
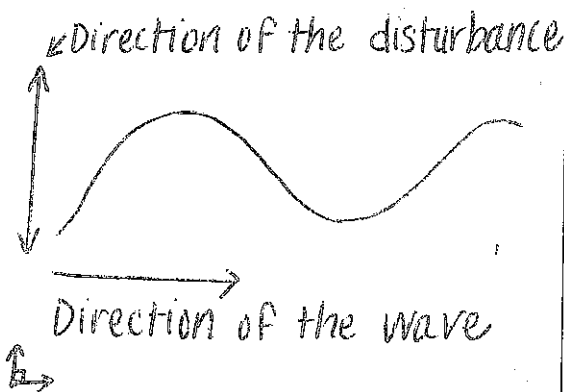
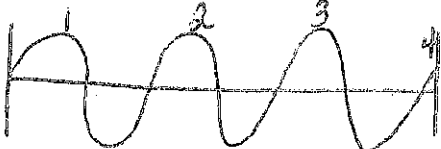


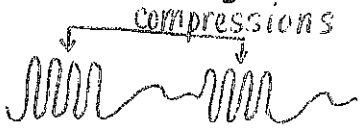


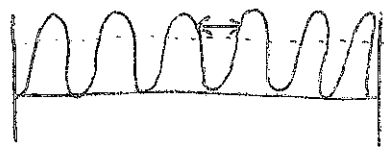
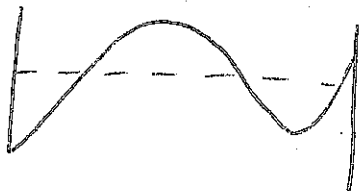


<p>What is a wave?</p>	<p>A wave is a disturbance that transfers energy.</p>
<p>What is a longitudinal wave?</p> 	<p>A longitudinal wave is a wave in which the direction of the disturbance and the direction of the wave are the same.</p> <p>Sound and a slinky moving are examples of a longitudinal wave.</p>
<p>What is a mechanical wave?</p>	<p>A mechanical wave is a wave that transfers energy through matter.</p> <p>Transverse and longitudinal waves are two kinds of mechanical waves.</p>
<p>What is a transverse wave?</p> 	<p>A transverse wave is a wave in which the direction of the disturbance and the direction of the wave are perpendicular. It transfers energy at right angles of the disturbance.</p> <p>Some examples are a wave moving through water and a rope being snapped up and down.</p>
<p>What is a medium?</p>	<p>A medium is a substance that a wave can move through.</p> <p>Some examples are water, air, ground, and rope.</p>

<p>What is a disturbance?</p>	<p>A disturbance is a change in the motion of the medium.</p>
<p>What is frequency?</p>	<p>Frequency is how many waves pass in a certain amount of time.</p>
<p>How do you measure the frequency of a transverse wave?</p> 	<p>Count the number of crests or troughs passing a point in a certain amount of time.</p>
<p>What is a wavelength?</p>	<p>A wavelength is the length of a wave.</p>
<p>How do you measure the wavelength of a transverse wave?</p> 	<p>Count from crest to crest or trough to trough.</p>
<p>What is a compression?</p> 	<p>A compression describes the part of a pressure wave where the vibrating particles are close together.</p> <p>Think of the slinky example where you could see the compressions moving along the slinky.</p>

<p>How do you measure the wavelength of a longitudinal wave?</p> 	<p>Measure from the center of the compression to the center of the next compression,</p>
<p>What is amplitude?</p>	<p>Amplitude is the amount of energy in both a transverse and longitudinal wave.</p>
<p>How do you measure amplitude in a transverse wave?</p>	<p>Measure from resting point to crest or resting point to trough. You are measuring the height of the wave from its resting point.</p>
<p>How do you measure amplitude in a longitudinal wave?</p>	<p>You measure how compressed the medium is.</p>
<p>How are people in a stadium doing "the wave" a model for the way a transverse wave moves?</p>	<p>People move up and down but energy (the wave) moves side to side.</p>

<p>How can a wave move through a medium and yet the medium stays in place?</p>	<p>The energy is passing through the medium but the medium itself is not traveling with the energy. There is a disturbance in the medium as the energy travels through.</p>
<p>How is frequency related to wavelength?</p>	<p>The higher the frequency, the smaller the wavelength.  The lower the frequency, the bigger the wavelength.</p>
<p>Which wave has more energy?</p> <p>a.  b. </p>	<p>B is bigger because the amplitude is bigger.</p>
<p>Use high/low to identify frequency and wavelength</p>  <p>_____ frequency _____ wavelength</p>	<p>High frequency Low wavelength</p>
<p>Use high/low to identify frequency and wavelength</p>  <p>_____ frequency _____ wavelength</p>	<p>Low frequency High wavelength</p>