**What’s the Deal with WAVE Classification?**

**How are WAVES classified?**

**Waves can be classified by \_\_\_\_\_\_\_ they move through or by \_\_\_\_\_\_\_\_\_\_\_\_\_ moves through them.**

**Classification of WAVES by \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_**

**There are two classifications for waves based on what they move through:**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Waves**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Waves**

**What are mechanical WAVES?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ waves are waves that can \_\_\_\_\_\_\_\_ move through a \_\_\_\_\_\_\_\_\_(through matter).**

**Mechanical wavesrequire the \_\_\_\_\_\_\_\_of the \_\_\_\_\_\_\_to \_\_\_\_\_\_in order for energy to be transferred.**

**What are examples mechanical WAVES?**

* **water waves**
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* **\_\_\_\_\_\_\_\_\_ waves**
* **waves that travel down a \_\_\_\_\_ or \_\_\_\_\_\_\_\_\_**
* **All of these examples \_\_\_\_\_\_\_\_\_ move through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**What is EMPTY SPACE?**

* **Empty space is space in which \_\_\_\_\_\_\_\_\_\_\_\_ is present. Another name for this is a \_\_\_\_\_\_\_\_.**

**What are electromagnetic WAVES?**

* **\_\_\_\_\_\_\_\_\_ waves**
* \_\_\_\_\_\_\_\_\_\_\_
* **\_\_\_\_\_\_ waves**
* **\_\_\_\_\_\_\_ light**
* **\_\_\_\_\_\_\_\_ rays**
* \_\_\_\_\_\_\_\_\_\_

**Classification of WAVES by HOW energy moves through them**

**There are two classifications for waves based on how energy moves through them:**

* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Waves**
* **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Waves**

**What are compressional/ longitudinal WAVES?**

**\_\_\_\_\_\_\_\_\_\_\_\_\_waves in which the \_\_\_\_\_\_\_\_ of matter in the medium \_\_\_\_\_\_by pushing together and moving apart \_\_\_\_\_\_to the direction \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_*travels* are called compressional/longitudinal waves.**



**The place on the wave that is \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is called the \_\_\_\_\_\_\_\_\_\_\_ and the place that is \_\_\_\_\_\_\_\_\_\_\_ is the \_\_\_\_\_\_\_\_\_\_\_\_\_\_.**

**What are examples of compressional/ longitudinal waves?**

* **\_\_\_\_\_\_\_\_\_ waves**
* **some waves in a \_\_\_\_\_\_\_\_**
* **some \_\_\_\_\_\_\_\_ waves (earthquake waves- primary waves, to be exact)**

**What are transverse WAVES?**

**\_\_\_\_\_\_\_ waves in which the particles of matter in the medium \_\_\_\_\_\_\_ by moving back and forth and \_\_\_\_\_\_\_\_\_\_ (at right angles) to the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ *travels* are called transverse waves.**



**The \_\_\_\_\_\_\_\_\_\_ point of a transverse wave is the \_\_\_\_ and the \_\_\_\_\_ point is called a \_\_\_\_\_\_.**

**What are examples of transverse waves?**

* **\_\_\_\_\_\_\_ on a musical instrument**
* **waves on a \_\_\_\_\_**
* **some waves in a \_\_\_\_\_\_\_**
* **some \_\_\_\_\_\_\_ waves (earthquake waves- secondary waves, to be exact)\_\_\_\_\_\_\_\_\_\_\_\_ waves are \_\_\_\_\_\_\_\_\_\_\_\_ waves that can travel without a \_\_\_\_\_\_\_through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**