

Subject: Science

Subject Leader

Winston Waite

National Curriculum

The Activate KS3 Science Syllabus is an approach to teaching the current National Curriculum KS3 Programme of Study. It has been designed to equip students for success at GCSE using big ideas with an approach that promotes understanding that prepares students for following the AQA 9–1 GCSE Combined Trilogy specification at KS4.

We believe that the Activate KS3 science has something to offer every student.

AQA Activate for KS3 is designed to support every student on their journey through secondary science at both Entry Level Certificate and GCSE Combined Trilogy.

AQA design qualifications to enable students to engage, explore, enjoy and succeed in science. By putting students at the heart of everything we do, our aim is to help teachers shape success in science for every student.

Entry Level Certificates (ELCs) are nationally recognised qualifications which give students the opportunity to achieve a certificated award. Like all the science qualifications taught at Kingsmead, we use straightforward language in our lessons to allow students to focus and achieve the GCSE results they deserve.

The ELC provides flexibility, but on a clear progression pathway. It equips students with skills and knowledge transferable to both educational and career settings, and provides a worthwhile course for our Y9 students coming to us from a range of diverse backgrounds.

Used as a transition qualification the ELC Science qualification provides excellent progression to GCSE studies particularly in GCSE Combined Science: Trilogy.

All our science qualifications provide opportunities for progression. Entry Level Certificate provides the foundation for studying science at the GCSE level. The Combined Science Trilogy gives students the opportunity to progress onto further education or apprenticeships.

Curriculum Intent

Our Key Stage 3 (KS3) Science Syllabus helps to create engaging lessons and promotes teaching and learning that develops student understanding throughout each unit. Using a logical order of objectives, this syllabus uses big ideas and realistic goals to equip students for success throughout KS3 leading to successful GCSE's at KS4.

The ELC Science specification has a direct link and is considered to be an excellent foundation qualification to support the teaching and learning of our GCSE Combined Sciences: Trilogy in Y10 and Y11.

Assessments are delivered throughout the year helping to keep the students motivated and interested in completing each unit. The ELC where possible uses straightforward language in their tests enabling students to focus on the science content encouraging them to achieve or surpass their target grade.

During the course our students will develop practical skills relevant to fully understand practical's being delivered at GCSE. Students will be required to complete Teacher Designed Assessments (TDAs). TDA's are practical based assessments that will be delivered at the start of each unit.

Externally Set Assessments (ESA) are written tests following the completion of each TDA. The ESA will be used to assess the scientific understanding of each student in relation to the associated TDA.

GCSE specifications in combined award science enable students to develop scientific knowledge and understanding through the specific modules of biology, chemistry and physics.

We've ensured that the biology, chemistry and physics content are presented clearly, in a logical teaching order.

Biology, chemistry and physics should be studied in ways that help students to develop curiosity about the natural world, insight into how science works, and a full understanding of its relevance to their everyday lives.

Curriculum Implementation

		Term	Content/Topics	Assessment
Year 7	Autumn Term	1	Biology unit Chapter 1_Cells Biology unit Chapter 2_Structure and Function of Body Systems	Kerboodle KS3 testing/classroom monitor assessment levels
		2	Biology unit Chapter 2_Structure and Function of Body Systems (Continued) Biology unit Chapter 3_Reproduction	Kerboodle KS3 testing/classroom monitor assessment levels
	Spring Term	3	Chemistry unit Chapter 1_Particles and Their Behaviour Chemistry unit Chapter 2_Elements, Atoms, and Compounds	Kerboodle KS3 testing/classroom monitor assessment levels
		4	Chemistry unit Chapter 3_Reactions Chemistry unit Chapter 4_Acids and Alkalis	Kerboodle KS3 testing/classroom monitor assessment levels
	Summer Term	5	Physics unit Chapter 1_Forces Physics unit Chapter 2_Sound	Kerboodle KS3 testing/classroom monitor assessment levels
		6	Physics unit Chapter 3_Light Physics unit Chapter 4_Space	Kerboodle KS3 testing/classroom monitor assessment levels
		Term	Content/Topics	Assessment
Year 8	Autumn Term	1	Biology unit Chapter 1_Health and Lifestyle Biology unit Chapter 2_Ecosystems and Processes	Kerboodle KS3 testing/classroom monitor assessment levels
		2	Biology unit Chapter 2_Ecosystems and Processes (continued) Biology unit Chapter 3_Adaptation and Inheritance	Kerboodle KS3 testing/classroom monitor assessment levels
	Spring Term	3	Chemistry unit Chapter 1_The Periodic Table Chemistry unit Chapter 2_Separation Techniques	Kerboodle KS3 testing/classroom monitor assessment levels
		4	Chemistry unit Chapter 3_Metals and Acids Chemistry unit Chapter 4_The Earth	Kerboodle KS3 testing/classroom monitor assessment levels

