

## Science - Shadow puppets!

### What you need:

- Lamp
- Cardboard
- Sellotape
- Pencil
- Scissors
- Skewers (or a stick/pencil - something you can use for a handle)
- White wall

### How to:

1. Choose what type of puppets you want. How about your favourite animal? Or your friends and family? Or a scary ghost?
2. Draw outlines for your puppets on the cardboard and cut them out.
3. Use sellotape to attach a skewer/pencil to the back of each of your puppets.
4. Put the lamp on the floor or on a table. Point it at the wall and turn it on. Turn off other lights and close the curtains.
5. Hold your puppets between the light and the wall. Can you see a shadow on the wall? Move the puppets between the light and the wall to make the shadow different sizes.



**Key Stage 2 Challenge** - What happens if you move your puppet closer to the light source? Does the shadow get bigger or smaller? Try placing other objects in front of the torch such as a mirror. The mirror both reflects the light and causes a shadow because it is opaque.



**Key Stage 1 Challenge** - Pretend to be pirates! Look through an empty kitchen roll tube. What can you see? Now bend the kitchen roll tube in the middle and look through it again. Can you see anything? This shows that light travels in straight lines. Light cannot travel around bends.

You could record your puppet show and email it to: [admin@woodhouse.calderdale.sch.uk](mailto:admin@woodhouse.calderdale.sch.uk) or take a photo and post it on the Science blog!