





Spring Inventions	Engages with debate	Vocabulary	Technical Knowledge	Research	Design	Make	Evaluate
<b>KS1</b>  <b>Electricity</b>	<b>How can electricity be used to help us?</b>	Circuit Electricity Faults Batteries Design Wire Component	Know what a series circuit is.  Know that the cell or battery provides the power.  How to find faults in circuits and battery operated devices	Invent a battery powered product to help people in everyday life  	Design a functional product based on a design criteria.  Sustainability Technological change Equality	Make a product, selecting and using a range of materials and components.  	Evaluate their product against a design criteria.
<b>LKS2</b>  <b>Electricity</b>	<b>How do toys use electricity to entertain children?</b>  	Switches Buzzers Bulbs Motors Circuits Series circuit Parallel circuit Wires System Electrical Disassemble	The difference between a series and parallel circuit.  How to use electrical systems in their products [such as switches, bulbs, buzzers and motors]  How to test if a circuit will work or not.	Research existing products with circuits by disassembling and investigating how they work.  Sustainability Technological change	Design their own product and circuit.  	Make a product including a circuit.  Sustainability Technological change Equality Legacy	Refine work and techniques as work progresses, continually evaluating the product design.  Sustainability Technological change Equality Legacy