electromagnetic radiation	traverse waves composed of alternating electric and magnetic fields, the components of which are perpendicular to each other and to the direction of the energy flow
electromagnetic spectrum	the range of electromagnetic waves from high frequency gamma waves to low frequency radio waves
focus	a point at which light rays meet or appear to diverge from
frequency	number of waves to pass a point per second; the number of oscillations of a particle per second
frequency modulation	a type of modulation where the frequency of the carrier wave is altered by an imposed signal

global positioning system (GPS)	a system that uses satellites to determine position on the Earth
inverse square law	a relationship in which one quantity is directly proportional to the inverse of another quantity squared
ionosphere	a spherical shell of ionised gas surrounding the Earth; can be used to reflect long-wave radio waves
laser	an acronym for Light Amplification by the Stimulated Emission of Radiation; a source of intense coherent light
longitudinal wave	a wave in which the particles vibrate parallel to the direction of energy transfer

medium	a region through which a wave propagates
microwaves	electromagnetic waves with wavelengths ranging from 1 mm to 0.1 mm
modulation	the alteration of some electronic or acoustic parameter by another
nodal lines	lines joining points of destructive interference
normal	a line drawn at right angles to another line or surface

optical fibre	a glass fibre consisting of two layers, the outer layer has a lower refractive index than the inner layer; used to transmit light over long distances
period	the time for one wave to pass a point; the time for a particle executing simple harmonic motion to complete one oscillation
periodic motion	motion which repeats itself at regular intervals of time
phase	a quantity which tells us what a particle undergoing periodic motion is doing
pitch	a subjective quantity related to the frequency of sound; the higher the pitch, the higher the frequency