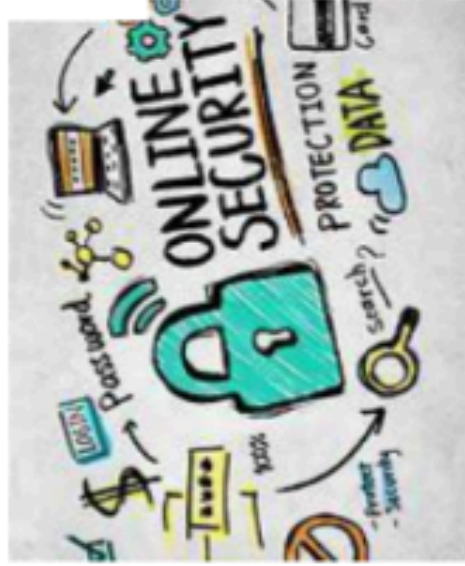




## Computing – Online

Safety



**Do not ever disclose personal information online!**



Google Search

Don't Feed the Lucky

[www.google.co.uk](http://www.google.co.uk)

**Do not talk to strangers online.**



### Key Vocabulary

**Google** – Search engine on the internet.

**Internet** - an electronic communications network that connects computer networks or telecommunications.

**Connection** – link between servers. Can be connected or disconnected.

**Safety** – Being cautious and careful to ensure that you are safe.

**Privacy** – Involves the right or mandate of personal **privacy** and that no one should have access to your personal information.

**Password** – Numbers, letters or symbols that help to keep your personal accounts safe.

**Data Protection** – All sensitive information kept safe.

**Strangers** – People that you do not know and have never met before.



# Electrical Systems

## Simple circuits and switches

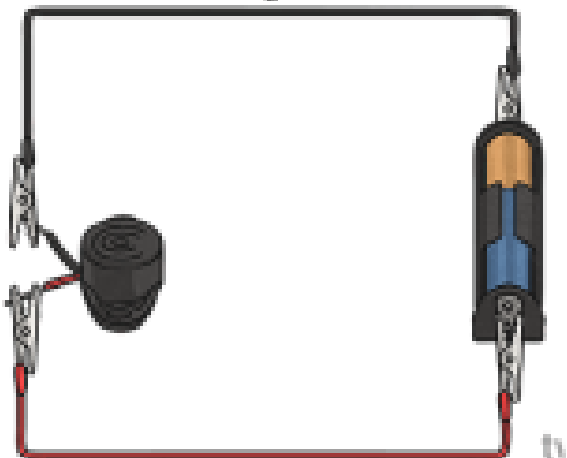
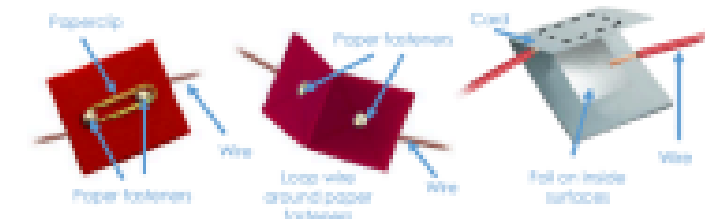
### Key Vocabulary

- **Circuit** – path through which electricity passes.
- **Conductor** – a material which allows an electric current to pass through it.
- **Insulator** – a material which does not easily allow electric current to pass through it.
- **Prototype** – a model made to test whether a design will work.
- **Push-to-break switch** – a switch turned off by pressing it.
- **Push-to-make switch** – a switch turned on by pressing it.
- **Reed switch** – a switch operated by a magnet.
- **Toggle switch** – a switch operated when a lever is pressed.
- **System** – a set of related parts or components that together achieve a desired outcome.
- **Output devices** – components that produce an outcome e.g. bulbs and buzzers.
- **Input devices** – components that are used to control an electrical circuit e.g. switches.

## Making secure connections



## Handmade switches



## Commercial switches



**Push-to-break switch**  
The switch is off while the button is pushed, but returns to its 'on' position when button is released.



**Push-to-make switch**  
When you push, the electricity flows through the circuit, but when you release it the circuit is broken and the switch is off.



**Reed switch**  
Activated by a magnet – this closes the contacts and completes the circuit.

**Toggle switch**  
Simple on/off switch





# Buddhism

## Timeline of the story of Buddha

1) An astrologer tells Siddhartha's parents that Siddhartha will become a very powerful ruler like his father or a holy man.

3) Siddhartha is forbidden to leave the castle grounds. He continues to live his life within the castle grounds and one day gets married to Yasodharā and has children.

5) Siddhartha left his old life behind to find happiness. He became a monk and sat beneath a Bodhi tree until he was able to find an answer to find true happiness.

7) On the 49th day, Siddhartha became enlightened and then taught his guide to happiness around the world and gained a lot of followers and started the religion of Buddhism.

2) The Astrologer tells Siddhartha's parents that as long as he is kept away from sickness, ageing, poverty and death Siddhartha will become a powerful ruler.

