

IGCSE Physical Science (0652), Combined Science (0653), Co-ordinated Sciences (0654) Frequently Asked Questions

Can my candidates take a dictionary / calculator into the examination?

Calculators can be used in all science papers and students should take a calculator, ruler, pencil, protractor and set of compasses into all science exams. A simple translation dictionary is allowed (i.e. one that does not give definitions).

What is the difference between Combined and Co-ordinated Sciences?

All IGCSE Science syllabuses follow a general pattern and are designed as two-year courses for examination at age 16-plus. The main difference to note is that 0654 Co-ordinated Sciences is a dual award subject, leading to a double IGCSE certification. This syllabus covers the sciences in more depth and requires more teaching time than the single certificate subjects.

What equipment should we have in our laboratories?

A CIE booklet entitled *Planning for Practical Science in Secondary Schools* is available from CIE Publications.

What help and advice can you give me about health and safety in the laboratory?

The most important point of first contact is with the organisation responsible for health and safety in schools locally; they must be consulted if you are in any doubt and will advise on any local legal requirements. In addition, there are several useful guides available and many are listed in the booklet 'Planning Science in Secondary Schools'. Most chemical suppliers' catalogues have details of safety requirements for specific chemicals, and 'Hazcards' (published by CLEAPSS Development Group, Brunel University, Uxbridge), 'Hazards in the Chemical Laboratory' (published by the Royal Society of Chemistry, ISBN 0-85186-489-9) and 'Hazard Data Sheets' (published by BDH Laboratory Supplies) are all excellent reference points. An on-line resource is located at www.labsafety.org.

My candidates are doing the Alternative to Practical paper, so they don't need any laboratory experience, do they?

Yes, they do. The ATP paper is an alternative to the Practical Paper, not an alternative to doing practical work. The syllabus makes it clear, in both the Aims and the Assessment Objectives, that the course should be taught practically and that candidates should have experience of doing (rather than merely seeing) experimental work. The Alternative to Practical paper assesses their practical skills, including both data handling and familiarity with standard laboratory equipment. Any candidates without experience of doing practical work will be disadvantaged in this paper.

Is there an option available which doesn't involve any assessment of practical skills?

No. Practical skills are an integral part of the Sciences. A science qualification without a practical component would be a second-rate assessment of the subject, and CIE aims to provide valid qualifications acceptable in all areas of the world.

I am in the middle of setting up the practical examination, and I need to look at the question. Am I allowed to look at a copy of the question paper?

No. You should have been preparing the examination using the Confidential Instructions, which are issued to Centres in confidence well in advance of the examination. These instructions tell you all you need to know about the apparatus requirements, how the apparatus is to be arranged, and what it will be used for. If you have a problem which cannot be resolved using the Confidential Instructions, please telephone our Customer services line on +44 1223 553554 or e-mail International@ucles.org.uk

I haven't got the exact equipment specified in the Confidential Instructions, but I do have something similar. Am I allowed to adapt the experiment at all?

Yes, you are allowed to make minor adaptations to the apparatus, providing that the apparatus still works as specified in the Confidential Instructions. You do not need to seek our approval for these minor adaptations. However, you must report the adaptations in detail to the examiners, by completing the Supervisor's Report form on the back of the Confidential Instructions, which should be enclosed with the candidates' completed scripts. More substantial adaptations, which require changes to the experiment or which cause the apparatus to work in a different way from that described in the Confidential Instructions, are not allowed.

What are the advantages of taking the coursework option?

One advantage of the coursework option is that the assessment is done during the course, well before the examinations at the end. By the time your students reach their examinations, the practical assessment is one thing less to worry about. A second advantage is that you are free to choose what experiments you want your students to do, to suit the local conditions and resources in your school. Some teachers feel that coursework is a fairer assessment because it does not depend on performance on one day.

Which option makes it easiest for my students to achieve high grades?

They are all the same difficulty, and in every examination we use robust statistical methods to ensure this.

I have decided that I want to follow the coursework option with my students. What do I need to do?

You – or another teacher in the Science Department – need to be trained to mark and internally moderate the coursework. The usual way to do this is by completing a Distance Training Pack, which we will send you for a fee. Then you need to have your work on this pack assessed, which we will do for a further fee. In the first instance, you need to contact Customer Services at CIE who can provide the relevant information (telephone +44 1223 553554 or e-mail International@ucles.org.uk).

Which is the correct textbook for the course?

We don't require Centres to use any one particular textbook for our courses, and we would hope that wherever possible teachers would make use of a variety of different resources, drawing from the best aspects of each. We do provide a list of books that teachers may find helpful, and you can find this on our [website](http://www.cie.org.uk) at www.cie.org.uk. It is worth reminding Centres that most standard UK GCSE texts will provide the majority of the content required but any text **must** be carefully checked against the appropriate syllabus.

Do I need to teach the course in the order given in the syllabus?

No, and we don't recommend it. The syllabus outlines what may be assessed in the examination, but we would normally expect teachers to follow their own scheme of work based on the syllabus.

I want to use last year's papers with my students. What were the pass marks for each grade?

The pass marks for grades A, C, E and F are published in the mark schemes for each paper. The mark schemes can be obtained from the Teacher Support website or from our publications department.