



## Course Report 2015

Subject	Environmental Science
Level	Higher

The statistics used in this report have been compiled before the completion of any Post Results Services.

This report provides information on the performance of candidates which it is hoped will be useful to teachers, lecturers and assessors in their preparation of candidates for future examinations. It is intended to be constructive and informative and to promote better understanding. It would be helpful to read this report in conjunction with the published assessment and marking instructions for the examination.

# Section 1: Comments on the Assessment

## Summary of the Course assessment

It is important to note that the number of centres presenting candidates this first year of the course was low (9), and the number of candidates completing the assessments was also low (80). Therefore, the statistics should be treated with caution on this occasion. As candidate numbers increase in future years, the statistics will provide a better reflection of candidate performance. Therefore, where possible, the following comments are based primarily on marker reports and discussions during the marking process.

## Component 1: Question Paper (100 marks)

The restricted response section (Q1–9) included questions with a range of marks, allowing candidates to demonstrate their knowledge and understanding of the topics rather than straight recall.

The extended response section (Q10–11) included both structured and unstructured questions, allowing candidates the opportunity to demonstrate the depth of their knowledge and understanding of the topics.

Marks for each response were assigned in line with the Detailed Marking Instructions. Where there was dubiety over a response or an innovative response was provided, these were discussed by the marking team and a collective decision was made whether to accept or reject the response.

In the restricted response section, two questions were clearly problematical for candidates: Q3 (on baryte) and Q7 (on weather and climate variability). On reflection, it was felt by the markers that candidate responses suggested that the wording for one part of Q7 was ambiguous. This was further discussed at the grade boundary meeting, resulting in the grade boundary being reduced by one mark. No adjustment was made for Q3 as the questions covered mandatory content as laid out in the Course Assessment Specification (CAS).

The majority of candidates opted to answer Q10B (reintroduction of nationally extinct species) and Q11A (waste management legislation). Overall, candidates fared much better on Q10 than Q11, and significantly better than the other options.

## Component 2: Assignment (20 marks)

Marks for each response were assigned in line with the SQA's General Marking Principles and Detailed Marking Instructions.

It should be remembered that only a small number of centres presented candidates this year, some presenting significant cohorts of candidates and others with only a few. Comments given here may apply to a single centre or be common across the board, but are intended to be supportive and to help improve the candidate experience in future years.

In general, the assignment was not particularly well done, with a mean mark of 8.4.

A report structure is provided in the Marking Instructions and the Candidates Guide, indicating the required content, but the final report does not need to adhere to this structure. However, assignment markers felt that this added significantly to the marking time, as they often had to read through a report several times to check that each component had been appropriately marked, since a significant proportion of the candidates did not follow the recommended structure.

As a new assessment component it was anticipated that some centres might experience some issues with the assignment, especially those centres which had not previously delivered National 5 Environmental Science. Some centres did very well, but it was evident that candidates in other centres had made poor choices when selecting a suitable topics. In addition, it appears that a few centres had not fully understood the assignment brief. The feeling of the marking team was that candidates at these centres had been significantly disadvantaged by this. An adjustment of two marks was made at the grade boundary meeting for this component.

## **Section 2: Comments on candidate performance**

### **Summary of candidate performance**

Although this is a new course, there is some overlap with Higher Managing Environmental Resources (MER). It had been assumed that the majority of candidates would have prior Intermediate 2 MER or National 5 Environmental Science knowledge but, interestingly, 95.1% of candidates were new to the subject and 69.5% were S6 pupils.

Environmental Science is a multi-discipline course, and anecdotal evidence suggested that it was likely to be delivered predominantly by Biology and/or Geography teachers rather than specialist Environmental Science teachers. This mix of disciplines was fairly evident during marking of both assessment components but especially in the question paper responses, with some candidates often faring better with geography-based questions than biology, and vice versa, presumably reflecting the specialisms of those delivering the classes. Over time, this disparity may level out as teachers become more familiar with topics outside their speciality.

65.1% of candidates achieved Grade A–C, combining the assignment and question paper marks.

