- How do we See?
- How do we hear?
- How do we transfer information?

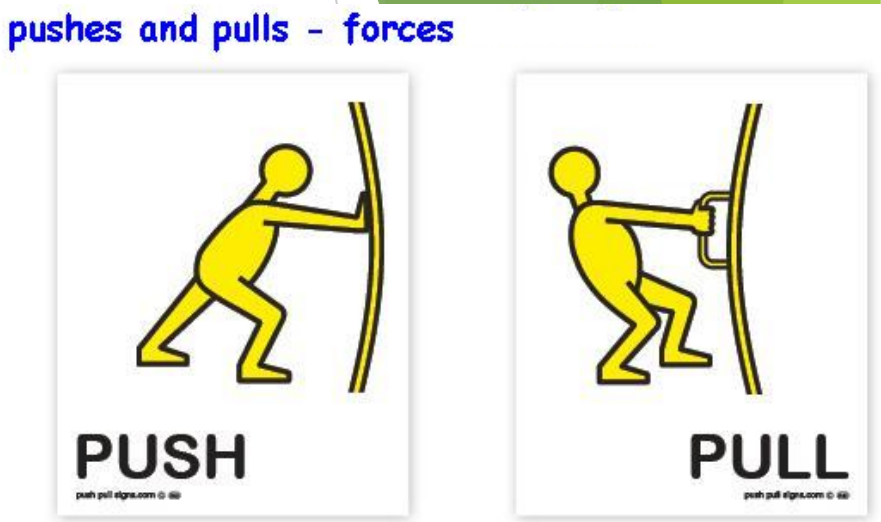
1. force?
2. energy?
3. waves?

Terminologies

Force: A push or pull on an object

Energy: Ability to apply a force over a distance

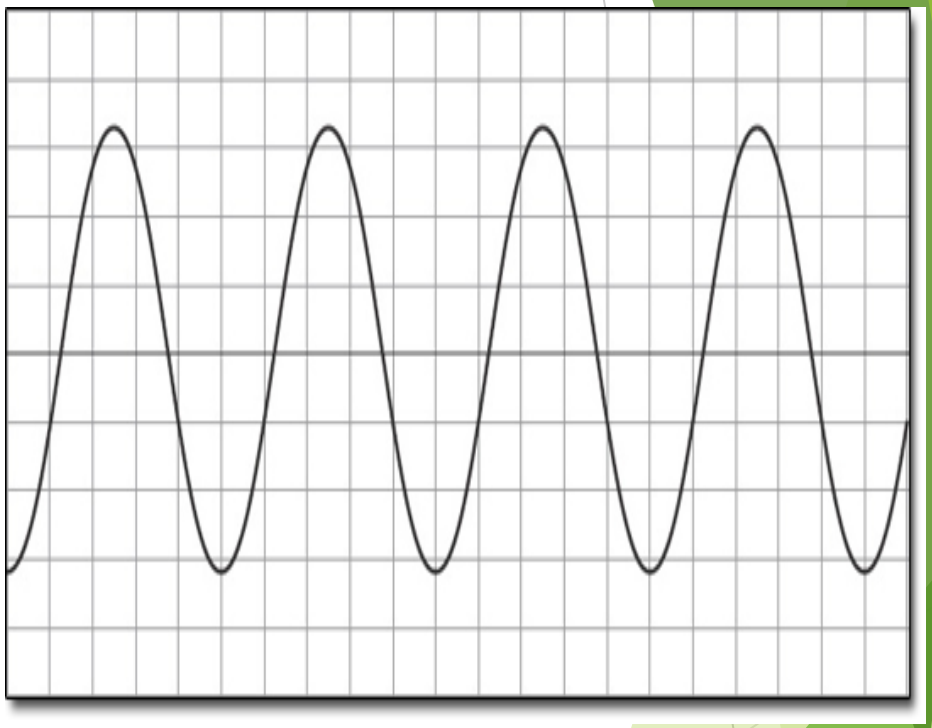
Wave: A movement that transfers energy through matter and space without causing a permanent displacement



Properties of Waves

What are example of waves?

How do these waves travel?



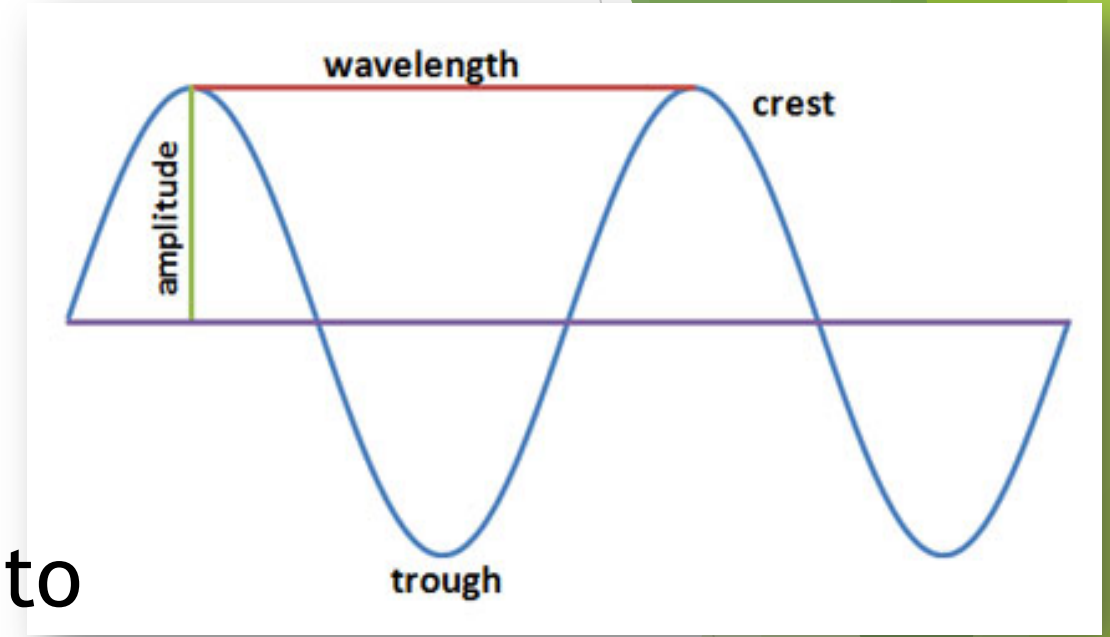
As a scientist, if you wanted to “MEASURE” the wave, what would you measure?

