St Cuthbert Mayne School Curriculum Map 2023-2024



Department: Science

Year 7

Department Intent and overview

Developing Scientists of the future

Key Stage 3 Curriculum Summary

Exploring the fundamental concepts of Science

NOTE: Science groups may have more than one teacher. In these cases students will be taught two units simultaneously, one by each teacher, so as not to disrupt learning and ensure continuity.

Autumn Term 1

Topic/Unit	Introduction to Science
Knowledge	Laboratory Safety

(Content covered)	Scientific Investigations ● Science in the news ● Careers in Science
Skills	Laboratory Safety skills, using equipment safely, reporting findings to the world
Assessment	Re-and Post progress check multiple choice, 2x DIRT tasks
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Science Technician

Autumn Term 2

Topic/Unit	Cells
Knowledge (Content covered)	 Animal and plant cells Microscopes Organs Systems Puberty Sexual reproduction Pregnancy The menstrual cycle
Skills	Applying basic scientific theories to new ideas Developing understanding of the fundamentals of science
Assessment	Pre-and Post progress check multiple choice, 2x DIRT, end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Nurse Doctor

Spring Term 1

Topic/Unit	Atoms
Knowledge (Content covered)	 Structure of an atom History of the atom Periodic table Separating techniques
Skills	Applying basic scientific theories to new ideas Developing understanding of the fundamentals of science
Assessment	Pre-and Post progress check multiple choice, 2x DIRT, end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Pharmacist

Spring Term 2

Topic/Unit	Forces
Knowledge (Content covered)	 Types of force Friction Speed Density Pressure Pneumatics
Skills	Applying basic scientific theories to new ideas Developing understanding of the fundamentals of science

Assessment	Pre-and Post progress check multiple choice, 2x DIRT, end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Automotive Engineer

Summer Term 1

Topic/Unit	Energy 1
Knowledge (Content covered)	Energy transfers Energy in food Power Efficiency Bills & fuel costs Electricity - Current Potential difference Resistance
Skills	Applying basic scientific theories to new ideas Developing understanding of the fundamentals of science
Assessment	Pre-and Post progress check multiple choice, 2x DIRT, end of unit assessment
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Electrical Engineer

Summer Term 2

Topic/Unit	Science project
Knowledge (Content covered)	Using the knowledge of all previous units to conduct group investigations and present them to the school population.

Skills	Applying basic scientific theories to new ideas Developing understanding of the fundamentals of science
Assessment	Pre-and Post progress check multiple choice, end of unit presentation
Gatsby 4 (Linking curriculum learning to careers) GATSBY BENCHMARK 4	Scientific Researcher