

St Cuthbert Mayne School Curriculum Map 2023-2024



Department: Science

Year 11

Department Intent and overview
Developing Scientists of the future
Key Stage 4 Curriculum Summary
Building on the fundamental concepts of Science

Autumn Term 1

Topic/Unit	Chemical Changes	Ecology
Knowledge (Content covered)	<ul style="list-style-type: none">● Formation of metal oxides● Reactivity series● Metals and acids● Displacement● Neutralisation	<ul style="list-style-type: none">● Classification● Adaptation● The carbon cycle● The water cycle● Sampling● Biodiversity● Deforestation● Global warming

	<ul style="list-style-type: none"> Electrolysis 	
Skills	Carrying out complex practical work safely. Following scientific methods	Applying theory to investigate current environmental issues Linking mathematical understanding to scientific scenarios
Assessment	Pre-and Post progress check multiple choice, 2x DIRT , end of unit assessment	Re-and Post progress check multiple choice, 2x DIRT tasks
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Chemist	Ecologist

Autumn Term 2

Topic/Unit	Using Resources	Forces
Knowledge (Content covered)	<ul style="list-style-type: none"> Relative formula mass Concentration equation Atom economy Moles Avogadro's constant 	Scalar and vector quantities Resolving forces Speed Velocity Acceleration
Skills	Linking mathematical understanding to scientific scenarios	Carrying out complex practical work safely. Following scientific methods Enhancing Mathematics in Science
Assessment	Re-and Post progress check multiple choice, 2x DIRT tasks	Pre-and Post progress check multiple choice, 2x DIRT , end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Pharmacologist	Automotive engineer

Spring Term 1

Topic/Unit	Inheritance variation and evolution
Knowledge (Content covered)	DNA Genes Punnett Squares Sex inheritance Classification
Skills	Deepening understanding of key biological concepts Following experimental methods safely
Assessment	Pre-and Post progress check multiple choice, 2x DIRT , end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Geneticist

Spring Term 2

Topic/Unit	Revision and exam preparation
Knowledge (Content covered)	
Skills	
Assessment	GCSE examinations

Gatsby 4 (Linking curriculum learning to careers)
[GATSBY BENCHMARK 4](#)

Summer Term 1

Topic/Unit	Revision and exam preparation
Knowledge (Content covered)	
Skills	
Assessment	GCSE examinations
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	

Summer Term 2

Topic/Unit	Revision and exam preparation
Knowledge (Content covered)	
Skills	
Assessment	GCSE examinations
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