



## Year 10 GCSE Chemistry

|                    | Key content (knowledge)                            | Key skills   | Assessments  | Challenge and enrichment   |
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| Autumn half term 1 | C4 Chemical Calculations<br>C5 Chemical Changes    | C4 – calculation and numeracy.<br>C5 – practical skills; observation and laboratory technique. | C4 Chemical Calculations<br>End of Topic (EOT)         | Most acids have a pH of between 0 and 7, however, super acids are so acidic they have a negative pH. Find out how they are made, and what they are used for. |
| Autumn half term 2 | C5 Chemical Changes (continued)<br>C6 Electrolysis | C5 – as above.<br>C6 – modelling, logic, problem-solving.                                      | C4 Calculations + C5<br>Chemical Changes combined test | Make a pamphlet on why recycling Aluminium is important, you can refer back to work you've done in year 8.   |
| Spring half term 1 | C7 Energy Changes<br>C8 Rates and Equilibrium      | C7 – calculation and modelling.<br>C8 – modelling, practical skills.                           | C7 Energy changes test                                 | Look into the life of one of the most infamous Chemists Fritz Haber. Was he evil, or a genius?   |

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| Spring half term 2 | C8 Rates and Equilibrium<br>(continued)<br>C9 Crude Oil and Fuels | C8 – as above.<br>C9 – pattern-finding,<br>modelling, scientific<br>language and explanation,<br>practical observations,<br>knowledge recall. | C8 Rates and Equilibrium<br>EOT                                | Write to your MP about the<br>effect of fossil fuels being<br>burnt, and give your opinion<br>on banks investing in fossil<br>fuels. |
| Summer half term 1 | C10 Organic Reactions   | C10 – practical explanations<br>and observations,<br>knowledge recall.  | End of Year Exam (content<br>from Year 9 and Year 10)          | Find an article, or<br>infographic, or TikTok<br>related to organic chemistry.   |
| Summer half term 2 | C10 Organic Reactions<br>(continued)<br>C11 Polymers              | C10 – as above.<br>C11 – scientific language<br>and explanation, knowledge<br>recall.   | C9 crude oil + C10 Organic<br>Reactions +<br>C11 combined test | Visit the science museum to<br>find out about uses of<br>plastics.   |