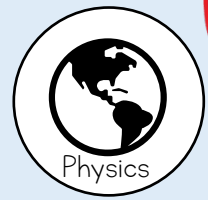


Electricity

Year 6



Review: *What should I already know?*

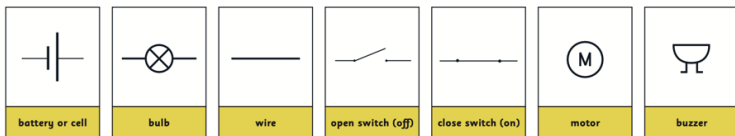
- I know some appliances run on electricity.
- I know how to construct a simple circuit
- I can identify and name the basic parts of a simple circuit.
- I know things can be conductors or insulators.

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.

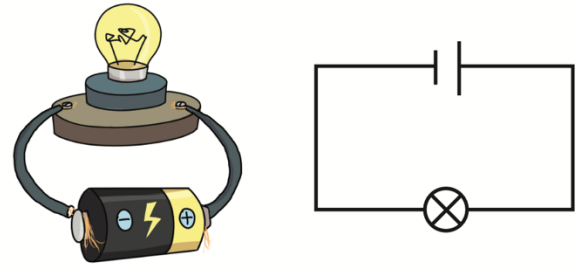


- The brightness of a bulb or volume of a buzzer can be affected by increasing or decreasing the voltage in a circuit.
- Symbols are used to draw circuits to make sure that they are consistent for all scientists.



Vocabulary

Physics	Physics is all about Earth and space and how they work.
Working Scientifically	is all about working like a scientist to answer 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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Skills I will need:

- I will make predictions based on scientific knowledge.
- I recognise the different variables and justify my choice of enquiry.
- I will be able to independently set up my scientific apparatus and use with care.
- I will be able to identify when to take repeat readings and find averages.
- I will record my results in a bar/scatter graphs using complex scales including decimals.
- I will use scientific language to justify my findings.
- I will explain the validity of my results and suggest changes to increase their accuracy.



Animals including Humans

Year 6



Review:

What should I already know?

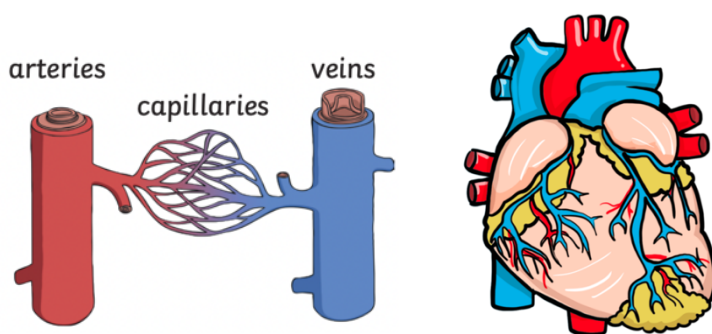
- I know the need for a skeletal and muscular system (Year 3).
- I know the function of the digestive system (Year 4) and how our body gets nutrients from different types of food (Year 3).
- I know our bodies grow and change as we age (Year 5).

Essential knowledge.

- I will learn that the circulatory system is a **body system** which **transports** things around the body.
- It has 3 main parts: the **heart**, **blood** and **blood vessels** and I will be able to describe the **functions** of these.
- I will recognise how diet, exercise, drugs and lifestyle choices can **impact** our body and circulatory system.
- I will learn how nutrients and water are **transported** in animals, including humans.

Vocabulary	
Biology	Biology is all about living things.
Working Scientifically	is all about working like a scientist to answer scientific questions.

Function	Something's function is what job it does.
Circulatory system	A body system which transports things around the body.
Heart	An organ which constantly pumps blood around the circulatory system.
Blood vessels	Tube-like structures that carry blood through tissues and organs.
Blood	Blood travels in the blood vessels. It is a liquid that carries nutrients and water to the body.
Oxygenated blood	Blood with oxygen within it. It is pumped from the heart to the rest of the body.
Deoxygenated blood	Blood where the oxygen has already been transferred to the rest of the body.
Drug	A substance (including alcohol) containing chemicals that has an effect on your body.



Working Scientifically



Our enquiry focus:				
Observing Changes Over Time	Pattern Seeking	Identifying, Grouping & Classifying	Fair Testing	Research

Skills I will need:

- I will plan a fair test enquiry and recognise the different variables.
- I will consider different enquiries using different variables and justify my choice.
- I will identify when to take repeat readings and find averages.
- I will record my findings in a line graph to show a period of time.
- I will be able to explain the validity of my results.
- I will use my results to suggest further fair tests.

