

> **STEP UP** TO OXFORDAQA INTERNATIONAL GCSE CHEMISTRY

Mapping of Activate from Oxford University Press to
OxfordAQA International GCSE Chemistry (9202)



➤ THE BRIDGE TO INTERNATIONAL GCSE CHEMISTRY (9202)

In this document, we show how Activate from Oxford University Press prepares your Lower Secondary age 11–14 students for the step up to OxfordAQA International GCSE Chemistry (9202), whether they are taking the course over two or three years.

The following mapping grid shows which areas of Activate provide the prior knowledge and skills for each topic in the OxfordAQA International GCSE Chemistry (9202) specification. Any content that does not require prior learning before students start their International GCSE study is clearly indicated.



Mapping of Activate to OxfordAQA International GCSE Chemistry (9202)

OxfordAQA International GCSE Chemistry (9202)		Mapping of content from Activate Key Stage 3 Science		
Topic area	Subtopic area	Activate 1 (ages 11-12) chapters and sections	Activate 2 (ages 12-13) chapters and sections	Activate 3 (ages 13-14) chapters and sections
ATOMIC STRUCTURE AND THE PERIODIC TABLE	› Solid, liquids and gases	Particles and their behaviour 1.2 States of matter 1.3 Melting and freezing 1.4 Boiling 1.5 More changes of state 1.6 Diffusion		
	› A simple model of the atom	Elements, atoms, and compounds 2.1 Elements 2.2 Atoms		
	› The periodic table	Elements, atoms, and compounds 2.1 Elements	The Periodic Table 1.1 Metals and non-metals 1.2 Groups and periods 1.3 The elements of Group 1 1.4 The elements of Group 7 1.5 The elements of Group 0	Turning points in chemistry 2.3 Discovering the periodic table
STRUCTURE, BONDING AND THE PROPERTIES OF MATTER	› Chemical bonds: ionic, covalent and metallic	Elements, atoms, and compounds 2.3 Compounds 2.4 Chemical formulae		
	› How bonding and structure are related to the properties of substances	No prior teaching needed before OxfordAQA International GCSE study.		
	› Structure and bonding of carbon	No prior teaching needed before OxfordAQA International GCSE study.		
	› Nanoparticles			New technology 1.1 Nanoparticles 1.2 Using nanoparticles 1.3 Nanoparticles in medicine 1.4 Nanoparticle safety
CHEMICAL CHANGES	› Metals		The Periodic Table 1.1 Metals and non-metals	
	› The reactivity series	No prior teaching needed before OxfordAQA International GCSE study.		
	› Metal carbonates	Reactions 3.4 Thermal decomposition		
	› Electrolysis	No prior teaching needed before OxfordAQA International GCSE study.		
CHEMICAL ANALYSIS	› Purity and chromatography		Separation techniques 2.1 Mixtures 2.2 Solutions 2.3 Solubility 2.4 Filtration 2.5 Evaporation and distillation 2.6 Chromatography	
	› Identification of common gases	No prior teaching needed before OxfordAQA International GCSE study.		
	› Identification of ions	No prior teaching needed before OxfordAQA International GCSE study.		
ACIDS, BASES AND SALTS	› The properties of acids and bases	Acids and alkalis 4.1 Acids and alkalis 4.2 Indicators and pH 4.3 Neutralisation		
	› Preparation of salts	Acids and alkalis 4.4 Making salts	Metals and acids 3.1 Acids and metals	

Mapping of Activate to OxfordAQA International GCSE Chemistry (9202)

