



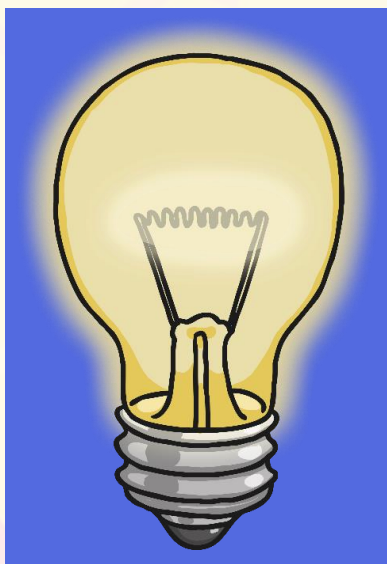
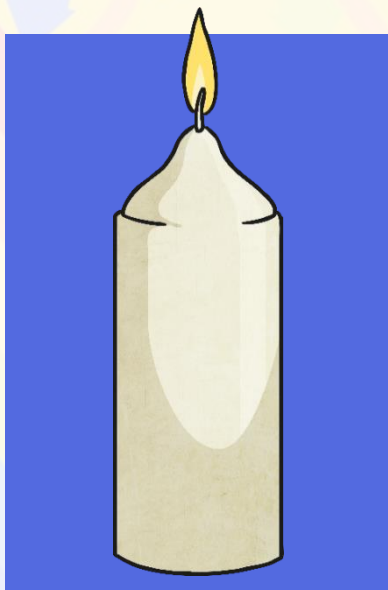
Year 5 Science Week 2



Lesson Aims

- I can explain that light travels in straight lines from light sources to our eyes, and from light sources to objects and then to our eyes.
 - Success Criteria
- I can demonstrate that light travels in a straight line.
- I can create a model to show how light travels from a light source to our eyes, or to an object and then our eyes.
- I can explain how we see things.

Where Does Light Come From?



Light seems to be all around us.
But where does it come from?

Can you name
some sources
of light?



What about some reflectors of light?

These can look like light sources, but are really reflecting light.

How does light travel from a light source?



How Does Light Help Us See?

Light is a type of energy known as electromagnetic radiation.

It is made up of photons, little particles of energy.

Light travels as a wave. But unlike waves of water, or sound waves, it does not need any medium to travel through. This means light can travel through a vacuum - a completely airless space.

Light waves travel out from sources of light in straight lines. These lines are often called rays or beams of light.



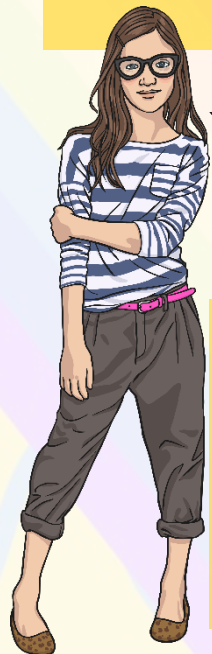
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How Does Light Help Us See?

Rays of light travel from a light source and hit objects around us.

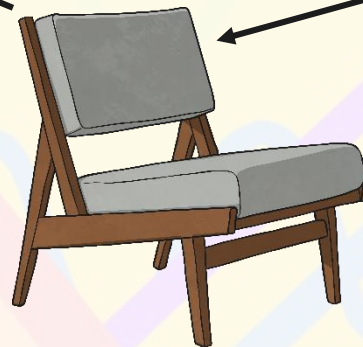
The rays of light reflect, or bounce, off an object, and then travel into our eyes.

This reflection of light allows us to see the object.



1. Light from the light bulb travels in a straight line and hits the chair.

2. The ray of light is reflected off the chair and travels in a straight line to the girl's eyes, enabling her to see the chair.



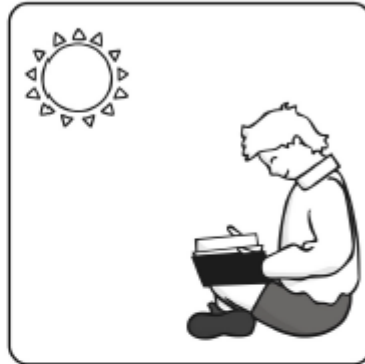
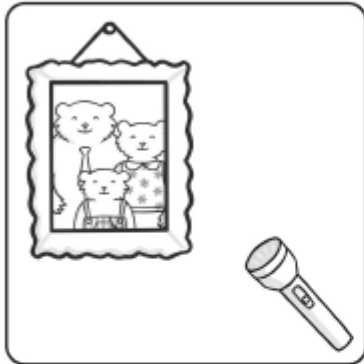
Can you describe how you can see some objects right now?

