

AQA GCSE Combined Science (Trilogy)

What does this qualification cover?

The course covers Biology, Chemistry and Physics content taught over a 2-year period, resulting in students leaving at GCSE with 2 Science grades. It is a concise yet in-depth foray into core Science, with strong foundations to prepare any budding scientist for the complexities of A-level and beyond.

The course covers the basis of how things work from the parts that make up the atom to the entire universe. You will learn about everything from acids and alkalis to key biological processes like photosynthesis, as well as many recent developments in fascinating topics, such as particle physics. You will apply key concepts and become competent in problem solving in a range of different contexts and applications.

Science trains your brain to think beyond boundaries, by combining practical skill with the theoretical ideas behind them. Our Combined Science course augments these same learning pathways by encouraging logical thinking and empirical questioning of all the facets of the universe around us.

What's included?

- 6 hours of teaching every week, with a comprehensive approach to each Science
- At least 30 practical experiments over the 2 years

The topics we cover are:

Biology

- 1. Cell biology
- 2. Organisation
- 3. Infection and response
- 4. Bioenergetics
- 5. Homeostasis and response
- 6. Inheritance, variation and evolution
- 7. Ecology

Chemistry

- 8. Atomic structure and the periodic table

- 9. Bonding, structure, and the properties of matter
- 10. Quantitative chemistry
- 11. Chemical changes
- 12. Energy changes
- 13. The rate and extent of chemical change
- 14. Organic chemistry
- 15. Chemical analysis
- 16. Chemistry of the atmosphere
- 17. Using resources

Physics

- 18. Energy
- 19. Electricity
- 20. Particle model of matter
- 21. Atomic structure
- 22. Forces
- 23. Waves
- 24. Magnetism and electromagnetism

At the end of year 11, our students sit 2 papers in each Science, each one worth 70 marks and 75 mins long. Students will receive two Combined Science GCSE grades.

Key features

- Comprehensive schemes of work and pedagogy, as well as access to past papers, mark schemes, examiner reports, specimen papers and a vast array of resources developed by our experienced teaching staff
- Differentiated learning materials tailored to every student's needs
- Combined Science: Trilogy gives students the option to progress to A-levels in science or other subjects
- State-of-the-art laboratories for testing various scientific principles, techniques or experiments

Links to workplace

This course encourages students to take at least one Science subject as an A-level, following which their career pathway could lead into a multitude of STEM areas. As ours is an Engineering specialist school, we would also encourage our students to take up an

Engineering-based career, such as Aerospace, Biomedical, Chemical, Civil, Electrical, Mechanical, Nuclear, Structural and a whole lot more!