



Scribble Bots LKS2

Duration: 1 hour, max capacity: 32 students

Working in small groups, students investigate and construct simple circuits using motors and switches then put them to work to make a scribbling machine with pens for legs. As a group they will produce a framed work of art drawn entirely by their machines to display back at school and amaze everyone!

Key Words:

Electricity, Circuits, Components, Motors, Investigation, Making, Tinkering, Art, Craft, Machines.

Learning objectives

Gain practical experience of building circuits, including components.

Understand that a circuit will only work if it is complete.

Recognise and identify the different parts of a circuit, including different components.

Engage with an iterative process of designing and making.

Appreciate that even minor modification to the design can produce significantly different outcomes.

Learn that an unbalanced load can cause movement.

Content

Build a simple circuit involving a motor.

Identify the names of the components of that circuit.

Use the circuit to build a scribbling machine.

Try out different arrangements of parts and pens to investigate how the drawn pattern changes.

Together create a work of art drawn by independent machines to take away.

Curriculum Links:

Year 4: Electricity

Construct a simple series electrical circuit, identifying and naming its basic parts.

Identify whether or not a motor will run in a simple series circuit, based on whether or not the motor is part of a complete loop with a battery.

Recognise that a switch opens and closes a circuit and associate this with whether or not a motor turns on in a simple series circuit.

Key Stage 2: Design and Technology

Through a variety of creative and practical activities, pupils should be taught the knowledge, understanding and skills needed to engage in an iterative process of designing and making.

Understand and use electrical systems in their products.

Apply their understanding of how to strengthen, stiffen and reinforce more complex structures.

Potential Hazards and accessibility

In this workshop students make a circuit using a battery. The battery may get hot if students short-circuit it (attach one end to the other via the crocodile clips).

we the curious
Workshop

