

Assessment

Vibrations and Waves

Section Quiz: Properties of Waves

Write the letter of the correct answer in the space provided.

- _____ 1. The material through which a mechanical wave travels is
- a medium.
 - empty space.
 - ether.
 - air.
- _____ 2. When a transverse wave passes through water, water molecules are displaced
- permanently in the direction of the wave motion.
 - permanently in a direction perpendicular to the wave.
 - temporarily in the direction of the wave motion.
 - temporarily in a direction perpendicular to the wave.
- _____ 3. A wave that is produced by a single motion that does not repeat is a _____ wave.
- transverse
 - continuous
 - pulse
 - compression
- _____ 4. The distance between two troughs of a transverse wave is the wave's
- amplitude.
 - wavelength.
 - frequency.
 - rarefaction.
- _____ 5. A _____ wave travels through a medium as a series of compressions and rarefactions.
- sine
 - longitudinal
 - pulse
 - transverse
- _____ 6. A wave is passing through a uniform medium. As the frequency of this wave increases, its wavelength
- depends on amplitude.
 - decreases.
 - increases.
 - does not change.

