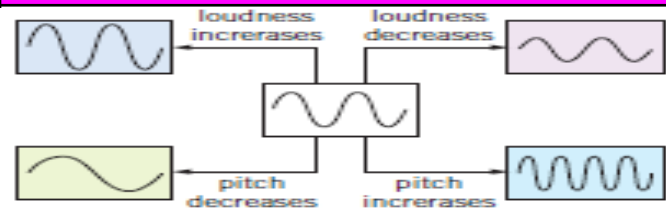


Properties of Waves

1	Transverse eg light	Travel at 90 degree direction of energy transfer Do not need a medium to travel through
2	Longitudinal eg sound	Travel in the direction of energy transfer •• Need a medium to travel through



Sound waves



1	Loudness	Amplitude of wave changes
2	Pitch	Wave length changes

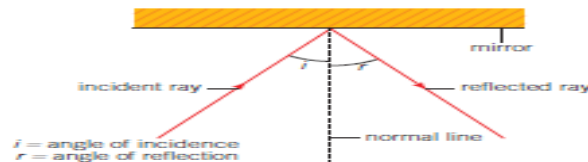
Colour



1	Light can be split using a prism and is made up of different colours of light Primary colours can be mixed to form secondary colours	
2	Primary	Red, Blue, Green
3	Secondary	Cyan, Magenta, Yellow

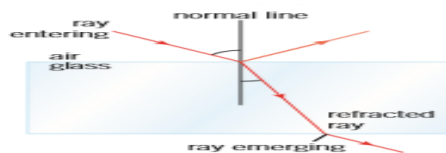
Law of Reflection

1	Law of Reflection	States that the angle of incidence will be equal to the angle of reflection
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Law of Refraction

1	When the wave passes into a more dense material from a less dense material it will bend towards the normal , e.g. air into glass (slows down)	
2	When the wave passes into a less dense material from a more dense material it bends away from the normal e.g. glass to air (speeds up)	



Hearing

1	The pinna directs sound along an auditory canal into the eardrum	
2	The vibration from the eardrum moves onto the ossicles which amplify the sound	
3	This passes the sound to the cochlea where tiny hairs detect the vibrations and pass this along to the auditory nerve as electrical signals to the brain.	

Key Vocabulary

1	Amplitude	The distance from the middle to the top of the wave
2	Wavelength	The distance between a point on a wave to the same point on the next wave
3	Trough	The bottom of the wave
4	Peak	The top of the wave
5	Frequency	How many waves pass a fixed point in a second
6	Hertz	Frequency is measured in Hertz
7	Ultrasound	Soundwaves above 20,000 (Hz) too high for humans to hear

Light and the eye

1	Light entering the eye is refracted by the lens focusing it on the retina as an inverted image	
2	Photoreceptors detect the light hitting your retina and send an electrical impulse to the brain	
3	If the light is not focuses properly on the retina or the eye you cannot see	
4	Long sighted people have the light focus behind the retina	
	Short sighted people have the light focus in front of the retina	

