

# Vocabulary: Properties of Waves



## Vocabulary

**wave:** Disturbances that move through a medium that are evidence of energy being transferred through time and space.

In general, waves:

- Exhibit no net transport of material
- Transport energy
- Have characteristic waveforms

**medium:** Any matter (solid, liquid, gas, or plasma) that has molecules to transport a wave's energy.

**transverse wave:**

A wave in which the particles of the medium move back and forth perpendicular to the direction of the wave.

**longitudinal wave:**

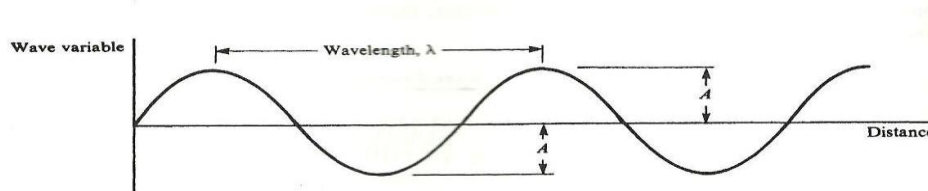
A wave in which the particles of the medium move back and forth in the same direction as the wave.

**crest:** The tops of a wave.

**trough:** The bottoms of a wave.

**wavelength,  $\lambda$ :** The distance between adjacent wave crests.

**amplitude,  $A$ :** The maximum distance a wave moves from its resting position, or undisturbed state.



**period,  $T$ :** The time required for one complete wave to pass a given point.

- Unit of measurement = seconds, s

**frequency,  $f$ :** The number of waves that pass a given point per second.

- Frequency is the inverse of the period,  $1/T$
- Unit of measurement = Hertz, Hz

