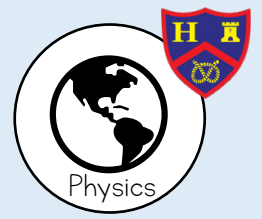


Light

Year 6



Review:

What should I already know?

- I can list some different sources of light.
- I know light is reflected from surfaces
- I can recognise that shadows are formed when the light from a light source is blocked by an opaque object.

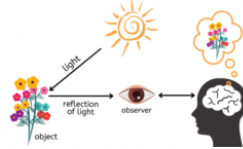
Essential knowledge

- Light travels in straight lines until it hits an object that will reflect it.

HOW DOES THE EYE DETECT LIGHT?

Light travels in straight lines. When light hits an object, it is **reflected** (bounces off) and enters our eyes.

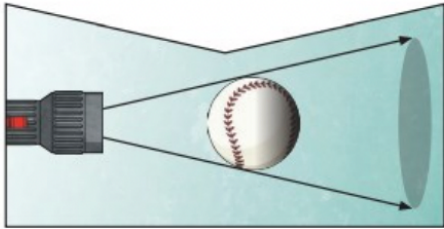
This is how we see the object.



HOW DO SHADOWS GET THEIR SHAPE?

Shadows are made by blocking light.

Light rays travel from a **source** in straight lines. If an **opaque** object gets in the way, it stops light rays from travelling through. The shape of the object blocking the light creates the shape of the shadow.



Vocabulary

Physics	Physics is all about the Earth and how it works.
Working Scientifically	Working scientifically is about answering scientific questions.
Light	A source of energy that allows you to see.
Dark	The absence of light.
Light Source	An object that makes its own light.
Reflection	When light bounces off of a surface and changes the direction of the ray of light.
Refraction	When light bends or changes direction as a result of passing through a medium (object).



Significant Scientist

Isaac Newton was the first to understand the rainbow. In 1672 he refracted white light with a prism, resolving it into its component colours: red, orange, yellow, green, blue and violet.



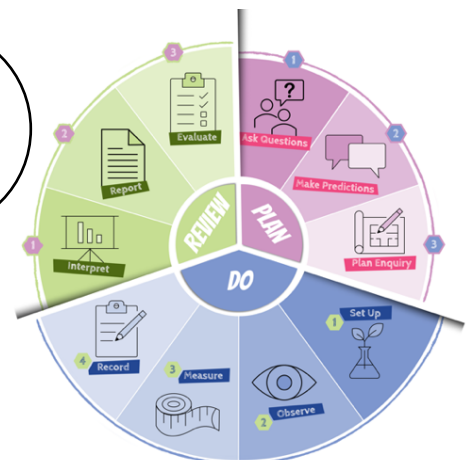
Working scientifically

Our enquiry focus:

Observing Changes Over Time	Pattern Seeking	Identifying, Grouping & Classifying	Fair Testing	Research
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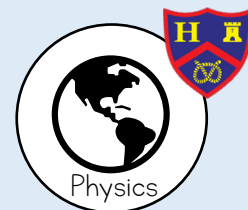
Our working scientifically skills:

PLAN	Set up enquiry	DO	Record
DO	Measure	REVIEW	Report



Electricity

Year 6



Review:

What should I already know?

- I know some appliances run on electricity.
- I know how to construct a simple circuit
- I can identify and name the basic parts of a simple circuit.
- I know things can be conductors or insulators.

Essential knowledge

• Electricity is a form of energy that can be carried by wires and is used for heating, lighting and to provide power for electrical devices. Sources of light and sound may need electricity to work.



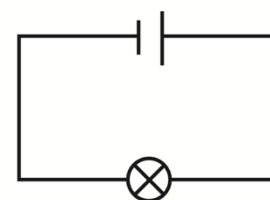
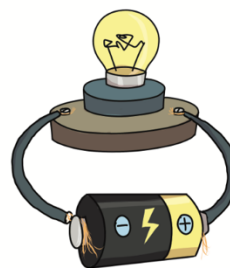
• The brightness of a bulb or volume of a buzzer can be affected by increasing or decreasing the voltage in a circuit.

• Symbols are used to draw circuits to make sure that they are consistent for all scientists.

battery or cell	bulb	wire	open switch (off)	close switch (on)	motor	buzzer

Vocabulary

Physics	Physics is all about the Earth and how it works.
Working Scientifically	Working scientifically is about answering scientific questions.
Circuit	A path that an electrical current can flow around.
Symbol	A visual picture that stands for something else.
Cell/Battery	A device that stores energy until it is needed. A cell is a single unit and a battery is a collection.
Current	The flow of electricity around a circuit.
Voltage	How strong a current is in a circuit..



Working scientifically

Our enquiry focus:

Observing Changes Over Time	Pattern Seeking	Identifying, Grouping & Classifying	Fair Testing	Research
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Our working scientifically skills:

PLAN	Make predictions	DO	Record
DO	Set up enquiry	REVIEW	Interpret

