Name: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Hour: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Transverse vs. Longitudinal Waves



**Measure the distance between two crests or two troughs in centimeters (cm). What is this distance?**

**Measure the distance from the line of origin to a crest or trough in centimeters (cm) . What is this distance?**

**What do waves do?**

Two Broad Types of Waves:

* Mechanical Waves: need \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* Electromagnetic Waves can travel through \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Mechanical waves travel through mediums such as:

Mechanical waves can be:

* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_
* \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Transverse Waves – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ moves \_\_\_\_\_\_ and \_\_\_\_\_\_\_\_\_\_ or side to side while \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Oscillations \_\_\_\_\_\_\_\_\_ in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ of the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Longitudinal Waves – \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ moves along the \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ while traveling \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

* Oscillations in the \_\_\_\_\_\_\_\_\_\_\_\_\_\_ direction the wave \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

**Put the following waves under the correct category:**

A wave at a ball game

Guitar string

Slinky

Flag waving in the wind

Sound wave

Shaking a rope

Water wave

Electromagnetic Waves include \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

Word of the Day: Compression –