

DAY 14

TOPIC: LIGHT

Reflection

Aim: Explain how light is reflected from a mirror.

Activity :

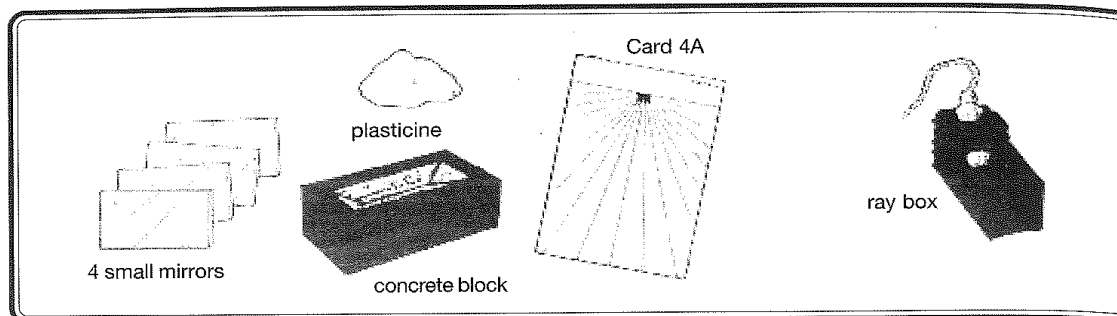
Watch videos 8.L.11-14

Read and answer questions on light 4 below.

Light 4

Reflections

You will need:

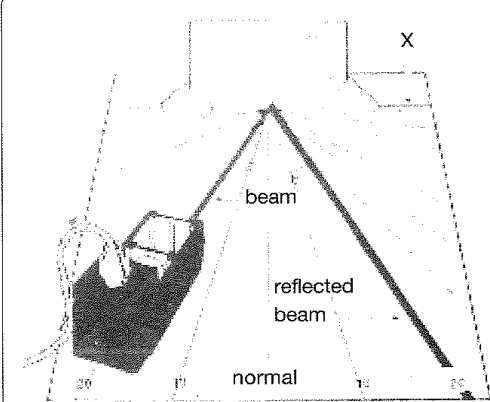


Angles

Q1 Copy this table.

Angle of incidence (angle 'a')	Angle of reflection (angle 'b')

Work in a darkened area.



- 1 Collect Card 4A. Use plasticine to stand the back edge of the mirror along the line X.
- 2 Place the ray box on the ray paper. Aim the beam of light along one of the lines to the mirror. Look at the reflected beam.
- 3 Read of the angles a and b. Record these in the table.
- 4 Repeat, using differnt values for angles a and b. Each time record the angles in the tables.

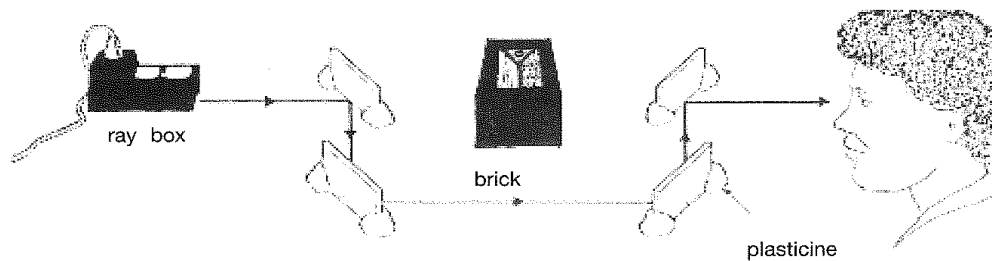
Q2 Copy this information.

A line at right-angles to the mirror is called the **normal**. The angle between a ray of light approaching the mirror and the normal (angle a) is called the **angle of incidence**. The angle between the ray of light reflected from the mirror and the normal (angle b) is called the **angle of reflection**.

- Q3** What do you notice each time about the angles **a** and **b**?
- Q4** Make a rule about the reflection of light by a mirror.
- Q5** Write a few sentences and draw a picture to show how you carried out this activity.

How to see through a brick

1



Arrange the four mirrors as shown until you can see the ray of light.

- Q6** Can you really see through the brick? Explain.
- Q7** What effect does each mirror have on the ray of light?
- Q8** What do you notice about the angles **a** and **b** for each mirror?
- Q9** Draw a picture showing how to see through a brick.

NEW WORDS: normal, angle of incidence, angle of reflection