Science Curriculum Map: Year 7 to Year 11

Key Stage 3

Year Seven - Ark Mastery

Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
• Energy • Circuits	• Mixtures • Energy	• Interdependence	• Atoms, elements compounds • Space	• Forces • Reproduction	• Cells • Particles
Assessment week		Assessment week		Assessment week	

Year Eight – Ark Mastery

Half term 1	Half term 2	Half term 3	Half term 4	Half term 5	Half term 6
• Tissues & organs • Acids & alkalis	• Movement & pressure • Respiration & Photosynthesis	• Changing substances • Magnetism	• Life Diversity • Earth systems	• Resistance	• Nutrition
Assessment week		Assessment week			Assessment week

Year Nine – Ark Mastery/AQA

Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
• Photosynthesis * • Respiration *	• Communicable diseases • Preventing & treating disease Non communicable	• Organisation	• Digestion	• Sound waves • Light • Quantitative	• Growth & differentiation • Periodic table
Assessment week		Assessment week		Assessment week	

Key Stage 4 – GCSE

Year Ten - AQA

Half term 1	Half term 2	Half term3	Half term 4	Half term 5	Half term 6
• Photosynthesis * • Respiration * • Energy • Energy transfers	• Energy resources • Circuits	• Electricity (home) • Molecules & matter • Radioactivity	• Atomic structure • Periodic table	• Structure & bonding • Chemical calculations • Energy changes	• Electrolysis • Energy changes • Chemical analysis
	Assessment week				Assessment week

Year Eleven AQA

Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
Revision	Revision	Revision	• Reproduction • Variation • Genetics • Adaptation • Ecosystems	• Waves • Electromagnetism • Hormonal control • Nervous system	• Rates • Crude oil • Earths atmosphere • Earths resources • Forces
		Mock exams		Mock exams	

Further Education/Employment

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Triple Science Curriculum Map: Year 10 2026-2027

Year Ten

Biology

Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
• Variation, Evolution & Selective Breeding	• Reproduction • Structure of DNA • Inheritance	• Feedback systems • Plant Hormones	• Endocrine System • Hormones in humans	• Homeostasis • Nervous • System Brain & Eye	• Bioenergetics • Aseptic Technique • Binary Fission • mABs

Chemistry

Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
• Crude oil & fuels	• Rates & equilibrium	• Electrolysis • Energy changes	• Chemical calculations • Chemical changes	• Structure & bonding	• Atomic structure & periodic table

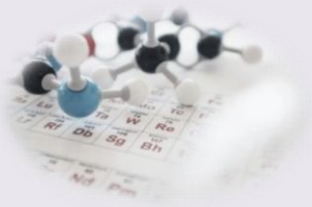
Physics

Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
• Force & pressure • Wave properties	• Forces & motion	• Radioactivity • Forces in balance	• Electricity (home) • Molecules & matter	• Energy resources • Electric Circuits	• Energy • Energy transfer

Mock exams

Mock exams

Further Education/Employment



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Triple Science Curriculum Map: Year 11 2026-2027

Year Eleven

Biology

Half term6	Half term 5	Thalf term 4	Half term 3	Half term 2	Half term 1
	• Revision	• Revision	• Organising an ecosystem • Biodiversity, Food Production	• Adaptation & interdependence	• Reproduction • Variation, genetics, evolution • Homeostasis

Chemistry

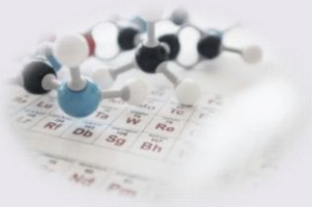
Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
	• Revision	• The Earth's resources	• Earth's atmosphere	Chemical analysis	Crude oil & fuels

Physics

Half term 6	Half term 5	Half term 4	Half term 3	Half term 2	Half term 1
	• Revision	• Space • Light	• Wave properties • Electromagnetism	• Force & pressure • Wave properties	• Forces & motion

Mock exams

Mock exams



Further Education/Employment

Science Curriculum 2025 – 2026

Rationale

'To be curious about the world around us, to learn through scientific discovery, and to be the scientists and innovators of the future'

Intent

Our science curriculum is ambitious, knowledge-rich and coherently sequenced, ensuring all pupils develop secure understanding of biology, chemistry and physics.
Pupils:
Develop substantive and disciplinary knowledge over time
Build scientific thinking and practical skills
Retain knowledge through systematic retrieval practice
Apply, analyse and evaluate ideas in familiar and unfamiliar contexts
Knowledge is carefully sequenced and revisited to strengthen long-term retention. The curriculum is inclusive by design, with all pupils accessing the same ambitious content, preparing them for GCSE and future STEM pathways.

Implementation

Curriculum Structure
At KS3, pupils follow the ARK Mastery curriculum, providing a secure, sequenced foundation.
3 × 60-minute lessons per week
Pre-tests and end-of-unit mastery quizzes
Weekly Sparx Science homework to consolidate learning
In Year 9, pupils complete the KS3 spiral curriculum and transition to the linear AQA GCSE Scheme, enabling greater depth of study and preparing them for the demands of KS4
At KS4:
Combined Science: 5 × 60-minute lessons per week taught by one science specialist
Triple Science: 8 × 60-minute lessons per week taught by three subject specialists

The science curriculum is carefully sequenced to ensure pupils build secure substantive and disciplinary knowledge over time. Key concepts are revisited throughout Key Stages 3 and 4 through planned retrieval practice, interleaved assessment and homework. Socrative/Do Now recall quizzes and Sparx Follow-Up 5 tasks provide spaced retrieval of previously taught content, helping pupils strengthen long-term memory and make connections between topics. In Year 9, pupils transition from the ARK Mastery curriculum to the AQA KS4 specification. Retrieval and interleaving continue throughout this transition to ensure knowledge from biology, chemistry and physics remains secure as pupils begin GCSE study.

Teaching Approach
KS3 (ARK Mastery):
Do Now: retrieval practice
Structured activities to embed understanding
Exit ticket to check learning
Scientist in the Spotlight to link to careers
Weekly Sparx homework

KS4 (AQA):
Socrative recall quizzes
Weekly Sparx homework + Follow-Up 5
Booklets include:
Must-Know knowledge
Prior/next learning links
Big 5 Science skills
Key vocabulary + Frayer models
Reading to develop disciplinary literacy
Linked careers
Regular exam-style questions

Adaptive Teaching
All pupils access the full curriculum, supported through:
Scaffolding without lowering challenge
Explicit vocabulary teaching
Targeted questioning
Challenge through depth

Wider Implementation
Digital booklets on iPads ensure consistency
Practical work is recorded and evaluated digitally
Working scientifically is explicitly taught through a consistent approach to practical work, ensuring students can observe, measure, analyse, present and evaluate data across all sciences

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Impact

Pupils know more, remember more and can apply their knowledge effectively:
Secure, long-term scientific knowledge
Strong performance in exam-style questions
Accurate use of scientific vocabulary
Confident practical and analytical skills
Assessment is used formatively and summatively to identify gaps and inform responsive teaching, including targeted retrieval, live reteaching and adaptation within lessons.
All pupils study a broad, ambitious and well-sequenced curriculum. Through consistent routines, retrieval and adaptive teaching, pupils successfully learn, retain and apply scientific knowledge over time.