

## Long Term Curriculum Plan Chemistry

At Bournemouth School, the science curriculum aims to inspire a future generation of scientists, igniting curiosity and wonder in students and developing their understanding of the world around them. Practical activities are used regularly to support theoretical application of knowledge and to develop research and analytical skills. High quality teaching provides purposeful, stimulating lessons, providing a rich depth of knowledge, enabling students to become critical thinkers and contribute to shaping a better world.

The Chemistry curriculum aim is to develop well rounded chemists who can explain complex theoretical concepts and investigate them practically for themselves. Investigative skills and techniques are embedded at frequent opportunities. Our curriculum aims to challenge all students and facilitates further studies or potential careers in the subject.

*“About 300,000 years after their appearance, matter and energy started to coalesce into complex structures, called atoms, which then combined into molecules. The story of atoms, molecules and their interactions is called Chemistry.”*

*Yuval Noah Harari*

KS4 roadmap	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
Year 9	C1a Atomic structure and the Periodic Table	C1b Atomic structure and the Periodic Table	C2 Bonding, Structure and Properties	C2 Bonding, Structure and Properties C4a Chemical Changes: Acids	C4a Chemical changes: Acids C4b Chemical Changes: Metals	C4b Chemical Changes: Metals
Year 10	C4b Chemical changes	C3 Quantitative Chemistry	C3 Quantitative Chemistry C5 Energy changes	C6 The rate and extent of chemical change  Revision	C6 The rate and extent of chemical change	C7a Organic Chemistry
Year 11	C10 Using resources Revision for Formal Assessments	C4b Chemical changes C5 Energy Changes  Revision for Formal Assessments	C3 Quantitative chemistry	C3 Quantitative chemistry  Revision for Formal Assessments	Revision for Formal Assessments	

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## KS4 assessments

Year 9	Topic	Year 10	Topic	Year 11	Topic
w/c 16/10/23	C1a Atomic structure and the periodic table lessons 1-8 only	w/c 09/10/23	C4a Chemical changes C4b Chemical changes	w/c 16/10/23	C7 Organic Chemistry C10 Using resources
w/c 11/12/23	C1a and C1b Atomic structure and the periodic table	w/c 04/12/23	C2 Bonding, structure + properties C3 Quantitative chemistry lessons 1-12 only	w/c 20/11/23	Mock Paper 2
w/c 26/02/23	C1a and C1b Atomic structure and the periodic table C2 Bonding, structure + properties	w/c 26/02/23	C1 Atomic structure + periodic table C3 Quantitative chemistry C5 Energy changes	w/c 4/03/23	Mock paper 1
w/c 29/04/23	C2 Bonding, structure and properties C4a Chemical Changes	w/c 29/04/23	C1 Atomic structure + periodic table C2 Bonding, structure + properties C3 Quantitative chemistry C4a Chemical changes C4b Chemical changes		
w/c 08/07/23	C1a and C1b Atomic structure and the periodic table C2 Bonding, structure + properties C4a and C4b Chemical Changes	w/c 08/07/23	C5 Energy Changes C6 Rates of reaction C7a Organic chemistry		

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Sixth form roadmap	Term 1	Term 2	Term 3	Term 4	Term 5	Term 6
YEAR 12	Induction and baseline test Chapter 1 atomic structure  Chapter 1 test	Chapter 2 Amount of substance Required practical 1  Progress test chapters 1 and 2	Chapter 4 Energetics Required practical 2  Progress test chapters 1,2 and 4	Chapter 6 Equilibria Chapter 19 Equilibrium Constant Kp Chapter 7 Redox Formal Assessment Revision	Chapter 8 periodicity Formal Assessment Preparation Chapter 9 group 2  Mock exam 1	Chapter 10 group 7
	Induction Chapter 3 Bonding and structure Chapter 3 test	Chapter 5 Kinetics Required practical 3 Chapter 11 Introduction to organic Chemistry Progress test chapters 3, 5 and 11	Chapter 12 Alkanes Chapter 13 Haloalkanes	Chapter 14 Alkenes Chapter 15 alcohols Required practical 5 Formal Assessment Revision	Formal Assessment Preparation Chapter 18 Kinetics Required practical 7 Mock exam 1	Chapter 16 Organic Analysis Required practical 6
YEAR 13	Chapter 21 acids, bases and buffers Required practical 8  Chapter 21 test	Chapter 22 Periodicity Chapter 17 Thermodynamics  Formal Assessment Revision	Chapter 20 Electrochemistry Required practical 8  Mock exam 1	Chapter 23 Transition metals Chapter 24 Reactions of inorganic compounds Required practical 11 Mock exam 2	Chapter 24 Reactions of inorganic compounds Revision	
	Chapter 25 Nomenclature and isomerism Chapter 26 Compounds containing the carbonyl group Required practical 10	Chapter 32 Structure determination Chapter 33 Chromatography Formal Assessment Revision	Chapter 27 Aromatic chemistry Chapter 28 Amines Mock exam 1	Chapter 29 Polymerisation Chapter 30 Amino acids, proteins and DNA Mock exam 2	Formal Assessment Review Chapter 31 Organic synthesis and analysis Revision	

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