

Age related scientific vocabulary

Subject Knowledge Bank

Year 6

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Science

Focus: Electricity

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voltage	Voltage is the difference in electrical energy between two parts of a circuit. It can be measured using a voltmeter and is measured in volts.
current	A current is an electrical flow caused when electrons move through a conductor and carry electrical energy from one place to another place. An electrical current flows through a circuit.
component	Everything you own that uses electricity will have an electric circuit. These circuits are made up of different electrical components. For example, batteries, switches, bulbs and buzzers.



Key Knowledge

- Batteries are a store of energy. The energy pushes electricity round the circuit. When a battery's energy is gone it stops pushing. Voltage measures the 'push'.
- The greater the current flowing through a device the harder it works.
- A switch opens and closes a circuit
- Drawings of complex circuits can be simplified using symbols in circuit diagrams.
- The number & voltage of the cells in a simple circuit affect the brightness of bulbs, the loudness of buzzers or the speed of motors
- Series circuits are simple with components wired along a single wire. If one component fails the complete circuit is broken and so all components fail to work as they should.
- In **parallel circuits** the complete circuit is maintained by other connections and so the failure of one component doesn't stop the other components working normally.

Success Criteria	Pupil Reflection		Teacher Assessment
I can explain the importance of the major discoveries in electricity	Before	After	
I can use recognised symbols when representing a simple circuit in a diagram	Before	After	
I can observe and explain the effects of differing number and volt- age of cells in a circuit	Before	After	
I can investigate the relationship between wire length and bulb brightness/loudness of buzzer—I can plan a fair test and decide how to collect evidence appropriately	Before	After	
l can communicate findings using scientific terminology and evalu- ate how my investigation could be improved	Before	After	