

SHS Science Department Curriculum Map 2026-27

Unit understanding and skills will be tested using a range of written and online assessments - including CATs and exam questions.

Terms	KS3 Science Year 7		KS3 Science Year 8	
1 & 2	Energy (Biology & Physics) (CAT) Getting Organised – cells, systems and classification (Biology) Acids & Alkalis (Chemistry) Test		Materials (Chemistry) (CAT) Light (Physics) Digestion (Biology) Test	
3 & 4	Reproduction (Biology) Particles (Chemistry) (CAT) Forces (Physics) Test		Sound (Physics) Respiration (Biology) (CAT) Acids and Bases (Chemistry) Test	
5 & 6	Bubbles & Bangs - chemical reactions (Chemistry) Electricity (Physics)(CAT) Test Plants (Biology)		Electromagnetism (Physics) (CAT) Microorganisms & Medicine (Biology) Chemical Earth (Chemistry) Year 8 Exam Space (Physics)	
KS4 Biology	Y9	Y10	Y11	
T1 & T2	DNA and Inheritance Test Communicable Diseases Test	Respiration and Photosynthesis (CAT) Test Animal Transport and Defence Test	More Hormones and Homeostasis (CAT) Test Nervous System (CAT) Test Mock Exam	
T3 & T4	Non-communicable Diseases Test	Plant Transport and Defence (CAT) Test Cell Division and Differentiation Test	Genes and Proteins Test Feeding Humans and its Impact Test	
T5 & T6	Year 9 Exam Enzymes (CAT) Test	Year 10 Exam Microscopes and Ecosystems (CAT) Test	Revision and GCSE Exams	
KS4 Chemistry	Y9	Y10	Y11	
T1 & T2	States of Matter Test Periodic table and atomic structure Test	Introduction to calculations Test Periodic Table Groups (CAT) Test Homologous Series and Making Polymers (not combined science) Test	Acids and Alkalis (CAT) Test Calculations (CAT) Test Mock Exam	
T3 & 4	Bonding and Properties Test	Electrolysis Test Extraction of metals (CAT) Test	Energetics & Equilibria (CAT) Test Earth Science Test Materials Science Test	
T5 & 6	Year 9 Exam Crude Oil (CAT) Test	Year 10 Exam Rates of reaction (CAT)	Revision and GCSE Exams	
KS4 Physics	Y9	Y10	Y11	
T1 & T2	Pressure and Moments Test Particles (CAT) Test	Units Materials (CAT) Test Waves Test Motion Test	Mains Electricity Radioactivity (CAT) Test Further Light (not combined science) Electromagnetic Spectrum Test Mock Exam	
T3 & T4	Hot to Cold Test Energy Test	Electricity (CAT) Test GPE/KE Charge (not combined science)	Electromagnetism (CAT) Momentum Test Gas Laws Solar System (not combined science) Test	
T5 & T6	Year 9 Exam Energy Resources Test	Nuclear Power (CAT) Test Year 10 Exam Force and Motion (CAT) Test	Revision and GCSE Exams	

KS5 BIOLOGY

Term	Y12		Y13	
T1 & T2	Cardiovascular Disease + Data Analysis CPA x2 Test x2	Biochemistry Molecules, Genetics + Inheritance CPA x2	Photosynthesis, Climate Change, Core Practicals + Evolution CPA x3 Test MOCK EXAM	Specific Immune Response Muscles + Joints
T3 & T4	Cell Structure + Cycle + Meiosis + Epigenetics CPA Test x2	Biodiversity, Sustainability + Genetic Analysis CPA x2	Nervous System, Brain, Behaviour and Genetic Modification CPA	Respiration, Enhancing Exercise Performance, Homeostasis CPA x2
T5 & T6	Year 12 Exam Ecology Fieldwork + Interdependence CPA	Plant Core Practicals + Revision Forensics Time of Death + Bacterial Disease CPA x3	Plant Responses	Scientific Article Preparation
			Revision and exam preparation	

KS5 CHEMISTRY - Termly Topic tests will be completed

Term	Y12		Y13	
T1 & T2	Mole Calculations CPA Acids and Bases CPA Redox Structure and Bonding	Basic Concepts of Organic Chemistry Alkanes and Alkenes Haloalkanes CPA	Equilibrium Constants Acids, Bases and Buffers CPA Enthalpy and Entropy MOCK EXAM	Carboxylic Acids and Esters CPA Amines, Amino Acids and Polymers
T3 & T4	Periodicity Group 2 and Group 7 Enthalpy Changes CPA	Alcohols CPA Aldehydes and Ketones Analytical techniques	Redox Potentials CPA Transition Metals CPA	Spectroscopy Organic Synthesis and Analysis CPA
T5 & T6	Year 12 Exam Rates CPA Chemical Equations	Organic Synthesis Aromatics CPA	Revision and exam preparation	

KS5 PHYSICS - Topic tests after each unit

Term	Y12		Y13	
T1 & T2	Measurement and Their Errors Current Electricity 1 Mechanics 1 CPA	Materials CPA Particles	Gravitational Fields Thermal CPA Magnetic Fields 1 CPA MOCK EXAM	Radioactivity 1 CPA Periodic Motion Non-ionising imaging
T3 & T4	Current Electricity 2 CPA x 2 Mechanics 2	Progressive and Stationary Waves CPA Quantum Phenomenon Refraction, Diffraction and Interference CPA	Physics of the Eye Magnetic Fields 2 CPA Physics of the Ear and Heart	X-rays Capacitance CPA Radioactivity 2 Radionuclide Imaging and Therapy
TS &	Year 12 Exam Electric Fields	Momentum Periodic Motion CPA	Revision and exam preparation	