

Battery Operated Lights



Prior Learning	
<p>This unit will build on the knowledge and skills learned in KS1 Prior learning will be knowledge and understanding of electrical systems and what is needed to light a bulb. This will be built upon by the introduction of series and parallel circuits and different types of switches which the children will apply in a purposeful way by designing and making a battery operated light which will be controlled by a homemade switch..</p>	
Key vocabulary for this unit	
Circuits Switches Bulbs Bulb Holders Switches Batteries	Battery Holders Insulated Wires Crocodile Clips Series Parallel
Learning Sequence	
Our Changing Technologies	<ul style="list-style-type: none"> To explain how key events and individuals in design and technology have helped shape the world.
Electrical Systems	<ul style="list-style-type: none"> To make and represent different types of circuits.
Switches	<ul style="list-style-type: none"> To make and use switches.
Designing	<ul style="list-style-type: none"> To develop design criteria and a design. To develop and communicate a design for my light
Making The Light	<ul style="list-style-type: none"> To select materials and components to make my light.
Finishing and Evaluating	<ul style="list-style-type: none"> To create a well finished product To complete a detailed evaluation of my finished product.
Assessment milestones	
<p>Working Practically:</p> <ul style="list-style-type: none"> To explore and make a series and parallel circuit To make a selection of different switches. 	<p>Design and Technology Knowledge:</p> <ul style="list-style-type: none"> To explain how technology has helped shape the world we live in.

- To make a well finished product considering the aesthetic and functional qualities.

- To diagnose faults where necessary.
- To evaluate their product against the design criteria.