

Bomere and the XI Towns Federation Knowledge Organiser—Science

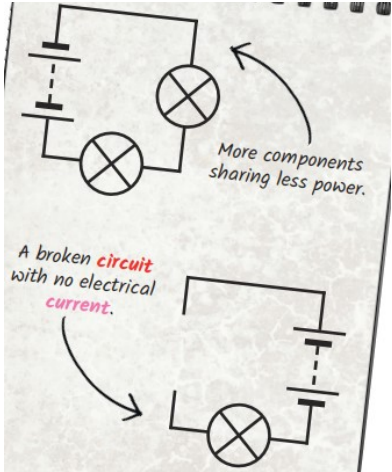
Topic: Science— Electricity

Class/Year Groups: Wrekin

Term: Summer

What you already know?
In year 4 pupils built simple circuits with different components. They tested materials for electrical conductivity and began to design their own simple circuits.

What you will learn:



What you will learn:


Components of a **Circuit** and Their **Symbols**

lamp/bulb (indicator)		wire	
lamp/bulb (lighting)		switch (open)	
motor		switch (closed)	
cell		battery	

These **symbols** can be used to create electrical **circuit** diagrams.

What will make a bulb brighter or a buzzer louder?

- More **batteries** or a higher **voltage** create more power to flow through the **circuit**.
- Shortening the wires means the **electrons** have less **resistance** to flow through.



Vocabulary:

Circuit	A path that an electrical current can flow around
Electrons	Very small particles that travel around an electrical circuit
Resistance	The difficulty that the electric current has when flowing around a circuit.
Voltage	The force that makes the electric current move through the wires. The greater the voltage, the more current will flow
Amps	How electric current is measured.
Current	The flow of electrons, measured in amps.



- National Curriculum Objectives:**
- Understand planning different types of scientific enquiries to answer questions, including recognising and controlling variables where necessary
 - Understand taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate
 - To be able to record data and results of increasing complexity using scientific diagrams and labels, classification keys, tables, scatter graphs, bar and line graphs
 - To report and present findings from enquiries, including conclusions, causal relationships and explanations of and degree of trust in re-

