

Year 3 Home Learning Science - Light and Shadows

Before you begin, make sure that you can explain the meanings of the following words:

light source **darkness** **shadow**

opaque **translucent** **transparent**

You can use the **glossary** (on the website) and watch [this clip](#) if you're not sure.

Activity 1 - Exploring Shadows

When an object blocks light from a light source, a shadow is formed. Watch [this clip](#).

Find a **light source**. Choose a variety of **opaque**, **translucent** and **transparent** objects and explore their shadows. Think about and discuss answers to these questions:

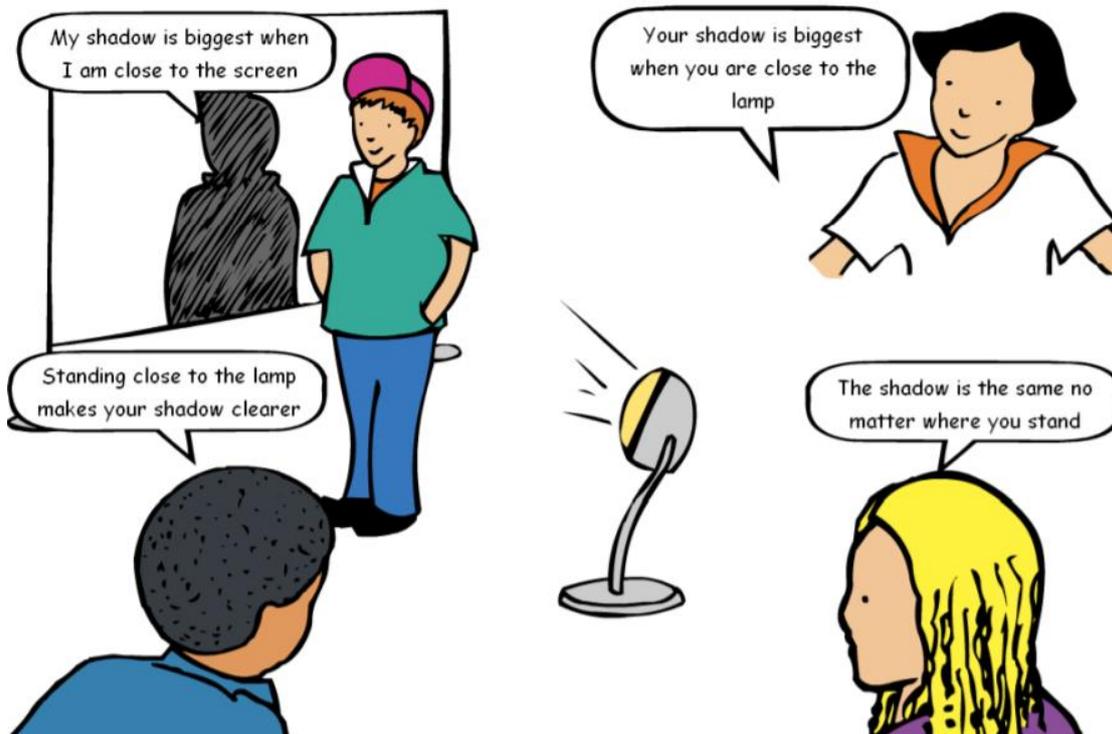
What sort of objects make the darkest shadow?
(Why do you think this is?)

How can you change the size of a shadow?

In what other ways can the position of the light source change a shadow?

Activity 2 - Who do you agree with?

Read each of these statements. Decide who you agree with and explain why.

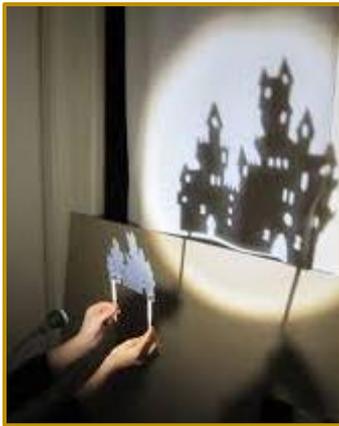


Activity 3 - You Choose!

This week we have included four different activities for you to choose from. You can have a go at as many as you like. You might even have some ideas of your own. Don't forget to send us some photographs!

Shadow Puppets

Create your own shadow puppets or maybe even a puppet show!



Watch [this clip](#) for some ideas. Blank walls and white bed sheets make great screens!

Shadow Drawing

How many different shadows can you create using the same object and light source?



Draw them on a piece of paper so you can compare them.

Changing Shadows

Go outside at different times and explore how your shadow changes throughout the day as the sun changes position in the sky.



You could draw round the outline of your shadow with chalk or measure it with a tape measure.

Multiple Shadows and Colour Shadows

Can an object have more than one shadow or a coloured shadow?

Watch [this clip](#) to inspire some ideas.



Can you find a way of creating multiple shadows or coloured shadows?