| YEAR 6 SCIENCE- LIGHT-Autumn 2 | | |
|---|---|--|
| Tier 3 Vocabulary | Knowledge Facts | Book Curriculum |
| Isaac Newton: Born in 1643, Newton had many scientific theories, such as, 'red, yellow and blue were the primary colors from which all other colors are derived.' | Light travels in straight lines: from a light source to our eyes, or to an object and then our eyes. | WHEN SKY |
| Light ray: Straight line drawn in a diagram to represent the direction of light. | Mirrors reflect light and help us see objects. Periscopes use mirrors to allow you to see objects you would not usually be able to see. | |
| Straight lines: Lines drawn at 180 degrees. | When light travels from air through water, glass or anything that lets light through, it gets bent. This bending is called 'refraction'. | |
| Reflection: The bouncing of light off a surface. | White light contains all colours. When it passes through a prism or water, it bends (refracts) and splits into a spectrum of colours: red, orange, yellow, green, blue, indigo and violet. Sunlight is an example of white light. | Other recommended reads |
| Angle: The space formed when two lines or rays meet at a point (vertex). | White light enables us to see all colours (spectrum). However, A filter only allows certain colours of light through, e.g. a green filter allows green light through, but absorbs the other colours. | Experiments LIGHTHOUSE LIGHTHOUSE |
| Plane Mirror: A flat, polished mirror (not curved) that reflects light to form an image. | Shadows are formed when an opaque object blocks a ray of light. Shadows are the same shape as the object that casts them. | |
| Opaque: Not able to be seen through; not transparent. | National Curriculum End Points I can recognise that light appears to travels in straight lines. I can use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye. I can explain that we see things because light travels from light sources to our eyes or from light sources to object and then to our eyes. I can use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them. | PERISCOPE |
| Refraction: The bending of light as it passes from one transparent substance into another. | | Object |
| Spectrum: A band of colors, as seen in a rainbow, | | |
| produced by separation of light. | | 45° Angled Observer |