ALMOND HILL JUNIOR SCHOOL MEDIUM TERM PLAN

TOPIC TITLE/SUBJECT: Science – Light **YEAR GROUP: 6** **TERM: Summer 1**

Vocabulary

Light
Light source
Reflection
Incident ray
Reflected ray
Refraction
Spectrum
Prism
Shadow
Transparent
Translucent
Opaque

Skills

Enquiry and working scientifically skills (UKS2)

- **plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary**
- **take measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate**
- **record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs**
- use test results to make predictions to set up further comparative and fair tests
- 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
- **identify scientific evidence that has been used to support or refute ideas or arguments.**

What we already know (from Y3/Su2 light unit)

- We need light to be able to see things. Light travels in a straight line. When light hits an object, it is reflected (bounces off). If the reflected light hits our eyes, we can see the object. Some surfaces and materials reflect light well. Other materials do not reflect light well. Reflective surfaces and materials can be very useful.
- Mirrors reflect light 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.
- A shadow is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light.

Outcomes

- Create a shadow puppet theatre and explore why shadows have the same shape as the objects that casts them.
- Exploration of prisms and colour wheels to understand how light travels in straight lines and is refracted.
- Explore how light travels and reflects
- We use sweets, coloured squares of cellophane and coloured

Concepts

- 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 the reflected off the chair and travels in a straight line 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)