

# 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 wave-lengths 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.