Springfield School

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| Blackbirds Class Medium Term Planning for Science 1 | |
| Topic: Pioneers | Vocabulary: Electricity, battery, circuit, lever, switch |

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| **Lesson 1 ‘link it’**  **What is Electricity?**  Exposition – What is electricity? Sort electric items from non-electric items.  Groups – Spot electrical items around the classroom. Sort electric and non-electric items.  Plenary – Share work | **Lesson 2 ‘learn it’**  **Electric or battery?**  Exposition – What uses electricity and what uses battery?  Groups – Sort real items around the classroom. Sort pictures of electric and battery items.  Plenary – Share work | **Lesson 3 ‘learn it’**  **Setting up circuits**.  Exposition – What is a circuit? What does it look like.  Groups – Set up a simple circuit. Draw a circuit.  Plenary – Share work | **Lesson 4 ‘learn it’**  **Setting up circuits**.  Exposition – What is a circuit? What does it look like.  Groups – Set up a circuit. Draw a circuit.  Plenary – Share work |
| **Lesson 5 ‘learn it’**  **Setting up circuits**.  Exposition – What is a circuit? What does it look like.  Groups – Set up a circuit. Draw a circuit.  Plenary – Share work | **Lesson 6 ‘check it’**  **Setting up circuits**.  Exposition – What is a circuit? What does it look like.  Groups – From a plan, set up a circuit.  Plenary – Share work |  |  |

Take the objectives for the LO stickers from this section

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| Substantive Knowledge (Content) | Disciplinary Knowledge (Skills) |
| **Asking Questions and carrying out Fair and Competitive Tests**   |  | | --- | | Asking relevant questions and using different types of scientific enquiries to answer them.  Setting up simple practical enquiries, comparative and fair tests.  **Children can:**  **a** start to raise their own relevant questions about the world around them in response to a range of scientific experiences;  **b** start to make their own decisions about the most appropriate type of scientific enquiry they might use to answer questions;  **c** recognise when a fair test is necessary;  **d** help decide how to set up a fair test, making decisions about what observations to make, how long to make them for and the type of simple equipment that might be used;  **e** set up and carry out simple comparative and fair tests. |   Making systematic and careful observations and, where appropriate, taking accurate measurements using standard units, using a range of equipment, including thermometers and data loggers. | * Learn that electric toys or equipment need batteries or to be plugged in * Investigate with simple electrical components and equipment – fans, lights, fans, motors, switches, buzzers. * Build a simple working circuit * **Use scientific knowledge of the transference of forces to choose appropriate mechanisms for a product.** |

Progression of Learning

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| ‘Link It’ | ‘Learn It’ | ‘Check It’ | ‘Show It’ | ‘Know It’ |
| Previous learning of pupils   * Knowledge of electricity and why we need electricity. | Activities provided during lesson  Resources  **PPTs**  **Pictures**  **Batteries, wires, clips, switches. Electric and battery operated items**  Activities to explore –  - Creating circuits  - Testing toys  - Different forms of electric | Independent activities linked to lesson  Resources  **PPTs**  **Books**  **Pictures**  Activities-  Circuits- wires batteries, clips and switches  -Opportunities to demonstrate knowledge | How will the pupils share knowledge during or end of lesson  **Explore and discuss photographs of lessons**  Share and compare work through performance | Retrieve or generalization of learning after lesson   * Understand why we need electricity * Understand how electric works * Understand the formation of circuits. |