Ormiston Sir Stanley Matthews Academy



GCSE Combined Science Trilogy

What is GCSE Combined Science Trilogy

GCSE Combined Science Trilogy is the course all students will start in year 10 and is awarded by AQA. This course is worth two GCSEs and will cover in equal parts biology, chemistry, and physics.

During this course learners will learn and develop skills of:

All students study biology, chemistry, and physics topics. In these topics, students will develop their scientific knowledge and an understanding of the nature, processes, and methods of science.

Included in the course are 21 required practicals (7 for each discipline) that will develop students skills using scientific equipment and their investigative technique, as well as their ability to analyse and evaluate data. Students will also develop their understanding of how scientists work together and evaluate each other's work to answer scientific questions.

There are a range of new applications for their mathematical skills in GCSE Combined Science Trilogy that will challenge students to develop skills from their mathematics lessons in new contexts.

What areas will I be taught?

All students will study these biology, chemistry, and physics topics:

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 Ecology 	 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 atmosphere Using resources 	 Energy Electricity Particle model of matter Atomic structure Forces Waves Magnetism and electromagnetism

How will I be assessed?

Students will sit six examinations at the end of year 11, lasting 1 hour and 15 minute each. There are 2 examinations for each of biology, chemistry and physics and are equally weighted. These examinations will be combined to give two GCSE grades (e.g., 5 5, 5 4, 8 8 etc).

How can I support my studies at home?

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 course – AQA Combined Science Trilogy. This is the one of the most popular courses for GCSE science so there is a wealth of resources available.

We do not sell revision guides in school, but do keep a selection for students to sample before selecting one to buy.

What college courses and career pathways does this qualification complement?

GCSE science is a broad course that will complement almost any career path. Recent events have reflected the value of a broad knowledge of science topics.

College courses in biology, chemistry, physics, engineering, medicine, applied science, psychology, and environmental science all lead naturally from GCSE science.

Success in these subjects can be advantageous when applying for university level education. Even courses and careers such as law benefit from a good grounding in scientific knowledge and skills.

There is an extremely broad range of careers that are opened up through GCSE science. Some examples include engineering, healthcare, environmental work, architecture, construction, catering and hairdressing.