

Nova's Electricity Discovery Flashcards

Learning objective: To identify common appliances that run on electricity and understand the basic components of a simple circuit.

Use these flashcards to test your knowledge of electricity. Nova the owl wants to make sure you can identify components and understand how to keep your home safe!

What is a simple electrical circuit?

A closed loop that allows electricity to flow from a power source to a component, like a bulb, and back again.

What is the function of a switch in a circuit?

A switch controls the flow of electricity by either completing the circuit (on) or breaking the circuit (off).

Give an example of a common electrical appliance found in a kitchen.

A toaster, a kettle, or a microwave.

What is a conductor?

A material that allows electricity to pass through it easily, such as metal.

What is an insulator?

A material that does not allow electricity to pass through it, such as plastic or eraser, used to cover wires for safety.

Why should you never touch an electrical socket with wet hands?

Water is a conductor of electricity, which could cause a dangerous electric shock.

What does a battery or cell provide in a circuit?

It provides the energy (voltage) needed to push the electricity around the circuit.

What happens if there is a gap in your circuit?

The circuit is 'broken', so the electricity cannot flow and the component (like a bulb) will not work.

If you add more cells to a circuit, what happens to the brightness of the bulb?

The bulb will usually become brighter because more energy is being supplied to the circuit.

Name one safety rule to follow when using electricity at home.

Do not overload plug sockets, keep electrical items away from water, or do not pull a plug out by the cord.

What is the difference between a cell and a battery?

A cell is a single unit of power, while a battery consists of two or more cells connected together.

Why do we use copper for electrical wires?

Copper is an excellent conductor, meaning it lets electricity travel through it very efficiently.