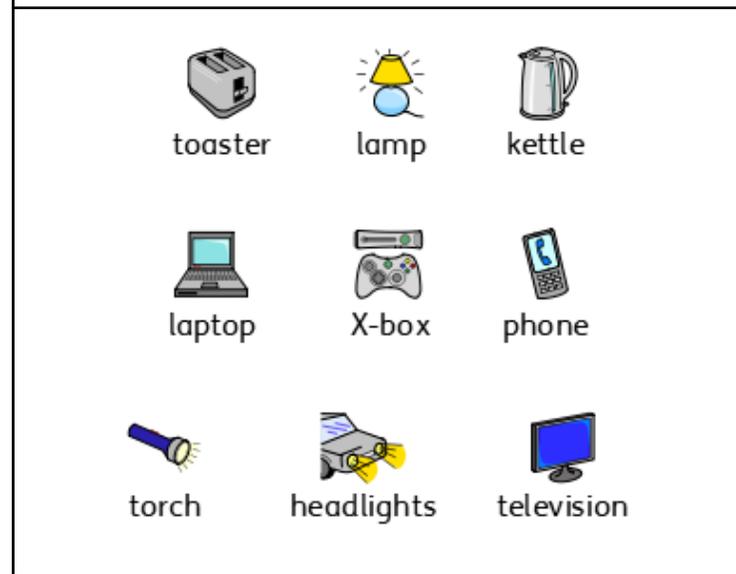


# Darlinghurst Academy Year 3: Autumn 1 - Bright Sparks – How does electricity work?

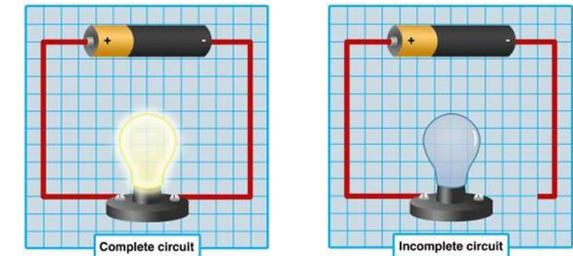
## Vocabulary

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

## Electrical Appliances

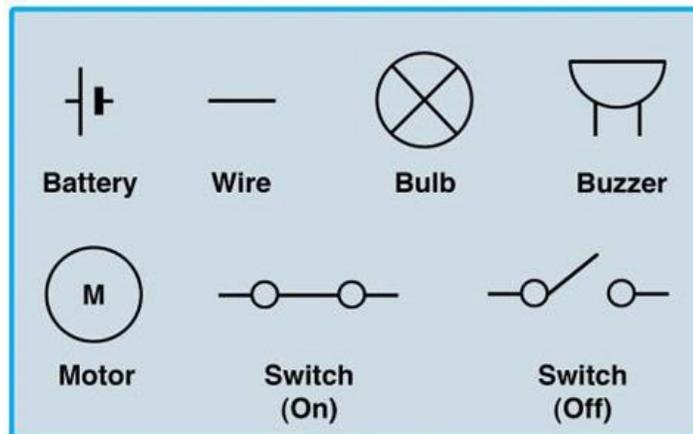


## Circuits



- 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.

