

GCSE Science Specifications

Practical Skills Assessments

GCSE Biology (GBL31 and GBL33)
GCSE Chemistry (GCM31 and GCM33)
GCSE Physics (GPY31 and GPY33)
GCSE Double Award Science (GDW71 and GDW75)
GCSE Single Award Science (GSA41 and GSA43)

Instructions to Teachers

Summer 2024

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1. Requirements for the Practical Assessment

Three copies of each of the Apparatus and Materials List and Confidential Instructions will be delivered to centres by the end of October each year for the GCSE Science specifications for which entries have been made. These will be held securely by the Examinations Officer but can be accessed by the Head of Department immediately. The Head of Department can liaise with the relevant technician(s) to order and set up the apparatus and materials as appropriate but ensure the document is held securely when not in use. They must not be photocopied or made available to anyone else.

All apparatus should be checked before the examination, and there should be an adequate supply of spare apparatus in case of breakages or malfunction. The Apparatus and Materials List should be regarded as a minimum and there is no objection to candidates being supplied with more than the minimum amount of apparatus and materials. Upon request, a candidate may be given additional quantities of materials without penalty. No notification needs to be sent to CCEA.

Centres are responsible for providing their own apparatus and materials to conduct the assessments. Practical Skills Booklet A will be delivered to centres no later than 5 working days before the assessment window opens. They must be held securely by the Examinations Officer until requested by the Head of Department. Booklet A can be completed by candidates between 1st December and 1st May each year.

For the practical unit (Separate Sciences: Unit 3; Double Award Science: Unit 7; Single Award Science: Unit 4) candidates must be entered at the same tier for all components within the unit. When Booklet A has been completed for a specification, the tier of entry for the practical unit can no longer be changed for each individual candidate.

Please note: The Biology Practical Skills Assessments (Double Award Biology and GCSE Biology only) may have slightly different instructions to be followed when an extra practical set-up session is required. See Section 8.

2. Confidentiality

The guidance contained in this document can be made available to all science staff in the centre. The Apparatus and Materials List and Confidential Instructions are for the use of the Head of Department **and are strictly confidential**. Under no circumstances may information concerning apparatus or materials be given before the examination to a candidate or other unauthorised person.

It is the responsibility of the centre to ensure that there should be no communication between candidates taking different sessions regarding the practical assessment both within the centre and with other centres. The JCQ regulations on the use of social media (*Information for Candidates* –

Social Media) must be explained to candidates in advance of completing Booklet A. Any breach of these regulations will constitute candidate malpractice and will be the subject of an investigation.

3. Health and Safety

Appropriate safety advice should be sought from CLEAPSS for the conduct of all practical tasks by each Supervising Teacher when completing their Risk Assessment in advance of the practical sessions. These should be tailored to their own class requirements.

Clear instructions must be given by the Supervising Teacher to all candidates at the beginning of the examination concerning appropriate safety procedures and precautions. The Supervising Teacher is also advised to remind candidates that all materials in the examination must be treated with caution. **Only those tasks specified in Booklet A should be attempted. Candidates must not attempt any additional confirmatory tasks.** Anything spilled on the skin should be washed off immediately with plenty of water. The use of appropriate eye protection is essential. The Supervising Teacher is reminded that they may not assist candidates during the examination. However if, in the opinion of the Supervising Teacher, a candidate is about to do something which may endanger themselves or others, the Supervising Teacher must intervene. A full written report must be sent to CCEA immediately by email to the appropriate Subject Officer.

4. JCQ Regulations

All JCQ instructions for conducting examinations should be followed for this practical examination including displaying JCQ posters with examination information in the laboratory and removal of smart devices including mobile phones. Posters should be available from your Examinations Officer.

Students who leave the examination room during the assessment should be supervised according to the JCQ regulations for external examination conduct.

5. Practical Booklet A

The Examinations officer will hold Practical Booklet A securely **at all times**. The Supervising Teacher (science teacher) may request one copy of Booklet A **five** working days in advance of carrying out the practical assessment with their class in order to trial the practical(s) and complete their risk assessment. The Supervising Teacher must retain a set of results from their trial which could be provided to a candidate(s) in exceptional circumstances. In this case, a report should be sent to the Subject Officer with specification responsibility by email (see Section 9 for more detail). This copy of Booklet A must be returned to the Examinations Officer for secure storage immediately after trials have been completed and should not be photocopied.

