
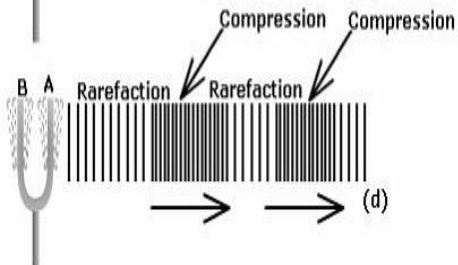
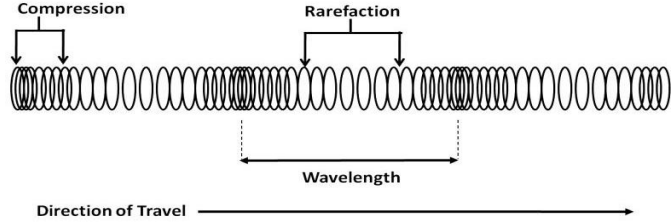
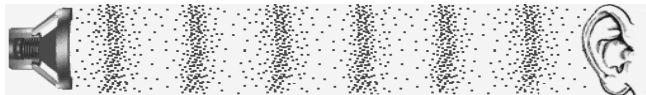
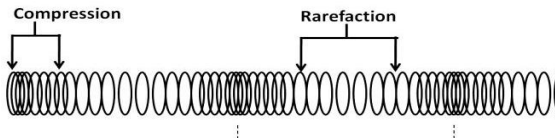
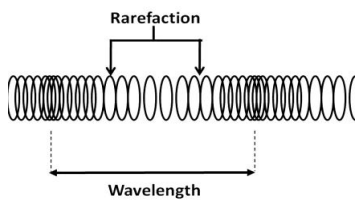
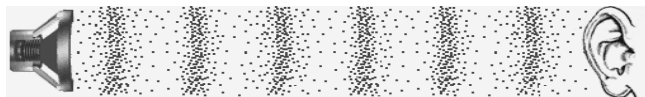
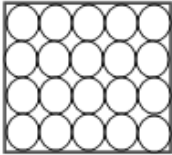




<p>What is <b>sound</b>?</p>	<p><b>Energy that is created and moved by vibrating matter.</b></p> 
<p><u>How</u> does sound travel?</p>	<p><b>Matter vibrates and carries the sound as compression (longitudinal) waves.</b></p> 
<p>What does a sound wave <u>look like</u>?</p>	
<p>Why can sound <u>only travel through matter</u>?</p>	<p>The molecules of matter vibrate in the direction the sound wave is travelling and move it along.</p> 
<p>What are <b>compressions</b> and <b>rarefactions</b> in a sound wave?</p>	<p>Compressions are when molecules are <u>pressed</u>. Rarefactions are when molecules are <u>spread</u>.</p> 
<p>What is the <b>wavelength</b> of a sound wave?</p>	<p>The distance between 2 compressions or rarefactions.</p> 
<p>What is the <b>frequency</b> of a sound wave?</p>	<p>The # of wavelengths that pass in a given period of time.</p> 

<p>What does sound travel <u>fastest</u> through?</p>	<p>Sound travels <b>faster through solids</b> than liquids or gases because the molecules are closer together.</p>  <p style="text-align: center;">Solid</p>
<p>What is the <b>pitch</b> of a sound wave?</p>	<p>The <u>pitch</u> is the <b>highness or lowness</b> of a sound and is determined by the frequency.</p> <p>Faster vibrations=higher pitch Slower vibrations=lower pitch</p> 
<p>What is the <b>amplitude</b> of a sound wave?</p>	<p>The <b>amplitude</b> is the <b>amount of energy</b> in a sound wave. It is <i>related to intensity and volume</i>.</p> <p><u>Loud</u> sound=many molecules vibrating hard <u>Soft</u> sound=fewer molecules vibrating slowly</p>
<p>Do <u>humans</u> and <u>animals</u> make and hear <u>different ranges of sound</u>? Explain.</p>	<p>Yes. People and animals make and hear different ranges of sound.</p> <p>A <b>bat</b> can hear sounds up to <b>110,000 hertz</b> and most <b>people</b> only hear up to <b>16, 000 hertz</b>.</p>
<p>What is <b>sonar</b>?</p>	<p>Sonar is used by bats, ships, whales, etc... Sound waves are sent out and echoed back to show location of something.</p>
<p>How are different <u>instruments classified</u>?</p>	<p>Each instrument causes the vibration of sound in different ways.</p> <p>Ex. Smaller, shorter instruments make higher pitched sounds.</p> 
<p>What are the <u>4 basic classifications of instruments</u>?</p>	<p>Percussion (drums, etc..) Strings (guitar, etc...) Wind (trumpet, etc...) Electronic (electric guitar, etc)</p> 