

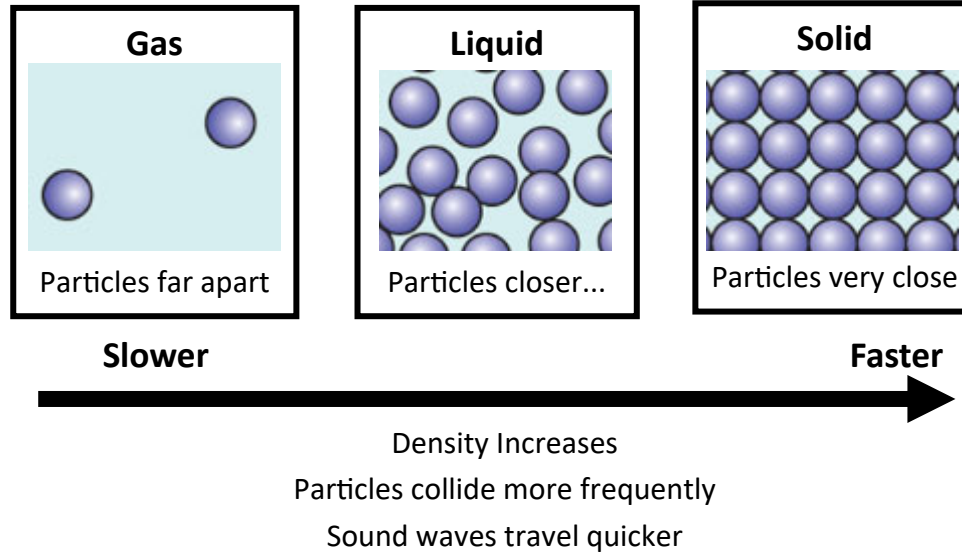
**Key Words**

<b>Vibration</b>	A repeating back and forth movement	<b>Oscilloscope</b>	A machine that can view sound waves as electronic signals
<b>Volume</b>	How loud or quiet a sound is (decibels, Db)	<b>Absorption</b>	Energy being transferred from sound to a material
<b>Longitudinal Wave</b>	A vibration moving in the same direction as the wave	<b>Auditory Range</b>	The highest and lowest frequencies that an animal can hear
<b>Pitch</b>	How low or high a sound is	<b>Echo</b>	Reflection of sound waves back to the listener
<b>Frequency</b>	Number of waves in a second (hertz, Hz)	<b>Vacuum</b>	A space with no particles of matter in

**Learning Sequence**

1. Introduction
2. Describing Sounds
3. Hearing Sounds
4. Travelling Sounds
5. Reflection and Absorption
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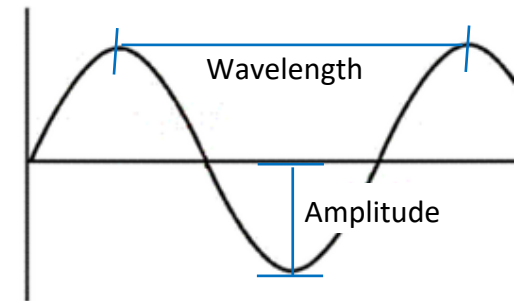
**Speed of Sound**



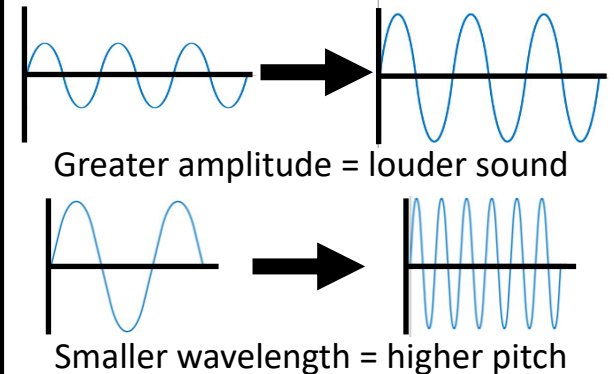
**What is Sound?**

Sound is vibrations, which travel as a longitudinal wave through substances.

**Longitudinal (Sound) Waves**



**Comparing Sound Waves**



**Sound Facts**

**Vacuum**

There are no particles to vibrate, so there are no sound waves. No sound can travel.

**Speed of Sound in Air**

Sound travels at 330 meters per second (m/s). This is a million times slower than the speed of light!

**Frequency**

The shorter the wavelength, the higher the frequency, the higher pitched the sound