

Chemistry



This update contains information relevant to your subject and details of the support available to you.

We also publish updates on the new National Courses in the 'Updates and Announcements' section of the relevant [subject pages](#). I would encourage you to make regular use of our subject pages, where you will find support documents, answers to common questions, and links to other areas of interest. You can also sign up for 'My Alerts', SQA's e-mail update service, that notifies you whenever content you are interested in is added or updated on our website. Visit www.sqa.org.uk/myalerts to register.

I hope you find the following update helpful, and please contact me if you have any questions.

Andy Shield
Qualifications Manager

The Qualifications Team

Andy Shield
Qualifications Manager

Sheron Ross
Qualifications Officer

Key messages from Diet 2014–15

Course Reports

We strongly recommend that you read the annual Course Reports for the subject(s) 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.

Verification Key Messages

Key Messages from round 2 of verification in session 2014–15 were published over the summer. They are available from the relevant [subject pages](#), where you can access them from the 'Verification and Course Reports' heading in the 'Assessment Support' section.

Finalised 2015 Marking Instructions

The finalised 2015 Marking Instructions for Chemistry question papers have been published on the [past papers](#) section of our website.

Documents and assessment support materials

It is important that you read the full suite of documents for your Course, as well as those relating to assessment, and that you refer to the latest versions.

Information on documents and assessment support materials for National 1 to Advanced Higher can be found at www.sqa.org.uk/supportdocuments

National 3 to Higher documents

As we communicated in our May 2015 subject update, we updated some documents for National 3, National 4, National 5 and Higher Chemistry for use in session 2015–16. These updates were made in April and May 2015. One major change was the removal of Assessment Standards 2.2 and 2.3 from the National 5 Chemistry Unit Specifications:

- *Chemical Changes and Structure* (H21G 75)
- *Chemistry in Society* (H21L 75)
- *Nature's Chemistry* (H21J 75)

Assessment Standard 2.4: Problem Solving was renumbered as Assessment Standard 2.2. This was based on considerable stakeholder feedback, and removal of these Assessment Standards will reduce the assessment burden at National 5. Please note that Assessment Standards 2.2 and 2.3 are being retained at National 3 and National 4 levels.

In addition to the updated National 5 Unit Specifications, a number of other documents were also updated. These included the Higher Chemistry Course Assessment Specification and Course and Unit Support Notes; the National 5 Chemistry Course Assessment Specification and Course and Unit Support Notes; the National 4 Chemistry Course and Unit Support Notes; and the National 3 Chemistry Course and Unit Support Notes.

You can find more details of these revisions in the [May 2015 subject update](#).

National 3 to Higher Unit assessment support

In August 2015, we updated some Unit assessment support materials for National 3 to Higher. This follows the revisions to Unit Specifications that were made in April 2015, and feedback gathered from centres during session 2014–15.

Please refer to the 'Notification of Changes' tables for your curricular area, as these provide a summary of the changes to each document and include details of the revised version numbers. These are available from www.sqa.org.uk/cfesubjectchanges

The use of SQA-produced Unit assessments is not mandatory; however, if you are using them, we strongly encourage you to use the most up-to-date versions. Please note that you may continue to use existing versions of the Unit assessments until the end of session 2015–16 and both will be accepted for verification purposes.

The updated Unit assessment support materials are available from our secure website and you can arrange access to them through your SQA Co-ordinator.

Further information on the reasons for the changes to Unit assessment support, and guidance on the next steps to take, is provided below. This information was also communicated to centres in August 2015.

