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| **Goonhavern Primary School- Design Technology** | | |
| **TOPIC: DT** | **YEAR: 4** | **STRAND: Electricity** |

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| **What should I know already?** | **What will I know by the end of the unit?** |
| I know how to make a simple electric circuit using batteries, light bulbs, motors, switches and fans | How to construct circuits, incorporating a battery or power supply and a range of switches, to make electrical  devices work |
| How to create a design using represent series circuits by drawings and conventional symbols, and how to construct series circuits on the basis of drawings and diagrams using conventional symbols |
| select tools, techniques and materials for making their product from a range suggested by the teacher  • suggest alternative ways of making their product, if first attempts fail  • explore the sensory qualities of materials and how to use materials and processes  • measure, cut and shape a range of materials |
| **School Values** | |
| **Five Ways to Wellbeing** | |

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| **Vocabulary** | |
| circuit | An electrical circuit is a path in which electrons from a voltage or current source flow. |
| Battery | a container consisting of one or more cells, in which chemical energy is converted into electricity and used as a source of power. |
| Energy | power derived from the utilization of physical or chemical resources, especially to provide light and heat or to work machines. |
| Electric | worked by, charged with, or producing electricity. |
| Fan | an apparatus with rotating blades that creates a current of air |
| Aerodynamic | of or having a shape which reduces the drag from air moving past. |
| pulley | a wheel with a grooved rim around which a cord passes, which acts to change the direction of a force applied to the cord and is used to raise heavy weights. |
| Axles | a rod or spindle (either fixed or rotating) passing through the centre of a wheel or group of wheels |

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| **Image/diagram that helps me to articulate my knowledge/understanding** | **Investigate!** |
|  | Link to science/electricity and make fan powered cars. Test cars for speed, agility and aerodynamics. Which materials work best? Where is the fan best placed? |