## Science Challenge



## Shadows

The weather has been very sunny recently and I'm sure everyone has noticed their shadow following them around. Have you ever wondered where your shadow comes from? Do you always have a shadow, or does it sometimes go away?

This BBC clip has some short videos and activities to help us to understand light.

https://www.bbc.co.uk/bitesize/articles/zijx6v4

Because light travels in straight lines objects can get in its way and block its path. This causes a shadow.

Make a shadow clock like the one below using a pencil and paper plate or by placing a ruler or stick in a plant pot. Put it on the ground in a sunny spot. Mark where the shadow is either with a pebble or by drawing around it on paper. An hour later, go back to your shadow clock and notice if anything has changed.

Repeat this as often as you can throughout a sunny day.....

Did your shadow change position or change shape?



This episode of Let's go Live contains lots of fun experiments to do with shadows and light. https://www.youtube.com/watch?v=6FFMr\_1DisA

We have used the sun as a source of light but what other sources of light can you find in and around your home? Some of these will be natural sources of light and some will be manmade. Do they all use white light or are there any other colours?

Can you use a torch or the sun through a window to make a hand puppet or if you have space outside can you use your body to make the letters of your name in shadows?

