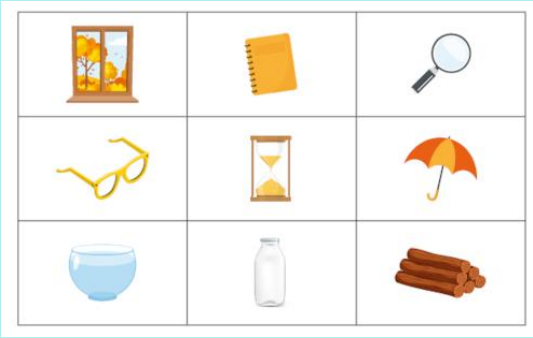
Tuesday 22nd June 2021

LO: To demonstrate how moving a light source changes the size of a shadow.

Starter:



Intriguing question:

Why is your shadow sometimes big and sometimes small?

Watch clip

https://www.bbc.co.uk/bitesize/clips/z8vfb9q

1st read: Answer in your books

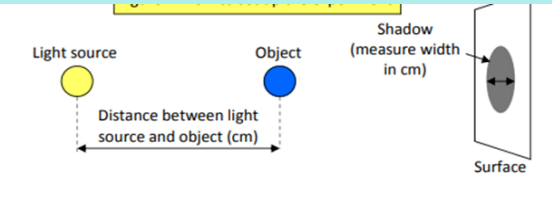
I DO: When is a shadow formed?

WE DO: What happens when the light source is close to the object?

YOU DO: What happens when the light source is further away?

YOU DO: What happens when the light source is directly above the object?

Set up the investigation below.



Measure how far the light source is from the object.

Measure the width of the shadow at its widest point.

Record this information in the table.

Move the light source further away from the object.

Record the new distance.

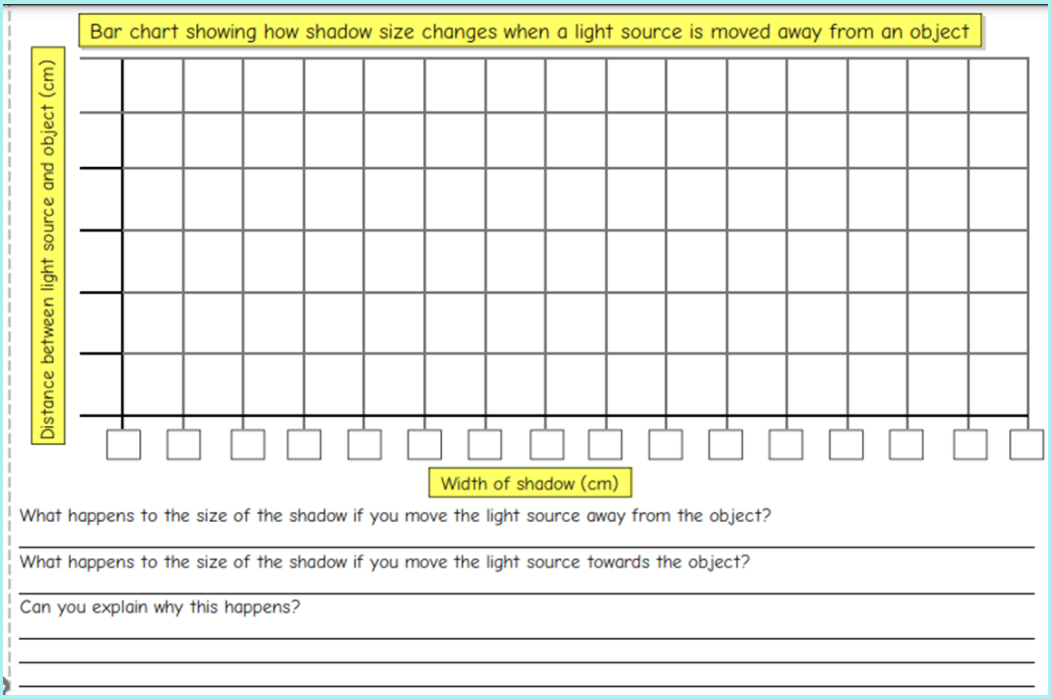
Predict and measure the width of the shade.

Repeat until you have 6 measurements.

Use your measurements to complete the bar chart

Table showing the width of shadow cast by an object

	Width of shadow at its widest point (cm)	
Distance between light source and object (cm)	Prediction	Measurement



What happens to the size of the shadow if you move the light source away from the object?

What happens to the size of the shadow if you move the light source towards the object?

Can you explain why this happens?