

The Nature of Waves

Wave Properties

Directions: Determine if each statement is true or false. If it is false, change the italicized word(s) to correct the sentence.

1. Waves transfer *matter* as they travel.
2. A wave will travel *only as long as* it has energy to carry.
3. Anything that moves *up and down or back and forth* in a rhythmic way is vibrating.
4. *All* waves need a medium in order to travel.
5. *Transverse and congressional* waves are the two types of mechanical waves.
6. In a *compressional* wave the matter in the medium moves back and forth at right angles to the direction that the wave travels.
7. In a *transverse* wave the matter in the medium moves back and forth in the same direction that the wave travels.
8. In a transverse wave, the peak of the wave is the *crest* and the lowest spot is the *trough*.
9. The *refraction* of a wave is how many wavelengths pass a fixed point each second.
10. In a compressional wave, the denser the medium is at the compressions the *smaller* its amplitude.
11. In a transverse wave, the higher the amplitude, the *more* energy it carries.