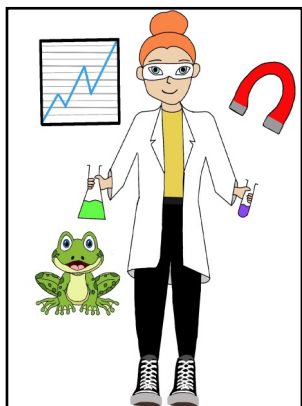




Knowledge Organiser

Year Group:	4	Subject:	Science– Electricity	Term:	Spring 1
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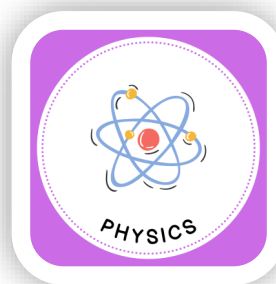
Enquiry Question

How does electricity flow?

What should I already know?

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

Concept



Substantive Knowledge (key facts)

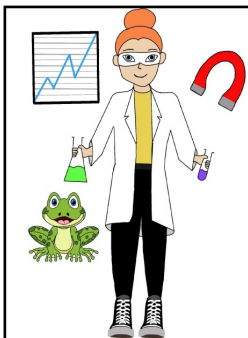
- Electricity is a type of energy which is used to power lots of different things including items that we use in everyday life.
- A simple electrical circuit needs a cell, battery, connections, and an output (light or sound)
- A switch is a small control that you use to turn a device on or off.
- When they are placed in a circuit, some materials allow electricity to pass freely through them. These are called electrical conductors. Metal is a good conductor.
- When they are placed in a circuit, some materials do not allow electricity to pass freely through them. These are called electrical insulators.

Scientific skills I am practising

- I can gather, record, classify and present information in a variety of different ways to help me answer questions.
- I can identify differences, similarities or changes related to simple scientific ideas and processes.
- I can record findings and present data using simple scientific language, explanations, diagrams, pictures, keys, bar charts and tables.
- I can ask relevant questions and use different types of scientific enquiry to answer them, including comparative and fair tests.

Sequence of learning

1)	define what electricity is and identify common appliances that run on electricity.
2)	understand how an electrical circuit works.
3)	construct a simple series electrical circuit.
4)	recognise and identify some common conductors and insulators.
5)	identify the dangers of electricity and understand how to use it safely.
6)	Assessment.



Knowledge Organiser				
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Key vocabulary	
Tier 2	Tier 3
Energy—power derived from the use of physical or chemical resources, especially to provide light and heat or to work machines.	Conductor—a material that allows electricity to flow through it.
Current- a flow of electricity which results from the ordered directional movement of electrically charged particles.	Insulator— a material that does not allow electricity to pass through it.
Cell—a device, which converts chemical energy into electrical energy	Electrical Circuit—path for transmitting electric current.
Output—amount of something produced by a machine.	