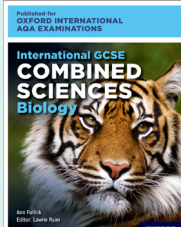
OxfordAQA International GCSE Chemistry (9202)		Mapping of content from Activate Key Stage 3 Science		
Topic area	Subtopic area	Activate 1 (ages 11-12) chapters and sections	Activate 2 (ages 12-13) chapters and sections	Activate 3 (ages 13-14) chapters and sections
QUANTITATIVE CHEMISTRY	Conservation of mass including the quantitative interpretation of chemical equations	Elements, atoms, and compounds 2.4 Chemical formulae		
		Reactions 3.1 Chemical reactions 3.2 Word equations 3.5 Conservation of mass		
	Use of amount of substance in relation to masses of pure substances		Separation techniques 2.1 Mixtures	
	The mole concept	No prior teaching needed before OxfordAQA International GCSE study.		
	Using molar concentrations of solutions and amount of substance in relation to volumes of gases	No prior teaching needed before OxfordAQA International GCSE study.		
TRENDS WITHIN THE PERIODIC TABLE	Group properties		The Periodic Table 1.3 The elements of Group 1 1.4 The elements of Group 7	
	Transition metals	No prior teaching needed before OxfordAQA International GCSE study.		
THE RATE AND EXTENT OF CHEMICAL CHANGE	Rate of reaction	Particles and their behaviour 1.6 Diffusion 1.7 Gas pressure		
	Reversible reactions and dynamic equilibrium	Reactions 3.1 Chemical reactions		
	Production of ammonia and sulfuric acid	No prior teaching needed before OxfordAQA International GCSE study.		
	Redox reactions	No prior teaching needed before OxfordAQA International GCSE study.		
ENERGY CHANGES	Exothermic and endothermic reactions	Reactions 3.6 Exothermic and endothermic		
	Calculating and explaining energy change	No prior teaching needed before OxfordAQA International GCSE study.		
	Chemical cells and fuel cells			New technology 1.6 New fuels
ORGANIC CHEMISTRY	Carbon compounds as fuels	Reactions 3.3 Burning fuels		New technology 1.5 Cars: pros and cons
	Crude oil	Reactions 3.3 Burning fuels		
	Hydrocarbons	Reactions 3.3 Burning fuels		New technology 1.5 Cars: pros and cons
	Obtaining useful substances from crude oil	No prior teaching needed before OxfordAQA International GCSE study.		
	Synthetic and naturally occurring polymers		Metals and acids 3.7 Polymers	
	Organic compounds – their structure and reactions	No prior teaching needed before OxfordAQA International GCSE study.		
	Alcohols	No prior teaching needed before OxfordAQA International GCSE study.		
	Carboxylic acids	No prior teaching needed before OxfordAQA International GCSE study.		
	Esters	No prior teaching needed before OxfordAQA International GCSE study.		

LAY STRONG FOUNDATIONS FOR OXFORDAQA INTERNATIONAL GCSE SCIENCE

Activate

		Student Books	Teacher Handbooks	Intervention Workbooks
Three Year	Two Year	 <p>978 019 839256 9</p>	 <p>978 019 839259 0</p>	 <p>Foundation Higher 978 019 842380 5 978 019 842379 9</p>
		 <p>978 019 839257 6</p>	 <p>978 019 839260 6</p>	 <p>Foundation Higher 978 019 842382 9 978 019 842381 2</p>
		 <p>978 019 839258 3</p>	 <p>978 019 839261 3</p>	

OxfordAQA International GCSE Science

		Separate Sciences	Combined Sciences
Biology		 <p>Print Textbook 978 019 837588 3 Online Textbook 978 019 841143 7 Print & Online Textbook Pack 978 019 841142 0</p>	 <p>Print Textbook 978 019 840793 5 Online Textbook 978 019 841158 1 Print & Online Textbook Pack 978 019 841157 4</p>
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Chemistry		 <p>Print Textbook 978 019 837589 0 Online Textbook 978 019 841148 2 Print & Online Textbook Pack 978 019 841147 5</p>	 <p>Print Textbook 978 019 842308 9 Online Textbook 978 019 841163 5 Print & Online Textbook Pack 978 019 842307 2</p>

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