



# Brookfield Primary School Knowledge Organiser

## Year 6: Science – Light

Science is the study of the world around us through observation, description, investigation and experimentation.

### Key Facts:

- Light travels in straight lines. The light rays from a light source reflect off the object we are looking at. The light travels in a straight line and enters the eye through our pupil.
- Light reflects off shiny, bright or light surfaces. That is why you can see your reflection when you look in a mirror.
- Water and bent shiny surfaces cause light rays to be reflected at different angles, meaning the reflection of the image is distorted.
- Opaque objects block the light rays so they can only travel around the edges of the object in straight lines. That is why a shadow is the same shape as the object.
- The closer an object is to the light source, the bigger the shadow. The further away the object is from the shadow, the smaller the shadow.
- White light is made up of the colours of the rainbow. When light is refracted through a transparent object, a rainbow is formed.

### Where to look:



- BBC Bitesize
- Photographs
- Library



### Things to find out about:



Consider how shadows can change.

### General Scientific Words/Phrases:

Enquire, investigate, observe, explore, experiment, describe, record, analyse, compare, evidence, record

### Key Vocabulary to use in this topic:

#### Word:

#### Definition:

Light

A form of energy.

Light source

An object that provides its own light.

Angle

The space between 2 intersecting lines.

Mirror

A surface that reflects a clear image.

Variable

Any one of the elements of an experiment which could be changed.

Rotate

To turn an object around a centre point.

Reflected

When light shines on a surface and bounces back.

Sunshade

A device giving protection from the sun.

Opaque

It describes materials which do not allow light to travel through.

Transparent

It describes materials which allow all light to travel through.

Optical

Relating to the science of optics.

Spectrum

A band of several colours.



