Year 11 Chemistry Curriculum Map

Half term	Topics to be covered	Overview of content	Assessment
Advent 1.1	C7 Energy Changes Start paper 2 content: C8 Rates and equilibrium	• Exo & Endothermic reactions • Using energy transfers • Reaction profiles • Bond energy calculations • Chemical cells, batteries and fuel cells • Rate of Reaction • Collision theory and surface area • The effect of temperature • The effect of concentration and pressure • The effect of catalysts • Reversible reactions • Energy and reversible reactions • Dynamic equilibrium • Altering conditions	Test: C6, 7 & C8
Advent 1.2	C9 Crude oil & fuels	• Hydrocarbons • Fractional distillation of oil • Burning hydrocarbons • Cracking hydrocarbons • Reactions of the alkenes	Mock exam C1-C7 Paper 1 1 hour 45 minutes

	C10 Organic reactions C12 Chemical analysis	• Structures of alcohols, carboxylic acids and esters • Reactions and uses of alcohols • Carboxylic acids and esters • Pure substances and mixtures • Analysing chromatograms • Testing for gases • Tests for positive ions • Tests for negative ions • Instrumental analysis	
Lent 2.1	C11 Polymers C13 The Earth's atmosphere	• Addition polymerisation • Condensation polymerisation • Natural polymers • DNA • History of our atmosphere • Our evolving atmosphere • Greenhouse gases • Global climate change • Atmospheric pollutants	Test: C9 – C13
Lent 2.2	C14 The Earth's resources	• Finite and renewable resources • Water safe to drink • Treating waste water • Extracting metals from ores • Life cycle assessments • Reduce, reuse and recycle • Rusting • Useful alloys	Mock exam C8-C15 Paper 2 Paper 2 – 1 hour 45 minutes

	C15 Using our resources	• The properties of polymers • Glass, ceramics and composites • Making ammonia – the Haber Process • The economics of the Haber process • Making fertilisers in the lab • Making fertilisers in industry	
Pentecost 3.1	Consolidation and prepare for GCSE		