The maximum displacement of particles of the medium from their mean positions during the propagation of a wave	Lines of constructive interference	A point of maximum amplitude because of constructive interference of waves	Observed frequency of wave when source or observer is moving (f')
Amplitude (of waves)	**Antinodal lines**	**Antinode**	**Apparent frequency**
A kind of interference. It occurs when two sets of waves have slightly different frequencies, $f_b = f_2 - f_1$	Difference between the frequencies of two similar waves	Area of constructive interference	A pipe with one end open and the other end blocked up
Beat	**Beat frequency**	**Bright fringe**	**Closed Pipe**
A part of a longitudinal wave in which the density of the particles of the medium is higher than the normal density	Two waves arriving at the same place, at the same time and in phase, add amplitudes to create a wave with a larger amplitude	The point of maximum positive displacement on a transverse wave is called a crest	A complete vibration
Compression	**Constructive interference**	**Crest**	**Cycle**
Vibrations which gradually die out as their source loses energy	Area of destructive interference	A nonlinear scale of loudness based on the ratio of the intensity level of a sound to the intensity at the threshold of hearing	Two waves arriving at the same point at the same time out of phase add their amplitudes to create zero total disturbance
Damped	**Dark fringe**	**Decibel scale**	**Destructive interference**

Wave changes direction	Bending of waves around a barrier/through a gap	Series of fine slits or lines used to deviate waves (e.g. Light)	Refraction in e.g. a prism causes white light to split up into colours
Deviates	**Diffraction**	**Diffraction grating**	**Dispersion**
An apparent shift in the frequency of a wave due to relative motion between the source of the wave and the observer	A reflected sound that can be distinguished from the original sound, which usually arrives at least 0.1 s after the original sound	Atomic line spectra given off from low pressure gas excited by heat or electricity	The number of waves which reach an observer in one second
Doppler effect	**Echo**	**Emission spectra**	**Frequency**
Band of light/dark	This is the simplest standing wave the medium can produce. It is the lowest possible frequency	An exact multiple of the fundamental frequency e.g. the second harmonic has twice the fundamental frequency	Unit of frequency; equivalent to one cycle per second
Fringe	**Fundamental**	**Harmonic**	**Hertz**
Matter emitting visible light as a result of high temperature e.g. a light bulb/flame because of high temperature	Moving towards (e.g. Incident light strikes a mirror)	Waves about to collide with boundary / interface	Sound waves having too low a frequency to be heard by the human ear; sound having a frequency of less than 20 Hz
Incandescent	**Incident**	**Incoming waves**	**Infrasonic**

A measure of the energy carried by a wave	Boundary between two different media	Effect occurring when waves meet	The wave in which the particles oscillate in the same direction as the direction of propagation of wave e.g. sound waves
Intensity	**Interface**	**Interference**	**Longitudinal waves**
Related directly to the amount of energy of the vibrating source	The total amount of energy radiated into space each second from the surface of a star	An object or objects that produce visible light; for example star/light bulbs/burning materials	The waves, which need a material medium for their propagation e.g. sound waves, water waves
Loudness	**Luminosity**	**Luminous**	**Mechanical wave**
Lines of destructive interference	A point in a stationary wave without any disturbances. Destructive interference occurs at nodes	Sounds made up of groups of waves of random frequency and intensity	A pipe with both ends open
Nodal lines	**Node**	**Noise**	**Open Pipe**
A vibration or regular pattern of movement or compressions e.g. sound waves in air	The time required for one complete cycle of a wave	When wave collides with an interface, the reflected wave has same speed/amplitude as incident wave but is upside down	Frequency of sound (low pitch = low frequency, high pitch = high frequency)
Oscillation	**Period (wave)**	**Phase change**	**Pitch**

Whose constituent transverse waves are all vibrating in the same plane	A film that transmits only polarized light	A wave of short duration confined to a small portion of the medium at any given time	A part of a longitudinal wave in which the density of the particles of the medium is less than the normal density
Polarized Light	**Polaroid**	**Pulse**	**Rarefaction**
Shift in spectral lines from stars due to their relative motion	A line representing direction of motion of light reflected from a boundary	The change when light, sound, or other waves bounce backwards off a boundary	The mass an object would mass if you could measure it while it is moving
Red shift	**Reflected ray**	**Reflection**	**Relativistic mass**
Oscillation when frequency of forced vibration is same as natural frequency	Apparent increase in volume caused by reflections, usually arriving within 0.1 second after the original sound	Gap /Aperture	Sound waves that pile up into a shock wave when a source is traveling at or faster than the speed of sound
Resonance	**Reverberation**	**Slit**	**Sonic boom**
Longitudinal wave that requires a medium (travels at 340 ms^{-1} in air)	The dispersion of white light into its component colours ROYGBIV for visible light	Where two waves of equal frequency traveling in opposite directions meet they can produce these	When two or more waves occupy the same position at the same time, they 'overlap' and show a combined pattern
Sound waves	**Spectrum**	**Standing waves**	**Superimposed**

Addition of wave pulses	Electromagnetic waves with frequencies in the infrared range lower than the red end of the visible spectrum	The time taken by a wave to travel through a distance equal to its wavelength	The time taken to complete one oscillation
Superposition of pulses	**Thermal radiation**	**Time Period (of a wave)**	**Time Period (of an oscillation)**
Occurs when a wave arrives at a boundary at the critical angle or beyond and is reflected back	A wave in which the particles of the medium oscillate in a direction perpendicular of the direction of propagation of wave	The point of maximum negative displacement on a transverse wave	Sound waves too high in frequency to be heard by the human ear; frequencies above 20,000Hz
Total internal reflection	**Transverse waves**	**Trough**	**Ultrasonic**
Light consisting of transverse waves vibrating in all conceivable random directions	A disturbance or oscillation that moves through a medium	Top of the wave	Direction which wave is travelling (wave front will be at 90 ^{o} to this)
Unpolarised light	**Wave**	**Wave crest**	**Wave direction**
Point on wave where waves have the same path length from the source	The movement produced involving the transfer of energy but not the transfer of matter	The time required for two successive crests or other successive parts of the wave to pass a given point	The distance traveled by a wave in one second
Wave front	**Wave motion**	**Wave period**	**Wave velocity**

The distance between the two nearest points on a waves (two adjacent crests or two adjacent troughs)			
Wavelength			