

Lesson 1

compression region of a longitudinal wave where the particles in the medium are closest together

crest highest point on a transverse wave

electromagnetic wave can travel through empty space and through matter

energy ability to cause change

longitudinal wave makes the particles in a medium move parallel to the direction of the wave

mechanical wave travels only through matter

medium material in which a mechanical wave travels

rarefaction region of a longitudinal wave where the particles are farthest apart

transverse wave disturbance is perpendicular to the direction of the wave

trough lowest point on a transverse wave

wave disturbance that transfers energy from one place to another

Lesson 2

amplitude maximum distance particles in a medium move from their rest position as waves pass through the medium

frequency number of wavelengths that pass by a point each second

wavelength distance from one
point on a wave to the same point
on the next wave

Quick Vocabulary

Lesson 3

- **absorption** transfer of energy by a wave to the medium through which it travels
- **constructive** pertaining to building or putting parts together to make a whole
- **diffraction** change in direction of a wave when it travels by the edge of an object or through an opening
- **interference** waves that overlap combine to form a new wave
- **law of reflection** angle of incidence equals angle of reflection
- **normal** perpendicular to or forming a right angle with a line or plane
- **reflection** bouncing of a wave off a surface
- **refraction** wave changes direction, because its speed changes
- **transmission** passage of light through an object