Triple Science

Examination Board:	AQA

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Why study Science?

Science is an important discipline and covers a wide range of different subjects.

Science encompasses everything that we are and allows us to make sense of the world around us. The human progression largely relies on advances in science, both past and future. The students' high-quality science education will develop students' curiosity and scientific knowledge to question the world in which we live, enable critical thinking, and encourage students to become socially aware global citizens. As students' progress through their scientific education, they should be able apply their scientific thinking and vocabulary to explain a wide range of phenomena, develop their experimental skills through a variety of scientific investigations and use their observations to justify the conclusions they have made, whilst using their analytical and evaluative skills to critically analyse information they are presented with.

Possible next steps (including careers)

With a Science education, students are able to access a range of different A-levels and college courses, such as Biology, Chemistry, Physics A-Level, Environmental Science, Forensic and Engineering courses. Potential careers could be: Doctor, Nurse, Midwife, Dentistry, Vet, Researcher Scientist, Engineering, Geologist, Meteorologist, Aerospace scientist, Science journalist, Consultancy, Medical sales, Teaching, Sound engineer.

Aptitudes needed

An interest in Scientific knowledge, with curiosity to explore this further. Ability to follow practical instructions in a calm manner. Willingness to produce graphs from data and use equations to solve mathematical problems.

Topic Structure

Within Triple Science, students will study the same topics as students in Combined Science but most topics will be explored in further detail. The students will have the same amount of lesson time to complete this content, hence students need to have the willingness to work at a faster pace. Students will receive 3 individual GCSE grades for each discipline – Biology, Chemistry and Physics.

Year 10

- Biology - Organisation, Bioenergetics, Ecology
- Chemistry – Bonding, Quantitative Chemistry, Electrolysis, The Rate and Extent of Chemical Change
- Physics – Electricity, Structure and Properties of matter, Radioactivity

Year 11

- Biology – Homeostasis and Response, Genetics and Evolution
- Chemistry – Organic chemistry, Chemical Analysis and Earth's resources
- Physics – Waves, Forces, Magnetism, Space Physics

Assessment Structure	
All papers are 1 hour and 45 minutes. They all consist of 100 marks (50% of each GCSE). The exam is made up of multiple-choice questions, short and long answer questions, with a highest value of 6 marks. Students can be entered into Higher or Foundation tier, but this is consistent within the discipline and can be different between the three different disciplines.	
Biology Paper 1 Content included: Cell biology, Organisation, Infection and Response and Bioenergetics.	**Chemistry Paper 1** Content included: Atomic structure and the periodic table, Bonding - structure and the properties of matter, Quantitative chemistry, Chemical changes and Energy changes.
Physics Paper 1 Content included: Energy, Electricity, Particle model of matter and Atomic structure.	**Biology Paper 2** Content included: Homeostasis and response, Inheritance, Variation and evolution, Ecology
Chemistry Paper 2 Content included: The rate and extent of chemical change, Organic chemistry, Chemical analysis, Chemistry of the atmosphere and using resources.	**Physics Paper 2** Content included: Forces, waves, magnetism, electromagnetism, and Space Physics.