



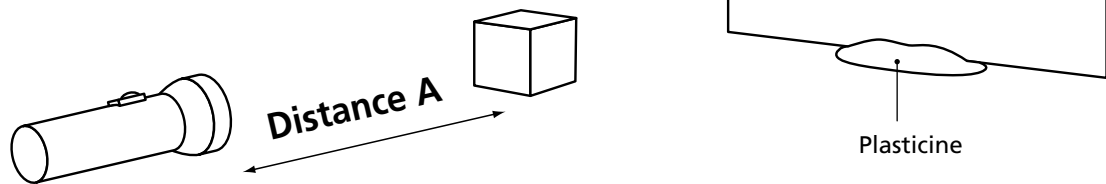
Name: ..... Form: .....

Based on pages 14 and 15 of *Light and shadows*

# Why shadows change size

## Try this...

1. Take a torch, small wooden or plastic block, a piece of card and a lump of Plasticine and set them up as shown in the diagram.



2. Move the block a few centimetres from the torch and write the distance between the block and the torch (distance A) at the top of the left hand column in the table below.

3. Measure the width of the shadow on the screen and write your measurement at the top of the right hand column of the table.

Distance of object from torch (cm)	Width of shadow (cm)

4. Move the block a little further from the torch and measure the width of the shadow on the screen. In the table, record the new distance of the block from the torch (distance A) and the new width of the shadow.

5. Repeat step 4 three more times.

6. Make a bar chart of your results on a separate piece of paper.

## Looking at the results.

7. What do the results show?



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