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| **Logo  Description automatically generatedLogo  Description automatically generatedWhingate Primary School – Science** | |
| Light – Can humans see in the dark? | Shape  Description automatically generatedYEAR 6 |

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| Interesting Fact 1: | Interesting Fact 2: | Interesting Fact 3: | Your answer to our topic question: |
| Visible light travels almost 186,282 miles per second through space. | The human eye can detect 10 million different colours. | Eyes perceive things upside down. |  |

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| Diagrams: | Vocabulary: | What we will learn in this unit (skills): |
| What is reflection of light -Science for Kids - YouTube  How the eye works - Dominic Tunnell Opticians | **beam** – a line of light or particles.  **dispersion** – the separation of white light into colours.  **light source** – anything which makes light, either natural or artificial.  **periscope** – a device consisting of a long tube containing mirrors that enables the user to see over the top of something.  **rainbow** – an arch of colour in the sky caused by the refraction and dispersion of light by rain or other water droplets in the atmosphere.  **reflection** -  **refraction** -  **shadow** -  **spectrum** – a band of coloured light as seen in a rainbow. | We will:  **Ask questions** - Recognise scientific questions which do not yet have definitive answers and use a range of scientific enquiries to explore possible answers.  **Make predictions** - Identify scientific evidence that has been used to support or refute ideas or arguments and use this to support predictions.  **Record data** - Record data and results of increasing complexity using classification keys.  **Draw conclusions** - Provide straightforward explanations for differences in repeated measurements or observations. |
| Sticky Knowledge: | What we will learn in this unit (knowledge): |
| - Light travels in straight lines.  - Objects are seen because they give out light or reflect light into our eyes.  - Shadows have the same shape as the objects that cast them. | We will:  - recognise that light appears to travel in straight lines.  - use the ideas that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye.  - explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.  - use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. |
| Assessment - Fill in the gaps: |
| **\_\_\_\_\_\_\_\_\_\_\_\_\_\_** is the bending of light whereas **\_\_\_\_\_\_\_\_\_\_\_\_** is the throwing back of light from a surface.  A **\_\_\_\_\_\_\_\_\_\_\_\_** is a dark are or space coming between a light source and an object. |