**Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ # \_\_\_\_**

**Wave Notes – Properties of Waves**

**A \_\_\_\_\_\_\_\_\_\_\_\_\_ is a disturbance that \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_ from one place to another.**

* **To “disturb” means to \_\_\_\_\_\_\_\_\_\_\_ or unsettle.**

**Waves can transfer energy over a distance \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ moving matter the entire distance.**

**Example: An \_\_\_\_\_\_\_\_\_\_ wave 🡪 It moves up and down (disturbance) but doesn’t move the water.**

**Forces & Waves**

**A \_\_\_\_\_\_\_\_\_\_\_\_ is required to change the motion of an object.**

**Forces can also start a \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_, sending a wave through a material.**

* **Examples:**

**Materials & Waves**

**A \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ is any substance that wave moves through.**

* **Examples:**
  + **Ocean waves move through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
  + **Earthquake waves move through the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
  + **Light waves move through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_.**
  + **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ waves move through many mediums including air.**

**Types of Waves**

**Mechanical Waves – Any wave that transfers energy through matter (a medium). There are two types of mechanical waves.**

1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Wave – the waves travel \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ to the direction of the disturbance.** 
   * **Example: Water waves, light waves, certain waves from earthquakes**

* **Draw the diagram 🡪**

1. **\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Wave- the wave travels in the \_\_\_\_\_\_\_\_\_\_ direction as the disturbance.**

* **Examples: Sound waves, certain waves from earthquakes**
* **Draw the diagram 🡪**