

Light

As Speakers we can:

Create an oral presentation about how our eyes see things.
Discuss how light travels and bends
Discuss how light is formed and what it is made up of.

As Writers we can:

Write instructions on how to make a periscope.
Explain how a kaleidoscope works.
Prepare a script for a presentation about light and how we see things.
Answer questions related to the information we find.

As Readers we can . . .

Research properties of different rocks and related materials.
Select appropriate information and materials from our research.
Read passages and whole texts related to the topic.

Focused Class Texts:

Stone Girl Bone Girl by Laurence Holt
Pebble in my pocket by Meredith Hooper and Chris Cody

Suggested texts for home reading:

<https://kidsloverocks.com/>

As Mathematicians we can:

Use very large numbers when considering the distance that the Sun is away from the Earth and the speed at which light travels to Earth.
Measure how long it would take for light to reach each planet in our galaxy.
Use our knowledge of data handling to record and analyse results.

As responsible citizens we can:

Encourage others to turn out lights when they are not being used.
Warn others about the dangers from being out in the sun – wear a hat, sunscreen and drink lots of water.
Work as a team in order to complete experiments and analyse results.
Understand how people who are visually impaired have to face challenges in their everyday life

In R.E we can:

Appreciate that God created the Earth
Discuss the fact that Jesus is the "Light of the World".
Understand the significance of Light and dark in the Bible.

As Scientists we can:

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.

What do rocks tell us about the way the earth was formed?

Key questions:

- How do we know that light travels faster than sound?
- How can you set up an experiment to show that light travels in straight lines?
- How do your eyes work?
- How can you use mirrors to see around blind corners?
- Spend a small period of time being blind folded and see how successful you are at doing everyday things you take for granted?
- Can you use water colour painting to create landscape or still life painting which shows light and shadow?
- Can you create a shadow puppet story and present it to others?

As Historians/Geographers, we can:

Explore how the eyes are used as symbols in ancient cultures (Egyptians, Mayans, Aztecs etc.)

Research the history of glasses – when were they first used to help people see?

Carry out a study to compare the amount of daylight each country / continent receives each year.

As Artists and Designers, we can:

Research which artists suffered from eye problems which affected their art.

Look at surrealism and pointillism and how it can play tricks on the eyes.

Design and create a shadow puppet theatre.

Learning beyond the classroom:

Using Technology, we can:

Create multimedia presentations.

Research how technology helps the blind or visually impaired.

Create graphs and charts to show the results of our experiments.

As sporting enthusiasts, we can:

Investigate

As musicians, we can:

Create music inspired by a light show

Create musical instruments that catch and use light.

Dance like the light – dance light a firework display.

Find music that uses light in its title

As home learners, we can:

Create a shadow puppet theatre

Create a kaleidoscope

Paint pictures using the theme dark and light.

Create a sundial.