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| **Meadow Vale Primary School** | | |
| **Topic**: Electricity | **Subject:** Science | **Year**: 6 |

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| **What should I already know?** |
| * Construct a simple series electrical circuit, identifying and naming its basic parts, including cells, wires, bulbs, switches and buzzers * Identify whether or not a lamp will light in a simple series circuit, based on whether or not the lamp 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 lamp lights in a simple series circuit * Recognise some common conductors and insulators, and associate metals with being good conductors. |

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| **Scientific Skills** |
| |  | | --- | | * To associate the brightness of a lamp or the volume of a buzzer with the number and voltage of cells used in the circuit * To compare and give reasons for variations in how components function, including the brightness of bulbs, the loudness of buzzers and the on/off position of switches * To use recognised symbols when representing a simple circuit in a diagram. | |

**Electrical Symbols**

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| **Vocabulary** | |
| **amps** | How electric current is measured. |
| **bulb** | A light bulb in a series circuit is used to determine whether or not electricity is flowing |
| **cell/battery** | A device that stores energy as a chemical until it is needed. A cell is a single unit. A battery is a collection of cells. |
| **circuit** | A path that an electrical current can flow around. |
| **current** | The flow of electrons, measured in amps. |
| **electrons** | Very small particles that travel around an electrical circuit. |
| **resistance** | The difficulty that the electric current has when flowing around a circuit. |
| **series circuit** | A circuit that has only one route for the current to take. If more bulbs or buzzers are added, the power has to be shared. If just one part of this series circuit breaks, the circuit is broken and the flow of current stops. |
| **switch** | A switch is a device used to interrupt the flow of electrons in a circuit. |
| **symbol** | A visual picture that stands for something else. |
| **voltage** | The force that makes the electric current move through the wires. The greater the voltage, the more current will flow. |

