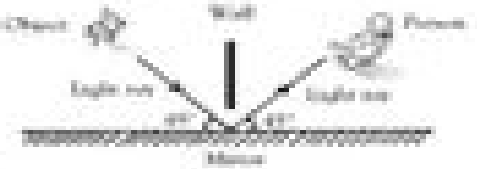
Bent on light

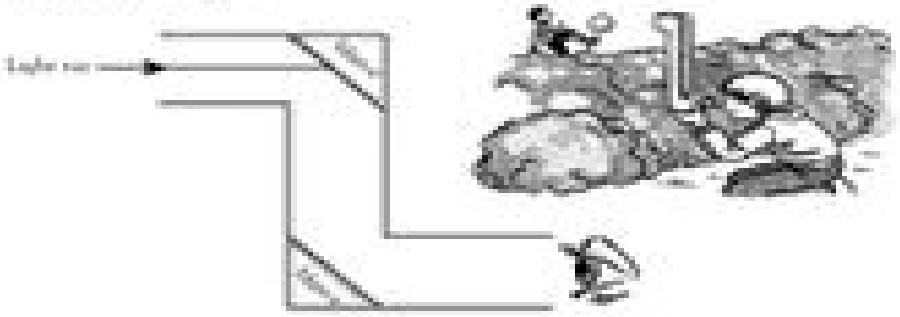
Background knowledge

Reflected light bounces off a surface. Shiny surfaces, such as mirrors, reflect light very well. Light always travels in a straight line and is reflected in a straight line. When a ray of light hits a mirror at an angle, it is reflected at the same angle. If a light ray strikes a mirror at 45°, it is reflected at 45°. If an object is placed in the path of the light ray, its image must be seen by someone who cannot see the actual object (see diagram below).



Science activity

A class made some periscopes to see over a hedge. A diagram of a periscope is shown below. One light ray has been drawn for you. Complete the diagram by drawing two more light rays to show how the light is reflected from the mirrors into the eye.



Science investigation

Find out how to build a periscope. Design and conduct an experiment to test it out. Note how it works. Then blow some bubbles. See if a bubble is transparent, translucent, or opaque? What does a bubble do to a light ray?