



# ALMOND HILL JUNIOR SCHOOL MEDIUM TERM PLAN

TOPIC TITLE/SUBJECT: Science – Light

YEAR GROUP: 6

TERM: Summer 1

<p><b>Vocabulary</b></p> <p>Light Light source Reflection Incident ray Reflected ray Refraction Spectrum Prism Shadow Transparent Translucent Opaque</p>	<p><b>Skills</b></p> <p><i>Enquiry and working scientifically skills (UKS2)</i></p> <ul style="list-style-type: none"> <li>plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary</li> <li>take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate</li> <li>record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs</li> <li>use test results to make predictions to set up further comparative and fair tests</li> <li>report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in results, in oral and written forms such as displays and other presentations</li> <li>identify scientific evidence that has been used to support or refute ideas or arguments.</li> </ul>	<p><b>What we already know (from Y3/Su2 light unit)</b></p> <p><b>Key Knowledge</b> We need <b>light</b> to be able to see things. <b>Light</b> travels in a straight line. When <b>light</b> hits an object, it is <b>reflected</b> (bounces off). If the <b>reflected light</b> hits our eyes, we can see the object. Some surfaces and materials <b>reflect light</b> well. Other materials do not <b>reflect light</b> well. <b>Reflective</b> surfaces and materials can be very useful...</p> <p>Mirrors <b>reflect light</b> very well, so they create a clear image. An image in a mirror appears to be reversed. For example, if you look in a mirror and raise your right hand, the mirror image appears to raise its left hand.</p> <p>A shadow is caused when <b>light</b> is blocked by an <b>opaque</b> object. A shadow is larger when an object is closer to the <b>light</b> source. This is because it blocks more of the <b>light</b>.</p>
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**Illustration/Outcomes**

**Seeing Colour**

We use sweets, coloured squares of cellophane

Create a shadow puppet theatre and explore why shadows have the same shape as the objects that casts them.

**Shadow Theatre**

Exploration of prisms and colour wheels to understand how light travels in straight lines and is refracted.

Explore how light travels and reflects

**Concepts**

**Key Knowledge**  
We need **light** to be able to see things. **Light** waves travel out from sources of **light** in straight lines. These lines are often called rays or beams of **light**.

**Light** from the sun travels in a straight line and hits the chair. The **light** ray is then **reflected** off the chair and travels in a straight line to the girl's eye, enabling her to see the chair.

**Other/Cross-Curricular links with English/Maths/Adaptation for SEND**

SEND – (word banks, differentiated tasks, adult support, use of Ipads for research etc)

Maths – use of a range of tables and keys Speaking and listening – suggest reasons for ideas and listen to the ideas of others – debate opinions based on evidence

Topic reading/English – learning about a famous scientist (reading and comprehension skills)