4) One day, Siddhartha leaves the castle grounds and saw an old man, sick man, a beggar and a dead man. This upset Siddhartha and he decided to leave his old life behind.

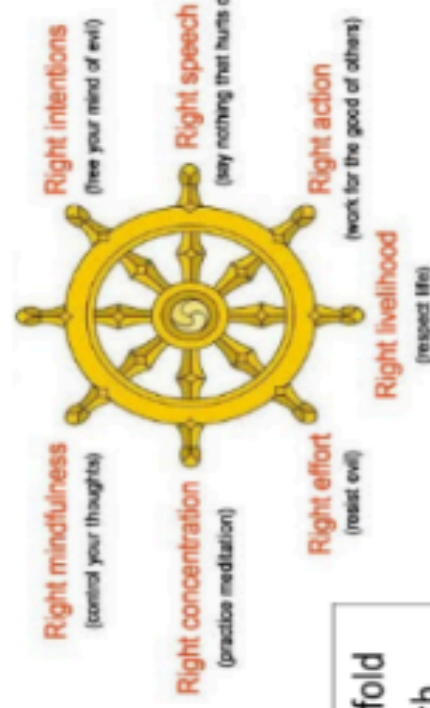
6) Siddhartha meditated for 49 days without any food. During these 49 days he was tempted by a devil to distract him however, this could not stop him.



Bodhi tree

Siddhartha Gautama- also known as Buddha.

## Eightfold path



## Key Vocabulary

**Buddhism**- a widespread Asian religion or founded by Siddhartha Gautama

**Happiness**- being happy

**Siddhartha Gautama**- most commonly referred to as the Buddha was a religious teacher who founded Buddhism.

**Enlightened**- to understand the natural world and humankind's place in it solely on the basis of reason

**Suffering**- the state of undergoing pain, distress, or hardship

**Followers**- a person who supports and admires a particular person or set of ideas.

**Materialistic**-desire for wealth and material possessions

**Faithful**- reliable and loyal

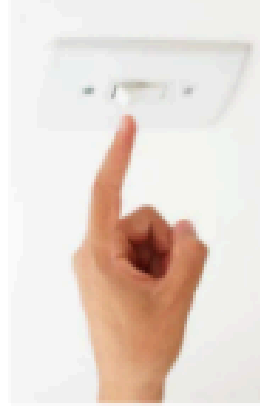
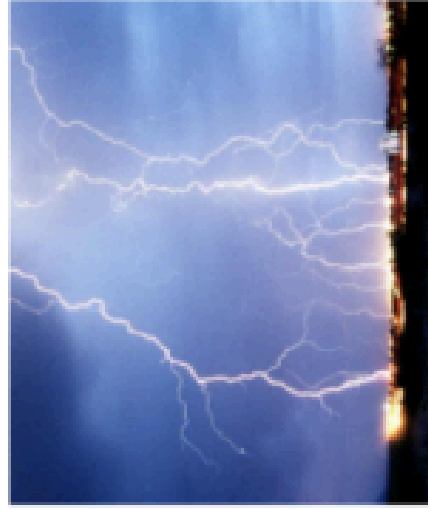
**Charity**- an organization set up to provide help and raise money for those in need.

**Meditation**- An activity to try and achieve a calm emotional state...

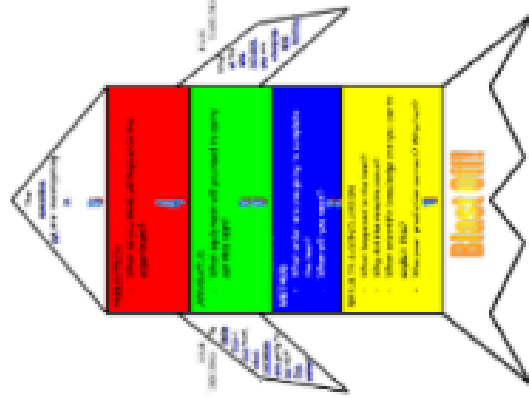


# Electricity

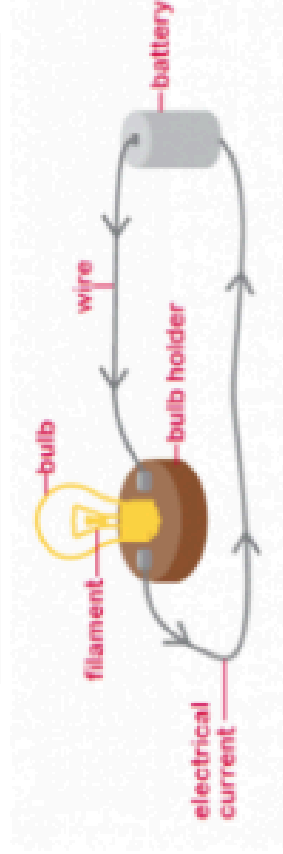
CPS Knowledge Organiser - Science – Autumn 1



|             |         |        |                |
|-------------|---------|--------|----------------|
|             |         |        |                |
| Lamp / bulb | Motor   | Switch | Cell / battery |
|             |         |        |                |
| Buzzer      | Ammeter | Wire   | Voltmeter      |



| 5 Electrical Conductors |      |        |       | 5 Electrical Insulators |       |     |         |
|-------------------------|------|--------|-------|-------------------------|-------|-----|---------|
|                         |      |        |       |                         |       |     |         |
| silver                  | gold | copper | steel | rubber                  | glass | oil | diamond |
|                         |      |        |       |                         |       |     |         |
| sea water               |      |        |       | dry wood                |       |     |         |



