

Key Vocabulary

Dark – the absence of light.

Light – a form of energy that travels in a wave from a source.

Light source – an object that makes its own light.

Opaque – objects that do not let any light pass through them.

Pupil – the black part of the eye that lets light in.

Ray – waves of light (sometimes called beams).

Reflection – the process where light hits the surface of an object and bounces back into our eyes.

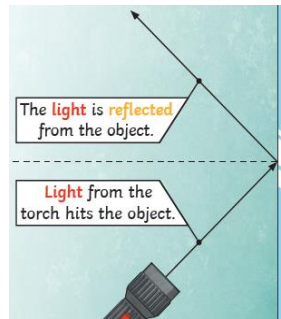
Shadow – an area of darkness where light has been blocked.

Translucent – objects that let some light through but scatter the light so that so we can't see through them properly.

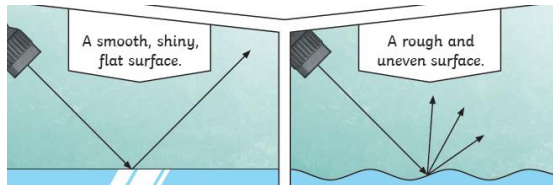
Transparent – objects that light travel through them easily meaning that you can see through the object.

Light

We need light to be able to see things. Light travels in straight lines. When light hits an object, it is reflected. If the reflected light hits our eyes, we can see the object.



Some surfaces and materials reflect light well. Others do not. Smooth, shiny flat surfaces reflect light the best. Whereas a rough, uneven surface does not.



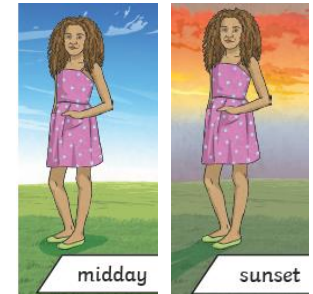
Shadows

A shadow is caused when light is blocked by an opaque object.

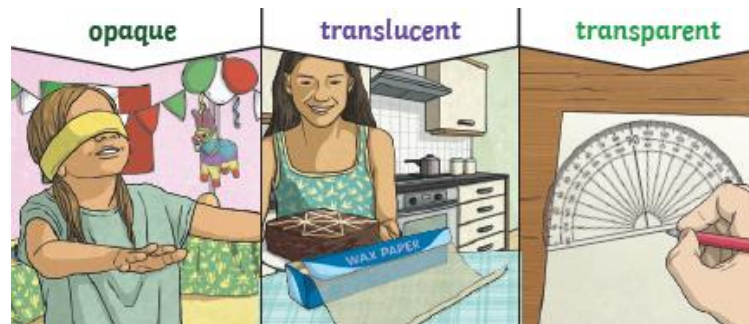
A shadow is larger when the object is closer to the light source. This is because it blocks more light.



When the light source is directly above an object, the shadow will be directly underneath. When a light source is to one side of an object, the shadow will appear on the opposite side. The shadow will also be longer.



Opaque, translucent and transparent



Opaque objects do not let light pass through them.

Translucent objects let some light pass through them.

Transparent objects let light pass through the.

Unlock even more knowledge by visiting:

<https://www.bbc.co.uk/bitesize/topics/z3nnb9q>
<https://kidshealth.org/en/kids/eyes.html>
<https://easyscienceforkids.com/kids-light/>

Unlock even more science experiment fun by visiting:

<https://carrotsareorange.com/light-experiments-for-kids/>