**St Mary’s C of E Primary School, Writhlington**

*‘Inspiring Learning Together’*

**Scheme of Work + Knowledge Organiser**

**National Curriculum Knowledge outcomes:**

* planning different types of scientific enquiries to answer questions,
* taking measurements, using a range of scientific equipment, with increasing accuracy and precision
* using simple models to describe scientific ideas
* reporting and presenting findings from enquiries, including conclusions, causal relationships and explanations of results, in oral and written forms such as displays and other presentations
* identifying scientific evidence that has been used to support or refute ideas or arguments.

**The Learning Journey:**

**To explain how light travels**

**To explain how light is reflected**Making a periscope to explore reflection.

**To investigate refraction**Using prisms.

**To explain how a prism affects a ray of light.**

**To investigate how light helps us see colours**Making a colour wheel.

**To explain how shadows are formed.**

**To understand how the size of shadows changes relative to distance from a light source**To present to the class a short shadow puppet show.

**To observe phenomena related to light and how we see
To record what they observe**

A carousel of activities to investigate.

**Key Vocabulary:**

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| **Spelling** | **Definition/Sentence** |
| **light** | **Natural agent which stimulates sight and makes things visible**  |
| **Periscope**  | **A tube with mirrors or prisms attached so that you can see things which might be out of sight otherwise.**  |
| **reflection** | **The throwing back of a surface of light, heat or sound without it being absorbed.**  |
| **refraction** | **The bending of light as it moves from one substance to another.**  |
| **spectrum** | **A band of colours (seen in rainbows) produced by the separation of the components of light.**  |
| **filter** | **Passing something through a device to remove unwanted material (liquid, gas, light or sound)**  |
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**Wider Curriculum** (Cooking, trips, outdoor):
making periscopes, art – learning about colours

Science – light