

Light

Exploring sources of light

Year 3 / Key Stage 2
Age 7-8

For parents and carers

Thank you for supporting your child's learning in science.

Before the session:

- Please read slide 2 so you know what your child learning and what you need to get ready.
- As an alternative to lined paper, slide 5 may be printed for your child to record on.

During the session:

- Share the learning intentions on slide 2.
- Support your child with the main activities on slides 3 & 4, as needed.
- Slide 6 is a further, optional activity.
- Slide 7 has a glossary of key terms.

Reviewing with your child:

- Slide 8 gives an idea of what your child may produce.



Light

Sources of light

Key Learning e.g.

- Some objects, for example, the sun, a lit light bulb and a burning candle are sources of light.
- Objects are easier to see if there is more light.

I can...

- identify which objects are sources of light and which reflect light.

Activities (pages 3-5): approx.30-40 mins

- Use lined paper, ruler and pencil.
- Alternatively, print page 5 as a worksheet.



Find out more... (page 6): approx. 10 mins

- Which light source is the odd one out?



Explore, review, think, talk....

*How 'light' is your home?
(10 minutes)*

Walk around your home and jot down any light sources you can see.

- Questions to think about:
 - What is it used for (its function)?
 - What type of bulb is it?
 - What colour is the light?
 - How is it powered?





Watch, read, listen...

What is light?
(5 minutes)



Watch this clip about light sources:

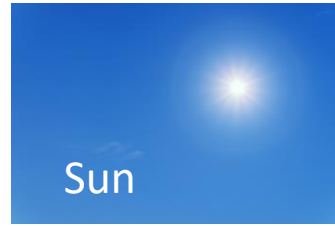
- <https://www.youtube.com/watch?v=1PsHHKwtXQU>
- What sources of light did you see in the video?

- A light source emits beams of light.
- Light sources allow us to see objects.
- Light leaves a light source in straight lines.
- We can see the world around us because of reflected light.
- The Sun is our largest light source and emits light in all directions .



Instructions for Activity

- Sort the images into two groups:
 - light source
 - reflects light
- Can you think of any other sources of light to add to the group?
- Do any of these surprise you? Why?



Sun



cutlery



Moon



candle



traffic lights



high-visibility jacket



Find out more about light sources

Which is the odd one out?
(15 minutes)

Explorify 'Odd One Out' on Light sources:

<https://explorify.wellcome.ac.uk/en/activities/odd-one-out/sources-of-light>

Put your child's observation skills to the test with these three sources of light.

Show the three images and ask them to come up with as many similarities and differences as they can. If they get stuck, prompt them to think about:

- appearance
- what they do
- where they might be found



- Then, everyone needs to decide which one is the odd one out and why.
- Encourage a reason for every answer; there is no wrong answer!

Glossary of terms

bright: If an object is **bright** it gives out or reflects much light.

dark (scientific): **Dark** is the absence of light.

dark (everyday): very little amount of light.

dull: If an object is **dull** it is not shiny or bright.

light: **Light** is the form of energy that makes it possible for eyes to see.

material: Anything used for building or making something else.

shiny: Reflecting or glowing with light.

surface: The outside limit or top layer of something.

All of these are sources of light. Children may not think that the TV emits light, but most modern televisions use LEDs or LCD to produce light.

The Sun and the candle are the two natural sources of light. The television and the traffic light are man-made sources of light.

Possible learning outcome for reviewing your work: **I can identify which objects are sources of light and which reflect light.**



Some children will think the Moon is a light source, but it actually reflects the light from the sun.

All of these objects reflect light. High-visibility jackets are designed to reflect as much light as possible.