### LKS2 Science Knowledge Organiser: Light

# Core Knowledge – By the end of this unit, I will be able to:

Lesson 1: Recognise that there needs to be light in order to see things and that darkness is the absence of light. Lesson 2: Notice that light is reflected from surfaces.

**Lesson 3:** Recognise that light from the Sun can be dangerous and that there are ways to protect your eyes and skin from the Sun.

**Lesson 4:** Recognise that shadows are formed when light from a light source is blocked by an opaque object.

**Lesson 5:** Find patterns in the way that the length of shadows change.

**Lesson 6:** know that light is reflected from surfaces (mirrors).

#### What I have already learned in Science:

Children do not study light as a separate topic. However, as part of seasonal changes topic, children will have observed and talked about changes in the weather and the seasons and will have talked about the dangers of looking at the Sun directly.

Key Vocabulary & Scientific terms	
Dark	The absence of light.
Light Source	Something that makes light.
Reflect	Bounces off or changes direction.
Shadow	A dark area or shape produced by an object coming between rays of light and a surface.
Opaque	Cannot be seen through.
Translucent	Can be seen through, but not clearly.
Transparent	Can be seen through.
Luminous	Giving off light; bright or shining.

## Light sources

A light source makes light. The Sun and other stars, fires, torches and lamps all make their own light, so they are examples of sources of light.



#### **Reflective light**

We can see things because light is reflected. Some materials reflect light better than others.

Light travels in straight lines. When light from an object is reflected by a surface, it changes direction.

Smooth, shiny surfaces such as mirrors and polished metals reflect light well. Dull and dark surfaces such as dark fabrics do not reflect light well.



### Shadows

A shadow is made when an object blocks light. A shadow is a dark area or shape caused by a solid object blocking the rays of light from a light source.