Properties of Waves

Crest: Highest part of the wave

Trough: Lowest part of the wave

Wavelength: Distance from a crest to the next crest



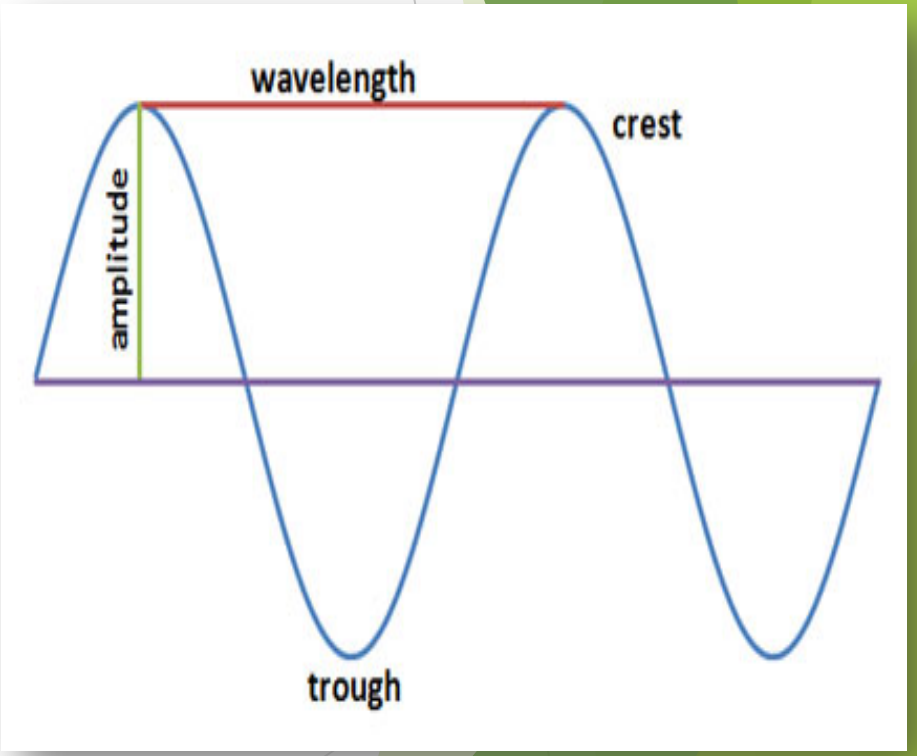
Would distance from a trough to the next trough work too?

Properties of Waves

Amplitude: height of a crest or depth of a trough from the rest position

When a wave has HIGH amplitude, it will carry HIGH amount of energy

Amplitude ⇧ Energy ⇧

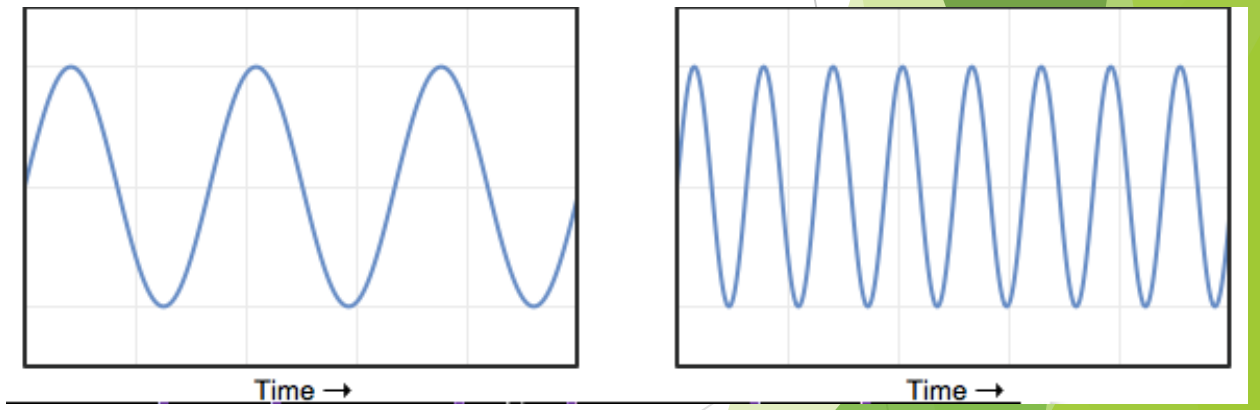


Properties of Waves

Frequency: number of oscillation, (repeats) that occurs in a given time

Frequency is measured in hertz (Hz)

1 Hz = 1 cycle per second



Wavelength ⇩ Frequency ⇧

Energy ⇧

Types of Waves?

Transverse

Compression