How We See Things Worksheet

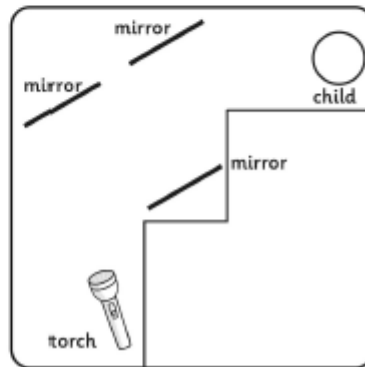
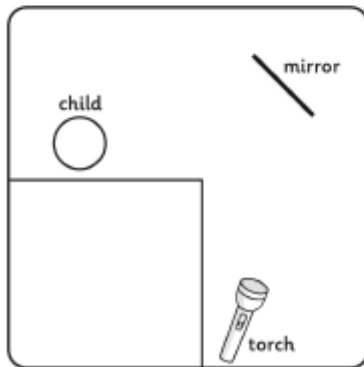


Name: Date:

Use arrows to represent light on the pictures below. Show how the boy can read the book and the picture can be seen?



Use arrows to represent light on the pictures below. Show how the children can see the light from the torch.



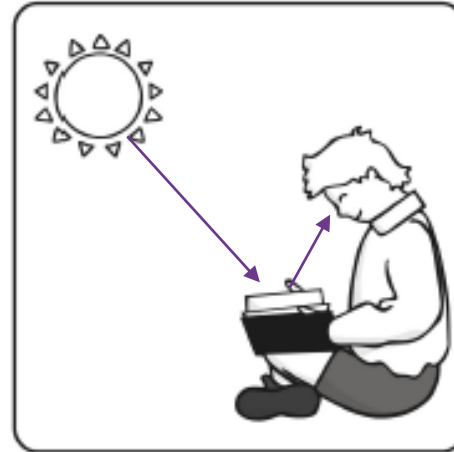
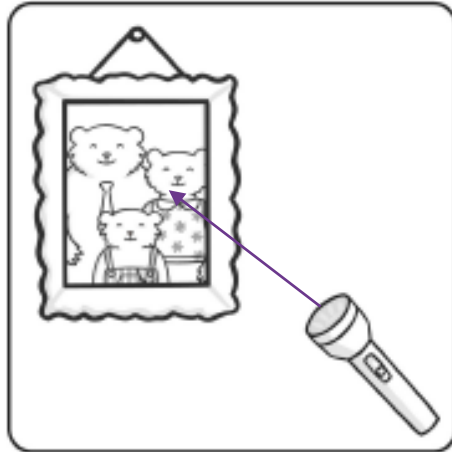
Complete the 'How We See Things' Worksheet

In the top two pictures, draw an arrow on the sheet to show where the light is coming from.

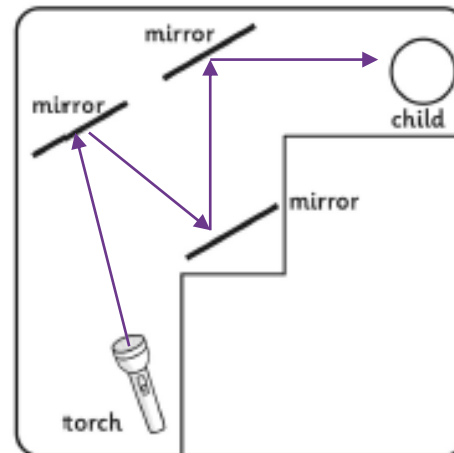
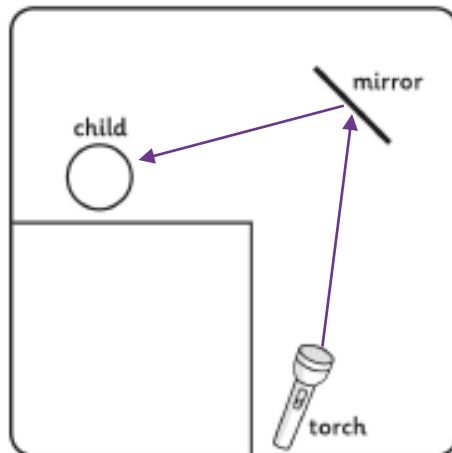
In the bottom two pictures, draw arrows to show how the light is reflected by the mirrors.

REMEMBER: Light travels in straight lines.
Use a ruler.

Use arrows to represent light on the pictures below. Show how the boy can read the book and the picture can be seen?



Use arrows to represent light on the pictures below. Show how the children can see the light from the torch.



Can you find out how fast light travels?

How long does it take for light from the Sun to reach our eyes?

The Light Learning Lab



The Light Learning Lab

You have been asked to create an educational programme for children all about how light enables us to see. Work with your group to plan the episode. All members of your group should take part equally. Make sure your explanations of how we see are clear and easy to understand. You may choose to use pictures or diagrams to support your explanations. Get into character as scientists and have fun!

1. Introduce yourselves and tell the audience what the programme will be about.
2. Explain how light travels.

3. Explain how light hits an object then bounces off it into our eyes, enabling us to see.
4. Give your audience any more information you think they need to know, then thank them for watching.

You might want to use some of these words

light	source	straight
beam	bounce	reflect



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Science | Year 6 | Light | How We See | Lesson 1

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2.

4.

Science | Year 6 | Light | How We See | Lesson 1

Aim



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Success Criteria

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