

Chemistry and Science

The Qualifications Team

Jack Rillie

Qualifications Manager

Vacancy

Qualifications Officer

Bill Beveridge

Subject Implementation Manager

Lesley Jackson

Subject Implementation Manager

Changes to assessment at National 5, Higher and Advanced Higher

As announced by the Depute First Minister in September 2016, units and unit assessments are being removed from National 5, Higher and Advanced Higher courses on a phased basis over three years:

- National 5 from 2017–18
- Higher from 2018–19
- Advanced Higher from 2019–20.

For more information, including a Q&A on the implications of these changes, please visit our website at www.sqa.org.uk/nqchanges.

Science is available at National 3 and National 4 and therefore these changes do not apply.

Units that were previously part of National 5 courses

The units that were previously part of National 5 courses are now freestanding units at SCQF level 5. They can no longer be used to contribute to the achievement of a National 5 course.

We will remove all references to National 5 courses from the unit specifications, unit support notes and unit assessment support packs in due course, and the unit support notes will be added to the unit specifications as an appendix. The unit specifications will also be relocated to a new freestanding units web page for each subject.

Further information on the timescales for this will be provided in our weekly Centre News newsletter.

Changes to assessment in National 5

The National 5 Chemistry course is now assessed through the following components:

Component	Marks	Scaled marks
question paper	100	n/a
assignment	20	25

Question paper: the question paper has two sections:

- section 1 (objective test) has 25 marks
- section 2 contains restricted and extended response questions and has 75 marks

Assignment: the topic chosen must include a mandatory practical experiment/activity and be related to a key area of the course. Marks for the assignment will be scaled to 25 marks in order to continue the 80/20 weighting of question paper and assignment.

Clarification of course content in the National 5 course

The course content has been arranged into a slightly altered suggested teaching order. Centres are reminded that this is only a suggestion and they are free to deliver content in any order they wish.

Clarification of depth of treatment has been added to a number of statements within the content in response to stakeholder feedback.

Content covering esters, condensation polymers, fuel cells, and rechargeable batteries has been removed.

Changes to assessment in Higher courses from session 2018–19

Units and unit assessments will be removed from Higher courses from session 2018–19 and we have started our review of the Higher course assessments. For this, we are working closely with our National Qualifications Support Teams (NQSTs) for each subject. Our NQSTs include teachers and lecturers who currently deliver National Courses, and representatives of professional associations. We will also meet with a sample of teachers to gauge their views on the proposed changes and the implications of these.

The publication of new and revised Higher materials will follow a similar timescale to National 5:

End of April 2018	Revised Higher course specifications
End of May to end of September 2018	Course support notes New/revised specimen question papers New/revised coursework assessment tasks

We will provide further information on what the changes to assessment are for each subject by the end of January 2018.

As with revisions to National 5, we will provide clarification of required depth of knowledge where appropriate and suggestions for the teaching order of the content.

Conditions of assessment for coursework

To ensure fairness for all candidates, it is essential that the specified assessment conditions for coursework are consistently applied in all centres. The following documents detail the specific conditions that must be followed in each assessment:

- course specification
- course assessment specification (Higher and Advanced Higher only)
- coursework assessment task

In addition to these documents, you must also refer to the following document, which is available from the coursework section of the National 5, Higher and Advanced Higher web pages:

- [Guidance on conditions of assessment for coursework](#)

This document provides important information on the time and volume of assessment, the use of resources, and the supervision, control and authentication of assessment — including examples.

Changes to documents

Revised National 5 documents and assessment support materials

Following the removal of units and unit assessments from the National 5 Chemistry course, we have strengthened the course assessment to ensure it assesses the full content of the course.

We have published revised course specifications and revised assessment support materials for the National 5 course, which detail the requirements of the revised course assessments from session 2017–18 onwards. The documents are available from the National 5 subject web pages at www.sqa.org.uk/nqsubjects. Further information on the changes to documents and assessment support materials is provided below.

Course specification

In April 2017, we published a revised course specification, which provided detailed information about the National 5 course and course assessment, including the conditions of assessment that must be followed. The revised document was produced by merging the previous course specifications, course assessment specifications and general assessment information into a single, streamlined document. Course support notes have been added to the course specification as an appendix.

You can view the course specification on the [National 5 Chemistry web page](#).

