

Unit	Summary	Skills	Assessment	British Values and SMSC	Career links	Cross-curricular links
C8 – Rates and Equilibrium	Rate of reaction and how they can be altered; reversible reactions & equilibrium	Using models to explain Maths – graphing & analysing data Practical skills – investigating rate	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.	Health & safety policies	Health & safety – powders	Biology, enzymes & disease
C9 – Crude oil & fuels	Hydrocarbons and crude oil – processing and use	Linking structure with properties Using models Maths skills – estimating, analysing graphs	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.	global citizenship & environmental impacts of lifestyle	Oil extraction & processing; Environmental scientist	
C10 – Organic reactions (triple only)	<i>Organic functional groups – their properties and uses</i>	Comparing observations using models predicting products literacy – nomenclature (prefix & suffix)	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.		Research chemist	
C11 – Polymers (triple only)	<i>Polymers (additional & condensation) with DNA as an example</i>	using models predicting products explaining synoptic links	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.	Recycling and environmental impacts		Link to Biology spec - DNA
C12 – Chemical analysis	Analysing pure & impure substances, dyes and gases (<i>testing for ions & instrumental analysis</i>)	Forensic testing justifying opinions based on evidence Analysing data	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.	Testing foods – how do you know what is in what you eat? Can you trust the label?	Forensics Food testing	
C13 – Earth's atmosphere	How the atmosphere evolved and how it is still being changed; global warming & atmospheric pollution mechanisms	Evaluating and inferring justifying using evidence analysing data reviewing and revising theory in light of new thinking	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.	global citizenship & environmental impacts of lifestyle	geologist, climatology environmental scientist	History
C14 – Earth's resources	Sustainable living, including drinking water, sewage, recycling and product life cycle assessments	justifying opinions synoptic links analysing data quantitative and qualitative data	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.	Environmental impact of modern society & sustainable living. Reduce, reuse, recycle quantitative vs qualitative data	Product design, materials design, engineer, water treatment, environmental scientist	Geography
C15 – Using Earth's resources (triple only)	Alloys and designer materials; Haber process and optimum conditions	evaluating data to justify conclusions	Low stakes testing 'Do Now' tasks 30min End of Unit test Optional Kerboodle Checkpoint quiz & Seneca.	Use of fertilisers (evaluating positive and negative impacts)	farming engineer hydrologist	