

Name _____

Sound Waves Unveiled: Understanding Frequency and Wavelength

Multiple Choice Questions

1. What unit of measurement is used to express frequency?
 - a) Meters per second (m/s)
 - b) Hertz (Hz)
 - c) Watts (W)
 - d) Newtons (N)

2. How is a high-frequency sound wave described?
 - a) It has a low pitch.
 - b) It vibrates slowly.
 - c) It has a short wavelength.
 - d) It has a long wavelength.

3. What is the relationship between frequency and wavelength in sound waves?
 - a) They are unrelated.
 - b) They have a direct proportionality.
 - c) They have an inverse relationship.
 - d) They remain constant.

4. What property of sound waves does wavelength represent?
 - a) Speed
 - b) Loudness
 - c) Spatial distance
 - d) Temperature

5. In which field is knowledge of frequency and wavelength crucial for creating detailed images of internal body structures?
 - a) Astronomy
 - b) Geology
 - c) Medicine
 - d) Agriculture

