

All children – regardless of gender, starting point or background – will have the opportunity to engage with a high-quality science education. They will be equipped with the knowledge, skills and vocabulary to understand how science can be used to explain what is occurring, predict how things will behave and analyse caused. We intend to inspire a sense of enjoyment and curiosity about science.



## Light

Autumn 1

### New Knowledge:

- We see objects because our eyes can sense light.
- Dark is the absence of light.
- We cannot see anything in complete darkness.
- Objects are easier to see if there is more light.
- Some objects, for example, the sun, light bulbs and candles are sources of light.
- Some surfaces reflect light. Objects are easier to see when there is less light if they are reflective.
- The moon is not a light source; it reflects the light of the sun.
- The light from the sun can damage our eyes and therefore we should not look directly at the sun.
- We can protect our eyes from the sun's UV rays by wearing sunglasses or sunhats in bright light.
- We can protect our skin from the sun's UV rays by wearing sunscreen.
- Shadows are formed on a surface when an opaque or translucent object is between a light source and the surface, blocking some of the light.
- The size of the shadow depends on the position of the source, object and surface.
- The closer the light source an object is, the bigger the shadow because the object blocks more of the light.

### Key Vocabulary:

- Light source
- Visible/visibility
- Absence of light
- Matt
- Surface
- Reflective
- Non-reflective
- Mirror
- Sunlight
- Ultra-violet (uv)
- Light
- Dangerous
- Thermal imaging
- Technology

