

Syllabus matching grid – OxfordAQA International GCSE Chemistry Student Book

This syllabus matching grid identifies which section of the OxfordAQA International GCSE Chemistry syllabus each Unit in the Student Book maps to. It also identifies whether the Unit is relevant to the original “extended” syllabus (9202) or just the new “core” syllabus (9202). Note that study of the topics identified as Core is required for the Extended syllabus also.

Page	Unit title	Core or extended?	OxfordAQA Syllabus section	Notes
4	1.1 States of matter	Core	3.1.1a	
6	1.2 Evidence for particles	Extended	3.1.1b	
8	1.3 History of the atom	n/a	n/a	
10	1.4 Atoms	Core	3.1.2a-c	
12	1.5 Atomic structure	Core	3.1.2d-f	
14	1.6 The arrangement of electrons in atoms	Core	3.1.1i	
16	1.7 Atoms and isotopes	Core	3.1.1g-j (and k which links to Unit 8.2)	3.1.1k ‘Unit 8.2 Relative masses’ are covered on page 100
18	Chapter 1 summary and practice questions			
20	2.1 Atoms into ions	Core	3.2.1a-c	
22	2.2 Ionic bonding	Core	3.2.1d-f	
24	2.3 Covalent bonding	Core	3.2.1g, h	
26	2.4 Bonding in metals	Extended	3.2.1i, j	
28	2.5 Giant ionic structures	Core	3.2.2a, b, 3.2.3e	
30	2.6 Simple molecules	Core	3.2.2c-e	
32	2.7 Giant covalent structures	Core	3.2.2f, 3.2.3a-d	
34	2.8 Giant metallic structures	Extended	3.2.2g	
36	2.9 Nanoscience	Extended	3.2.4	

38	Chapter 2 summary and practice questions			
40	3.1 The periodic table	Core	3.7.1	
42	3.2 Group 1 – the alkali metals	Core	3.7.1a, b	
44	3.3 The transition elements	Extended	3.7.2a, b	
46	3.4 Group 7 – the halogens	Extended	3.7.1c-e	
48	3.5 Explaining trends	Core and Extended	3.7.1f	
50	Chapter 3 summary and practice questions			
52	4.1 Useful metals	Extended	3.3.1a-c	
54	4.2 Iron and steels	Extended	3.3.1b, d	3.8.4a also covered
56	4.3 The reactivity series	Core	3.3.1.1a, c	3.8.4b, c also covered
58	4.4 Displacement reactions	Extended	3.3.1.1b, f, h	
60	4.5 Metal carbonates	Extended	3.3.1.2	
62	Chapter 4 summary and practice questions			
64	5.1 Electrolysis	Core	3.3.2a-c	
66	5.2 Changes at the electrodes	Core and Extended	3.3.2d, e, f, g	
68	5.3 The extraction of aluminium	Core	3.3.2i	
70	5.4 Electrolysis of brine	Core	3.3.2j	
72	5.5 Electroplating	Core	3.3.2h	
74	5.6 Electrolysing copper sulfate solution	Core	3.3.2	Required practical
76	Chapter 5 summary and practice questions			
78	6.1 Separating mixtures	Extended	3.4.1a, c	
80	6.2 Paper chromatography	Core	3.4.1d, e	
82	6.3 Testing for gases	Core and Extended	3.4.2a-e	
84	6.4 Tests for positive ions	Extended	3.4.3a-c	Required practical
86	6.5 Tests for negative ions	Extended	3.4.3d-f	
88	Chapter 6 summary and practice questions			
90	7.1 Acids and alkalis	Core	3.5.1a, f	
92	7.2 Making soluble salts from metals or insoluble bases	Core	3.5.1b, c	
94	7.3 Making salts by neutralisation or precipitation	Core and Extended	3.5.1d, g 3.5.2a-c	
96	Chapter 7 summary and practice questions			

98	8.1 Chemical equations	Core	3.6.1a-d	
100	8.2 Relative masses and moles	Core and Extended	3.6.2a, b, 3.6.3a, b	
102	8.3 Percentages by mass and empirical formulae	Core and Extended	3.6.2b, c	
104	8.4 Equations and calculations	Core	3.6.1d	
106	8.5 The yield of a chemical reaction	Extended	3.6.1e	
108	8.6 Titrations	Extended	3.6.4b	Required practical
110	8.7 Titration calculations	Extended	3.6.4a, c	
112	8.8 Volumes of gases	Extended	3.6.4 d	
114	Chapter 8 summary and practice questions			
116	9.1 How fast?	Core	3.8.1a	
118	9.2 Collision theory and surface area	Core	3.8.1b, f	
120	9.3 The effect of temperature	Core	3.8.1c	
122	9.4 The effect of concentration or pressure	Core	3.8.1d, e	
124	9.5 The effect of catalysts	Core and Extended	3.8.1g, h	Required practical
126	Chapter 9 summary and practice questions			
128	10.1 Reversible reactions	Extended	3.8.2a	
130	10.2 Chemical equilibrium	Extended	3.8.2b	
132	10.3 Altering conditions	Extended	3.8.2c-e	
134	10.4 Making ammonia – the Haber process	Extended	3.8.3 a, b	
136	10.5 The economics of the Haber process	Extended	3.8.3c	
138	10.6 The Contact process	Extended	3.8.3d	
140	Chapter 10 summary and practice questions			
142	11.1 Exothermic and endothermic reactions	Core	3.9.1a-c	
144	11.2 Using energy transfers from reactions	Core	3.9.1b, c	
146	11.3 Energy and reversible reactions	Extended	3.9.1d	
148	11.4 Comparing the energy released by fuels	Core	3.9.2a-c	
150	11.5 Energy transfers in solutions	Core	3.9.2a-d	
152	11.6 Energy level diagrams	Core	3.9.2d-h	
154	11.7 Bond dissociation energy calculations	Core	3.9.2e, f	
156	11.8 Chemical cells and batteries	Extended	3.9.3a	

158	11.9 Fuel cells	Extended	3.9.3b	
160	Chapter 11 summary and practice questions			
162	12.1 Hydrocarbons	Core	3.10.1.1a, b 3.10.1.2a, b	
164	12.2 Fractional distillation of crude oil	Core	3.10.1.1c 3.10.1.2c	
166	12.3 Burning fuels	Extended	3.10.1.2d, e	
168	12.4 Alternative fuels	Extended	3.10.1.2f, g	
170	Chapter 12 summary and practice questions			
172	13.1 Cracking hydrocarbons	Core	3.10.1.3a-e	Required practical
174	13.2 Making polymers from alkenes	Extended	3.10.2a	
176	13.3 The properties of polymers	Extended	3.10.2b, c	
178	13.4 New and useful polymers	Extended	3.10.2d	
180	13.5 Plastic waste	Extended	3.10.2e, f	
182	Chapter 13 summary and practice questions			
184	14.1 Structures of alcohols, carboxylic acids, and esters	Extended	3.10.3.1a 3.10.3.2a 3.10.3.3a	
186	14.2 Properties and uses of alcohols	Extended	3.10.3.1b, c	
188	14.3 Carboxylic acids and esters	Extended	3.10.3.2b 3.10.3.3a, b	
190	Chapter 14 summary and practice questions			