Edexcel GCE A level Chemistry

The table shows the contents of each Group of lessons, mapped to the specification. Some lessons may appear in more than one Group.

Note that some aspects of Topics – mostly applications – have been removed from Lesson plans for brevity, but could be restored by Lesson authors if time permits.

There is potential overlap in Lesson C.4 and Lesson E.3 in terms of where optical activity / SN1 and SN2 are considered.

Lesson Group	Specification coverage	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Pre-Test	Post-Test
A: Fundamental principles of chemistry	Topic 1 Topic 2 Topic 5	Atomic Structure (1.1 – 1.7, 1.11 – 1.21)	Ionic and covalent bonding (2.1 – 2.9, 2.13 – 2.15)	Intermolecular forces (2.16 – 2.21)	Shapes and structures (2.10 – 2.12, 2.22 – 2.27)	Chemical equations and quantitative chemistry (5.1-5.11)	**A**	**A**
B: Chemical energy	Topic 8 Topic 13	Enthalpy changes (8.1 – 8.4, 8.9 – 8.11)	Hess's Law / enthalpy practicals (8.5 – 8.8)	Lattice energy and Born Haber cycles (13.1 – 13.11)	Entropy (13.12 – 13.17)	Gibbs free energy (3.18 – 3.22)	**B**	**B**
C: Reaction kinetics	Topic 9 Topic 16	Collision theory and measuring reaction rates (9.1 – 9.3)	Maxwell-Boltzmann and catalysts (9.4 – 9.9)	Orders of reaction (16.1 – 16.2, 16.5-16.7)	Rates and mechanisms (16.8 – 16.11)	Obtaining rate data and rate equation (16.3 – 16.4, 16.12)	**C**	**C**
D: Equilibrium reactions	Topic 10 Topic 11 Topic 12	Factors influencing position of equilibrium (10.1 – 10.3)	Kc and Kp (10.4, 11.1 – 11.5)	Acids and pH (12.1 – 12.8)	Ka and Kw (12.9 – 12.15)	Buffers and titration curves (12.16 – 12.22)	**D**	**D**
E: Organic chemistry	Topic 6 Topic 17 Topic 18	Alkanes and alkenes (6.1 – 6.9, 6.15 - 6.25)	Haloalkanes and alcohols (6.30 – 6.38)	Chirality, carbonyls and carboxylic acids (17.1 – 17.15)	Aromatic Compounds (18.1 – 18.7)	Organic nitrogen compounds & synthetic	**E**	**E**

Lesson Group	Specification coverage	Lesson 1	Lesson 2	Lesson 3	Lesson 4	Lesson 5	Pre-Test	Post-Test
						pathways (18.8 – 18.20)		
F: Periodic Table and redox	Topic 3 Topic 4 Topic 14 Topic 15	Redox and balancing equations (3.1 – 3.13, 14.18)	Groups 1, 2 and 7 (4.1 – 4.14)	Principles of transition metal chemistry (15.1 – 15.14)	Reactions of transition metals (15.15 – 15.30)	Redox potentials (14.3 – 14.12)	**F**	**F**
G: Instrumental and Core Practical techniques	Topic 1 Topic 7 Topic 19	Mass spectrometry (1.8 – 1.10, 7.1, 19.1	NMR (19.2 – 19.5)	IR and chromatography (7.2, 19.6 – 19.8)	Core Practical Techniques (CP1-17) **Chosen by school**	Organic techniques (6.39, 18.21 – 18.22)	**G**	**G**