

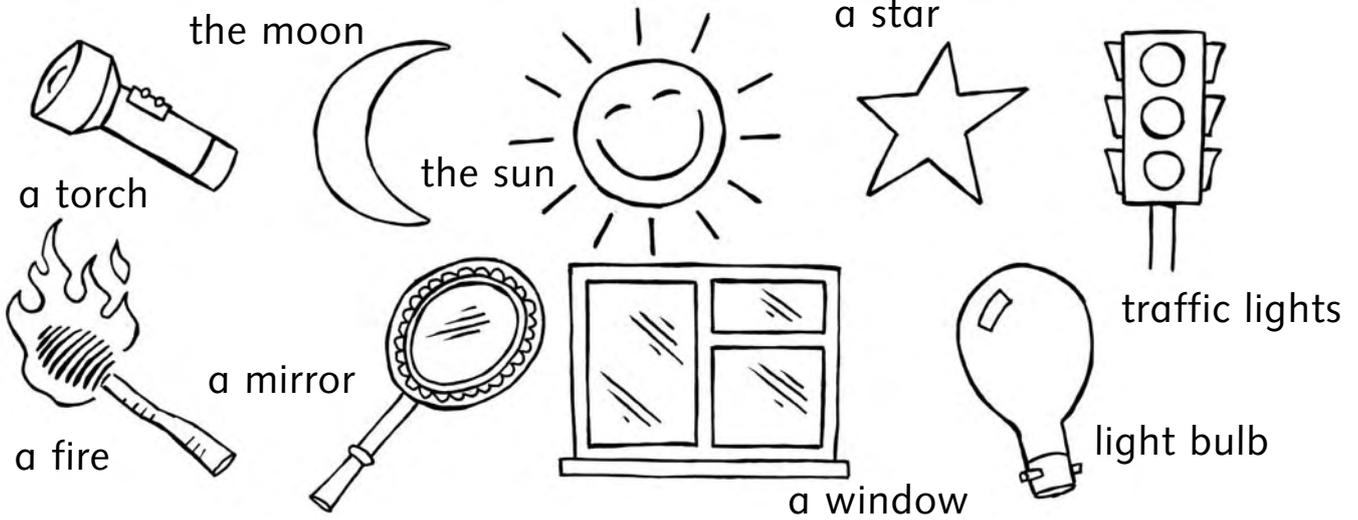
Science - Sound and light

1 Use the key to colour 10 things in the picture.



Key
 blue = quiet sound
 red = loud sound

2 Circle the sources of light.



3 Now classify the sources of light.

Natural	Artificial
the moon	

Subject: Science

Sound and light

Objective: sound and light

Vocabulary: moon, sun, star, traffic lights, light bulb, window, mirror, fire, torch

Introduction

At this stage, pupils will learn to identify the sources of sound and the intensity of common sounds. When objects vibrate they disturb the molecules in the air. This disturbance moves outwards in waves. This is sound. They will also identify sources of natural and artificial light.

Warm up

- Write the words *light* and *sound* on the board.
- Ask general questions about light and sound for example, *Can light travel in a zigzag line? (No, it only travels in a straight line). Can light travel in a vacuum? (Yes, it can, light travels through space). Can sound travel in a vacuum? (No, as there's no air). If I clap my hands in outer space can anybody hear me? (No, as there's no air). What kinds of objects can reflect light? (shiny objects like mirrors). Can sound travel under water? (Yes, it can)*

Activity 1

- Pupils look at the picture and colour the objects according to the key.
- Pupils may colour the picture differently depending on their personal perspective.

Encourage them to discuss their pictures and say why they have used each colour.

Example answers: (blue) bird, the women talking, the guitar player, the person on the phone; (red) the baby, the bus, the two drivers, the dog, the ambulance, the clock

Activity 2

- Pupils circle the sources of light. Remind them that they should circle sources not objects that reflect light.
- Ask volunteers to say what they have circled. Explain that the Moon reflects the light from the Sun, it is *not* a source of light.

Answers: (circled) torch; sun; star; fire; traffic lights; light bulb

Activity 3

- Tell pupils to classify the things they have circled. Write the words on the board if necessary.
- Draw the chart on the board and ask volunteers to come and complete the chart. Pupils correct their work.

Answers: Natural sources: sun, star, fire; Artificial sources: traffic lights, torch, light bulb

Project ideas

- Make shadows and investigate the effect of angles and distances on the size and shape of the shadows.
- Organise a shadow theatre.