

Knowledge

Progression

How does light travel?

Can the path of light be bent?

How are shadows made?
How does the position of the sun affect shadows?

Why do they have the same shape as the object that casts them?

How can we investigate the path of light?

Which material is best at reflecting light?

What does a prism do to light?

Why does a pencil appear to bend in water?

How does the eye see things?

What are our pupils for?

How do we see colour?

Year 6 Light

Science Knowledge Organiser

Knowledge

Skills

Vocabulary



Curriculum Coverage

- recognise that light appears to travel in straight lines
- use the idea that light travels in straight lines to explain that objects are seen because they give out or reflect light into the eye
- explain that we see things because light travels from light sources to our eyes or from light sources to objects and then to our eyes
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them
- use the idea that light travels in straight lines to explain why shadows have the same shape as the objects that cast them

Skills Progression

- To use scientific evidence to support / refute an idea
- To plan a scientific enquiry to answer a question
- Use test results to make predictions
- Plan & set up comparative tests
- Plan & set up a fair test, controlling variables
- Discuss results and how they can be trusted

Scientific vocabulary

Dull, bright, shadow, sun, transparent, opaque, translucent, reflection, mirror, absence, bounce, shade, sunrise, sunset, source, ray, refraction.

Scientific enquiry

What does the path of light look like and can it be changed?

How do human eyes see objects?

Why are shadows different shapes?

Do shadows alter between different times of the day?

Why do we need to reflect light and what materials are the best for this?

