



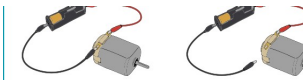
Year 5 - Electrical Systems - Wobble Bots - Term 1

Key Vocabulary

Circuit	A complete path for electricity.
Component	A part of a circuit.
Battery	A source of electrical energy.
Motor	A component that makes movement.
Axle	A rod or shaft that can rotate.
Off-centre	Not positioned at the middle.
Assemble	To put parts together.
Annotate	To add explaining labels to a diagram.
Design criteria	Requirements that a product should meet.
Evaluate	To identify strengths and ways to improve.

A complete circuit

Electricity flows when a circuit forms a complete loop. If the loop is broken, the motor stops.

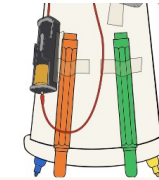


Electrical components are parts of a circuit such as a bulb, battery, wires or a motor. A **motor** is an electrical component that uses electricity to make something move.

A motor converts electrical energy to movement.

Why do bots wobble?

An off-centre weight on a rotating motor axle creates an uneven turning motion.

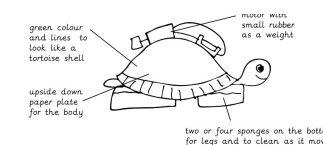


This Kapow Doodle uses a motor with an **off-centre weight** on the axle making it wobble and draw patterns.

The moving weight makes the model wobble.

Design and annotate

Use a labelled diagram to explain parts and test the product against its design criteria.



Change parts after testing to improve the bot.

To know statements



To investigate motors by creating circuits.

To make a motorised product and test its function.

To apply knowledge of circuits to experiment with product design.

To design a motorised product for a specific purpose.

To make and evaluate the effectiveness of a motorised product.

What can you remember from previous units?

What electrical components have you used?

How do you know that a circuit works?

Anything else you have learnt?

What have you enjoyed?