

Electricity

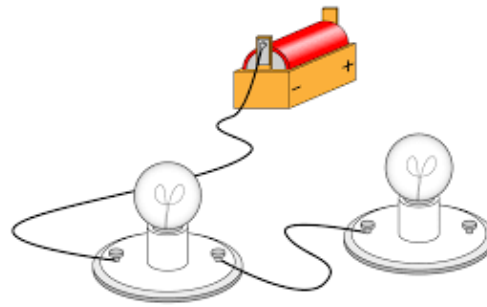
Construction

Prior Knowledge

In Year 4, you learned about circuits needing to be complete and how different materials are conductors or insulators. You also learnt that a switch can open and close a circuit. Finally, in Year 4, you identified common appliances that run on electricity.

In Year 5, you learnt about the properties of materials and tested their levels of conductivity—both electrical and thermal.

You also learnt how to test the different properties materials fairly - particularly their everyday uses.



My Component Knowledge:

Lesson 1: What is an electrical cell?

Lesson 2: What are insulators and conductors?

Lesson 3: How does the wire loop game work?

Lesson 4: How does a burglar alarm work?

Lesson 5: How do different components work?

Lesson 6: What makes a circuit defective?

My Composite Knowledge:

Adding more cells to your circuit increases the brightness of a bulb and the volume of a buzzer.

Electrons flow from the anode to the cathode.

Components create a load on the circuit.

If the circuit is incomplete electrons will not flow.

My Powerful Knowledge:

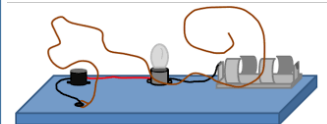
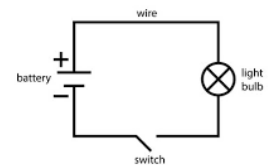
I understand the factors that effect how a circuit works or does not. and can describe the purpose of components.

Key Vocabulary

Tier 1: power, electricity, force, energy, wires, battery, light, sound, buzzer, bulb

Tier 2: circuit, diagram, connection, bulb, buzzer, complete, conductor, insulator, effective, ineffective, devise, cell,

Tier 3: current, voltage, amps. electron, component



Working Scientifically

Record data and results and use scientific diagrams.

Report and present findings from enquiries and conclusions.

Identify scientific evidence that has been used to support or refute ideas or argument.

Where does electricity come from?

How does electricity travel?

What makes electricity powerful?

How do you check a circuit works?