St Leo's and Southmead Catholic Nursery and Primary School

Year Six Science Knowledge Organiser Autumn Term

Amazing Activities

Set up fun light laboratory to share fun experiments with younger children

Curriculum Links

DT - Use research and develop design criteria to inform the design of innovative, functional, appealing products that are fit for purpose, aimed at particular individuals or groups; understand and use electrical systems in their products

Light

Key Vocabulary

Light - a form of energy that travels in a wave from a source

Light Source - an object that makes its own light

Reflection - when light bounces off a surface, changing the direction of the light

Incident ray - a ray of light that hits a surface

Reflected ray - a ray of light that has bounced back after hitting a surface

Law of reflection - the angle of the incident ray is equal to the angle of the reflected ray

Refraction - when light passes from one medium to another (eg, air into water)

Visible Spectrum - light visisble to the human eye. Made up of the colour spectrum

Prism - solid 3D shape with flat sides. A **transparent prism** separates outvisible light into all the colours of the spectrum

Key Concepts

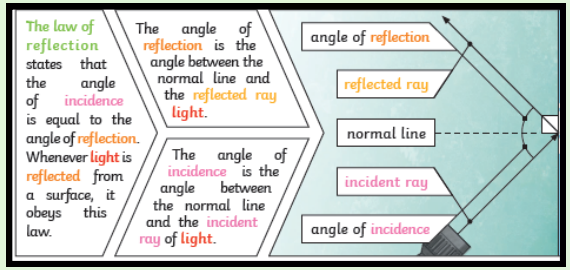
Light travels as a wave through space

Objects reflect light or give out light

We can see things because light travels from a light source to our eyes

Shadows have the same shapes as the objects that cast them because light travels in straight lines

Light is refracted when it passes from one medium to another



Light is refracted when it passes from one medium to another.

Skills

- Explore and talk about ideas, ask their own questions about scientific phenomena
- Plan different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary.
- Begin to recognise more abstract ideas and begin to recognise how these ideas help them to understand how the world operates.
- Select and plan the most appropriate type of scientific enquiry to use to answer scientific questions
- Use enquiry results to make predictions to set up further scientific enquiries
- Confidently choose and use a variety of different types of scientific and measuring equipment
- Chose the most appropriate measuring equipment (for precision) and explain how to use it accurately
- Take repeat measurements where appropriate
- Independently decide how to record data and results
- Use scientific language and illustrations to discuss, communicate and justify their scientific ideas.