Single Sciences

Qualification: 3 GCSEs
Equivalent to: 3 GCSEs (Grades 9 – 1)

Single Science looks into key scientific concepts which we encounter on a daily basis in detail. All three sciences are studied in a greater depth compared to Combined Science and this allows for up to date technologies to be discussed. Throughout the qualification, practical and scientific enquiry skills are developed through hands-on experience of scientific concepts.

Course Content

- Biology units include: Cell biology; Organisation, Infection and responses; Bioenergetics; Homeostasis and response; Ecology; Inheritance, variation and evolution.
- Chemistry units include: Atomic structure and the Periodic Table; Bonding, structure and the properties of matter; Quantitative chemistry; Chemical changes; Energy changes; The rate and extent of chemical changes; Organic chemistry; Chemical analysis; Chemistry of the atmosphere; Using resources.
- Physics units include: Forces; Energy; Waves; Electricity; Magnetism and electromagnetism; Particle model of matter; Atomic structure.

Assessment

Students will sit 6 written examinations (two Biology, two Chemistry and two Physics equally weighted to the final grade) lasting 1 hour and 45 minutes each. Higher (Grades 9 – 4) and Foundation (Grades 5 – 1) tier papers are available. The final GCSE grades are separate and will be based on the results from the two examination papers for each subject. There is no longer a Controlled Assessment unit attached to this qualification.

Who would enjoy and be successful on the course?

Single Science is for students who really enjoy Science and have a thirst for scientific understanding. Those that have enjoy all three subjects (Biology, Chemistry and Physics) and are considering a future (studying or career) in science should think about opting for Single Science.

Owing to the quantity and depth of content involved on the Single Science course, student performance throughout Year 8 and a test in year 9 will be used to measure their suitability.

Progression – Sixth Form / Further Education / Careers

Single Science can lead to studying A Levels in Biology, Chemistry, Physics, or even Environmental Science and Applied Science. This can then see students moving on to study courses and pursue careers in Medicine, Biochemistry, Marine Biology, Engineering, Veterinary Science, Physiotherapy and Pharmacy degrees at university, which can then result in them pursuing careers in these areas.