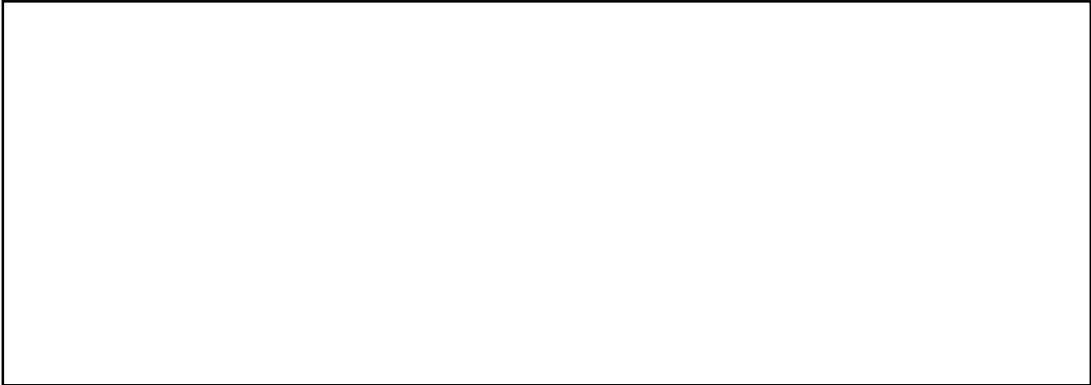



# NOTES: WAVES

|                           |  |
|---------------------------|--|
| 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; margin-top: 20px;"> <h2 style="color: blue;">Waves</h2> <pre> graph TD     Waves[Waves] --&gt; Mechanical[Mechanical Waves]     Waves --&gt; Electromagnetic[Electromagnetic Waves]     Mechanical --- Req[Requires a medium]     Electromagnetic --- NoReq[Do not require a medium]     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[Ultra violet 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 _____.</p> <p>Medium- _____ that a wave _____ through.</p>  |
| Types of Mechanical Waves | <ol style="list-style-type: none"> <li>1. _____ waves</li> <li>2. _____ or Compressional Waves</li> </ol>  |
| Transverse Waves          | <p>A _____ in which _____ moves at a _____ angle to the direction the _____ is _____.</p> <p>Examples:</p> <ol style="list-style-type: none"> <li>1. _____</li> <li>2. _____</li> </ol>  |

|  |   |
|--|---|
| Parts of a Wave                                  | 1. _____ - the _____ point of a wave.<br>2. Trough- The _____ point of a wave.  |
|  | 3. _____ - The _____ from one _____ on a _____ to the corresponding point on the _____ wave.  |
| Wavelength & Frequency                           | Frequency- The _____ of wavelengths that pass a certain _____ each second.<br>Therefore, the _____ the frequency, the _____ the wavelength. |
| Wavelength & Energy                              | The _____ the wavelength the _____ the energy.<br>The _____ the wavelength the _____ the energy.  |
| Amplitude  | 4. Amplitude- The _____ from the _____ or _____ to the midline of the wave.<br>_____ energy means _____ amplitude.                          |
| Amplitude & Energy                               | The _____ the amplitude, the _____ the amount of _____.   |
| Draw and label a diagram of a transverse wave.   |    |
| Longitudinal or Compressional Waves              | A _____ in which the matter moves _____ to the _____ the energy in the _____ travels.<br><br>Example: _____ is a longitudinal wave.         |
| Draw and label a diagram of a longitudinal wave. |   |