Chemistry Year 7 Curriculum Overview

	Autumn		Spring		Summer
	Learning Cycle 1	Learning Cycle 2	Learning Cycle 3	Learning Cycle 4	Learning Cycle 5
Торіс	Particle Model	Separating techniques	Metals and Non metals	Metals and Acids	Earth
Critical Prior	KS2: Properties and	KS2: Properties and	KS2: Properties and	KS2: Properties and	KS2: Earth and Space,
Knowledge	changes of materials	changes of materials	changes of materials	changes of materials	Forces
Overall Intent	The properties of the	The concept of a pure	The properties of	Defining acids and	The compositions and
(Big ideas and key	different states of	substance.	metals and non -	alkalis in terms of	structure of the Earth.
concepts)	solids, liquids and	Understanding	metals. The chemical	neutralisation	The formation and
,	gases (expansion, gas	mixtures, including	properties of metal	reactions. The pH scale	properties of
	pressure,	dissolving. Simple	and non -metal oxides	for measuring	sedimentary, igneous
	compression). Particle	techniques for	with respect to acidity.	acidity/alkalinity. The	(intrusive and
	models of solids,	separating mixtures:	The properties of	use of indicators to	extrusive) and
	liquids and gases.	filtration, evaporation,	metals and non -	measure pH. The	metamorphic rocks.
	Explaining properties	distillation and	metals. Conservation	difference between	Identifying types of
	using the particle	chromatography.	of mass changes of	strong and weak acids.	rocks from their
	model. Changes of		state and chemical		properties. The three
	state in terms of the		reactions. Reactions of		types of weathering
	particle model. The		acids with metals to		and the effects of
	particle model linked		produce a salt plus		them. The rock cycle.
	to diffusion.		hydrogen		
Essential	Students are able to	Students are able to	Students can identify	Students are able to	Students are able to
Knowledge	represent and identify	identify the difference	evidence that a	define what an acids	describe the
milestones	the particle	between pure	chemical reaction has	and alkali is. Students	composition and
(What students must	arrangements in solids,	substances and	taken place. Students	able to work with the	structure of the Earth.
master)	liquids and gases.	mixtures and describe	know the products of	pH scale. Students able	Students are able to
,	Students able to	ways to separate	complete and	to measure pH of	describe the
	explain compression	substances in given	incomplete	solutions using	differences between
	and expansion using	mixtures.	combustion and the	common chemical	the three main types of
	the particle model.		conditions leading to	indicators. Students	rocks and describe how
	Students can name		incomplete	able to describe the	each type were

	changes of state and		combustion. That mass	process of	formed. Describe the			
	link these to particle		is conserved in	neutralisation.	three types of			
	arrangements.		chemical reactions.		weathering. Describe			
			How to represent		the stages in the rock			
			chemical reactions		cycle.			
			with word and					
			balanced symbol					
			equations.					
Cultural Capital	Practical techniques,	Practical techniques,	Practical techniques,	Practical techniques,	Practical techniques,			
	health and safety,	health and safety,	health and safety,	health and safety,	health and safety,			
	development of fine	development of fine	development of fine	development of fine	development of fine			
	motor and dexterity	motor and dexterity	motor and dexterity	motor and dexterity	motor and dexterity			
	skills	skills	skills	skills	skills			
	Communication of	Communication of	Communication of	Communication of	Communication of			
	Science ideas and	Science ideas and	Science ideas and	Science ideas and	Science ideas and			
	concepts	concepts	concepts	concepts	concepts			
Assessment Points	Regular Afl embedded	Regular Afl embedded	Regular Afl embedded	Regular Afl embedded	Regular Afl embedded			
	into lessons.	into lessons.	into lessons.	into lessons.	into lessons.			
	C1 Retrieval Mastery	C1 Retrieval Mastery	C2 Retrieval Mastery	C2 Retrieval Mastery	C3 Retrieval Mastery			
	,							
	Term 2 – Progress	Term 2 – Progress	Term 3 – Progress	Term 3 – Progress	Term 3 – Progress			
	Assessment	Assessment	Assessment	Assessment	Assessment			
ECC Student	Through these units we will encourage students to work hard and be resilient individuals who embrace challenge and through							
Characteristics	their creativity and endeavours become reflective learners. Mastering the key concepts of each topic before being able to							
	build on these ideas as they are interleaved through other units later in the course.							
Connection to future	Separating mixtures	KS4 Analytical	Y8 Types of reaction,	Y8 Types of reaction,	Y8 Climate and			
learning	Y8 Elements and	techniques	Energy changes	Energy changes	resources			
(When is this	periodic table		KS4 reactivity series	KS4 Chemical changes	KS4 Earths resources			
developed /	KS4 Atoms and		and reactions of		and atmosphere,			
revisited)?	elements		metals, extraction of		extraction of metals			
			metals, earths					
			resources					