



GCE A LEVEL

1420U50-1C



S25-1420U50-1C

For APRIL 2025

To be opened on receipt in JANUARY 2025

PHYSICS – A2 unit 5

Practical Examination

INSTRUCTIONS TO TEACHERS/EXAMS OFFICERS

Experimental Task

TESTS 1 and 2

CONFIDENTIAL

This document should be stored securely by the exams officer when not in use by the teacher/technician.

This document must not be stored within the science department when not in use by the teacher/technician.

Its contents should not be divulged except to those concerned with the preparation of the assessment.

A. General Instructions

1. The Experimental Task will consist of one session of 90 minutes duration. Two versions of the test will be set for use on dates specified by WJEC as follows:

Test 1 – Wednesday, 2 April 2025 (day 1)

Test 2 – Thursday, 3 April 2025 (day 2)

The vast majority of candidates will take Test 1. Test 2 should only be used in centres where it is **not practically possible** to accommodate all candidates on day 1. Centres requiring Test 2 (for use on day 2) should already have informed WJEC that this is the case. Please contact the subject support officer at WJEC (science@wjec.co.uk) as a matter of urgency if this has not been done. **No individual candidate may undertake both tests.**

Centres must schedule the test as early as is possible on the appropriate date and where more than one session is required on a single day, centres must ensure that candidates in later sessions have no opportunity to communicate with those who have already taken the test.

2. The tests should be invigilated by a person other than an A level Physics teacher.
3. An A level Physics teacher must be present in the examination room to deal with any technical difficulties that may arise, including matters of safety and the awarding of the teacher assessed marks.
4. Teachers must ensure that each candidate has adequate working space and that the candidates are set a reasonable distance apart. Each candidate requires uninterrupted access to the allocated apparatus – one set of apparatus per candidate.
5. Centres will receive sufficient copies of the examination papers for Test 1 (and Test 2 if applicable).
6. Teachers may open the “**Setting up Instructions**” document one week before Test 1 (i.e. Wednesday, 26 March 2025). **This is for the purpose of ensuring that the apparatus functions well enough for the candidates to complete the assessment fully. Teachers are encouraged to try out the task, WHILST PRESERVING THE CONFIDENTIALITY OF THE ASSESSMENT. This document should be stored securely by the exams officer when not in use by the teacher.** The full version of the examination paper will not be available until the day of the examination (i.e. Wednesday, 2 April 2025).
7. Candidates are to be given a list of the main topic areas to be assessed in the Experimental Task and in the Practical Analysis Task prior to the assessment. **In order to implement this, page 4 of this document should be copied and given to candidates as soon as possible after receipt of this document.** This information is also published on the WJEC GCE Physics web page.
8. Teachers need to ensure that the teacher assessed marks are recorded on the front of each candidate’s paper. Guidance on the awarding of these marks will be provided in the “Setting up Instructions” document.
9. The completed Experimental Tasks must be stored securely by the exams officer. Once the Practical Analysis Tasks are completed the exams officer should then pair up the Experimental Task and Practical Analysis Task for each candidate and place them in the order of the candidate register. **Teachers should not be given access to the completed examination papers after the actual assessments have taken place.**
10. The examination papers will be externally marked by a WJEC examiner. The same examiner will mark both the Experimental Tasks and Practical Analysis Tasks for a centre. The name and address of the examiner will be issued to centres by the end of April.
11. In most years, the examiner will require teachers’ results for the tests, to be recorded clearly on the ‘Information from Centres’ form (which will be in the “Setting up Instructions” document). This information must be sent to the examiner along with the examination papers.
12. Monitoring visits will take place on a random sample of centres to ensure the practical examination is being administered correctly. Visiting monitors will require access to candidates’ “lab books” on the day(s) of the examination. **This includes the date of the Practical Analysis Task.**

B. Specific Instructions

Details of the apparatus and materials required for the tests follow.

If any difficulty is experienced in providing the apparatus, WJEC should be informed as soon as possible.

Contacts:

**Subject Officer Helen Francis,
Support Officer Eira Morgan,**

**029 2240 4252, science@wjec.co.uk
029 2240 4252, science@wjec.co.uk**

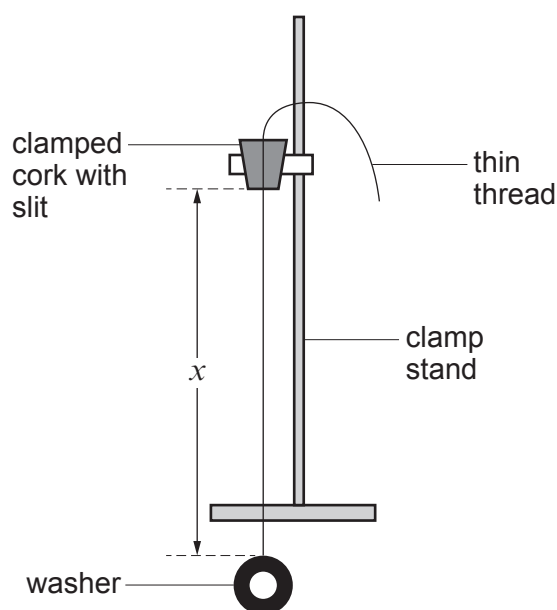
Apparatus Required

Test 1

The following apparatus is required for each candidate

- 1 × metre ruler ± 0.001 m
- 1 × stopwatch ± 0.01 s
- 1 × digital callipers ± 0.01 mm
- 1 × split cork
- 1 × clamp and stand
- 1 × washer
- 1 × thin thread of length 110.0 cm

The apparatus should be set up for each candidate.



The washer should be a flat round washer of outer diameter approximately 37.0 mm. These are available from all hardware suppliers, for example, Screwfix. The thickness and the internal diameter of the washer are not significant.

The length, x , of the thread should be set at approximately 80.0 cm for each candidate.

A G-clamp to secure the stand to the desk is not required.

Test 2

The apparatus should be set up in exactly the same way as for Test 1 except that a washer of outer diameter approximately 30.0 mm should be used.

**GCE A LEVEL**

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PHYSICS – A2 unit 5
Practical Examination**TOPIC AREAS FOR ASSESSMENT IN UNIT 5**
IN SUMMER 2025

This page should be copied and given to candidates.

Knowledge, understanding and skills related to the following topic areas will be assessed:

- 1.4 Energy concepts
- 2.2 Resistance
- 3.2 Vibrations
- 3.3 Kinetic theory
- 3.4 Thermal physics