## Science Experiment Sheet Light (Size of Shadows)

Use the equipment to investigate the size of shadow cast by an object at different distances from the light source


Screen or wall
Torch

> Metre Rule

Starting at 1 metre distance, move the torch closer to the block in 10 cm steps.
Each time measure the height of the shadow and fill in your results in the table.

| Distance (cm) | 100 | 90 | 80 | 70 | 60 | 50 | 40 | 30 | 20 | 10 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Height (cm) |  |  |  |  |  |  |  |  |  |  |

1.What happens to the shadow as the light source gets closer to the block? $\qquad$
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2. Did you observe any other differences in the shadow? $\qquad$
$\qquad$
$\qquad$
3. Repeat some of your observations (20, 40, 80100 cm ) and see if you get the same results.

3a. If your results are different why might this be?

3b. Why is it important to repeat experiments? $\qquad$
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$\qquad$
4. Use the grid below to draw a graph of your results.


Distance From Light Source

