# SCIENCE

## ELABORATE and BUILD on the KNOWLEDGE of LIGHT

Year __
_____ Term

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**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

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**visible spectrum**

**white light** is shone through a **prism**

the colours of the visible spectrum **separate**

produce a rainbow
(colours of the visible spectrum)

**prism**

**transparent** object with two triangular ends and three rectangular sides.
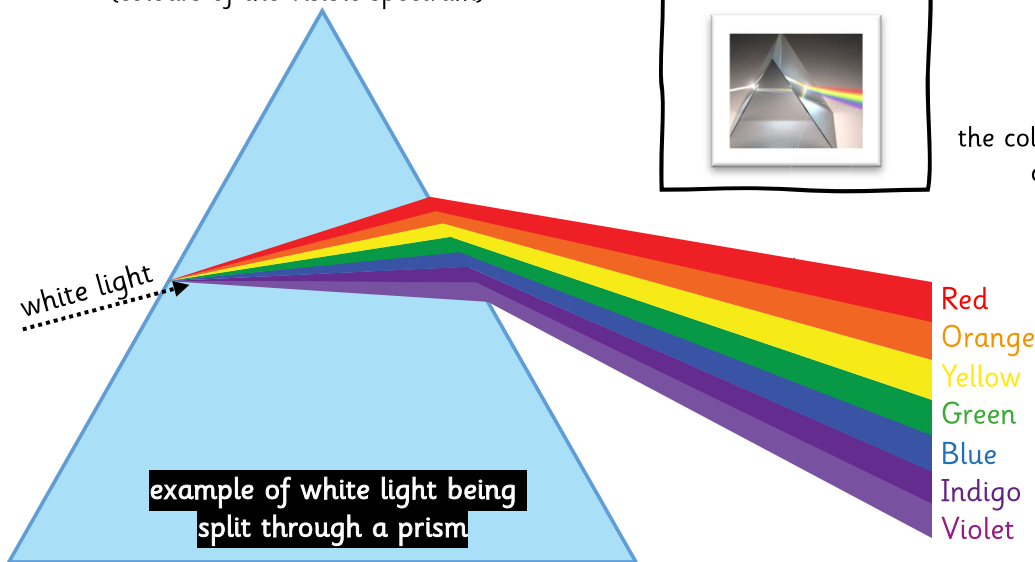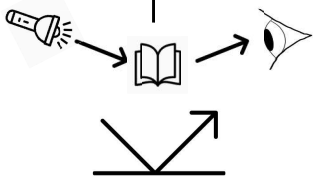
In 1666
(more than 300 years ago)

**Isaac Newton**

discovered light was made of colours

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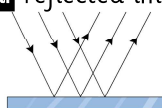the colours of the visible spectrum combine to form white

white light

example of white light being split through a prism

Red
Orange
Yellow
Green
Blue
Indigo
Violet

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**we see an object**

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

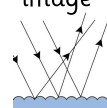**shiny** or **smooth** surfaces

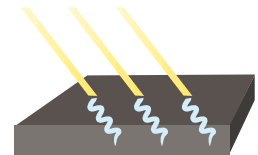reflect light in the **same** direction

**clear** reflected image

**rough** surfaces

reflect light in a **scattered** direction

**less clear** reflected image

**dull** or **dark** surfaces
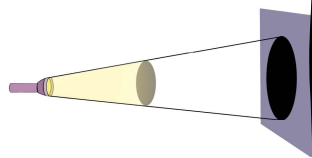
**absorb** light and heat energy

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**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

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