

Key Stage 4 Science Teaching and Learning Framework

The science curriculum aims to foster a love of learning and engage students from a young age. Students will be able to understand environmental issues and their relation to science through the promotion of problem-solving skills, and by linking learning to other curriculum areas and experiences from their own lives.

Our pupils will develop a sense of belonging and responsibility through having a better understanding of the world, and by applying learning to real-life problems and contexts. They will be able to access the world around them as independently and safely as possible due to having a better awareness of the risks and hazards within their world.

Integral to the delivery of the science curriculum is allowing students regular opportunities to ask questions, make predictions, plan investigations and evaluate their results. These skills will support students' understanding and promote independence outside the classroom.

The curriculum is designed for pupils who are encountering and developing. If pupils are encountering, they will follow the curriculum topics with a view to achieving unit awards for each topic. If pupils are developing, they will be working towards the OCR Entry Level science qualification. Pupils who are enhancing attend mainstream lessons with a view to achieving a GCSE qualification in science.

Cycle One	
Autumn 1	Autumn 2
Clean air and water ELC4/ Sorting Out ELC6 Unit Awards: 86835 CHEMISTRY: SEPARATING MATERIALS	CSI Plus ELC12/ Practical Task Unit Awards: 113880 INTRODUCTION TO THE GENETIC CODE, VARIATION AND INHERITANCE



Spring 2
Attractive Forces/ Practical Task ELP8 Unit Awards: 117331 WHAT ARE FORCES AND MAGNETS?
Summer 2
Creepy Crawlies ELB9; Alternative Energy ELP5
Unit Awards: 113598 INTRODUCTION TO ENERGY SOURCES

Cycle Two	
Autumn 1	Autumn 2
Are you Overreacting? ELC10; How Fast? How slow? ELC11 Unit Awards: 118668 CHEMISTRY: CHEMISTRY IN OUR WORLD	Practical Task Getting the Message- communicating through wires ELP1 Unit Awards: 119480 EXPLORING SOUND AND RHYTHM
Spring 1	Spring 2



Full spectrum- colours and light ELP2; Medical Rays- X-rays and Bones ELP3 Unit Awards: 117720 MIXING PAINT TO MAKE A COLOUR WHEEL WITH SUPPORT	Babies ELB2; My Genes ELB11 Unit Awards: 114822 LIVING THINGS: CLASSIFICATION AND REPRODUCTION
Summer 1	Summer 2
Our Electricity Supply ELP7; Hot Stuff- safety in the home ELP4 Unit Awards: 114847 HEATING AND MAGNETS	Control Systems ELB3 Fooling Your Senses ELB4 Unit Awards: 118489 STARTING TO LEARN ABOUT THE

Cycle Three	
Autumn 1	Autumn 2
Dead or Alive ELB1; Gasping for Breath ELB5 Unit Award: 115339 BIOLOGY (UNIT 1): CHARACTERISTICS OF LIFE	Practical Task; You only Have one Life ELB7 Unit Award: PSE026 HEALTHY LIFESTYLES
Spring 1	Spring 2
Physical or Chemical Change ELC1; Acids and Alkalis ELC2 Unit Award: 119064 PHYSICAL AND CHEMICAL CHANGES	Pushes and Pulls ELP9; Practical Task Unit Award: 118654 INVESTIGATING FORCES



Summer 1	Summer 2
Driving Along ELP10; Casualty- The Heart ELB6 Unit Award: 115419 SKILLS FOR LIFE (UNIT 2)	Everything in its Place ELC3; Heavy Metal ELC8
	Unit Award: 115344 CHEMISTRY (UNIT 2): MATERIALS AND THEIR USES