

AUTUMN 1

<p>UNIT 3 sections A – H (Biology /Chemistry) Investigative Skills Investigating growing conditions for plants, diffusion and enzymes. In depth method writing, data collection, graph construction and analysis, conclusions and evaluations.</p>	<p>UNIT 3 sections A – H (Physics /Chemistry) Investigative Skills Investigating fuels and circuits. In depth method writing, data collection, graph construction and analysis, conclusions and evaluations.</p>	<p>Prior Learning Revision and extension of GCSE content on burning fuels, diffusion, enzymes, electrical circuits.</p>
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AUTUMN 2

<p>UNIT 3 sections A – H (Biology/Physics/Chemistry) Investigative Skills (cont) Statistics – standard deviation, t-test and chi squared.</p>	<p>UNIT 14 C (opted) Organic Chemistry Isomers – Structural and Stereoisomerism including optical isomers.</p>	<p>Prior Learning Statistics introduced in GCSE maths, organic chemistry introduced in GCSE Combined Science.</p>
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SPRING 1

<p>UNIT 14 B (opted) Organic Chemistry Aromatic Chemistry – benzene chemistry including addition, substitution, Friedel-Crafts mechanisms, monosubstituents</p>	<p>UNIT 14 C (opted) Organic Chemistry Isomers –Case studies of ibuprofen and thalidomide.</p>	<p>Prior Learning Organic chemistry introduced in GCSE Combined Science.</p>
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SPRING 2

<p>UNIT 14 D (opted) Organic Chemistry Organic Reactions – practical assignment forming carbonyl, non-carbonyl and aromatic compounds.</p>	<p>UNITS 1 & 3 REVISION/EXAM RESITS.</p>	<p>Prior Learning Organic chemistry introduced in GCSE Combined Science, practical lab skills developed throughout Unit 3.</p>
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SUMMER 1

<p>UNITS 1 & 3 REVISION/EXAM RESITS.</p>	<p>UNITS 1 & 3 REVISION/EXAM RESITS.</p>	<p>Prior Learning Revision skills as established throughout the course.</p>
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CAREERS LINKS

Environmental scientists, research scientists, organic chemists. Drug designer. Lab technician, fractional distillation plant engineer.

CHARACTER LINKS

Motivation, resilience and teamwork (performance virtues). Confidence and determination (performance virtues). Listening, critical thinking and problem solving (intellectual virtues). Evaluation of ideas and process and seeking improvement through better knowledge and techniques (intellectual virtues). Consideration and construction of moral and ethical arguments in Science (moral virtues).

KEY ASSESSMENT DATES

January – Unit 3 Practical exam
 May – Unit 14 Submission
 May / June – Unit 3 Practical exam resit.