

Aim

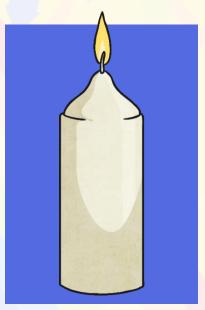
• I can explain that light travels in straight lines from light sources to our eyes, and from light sources to objects and then to our eyes.

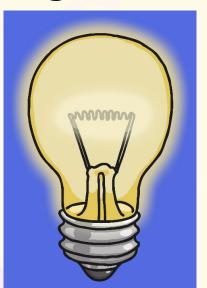
Success Criteria

- 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.



How Does Light Help Us See?

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

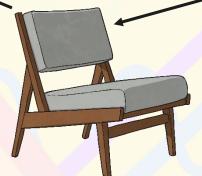
The rays of light reflect, or bounce, off an object, and then travel into our eyes.

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?

Model It!



Can you work with your group to create a human model to show how light enables us to see things?

Use your yellow wool as the ray of light - remember, it should always go in a straight line!

With one member of your group acting as the light source, and one member acting as an object, show how the ray of light travels to the other group members' eyes.

Show your models to the rest of the class. Do they agree with the way you have demonstrated how we see?



The Light Learning Lab



The Light Learning	The Light Learning Lab	ight Learning Lab
You have been asked to create an educational programme for children all about h Work with your group to plan the episode. All members of your group shoul explanations of how we see are clear and easy to understand. You may choose e your explanations. Get into character as scientists and have fur! 1. Introduce yourselves and tell the audience what the programme will be about.	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. Cet into character as scientists and have fun! 1. Introduce yourselves and tell the audience what the 2. Explain how light travels.	cational programme for children all about how light enables us to see. pisode. All members of your group should take part equally. Make sure your and easy to understand. You may choose to use pictures or diagrams to support s scientists and have fun! 2.
Explain how light hits an object then bounces off it into our eyes, enabling us to see. 4. Give your they need. 9. Give your they need.	Explain how light hits an object then bounces off it 4. Give your audience any more information you think into our eyes, enabling us to see. they need to know, then thank them for watching.	4.
You might want to use some of these word		
beam bounce reflect	twinks planit Science Year of Light How We See Lesson 1	Science I Year of Light I How the See [Lesson 1

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