

# Science • Electricity

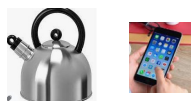


## Crucial Knowledge

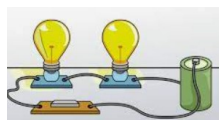
- Many household devices and appliances run on electricity.
- Sources of electricity for appliances are mains, battery, solar, wind.
- Electrical current can flow if there is a complete circuit.
- A switch functions by completing or breaking a complete circuit.
- Conductors allow electricity to pass through.
- Insulators do not allow electricity to pass through them.



## Key Vocabulary



**electric appliance:** Any piece of equipment that uses electricity



**circuit:** a closed path that electricity can flow round.

**component:** one of the parts of an electrical circuit

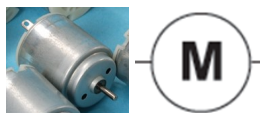
**mains:** electricity supplied to a building through wires



**crocodile clip:** a metal clip with long jaws that can attach wires and circuit components together



**battery cell:** A safe power source. A store of chemical potential energy that can power a circuit.



**motor:** A component that turns when electricity flows through it.



**loose connection:** when part of a circuit is not joined up securely.



**conductor:** A material which allows electricity to flow through it.

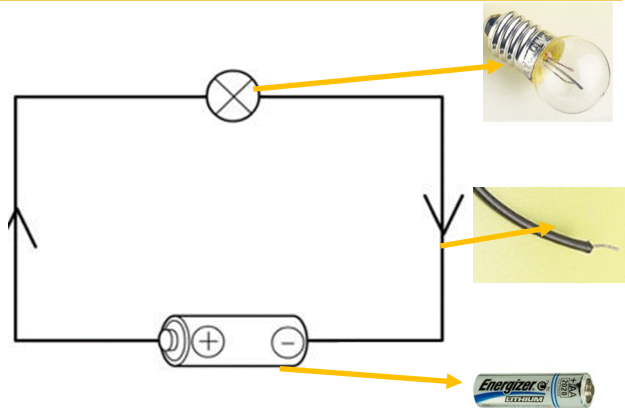


**electrical insulator:** A material which does not allow electricity to flow through it.

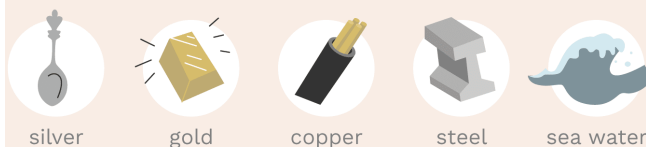


## Diagrams / Images

### Complete Circuit Diagram



### 5 Electrical Conductors



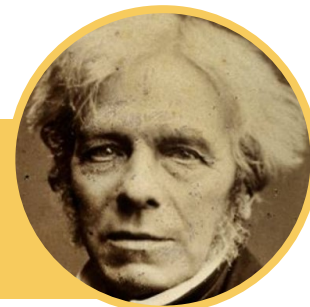
### 5 Electrical Insulators



## Important People



**James West**  
invented the microphone that is in the phone.



**Michael Faraday**  
Made many early discoveries about the nature of electricity

### We Are Building Our Knowledge From

- Materials (Y2)

### This will help when we learn about

- Electricity (Y6)