

Medium - the matter that waves travel through.
 Ex. sound waves can travel through air, air is the medium.

WAVES

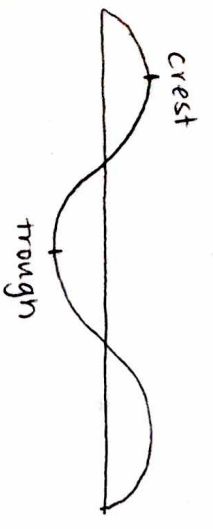
a disturbance that transports energy from one location to another without transporting matter.

Mechanical

Energy moves in an up and down motion

Transverse

- S-waves (earthquakes)
 - moving rope up & down

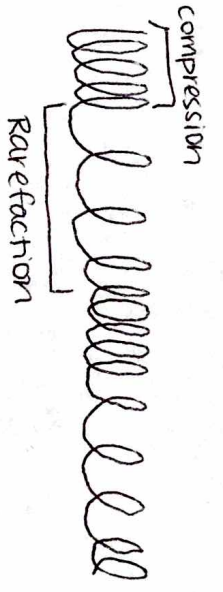


Require a medium

Energy moves in a back and forth motion

Longitudinal / Compressional

- slinky
 - sound waves
 - P-waves (earthquakes)



Electromagnetic

Do Not require a medium

- caused by vibrations of electric and magnetic fields
 - all types of EM waves can be seen in the electromagnetic spectrum.
 Ex. visible light
 x rays
 uv waves
 infrared waves
 - move similar to transverse waves