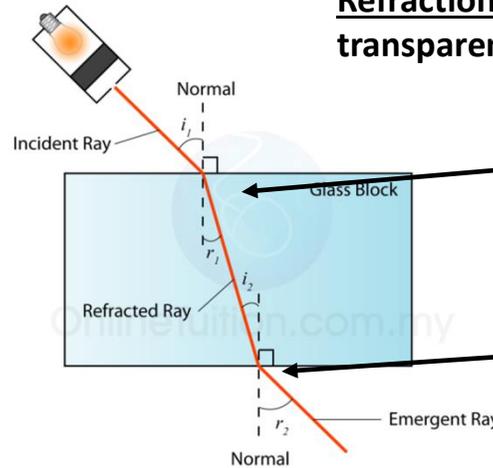


Science - Light Knowledge Organiser

Year 8 - Term 1

Luminous	Objects that create light eg. sun, light bulb
Non-luminous	Objects that do not create light
Opaque	Material that does not allow light to pass through it
Transparent	Material that light can travel through
Translucent	Material through which a glow of light can be seen, but not a clear image.
Reflection	Light bouncing back off a shiny surface
Refraction	Change in direction of light as it passes from one transparent material to another eg air to glass or water.
Angle of incidence	Angle between an incoming light ray and the Normal line on a mirror.
Angle of reflection	Angle between the Normal line and ray of light leaving a mirror
Normal line	Imaginary line at right angles to a reflective surface, drawn at the point a light beam hits it.
Total internal reflection	When light is reflected inside a piece of glass or other transparent material
Wave	a way of transferring light energy
Wave length	The distance between the top of one wave and the top of the next.
Light dispersion	The separating of the colours in light, usually through a prism. Occurs in rainbows.
Light filters	Transparent coloured sheet that only allows a specific colour of light to pass through.
Primary colour	The 3 main colours that can make white light (red, blue and green).
Prism	A block of clear, colourless glass or plastic, which is usually triangular. Use to split light into its separate colours.

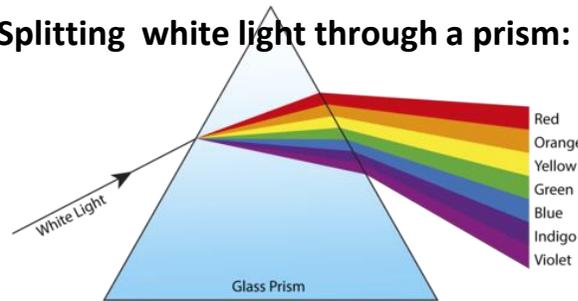
Refraction: light appears to bend as it travels through transparent materials of different density



Light travelling from low to high density materials – light bends towards the Normal Line.

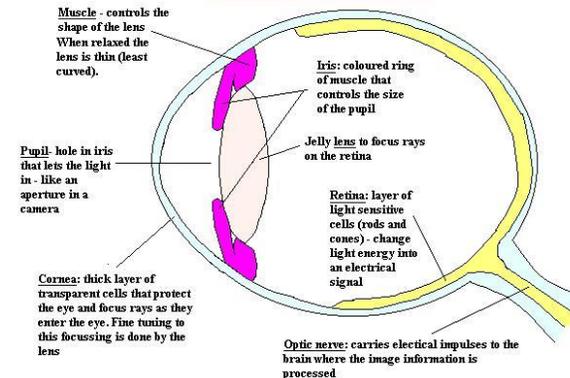
Light travelling from high to low density – light bends away from the Normal line.

Splitting white light through a prism:



The eye: collects light through the pupil & the lens bends it to focus on the retina. Images fall upside-down on the retina.

The Human Eye



Reflection: light bounces off a shiny reflective surface

angle of incidence = angle of reflection

