

The vision of this faculty is that together, with families and the local community, we are dedicated to helping young people to develop a lifelong love of learning for Science and the confidence to not just navigate the scientific world, but to shape it.

Science plays a very important part of the curriculum because it links to learners' lives in terms of medicine, technological change and their own health. Understanding Science is crucial in helping learners to understand where Physics, Biology and Chemistry is in their homes, in their academy and their community. The subject of Science prepares learners for the "next stage" because everything in Science has an impact on what learners say and do. It is not meant to limit innovation or prescribe how the curriculum is taught.

Science is taught through 12 big ideas linking Biology, Chemistry and Physics that support learner progression through years 7 to 11, taking in to account prior learning. The big ideas help to define the ultimate goal of the Science curriculum, they provide a framework to help learners organise knowledge. This framework directly supports what we know about how learners learn in science e.g. grouping related ideas together, moving from concrete to abstract ideas and revisiting and building upon the same idea multiple times. The big ideas are sequenced through a spiral curriculum to enable depth before breadth, this is to prepare learners to develop critical thinking, create solutions and decision making; required practical's play an integral role in developing these skills. Practical science allows learners to cultivate curiosity, construct hypotheses, observe and record data; subsequently to analyse and evaluate the scientific method.

Dreaming big	Rewarding effort	Leading together	Respecting each other and our world	Learning that inspires
<p>All learners will have curiosity created by the effective delivery of the Science Curriculum.</p> <p>Real life links will promote science and science related careers.</p> <p>Learners take ownership of learning and know how to progress through effective feedback</p>	<p>Cross Trust Competitions</p> <p>Creating safe learning environment where learners feel ok to 'fail'.</p> <p>Celebrating success at every level and realising that success looks different.</p>	<p>Peer Assessment</p> <p>Discussion of topics where different opinions are respected and encouraged.</p> <p>Learners to realise what they need to do to progress and take ownership of their learning.</p> <p>Cognitive load is minimal and cross curricular links are established taking in to account whole trust strategies</p>	<p>Verbal feedback and discussion is encouraged in lessons.</p> <p>Opposing views are not only tolerated but respected and understood.</p> <p>All forms of feedback (peer, self etc.) are acted on and understood.</p> <p>Teaching includes real world examples around conservation, sustainability and recycling.</p>	<p>Curriculum is knowledge rich and spiral in nature building on preconceptions.</p> <p>Challenge is appropriate to the individual and is an integral part of the scheme of work.</p> <p>Literacy and the meaning of terms is implicitly taught.</p>

## Year 7

	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY																															
Teaching Topic	B1 Cells and Organisation	31 August 2020	C1 The Particle Model	C1 The Particle Model	PI Energy	B2 Reproduction	C2 Atoms Elements Compounds and Mixtures	C2 Atoms Elements Compounds and Mixtures	P2 Forces	B3 Nutrition and Digestion	C3 Chemical Reactions	C3 Chemical Reactions	P3 Motion																													
		07 September 2020																																								
		14 September 2020																																								
		21 September 2020																																								
		28 September 2020																																								
	05 October 2020	12 October 2020	19 October 2020	26 October 2020	02 November 2020	09 November 2020	16 November 2020	23 November 2020	30 November 2020	07 December 2020	14 December 2020	21 December 2020	28 December 2020	04 January 2021	11 January 2021	18 January 2021	25 January 2021	01 February 2021	08 February 2021	15 February 2021	22 February 2021	01 March 2021	08 March 2021	15 March 2021	22 March 2021	29 March 2021	05 April 2021	12 April 2021	19 April 2021	26 April 2021	03 May 2021	10 May 2021	17 May 2021	24 May 2021	31 May 2021	07 June 2021	14 June 2021	21 June 2021	28 June 2021	05 July 2021	12 July 2021	19 July 2021

## Year 8

	SEPTEMBER	OCTOBER	NOVEMBER	DECEMBER	JANUARY	FEBRUARY	MARCH	APRIL	MAY	JUNE	JULY																															
Teaching Topic	B3 Nutrition and Digestion	C3 Chemical Reactions	C3 Chemical Reactions	P3 Motion	B4 Genetics and Evolution	C4 The Periodic Table and Reactivity	C4 The Periodic Table and Reactivity	P4 Waves	B6 Bioenergetics - Respiration and Photosynthesis	C6 - Controlling Resources	C6 - Controlling Resources	P5 Electricity																														
													31 August 2020																													
													07 September 2020																													
				14 September 2020																																						
		21 September 2020																																								
	28 September 2020																																									
	05 October 2020	12 October 2020	19 October 2020	26 October 2020	02 November 2020	09 November 2020	16 November 2020	23 November 2020	30 November 2020	07 December 2020	14 December 2020	21 December 2020	28 December 2020	04 January 2021	11 January 2021	18 January 2021	25 January 2021	01 February 2021	08 February 2021	15 February 2021	22 February 2021	01 March 2021	08 March 2021	15 March 2021	22 March 2021	29 March 2021	05 April 2021	12 April 2021	19 April 2021	26 April 2021	03 May 2021	10 May 2021	17 May 2021	24 May 2021	31 May 2021	07 June 2021	14 June 2021	21 June 2021	28 June 2021	05 July 2021	12 July 2021	19 July 2021



