



### Chemistry - IAL EdExcel

Approximate available lessons based on 5 lessons per week over 37 week year; assuming approximately 16 lessons missed for holidays/other subject activities/PSHE/exams

Exact curriculum timings are approximate due to holidays/ other subject trips and activities / PHSE / internal examinations

All topics across KS5 will have ongoing formative assessment including:

- Questioning techniques
- Peer/self-marking and assessments
- Written exercises
- Presentations
- Class activities
- Practical work

All topics will have some form of summative assessment to test the knowledge and skills covered within the topic. These will take the forms of:

- End of topic tests
- Scientific Investigations

All topics will include practical work to ensure that the links between practical and theory are encouraged and emphasised.

	Year 12 Chemistry	Year 13 Chemistry																									
<b>Topic and Content</b>	<p><b>T1: Atomic Structure</b>  <b>Bonding and Structure</b>  <b>Introduction to Organic Chemistry</b>  <b>Alkanes</b></p> <p><b>T2: Alkenes</b>  <b>Intermolecular Forces</b>  <b>Redox and Group chemistry</b></p> <p><b>T3: Halogenoalkanes, Alcohols and Spectra</b>  <b>Physical Chemistry</b></p> <p><b>T4: Exam preparation, A2 Energetics and entropy, A2 Kinetics</b></p>	<p><b>T1: Chemical Equilibria, Acid base equilibria, Organic Chemistry: Carbonyls, Carboxylic acids and chirality</b></p> <p><b>T2: Organic Chemistry: Carbonyls, Carboxylic acids and Chirality, Organic nitrogen compounds: Amines, Amides, Amino acids and Proteins, Acid base Equilibria, Redox equilibria</b></p> <p><b>T3: Organic nitrogen compounds: Amines, Amides, Amino acids and Proteins, Organic chemistry: Arenes, Organic Synthesis, Redox equilibria, Transition Metals and their Chemistry</b></p> <p><b>T4: Exam preparation</b></p>																									
<b>Assessment Objectives and Weightings</b>	<table border="1"> <thead> <tr> <th></th> <th></th> <th>% in IAS</th> <th>% in IA2</th> <th>% in IAL</th> </tr> </thead> <tbody> <tr> <td><b>A01</b></td> <td>Demonstrate knowledge and understanding of science.</td> <td>34-36</td> <td>29-31</td> <td>32-34</td> </tr> <tr> <td rowspan="2"><b>A02</b></td> <td>(a) Application of knowledge and understanding of science in familiar and unfamiliar contexts.</td> <td>34-36</td> <td>33-36</td> <td>33-36</td> </tr> <tr> <td>(b) Analysis and evaluation of scientific information to make judgements and reach conclusions.</td> <td>9-11</td> <td>14-16</td> <td>11-14</td> </tr> <tr> <td><b>A03</b></td> <td>Experimental skills in science, including analysis and evaluation of data and methods.</td> <td>20</td> <td>20</td> <td>20</td> </tr> </tbody> </table>					% in IAS	% in IA2	% in IAL	<b>A01</b>	Demonstrate knowledge and understanding of science.	34-36	29-31	32-34	<b>A02</b>	(a) Application of knowledge and understanding of science in familiar and unfamiliar contexts.	34-36	33-36	33-36	(b) Analysis and evaluation of scientific information to make judgements and reach conclusions.	9-11	14-16	11-14	<b>A03</b>	Experimental skills in science, including analysis and evaluation of data and methods.	20	20	20
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<b>Method of Summative Assessment</b>	Projects Investigations End of Topic Tests Public Examinations in Jan (Unit 1) and June (Units 2 and 3)	Projects Investigations End of Topic Tests Public Examinations in Jan (Unit 4) and June (units 5 and 6)																									