



PERISCOPES

LEVEL OF DIFFICULTY



OUTLINE OF ACTIVITY

A periscope is a simple device that enables us to see over walls or round corners. Rays of light hitting the mirror of the periscope are reflected twice. The beam of light is reflected through 90° , because the mirrors are at 45° to the path of the light ray.

Card mirrors are used to make the periscope as they are cheap and can be cut with scissors. This activity provides a template to construct the shape of the periscope out of thin card.

EQUIPMENT

Quantities are based on a **make** and **take** approach to produce 20 periscopes.

- scissors x 15
- thin correx or black card
- roll of sellotape
- glue sticks x 5
- periscope templates x 20
- plastic mirrors x 10

SCIENCE CONTEXT

Light, that light travels from a source and is reflected from shiny surfaces e.g. mirrors, polished metals.

SCIENTIFIC EXPLANATION

Periscopes can be used to peep over walls or round corners. When a ray of light hits a plane mirror the angle of reflection is equal to the angle of incidence, therefore if a ray of light hits the mirror at 45° it will be reflected at 45° .