Coleman Primary School
Year 3 Spring 1 Knowledge Organiser
Science—Light and Shadows

You already know...
- that shadows are dark.
- what light and dark means from personal experience.

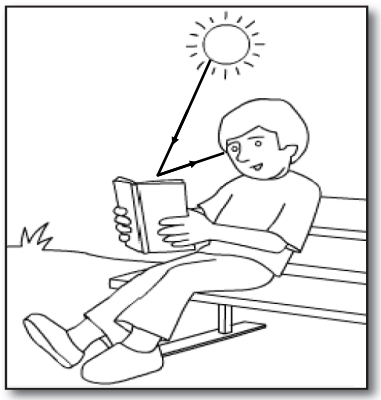
You will learn...
- that we need light to see and that darkness means the absence of light.
- that light is reflected from some surfaces.
- that shadows are formed when an object blocks light and how they change.

Where does light come from?

Light comes from light sources. There are many different light sources. Some are natural and some are made by humans. Can you think of any more light sources you know?

Did you know...?
The moon is not a light source as it only reflects light from the sun.

How do we see?



Light travels in straight lines from a light source. It reflects off objects and some of the reflected light goes into our eyes.
When the reflected light enters our eyes, we see the object.

Did you know...?
We cannot see in the dark. We need light to be able to see. Darkness means when there is no light.

Scientific Vocabulary: Light and Shadows	
description: a statement that says what you see	**opaque**: not letting light pass through
dull: a surface that scatters light and does not look shiny	**reflect**: to change the direction of light using a shiny surface
explanation: a sentence (or sentences) giving a reason for something happening	**shadow**: darkness caused by light being blocked
light source: the place where light originates from	**shiny**: surfaces that reflect lots of light
mirror: a shiny polished surface	**translucent**: letting some light through
observation: what we see happening in a scientific test	**transparent**: letting most or all light through

What you will know

*To know that we need light to see things.
To know that dark is the absence of light.
*To know that light is reflected from surfaces.
To know that light from the sun can be dangerous and we need to protect our eyes.
*To know that shadows are formed when light from a source is blocked by a solid object.
*To know that light travels in straight lines

Scientific Skill Progression

In Year 2 you were... Observing closely, using simple equipment; using observations and ideas to suggest answers to questions

In Year 3 you will be... Making careful observations (taking measurements using standard units); reporting on findings from enquiries, including oral and written explanations, displays or presentations of results and conclusions; using results to draw simple conclusions, suggest improvements and raise further questions