Key term	Definition
absorption (absorb(ed))	When energy is transferred from sound (or other waves) to a material.
amplify	To increase the amplitude of a sound so that it sounds louder.
amplitude	The maximum amount of vibration, as measured from the middle position of the wave. Usually measured in metres.
angle of incidence	Between the normal and incident ray.
angle of reflection	Between the normal and reflected ray.
auditory canal	The passage in the ear from the outer ear to the eardrum.
auditory nerve	An electrical signal travels along the auditory nerve to the brain.
auditory range	The lowest and highest frequencies that a type of animal can hear.
brain	The organ in the human body that co-ordinates nervous responses.
cochlea	Snail shaped tube in the inner ear with the sensory cells that detect sound.
concave	A lens that is thinner in the middle and that spreads out light rays.
continuous	A variable that has values that can be any value.
converging	Bringing rays of light together.
convex	A lens that is thicker in the middle and that bends light rays towards each other.
cornea	The transparent layer at the front of the eye that refracts light.
crest	The top of a wave.
decibel	A commonly used unit of sound intensity or loudness (dB).
diffuse reflection	Reflection from a rough surface.
dispersion	The splitting up of a ray of light of mixed wavelengths by refraction into its components.

diverging	The type of lens that spreads light out and forms a virtual image.
ear	The organ of the body that detects sound.
eardrum	A membrane that transmits sound vibrations from the outer ear to the middle ear.
echo	Reflection of sound waves from a surface back to the listener.
eclipse	The appearance of the Sun when light is blocked by the Moon, or the appearance of the Moon when light is blocked by the Earth.
filter	A piece of material that allows some radiation (colours) through but absorbs the rest.
focal point	The point at which the rays refracted by a convex lens cross over.
focus	Another name for the focal point.
frequency	The number of waves produced in one second, in hertz.
hertz	The unit of frequency (Hz).
image	The point from which rays of light entering the eye appear to have originated.
incident ray	The incoming ray from a source of light.
infrasound	Sound below a frequency of 20Hz.
inner ear	The semi-circular canals that help you to balance, and your cochlea.
inverted	Upside down.
iris	The coloured part of your eye.
kilohertz	1kilohertz (kHz) = 1000 hertz (Hz)
law of reflection	The angle of incidence is equal to the angle of reflection.
lens	A device made of shaped glass that focusses light rays from objects to form an image.
longitudinal wave	Where the direction of vibration is the same as that of the wave.
luminous	Gives out light.

medium	The material that affects light or sound (or other waves) by slowing it down or transferring the wave.
middle ear	The ossicles (small bones) that transfer vibrations from the outer ear to the middle ear.
non-luminous	Objects that produce no light.
normal line	An imaginary line from which angles are measured, at right angles to the surface.
opaque	A material that allows no light to pass through it.
optic nerve	A paired sensory nerve that runs from each eye to the brain.
oscilloscope	Device able to view patterns of sound waves that have been turned into electrical signals.
ossicle	The small bones of the inner ear (hammer, anvil, and stirrup) that transfer vibrations from the eardrum to the oval window.
outer ear	The pinna, auditory canal, and eardrum.
oval window	The membrane that connects the ossicles to the cochlea.
peak	The top of a wave.
photoreceptor	A specialised cell that is sensitive to light.
pinna	The outside part of the ear that we can see.
pitch	How high or low a sound is. A low (high) pitch sound has a low (high) frequency.
plane	A mirror with a flat, reflective surface.
primary colour	The colours red, blue, and green.
prism	A triangular-shaped piece of glass used to produce a spectrum of light.
pupil	The hole in the front of your eye where light goes in.
real	An image that you can put on a screen.
reflect (ion)	The change in direction of light or sound when it hits a boundary and bounces back.
reflected ray	The outgoing ray that has been reflected from a surface.

refraction	Change in the direction of light going from one material into another.
retina	Layer at the back of the eye with light detecting cells, where an image is formed.
scattered	When light bounces off an object in all directions.
secondary colour	Colours that can be obtained by mixing two primary colours.
spectrum	A band of light produced when light is spread out by a prism.
specular reflection	Reflection from a smooth surface.
speed of light	The distance light travels in one second (300 million m/s).
speed of sound	The distance sound travels in one second (330 m/s).
translucent	A material that allows some light to pass through it.
transparent	A material that allows all light to pass through it.
trough	The bottom of a wave.
ultrasound	Sound at a frequency greater than 20 000 Hz, beyond the range of human hearing.
vacuum	A space with no particles of matter in it.
vibration	A back and forth motion that repeats.
virtual	An image that cannot be focussed onto a screen.
volume	How loud or quiet a sound is, in decibels (dB).
wavelength	Distance between two corresponding points on a wave, in metres.