On the day of the practical assessment, the Supervising Teacher will request the required number of copies of Booklet A from the Examinations Officer. After the practical session is complete, all **Booklet As must be returned to the Examinations Officer by the Supervising Teacher who will have collated them in order of Candidate Number (lowest to highest)**. For GCSE Biology, Chemistry, Physics and GCSE Single Award Science, the **Examinations Officer should ensure that multiple sets of returned Booklet As are collated as a centre in ascending Candidate Number order**. For Double Award Science, it will be the responsibility of the Examinations Officer to collate the Biology, Chemistry and Physics Practical Booklet A for each individual candidate and treasury tag them together (treasury tags are supplied by CCEA in the stationery dispatch), before arranging them in ascending Candidate Number order. **All Practical Booklet As will be collected by CCEA in early May. The exact date each year will be published in CCEA's Calendar of Events.**

Multiple sessions are permitted to accommodate all candidates within the centre. Centres do not have to accommodate all their candidates to carry out the practical assessment on the same day.

Foundation and Higher Tier candidates may carry out the practical assessment in the same room, but they may only work with others taking the same tier.

All used and unused booklets must be returned to the Examinations Officer for secure storage immediately following the session. Unused booklets may be returned to the Head of Department after the review of results date has passed in September each year.

6. Invigilation

For invigilating the practical skills assessment, regulations and conditions set out in the most recent *JCQ Instructions for Conducting Examinations* should be adhered to.

An appropriate science teacher (Supervising Teacher) must be present with an invigilator during the assessment to ensure compliance with health and safety regulations and deal with any technical difficulties that may arise unexpectedly. An invigilator may be any adult in the employment of the school that is not the science teacher of the candidates, for example, this might be another teacher, science technician or teaching assistant. The invigilator should remain with the candidates for the full duration of the assessment and must have read the regulations around invigilating examinations as outlined in *JCQ Instructions for Conducting Examinations*. It is not permitted for teachers or invigilators to discuss any aspect of the Practical Skills Assessment that has been conducted with any other person(s) including candidates.

The Supervising Teacher should ensure that candidates are supplied with a Booklet A for their correct tier of entry (Foundation Tier papers will be buff coloured and Higher Tier papers will be printed on white paper).

7. Controls for carrying out Booklet A

The practical assessment must be completed under a high level of control (as detailed in the respective specification). Teachers and invigilators must not offer direction or guidance to candidates where this would assist them in completing Booklet A.

The practical session for Booklet A is time limited to a maximum of one hour for each discipline of Double Award Science and a maximum of two hours for GCSE Biology, Chemistry and Physics and Single Award Science. All practical and written tasks in each Booklet A must be completed in the same continuous session on the same day (Double Award Science Booklet A's can be completed on different days).

Not all candidates or classes in a centre need to complete Booklet A at the same time. Candidates who are absent for the practical session may take it at a later date with another class completing the same practical skills assessment or should be accommodated individually by the centre.

Ideally candidates should work individually to carry out the practical tasks where this can be accommodated by centres. However, candidates are permitted to work collaboratively in groups of up to three when carrying out the practical tasks. If candidates are working in groups to complete the practical tasks, it is the Supervising Teacher's responsibility to inform candidates beforehand that each member of the group should participate in practical activity. For Health and Safety purposes, these candidates must be permitted to communicate to each other regarding the practical methodology. All candidates must work individually and independently to complete the written tasks in Booklet A.

In line with JCQ regulations, candidates may not have access to their laboratory notes, smart devices, textbooks, wall displays or the internet at any time during the practical session. They are also not allowed access to dictionaries, spellchecks and grammar facilities and should be informed of this beforehand.

Candidates must not attempt a practical assessment Booklet A more than once. Drafting is not permitted under any circumstances and teachers must not give any feedback to candidates.

Candidates should be offered additional sheets of paper upon request that are supplied by CCEA for other external examinations.

8. Biology Practical Skills Assessment (Double Award Biology and GCSE Biology only)

While the majority of Biology practicals will be able to be completed within the given time limit, there may be biological processes/reactions in some practical assessments which take longer than the time allocated to complete. These practicals will require a **set-up session** in advance of the session that is used to complete Booklet A.

CCEA will provide candidates with a separate Confidential Candidate Practical Set-up Instruction Sheet specific to such a practical. This sheet will detail the set-up of the practical and any initial recording that candidates may have to carry out at the point of set-up. Hard copies will be distributed to centres along with Booklet A based on estimated entries.

The Confidential Candidate Practical Set-up Instruction Sheets must be held in a confidential and secure place along with Booklet A by the Examinations Officer. It must not be photocopied. This sheet can be distributed to the Head of Department and Supervising Teachers on the same basis as Booklet A. Where the Practical Set-up Instruction Sheet is required, one copy of it and one copy of Practical Skills Booklet A can be accessed by the Supervising Teacher, from the Examinations Officer, **five working days** in advance of the **practical set-up session** which has been planned for candidates, in order to trial the practical. After the practical trialling is complete, both documents must be returned to the Examinations Officer for secure storage.

The Confidential Candidate Practical Set-up Instruction Sheet should be given to the candidates at the beginning of the practical assessment set-up session, which is not time limited. This sheet will detail the set-up of the practical and any initial recording that candidates may have to carry out in advance of completing Booklet A. Any initial recording of data will not contribute to the final marks, nor will the time required for the practical set-up be included in the time allowed for the completion of Practical Skills Booklet A.

