

Subject: Science	Accreditation: AQA GCSE Science Double award AQA ELC Science double award	Blue Pathway
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LONG TERM PLAN

		<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>
<u>KS4</u>	Cycle 1	Topic(s): Biology – The Human Body	Topic(s): Biology – The Human Body Topic: Chemistry – Elements, mixtures and compounds	Topic(s): Chemistry – Elements, mixtures and compounds Coursework	Topic(s): Physics – force, energy and structure of matter	Topic(s): Physics – force, energy and structure of matter Coursework	Topic(s): Biology – Environment, evolution and inheritance
	Cycle 2	Topic: Chemistry – Chemistry in our World	Topic: Chemistry – Chemistry in our World Topic Physics- Electricity, Magnetism and Waves	Topic Physics- Electricity, Magnetism and Waves Coursework Topic(s): Biology – Environment, evolution and inheritance - COURSEWORK	Revision for GCSE exams	Revision for GCSE exams	Revision for GCSE exam
<u>KS3</u>	Cycle 1	Particle model Separating mixtures Body movement	Cells, Voltage and resistance Current Light	Earths structure Universe Gravity	Variation Human reproduction Sound	Metals and non metals Acid and alkalis Energy transfers	Speed Interdependence Plant reproduction
	Cycle 2	Periodic table. Elements. Contact forces	Voltage and resistance. Current. Pressure. Breathing	Digestion. Chemical energy. Types of reactions	Evolution and inheritance. Heating and Cooling	Magnetism and Electromagnets. Climate. Earths resources	Respiration. Photosynthesis. Work Waves
<u>KS2</u>	Cycle 1	Properties and changes in materials (1)	Light and Sound	Electricity	Animals – human development	Properties and changes in materials (2)	Living things and their habitats – life cycles
	Cycle 2	Animals including humans	Earth and Space	Rocks	Evolution and inheritance	Forces	Living things and their habitats - classification

Working Scientifically	Working scientifically is woven through the content of the three strands of science. The areas covered include: measurement, experimental skills and investigations, analysis and evaluation and scientific attitudes
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Subject: Science	Accreditation: AQA unit awards (at pre entry level, entry level, level 1-3)	Green Pathway
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		<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>	<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>	<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>
<u>KS3/4</u>	Cycle 1	Electricity and Magnets	States of matter and separation techniques	Cells and Human body	Forces and Waves	Plants and inter dependence	Properties of materials/ acids and alkalis	Space and Energy	Chemical reactions/ Earths resources	Variation/Evolution and Human reproduction
	Cycle 2	Electricity and Magnets	States of matter and separation techniques	Cells and Human body	Forces and Waves	Plants and inter dependence	Properties of materials/ acids and alkalis	Space and Energy	Chemical reactions/ Earths resources	Variation/Evolution and Human reproduction
Broad coverage of National Curriculum topics at an appropriate level, with a view to Entry Level and Unit Award assessment. Highly differentiated to need.										
		<u>Autumn 1</u>	<u>Autumn 2</u>	<u>Spring 1</u>		<u>Spring 2</u>	<u>Summer 1</u>	<u>Summer 2</u>		
<u>KS2</u>	Cycle 1	Properties and changes in materials (1)	Light and Sound	Electricity		Animals – human development	Properties and changes in materials (2)	Living things and their habitats – life cycles		
	Cycle 2	Animals including humans	Earth and Space	Rocks		Evolution and inheritance	Forces	Living things and their habitats - classification		
Broad coverage of National Curriculum topics at an appropriate level, Based on KS1/2 National Curriculum which feeds into the work pupils will encounter at KS3 and KS4.										

Working Scientifically	Working scientifically is woven through the content of three strands of science. The areas covered include: measurement, experiment skills and investigation, analysis and evaluation and scientific attitudes.
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Yellow Pathway: Pupils encounter science in cross curricular themes. Science is taught through a sensory approach using activities such as sensory based play and attention autism to help young people engage with more scientific concepts. This feeds into the EYFS.

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	My Wonderful Health		My community		In the garden	
Year 1	Feelings	Body Wise	Transport	Passport to the world	Seaside	Under the water
Science	How are we the same and different?	Keeping my body healthy	Push, pulls and twists	Everyday materials	Light and dark	Habitats and animals
Topic	Home and School		My community		In the garden	
Year 2	Me, Myself and I	My World	People who help	World of work	Plants	Under the garden
Science	Human bodies	Earth and space	Exploring Materials	How do things work?	Life of Plants	Habitats and animals

Intent: The intent of the science curriculum is to promote enjoyment of science and to foster wonder and curiosity about the world around us. To build on prior knowledge and embed core knowledge to allow pupils to apply this in different settings and encourage independent research. The science curriculum make reference to careers in science and real-world applications as well as generalised skills for life, helping our pupils to be critical, enquiring independent thinkers. Literacy, oracy, maths and ICT skills are supported throughout the curriculum. The academy/trust values and golden rules of behaviour underpin the curriculum.

Cultural Capital: Science seeks opportunities to increase the cultural capital of our pupils through discussion about real world and current, everyday events. STEM opportunities are provided to support pupils making these links. Science capital is a measure of the engagement of students with science, how much they value it and whether they feel it is “for them” and connected to their life. Science lessons are hands on and heavily practical based to promote life skills and engage all our learners.