## Year 10/11 GCSE Trilogy

		SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				APRIL				MAY				JUNE				JULY																																																																																																																																																		
		Date				Date				Date				Date				Date				Date				Date				Date				Date				Date				Date																																																																																																																																																		
Year 11	Homeostasis	Particle model and Atomic structure				Infection and Response				Quantitative Chemistry				Forces 1				Chemical and Energy Changes				Bioenergetics				Rate and Extent of Chemical Change				Forces 2				Organic Chemistry and Chemical Analysis				Ecology																																																																																																																																																						
		Chemistry of the Atmosphere				Waves				Inheritance & Evolution				Using Resources				Magnetism and Electromagnetism				Rate and Extent of Chemical Change				Organic Chemistry and Chemical Analysis				Paper 1 Revision				Paper 2 Revision																																																																																																																																																										
	31 August 2020				07 September 2020				14 September 2020				21 September 2020				28 September 2020				05 October 2020				12 October 2020				19 October 2020				26 October 2020				02 November 2020				09 November 2020				16 November 2020				23 November 2020				30 November 2020				07 December 2020				14 December 2020				21 December 2020				28 December 2020				04 January 2021				11 January 2021				18 January 2021				25 January 2021				01 February 2021				08 February 2021				15 February 2021				22 February 2021				01 March 2021				08 March 2021				15 March 2021				22 March 2021				29 March 2021				05 April 2021				12 April 2021				19 April 2021				26 April 2021				03 May 2021				10 May 2021				17 May 2021				24 May 2021				31 May 2021				07 June 2021				14 June 2021				21 June 2021				28 June 2021				05 July 2021				12 July 2021				19 July 2021			

## Year 11 GCSE Biology

	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER			JANUARY				FEBRUARY				MARCH				APRIL			MAY				JUNE			JULY										
Date	31 August 2020	07 September 2020	14 September 2020	21 September 2020	28 September 2020	05 October 2020	12 October 2020	19 October 2020	26 October 2020	02 November 2020	09 November 2020	16 November 2020	23 November 2020	30 November 2020	07 December 2020	14 December 2020	21 December 2020	28 December 2020	04 January 2021	11 January 2021	18 January 2021	25 January 2021	01 February 2021	08 February 2021	15 February 2021	22 February 2021	01 March 2021	08 March 2021	15 March 2021	22 March 2021	29 March 2021	05 April 2021	12 April 2021	19 April 2021	26 April 2021	03 May 2021	10 May 2021	17 May 2021	24 May 2021	31 May 2021	07 June 2021	14 June 2021	21 June 2021	28 June 2021	05 July 2021	12 July 2021	19 July 2021	
Year 11	Ecology								Inheritance and Evolution								Inheritance and Evolution								Revision Triage (Feedback from mocks used to identify serious gaps and reteach where appropriate).								Revision Triage (Feedback from mocks used to identify serious gaps and reteach where appropriate).								Revision Triage (Feedback from mocks used to identify serious gaps and reteach where appropriate).							

## Year 11 GCSE Physics

	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER			JANUARY				FEBRUARY				MARCH				APRIL			MAY				JUNE			JULY										
Date	31 August 2020	07 September 2020	14 September 2020	21 September 2020	28 September 2020	05 October 2020	12 October 2020	19 October 2020	26 October 2020	02 November 2020	09 November 2020	16 November 2020	23 November 2020	30 November 2020	07 December 2020	14 December 2020	21 December 2020	28 December 2020	04 January 2021	11 January 2021	18 January 2021	25 January 2021	01 February 2021	08 February 2021	15 February 2021	22 February 2021	01 March 2021	08 March 2021	15 March 2021	22 March 2021	29 March 2021	05 April 2021	12 April 2021	19 April 2021	26 April 2021	03 May 2021	10 May 2021	17 May 2021	24 May 2021	31 May 2021	07 June 2021	14 June 2021	21 June 2021	28 June 2021	05 July 2021	12 July 2021	19 July 2021	
Year 11	Forces and Motion								Electromagnetism								Space								Space				Revision				Revision Triage (Feedback from mocks used to identify serious gaps and reteach where appropriate).								Revision Triage (Feedback from mocks used to identify serious gaps and reteach where appropriate).							

## Year II Chemistry

Year II	SEPTEMBER				OCTOBER				NOVEMBER				DECEMBER				JANUARY				FEBRUARY				MARCH				APRIL				MAY				JUNE				JULY																		
	Date																																																										
	31 August 2020	07 September 2020	14 September 2020	21 September 2020	28 September 2020	05 October 2020	12 October 2020	19 October 2020	26 October 2020	02 November 2020	09 November 2020	16 November 2020	23 November 2020	30 November 2020	07 December 2020	14 December 2020	21 December 2020	28 December 2020	04 January 2021	11 January 2021	18 January 2021	25 January 2021	01 February 2021	08 February 2021	15 February 2021	22 February 2021	01 March 2021	08 March 2021	15 March 2021	22 March 2021	29 March 2021	05 April 2021	12 April 2021	19 April 2021	26 April 2021	03 May 2021	10 May 2021	17 May 2021	24 May 2021	31 May 2021	07 June 2021	14 June 2021	21 June 2021	28 June 2021	05 July 2021	12 July 2021	19 July 2021												
	Quantitative Chemistry										Quantitative Chemistry										Chemical Analysis										Organic Chemistry										Revision Triage (Feedback from mocks used to identify serious gaps and reteach where appropriate)										Revision Triage (Feedback from mocks used to identify serious gaps and reteach where appropriate)								