## Key Vocabulary

**Electricity** - the flow of tiny particles called electrons and protons. It can also mean the energy you get when electrons flow from place to place.

**Conductor** - a substance or body capable of transmitting light, electricity, heat, or sound. Copper is a good conductor of electricity.

**Circuit** - a pathway that electricity can flow around. It is based around wires and a power supply. Examples of components (parts) you can add in to a circuit are bulbs, switches, buzzers and motors.

**Insulator** - a material (as rubber or glass) that is a poor conductor of electricity, heat, or sound.

**Battery** - battery is a sort of container that stores energy until it is needed. Chemicals inside the battery store the energy.

**Power** - it is a measurement of how fast you are using energy.

**Fair test** - A fair test is a test which controls all but one variable when attempting to answer a scientific question.

**Electric current** – Electrons running through.

**Safety** - being away from danger or distancing oneself from undergoing or causing hurt, injury, or loss.

**Danger** – Potential Hazard

**Switch** – to turn, shift, or change by operating a device that makes, breaks, or changes the connections in an electrical circuit. Remember to **switch** off the light.

**Buzzer** – Used in circuits and can help to identify whether a circuit is complete or incomplete.



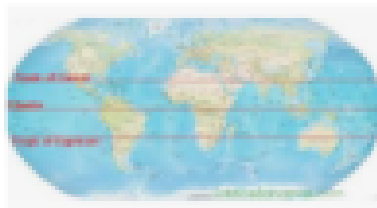
# Around The World



World



United Kingdom



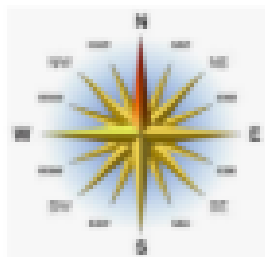
Tropic of Capricorn, Equator and Tropic of Cancer.



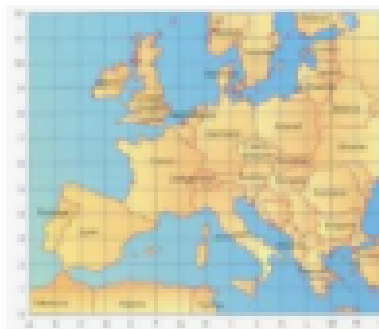
British Flag

## Comparing Climates:

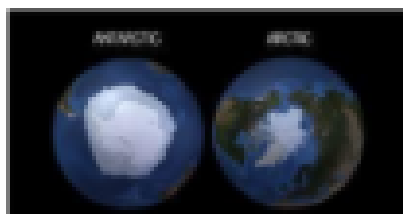
Different parts of the Earth have different climates because of different amounts of heat received from the Sun. The main types of climate are desert, tropical, Savannah, temperate, Mediterranean and polar. The UK has a temperate maritime climate whilst many western European countries have a more continental climate.



North, South, East and West.



Coordinates



## Key Vocabulary

**Weather** – The state of the atmosphere at a particular place and time as regards heat, cloudiness, dryness, sunshine, wind, rain, etc

**Climate**– The weather conditions prevailing in an area in general or over a long period.

**Polar Regions** – The part of the Earth's surface forming a cap over a pole; characterized by frigid climate.

**Geographical features** – naturally-created features of the Earth

**Meridian**–a circle of constant longitude passing through a given place on the earth's surface and the terrestrial poles.

**Maritime**–connected with the sea, especially in relation to seaborne trade or naval matters

**Longitude** –the angular distance of a place east or west of the Greenwich meridian, or west of the standard meridian of a celestial object, usually expressed in degrees and minutes.

**Latitude**–the angular distance of a place north or south of the earth's equator, or of the equator of a celestial object, usually expressed in degrees and minutes

**Hemisphere** –a half of the earth, usually as divided into northern and southern halves by the equator, or into western and eastern halves by an imaginary line passing through the poles.

**Research** – the systematic investigation into and study of materials and sources in order to establish facts and reach new conclusions.

**Location** –a particular place or position.

**Atlas** – a book of maps or charts.

**Globe** – the Earth

**Earth**–the planet on which we live; the world

**Data**–facts and statistics collected together for reference or analysis.

**Statistics**–the practice or science of collecting and analysing numerical data in large