

QUIZEN – Sound (9P05)

Learning Level 1	Learning Level 2	Learning Level 3
Q - Remembering (knowledge-based questions) U - Understanding (comprehension-based questions)	I - Applying (application-based questions) Z - Analyzing (analysis-based questions)	E - Evaluating (evaluation-based questions) N - Creating (creation-based questions)

Learning Level 1

1. State the production methods of sound.
2. Define the term "propagation of sound" and explain how sound waves travel through different mediums.
3. What is the frequency of a sound wave that has a wavelength of 0.2 m and travels at a speed of 340 m/s in air?
4. What are the different characteristics of a sound wave?
5. Explain the term "echo" and how it is produced

Learning Level 2

6. A sound wave with a frequency of 1000 Hz travels through air and then enters water. If the speed of sound in air is 340 m/s and in water is 1500 m/s, calculate the wavelength of the sound wave in air and water.
7. A tuning fork produces a sound wave with a frequency of 256 Hz. Calculate the wavelength of the sound wave if it travels through air at a speed of 340 m/s.
8. A sound wave with a frequency of 2000 Hz has a wavelength of 0.16 m. Calculate the speed of sound in the medium through which the wave is traveling.
9. A sound wave has a wavelength of 0.5 m and a speed of 340 m/s. Calculate the frequency of the sound wave.
10. A sound wave has a frequency of 500 Hz and a wavelength of 0.68 m. Calculate the speed of sound in the medium through which the wave is traveling.

Learning Level 3

11. Compare and contrast the production and propagation of sound in solids, liquids, and gasses.
12. Evaluate the factors that affect the speed of sound in a medium and explain their effects.
13. Analyze how the characteristics of a sound wave affect the pitch, loudness, and quality of a sound.

14. Create a diagram showing the different parts of a sound wave and explain the significance of each part.
15. Design an experiment to investigate the relationship between the frequency of a sound wave and the pitch of the sound produced.

