50 Anchor Charts for WAVES

bright in the middle

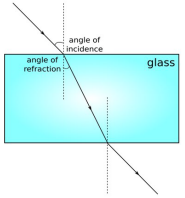
Anchor Charts Cover:

- waves
- mechanical and electromagnetic waves
- transverse and longitudinal waves
- electromagnetic spectrum
- properties of waves: amplitude, wavelength, frequency, wave speed
- frequency and wavelength
- wave behaviors: reflection, refraction, diffraction, interferences (constructive and destructive), absorption, transmission, scattering
- radio waves, microwave, infrared, visible light, ultraviolet, x-ray, gamma ray
- ROYGBIV
- law of reflection
- specular and diffuse reflection
- sound waves
- loudness and intensity
- decibel levels
- pitch
- frequency and pitch
- speed of sound in different mediums
- the human ear: outer, middle, inner
- the human eye
- nearsightedness and farsightedness
- types of mirrors
- lens
- optical instruments

Refraction

bending of waves as they travel through different mediums

Waves travel at different speeds in different mediums.

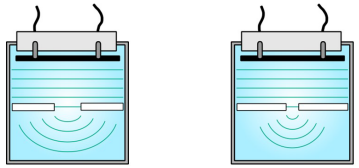


Example of Refraction:

A pencil in water looks bent because light does not travel as quickly in water as it does in air.

Diffraction

bending of waves around an obstacle or through them



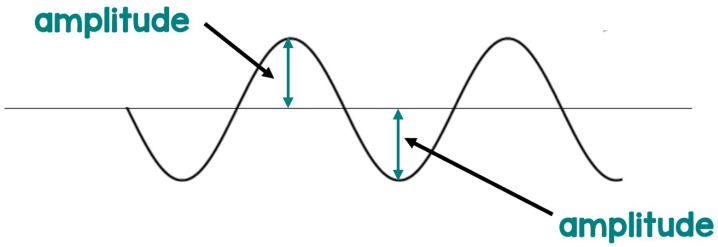
Example of Diffraction:

A CD reflects rainbow colors in all directions.

Frame Size

Amplitude

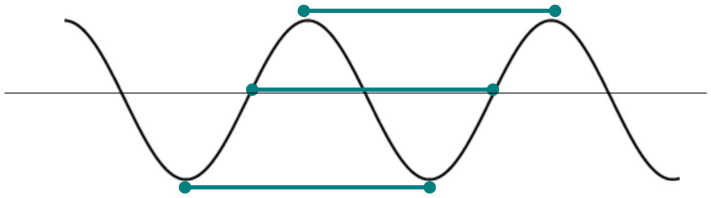
how high above or below normal level the oscillation is



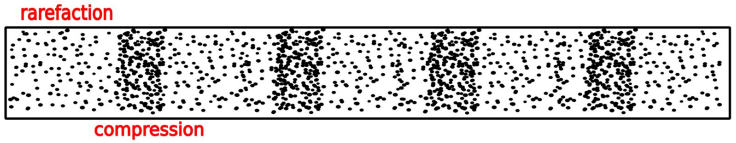
higher amplitude = more energy

Wavelength (λ)

length of one complete wave cycle



transverse

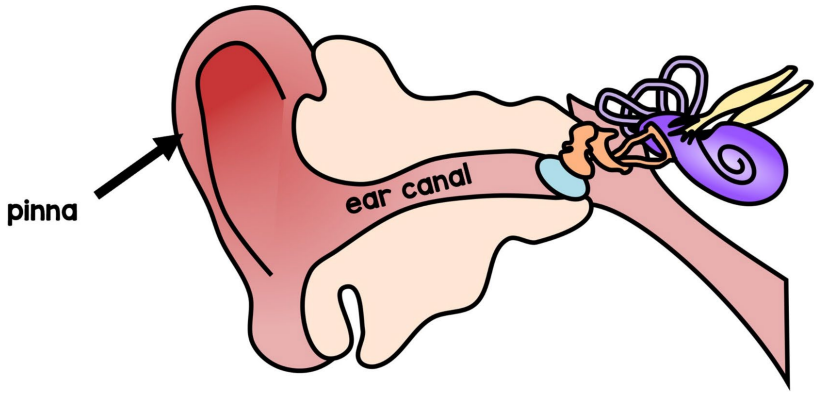


longitudinal

Half-Sheet Size

The Outer Ear

- pinna (auricle):
  - visible part
  - takes in sound waves
- ear canal (auditory canal):
  - acts as funnel that leads to eardrum
  - ~2.5 cm
  - protects the eardrum



Full-Sheet Size