

Year 5/6 Light Knowledge Organiser



What do I know ?

- Darkness is the absence of light.
- Light can be reflected from surfaces. I know which surfaces reflect light well.
- Light from the sun can be dangerous (UV rays), but there are ways to protect our eyes.
- Shadows are formed when an object blocks a light source.
- Opaque objects form the darkest shadows.



Gems of knowledge

- I will learn that light travels in straight lines.
- I will learn that objects are seen because they give out or reflect light into the eye.
- I will learn about the angle of reflection and the angle of incidence.
- I will learn why shadows have the same shape as the object that casts them.



How will I work like a Scientist?

- I will plan different types of scientific enquiry to answer a variety of questions.
- I will recognise and control variables where necessary (Y5- with support).
- I will select all equipment needed (Y5- with support).
- I will use a range of scientific equipment to take measurements with increasing accuracy.
- I will identify when to take repeat readings (Y5- begin to understand).
- I will take repeat readings.
- I will record data and results of increasing complexity e.g. line graphs.
- I will report and present findings from enquiries, including conclusions and suggest causal relationships (Y5- with prompting).
- I will report and present findings from enquiries in oral and written forms.
- I will identify scientific evidence that has been used to support or challenge arguments.
- I will use test results to suggest further comparative or fair tests (Y6- make predictions)
- Y6 only- I will report and present findings from enquiries, including explanations of the validity of results.

Vocabulary

Meaning

Light source

An object that makes its own light.

Reflect/reflection

When light bounces off a surface and changes direction

Shadow

An area of darkness where light has been blocked.

Opaque

Objects that do not let light through them.

Law of reflection

The law states that the angle of the incident ray is equal to the angle of the reflected ray.

Significant Scientist



Ibn al-haytham was a physicist and mathematician who carried out the first experiment to prove that light travels in straight lines. He is known as the 'father of optics'.

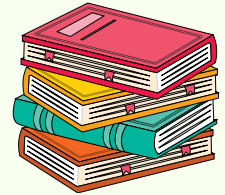


Careers in Physics (learning about the Earth and how it works)



Optometrists/opticians- examine people's eyes for vision defects and signs of disease.

Read me!



Blackout by John Rocco.

Available to listen to on YouTube.

