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| Year 8 | **Topic: C5 – Chemical Reactions** **P5 – Electricity** **Period:** Spring 2 |
| **Overview of topic:**C5 – This topic will begin with the basic knowledge of how we know a chemical reaction has occurred. Students will then learn about different types of chemical reactions including oxidation, acids, alkalis and neutralisation and metals and acids. They will also learn about how the pH scale can measure the acidity and alkalinity of different substances. Students will then use this knowledge to support their practical skills of learning how to perform a simple titration and then investigate antacids. P5 – This topic will introduce students to electricity. They will look at circuits and how they are built. They will then gain an understanding of the differences between current, voltage and resistance within a circuit. Students will then learn about static electricity before moving onto magnetic fields and then they will lean how to investigate these. Finally students will learn about electromagnets and electric motors.  |
| **Key** **knowledge:**How electricity works. How to use magnets and make electromagnets and motors. **Key vocabulary:**

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| **Tier 2** | **Tier 3** |
| **Motor** **Circuit** | **Electromagnet** **Pole** **Static** **Resistance** **Potential difference** **Current**  |

 | **Key skills:** ***Know how to…**** Make circuits
* Use iron filings to investigate magnetic fields
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| **Co-curricular opportunities:** **Maths skills are practiced throughout.** | **Key reading skills taught *summarise* and key texts:** **DART activities** **Wider Reading Opportunities/Links:**<https://electronics.howstuffworks.com/motor.htm>  |
| **How can I use this information at home?*** Conversation starters with your children to discuss their learning
* Support your child in carrying out independent research around the topic
* Visit your local library (or BorrowBox), museums, or other locations to explore the topic
* Promote books/other texts that explore this topic (see reading section)
* Help your child to learn the key vocabulary
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