



Sunlight

Our main **SOURCE OF LIGHT** is the Sun. Its light reaches us even when it is cloudy.



▲ (Picture 1) The Sun is our main source of light.



WARNING Never look directly at the Sun. It can damage your eyes.

We see things because of light. Without light we can see nothing at all.

The rules for bright light

Light comes from anything that shines (Picture 1). But not everything gives us the same amount of light.

For light to be bright:

- ▶ The light must be strong.
- ▶ The light source must be big.
- ▶ The light source must be close.

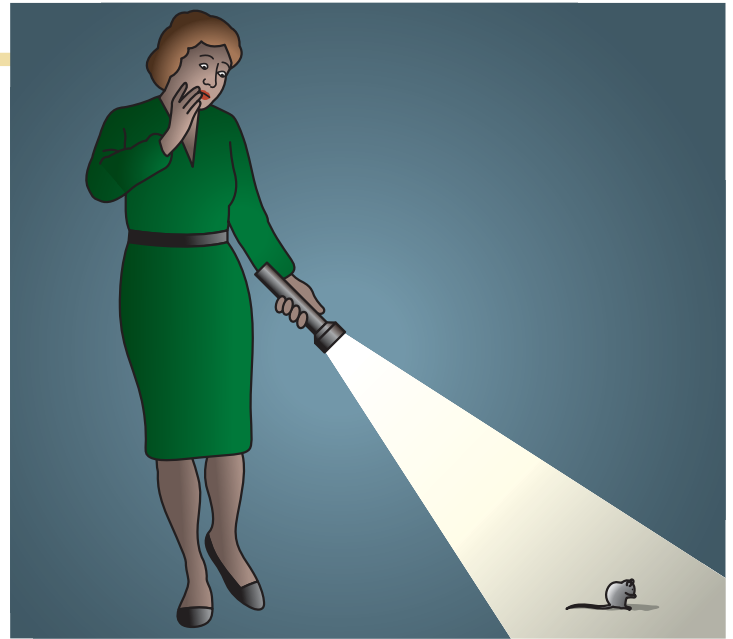
So, the brighter a light shines, the bigger it is and the closer it is, the more it can light our world.

Torchlight and sunlight

If you look straight at a light bulb you may be dazzled and think the light is very powerful.

Look at a torchlight in a darkened room. The source of the light is the tiny bulb in its centre. Although it is very bright, the bulb is so tiny that it can never light a whole room. It can only light things that are very close to it (Picture 2).

Pull back the curtains. Look at the light from a torch bulb again. Its light is hard to see. This tells us that daylight is far brighter than torchlight.



▲ (Picture 2) A torch is a useful, but weak, source of light.

Daylight is sunlight

Daylight comes from the Sun (Picture 3). Although it is far away, the Sun is very, very big and its light is very strong. This is why it would hurt our eyes if we looked straight at it. Sunlight is so powerful that light can get right through even thick clouds.

◀ (Picture 3) This is the Sun seen through a powerful telescope. The dark and light areas show where the surface gases are boiling.

Summary

- The Sun is the most powerful source of light in our world.
- It gives out light because it is bright and huge.