

National 5 Physics

Waves

Key Definitions

Word/Term	Definition
Longitudinal Wave	A longitudinal wave is one where the particles vibrate along the same direction as the wave.
Transverse Wave	A transverse wave is one where the particles move at right angles (90°) to the direction of travel of the wave.
Frequency	The number of waves per second.
Period	The time taken for one wave to pass a point. It is also known as the inverse of the frequency.
Crest	The top point (peak) of a wave.
Trough	The bottom point of a wave.
Amplitude	The vertical distance from the axis to the top of the wave (crest) or bottom of the wave (trough). It is also half the vertical height of the wave.
Wavelength	The horizontal distance from one crest to the next crest, one trough to the next trough or one point on a wave to the same point on the next wave.
Wave Speed	The distance travelled per second. It is also the frequency multiplied by the wavelength.
Diffraction	The bending of waves through gaps or around obstacles.
Electromagnetic Spectrum	A group of all the types of electromagnetic radiation ordered in terms of their wavelength/frequency.
Refraction	The change in speed of light as it passes from one medium to another (e.g. from air to glass).
Normal	A dashed line that is drawn perpendicular (at 90°) to any surface.
Angle of Incidence	The angle measured between the incident ray and the normal.
Angle of Refraction	The angle measured between the refracted ray and the normal.