude, and (ii) frequency?

Ans. \_\_\_\_\_  
\_\_\_\_\_

Q2. A pendulum oscillates 40 times in 4 seconds. Find its time period and frequency.

Ans. \_\_\_\_\_  
\_\_\_\_\_

Q3. Lightning and thunder take place in the sky at the same time and at the same distance from us. Lightning is seen earlier and thunder is heard later. Can you explain?

Ans. \_\_\_\_\_  
\_\_\_\_\_

Q4. Name one solid, one liquid and one gas through which sound can travel.

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Q5. Whose voice is more shriller: a baby or a woman?

Ans. \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

## Sound

Q1. What differences will you hear in a sound if there is an increase in (i) amplitude, and (ii) frequency?

Ans. (i) The sound will become loud on increasing the amplitude.

(ii) The sound will become shrill on increasing the frequency.

Q2. A pendulum oscillates 40 times in 4 seconds. Find its time period and frequency.

Ans. Frequency = (Number of Oscillations)/Time =  $40/4 = 10$  Hz

Time period =  $1/(\text{Frequency of Oscillation}) = 1/10 = 0.1$  sec

Q3. Lightning and thunder take place in the sky at the same time and at the same distance from us. Lightning is seen earlier and thunder is heard later. Can you explain?

Ans. Speed of the light is more than the speed of sound. Thus, Lightning is seen earlier and thunder is heard later.

Q4. Name one solid, one liquid and one gas through which sound can travel.

Ans. Solid: Metal (Iron, Steel, Aluminium), wood, bricks etc.

Liquid: Water

Gas: Air

Q5. Whose voice is more shriller: a baby or a woman?

Ans. The voice of a baby has a higher frequency (or higher pitch) than that of a woman due to which the voice of a baby is even more shrill than that of a woman.