	Summer Term	5	Physics unit Chapter 1_Electricity and Magnetism	Kerboodle KS3 testing/classroom monitor assessment levels
		6	Physics unit Chapter 2_Energy Physics unit Chapter 2_Energy (continued) Physics unit Chapter 3_Motion and Pressure	Kerboodle KS3 testing/classroom monitor assessment levels
	Term		Content/Topics	Assessment
Year 9	Autumn Term	1	ELC 1-Biology :The human body (Completed TDA +ESA) ELC 3-Chemistry :Elements, Mixtures and compounds (Completed TDA)	Teacher Designed Assessments (TDA)/ Externally Set Assessments (ESA)
		2	ELC 3-Chemistry :Elements, Mixtures and compounds (Completed ESA) ELC 5-Physics: Energy, Forces and Structure of matter (Completed TDA +ESA)	Teacher Designed Assessments (TDA)/ Externally Set Assessments (ESA)
	Spring Term	3	ELC 2-Biology: Environment, evolution and inheritance (Completed TDA +ESA) ELC 4- Chemistry: Chemistry in our world (Completed TDA)	Teacher Designed Assessments (TDA)/ Externally Set Assessments (ESA)
		4	ELC 4- Chemistry: Chemistry in our world (Completed ESA) ELC 6- Physics: Electricity, magnetism and waves (Completed TDA +ESA)	Teacher Designed Assessments (TDA)/ Externally Set Assessments (ESA)
	Summer Term	5	GCSE 5.1 Atomic structure and periodic table (Completed TDA +ESA) ELC intervention for students failing ELC level 2	Teacher Designed Assessments (TDA)/ Externally Set Assessments (ESA)
		6	ELC intervention for students failing ELC level 2 GCSE 5.9 Chemistry of the atmosphere (Start GCSE Combined Trilogy Course)	Teacher Designed Assessments (TDA)/ Externally Set Assessments (ESA)

	Term		Content/Topics	Assessment (including formal exam options)
Year 10	Autumn Term	1	GCSE 4.1 Cells, GCSE 4.2 Organisation	End of unit assessments
		2	GCSE 6.1 Energy GCSE 6.2 Electricity	End of unit assessments
	Spring Term	3	(5.1 Atomic structure recap lesson) GCSE 5.2 Bonding, structure, and the properties of matter;	End of unit assessments

		GCSE 5.3 Quantitative chemistry;		
	4	GCSE 4.3 Infectious disease GCSE 4.4 Bioenergetics	End of unit assessments	
	Summer Term	5	GCSE: 5.4 Chemical changes GCSE: 5.5 Energy changes (Start 5.6 Rate and extent of chemical change)	End of unit assessments
		6	GCSE 6.3 Particle model of matter GCSE 6.4 Atomic structure, (Start 6.5 Forces)	End of unit assessments
	Term	Content/Topics	Assessment (including formal exam options)	
Year 11	Autumn Term	1	GCSE (Complete 6.5 Forces) 6.6 Waves GCSE 6.7 Magnetism and electromagnetism	Mock Exams/Analysis and intervention
		2	GCSE (Complete 5.6 The rate and extent of chemical change); 5.7 Organic chemistry; GCSE 5.8 Chemical analysis;	
	Spring Term	3	GCSE 5.9 Chemistry of the atmosphere GCSE 5.10 Using resources	Mock Exams/Analysis and intervention
		4	GCSE 4.5 Homeostasis and response GCSE 4.6 Inheritance, variation and evolution and 4.7 Ecology	
	Summer Term	5	GCSE 4.7 Ecology Revision and past paper GCSE questions	
		6	Revision and past paper GCSE questions	

