Key Vocabulary and Definitions:

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| Buzzer | A component in a circuit that makes a sound (buzz) |
| Circuit | A series of wires, battery and components joined together |
| Component | One item found in a circuit |
| Motor | A machine powered by electricity |
| Switch | A component in a circuit that can turn a circuit on or off by completing or breaking the circuit |
| Symbols  | Drawings used to represent components in a circuit. For example is a bulb |
| Voltage  | Is the size of the ‘push’ that moves the electricity around a circuit |

What should I already know?

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|  ●Recognise that living things can be grouped in a variety of ways. (Y4 - Living things and their habitats)  ●Explore and use classification keys to help group, identify and name a variety of living things in their local and wider environment. (Y4 - Living things and their habitats) ●Describe the differences in the life cycles of a mammal, an amphibian, an insect and a bird. (Y5 - Living things and their habitats) ●Describe the life process of reproduction in some plants and animals. (Y5 - Living things and their habitats)  | * • Differences between species. (KS3)
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Scientific Skills:

* Plan a scientific enquiry to answer a question, recognising and controlling variables



Teaching Sequence

1. To describe what electricity is and how it is used and generated
2. To observe and explain the effects of different components in a circuit
3. To observe and explain the effects of differing volts in a circuit.
4. To plan an investigation and understand variations in how components function.
5. To conduct an investigation, record my data and report my findings
6. To carry out further investigation into my results

Blooms Taxonomy – Specific Verbs to Use in Lesson Aims

Knowledge: Describe, find, identify, list, locate, name, recognise, retrieve Comprehension: Classify, compare, explain, infer, interpret, paraphrase, summarise Application: Carry out, implement, use Analysis: Deconstruct, Organise, outline, structure Synthesis: Construct, design, devise, invent, make, plan, produce, Evaluation: Appraise, assess, choose,

Key Knowledge

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| Term 4 | Let’s Talk (Explorify) | Scientific Knowledge | Scientific skill |
| Lesson 1 | Take Your Turn<https://explorify.uk/en/activities/odd-one-out/take-your-turn> | Learn what electricity is and the different ways it is generated | Observe and record |
| Lesson 2 | Who is Haydn Francis?<https://explorify.uk/en/activities/who-is/haydn-francis> | Explore how to build a circuit using different components and learn how to draw diagrams of circuits and components | Observe and record |
| Lesson 3 | Have You Ever Felt a Spark When Touching Something?<https://explorify.uk/en/activities/have-you-ever/felt-an-electric-spark-from-touching-something-or-someone-else> | To observe and explore factors that affect the voltage of a circuit | Set up and enquiryEvaluateRecord |
| Lesson 4 | Nuclear Energy Scientist<https://explorify.uk/en/activities/whats-going-on/nuclear-energy-scientist> | To plan an experiment on how components function within a circuit | Ask questions and plan an experiment |
| Lesson 5 | Roving Robotshttps://explorify.uk/en/activities/odd-one-out/roving-robots | To conduct an investigation on how components function within a cicuit | Set up and enquiryEvaluate |