



# **Light and Dark**

# Aim

- I can explain that I need light to see things, and that dark is the absence of light.

# Success Criteria

- I can identify a range of light sources.
- I can explain that dark is caused by the absence of light.
- I can explain that I need light to see things.

# What Is Light?

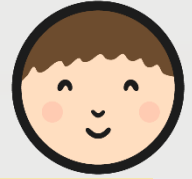
- Can you name some things that give out light?
- How does light help us to see?
- What is dark?
- How do mirrors work?
- What is reflection?
- How are shadows made?

This unit of work is all about light.

You will find the answers to all these questions, and more!



# What Is Light?



What do you already know?

Create a mind map to show what you already know about light.  
Can you think of any questions you would like to find out about light?

**Mind Map**

Draw or write about the things you already know about light.

How do we see things?

Light

What is a reflection?

What is darkness?

Why do people wear sunglasses?

How are shadows made?


What things make light?

Do you have any questions about light? What would you like to find out? Write your thoughts below.

---

---

---

 **planit** twinkl.co.uk

Science | Year 3 | Light and Dark | Lesson 1

# Light Source Sorting Game



Can you sort the set of cards?

Identify the cards that are sources of light, and which ones are not.

Can you explain your reasons?

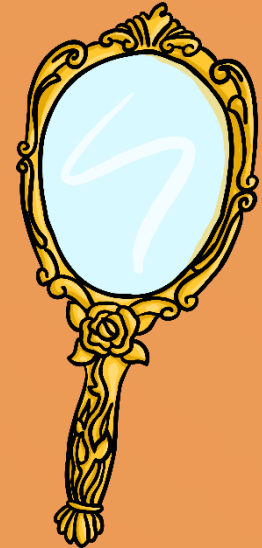


# Light Source Sorting Game

## The Tricky Ones!

Some of the cards were tricky to sort - the moon, the window and the mirror are some examples.

These objects look like light sources, but they are not!





# Light Source Sorting Game

## The Tricky Ones!

The moon is not a light source because it does not make its own light.  
We can see the moon because light from the sun reflects off it  
(bounces off it) back to the earth.



# Light Source Sorting Game

## The Tricky Ones!

The window is not a light source. It is an opening that lets the light from the sun or other light source into the room.

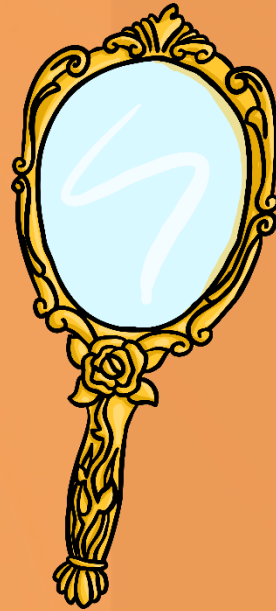




# Light Source Sorting Game

## The Tricky Ones!

The mirror is not a source of light because it does not make its own light.  
It reflects light from other sources.



# What Is Dark?

**Dark is the absence of light.**

If there is no light from a light source, it will be dark.

Think about times when it is dark, or places where it is dark. Which sources of light are absent, or switched off?

**Can we see in the dark?**


# What's In the Bag?



Around your classroom you will find some feely bags.  
It is dark inside the bags, so you can not see what is inside.  
You will have to feel!

Visit each one and feel the object inside. Write a description or draw a picture of what you think is inside the bag on your Activity Sheet.

What's In the Bag?				
<div style="border: 1px solid black; height: 30px; width: 100%;"></div>				
There are 5 feely bags around your classroom. It is dark inside the bags, so you cannot see what is inside. Visit each bag and feel the object inside. Draw or write about what you can feel in the correct space below.				
1.	2.	3.	4.	5.
<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>
Open up the bags. The light can get inside now, and can illuminate the objects. Visit each bag again, and draw or write about what is really inside!				
1.	2.	3.	4.	5.
<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>	<div style="border: 1px solid black; height: 80px; width: 100%;"></div>



Science | Year 3 | Light and Dark | Lesson 1

# What's In the Bag?



Was it hard to tell what was in the bags?

It is much easier to use our eyes to see, but for this we need light.

How can we get light into the bags?



# What's In the Bag?



Open up the bags.

The light can get inside now.

Which light source is illuminating the objects?







Visit each bag again now they are open to the light.

Use your Activity Sheet to draw or write about the objects that are really inside!

It is much easier to tell now because you can use the light to see.

# Light and Dark

Complete your Light and Dark Activity Sheet to explain what you have found out in this lesson.

★ Light and Dark	★★ Light and Dark	★★★ Light and Dark
<p>Complete the paragraph using the key words below to show what you have found out.</p> <p>A _____ source is something that makes light. Some examples of light sources are _____, _____ and _____.</p> <p>_____ is the absence of light. It is dark at _____ time because _____.</p> <p>When it is dark, there is no light so _____ objects, so we can't see them, so we _____.</p> <p>In the jelly bag activity, we could not _____ the objects when they were in the bag, so we _____ up to light so light could illuminate the objects, so we could see them.</p> <p><b>Key words</b></p> <div></div> <p>light      dark      night</p> <div></div> <p>television      sun      see</p> <p><small>twinkl planit! Science Year 1</small></p>	<p>Complete the paragraph using the key words below to show what you have found out.</p> <p>A light _____ is something that makes light. Some examples of light sources are _____.</p> <p>Some objects seem to make light, but are not really light sources, so we call them _____.</p> <p>Dark is the _____ of light. It is dark at night time because light _____.</p> <p>When it is dark, there is no _____ so _____ objects, so we _____ see them.</p> <p>When the bag was opened up to light, so light could illuminate the objects, we _____.</p> <p>This shows that we need light to see.</p> <p><small>twinkl planit! Science Year 1</small></p>	<p>Complete the paragraph using the key words below to show what you have found out about light and dark.</p> <p>A light source is _____. Some examples of light sources are _____. Some objects seem to make light but are not really light sources, so we call them _____. Dark is _____. It is dark at night time because _____. When it is dark, there is no light so _____ objects, so we _____ see them. In the jelly bag activity, we _____.</p> <p>This shows that we _____.</p> <p><small>twinkl planit! Science Year 1</small></p>



# Aim



- I can explain that I need light to see things, and that dark is the absence of light.

# Success Criteria

- I can identify a range of light sources.
- I can explain that dark is caused by the absence of light.
- I can explain that I need light to see things.

