



# Year 6 – Spring 2 – Science – Pupil Knowledge Organiser



What do I already know?	What am I learning now?																									
<ul style="list-style-type: none"> <li>• Dark is the absence of light.</li> <li>• We see sources of light when their light travels to our eyes.</li> <li>• Light travels in straight lines until it encounters a surface.</li> <li>• We see non-luminous objects when light reflects off them and into our eyes.</li> <li>• A shadow will always form on the side behind the object.</li> </ul>	<ol style="list-style-type: none"> <li>1. Can we plan an investigation using our prior learning? (WS)</li> <li>2. How does the distance between a light source and an object affect its shadow? (WS)</li> <li>3. How do we represent our results in a graph? (WS)</li> <li>4. What makes a scientific conclusion? (WS)</li> <li>5. How do scientists evaluate their investigations? (WS)</li> </ol>																									
Key Knowledge: Light (Part 1) Working Scientifically Focus	Key Skills: Working Scientifically	Key Vocabulary																								
<div data-bbox="120 676 582 847"> <p>When white light strikes an object, some wavelengths are absorbed, and others are reflected.</p> </div> <div data-bbox="165 979 528 1142"> <p>According to the law of reflection, the angle of reflection is always equal to the angle of incidence.</p> </div> <div data-bbox="663 676 1061 847"> <p>When light encounters opaque objects, it cannot pass through, forming a shadow.</p> </div> <div data-bbox="663 943 1061 1114"> <p>The shape of the shadow matches the object that casts it.</p> <p>This is because the light rays around it are not being blocked.</p> </div>	<div data-bbox="1137 619 1285 762"> <p>Ask Questions</p> </div> <div data-bbox="1167 799 1256 943"> <p>Enquiry</p> </div> <div data-bbox="1160 975 1256 1118"> <p>Observe</p> </div> <div data-bbox="1151 1150 1267 1326"> <p>Record/ Present</p> </div> <div data-bbox="1330 724 1458 868"> <p>Conclusions</p> </div> <div data-bbox="1330 900 1458 1043"> <p>Evaluation</p> </div> <div data-bbox="1330 1075 1458 1219"> <p>Communicate</p> </div>	<table border="0"> <tr> <td data-bbox="1496 501 1644 533">light</td> <td data-bbox="1666 501 2128 564">The energy that is transferred to our eyes making it possible for us to see.</td> </tr> <tr> <td data-bbox="1496 587 1644 619">shadow</td> <td data-bbox="1666 587 2128 651">Dark area formed when light is blocked by an opaque object.</td> </tr> <tr> <td data-bbox="1496 673 1644 705">light source</td> <td data-bbox="1666 673 2128 705">Origin of light, such as a lamp or the sun.</td> </tr> <tr> <td data-bbox="1496 721 1644 785">independent variable</td> <td data-bbox="1666 721 2128 753">The thing you change in an investigation.</td> </tr> <tr> <td data-bbox="1496 807 1644 871">dependent variable</td> <td data-bbox="1666 807 2128 871">The thing you measure in an investigation.</td> </tr> <tr> <td data-bbox="1496 893 1644 957">control variable</td> <td data-bbox="1666 893 2128 957">The things you keep the same to make it a fair test.</td> </tr> <tr> <td data-bbox="1496 979 1644 1011">hazard</td> <td data-bbox="1666 979 2128 1011">Something which could hurt you.</td> </tr> <tr> <td data-bbox="1496 1034 1644 1066">risk</td> <td data-bbox="1666 1034 2128 1098">The chance that something could hurt you</td> </tr> <tr> <td data-bbox="1496 1120 1644 1152">conclusion</td> <td data-bbox="1666 1120 2128 1184">What you learn from the results of an investigation.</td> </tr> <tr> <td data-bbox="1496 1206 1644 1238">graph</td> <td data-bbox="1666 1206 2128 1270">A diagram that shows results in a clear way, to spot patterns in data.</td> </tr> <tr> <td data-bbox="1496 1292 1644 1356">line of best fit</td> <td data-bbox="1666 1292 2128 1356">A smooth line drawn on a graph to show the general trend of the results.</td> </tr> <tr> <td data-bbox="1496 1378 1644 1410">evaluation</td> <td data-bbox="1666 1378 2128 1442">Thinking about how an investigation can be made better next time.</td> </tr> </table>	light	The energy that is transferred to our eyes making it possible for us to see.	shadow	Dark area formed when light is blocked by an opaque object.	light source	Origin of light, such as a lamp or the sun.	independent variable	The thing you change in an investigation.	dependent variable	The thing you measure in an investigation.	control variable	The things you keep the same to make it a fair test.	hazard	Something which could hurt you.	risk	The chance that something could hurt you	conclusion	What you learn from the results of an investigation.	graph	A diagram that shows results in a clear way, to spot patterns in data.	line of best fit	A smooth line drawn on a graph to show the general trend of the results.	evaluation	Thinking about how an investigation can be made better next time.
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