



NQ verification 2023–24 round 1 and 2

Qualification verification summary report

Section 1: verification group information

Verification group name:	Environmental Science
Verification activity:	Event
Date published:	July 2024

National Units verified

Unit code	Unit level	Unit title
H24P 73	National 3	Environmental Science: Living Environment
H24R 73	National 3	Environmental Science: Earth's Resources
H24S 73	National 3	Environmental Science: Sustainability
H24P 74	National 4	Environmental Science: Living Environment
H24R 74	National 4	Environmental Science: Earth's Resources
H24S 74	National 4	Environmental Science: Sustainability
H24T 74	National 4	Environmental Science: Added Value Unit
J25Y 75	SCQF level 5	Environmental Science: Living Environment
J261 76	SCQF level 6	Environmental Science: Living Environment
J264 76	SCQF level 6	Environmental Science: Earth's Resources
J266 76	SCQF level 6	Environmental Science: Sustainability

Section 2: comments on assessment

Assessment approaches

Almost all centres had used the most recently published SQA unit assessment support (UAS) packs for assessing candidates.

Please be aware that centres must not use previously published SQA exam questions in the assessment. Unit assessments must be secure and unseen to candidates, so it is not appropriate to use past paper questions. Past paper questions may also contain grade A marks, which are not suitable for inclusion in a unit assessment.

A number of centres had marked their submission as complete, although it did not include evidence for outcome 1. Centres are reminded that candidates must pass both outcome 1 and outcome 2 to pass a unit, although an experimental report covering outcome 1 from any unit is transferable between the units, with the exception of the National 4 Added Value Unit.

Assessment judgements

Assessors had, in general, made assessment judgements in line with national standards.

Some centres had annotated the marking instructions with additional alternative responses to the marking instructions to show alternative answers that are acceptable or not acceptable. The UAS marking instructions are not exhaustive and centres are encouraged to annotate them, as this aids consistency between assessors and internal verifiers within a centre. Centres should make sure that any annotations are correct scientifically.

Most centres used the holistic approach of applying marks and a cut-off score of 50% to the assessment of outcome 2. This is by far the easiest approach to administer and internally verify, and all centres are encouraged to adopt this approach.

A small number of centres had separated the marks for assessment standards (AS) 2.1 and 2.2, which is only acceptable if each of the problem-solving skills for AS 2.2 is judged individually. However, in most cases the internal verifier had changed this to use the 50% cut-off score across the two assessment standards.

Of the small number of centres that took the more atomistic approach, one or two had grouped the marks for AS 2.2 together and applied a 50% cut off, which is not a valid approach. They also had not given the candidates the opportunity of answering the questions for all problem-solving skills (AS 2.2) or for all of the key areas (AS 2.1). Where a centre is taking the more atomistic approach to assessment, they must still give candidates the opportunity to attempt the questions for each key area and each problem-solving skill.

Some questions in the UAS packs specify that the answer must be appropriate to the previous part of a question. In these questions, an answer in the second part of the question that does not relate to the first part cannot be awarded the mark. However, where a candidate gives an answer to the first part that is incorrect and then gives an answer to the second part that is consistent with their previous incorrect answer, they may be awarded the second mark. This ensures a candidate is not penalised twice for the same mistake.

Some centres had included evidence for outcome 1 for verification. Most centres had applied the judging evidence criteria correctly. However, some centres did not apply the criteria for each assessment standard correctly, in particular for AS 1.1, 1.3, 1.4, and 1.6.

For AS 1.1, an aim must be specific; sometimes a vague aim was incorrectly awarded the standard.

Some candidates had not included any raw data and so could not achieve AS 1.3, but some centres awarded a pass for this assessment standard despite the lack of data.

Where raw data is not included, AS 1.4 cannot be awarded as it is not possible to check whether the data has been correctly plotted.

Centres are reminded that when a candidate draws a graph, it must either be drawn using a computer graphing package or using graph paper. Drawing a graph on blank paper, or squared paper, is not appropriate as the accuracy of the plotting cannot be determined. Centres are also reminded that when computer graphing packages are used to produce a graph, the candidate must include both major and minor gridlines for the assessment standard to be awarded. Centres are reminded that when a candidate includes a line of best fit, it must be appropriate to the data.

When a candidate states an aim that contains multiple parts, the conclusion must apply to all parts of the aim for the appropriate assessment standard to be awarded.

Some centres had incorrectly given candidates a template for National 4 outcome 1. Centres are reminded that at National 4 level and above, candidates must only be given the 'Assessment information for candidates' and not a template. At National 3, a template for outcome 1 may be given to the candidates.

Evidence for the National 4 Added Value Unit was generally to a good standard and assessed appropriately.

To award a mark for the conclusion, the assessor must ensure the conclusion refers to all data in the communication (report, conference poster, PowerPoint presentation, leaflet). Some candidates had processed data from graphs into tables, and centres are reminded this is valid, so long as it is possible to determine accurate values from the graph. Where the evidence submitted is the slides from a PowerPoint presentation, centres are reminded that speaker notes should be included too.

Section 3: general comments

Centres must confirm at the start of the year that they are using the most up-to-date assessments if they are using the UAS packs.

If a centre decides to adapt a UAS pack significantly, the adapted assessment should be submitted to SQA for prior verification before it is used. This helps ensure that candidates are not assessed using invalid assessment instruments.

When centres are using the approach of allocating marks and a cut-off score, they must make sure to total the number of marks awarded correctly.

There is no need to internally verify all evidence. An appropriate sample can be verified. The internal verification was generally good. Many centres showed a high level of annotation on candidate evidence, showing rigorous internal verification. Where the assessor and the internal verifier do not agree, the final decision must be made clear. Both the assessor and the internal verifier must be aware of the standard of answer expected for each level of qualification, and both must be aware that the marking guidance is not meant to be exhaustive and can be annotated by the centre.