

Battery Operated Lights



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| Prior Learning | |
| <p>This unit will build on the knowledge and skills learned in KS1</p> <p>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 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. |

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| <ul style="list-style-type: none">• To design and make a well finished product considering the aesthetic and functional qualities. | <ul style="list-style-type: none">• To diagnose faults where necessary.• To evaluate their product against the design criteria. |
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