

SCIENCE

TEACHING

All pupils are taught biology, chemistry and physics separately from Year 7. In Years 7 and 8, pupils have three lessons of 55 minutes per fortnight for each of the three sciences per week and are taught in mixed ability form groups. Pupils in Years 9 to 11 are taught in sets and have four 55 minute lessons per fortnight for each of the three sciences per week, equating to three hours forty minutes per subject.

The main aim in Year 7 is for pupils to gain the confidence, practical and analytical skills required for studying science at IGCSE level and beyond and become familiar with the laboratory environment.

Year 7 and Year 8 pupils cover the following topics as part of their Key Stage 3 syllabus. The Exploring Science textbook is used in support of the key stage 3 course.

	Biology	Chemistry	Physics
Year 7	Cells, tissues, organ systems Sexual reproduction Breathing Variation and ecosystems	Mixtures and Separation Acids and Alkalis The Particle Model Atoms, Elements and Compounds	Measurement Energy Electricity Forces Sound Space
Year 8	Food & Digestion Respiration & Circulation Microbes & Disease Fitness and Health	Combustion The Periodic Table Metals and Their Uses Pollution	Fluids Light Energy transfers Earth & Space

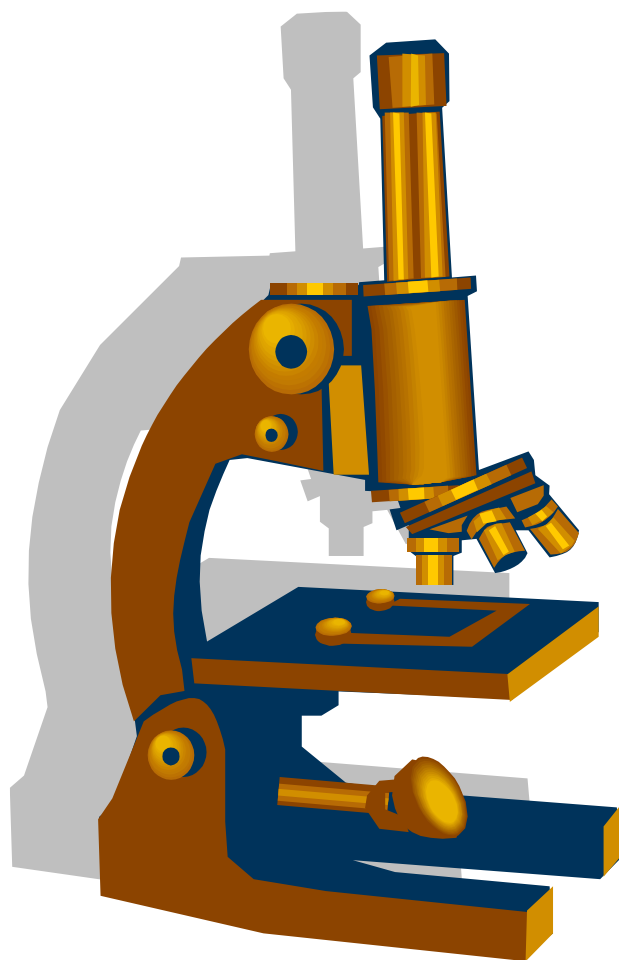
In Years 9 to 11 pupils are prepared for their IGCSE Science Qualifications with all exams taking place at the end of the course.

GCSE SCIENCE QUALIFICATIONS

At GCSE level we follow the Edexcel IGCSE Double Science award. We start teaching the course in Year 9 where pupils study the three sciences but are entered for the dual award, which is worth two GCSEs.

The use of ICT has increased greatly in recent years with class sets of data logging equipment and data projection equipment in labs as well as internet based resources for class and revision work across all year groups.

GCSE qualifications are seen both as an end in their own right but also as a preparation for A-level.



SCIENCE AT A-LEVEL

All three science subjects are available as separate A-level subjects. Each subject is taught for 12 periods per fortnight. Science is extremely popular at A-level, with there currently being two classes per year group for chemistry and physics, and three classes for biology. A significant number of students go on to study science based courses at university.

The science department has celebrated much success in recent years in external exam results. A summary of these are in the tables on the next page.

RESULTS

2024 IGCSE Results

	% 9-4	% 9-7
Co-ordinated Extended Science	95%	50%

A-Level Results

Subject	Year	% A* – C	% A* – E
Biology	2022	76	100
	2023	50	97
	2024	50	98.5
Chemistry	2022	83	100
	2023	74	96
	2024	75	100
Physics	2022	83	100
	2023	42	100
	2024	69	92

STAFFING

Mr. E Bean	B.Eng	Head of Science (Physics)
Mr. D Cliffe	Bsc	Chemistry
Mrs. J Edgar	BSc	Curriculum Coordinator (Physics)
Miss. K England	BSc	Curriculum Coordinator (Chemistry)
Mr. T Exeter	BSc	Biology, Chemistry and Physics
Mr. C Garbutt	BSc	Biology and Chemistry
Mrs. S Harder	BSc	Physics and Chemistry
Dr. A Ingham	PhD	Head of Teaching and Learning (Biology)
Mr C Norris	BSc	Biology, Chemistry, Physics and Maths
Mrs. L Richardson	BSc	Head of Science (Biology)
Mr J Shah	BSc	Chemistry
Mr M Yam	BSc	Physics and Chemistry