As a new course, with new centres presenting and the majority of students unfamiliar with either MER or National 5 Environmental Science, it was difficult to predict how candidates would fare in the assessments. Trends in attainment may take some time to become evident, as more centres are already showing an interest in delivering Environmental Science and candidate numbers will therefore increase in the coming years.

## Component 1: Question paper (100 marks)

Overall, the question paper performed as expected for a new course, with a mean mark of 55. Results analysis in future years will highlight trends (hopefully improvements) in candidate knowledge and understanding of Environmental Science, and in problem solving skills. The comments below summarise where attention should be focused for improvement based on this question paper. More detailed comments can be found in sections 3 and 4.

As mentioned in Section 1, the majority of candidates found two questions to be particularly demanding.

- ◆ Question 3 focused on formation, extraction and uses of baryte, with a calculation. Candidates mostly struggled with baryte formation, the role of weathering in forming viable baryte deposits, and use of barium sulfate in oil drilling,
- ◆ Question 7 dealt with changes in rainfall patterns and climate variability. It was clear that a significant number of candidates were confused about the difference between weather and climate, and also about how natural factors can contribute to climate variability. Adjustment of 1 mark was made at the Grade Boundary Meeting for 7(b)(i), which elicited responses relating to rainfall rather than climate variability from the majority of candidates, and following marker team debate about whether the question phrasing might account for this.

Candidates performed poorly in the two calculation questions, with only 28% achieving in Q3 and 23% in Q4. Neither calculation was judged to be particularly complex for Higher-level study but candidates may have been thrown by the use of large values in both calculations. It was also evident that some candidates struggled with percentage change calculations.

Graph work was not particularly well done overall, with only 58% of candidates awarded both marks. Candidates missed marks due to use of inappropriate scales (both axes) and for inaccurate plotting of points. This was a fairly basic graph, with labels provided, and candidates should be aware that in future question papers they might be provided only with a grid and asked to fully complete the graph.

Extended response questions produced a 'mixed bag' of results.

- ◆ Most candidates (83%) answered Q10B (reintroduction of native species), with a mean achievement of 6.15 marks out of 10, while Q10A (impact of non-native species) resulted in a mean of 4.36.
- ◆ Question 11 was not so well done, with a mean of 3.16 for Q11A (waste legislation) and 3.75 for Q11B (climate change/renewable energy policy). However, a significant number of candidates either did not attempt Q11 at all or made only a brief attempt. This could have been due to time management or to lack of familiarity with the question topics.

On a positive note, most candidates performed well in the other restricted response questions, sometimes providing lengthy, detailed responses. Use of language, grammar and structure were good in the main, especially for the extended response questions.

## **Component 2: Assignment (20 marks)**

The assignment is a new assessment component and results show that most candidates did not find it straightforward on this occasion. The mean mark was 8.37 with a standard deviation of 4.65, but these statistics do not represent the wide variation in marks across all candidates.

Detailed comments can be found in section 4 but, in the main, candidates appear to have coped fairly well with the aim, selection of data/information, and presentation. Mean results for the other report components are all less than half the available marks. Although the amount of teacher input is limited for the assignment, it is recommended here that candidates be given guidance and practice in report writing prior to the assignment investigation.

Given that a small number of centres presented this year, candidates investigated a good range of topics. Among others, these included rearing and consumption of insect-based protein as an alternative to traditional meats; effects of tourism on the environment in national parks; impact of palm oil production on local biodiversity; footpath erosion; impact of climate change on the incidence of malaria; potential impact of re-introduced wolves on red deer; freshwater invertebrate sampling; and heather moorland treatments.

The majority of reports involved desk-based research but some practical investigations were also undertaken. Whichever approach is used, it is essential that candidates know to include and use data/information from at least two sources; for example, results from a practical investigation might be compared with published data.

Use of language, grammar and structure were good in the main. Although candidates are not required to use the report structure laid out in the candidate guide, it is suggested that they do use this structure, or at least make it very clear when they switch from one section to another. Essay format was used by some candidates, and assignment markers often found these more difficult to mark. It is also suggested that candidates add in an 'introduction' section in which they demonstrate their knowledge and understanding of the environmental science underpinning their chosen topic.

