






visible form of energy

natural or man-made

sometimes called **white light**

- a colourless light that contains all the colours of the visible spectrum

a light source **emits** light

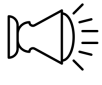





light

only travels in **straight lines**

300,000,000 metres each second

circumnavigates the Earth **7.5 times** in just **one** second

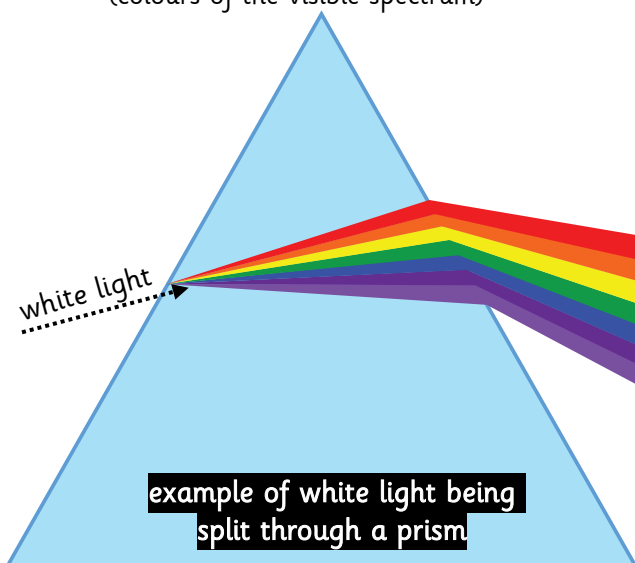
visible spectrum

white light is shone through a **prism**

the colours of the visible spectrum **separate**

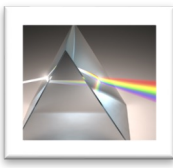
produce a rainbow (colours of the visible spectrum)

example of white light being split through a prism




prism

transparent object with two triangular ends and three rectangular sides.



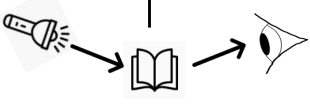
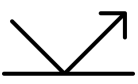
In 1666 (more than 300 years ago) **Isaac Newton** discovered light was made of colours

when spun, the colours of the visible spectrum combine to form white




we see an object

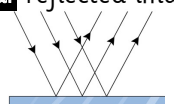
light is **reflected** off a surface and enters our eyes

shiny or **smooth** surfaces

reflect light in the **same** direction

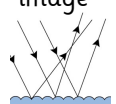
clear reflected image



rough surfaces

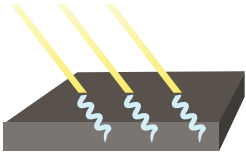
reflect light in a **scattered** direction

less clear reflected image



dull or **dark** surfaces

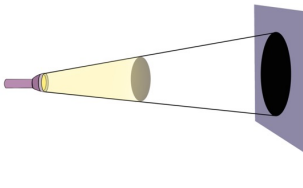
absorb light and heat energy



shadow

when an object blocks the path of light

a space that lacks light



How we see colour

objects that have colour pigments **absorb** light

a blue object absorbs all other light colours

blue is the only colour reflected and seen

white light

