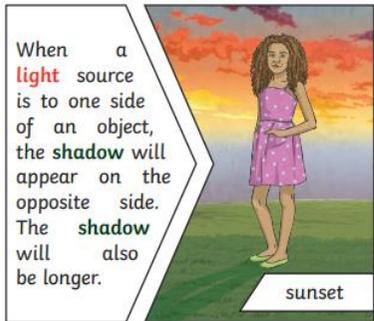
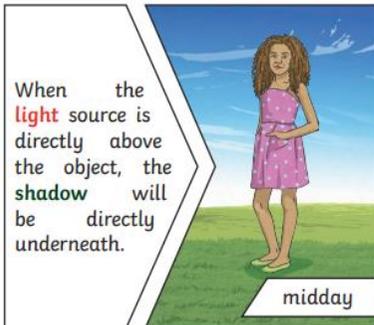


Light

Why shadows from the sun change over time.



Key knowledge

Why do we need light?	We need light to be able to see things. Light travels in a straight line. When light hits an object, it is reflected. If the reflected light hits our eyes, we can see the object.
How do mirrors work?	Mirrors reflect light very well, so they create a clear image. An image in a mirror appears to be reversed. When looking in a mirror and you raise your right hand the image appears to raise its left hand.
How do our pupils let us see?	The pupils control the amount of light entering the eyes. If too much light enters then it can damage the retina.
How are shadows formed?	A shadow is caused when light is blocked by an opaque object. A shadow is larger when an object is closer to the light source. This is because it blocks more of the light.
Is the sun evil or a hero?	The sun as a source of light can be both safe and dangerous. It provides us heat, plant's nutrients and is a source of light. However, it can also cause damage to our eyes and skin, create wrinkles and lead to global warming.
How do you stay safe in the sun?	Due to UV rays from the sun people need to protect themselves. Wearing sun cream, sunglasses and a wide brimmed hat is all very good pieces of advice.

Key Vocabulary

light	A form of energy that travels in a wave from a source
light source	An object that makes its own light
dark	The absence of light
reflection	The process where light hits the surface of an object and bounces back into our eyes
reflective	Something which reflects light well
pupil	The black part of the eye which lets light in
shadow	An area of darkness where light has been blocked
opaque	Describes objects that do not let any light pass through them
translucent	Describes objects that let some light through, but scatter the light so we can't see them properly
transparent	Describes objects that let light travel through them easily, meaning that you can see through the object

You can test this out at home!

Measure a shadow in your home over the day and record how the length changes.

