

## Science – Light – Spring Term 1

### Prior Knowledge

- Light helps us see things
- Light usually comes from a source (e.g. the Sun, lamps, candles)
- Darkness is the absence of light (even if not phrased scientifically)
- Humans use their eyes to see
- The Sun is a light source
- The Sun is associated with daytime
- There are patterns of day and night
- Some objects give off light (e.g. candles, torches)
- Some light sources can be dangerous (e.g. the Sun, fire)
- Objects are used for different purposes, including lighting

### Key Vocabulary

|             |   |
|-------------|---|
| reflect     | When light bounces off a surface instead of passing through it.                     |
| translucent | A material that lets some light pass through, but objects cannot be seen clearly.   |
| transparent | A material that lets light pass through completely, so objects can be seen clearly. |
| opaque      | A material that does not let light pass through.                                    |
| source      | An object that produces its own light, such as the Sun, a lamp, or a candle.        |
| shadow      | A dark area or shape made when an object blocks light.                              |

### Core Knowledge

- Light helps us to see. Dark is when there is little or no light.
- Some objects give off their own light. These are called light sources.
- Some surfaces are reflective and can bounce light back.
- Mirrors reflect light and show clear images.
- Shadows are formed when an object blocks light.
- Transparent materials let light pass through.
- Translucent materials let some light pass through.
- Opaque materials do not let light pass through.
- The size of a shadow changes when a light source is moved closer or further away.
- The Sun is a powerful light source that helps plants grow and keeps Earth warm.
- Looking directly at the Sun can be dangerous and can harm our eyes.
- We can stay safe in the Sun by wearing hats, sunscreen, and sunglasses.

### Diagrams

