

Science Overview – Electricity

Year 6

Autumn 1

Key Question: How do the choices people make shape a society?

National Curriculum

- associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit.
- compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches.
- use recognised symbols when representing a simple circuit in a diagram.

SUBSTANTIVE KNOWLEDGE

- Know the components of a circuit and draw a circuit using the correct symbols.
- Know what might impact the function of components.
- Know what happens when more/less batteries are added to a circuit.
- Know how to make bulb brighter and a buzzer louder.
- Know how to make a bulb dimmer or a buzzer quieter.
- Know what a series circuit is.

Key words:

**current
voltage**

Vocabulary:

circuit, symbol, cell/battery, amps, electrons

Working Scientifically

- taking measurements, using a range of scientific equipment, with increasing accuracy and precision, taking repeat readings when appropriate.

Enquiry type to cover and enquiry suggestion

Fair testing (enquiry type)

How does the voltage of batteries in a circuit affect the volume of a buzzer?

Learning Milestones /Assessment

I can...

- match a circuit component up with the correct symbol.
- draw a circuit using the symbols.
- describe what might happen to a circuit in different circumstances- switch open, two batteries present etc.