

New Knowledge and vocabulary

Electrical appliances	Objects that use electricity to power them. This power could come from batteries or mains electricity . Lights, televisions and computers are examples.
Circuit	From the Latin word <i>circum</i> meaning to 'go around.' A circuit can contain a battery (for power), wires (for the electricity to travel through) and a bulb or buzzer which uses the power.
Switch	Circuits can contain a switch to control the flow of energy between on and off . These are widely used for lights in buildings.
Insulators and conductors	Insulators stop the flow of electricity. Insulators include wood, plastic and glass. Conductors allow the flow of electricity. Examples include water, gold and copper.
Electrical safety	Electricity is useful but can be dangerous. Don't use electrical appliances with wet hands. Don't put fingers into appliances. If you aren't sure, always ask an adult.

Examples of how to stay safe around electricity



Metals are conductors **because...**

Metals are conductors **but...**

Metals are conductors **therefore....**

Application of knowledge

Investigate the effect of changing a variable in a circuit. For example, what happens to the brightness of a bulb if more batteries are added?

Test a range of materials to determine to test if they are insulators or conductors by adding them in circuits.

Examples of electrical appliances that use electricity



Copper is an excellent conductor so it is often used in electrical wires

