



Be the best that we can be.

EBJ Knowledge Organiser Science Year 3

Spring 2 Materials – Light and Shadow



What is a light source?

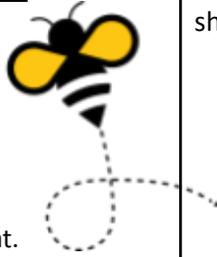
A **light source** is something that gives out light. This is also known as **luminous**. We need light to be able to see things. **Darkness** is when there is no light.



Bright lights can damage the eyes.

Never look directly at bright lights like the sun.

Protect your eyes by wearing sunglasses and a sunhat.



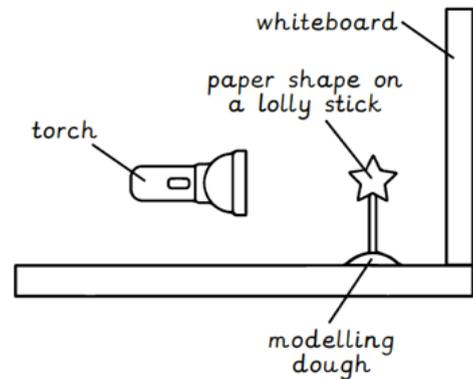
Shadows

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



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.

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



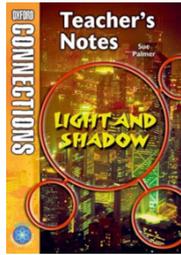
The distance between the light source and an object changes the size of the **shadow**. The closer the light source is to the object, the larger the shadow. This is because it blocks more light. The further away the light source from the object, the smaller the shadow.

Reflection

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

 transparent	 translucent	 opaque
Lets most light through so little or no shadow forms.	Lets some light through so a light shadow forms.	Lets no light through so a shadow forms.

Read all about it! Can you find these books in your local library?



Key Vocabulary

Group, luminous, mirror, record, reflective, sun, investigation, opaque, reflect, translucent, variable, light source, non-luminous, shadow and transparent.

Scientific enquiry types