## **Section 3: Areas in which candidates performed well**

### **Component 1: Question paper**

A number of questions included topics or contexts not included in the mandatory content for Higher Environmental Science, requiring candidates to think laterally and apply their knowledge to new situations. In general, most candidates coped well with this.

**Question 1** Candidates performed well in general with this question.

- Q1 (b)(i) Those candidates with geography knowledge were likely to have covered this topic in depth, and this was evident in technical terms used in some responses. Those without such detailed knowledge who answered the question correctly but in more basic terms were awarded marks as

appropriate. Most candidates coped well with drawing conclusions from the three graphs.

- Q1 (b)(ii) Candidates were able to make the link between land use change and its impact on river discharge, with some good innovative responses.

#### **Question 2**

- Q2 (b) Most candidates generally coped well with this question in terms of discussing improvements, though there was often confusion over the difference between validity and reliability.

- Q2 (c)(i) The majority of candidates knew how to calculate a simple whole number ratio.

#### **Question 4**

- Q4 (d) Most candidates performed well with this question, particularly the environmental benefits of the circular economy, which is likely to have been a new approach for the majority.

#### **Question 5**

- Q5 (a) Candidates generally know about how pesticides enter ecosystems, their impacts on organisms, and alternatives to pesticide use. However, there was often obvious confusion about the difference between bioaccumulation and biomagnification, with biomagnification responses (5(c)(i)) performing significantly better than bioaccumulation.

#### **Question 6**

- Q6 (a) The question asked for a description of the general trend shown on the graph, and most candidates described this well and were also aware of the reasons behind the increased emissions.

- Q6 (b) Candidate responses were almost all related to natural effects (an acceptable response), but scientific uncertainty could also be considered.

- Q6 (c) Slow steaming and new ship design standards are not included as mandatory content, but candidates coped very well with these questions, which required them to use their knowledge to solve problems. Good lateral thought was demonstrated.

- Q6 (d) Almost all candidates were aware of the need for environmental assessment.

#### **Question 8**

Candidates performed well in questions on the EU CAP. Responses relating to both the old and new CAP reforms were accepted but it is expected that over time there will be more focus on teaching the post-2013 reforms. Responses relating to the Scottish Rural Development Programme (SRDP)

were also accepted as this is largely the Scottish Government's response to CAP reforms.

### **Question 9**

Q9 (b) Candidates demonstrated good knowledge of the extraction and pros and cons of shale gas, but knowledge of shale gas formation was often poor.

### **Question 10**

Q10 was a structured extended response question, with a move away from the traditional approach of awarding a set number of marks for each section. This provided the opportunity to credit candidates who may demonstrate more knowledge of one section than the other, though a maximum number of marks was allocated in the marking instructions for each section.

Most candidates opted for 10B and performed well, with many focusing on the negatives of re-introduction of nationally extinct species rather than why we maybe should reintroduce a species.

Language and style used were good in the main, with full responses and minimal use of bullet points.

## **Component 2: Assignment**

In general, candidates who were awarded high marks for the assignment came from a very limited number of centres, and the mark allocation tended to be high across all components of the report. The focus will therefore be on areas which candidates found challenging.

## **Section 4: Areas which candidates found demanding**

### **Component 1: Question paper**

**Question 1** Although this question performed well in general, there are a couple of points to comment on.

Q1 (a)(i) A number of candidates appeared to have issues either with terminology such as 'subterranean' and/or perhaps with the hydrological cycle in general.

Q1 (a)(ii) Most candidates opted for process B and named and described the process satisfactorily. Very few opted for A, and those who did were often only partially correct, able to name but not describe the process (or vice versa). Anecdotal evidence suggests that sublimation may not traditionally be taught as part of the hydrological cycle (in geography); however, it is included in the mandatory content for this course.

