



Curriculum Overview

At ICC we follow the OCR Chemistry A AS and A-level Specification. The curriculum is sequenced to be delivered by two members of teaching staff and each unit is mapped to the big ideas from our KS3 and KS4 curriculum. Each unit is assessed with end of topic summative assessments as well as half termly cumulative assessments and formative assessment throughout the course ensures retrieval of relevant content and supports students in making synoptic links. Opportunities to consider rich questions and reference to futures are made where relevant throughout the course in order to help our students understand the present and plan for their own future.

[Link to the specification](#)

[Link to the scheme of work](#)

		Teacher 1			Teacher 2		
		Topics	Practical's	Big idea	Topics	Practical's	Big idea
Autumn Term	First half	2.1.1 Atoms, ions & compounds 2.1.2 Compounds, formulae and equations 2.1.3 Amounts of substances	Dot formula Epsom salts PAG 1.3 % Vit C in a tablet using titration	MATTER	3.2.2 Reaction rates and Equilibrium 3.2.3 Reaction rates and equilibrium 3.2.1 Enthalpy	Measuring rates of reaction involving gas production; Measuring enthalpies of reactions. Enthalpy of combustion measurement	REACTIONS
	Second half	2.1.5 Acids and Redox 2.2.1 Electrons and Bonding 2.2.2 Shapes molecules and intermolecular forces	PAG 2.1 Ar of magnesium Ar of lithium by 2 different methods	MATTER	3.2.1 Enthalpy	Change in enthalpy for thermal decomposition of KHCO ₃ PAG 3.1	REACTIONS
Spring Term	First half	4.1.1 Basic Concepts 4.1.2 Alkanes 4.1.3 Alkenes	PAG 1.1 Extracting limonene from oranges	MATTER	3.1.1 Periodicity 3.1.2 Group 2	Reactions of calcium metal	MATTER
	Second half	4.2.1 Alcohols 4.2.2 Haloalkanes	Oxidation of propan-1-ol Rates of hydrolysis of haloalkanes; PAG 7.1	REACTIONS	3.1.3 The halogens 3.1.4 Qualitative Analysis		MATTER REACTIONS
Summer Term	First half	4.2.2 Haloalkanes 4.2.3 Organic synthesis	Preparation and purification of 1,2 dibromocyclohexane	REACTIONS	4.2.4 Analytical Techniques	Halogen/Halide ion reactions; Identification of halide ions; PAG 4.1	REACTIONS
	Second half	5.1.1 How fast?	Kinetics of reaction of CaCO ₃ and HCl, PAG 9.1; Kinetics of reaction of acidified propanone and iodine; PAG 10.1	REACTIONS	6.1.1 Aromatic compounds	PAG 5.2 Preparation of methyl-3-nitrobenzoate Reactions of phenols	MATTER