

# Darlinghurst Academy Year 3 Autumn 1: Bright Sparks – How does electricity work?

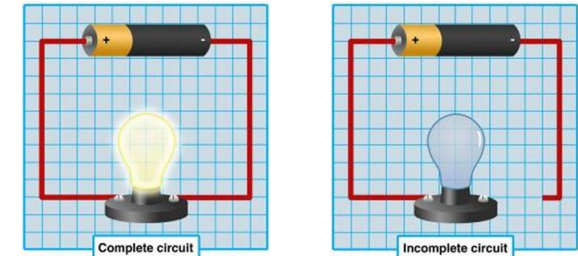
## Vocabulary

attract	If one object attracts another object, it causes the second object to move towards it
battery	small devices that provide the power for electrical items such as torches
bulb	the glass part of an electric lamp, which gives out light when electricity passes through it.
buzzer	an electrical device that is used to make a buzzing sound
cell	a synonym for battery
circuit	a complete route which an electric current can flow around
conductor	a substance that heat or electricity can pass through or along
current	a flow of electricity through a wire or circuit
electricity	a form of energy that can be carried by wires and is used for heating and lighting, and to provide power for devices
insulator	a non-conductor of electricity or heat
magnet	a piece of iron or other material which attracts magnetic materials towards it
motor	a device that uses electricity or fuel to produce movement
repel	When a magnetic pole repels another magnetic pole, it gives out a force that pushes the other pole away
switch	a small control for an electrical device which you use to turn the device on or off
wire	a long thin piece of metal that is used to fasten things or to carry electric current

## Electrical Appliances

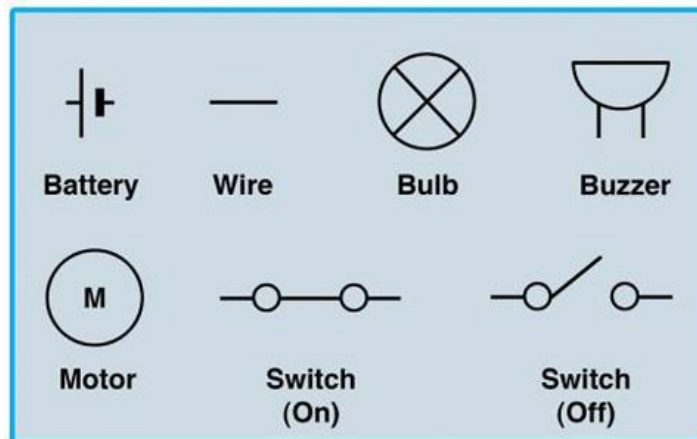


## Circuits



- A circuit always needs a power source, such as a battery, with wires connected to both the positive (+) and negative (-) ends.
- A circuit can also contain other electrical components, such as bulbs, buzzers or motors, which allow electricity to pass through.
- Electricity will only travel around a circuit that is complete, i.e. has no gaps.

## Circuit symbols



## How do magnets work?

- Magnets produce an area of force around them called a magnetic field.
- When objects enter this magnetic field, they will be attracted to or repelled from the magnet if they are magnetic.
- When magnets repel, they push each other away
- When magnets attract, they pull together.

