

S1 Science Sight and Sound Topic Need to Knows

• There two types of mechanical wave, transverse and longitudinal.
• A wave has a crest, a trough, and amplitude and a wavelength, and I know where on a wave they appear.
• All waves carry energy.
• Sound requires a medium to travel through.
• A sound is created by energy causing the particles in a medium to vibrate.
• A sound has a volume and a pitch.
• The unit of pitch, or frequency, is the Hertz (Hz).
• The pitch range of human hearing is 20 Hz to 20,000 Hz.
• The speed of sound in air is 340 m/s.
• The ear is made up from the ear canal, the ear drum, the small bones (ossicles), the cochlea, the semi-circular canals, the auditory nerve and the pinna
• The unit of sound volume is the decibel (dB).
• The level at which sound can start causing damage to human hearing is 84 decibels (dB).
• The primary colours are red, green and blue.
• The secondary colours are cyan, magenta and yellow.
• The speed of light in air is 300,000,000 m/s.
• The law of reflection states that the angle of incidence equals the angle of reflection.
• Refraction is a change in speed and wavelength when light travels from one material to a different material.
• Convex lenses cause light to converge.
• Concave lenses cause light to diverge.
• The eye is made up of the cornea, the pupil, the iris, the lens and the optic nerve.
• The EM Spectrum is Radio waves, Microwaves, Infrared radiation, visible light, ultraviolet, x-rays, gamma rays.
• I know a use for each part of the EM spectrum.

