

Name _____

Riding the Wave: Classifying Waves in Physics

Multiple Choice Questions

1. What is the main difference between transverse and longitudinal waves?
 - A) Transverse waves move parallel to the direction of the wave.
 - B) Transverse waves require a medium to travel through.
 - C) Longitudinal waves have particles that move perpendicular to the wave's direction.
 - D) Longitudinal waves do not need a medium to travel through.

2. Which of the following is an example of an electromagnetic wave?
 - A) Sound wave
 - B) Ocean wave
 - C) Light wave
 - D) Earthquake wave

3. What does wavelength measure?
 - A) The distance between two consecutive points on a wave in phase
 - B) The number of cycles per second in a wave
 - C) The maximum displacement of a particle from its rest position
 - D) The direction in which a wave travels

4. Which type of wave carries more energy?
 - A) High-frequency waves
 - B) Low-frequency waves
 - C) High-amplitude waves
 - D) Low-amplitude waves

5. What is the unit used to measure frequency?
 - A) Meters per second (m/s)
 - B) Hertz (Hz)
 - C) Newtons (N)
 - D) Watts (W)

