

Line of light investigation planner

Name: _____ Date: _____

Question What do we want to find out?

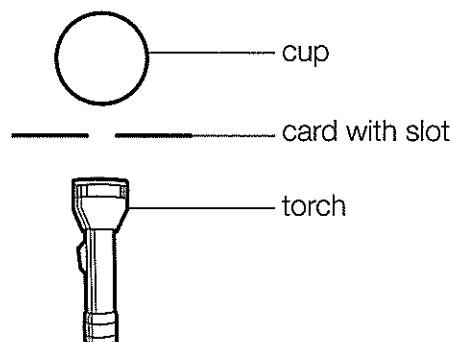
Prediction What do we think will happen?

What do we need?

- each team member's science journal
- clear plastic cup
- pencil
- piece of card (20 cm x 20 cm)
- water
- ruler
- torch
- scissors

What will we do?

1. Find a dark place and a flat surface to work on.
2. Use a ruler and pencil to rule a line on the card that is 10 cm high and about 1 mm thick. Use scissors to cut along the line to create a slot.
3. Hold the card upright and place the torch behind the card so that a thin light beam shines through the slot.
4. Place the centre of the empty cup in the path of the light beam and observe what happens to the light beam.
5. Move the cup from side to side, observing what happens to the light beam each time you move the cup.
6. Fill the cup $\frac{3}{4}$ full with water and repeat steps 4–6.



Bird's-eye view of investigation set-up