

Archbishop Temple Church of England High School's Science Department - Chemistry 5 Year Curriculum.

		Autumn		Spring		Summer		
		7 weeks	8 weeks	6 weeks	6 weeks	6 weeks	7 weeks	
Year 7	Unit	Particles and their behaviour Elements, atoms and compounds			Reactions Acids and Alkalis			
	Assessment	Selection of Doddle, Educake, Quizlet, Quizizz questions. Practice Exam style questions. Teaching pupils exam and revision techniques.			Selection of Doddle, Educake, Quizlet, Quizizz questions. Practice Exam style questions. Teaching pupils exam and revision techniques.			
	Skills	Particles and their behaviour: Scientific models, recording data, analysing data. Elements, atoms and compounds: Scientific writing			Reactions: Scientific writing, evaluating data Acids and Alkalis: Qualitative tests, Quantitative tests, recording data, scientific drawing			
Year 8	Unit	The Periodic table Separation techniques			Metals and acids The Earth and its atmosphere			
	Assessment	Selection of Doddle, Educake, Quizlet, Quizizz questions. Practice Exam style questions. Teaching pupils exam and revision techniques.			Selection of Doddle, Educake, Quizlet, Quizizz questions. Practice Exam style questions. Teaching pupils exam and revision techniques.			
	Skills	The Periodic table: Analysing data, scientific writing. Separation techniques: Analysing data, recording data, scientific drawing, using appropriate techniques.			Metals and acids: Scientific observations, making predictions The Earth and its atmosphere:			
Year 9	Unit	Atomic Structure and the Periodic Table Atoms, elements and compounds, Separating Mixtures and Chemical Equations.	Atomic Structure and the Periodic Table Atomic structure, the History of the atom, isotopes and ions (common content with Physics).	Atomic Structure and the Periodic Table The development of the Periodic table, Transition elements and Patterns in groups 1, 7 and 0.	Bonding, Structure and the Properties of Matter The Particle Model, Ions, Ionic bonding and Properties of ionic compounds.	Bonding, Structure and the Properties of Matter Covalent bonding, Properties of simple molecules, Giant structures and their properties, Fullerenes and graphene and Polymers.	Bonding, Structure and the Properties of Matter Metallic bonding and Nanoscience. Review and recap in preparation for Year 10.	
	Assessment	Doddle, Educake, Quizlet, Quizizz. Practice exam questions, throughout the year. (Refer to Chemistry Handbook for details).		January: Options Exam (Atomic Structure and the Periodic Table)	Doddle, Educake, Quizlet, Quizizz. Practice exam questions, throughout the year. (Refer to Chemistry Handbook for details).		June: Setting Exam (Bonding, Structure and the Properties of Matter excluding Nanoscience).	
	Skills	RP1: Making Salts RP6: Chromatography <ul style="list-style-type: none"> Experimental skills and strategies - Safe use of a range of equipment to separate chemical mixtures. Scientific vocabulary, quantities, units, symbols, and nomenclature 	<ul style="list-style-type: none"> Development of scientific thinking Scientific vocabulary, quantities, units, symbols, and nomenclature 	<ul style="list-style-type: none"> Development of scientific thinking - Explain how testing a prediction can support or refute a new scientific idea 	<ul style="list-style-type: none"> Development of scientific thinking Scientific vocabulary 	<ul style="list-style-type: none"> Development of scientific thinking 	<ul style="list-style-type: none"> Development of scientific thinking Scientific vocabulary, quantities, units, symbols, and nomenclature 	
Year 10	Unit	Chemical Changes		Quantitative Chemistry	Energy Changes	The Rate and Extent of Chemical Change Collision theory and Factors Affecting Rate	The Rate and Extent of Chemical Change Reversible Reactions and Equilibrium Chemical Analysis	Chemical Analysis Ion Testing (Triple Only) Review and recap in preparation for Year 11.
	Assessment	Doddle, Educake, Quizlet, Quizizz. Practice exam questions, throughout the year. (Refer to Chemistry Handbook for details).			Practice Paper 1 (Exam or Group Task)	Doddle, Educake, Quizlet, Quizizz. Practice exam questions, throughout the year. (Refer to Chemistry Handbook for details).	May Y10 Exams: Full Paper 1	Doddle, Educake, Quizlet, Quizizz. Practice exam questions, throughout the year. (Refer to Chemistry Handbook for details).
	Skills	RP1: Making Salts RP2: Neutralisation (Triple Only) RP3: Electrolysis		RP4: Temperature Changes	RP4: Factors affecting rate	RP6: Chromatography	RP7: Chemical Testing (Chemistry Only)	
Year 11	Unit	Organic Chemistry Crude oil and Hydrocarbons	Organic Chemistry (Triple Only) Reactions of alkenes, alcohols, carboxylic acids, polymers, amino acids and DNA (links to Biology) Chemistry of the Atmosphere	Chemistry of the Atmosphere	Using Resources Review and recap in preparation for exams.			
	Assessment	Doddle, Educake, Quizlet, Quizizz. Practice exam questions, throughout the year. (Refer to Chemistry Handbook for details).	Mock exams - Full paper 1 (Cell biology, Organisation, Infection and response, Bioenergetics.) Part paper 2 - Content covered so far.	Review Mock Exams	Paper 1 and 2 Questions			
	Skills	Throughout the year exam questions are modelled and explained, including command words. Required Practical activities reviewed. Exam practice and technique embedded throughout the year.						

