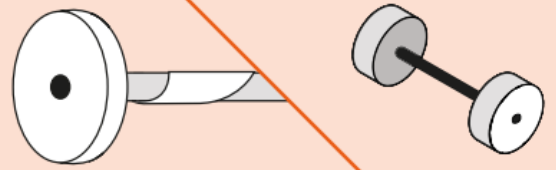


Year 5 - Doodlers

Circuit	A collection of components that make an electrical system.
Circuit component	One of several parts that complete a circuit (e.g. bulb).
Configuration	How different parts are put together to form an object.
Current	The flow of electricity.
Develop	Continue to work on something to make progress or improve it.
DIY	The acronym means 'Do it yourself' and represents various activities that someone chooses to do themselves at home, rather than through a service or professional.
Investigate	Research something by looking at it in greater detail.
Problem-solve	Develop and test solutions to an issue.
Product analysis	To look at an object and evaluate it based on certain criteria (e.g. function).
Stable	Object does not easily topple over.
Target user	A particular person at whom the product is aimed.

Key facts

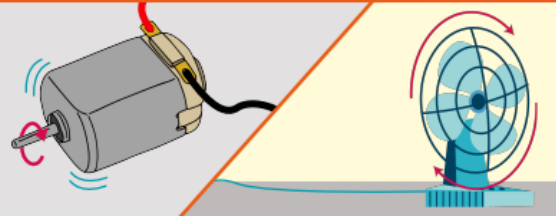
Axles form part of the wheel mechanism in wheeled products such as toy cars, wheelbarrows and bicycles.



For a bicycle to function we need to use our legs and feet to push the pedals that rotate the axle and spin the wheels.

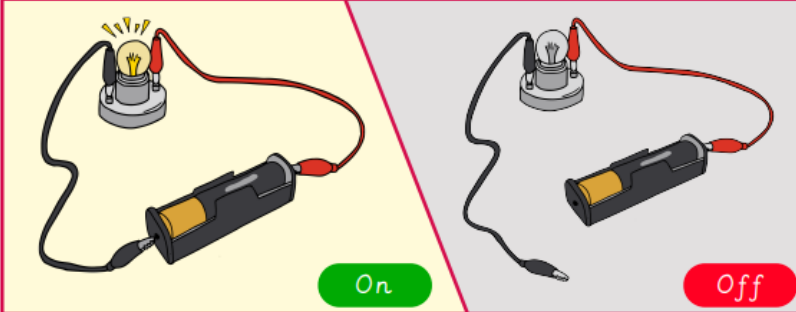


An electric motor converts electrical energy into rotational movement, causing the motor's axle to spin. Motors use electricity instead of human force to move the axle.



A motorised product is an object that uses a motor to function.

Series circuits only have one path for the electrical current to flow.



If there is a break in a series circuit, the electrical current will be cut and all the components will stop working. Causing a break in a series circuit can act as a switch to turn the circuit off.

Science



Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers'

Key Vocabulary

- Circuit component-** An electronic circuit is composed of individual components which are electronic such as resistors, transistors, capacitors and the inductors
- Configuration-**an arrangement of parts or elements in a particular form, figure, or combination.
- Current-**a flow of electricity which results from the ordered directional movement of electrically charged particles
- DIY-**the activity of decorating, building, and making repairs at home by oneself rather than employing a professional
- Investigate-**carry out research or study into something
- Motor-** a machine, especially one powered by electricity or internal combustion, that supplies motive power for a vehicle or object.

Key knowledge

- ✓ To know that, in a series circuit, electricity only flows in one direction.
- ✓ To know when there is a break in a series circuit, all components turn off.
- ✓ To know that an electric motor converts electrical energy into rotational movement, causing the motor's axle to spin.
- ✓ To know a motorised product is one which uses a motor to function.