## Question 2

- Q2 (a) While land use change was answered well in a previous question, candidates appear not then to have made the link with the need to manage land use change and ways in which this management can help protect species at risk from human activities.
- Q2 (b) Markers commented that reliability rather than validity is taught in science subjects in schools, usually in relation to experimental work. The focus on reliability in the responses seems to support this. The mandatory content for this course specifically states that both reliability and validity of results should be considered in the importance of randomisation and statistical analysis in sampling, so centres should take steps to ensure both are covered in teaching.
- Q2 (c)(iii) While the majority of candidates completed the graph satisfactorily, a significant number of candidates used inappropriate scales, plotted points inaccurately, or did not notice the change in interval for the year and therefore plotted the points incorrectly.

SQA science marking guidelines allow for occasional plotting error, with a  $\pm\frac{1}{2}$  box tolerance and  $\geq 90\%$  of processing should be correct.

**Question 3** In general, most candidates did not perform well across this question. The mandatory content states that formation, discovery, extraction and uses of baryte, including oil drilling and biomedical imaging, should be covered. However, it appears that some centres had not covered this topic in much depth.

- Q3 (a) Baryte forms in many different ways and reasonable responses were accepted. A number of candidates referred to the role of volcanism in the formation process but marker research into this did not reveal direct links to volcanoes and so these responses were not accepted.
- Q3 (b) The percentage change calculation was either not attempted or not answered correctly by the majority of candidates. Although large values were involved, the calculation was still fairly straightforward.
- Q3 (c) Most candidates struggled with this crossover with the biosphere unit. The key process was weathering (predominantly chemical) of underlying baryte-rich parent rock.
- Q3 (d) Responses indicate that while candidates were well acquainted with use of barium sulfate in biomedical imaging, they were less clear about its use in oil drilling.

## Question 4

- Q4 (a) Most candidates were able to provide one factor that would be considered in a life cycle analysis (LCA) but struggled to come up with a second. An LCA

should consider all energy, materials and transport involved in product, from extraction of raw materials through to disposal.

- Q4 (b) As with other calculations, most candidates either incorrectly completed or did not attempt or this question.

### **Question 5**

- Q5 (a)(ii) Candidates coped well in general with biomagnification (Q5(c)(i)) but appear to have struggled with the initial bioaccumulation ie how it builds up in the body over time. These are two distinct processes and it may help to cover them separately when teaching as confusion between the two was apparent.

- Q5 (b) Energy transfer & loss was not covered satisfactorily by the majority of the candidates and/or responses were very convoluted.

- Q5 (c)(ii) Many candidates appear to have been confused about the difference(s) between endotherms and ectotherm, and the energy implications of each in a food chain.

### **Question 7**

- Q7 (b) The majority of candidates focused on weather rather than climate variability, with some treating them as the same thing. Discussion of how a named natural factor contributes to climate change was poor in general, either in naming a factor or in describing its impact.

### **Question 9**

- Q9 (a) While the extraction of shale gas was covered satisfactorily (albeit frequently only partially) by most candidates, the majority were unable to discuss the formation of this fossil fuel appropriately.

- Q9 (b) Most candidates were aware of objections to shale gas extraction, but not why governments would want to extract it even in light of fossil fuel/greenhouse gas concerns. Centres should ensure coverage of the continued dependency on fossil fuels but also the increasing emphasis on use of renewable energy sources in the future and the need to reserve fossil fuels for essential applications.

- Q9 (c) Candidates tend to struggle with legislation, policies, initiatives etc, and this was evident when asked to name a land designation used for conserving geology. Suggested pieces of legislation are kept to a minimum in the mandatory content but SSSI is one that is named. Some candidates stated the Fossil Code but this is a piece of guidance rather than a legal designation; similarly a Geopark is not supported by legislation.

- Question 11** Q11 was an unstructured extended response question, with an option of discussing either waste management (Q11A) or climate change policy/legislation (Q11B).

The majority of candidates opted for Q11A and overall marks for this question were higher than those achieved for Q11B. It was noticeable that a significant number of candidates either did not start or did not make much attempt at Q11. It is not clear if this was due to time constraints or to lack of knowledge of the topics.

