

St Cuthbert Mayne School Curriculum Map



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	Ecology	Using Resources
Knowledge (Content covered)	• Classification • Adaptation • The carbon cycle • The water cycle • Sampling • Biodiversity • Deforestation • Global warming	• Water purification • Recycling
Skills	Applying theory to investigate current environmental issues Linking mathematical understanding to scientific scenarios	Relating science to the real world Following experimental methods safely
Assessment	Pre-and Post progress check multiple choice, end of unit assessment	Pre-and Post progress check multiple choice, end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Ecologist	Environmental Scientist

Autumn Term 2

Topic/Unit	Chemical Analysis	Forces
Knowledge (Content covered)	• Formulations • Gas Tests • Chromatography	• Scalar and vector quantities • Resolving forces • Speed

		• Velocity • Acceleration
Skills	Carrying out complex practical work safely. Following scientific methods Enhancing Mathematics in Science	Carrying out complex practical work safely. Following scientific methods Enhancing Mathematics in Science
Assessment	Pre-and Post progress check multiple choice, end of unit assessment	Pre-and Post progress check multiple choice, end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Analytical Chemist	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, 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
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	