Shadow masters

**Year 5**

Select three opaque items and investigate what happens when you shine a light on them. Record your observations in the space provided using words and diagrams.

Some prompts to get you thinking about what you might look for are:

* How would you describe the colour of the shadow?
* Are the shadows all, and always, the same colour?
* If you move the light source, does the shadow change? How?
* Can you make the shadow bigger or smaller?
* Can you change the shape of the shadow?

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| **Object** | **Observations** | |
| Object 1  Straight edges |  | |
| Object 2  Curved edges |  | |
| Object 3  Your choice |  | |
| Select one object and create a shadow using your light source.  Draw an accurate labelled ray diagram showing the light source, the direction the light is travelling and the shadow formed by the object.  Move the light source to a different place so that the shadow looks different. Draw a new ray diagram. | | |
| **Ray diagram 1** | | **Ray diagram 2** |