

# Dog Kennel Hill Primary School - Science

**Topic: Light**

**Year: 6**

**Strand: Physics**

### What should I already know?

- Some things produce **light**, such as lamps or candles.
- Recognise that they need light in order to see things and that dark is the absence of light
- Notice that light is reflected from surfaces
- Recognise that light from the sun can be dangerous and that there are ways to protect their eyes
- Recognise that shadows are formed when the light from a light source is blocked by a solid object
- Find patterns in the way that the sizes of shadows change.

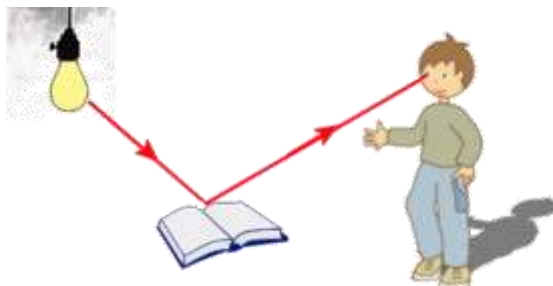
### What will I know by the end of the unit?

How does light travel?

- Light appears to travel in straight lines

How are objects seen?

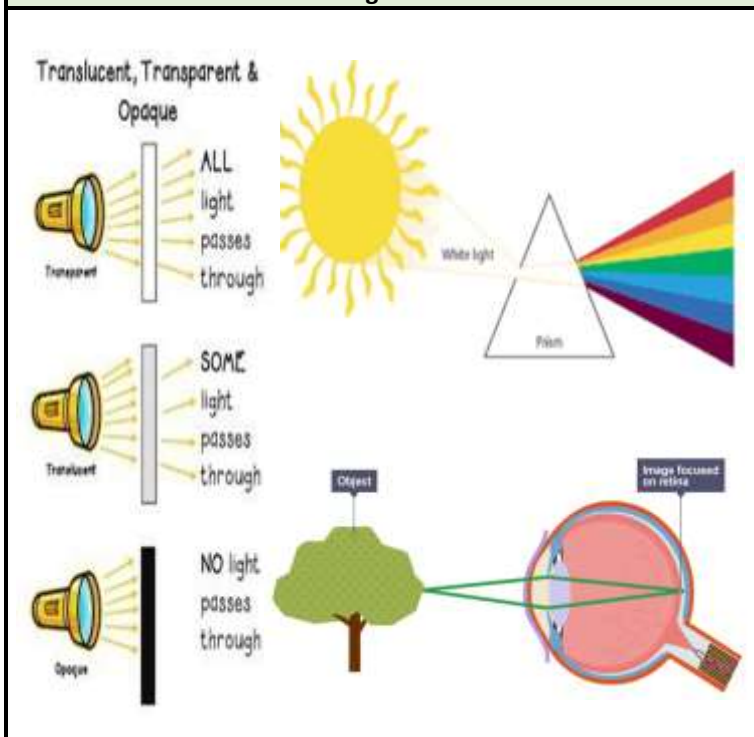
- Objects are seen because they give out or reflect light into the eye.
- We see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes.



### Vocabulary

Angle	the direction from which you look at something
Bright	a colour that is strong and noticeable, and not <b>dark</b>
Chemical reactions	a process that involves changes in the structure of something
Dark	the absence of <b>light</b>
Dim	<b>light</b> that is not <b>bright</b>
Electricity	a form of energy that can be carried by wires and is used for heating and lighting, and to provide power for machines
Emits	to <b>emit</b> a sound or <b>light</b> means to produce it
Eyes	Globular organs of sight in the head of humans and vertebrate animals
Light	a <b>brightness</b> that lets you see things.
Light source	Something that provides light, whether it be a natural or artificial source of light (e.g. the sun, a torch).
Mirror	a flat piece of glass which <b>reflects light</b> , so that when you look at it you can see yourself <b>reflected</b> in it
Opaque	if an object or substance is <b>opaque</b> , you cannot see through it
Periscope	An apparatus consisting of a tube of attached to a set of mirrors or prisms through which an observer can see things that are otherwise out of sight.
Reflection	The throwing back by a body or surface of light, heat or sound without absorbing it.
Refraction	The bending of light as it passes from one substance to another with the bending caused by the difference in density between two substances.
Shadows	a dark shape on a <b>surface</b> that is made when something stands between a <b>light</b> and the <b>surface</b>
Spectrum	A band of colours, as seen in rainbows, produced by separation of the components of light by their different degrees of refraction.
Torches	a small <b>electric light</b> which is powered by batteries and which you can carry
Translucent	if a material is <b>translucent</b> , some <b>light</b> can pass through it
Transparent	If an object or substance is <b>transparent</b> , you can see through it

### Diagrams



**Dog Kennel Hill Primary School - Science**

**Topic: Light**

**Year: 3**

**Strand: Physics**

Question 1

Question 2

Question 3

Question 4

Question 5