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| **What will we be learning?****Current** | **Why this? Why now?**Future Learning Energy Cost, Voltage, Magnetism, electromagnetismEnquiry ProcessesAnalyse Patterns, Draw conclusions, Present data, Justify opinions, Collect data, Present data, Plan variables | **Key Words:****Electrons****Charges****Flow****Positive****Negative** |
| **What will we learn?**That current is the rate of flow of charges.How current acts in series and parallel circuits.Current can split.How to use an ammeter.How electric fields interact.How changing components affect the current.The effect of current on the rate of energy transfer.How distance affects the strength of an electric field.**Misconceptions in this topic**Current flows from a battery (or other source of electricity) to a light bulb (or other item that consumes electricity), but not from the light bulb to the battery. Current flows out of both terminals of a dry cell or both connections in an electrical outlet. Current flows around a complete circuit, but it is used by objects like light bulbs so less current returns than leaves the source of the electricity.All the electrons that make up a electrical current are initially contained in the battery or generator that is the source of the electricity. |
| **What opportunities are there for wider study?**STEM sharepoint <https://highcliffe.sharepoint.com/sites/LearnSTEM>* Electrical engineering technician.
* Mechanical engineering technician.
* Electricity distribution worker.
* Electrical engineer.
* Energy engineer
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| **How will I be assessed?**End of unit test |