

What will you learn about waves?

- properties of waves (frequency, amplitude, wavelength, speed)
- behaviors of waves (refraction, reflection, transmission, and absorption)
- types of waves (mechanical v. electromagnetic)
- transported by waves (energy - *never matter*)
- hearing - relationship between sound waves and mechanics of ear
- mechanics of ear (outer, middle, inner and subparts of each)
- seeing - relationship between light waves emitted or reflected by an object and the mechanics of the eye
- mechanics of eye (cornea, lens, iris, pupil, retina, rods, cones optic nerve)
- human perception of "color" (caused by reflection and absorption of light waves)
- electromagnetic spectrum (all components of the energy from the sun, visible and not visible to humans; uses; relative energy)