

# NOTES: WAVES

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What is a wave?	<p>A _____ is a disturbance that moves _____ through _____ or space.</p> <p>Waves do _____ move _____; they move _____.</p>
How are waves made?	<p>_____ waves are created by _____.</p> <p>Earthquakes send out _____ due to the Earth vibrating.</p> <p>You are able to speak because your _____ cords vibrate.</p>
Two Categories of Waves	<p>_____ waves</p> <p>_____ waves</p> <div style="text-align: center;"> <h2 style="color: blue;">Waves</h2> <pre> graph TD     Waves[Waves] --&gt; Mechanical[Mechanical Waves]     Waves --&gt; Electromagnetic[Electromagnetic Waves]     Mechanical --&gt; Sound[Sound waves]     Mechanical --&gt; Water[Water waves]     Electromagnetic --&gt; Light[Light]     Electromagnetic --&gt; Microwaves[Microwaves]     Electromagnetic --&gt; Infrared[Infrared]     Electromagnetic --&gt; Xrays[X-rays]     Electromagnetic --&gt; UV[Ultraviolet rays]     Electromagnetic --&gt; Radio[Radio waves]                     </pre> </div>
Electromagnetic Waves	<p>Light- _____ of electromagnetic radiation _____ to the human eye.</p> <p>_____ light is composed of a number of _____ wavelengths. Each wavelength is visible as a different _____.</p>
Mechanical Waves	<p>Mechanical Waves- a wave that can only travel through a _____. (SLG)</p> <p>Medium- _____ that a wave _____ through.</p>
Types of Mechanical Waves	<p>1. _____ waves</p> <p>2. _____ or Compressional Waves</p>
Transverse Waves	<p>A _____ in which _____ moves at a _____ angle to the direction the _____ is _____.</p> <p>Examples:</p> <p>1. _____</p> <p>2. _____</p>

Parts of a Wave	<p>1. _____ - the _____ point of a wave.</p> <p>2. Trough- The _____ point of a wave.</p> <p>3. _____ - The _____ from one _____ on a _____ to the corresponding point on the _____ wave.</p>
Wavelength & Frequency	<p>Frequency- The _____ of wavelengths that pass a certain _____ each second.</p> <p>Therefore, the _____ the frequency, the _____ the wavelength.</p>
Wavelength & Energy	<p>The _____ the wavelength the _____ the energy.</p> <p>The _____ the wavelength the _____ the energy.</p>
Amplitude	<p>4. Amplitude- The _____ from the _____ or _____ to the midline of the wave.</p> <p>_____ energy means _____ amplitude.</p>
Amplitude & Energy	<p>The _____ the amplitude, the _____ the amount of _____.</p> <p>DRAW and LABEL a TRANSVERSE wave on the back of your vocab sheet.</p>
Longitudinal or Compressional Waves	<p>A _____ in which the matter moves _____ to the _____ the energy in the _____ travels.</p> <p>Example: _____ is a longitudinal wave.</p> <p>DRAW and LABEL a LONGITUDINAL wave on the back of your vocab sheet.</p>

## video: waves

- Energy travels in \_\_\_\_\_.
- \_\_\_\_\_ is how often waves pass by.
- If you increase the frequency, the wavelength is \_\_\_\_\_.
- All waves have a similar \_\_\_\_\_.
- We **SEE** different wavelengths as different \_\_\_\_\_.
- X-ray waves are just like light waves, only they are much \_\_\_\_\_ together.
- Wavelength is the distance from the \_\_\_\_\_ of one wave to the \_\_\_\_\_ of another wave.
- \_\_\_\_\_ is the height of a wave.
- What type of wave squeezes and spreads?
- Sonar uses \_\_\_\_\_ waves to find stuff underwater.

