

KS4 Curriculum Map – Chemistry

Year 10 Combined	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Topic 2 Structure and bonding	Topic 4 Chemical changes	Topic 4 Chemical change	Topic 4 Chemical changes and Topic 3 Quantitative chemistry	Topic 3 Quantitative chemistry and Topic 5 Energy changes	Revision, final assessment and feedback
Assessment	Topic tests topics 1, 2, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Topic tests topics 1, 2, 4, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Exam topics 1, 2, 4 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Topic tests topics 2, 4, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Topic tests topics 2, 3, 4 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Exam topics 1-5, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons
Careers link	Materials science; metallurgy; engineering	Synthetic and medicinal chemist; electroplating; chemical engineer		Analytical science; financial services; Environmental science	Chemical engineering	
Link with GCSE Skills and AOs	Demonstrate knowledge and understanding of the content developed in each topic, including the associated mathematical and practical skills, and ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated, and logically structured. AO1: Demonstrate knowledge and understanding of scientific ideas; scientific techniques and procedures. AO2: Apply knowledge and understanding of scientific ideas; scientific inquiry, techniques, and procedures. AO3: Analyse information and ideas to: interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedures.					
Enrichment/ Wider curriculum	Royal Society of Chemistry online practical enrichment, IRIS projects, talks at UCL					

Year 10 Separate	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Topic 2 Structure and bonding	Topic 2 Structure and bonding and Topic 4 Chemical changes	Topic 4 Chemical Change	Topic 4 Chemical Change and Topic 3 Quantitative chemistry	Topic 3 Quantitative chemistry and topic 5 Energy changes	Topic 10 Using resources (obtaining potable water and waste water)
Assessment	Topic tests topics 1, 2, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	1, 2, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Exam topics 1, 2, 4 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Topic tests topics 2, 4, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Topic tests topics 2, 3, 4 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons	Exam topics 1-5, 8 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons
Careers link	Materials science; metallurgy; engineering	Synthetic and medicinal chemist; electroplating; chemical engineer		Analytical science; financial services; Environmental science; engineering		Environmental sciences; water treatment
Link with GCSE Skills and AOs	Demonstrate knowledge and understanding of the content developed in each topic, including the associated mathematical and practical skills, and ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated and logically structured. AO1: Demonstrate knowledge and understanding of: scientific ideas; scientific techniques and procedures. AO2: Apply knowledge and understanding of: scientific ideas; scientific enquiry, techniques and procedures. AO3: Analyse information and ideas to: interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedures.					
Enrichment /Wider curriculum	Royal Society of Chemistry online practical enrichment, IRIS projects, talks at UCL					

Year 11 Combined	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Topic 7 Organic Chemistry Topic 8 Chemical Analysis	Topic 8 Chemical Analysis Topic 9 Earth's atmosphere	Topic 10 Using Resources	Revise Topics 1-5 Revision of Topics 6-10	Revision of paper 1 and 2 content via examination papers and feedback	EXAM SEASON
Assessment	Topic test topics 1, 2, 3, 6 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Exam Week at the beginning of Autumn Term (Paper 1, topics 1-5) Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Topic tests topics 7-9 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Exam Week at the beginning of Spring Term 2 (Paper 2, topics 6-10) Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	
Careers link	Medicine; chemical engineering. Analytical chemistry; analytical skills for all professions Environmental science; policy and government; engineering					
Skills and AOs	Demonstrate knowledge and understanding of the content developed in each topic, including the associated mathematical and practical skills, and ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated, and logically structured. AO1: Demonstrate knowledge and understanding of scientific ideas; scientific techniques and procedures. AO2: Apply knowledge and understanding of scientific ideas; scientific inquiry, techniques and procedures. AO3: Analyse information and ideas to: interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedures.					
Revision	After school revision sessions, and targeted intervention					

Year 11 Triple Chemistry	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	Topic 7 Organic Chemistry	Topic 7 Organic Chemistry Topic 8 Chemical Analysis	Topic 8 Chemical Analysis Topic 9 Chemistry of the Atmosphere Topic 10 Using resources	Revision of paper 1 content then paper 2 content	Content Complete- Revision Weekly by paper	EXAM SEASON
Assessment	Topic test on Topics 1, 2, 4, 6, 10 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Exam Week at the beginning of Autumn Term (Paper 1, topics 1-5) Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Topic tests topics 7-9 Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Exam Week at the beginning of Spring Term 2 (Paper 2, topics 6-10) Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	Full paper 1 and 2 in class with support and feedback Extended response exam questions (literacy, numeracy, analysis skills) AFL in lessons All assessments cover AOs1,2&3 and include spaced repetition.	
Careers link	Medicine; chemical engineering; Analytical skills for all professions Environmental science; forensic chemistry; healthcare; engineering; policy and government					
Skills and AOs	Demonstrate knowledge and understanding of the content developed in each topic, including the associated mathematical and practical skills, and ability to construct and develop a sustained line of reasoning which is coherent, relevant, substantiated, and logically structured. AO1: Demonstrate knowledge and understanding of scientific ideas; scientific techniques and procedures. AO2: Apply knowledge and understanding of scientific ideas; scientific inquiry, techniques and procedures. AO3: Analyse information and ideas to: interpret and evaluate; make judgments and draw conclusions; develop and improve experimental procedures.					
Revision	After school revision sessions, targeted intervention.					

