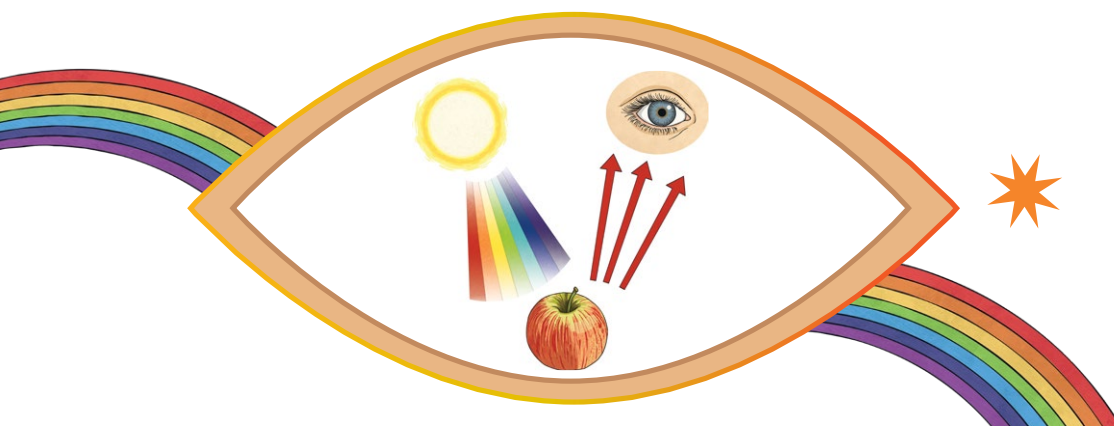


The Visible Spectrum

7 Isaac Newton, an English scientist and mathematician,
16 made an observation about light during a series of
23 investigations made in the 1660s. After experimenting
32 with shining light through a prism, he discovered that
41 white light was in fact composed of seven different
50 colours. These colours are those found in a rainbow
58 (red, orange, yellow, green, blue, indigo and violet)
64 and are called the '**Visible Spectrum**'.

75 Light appears white to our eyes as each colour within a
85 ray of light has a different wavelength and the colours
93 merge together. When light travels through a transparent
102 material, such as a prism, it refracts or bends.
111 As each colour wavelength is different and bends slightly
119 differently, the colours of the spectrum are separated.



Questions



1. What object was Isaac Newton experimenting shining light through?



2. Why might someone choose to read this text?
Explain your answer.



3. Find and copy one word which shows that something is clear or see-through.

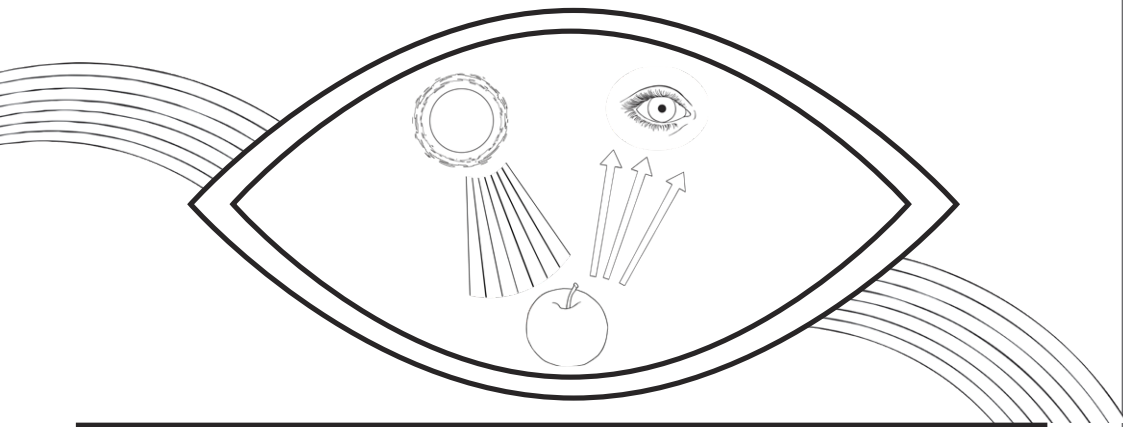


4. Why do you think the author chose to put '**Visible Spectrum**' in bold?

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Answers



1. What object was Isaac Newton experimenting shining light through?

Isaac Newton was experimenting shining light through a prism.



2. Why might someone choose to read this text? Explain your answer.

Pupils' own responses, such as: I think that someone may choose to read this text if they are studying Isaac Newton or the topic of 'Light'.



3. Find and copy one word which shows that something is clear or see-through.

transparent



4. Why do you think the author chose to put 'Visible Spectrum' in bold?

Pupils' own responses, such as: I think the author chose to put 'Visible Spectrum' in bold to emphasise what the text is about and to make it stand out to the reader so that they may be more likely to remember it.