Specimen question paper

The National 5 Chemistry question paper has been strengthened to allow increased sampling of knowledge and understanding and skills. The specimen question paper illustrates the standard, structure and requirements of the question paper candidates will sit. This also includes marking instructions. You can view the specimen question paper in the 'Assessment' section of the [National 5 Chemistry web page](#).

Coursework assessment task

The National 5 Chemistry assignment allows assessment of skills which cannot be assessed through the question paper; for example, research skills and the handling and processing of data gathered as a result of experimental work. The coursework assessment task includes information that centres must use in administering coursework and must be read in conjunction with the course specification. You can view the document in the 'Assessment' section (under the Coursework tab) of the [National 5 Chemistry web page](#).

Supportive resources

National 5 CPD webinar

To help teachers and lecturers prepare for the changes to assessment in the National 5 course, we ran a series of subject-specific continuing professional development (CPD) webinar that focused on the requirements of the course assessment, in particular the assignment.

Recordings of these webinars are available online from the CPD webinar/audio and support tab on the [National 5 Chemistry web page](#).

National 5 course events

We are hosting a series of subject-specific events that focus on the changes to assessment in National 5 courses. The events are running during November 2017 and provide delegates with the opportunity to participate in workshops and discuss the course documents, as well as have their questions answered by senior examining team members.

There are five events around the country, with one held on a Saturday in order to allow teachers and lecturers who may have difficulty gaining release to attend.

To view the event schedule and book your place, visit www.sqa.org.uk/ngevents.

Q&A document on the changes to assessment

During the question and answer section of the National 5 webinar, we received a number of questions about the changes to assessment. We have published a Q&A document that provides answers to the questions asked during the webinar, as well as some of the most frequently asked questions we have received from teachers and lecturers. You can access the Q&A document under the 'Updates and announcements' section of the [National 5 Chemistry web page](#).

Understanding Standards materials

We have recently published two exemplar National 5 Chemistry assignments with associated commentaries. You can view these by selecting Chemistry from the subject box on our [Understanding Standards website](#), then National 5, followed by 'Assignment'.

SSERC, in partnership with SQA, have produced resources for the National 5 Assignments. These are available on [SSERC National 5 Chemistry Assignments](#).

Further information and guidance

National 3 and National 4 Science

Units remain in National 3 and National 4 Science. In session 2016–17 a threshold was introduced to the number of assessment standards that candidates must meet to achieve outcome 1. Candidates are no longer required to show full mastery of the assessment standards to achieve outcome 1. Assessment standards 2.2 and 2.3 were removed from outcome 2 and assessment standard 2.4 was renumbered as 2.2.

For session 2017–18 centres must use the criteria exemplified in the following guidance documents when carrying out assessments.

- National 3 Science: Understanding standards for the session 2017–18
- National 4 Science: Understanding standards for the session 2017–18

You can view these documents on the [Science subject page](#) under 'Understanding the next steps for Science' tab.

The National 3 and National 4 Science unit specifications and unit assessments are in the process of being revised to reflect the removal of assessment standards and the revised assessment criteria. They will be published in due course.

National 3 and National 4 Chemistry

Units remain in National 3 and National 4 Chemistry. In session 2016–17 a threshold was introduced to the number of assessment standards that candidates must meet to achieve outcome 1. Candidates are no longer required to show full mastery of the assessment standards to achieve outcome 1. Assessment standards 2.2 and 2.3 were removed from outcome 2 and assessment standard 2.4 was renumbered as 2.2.

For session 2017–18 centres must use the criteria exemplified in the following guidance documents when carrying out assessments.

- National 3 Chemistry: Understanding the next steps for session 2016–17
- National 4 Chemistry: Understanding the next steps for session 2016–17

You can view these documents on the [Chemistry subject page](#) under the 'Information on unit thresholds' tab.

The National 3 and National 4 Chemistry unit specifications and unit assessments are in the process of being revised to reflect the removal of assessment standards and the revised assessment criteria. They will be published in due course.

Freestanding SCQF level 5 units and unit assessment support packs

The units from the previous National 5 course have become freestanding SCQF level 5 units. These units have retained the content of the old course. The associated unit assessment support packs (UASPs) and unit assessments for the SCQF 5 units are still valid, and do not require updating. These are still available via the secure site and the same assessment rules still apply.