Subject	Reason for change	Next steps for centres
Chemistry National 3	<p>Unit assessment support packs have been revised to make them more consistent both across the level and between levels.</p> <p>In some cases the layout has been reformatted and clarification has been added throughout the documents, based on feedback from centres and issues identified through verification.</p> <p>For all Unit assessment support packs, the amendments include:</p> <ul style="list-style-type: none"> • Minor amendments to wording and formatting throughout the document to increase clarity. • Repetition removed from the 'assessment' and 'assessment conditions' sections. • Clarification that when assessment is oral, assessor questions and comments are required in addition to candidate responses. • Clarification that the assessment of a particular Assessment Standard cannot be split between activities. • Outcome 1 — an example of a suitable template has been included. • Assessment Standard 1.3 — clarification of the requirement for processing and presenting and of the particular requirements if graphing packages are used. • Assessment Standard 1.5 — requires evaluation of procedures or one improvement. • Assessments Standard 2.1 — clarification that 50% in each key area is not required and that key areas cannot be split across assessment activities. <p>The following specific amends have been made.</p> <ul style="list-style-type: none"> • H21G 73 <i>Chemical Changes and Structure</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — slight changes to the following 2.1 and 2.4 questions: question 2, 3, 6, 7a — clarification added to marking guidance • H21J 73 <i>Nature's Chemistry</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — clarification added to marking guidance • H21L 73 <i>Chemistry in Society</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Assessment Standards 2.1 and 2.4 — minor amendment to question 3b — clarification added to marking guidance • Chemistry package 2: combined approach <ul style="list-style-type: none"> — minor changes to the 2.1 and 2.4 questions: <i>Chemical Changes and Structure</i> — 6b and 6c; <i>Nature's Chemistry</i> — 2 and 3; <i>Chemistry in Society</i> — 3 — clarification added to marking guidance 	Centres are advised to download new copies of the revised documents.

Chemistry National 4	<p>Unit assessment support packs have been revised to make them more consistent both across the level and between levels.</p> <p>In some cases the layout has been reformatted and clarification has been added throughout the documents, based on feedback from centres and issues identified through verification.</p> <p>For all Unit assessment support packs, the amendments include:</p> <ul style="list-style-type: none"> • Minor amendments to wording and formatting throughout the document to increase clarity. • Repetition removed from the assessment and assessment conditions sections. • Clarification that when assessment is oral, assessor questions and comments are required in addition to candidate responses. • Assessment Standard 1.3 — clarification in terms of the requirement for correct units. • Assessment Standard 1.4 — clarification of the requirement for processing and presenting and the particular requirements if graphing packages are used. • Assessment Standard 1.6 — requires evaluation of procedures or one improvement. • Assessments Standard 2.1 — clarification that 50% in each key area is not required and that key areas cannot be split across assessment activities. <p>The following specific amends have been made.</p> <ul style="list-style-type: none"> • H21G 74 <i>Chemical Changes and Structure</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — slight changes to the following 2.1 and 2.4 questions: question 1 graph and 1c; question 4 picture; question 6 solubility table — clarification added to marking guidance — Outcome 1 — suggested experiments modified — Assessment Standards 2.2 and 2.3 —suggested research investigations modified • H21J 74 <i>Nature's Chemistry</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Assessment Standards 2.1 and 2.4 assessment — question 3 numbering changed — Assessment Standards 2.1 and 2.4 marking guidance updated • H21L 74 <i>Chemistry in Society</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Assessment Standards 2.1 and 2.4 marking guidance updated • Chemistry package 2: combined approach <ul style="list-style-type: none"> — <i>Chemical Changes and Structure</i>: question 1a has been separated into two parts; question 4 — 'more acidic' removed as a correct response — <i>Nature's Chemistry</i>: question 1aii — 'breathing' is not a correct response; question 2 — headings in the table corrected; question 3b — 'dies' is not a correct response; question 4 	Centres are advised to download new copies of the revised documents.
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	<p>changed from 'describe' to 'name a process'</p> <ul style="list-style-type: none"> — <i>Chemistry in Society</i>: question 1 a & b — wording of the questions has been changed; question 6 — changed from 'describe' to 'state what could be used' 	
Chemistry National 5	<p>Unit assessment support packs have been revised to make them more consistent both across the level and between levels.</p> <p>In some cases the layout has been reformatted and clarification has been added throughout the documents, based on feedback from centres and issues identified through verification.</p> <p>The removal of Assessment Standards 2.2 and 2.3 will reduce the volume of assessment required for National 5.</p> <p>For all Unit assessment support packs, the amendments include:</p> <ul style="list-style-type: none"> • Assessment Standards 2.2 and 2.3 have been removed. Assessment Standard 2.4 becomes 2.2. • All tasks and activities have been amended to reflect this change and the recording documentation has been amended. • Clarification to Outcome 1 including: <ul style="list-style-type: none"> — Assessment Standard 1.1 — clarification that the words dependent and independent variable are not required — calculating averages moved from Assessment Standard 1.3 to 1.4 — Assessment Standard 1.4 — requirement for processing and presenting and particular requirements if graphing packages have been used — key, diagram and flow chart formats, summary removed from Assessment Standard 1.4 — Assessment Standard 1.6 amended for clarity — repeating measurements and calculating averages added to candidate guide — recommendation for prior verification if significant changes are made to the Assessment Standard 2.1 questions <p>The following specific amends have been made:</p> <ul style="list-style-type: none"> • H21G 75 Chemical Changes and Structure package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — clarification to Outcome 2 including: <ul style="list-style-type: none"> question 5b has been removed and 4d added — clarification regarding which numerical answers require units — marking guidance and grid amended • H21J 75 Nature's Chemistry package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — repeating measurements and calculating averages added to candidate guide — question 4 — change to stem of question • H21L 75 Chemistry in Society package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Assessment Standard 2.1: slight changes to the numbering of the questions 	Centres are advised to download new copies of the revised documents.

