

Combined Science: Trilogy is worth two GCSEs in the Science GCSE framework. The girls will receive nine lessons per week, three each of Physics, Chemistry and Biology taught by subject specialists. Combined Science will suit those girls who wish to take an additional non-science option at GCSE.

The candidates will be assessed at the end of the course by six 1 hour 15 minutes written papers, two each of Biology, Chemistry and Physics. The assessment of investigative skills forms part of the written paper. All girls will sit the Higher Tier papers.

Over the course of the two years, there are many additional enrichment opportunities offered to girls in the Science Department, such as lunchtime and evening lectures, national and local competitions, residential courses, visits to local universities, museums, and other places of scientific interest, plus science clubs and activities.

Smallpeice Trust courses, offering residential tasters of different areas of engineering, are available for girls in Lower and Upper Fifth.

A significant number of girls will choose to take A-level Sciences having studied Combined Science: Trilogy; they will be expected to complete some work over the summer after they have completed their GCSEs to facilitate the transition to A-Level.

The **Biology** content of the Combined Science: Trilogy specification includes:

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

The **Chemistry** content of the Combined Science: Trilogy specification includes:

- 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

The **Physics** content of the Combined Science: Trilogy specification includes:

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

