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# EBJ Knowledge Organiser Science Year 4

## Spring 2 Electricity

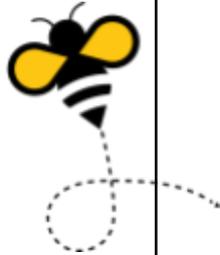
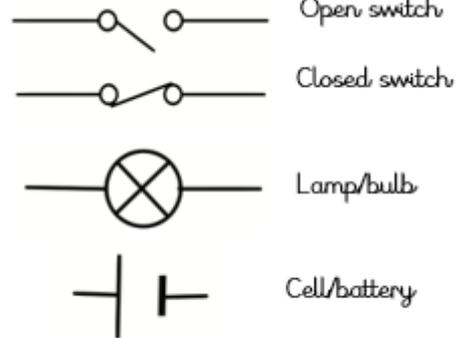


### What is electricity?

Electricity is a form of energy transferred through conductors. Electricity is generated using energy from natural sources such as the Sun, oil, water and wind. These can also be called fuel sources.

Common appliances that we use everyday use electricity. These are appliances such as lightbulbs, ovens, TVs, mobile phones and games consoles. Some appliances use batteries and some use mains electricity. Batteries come in different sizes depending on how much and for how long the appliance is used.

### Circuit Symbols

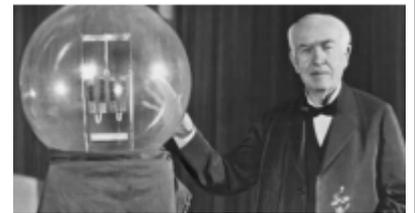


### Key Vocabulary

Battery, buzzer, cell, circuit, component, conductor, current, insulator, lamp, motor, switch, wire.

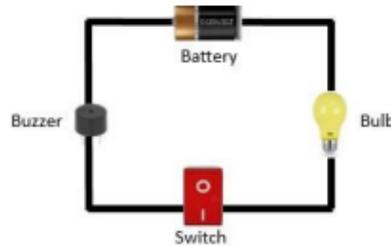
### Famous Scientists

Thomas Edison is an American scientist and inventor. He invented his most famous invention in 1879.

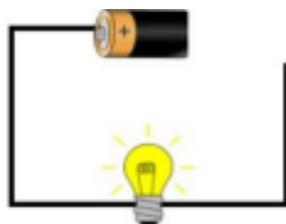


### What is an electric circuit made up of?

A circuit is a connected loop of conductive material, such as metal wire, that has a power source and an electrical component like a light bulb, switch, buzzers or motors. A lamp will only light up in a simple circuit if all the conductive materials (metal wire) are connected with no gaps or obstructions.



A lamp will not light up if the circuit is broken and not touching another component through the conductive material. Switches can be added to the circuit to turn the component on and off. When the switch is open, the electricity cannot flow. When it is closed, the electricity can flow to the component.



An insulator is a material that does not allow electricity to travel through, such as rubber or wood. A conductor is a material that electricity can flow through such as metals and some liquids.

Read all about it. Can you find these books in the local library?

