

## Beams of light

Light travels in straight lines and cannot curve around things.

Street lights do not light anything very brightly. If we want to make something brighter, we need to narrow the light and send it in just one direction. Car headlamps are like this (Picture 1). We call the light from a headlamp a BEAM of light.

A beam of light is usually invisible. To see it, there has to be something to 'catch' the light. The water droplets in fog can catch the light and show how light travels (Picture 2).

(Picture 2) You can see a beam of light when it is foggy.



(Picture 1) At night we see headlamps and the road they are shining on. But we do not usually see the light itself.



(Picture 3) Light beams can be seen in an early morning mist. In this case the streams of light have been caught by the tiny droplets of water in the mist, and we see them sparkling as light falls on them.

As the light shines out from the headlamps, it catches the tiny droplets of fog and they shine, too. Beams of light can also be seen in the early morning mist (Picture 3).

In both cases, we can see how the edges of the beams of light are straight. This shows us that light moves in straight lines.

(Picture 4) Rays of light can be made by cutting thin slits in a piece of cardboard. The torch beam will show in a darkened room.

## Light travels through slits

There is one easy way in which we can see beams of light. If we cut thin slits in a piece of card and then shine a torch at one side of the card, narrow beams come out from the other side of it (Picture 4). Here, too, you can see the light travelling in straight lines.

## **Summary**

- Light travels in straight lines.
- A beam of light is a thick stream of bright light.