	<ul style="list-style-type: none"> — clarification to the marking guidance for some questions • Chemistry package 2: combined approach <ul style="list-style-type: none"> — repeating measurements and calculating averages added to candidate guide — Assessment Standard 2.2 — question changed significantly — Assessment Standard 2.1 questions — clarification to the marking guidance 	
Chemistry Higher	<p>Unit assessment support packs have been revised to make them more consistent both across the level and between levels.</p> <p>In some cases the layout has been reformatted and clarification has been added throughout the documents, based on feedback from centres and issues identified through verification.</p> <p>For all Unit assessment support packs, the amendments include:</p> <ul style="list-style-type: none"> • Minor amendments to wording and formatting throughout the document to increase clarity and for consistency and style across other Unit assessment support packs. • Clarification that when assessment is oral, assessor questions and comments are required in addition to candidate responses. • Assessment Standards updated as follows: <ul style="list-style-type: none"> — Assessment Standard 1.1 — requirement for a hypothesis removed — Assessment Standard 1.3 — clarification in terms of the requirement for correct units — Assessment Standard 1.4 — clarification of the requirement for processing and presenting and the particular requirements if graphing packages are used — Assessment Standard 1.6 — requires evaluation of procedures or two improvements <p>The following specific amends have been made:</p> <ul style="list-style-type: none"> • H4KH 76 <i>Chemical Changes and Structure</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Assessment Standard 2.1 — assessment updated in terms of formatting, layout and wording. Periodicity key area questions have been separated from the 'structure and bonding' key area questions which involved changing some question numbers — question 8b(ii) has been modified — Outcome 2 — marking guidance updated — Assessment grid updated — Assessment Standard 2.2 — assessment question 10b average electronegativity value changed to 2.4 • H21J 76 <i>Nature's Chemistry</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Outcome 2 — marking guidance updated — problem solving assessment grid updated — Assessment Standard 2.1 — assessment question 1a(iii) and 6b updated in addition to some layout/formatting/wording changes 	Centres are advised to download new copies of the revised documents.

