



# Year 3: Light and Dark Knowledge Mat

Subject Specific Vocabulary		Interesting Books	Sticky Knowledge about light and dark
<b>reflection</b>	It occurs when a ray of light hits a surface and bounces off.	 	<input type="checkbox"/> Black and dark objects absorb light and heat whilst white or light objects reflects it.
<b>shadows</b>	A shadow is formed when an object blocks out the light. The object must be opaque or translucent to make a shadow.		<input type="checkbox"/> Some objects like glass are transparent which means that light can shine through them.
<b>light source</b>	The main light source for Earth is the Sun. Some other luminous objects give out light, for example, torches, candles and lamps.		<input type="checkbox"/> Our main source of light on Earth comes from the Sun. A ray of light travels very fast.
<b>opaque</b>	Opaque objects do not allow light to pass through them. In most cases creating a shadow.		<input type="checkbox"/> Darkness is made by blocking light from the sun or some other source of light, which makes shadows
<b>refraction</b>	It is the change of direction of a light ray as it passes through different surfaces, for example, from air to water.	Important facts to know by the end of the light and dark topic	
<b>periscope</b>	A periscope is an instrument people use to look at things from a hidden position.	<ul style="list-style-type: none"> <li>• <b>What dark is (in relation to absence of light).</b></li> <li>• <b>Know that we need light so we can see things.</b></li> <li>• <b>Know that light can be reflected.</b></li> <li>• <b>Know how a shadow is formed.</b></li> <li>• <b>Understand why shadows change shape.</b></li> <li>• <b>Know the dangers of looking directly at the Sun.</b></li> <li>• <b>Know how to protect oneself from direct sunlight.</b></li> </ul>	<input type="checkbox"/> The Sun and other stars, fires, torches and lamps all make their own light and so are examples of sources of light.
<b>nocturnal</b>	If something is nocturnal, it belongs to or is active at night. For example, bats and owls		<input type="checkbox"/> A mirror is not a source of light it merely reflects light. Similarly, the Moon is not a source of light it reflects the light from the Sun.
<b>orbits</b>	An orbit is a repeating path that one celestial body takes around another.		<input type="checkbox"/> Some animals are nocturnal. They are awake at night and can see very well in the dark. Our eyes aren't designed to see in the night.
<b>convex</b>	Convex lenses, also called positive lenses, are lenses that curve outward from the edges to the centre.		
<b>concave</b>	A concave lens is one where the centre of the lens is thinner than the edges.		