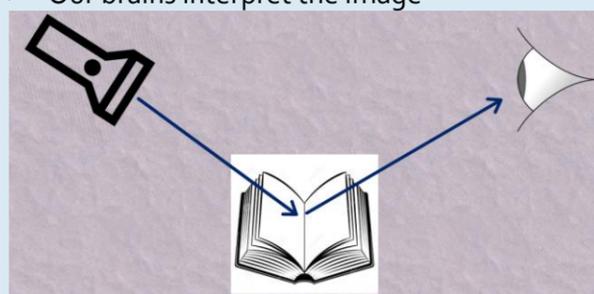
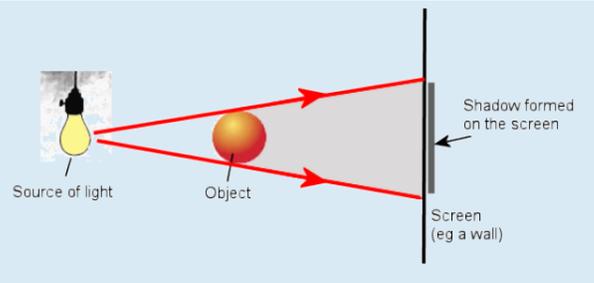


# Year 6 – Light

Scientific Definitions	
<b>Light</b>	Light is a form of energy
<b>Primary Light Source</b>	A primary light source creates the light that it emits
<b>Secondary Light Source</b>	Secondary light sources receive light from another source and reflect it
<b>Reflected</b>	Light bounces off the object
<b>Darkness</b>	Absence of light
<b>Shadow</b>	A shadow is the absence of some of the available light. This occurs when light waves are blocked.
<b>Transparent</b>	A material which lets light through.
<b>Translucent</b>	A material which partially blocks light
<b>Opaque</b>	A material which blocks light completely

Quiz Questions	
What is light?	A form of energy
What is a primary light source?	Something which converts other forms of energy into light energy.
Which of these is a primary light source?	Flame, fireworks, sun, screen
What is a secondary light source?	Something that receives light from another source and reflects it.
Which of these is a secondary light source?	Book, house, grass, cat, man
How does light travel?	In a straight line.
How is a shadow formed?	When an object blocks the light waves.
Why is a shadow formed?	There is an absence of light.
Will light travel through an opaque object?	No
Will light travel through a translucent object?	Partially
Will light travel through a transparent object?	Yes
What happens when light hits an object?	It is scattered and reflected.
Can we see without light?	No
How do we see objects?	Light travels in a straight line to the object, bounces off the object and travels in a straight line to our eyes

Scientific Concepts	
<b>Primary sources of light</b>	<ul style="list-style-type: none"> <li>Converts other forms of energy into light energy</li> <li>Emit energy as light</li> </ul> Examples: candle, sun and computer screen
<b>Secondary sources of light</b>	<ul style="list-style-type: none"> <li>Scatter or reflect light from the primary sources</li> <li>They don't produce the light they emit</li> <li>Examples: moon, book or human</li> </ul>
<b>How does light travel?</b>	<ul style="list-style-type: none"> <li>Light travels at about 300,000 kilometers per second</li> <li>Light travels in a straight line.</li> </ul>
<b>How we see primary sources of light</b>	<ul style="list-style-type: none"> <li>Light travels in a straight line from the primary light source into our eyes</li> </ul> 
<b>How we see objects</b>	<ul style="list-style-type: none"> <li>Light travels in a straight line and hits the object</li> <li>The object reflects the light</li> <li>The reflected light travels in a straight line to our eyes</li> <li>Our brains interpret the image</li> </ul> 

Scientific Concepts	
Shadows	
<b>What is a shadow?</b>	A shadow is the absence of some of the available light.
<b>How are shadows made?</b>	A shadow is formed when an object blocks the light waves.
<b>Is a shadow black?</b>	A shadow is rarely completely black because light arrives at the shaded area from other directions.
<b>Diagram</b>	
Transparent materials	
<b>Transparent</b>	<ul style="list-style-type: none"> <li>Transparent materials let light pass through them in straight lines</li> <li>You can see clearly through them</li> </ul>
<b>Examples</b>	glass, clear plastic
Translucent materials	
<b>Translucent</b>	<ul style="list-style-type: none"> <li>Materials let <b>some</b> light through</li> <li>They scatter the light in all directions, so that you cannot see clearly through them.</li> </ul>
<b>Examples</b>	tissue paper, grease proof paper and frosted glass
Opaque materials	
<b>Opaque</b>	<ul style="list-style-type: none"> <li>Materials block light completely</li> </ul>
<b>Examples</b>	wood, metals and bricks
	