



Introduction / Why Study Combined Science (Trilogy)?

GCSE Combined Science (Trilogy) is a double GCSE taken by the majority of students. It builds on the Key Stage 3 curriculum and covers the National Curriculum Programme of Study for Science at Key Stage 4. It encourages students to explore, explain, theorise and model in science and develops a critical approach to scientific evidence. At Wadebridge School students start studying towards their GCSE Combined Science in Year 9.

Exam Board

The exam board is AQA. More details including the full draft specification for GCSE Combined Science (Trilogy) is available at: <http://www.aqa.org.uk/subjects/science/gcse>

What Will I Study / What Skills Will I Develop?

GCSE Combined Science (Trilogy) is taught as 3 subjects:

Biology

Cell biology
Organisation
Infection and response
Bioenergetics
Homeostasis and response
Inheritance, variation and evolution
Ecology

Chemistry

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 change
Organic chemistry
Chemical analysis
Chemistry of the atmosphere
Using resources

Physics

Energy
Electricity
Particle model of matter
Atomic structure
Forces
Waves
Magnetism and electromagnetism

How Will I Be Assessed?

- The Combined Science GCSE is examined by six 1 hour 15 min written exams, each of which is worth 16.7%. There are two exams on each subject Biology, Chemistry and Physics
- There are 21 required practicals that are delivered throughout the course. There will be questions relating to these practicals on the written exam papers.

What Might Combined Science GCSE Lead To?

- GCSE Core Science gives you a good grounding in Science. Success in Combined Science can provide access to AS/A2 Science courses, including Applied Science and Psychology. In the long term, if you decide to pursue your scientific studies, it can lead to an almost limitless number of job opportunities. Highly qualified scientists are very much in demand and their skills are required in many jobs.



GCSE Separate Sciences

Introduction / Why Study Separate Sciences?

This course is offered for students who wish to study for three GCSEs in Science. It is well suited to students who have demonstrated a keen interest and an aptitude for the subject in KS3. It should be noted that it is **not** a pre-requisite for the study of A level Sciences. It aims to encourage you to explore, explain, theorise and model in Science, develops a critical approach to scientific evidence and helps to prepare you for further studies in Science. The course will include all of the elements from Combined Science (Trilogy) but in addition extra units in Biology, Chemistry and Physics are studied leading to separate Biology, Chemistry and Physics GCSEs. Please note that students must take all three GCSEs if given this option.

Exam Board

The exam board is AQA. More details including the full draft specifications for GCSE Biology, GCSE Chemistry & GCSE Physics are available at: <http://www.aqa.org.uk/subjects/science/gcse>

What Will I Study / What Skills Will I Develop?

GCSE Biology:

- 4.1 Cell biology
- 4.2 Organisation
- 4.3 Infection and response
- 4.4 Bioenergetics

GCSE Chemistry

- 4.1 Atomic structure and the periodic table
- 4.2 Bonding, structure, and the properties of matter
- 4.3 Quantitative chemistry
- 4.4 Chemical changes

GCSE Physics

- 4.1 Forces
- 4.2 Energy
- 4.3 Waves
- 4.4 Electricity

GCSE Biology:

- 4.5 Homeostasis and response
- 4.6 Inheritance, variation and evolution
- 4.7 Ecology

GCSE Chemistry

- 4.6 The rate and extent of chemical change
- 4.7 Organic chemistry
- 4.8 Chemical analysis
- 4.9 Chemistry of the atmosphere
- 4.10 Using resources

GCSE Physics

- 4.5 Magnetism and electromagnetism
- 4.6 Particle model of matter
- 4.7 Atomic structure
- 4.8 Space physics

How Will I Be Assessed?

- Biology, Chemistry & Physics GCSEs are assessed by two 1hour 45 min written exams. Each exam is worth 50%
- Each GCSE has 8 required practicals that are delivered throughout the course. There will be questions relating to these practicals on the written exam papers.

Other Information

You will be invited to study this course if it is appropriate for you.

What Might GCSE Biology, Chemistry and Physics Lead To?

Separate Sciences is an academic course. It provides an excellent choice if you are intending to study Science at Advance level, for example AS/A Level Biology, Chemistry, Physics and Applied Science. It will also provide the basis for future study of the Sciences at degree level and extensive employment opportunities.