

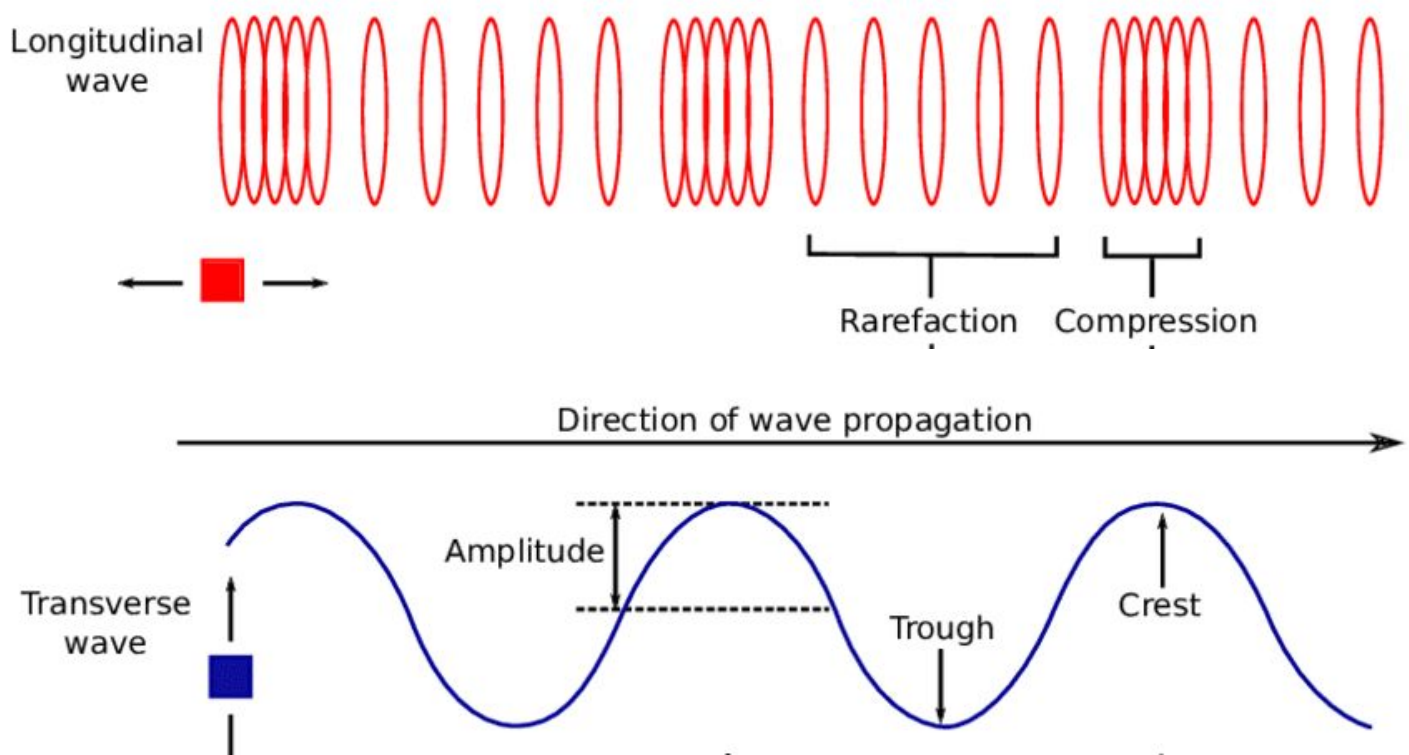
Astrocamp

Sound Waves

Like waves in the ocean, sound makes waves in the air. Sound is a **mechanical wave** that is created by a vibrating object. **Mechanical Waves** are waves which propagate through a medium, i.e. a violin string

Sound waves are **longitudinal waves**. Longitudinal waves are waves in which the motion of the individual particles of the medium are in a direction that is **parallel** to the direction of energy transport.

A vibrating string creates longitudinal waves. As the vibrating string moves right, it begins to push upon surrounding air molecules, moving them to the right towards their nearest neighbor.



The other type of wave is a **transverse wave**. Light travels as a transverse wave. These waves move perpendicular (like a T) to the source of the vibration. Watch longitudinal and transverse waves in action at:

<https://www.acs.psu.edu/drussell/Demos/waves/wavemotion.html>