

## What factors affect the size of a shadow in a shadow theatre?



We have learnt many different things about light over the last few weeks.

This week I want you to create your own puppet show and investigate what happens as the puppet gets closer or further away from the light source.

### **Website;**

[https://central.espresso.co.uk/espresso/primary\\_uk/subject/module/video/item576165/grade2/module502908/index.html?referrer=../../../../../modules/s2\\_light/shadows/index.html](https://central.espresso.co.uk/espresso/primary_uk/subject/module/video/item576165/grade2/module502908/index.html?referrer=../../../../../modules/s2_light/shadows/index.html)

Espresso –KS2-science-light and shadows-shadow puppet investigation

<https://www.stem.org.uk/resources/elibrary/resource/315603/what-factors-affect-size-shadow-shadow-theatre>

### **Questions to think about**

- How is a shadow formed?
- Do shadows have the same shape as the object?

### **Task**

Create a shadow puppet or puppets using cardboard, straws or sticks. Think carefully about your character or characters. Keep your character outline simple and try not to add too much detail.



Think about how you can use your shadow puppets, moving them closer or further away.

Upload a photo or a video of your work and include the answers to the questions below.

- What happens to the size of the shadow when you move the puppet further from the screen?
- Was the shadow equally dark all over?
- Why did the shadow form?
- Why did the size of the shadow change?