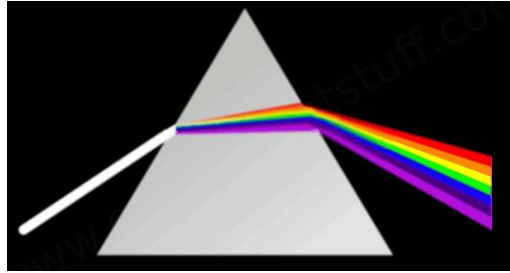




Knowledge



The colours that blend together to make white light are the same colours as the rainbow: Red Orange Yellow Green Blue Indigo Violet

Isaac Newton discovered that when he aimed a ray of light at a clear triangular prism, it broke up the ray of light into the individual colours of the rainbow. When light is shone through the prism, the ray of light refracted into the colours of the rainbow.

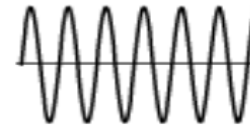


Refraction is the change in the speed of a wavelength while it passes through a material. This is most commonly seen with light and transparent objects, such as glass or water. The change in speed causes the waves to change direction, affecting the way that we see things!

The pitch of a sound is how high or low it is.
A squeak of a mouse has a high pitch .
A roar of a lion has a low pitch.

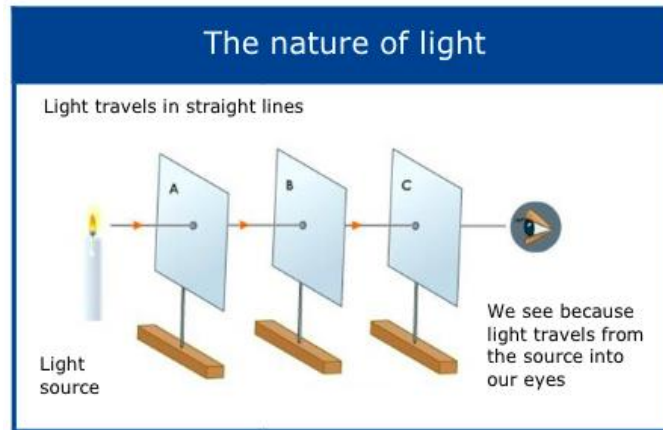


Lower Pitch



Higher Pitch

A high pitch sound is made because it has a high frequency. The sound source vibrates many times a second.



Vibrations - something moving backwards and forwards very quickly.

Wave - sound wave is an invisible wave which can move through different mediums.

Amplitude - measure of the strength of a sound wave. Size of the vibration.

Frequency - how many vibrations are made in one second.

Pitch - how high or low a sound is.

Reflect - to throw back or bounce light from a surface.

Refraction - change in direction of any wave as a result of its travelling at different speeds at different points along the wave front.