

IGCSE COMBINED SCIENCE - 0653

Why should I choose Combined Science?

- In Combined Science, you will develop a range of transferable skills that are valuable in various aspects of life, such as data handling, practical problem-solving, and the application of the scientific method.
- Combined Science will make you aware of the practical application of science in everyday life, demonstrating its potential impact on the community and the environment, both positively and negatively.
- Combined Science equips students with essential scientific skills that are fundamental for further studies in science-related fields or for employment opportunities. These skills provide a strong foundation, enabling learners to excel in more advanced science courses and pursue diverse career paths that require a scientific background.

Why study Cambridge IGCSE Combined Science?

As well as a subject focus, the Combined Science syllabus enables students to:

- Gain an in-depth understanding of scientific theories and practices, building a strong foundation in a variety of scientific disciplines.
- Hone a range of experimental skills, including the adept handling of variables and the practice of laboratory safety, facilitating practical competence for academic and real-world applications.
- Cultivate problem-solving skills by using scientific data and evidence to address complex issues, while also exploring the limitations of scientific methods, promoting critical thinking and a well-rounded approach to challenges.

Course Content:

The subject content is divided into three sections: Biology (B1–B16), Chemistry (C1–C12), and Physics (P1–P5). In Year 10, students cover B1-B14, C1-C9, and P1-P3. The remaining topics, B15-B16, C10-C12, and P4-P5, are covered in Year 11.

1. Biology (B1 Characteristics of living organisms, B2 Cells, B3 Movement into and out of cells, B4 Biological molecules, B5 Enzymes, B6 Plant nutrition, B7 Human nutrition, B8 Transport in plants, B9 Transport in animals, B10 Diseases and immunity, B11 Gas exchange in humans, B12 Respiration, B13 Drugs, B14 Reproduction, B15 Organisms and their environment and B16 Human influences on ecosystems)
2. Chemistry (C1 States of matter, C2 Atoms, elements and compounds, C3 Stoichiometry, C4 Electrochemistry, C5 Chemical energetics, C6 Chemical reactions, C7 Acids, bases, and salts, C8 The Periodic Table, C9 Metals, C10 Chemistry of the environment, C11 Organic chemistry, C12 Experimental techniques, and chemical analysis)
3. Physics (P1 Motion, forces, and energy, P2 Thermal physics, P3 Waves, P4 Electricity, P5 Space physics)

How will I learn?

A variety of learning methods are employed throughout the course, encompassing practical work, demonstrations, presentations, group work, inquiry-based projects, interactive simulations, field research, peer assessments, and self-assessment.

How will I be assessed?

You will undergo assessment through three papers that evaluate your grasp of the covered content: one multiple-choice paper (45 minutes, contributing 30% to the total marks), a short-answer and structured questions paper (1 hour 15 minutes, accounting for 50% of the total marks), and an alternative to practical test (60 minutes, constituting 20% of the total) assessing practical techniques, data handling, and analytical skills.