

## On the light side

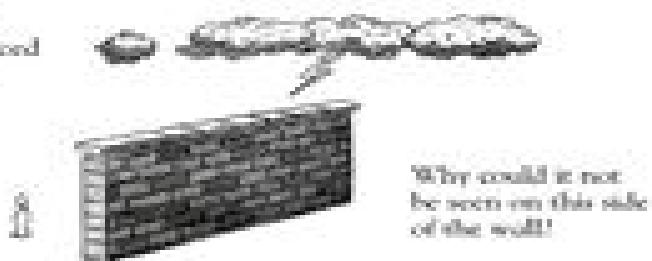


### Background knowledge

Many types of objects give off light. The Sun provides daylight. Lamps and candles provide light at night. The speed of light is much faster than the speed of sound. That is the reason you see lightning before you hear thunder. Light travels in a straight line. A line of light is called a light ray. Light has some interesting properties. It can reflect off surfaces. The light ray bounces off a surface. That is why you can see yourself in a mirror. Light is a form of energy because it can do work for us. For example, phone conversations can be transmitted by light energy from a laser through fibre optics.

### Science activity

A lit candle was placed behind a wall.



'Why could it not  
be seen on this side  
of the wall?'

At the end of a long field, a man was hammering a stake into the ground. From the other side of the field, people could see him hit the stake before they heard the sound of the hammer. Explain why this happened.

### Science investigation

Write your name backwards and look at its reflection in a mirror. Explain what you see. Draw a simple line maze with right and left turns. Place the maze in front of a mirror and try to do the maze without crossing a line. Is it hard? Explain.