	<ul style="list-style-type: none"> • H21L 76 <i>Chemistry in Society</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Outcome 2 — marking guidance updated including question 5 to reflect the Fluorine bond enthalpy in the new data book — problem solving assessment grid updated — Assessment Standard 2.1 — question 9a changed — Assessment Standard 2.1 — minor formatting changes made to questions 1, 4, 6 and 10 • H4KK 76 <i>Researching Chemistry</i> package 1: Unit-by-Unit approach <ul style="list-style-type: none"> — Assessment Standard 2.2 — clarification of the requirement for units • Chemistry package 2: combined approach <ul style="list-style-type: none"> — Outcome 2 — marking guidance updated — Assessment Standard 2.1 questions — minor changes — repeating measurements and calculating averages added to candidate guide — additional details showing what an evaluation could include — clarification in terms of annotating candidate evidence with where Assessment Standards have been met and the need to reference this clearly on recording documentation • Chemistry package 3: portfolio approach <ul style="list-style-type: none"> — Assessment Standard 2.1 — clarification in terms of 50% in each key area not being required — clarification in terms of annotating candidate evidence with where Assessment Standards have been met and the need to reference this clearly on recording documentation — <i>Researching Chemistry</i>: Assessment Standard 2.2 — clarification of the requirement for units. 	
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Unit assessment support materials are available from our secure website and you can arrange access to them through your SQA Co-ordinator. To find out more about using our Unit assessment support packs, visit www.sqa.org.uk/unitassessment

National 5 and Higher Coursework information

The National 5 and Higher Chemistry Assignment Marking Instructions were updated during main Diet 2015 to provide further clarity to assist Markers and to benefit candidates. The National 5 and Higher Chemistry Coursework Assessment Task and General Assessment Information documents have been updated to reflect these revisions.

Advanced Higher documents

In April and May 2015, we updated the mandatory documents and Course/Unit Support Notes for Advanced Higher. You can also view the Notification of changes spreadsheets for National 3 to Higher, and Advanced Higher at www.sqa.org.uk/cfesubjectchanges

Advanced Higher Exemplar Question Papers

In December 2015, we will publish Exemplar Question Papers for all new Advanced Higher Courses that include a question paper as part of the Course assessment.

Coming up in 2015–16

Understanding Standards 2015–16

From the end of October 2015, we will publish further Understanding Standards packs for National 1 to Higher. These packs contain candidate evidence and commentaries for Unit assessment and internally assessed Components of Course assessment.

From November 2015 to January 2016, we will hold subject-specific Understanding Standards events for teachers and lecturers. The main focus of these events will be on Course assessment at Higher. Understanding Standards events for Higher Chemistry will take place on the following dates:

- 5 November Inverness
- 13 November Aberdeen
- 27 November Glasgow
- 10 December Edinburgh
- 5 December Stirling

Materials from the recent Nominee training events will also be published on our website. For more information, visit www.sqa.org.uk/understandingstandards. Details of the Understanding Standards materials for each subject are available from the [subject pages](#)

National 4 Added Value Units

You now have the option of developing your own National 4 Added Value Unit assessments for use with candidates.

Please note that this is not a requirement and you can continue to use SQA-produced Added Value Unit assessments. Most SQA-produced Added Value Unit assessments already allow considerable flexibility in the choice of a context for the assessment, while some provide a context that you can change.

If you choose to develop your own Added Value Unit assessment, we strongly advise submitting it to us for prior verification before using it with candidates. Further information can be found at www.sqa.org.uk/unitassessment

Marker recruitment opportunities for 2016

We are now accepting Marker applications from teaching professionals to contribute to the 2016 examination diet. If you are interested in joining us as a Marker please visit the [appointee opportunities section of our website](#) where you will find a marker advert for all subjects and levels, with details of the role.

Our current Markers will confirm to you that the experience of marking helps increase their awareness of the demands of Course assessment and that marking is excellent professional and personal development.

Please check www.sqa.org.uk/appointees regularly for other appointee opportunities which may be of interest to you.

Contact us

For centre enquiries, please contact our Customer Support Team:

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