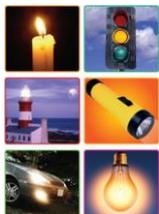


Key Questions

- Where does light come from?
- Can you name different sources of light?
- What is reflection, how is it different from a light source?
- How can we protect ourselves from the sun?
- How are shadows formed?
- How does the position of the sun change our shadow throughout the day?



What I should already know

This topic has not yet been covered at primary school.

What I will know by the end of the unit

- There are many different sources of light natural – sun, stars. Man-made – lightbulbs, tvs, computer screens.
- We need light in order to see things and that dark is the absence of light.
- Light is reflected from surfaces, these are not light sources.
- The sun can be dangerous to our eyes and skins and we can protect ourselves by using sun cream, wearing sunglasses and hats.
- Materials can let different amounts of light through them, they can be opaque where no light passes through, translucent where some light passes through and transparent where all light passes through.
- Shadows are formed when the light from a light source is blocked by an opaque object.
- The position of the sun throughout the day causes the length of our shadow to change – early morning and late evening our

Key Vocabulary

Light – A form of energy that travels in waves from a source.

Dark – The absence of light.

Light source - An object that makes its own light.

Reflection – When light bounces off a surface, changing the direction of the ray of light.

Mirror - A surface which reflects a clear image.

Shiny – A surface that easily reflects light.

Matt – A dull surface without shine.

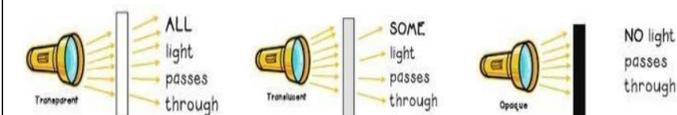
Shadow – An area of darkness where light has been blocked.

Sunlight – Light from the sun.

Transparent – Objects that let light pass through them easily, meaning you can see them.

Translucent - Objects that let some light pass through them but scatters the light, meaning you can't see through them easily.

Opaque – Objects that do not let any light pass through them.



Key People

Isaac Newton (1642 – 1727) from England, **discovered** that ordinary **light** from the sun was made up of the seven colours of the rainbow.



Scientific Enquiry

During this unit I will:

- Identify natural and man-made light sources.
- Investigate how different surfaces reflect light.
- Explore the terms transparent, translucent and opaque.
- Investigate how shadows are formed and how they change size throughout the day.

Useful web links:

<https://www.bbc.co.uk/bitesize/topics/zbssgk7>
<https://www.theschoolrun.com/what-is-light>