

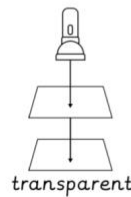
Science - Light and shadows

We need light to be able to see things.
Darkness is when there is no light.

A **light source** is something that gives out light. This is also known as **luminous**.

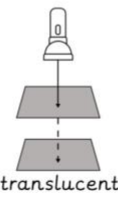


- **Bright lights** can damage the eyes.
- Never look directly at bright lights like the Sun.
- Protect your eyes by wearing sunglasses and a sunhat.



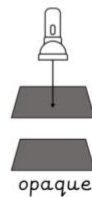
transparent

Lets **most** light through so **little or no** shadow forms.



translucent

Lets **some** light through so a light shadow forms.



opaque

Lets **no** light through so a **shadow** forms.



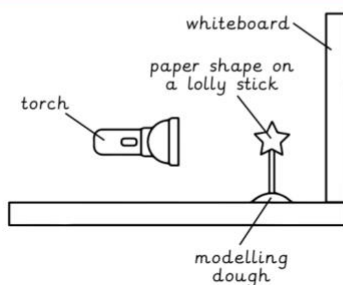
All surfaces **reflect** at least a little light where light bounces off them. Objects that are shiny and **reflective** let more light bounce off them.



Shadows form when the light from a light source is blocked by an opaque object.

Science - Light and shadows

Changing the position of the light source affects the size, shape and position of the shadow.



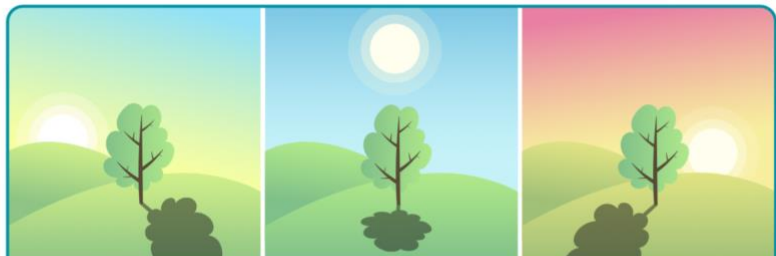
The distance between the light source and an object changes the size of the shadow.

The closer the light source is to the object, the larger the shadow. This is because it blocks more light.

The further away the light source from the object, the smaller the shadow.



As the Sun changes position in the sky throughout the day, shadows will also change. This can be done in the classroom by moving a torch like the Sun in the sky.



The shadow's position will change as the Sun rises in the East and sets in the West. The shadows get shorter as the Sun moves higher in the sky until midday and then get longer again as the Sun sets.