Ormiston Sir Stanley Matthews Academy



GCSE Biology, GCSE Chemistry and GCSE Physics (Triple Science)

What is GCSE Biology, GCSE Chemistry and GCSE Physics (Triple Science)?

By taking this option students will have an extra 4 science lessons over the two week rotation and will receive three GCSEs for their study. This course is awarded by AQA and will result in a separate GCSE grade for biology, chemistry and physics.

During this course learners will:

- Study equal amounts of biology, chemistry, and physics topics
- Develop their scientific knowledge
- Understand the nature, processes, and methods of science
- Conduct 28 required practical investigations
- Develop skills using scientific apparatus and investigative techniques
- Analyse and evaluate data
- Understand how scientists work together and evaluate each other's work to answer scientific questions
- Apply mathematical skills to new contexts

What areas will I be taught?

Biology	Chemistry	Physics
Cell biology Organisation (physiology of plants and animals) Infection and response Bioenergetics (photosynthesis and respiration) Homeostasis and response Inheritance, variation, and evolution	 Chemistry Atomic structure and the periodic table Bonding, structure, and properties of matter Quantitative chemistry Chemical changes Energy changes The rate and extent of chemical change Organic chemistry Chemical analysis Chemistry of the 	 Physics Energy Electricity Particle model of matter Atomic structure Forces Waves Magnetism and electromagnetism Space physics
• Ecology	atmosphere Using resources	

How will I be assessed?

Assessment for this course will be through exams only (no course work). Students will sit six examinations at the end of year 11, lasting 1 hour and 45 minute each. There will be 2 exams for each of the three sciences. These two exams will have their scores combined to give an overall grade in each science subject, resulting in three GCSE grades.

There are a range of resources that can be accessed online & some that can be purchased; we can support you through this if you require.

When choosing revision material, be sure to check it is suitable for our courses – AQA GCSE Physics, GCSE Chemistry and GCSE Biology. This is one of the most popular courses for GCSE science so there is a wealth of resources available.

What college courses and career pathways does this qualification complement?

GCSE triple science is a broad course that will complement almost any career path. Students choosing to study separate GCSEs in science will have a head start in the knowledge and skills required for A level study in the science disciplines.

Success in these subjects can be advantageous when applying for university level education.

There is an extremely broad range of careers that are opened up through GCSE triple science. Some examples include:

- Engineering
- Healthcare
- Environmental sciences and sustainability
- Architecture and construction
- Dentistry
- Medicine
- Midwifery
- Veterinary science
- Astrophysics

Enrichment opportunities and trips

Students choosing this option have the opportunity to take part in many enrichment opportunities, included those listed below:

- GCSE Science Live Inspirational science talk show at the Royal Opera House in Manchester
- OAT STEM Project with Higher Horizons Innovative competition where students use their scientific knowledge to design a state-of-the-art weather station
- A Museum Visit focussing on science exhibits
- University trips focussing on a range of topics for example forensics at Staffordshire University and the Space Observatory at Keele University