



What should I already know?	What will I know at the end of the unit?
<ul style="list-style-type: none"> <li>• Certain things produce light, usually by burning (e.g. the Sun) or electricity (e.g. street lights)</li> <li>• Shiny materials do not make light but reflect it.</li> <li>• Shadows are caused when certain materials block light.</li> <li>• Light travels in straight lines. When light is blocked by an opaque object, a dark shadow is formed.</li> <li>• The further away the light source is, the smaller the shadow is. The closer the source of the light, the bigger the shadow.</li> </ul>	<ul style="list-style-type: none"> <li>• 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.</li> <li>• I can recognise that light appears to travel in straight lines.</li> <li>• I can create a periscope to support the theory of light travelling in straight lines.</li> <li>• 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.</li> <li>• I can report using evidence how shadows can be changed and explain why they have the same shape as the objects that cast them.</li> </ul>

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

Recommended Reads	Inventor/ Scientist
	<p>Percy Shaw</p>  <p>The Cats Eye Yorkshireman</p>

Suggested Investigations
<p>Fair Testing: How does the angle that a light ray hits a plane mirror affect the angle at which it reflects off the surface?</p> <p>Identify &amp; Classify: Can you identify all the colours of light that make white light when mixed together?</p> <p>Observing over time: How does my shadow change over the day?</p>