Candidates must return the Confidential Candidate Practical Set-up Instruction Sheet at the end of the practical set-up session to the Supervising Teacher who must return them to the Examinations Officer immediately for secure storage. The Examinations Officer should then release the Candidate Practical Set-up Instruction Sheets along with Practical Booklet As to the Supervising Teacher just before the planned session for completing Booklet A. They must be returned to candidates at the beginning of the Practical Skills Assessment session to support them in completing Booklet A.

At the end of the Practical Skills Assessment session, the Supervising Teacher should collect the Confidential Practical Set-up Instruction Sheets and Practical Skills Booklet A separately. The Supervising Teacher must ensure that the Booklet As are arranged in order of Candidate Number (lowest to highest) and returned to the Examinations Officer immediately for secure storage until they are collected by CCEA. The Supervising Teacher must collate the Confidential Practical Set-up Instruction Sheets and return them to the **Head of Department** who should organise for them to be stored securely. CCEA do not require these sheets to be returned unless requested on an individual centre basis. Heads of Departments must retain these sheets until the end of October after the issue of results for that cohort.

9. Access Arrangements and Special Consideration (SPC)

The Supervising Teacher should liaise with the Examinations Officer/SENCo regarding the application for Access arrangements for candidates in advance of sitting Practical Booklet A. Access arrangements can be applied for through the Central Login portal on the CCEA website.

Where the centre finds that a candidate/group of candidates may have been disadvantaged because apparatus or materials did not function as intended, the Examinations Officer must send a confidential report to the Subject Officer by email, detailing the issue and the Candidate Number(s) affected before the May collection date. They should also submit an application for SPC via the Central Login portal:

- CCEA has developed the SPC Online Application to allow centres to submit applications for SPC.
- Teachers are asked to contact their Examinations Officer, who will have access to the secure online application, for further details on how to submit an application for SPC online.
- The SPC application can be accessed from the Central Login portal on the CCEA website.

10. Use of candidates' work

Centres and candidates should note that CCEA may use extracts from external assessments on an anonymous basis in educational presentations, materials and products.

Appendix 1(a) – Contact Details

CONTACT	REASON
<p>Subject Officer for Biology, GCSE Double Award Biology and GCSE Single Award Biology <i>Gareth Wilson</i> gwilson@ccea.org.uk</p>	<ul style="list-style-type: none"> Should any queries arise regarding the trialling, conduct and content of Practical Booklet A, please direct your queries by email to CCEA on the following basis (including your name, centre and a daytime contact number)
<p>Subject Officer for Chemistry and GCSE Double Award Chemistry and GCSE Single Award Chemistry <i>Elaine Lennox</i> elennox@ccea.org.uk</p>	
<p>Subject Officer for Physics and GCSE Double Award Physics and GCSE Single Award Physics <i>Gavin Gray</i> ggray@ccea.org.uk</p>	
<p>Specification Support Officer <i>Louise Millar</i> lmillar@ccea.org.uk (028) 9026 1200 ext 2610</p>	<ul style="list-style-type: none"> Any queries regarding the general administration of Booklet A.
<p>CCEA (General Queries) CCEA, Clarendon Dock, 29 Clarendon Road, Belfast, BT1 3BG (028) 9026 1200 info@ccea.org.uk http://www.ccea.org.uk</p>	<ul style="list-style-type: none"> All other queries

Appendix 1(b) – Useful Links

WEBPAGE	REASON
<p>GCSE Biology Webpage: https://ccea.org.uk/key-stage-4/gcse/subjects/gcse-biology-2017</p>	<ul style="list-style-type: none"> • Specification/assessment material
<p>GCSE Chemistry Webpage: https://ccea.org.uk/key-stage-4/gcse/subjects/gcse-chemistry-2017</p>	
<p>GCSE Physics Webpage: https://ccea.org.uk/key-stage-4/gcse/subjects/gcse-physics-2017</p>	
<p>GCSE Single Award Science Webpage: https://ccea.org.uk/key-stage-4/gcse/subjects/gcse-science-single-award-2017</p>	
<p>GCSE Double Award Science Webpage: https://ccea.org.uk/key-stage-4/gcse/subjects/gcse-science-double-award-2017</p>	
<i>JCQ GUIDANCE</i>	
<p>JCQ Exams Office 'ICE' – Instructions for Conducting Examinations https://www.jcq.org.uk/exams-office/ice---instructions-for-conducting-examinations/</p>	<ul style="list-style-type: none"> • JCQ instructions for conducting examinations

This booklet has been drawn up to comply with the relevant regulatory requirements.

Teachers, centres and candidates should note that CCEA may use extracts from examination scripts/internally assessed material on an anonymous basis in educational presentations, materials and products.

