

# Science • Electricity



## Crucial Knowledge

- A source of electricity (mains or battery) is needed for electrical devices to work.
- Electricity sources push electricity round a circuit.
- More batteries will push the electricity round the circuit faster.
- Devices work harder when more electricity goes through them.
- A complete circuit is needed for electricity to flow and devices to work.
- Some materials allow electricity to flow easily and these are called conductors.
- Materials that don't allow electricity to flow are called insulators.



## Key Vocabulary

*We are getting better at communicating scientifically*



**Electric Current:** A flow of electricity through a wire.



**Wires:** Plastic-coated electrical wire conduct electricity around the circuit.



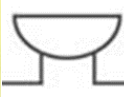
**Bulb (lamp):** A component which lights up when electricity passes through it in a circuit.



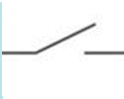
**Battery Cell:** A safe power source. A store of chemical potential energy that can power a circuit.



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



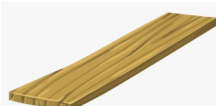
**Buzzer:** a component that makes a noise when electricity passes through it in a circuit.



**Switch:** Part of a circuit which can easily be opened or closed to control the flow of electric current.



**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

### 5 Electrical Conductors



silver



gold



copper



steel



sea water

### 5 Electrical Insulators



rubber



glass



oil

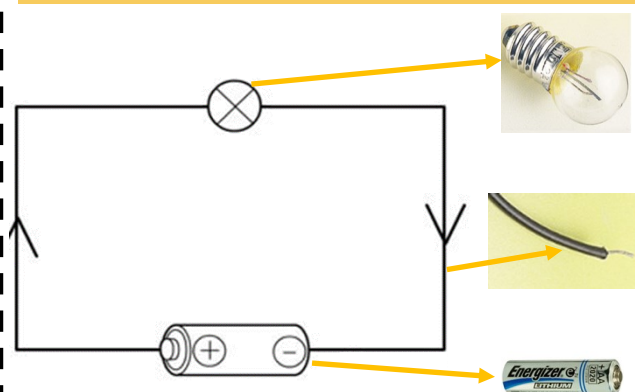


diamond



dry wood

### Complete Circuit Diagram



## Important People



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



**Edith Clarke**  
wrote one of the most important books on electrical engineering.

### We Are Building Our Knowledge From

- Materials (Y2)

### This will help when we learn about

- Electricity (Y6)