

COMMON ENTRANCE (CE) 13+

SUBJECT GUIDE FOR FAMILIES: SCIENCE

CE 13+ exams are taken by pupils as part of their entrance applications to senior independent schools for entry into Year 9. **Science** is one of the compulsory core subjects assessed in CE 13+ exams, along with **English** and **maths**.

This guide includes an explanation of the **CE 13+ science exam structure**, what knowledge and skills are assessed, and what your child can expect from each paper. It also contains **tips and tricks for using past papers as practice resources** at home, as well as links to further support your family throughout your admissions journey. Let's get started!

WHAT KNOWLEDGE AND SKILLS DO CE 13+ SCIENCE EXAMS ASSESS?

The CE 13+ science exam is designed to test pupils' ability to:

- **Recall learned information** and demonstrate their knowledge and understanding.
- **Apply their knowledge** to familiar and new contexts, including processes and applications.
- **Recognise the wider importance** of their knowledge and understanding to science and to society.

The exam will contain questions about practical techniques and scientific processes, assessing whether the pupils can:

- **Record observations** and **measurements** with appropriate precision.
- **Analyse, interpret, explain** and **evaluate** a scientific method.
- **Complete a results table** and **draw conclusions** from the results.

A minimum of 25% of the marks in every paper will be based on a 'Thinking and Working as a Scientist' section of the CE 13+ science specification. This will sometimes involve tasks such as comparing different pieces of evidence to make predictions, commenting on the reliability and accuracy of results, and identifying problems in experimental design.

The exam papers will use a system of '**command words**', which indicate the type of response required and the depth of the answers.

HOW IS THE EXAM STRUCTURED?

The CE 13+ science exam can be taken at either **Foundation** or **Core** level, the Foundation containing slightly more accessible questions in comparison to Core. Your child's current school will usually make this decision after discussing it with prospective senior schools and assessing your child's ability.

If your child is taking Foundation science, they will only sit **one paper**. This paper will take around 60 minutes and will include questions on biology, chemistry and physics.

If your child is taking Core science, they will sit **three separate papers** on biology, chemistry and physics. Each Core science paper will last approximately 40 minutes and total 60 marks. Each paper will be sat on different days.

Foundation science paper (1 hour, 80 marks)

The Foundation paper is designed for pupils who are developing the skills and vocabulary needed for Core level. This paper may be used for assessment at CE 13+ by agreement with senior schools, or to support learning in Years 6 and 7.

Foundation papers will include more explanatory text in the questions, including some word equations and, where calculations are required, formulae, and units. Due consideration will be given to the level of difficulty and content in Foundation level questions.

The first question will include **seven multiple-choice parts**. The rest of the paper will include a mix of **closed and open-ended questions**. Pupils must attempt every question.

Core science papers: biology, chemistry and physics (40 minutes, 60 marks EACH)

The Core biology, chemistry and physics papers will be sat separately.

For each paper, the first question will include **seven multiple-choice parts**. The rest of the papers will include **closed and open-ended questions**. Pupils must attempt each question.

WHAT IS THE DIFFERENCE BETWEEN EXAM PAPERS PUBLISHED BEFORE AND AFTER AUTUMN 2022?

ISEB introduced an updated specification in 2021. The first exams that followed this specification were held in Autumn 2022. For science exams, the naming convention of the levels changed, so **'Level 1/Level 2'** became **'Foundation/Core'**.

Past papers from the earlier specification (for exams up until Summer 2022) remain valid and valuable practice resources for any upcoming CE 13+ science exams.

You can find more detailed information regarding the Science specification via this link:

www.iseb.co.uk/assessments/common-entrance/science.

HOW IS THE CE 13+ SCIENCE EXAM MARKED?

CE 13+ science exams can be marked in two ways:

- **Internally:** The exam is marked by your child's current school and the results are sent to the senior school.
- **Externally:** The exam is marked by the senior school your child is applying to.

HOW CAN PUPILS BEST PREPARE FOR THIS EXAM?

Students can prepare for their CE 13+ science exam in a variety of ways, but **practice** and **familiarisation** are crucial to achieving higher marks. Your child's teacher has already done an excellent job in teaching the knowledge required to achieve well: your child's job is now to practice.

PAST PAPERS

Past papers are the best form of practice for the CE 13+ Science papers, because they help pupils **familiarise** themselves with the exam format, **identify gaps** in their knowledge or skill set, **practice** their comprehension and writing skills, and allow them to develop important exam techniques, i.e.,

time management. This preparation can help pupils feel confident and well-prepared when taking their real exam.

Our experts have compiled the following tips to help your child use CE 13+ science past papers at home.

Top tips for the CE 13+ science paper:

- **Expect unfamiliar questions:** Your child may see questions that are new or unfamiliar. Don't worry; they are designed to prompt them to apply scientific understanding to different experimental set-ups and scientific investigations.
- **Learn the command words:** Familiarise your child with the command words and terms outlined in the CE science specification. This will help them to understand exactly what each question is asking. For example, a question that asks them to describe results will have a different marking criterion than a question that asks them to explain results. Using past papers will allow your child to practice identifying the command term in each question.

You can use past papers in several different ways while practising at home. You can complete the papers under timed exam conditions or use them as an 'open book' exam and use the mark schemes to help form your answers. You can also use the papers as revision resources, and make sure you practice all the topics separately. There is a benefit to practising questions from all levels to build knowledge, no matter which exam level your child will take.

CE 13+ science past papers are available [on the ISEB online shop for families](#).

FURTHER SUPPORT

We provide a hub of support resources, articles, FAQs, and more on registration and preparation for CE and CASE exams in our [CE Admissions Toolkit](#).

You can also access further information and direct support from ISEB through our [CE Support Portal](#). Access over 100 articles or raise a ticket with our customer success team for direct and bespoke support.