

This week in science we are using what we have learned about how we see, how light travels and reflections to carry out some practical work to investigate how we can bend light.

Use the activity sheets to help you carry out the investigations at home or, if you haven't got the required equipment, research how periscopes work, where they are used and draw a diagram of one.

Have fun!!

MODULE 6, LESSON 3, RESOURCE SHEET 1

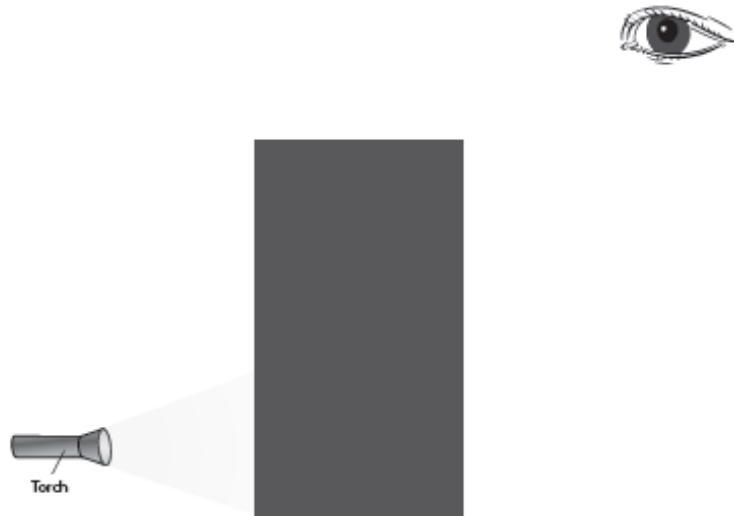
ROUND THE BEND

Problem 1: Arrange the equipment you have on the desk like the picture below. Then use the mirrors you have to make a beam of light go from the torch to the eye. You may need to use more than one mirror.



ROUND THE BEND

Problem 2: Arrange the equipment you have on the desk like the picture below. Then use the mirrors you have to make a beam of light go from the torch to the eye. You may need to use more than one mirror.



ROUND THE BEND

Problem 3: Arrange the equipment you have on the desk like the picture below. Then use the mirrors you have to make a beam of light go from the torch to the eye. You may need to use more than one mirror.



MAKING A PERISCOPE

You are going to make a periscope that you can use to see around corners.

WHAT TO DO

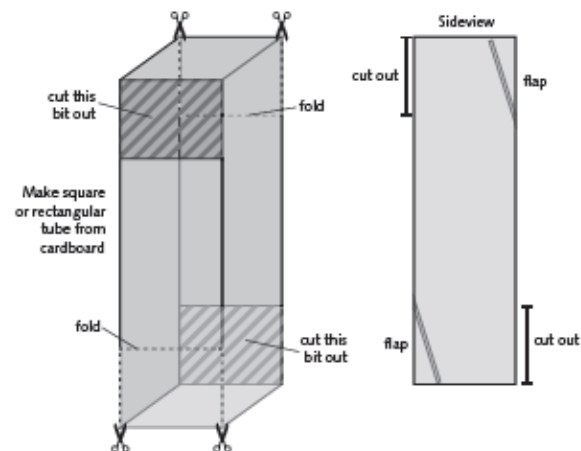
- 1 Use the cardboard to make a cuboid, at least 30cm tall.

The cuboid needs to be open at both ends and the width of the tube needs to be about the same width as the mirrors.

- 2 Cut flaps on opposite sides of the cardboard tube, one near the top and the other near the bottom.

Each flap should be the same size as your mirrors.

- 3 On the side of the tube, opposite each flap, cut away the cardboard.



YOU WILL NEED

- Cardboard
- Sticky tape
- Scissors
- Two small mirrors

MAKING A PERISCOPE

- 4 Stick a mirror to the inside of each flap.

- 5 Bend the flaps with the mirrors on them inwards. Set them at angles of about 30° to start with.

- 6 Look in the mirror in the bottom flap. Bend the flaps until you can see what is reflected in the mirror on the top flap.

- 7 When the mirrors are in the correct position, tape them in place.

