

# Science: Year 6

## Light

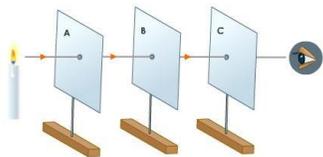
### Knowledge Organiser

#### What should I already know?

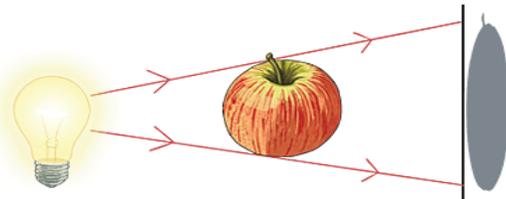
- I know that you need light to see things, that dark is the absence of light and that light is reflected from some surfaces
- I recognise that light from the sun can be dangerous and there are ways to protect my eyes
- I know that shadows are formed when light from a light source is blocked by an opaque object
- I can find patterns in the way that the size of shadows change

#### TAPS assessment

##### Investigating shadows



#### Class reader



## Learning Objectives

LO: recognise that light appears to travel in straight lines

LO: use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye

LO: explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes

LO: use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them.

## Key Vocabulary

<b>Light Source</b>	A natural or artificial source of light.
<b>Straight Lines</b>	Light travels in straight lines
<b>Light Ray</b>	Each line of light travelling in a straight line from its place of origin
<b>Reflect</b>	When light bounces from a surface
<b>Refract</b>	When light changes direction as a result of changing speed. Light changes speed when it passes through transparent materials of different densities for example from air to water.
<b>Angle</b>	An angle is a measure of a turn, measured in degrees or $^{\circ}$ .
<b>Shadow</b>	A dark area created where light from a light source is blocked by an object. The object blocking the light will be opaque or translucent.