Centres are advised not to alter the UASPs for freestanding SCQF level 5 units to take account the minor changes to the National 5 Chemistry course content. Doing so could mean key areas of the SCQF level 5 units would not be assessed. Changes to the UASP could also invalidate assessments. If, for other reasons, a centre wishes to alter a UASP for a freestanding SCQF 5 unit, then they can apply to SQA for prior verification, as outlined in 'Internal Verification: A Guide for Centres offering SQA Qualifications'. You can access this document by scrolling down to the Related Information section of our [National Qualifications Internal Verification Toolkit web page](#).

Higher Chemistry

In session 2016–17 a threshold was introduced to the number of assessment standards that candidates must meet to achieve outcome 1, if undertaking an outcome 1 for the content-based units. Candidates are no longer required to show full mastery of the assessment standards to achieve outcome 1.

Transfer of evidence was introduced so that candidates who successfully achieved the Researching Chemistry Unit could be credited with Outcome 1 of the other Units, without the need to match the evidence requirements for Outcome 1 in the content-based Units. Effectively, this means many candidates would not require an Outcome 1 for those Units, since they will achieve the Researching Chemistry Unit.

For session 2017-18 centres must use the criteria exemplified in the following guidance documents when carrying out assessments.

- Higher Chemistry: Understanding the next steps for session 2016–17
-

You can view this document on the [Chemistry subject page](#) under the 'Information on unit thresholds' tab.

Higher Chemistry assignment

In 2016–17, a change was made to the Higher Chemistry assignment to require candidates to process and present their experimental data, as opposed to any secondary data. It is pleasing to report that the vast majority of candidates followed this instruction. There were, however, a number of individual candidates or centres that failed to do so. In those cases candidates had not carried out any processing or presenting of their experimental data and instead processed and presented secondary data. Centres are reminded that the same rule applies for session 2017–18, in that candidates must process and present their own experimental data.

Candidates may still wish to process and present their secondary data in addition to the experimental data, as this may assist with their analysis, but only the processing and presentation of the experimental data is marked. Where candidates fail to do so, they will be unable to access any marks for that section.

Advanced Higher Chemistry

In session 2016–17 a threshold was introduced to the number of assessment standards that candidates must meet to achieve outcome 1. Candidates are no longer required to show full mastery of the assessment standards to achieve outcome 1. Existing transfer of evidence from the Researching Chemistry Unit means that, for most candidates, an Outcome 1 in the content-based Units will not be required.

For session 2017–18 centres must use the criteria exemplified in the following guidance documents when carrying out assessments.

- Advanced Higher Chemistry: Understanding the next steps for session 2016–17

You can view this document on the [Chemistry subject page](#) under the 'Information on unit thresholds' tab.

Course Reports

We strongly advise that you read the annual Course Reports for the subject and levels you are teaching. These reports are produced following the annual diet of exams and are published by the end of October. The reports provide informed and valuable comment on the assessment for each component in the course, and include a summary of:

- candidate performance in the course assessment
 - areas in which candidates performed well
 - areas which candidates found demanding
-

The reports also contain advice on preparing future candidates, and statistical data relating to grade boundaries. Course Reports are available from the relevant subject pages of our website at www.sqa.org.uk/nqsubjects.

SQA style change

Following the naming convention adopted by other publishers, such as the Royal Society of Chemistry, the SQA has updated its style rules for chemistry to remove capitalisation from the term 'periodic table'. All future SQA documentation will refer to the 'periodic table' using lower case. This change does not indicate a change to the approach used in marking of candidate responses where capitalisation of the term 'periodic table' will remain an option for candidates.

Stay informed

Subscribe to Centre News

Our weekly Centre News newsletter contains the latest news and updates for centres delivering SQA qualifications. The newsletter is sent to your SQA co-ordinator and you can also subscribe directly at <http://mailer.sqa.org.uk/centrenews/step1>

Sign up to MyAlerts

To receive e-mail alerts when content you are interested in has been added to, or updated, on our website, subscribe to MyAlerts at www.sqa.org.uk/myalerts

Follow us online

Twitter: [@sqanews](https://twitter.com/sqanews)

Facebook: [Scottish Qualifications Authority](https://www.facebook.com/ScottishQualificationsAuthority)

LinkedIn: [Scottish Qualifications Authority](https://www.linkedin.com/company/ScottishQualificationsAuthority)

YouTube: [SQAonline](https://www.youtube.com/SQAonline)

Contact us

Please contact our Customer Support Team:

Tel: 0303 333 0330

Fax: 0345 213 5000

E-mail: mycentre@sqa.org.uk
