**Science Knowledge Organiser Year 6 – Danger low voltage**

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| **Question for Learning;**  **How many simple circuits can you make?**  **Key learning;**   * **Plastic materials do not conduct electricity.** * **A single battery is called a cell - A cell is what makes the circuit work.** * **Mains electricity can be dangerous if misused.** * **Electric components must have two connection points.** | **Problem solving** |
| **Question for Learning;**  **What does a switch do?’**  **Key learning;** | **Comparative** |
| **Question for Learning;**  **How strong is your resistance?**   * **Resistance is the measure of the difficulty that electrons have in flowing through a material.** * **Voltage is the ‘push’ that causes current to flow round a circuit.** * **Current describes the flow of electrons in a circuit.** | **Research** |
| **Question for Learning;**  **Do you know your circuit diagrams and can you construct working circuits for them?**   * **Electricity is the flow of electrons (current) around a circuit.** | **Problem solving** |
| **Question for Learning;**  **Will the lights stay on? (part 1 and 2)** | **Research and Exploration** |

**Key Words**

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| **Generator** | An electric generator is a machine or device that converts mechanical energy or non-mechanical energy into electrical energy. |
| **Component** | Any part of an electric circuit. |
| **Voltage** | It is what makes electric charges move. It is the ‘push’ that causes charges to move in a wire or other electrical conductor. |