

## Year 5 - Electrical Systems - Doodlers - Term 1

## 5

## Key Vocabulary

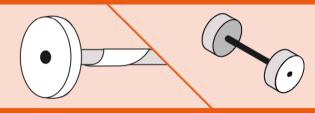
Circuit	A collection of components that make an electrical system.
Circuit component	One of several parts that complete a circuit (e.g. bulb).
Configuration	How different parts are put together to form an object.
Current	The flow of electricity.
Develop	Continue to work on something to make progress 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.

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.

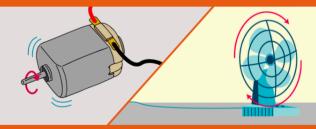
Axles form part of the wheel mechanism in wheeled products such as toy cars, wheelbarrows and bicycles.



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.

What can you remember from previous units?

How can you make a switch? What is more important - personal design or functionality? Anything else you have learnt? What have you enjoyed?

## To know statements



I know that circuits are made up of different electronic components, naming these components and giving examples of motorised products.

I know how to try different ways to amend the form or function of the Doodlers.

I know how the form or function has been altered and what caused the change.

I know how to discuss the design criteria for their Doodler and relating this to the investigative process from the previous lesson.

I know how to list the equipment needed to build a Doodler and the main steps to take during assembly as a set of instructions or storyboard.