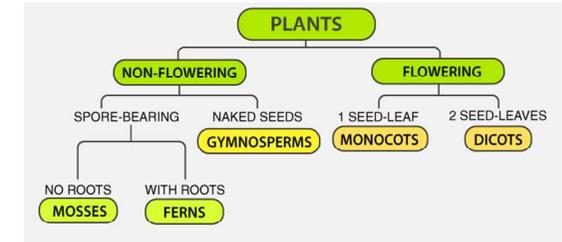


Key vocabulary	
vertebrate	Animals that have a backbone. They can be divided into 5 groups: fish, amphibians, reptiles, birds and mammals.
fish	<ul style="list-style-type: none"> - cold-blooded - scales covering its body - has fins - lives in water, lays eggs in water - breathes through gills
amphibian	<ul style="list-style-type: none"> - cold-blooded - start as eggs in water and breathe through gills - later develop lungs and live on land and in water - lays eggs in water - damp skin/body
reptile	<ul style="list-style-type: none"> - cold-blooded - breathes with lungs - dry, scaly skin - lay soft-shelled eggs on land
bird	<ul style="list-style-type: none"> - warm-blooded - breathes with lungs - lays eggs with hard shells - covered with feathers - have wings but not all can fly
mammal	<ul style="list-style-type: none"> - warm-blooded - have fur or hairy skin - give birth to live young - feed their young milk
invertebrate	Animals that do not have a backbone. Can be divided into several groups including insects, spiders, snails and worms.
plants	Can make their own food. They can be divided broadly into two main groups: flowering plants and non-flowering plants.

Living things and their habitats – Year 6

Significant scientists	
<p>Carl Linnaeus (1707-1778)</p> 	Carl Linnaeus was a Swedish scientist who developed the modern system of classifying and naming organisms. Before this the names of living things were often very long. He gave them a two-part name.
<p>Chris Nelson</p> 	Chris Nelson is a horticulturist and a director of Growing Underground which uses hydroponic techniques to grow pesticide-free crops in a former London underground air-raid shelter.

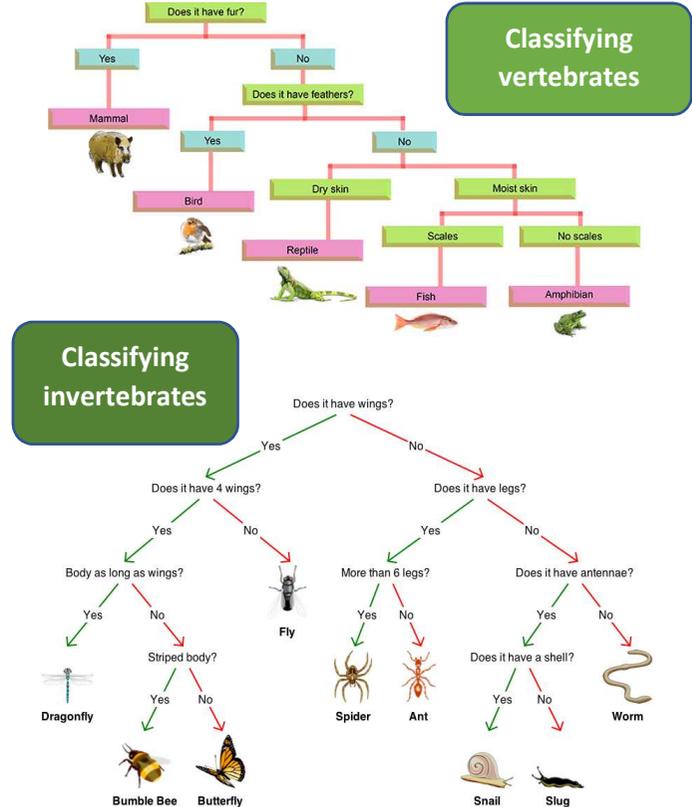


Flowering plants – numerous and diverse group. Reproduce through flowers and seeds. E.g. sunflower

Non-flowering plants – smaller group. They have a simple structure and do not have flowers or seeds. They reproduce through spores. E.g. algae, mosses

Classification
Living things can be classified into broad groups according to observable characteristics that are similar or different.

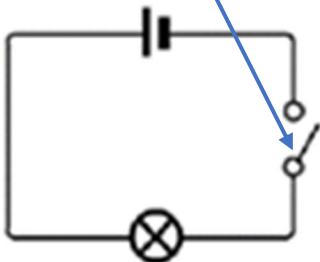
Micro-organisms
These are tiny living creatures. Most can only be seen through a microscope. They can be sub-divided into smaller groups including **bacteria, fungi and viruses.**



Electricity – Year 6

Key vocabulary	
circuit	A complete path that an electric current can flow around. It flows from the battery, through wires and devices before returning to the battery. If the circuit is not complete the electric current cannot flow.
circuit symbol	A symbol used to represent various electronic components or functions in a diagram of a circuit.
circuit diagram	A visual representation of an electrical circuit using symbols to represent the electrical components.
cell	A single electrical energy source.
battery	A device consisting of one or more cells.
switch	An electrical component that can make or break an electrical circuit. When a switch is open (off), there is a gap in the circuit and electricity cannot flow around the circuit.
voltage	Volts are a measure of the energy of a flow of electricity. Mains electricity carries a voltage of 210-240 volts. A typical cell in school has 1.5 volts.

Switch turned off (open).



This breaks the circuit so it is not complete and electricity cannot flow. The bulb will turn off.

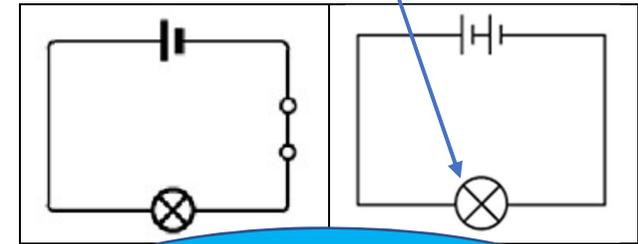
Significant scientists	
<p>Nicholas Tesla (1856-1943)</p> 	Nicholas Tesla was a Serbian-American engineer and physicist. He invented the first alternating current (AC) motor and developed AC generation and transmission technology. He worked for Thomas Edison when he first moved to New York.
<p>Peter Rawlinson</p> 	Peter Rawlinson is a British engineer based in California. He is working on the development of electric vehicles, providing clear vision for a next-generation product.

Circuit symbols

cell	
battery	
wire	
bulb	
buzzer	
motor	
switch	 Open switch Closed switch

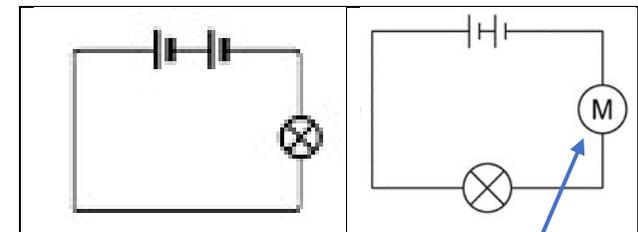
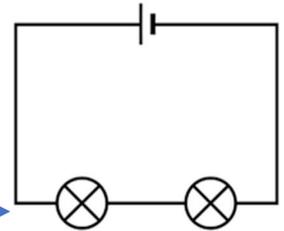
Adding more cells to a circuit makes a bulb brighter:

The bulb in this circuit will be brighter.



If you use a battery with a higher voltage, the bulb would also be brighter.

Adding more bulbs to a circuit will make each bulb less bright.



If we add a motor into a circuit with a single bulb, the bulb will be less bright.
If we then add more motors to the circuit, each motor will spin more slowly.