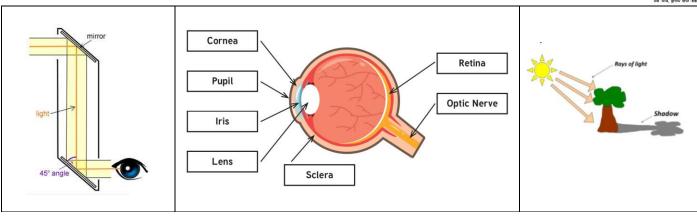
St Mary's Horsforth – Science Knowledge Organiser Year 6 – Light – Physics - Autumn Half Term 1.





What should I already know?

- Certain things produce light, usually by burning (e.g. the Sun) or electricity (e.g. street lights)
- Shiny materials do not make light but reflect it.
- Shadows are caused when certain materials block light.
- Light travels in straight lines. When light is blocked by an opaque object, a dark shadow is formed.
- The further away the light source is, the smaller the shadow is. The closer the source of the light, the bigger the shadow.

What will I know at the end of the unit?

- I can 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.
- I can recognise that light appears to travel in straight lines.
- I can create a periscope to support the theory of light travelling 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 report using evidence how shadows can be changed and explain why they have the same shape as the objects that cast them.

Knowledge Vocabulary	Working Scientific Vocabulary
periscope	classify
source	compare
shadow	observe
opaque – translucent- transparent	gather
light rays	record
reflection	suggest
retracted	investigate
	data present- line graphs

Recommended Reads	Inventor/ Scientist
INVISIBLE BRIGHT, LIGHT	Percy Shaw
	The Cats Eye Yorkshireman

Suggested Investigations

Fair Testing: How does the angle that a light ray hits a plane mirror affect the angle at which it reflects off the surface?

Identify & Classify: Can you identify all the colours of light that make white light when mixed together?

Observing over time: How does my shadow change over the day?