



**Science Topic:** Light (Shadows)

**Year: 6 Term:** Summer 2

**Key Knowledge/Content:**

- Animals see light sources when light travels from the source into their eyes.
- Animals see objects when light is reflected off that object and enters their eyes.
- Light reflects off all objects (unless they are black). Non shiny surfaces scatter the light so we don't see the beam.
- Light travels in straight lines.

**Scientist Focus:**

**Percy Shaw (Inventor)**

Known for his invention of cat's eyes.

**Key vocabulary with definition:**

**Prior vocabulary:**

- Travel- Movement
- Straight line
- The Sun
- Light source- An object which produces light, such as the Sun or a bulb
- Ray- The movement of light from a source.
- Visible- Able to be seen.
- Bounce- Moving off a surface.

**New vocabulary:**

- Opaque- A solid object.
- Shadow- The blocking of light by an opaque object.

**Links to:**

**Prior learning:**

To know how light travels and investigate how reflection works.

**Future learning:**

To investigate that light travels in waves, looking in more detail at how the waves move.

**By the end of this unit**

**All children can:** identify what causes a shadow and **explain** how a shadow's shape often reflects the shape of the object.

**Most children can:** investigate ways that a shadow changes, including through size of an object and distance from a light source, and **make predictions** accordingly.

**Some children can:** explain how shadows changes throughout the day, linking to the position of the Sun, and **understand** how shadows can tell the time.

**Background understanding for teachers and parents:**

This unit will continue the learning on light to investigate how shadows are formed. Children will conduct a range of experiments, considering how the shape and size of a shadow can change.

**Curriculum Driver (one):**

Communication

**Evidence outcome:**

Make predictions and communicate findings of different investigations relating to the forming of shadows.