The mandatory content does not include named pieces of waste management or climate change legislation/policy, but centres should ensure that candidates are able to name current examples as necessary.

Language and style used were good in the main, with full responses and minimal use of bullet points.

## **Component 2: Assignment**

Comment has already been made about candidates not being required to use report format, but a logical report structure containing all the required components is shown below as an aid. Use of a similar format would be advantageous both to candidates and to assignment markers.

### **Title (1 of the 2 Presentation marks)**

Some candidates did not include a title and/or treated the title and aim as the same. These should be different and included separately.

### **Aim (1 mark)**

What do I intend to do?

The majority of candidates (83%) satisfactorily stated the aim of their investigation, but the remainder either did not include an aim or the stated aim was not appropriate to the investigation they reported on. Some candidates presented hypotheses, both working and null statements, which was useful in that it demonstrated that they clearly understood the aim of their investigation and also helped with the conclusion: did they achieve the aim and if not, why not?

Some candidates included multiple aims, and each of these must be discussed in the conclusion and therefore have appropriate data/information handling throughout the report. Unless a candidate is very clear about why each aim should be investigated and its overall relevance to the topic, it might be more prudent to focus on just one – or to include several (to demonstrate depth of knowledge) but then select one to be investigated.

It may be more appropriate to place the aim after the introduction (see below) so that there is a flow from broad discussion about the topic through to the specifics of the investigation.

### **Applying knowledge and understanding of Environmental Science/Introduction (5 marks)**

Why is this topic significant to my studies?

Applying knowledge and understanding of the environmental science underpinning the selected topic accounts for a quarter of the available marks, but was often poorly covered (41% of candidates achieved 1-2 marks) or absent altogether (23%), or was scattered throughout the report. On a positive note, 20% of candidates achieved 4–5 marks. Assignment markers awarded marks as appropriate, wherever the evidence was placed, but marking of unstructured reports was often time consuming because of the need to read through a report several times to ensure that marks had been awarded according to the marking instructions.

This element could be adequately covered as a discrete introduction to the report, and it is suggested that encouraging candidates to include an introduction may aid their understanding of what is being looked for in their reports.

### **Selecting information (2 marks)**

What data/information do I need to be able to satisfactorily investigate the topic?

51% of candidates were awarded full marks for this section and 33% achieved half marks. Marks were lost where candidates did not include their raw data/information in the report, only included data/information from one source, or the data/information did not relate to the aim. The data/information should be relevant and sufficient, enabling the candidate to draw a conclusion.

### **Processing and presenting data/information (4 marks)**

How can I use the selected data/information to address my aim/hypothesis?

The overall mean for this section was low at 1.44, and 23% of candidates were awarded 0 marks. This section builds on the inclusion of appropriate data/information (from at least two sources) in the report, and for **both** processing and presenting of that data/information to take place. It is important to note that if either of these is missing then no marks are awarded for this section, a potential loss of a fifth of the available marks. In general, processing and presenting was often only partial eg a table of data but no graph, or vice versa.

Processing data/information could include performing calculations but very few candidates undertook this. Those who did tended to do percentage calculations. Processing could also include summarising (referenced) text but candidates should make sure to make this an obvious process and distinct from the original text.

The most common method used by candidates to process and present data was inclusion of a table of data (present) and conversion of the data into an appropriate graph (process), or vice versa. When doing this, it is important that candidates make it clear which graphic displays the original data; most easily achieved by including a caption and reference (essential). Candidates should include a list of references at the end of their work after the evaluation, and a citation or indicator of some form beside the data/information which allows the marker to cross-reference the two.

17% of candidates were awarded 3–4 marks in this section. To achieve high marks, candidates must ensure that **all** tables, graphs etc are formatted and presented correctly, calculations or processing of information is correct, points on graphs are accurately plotted,

and relevant references are included beside the data. To enable markers to check accuracy of plotting on graphs, candidates should include minor gridlines and use an appropriate size of plotting point ie not overly large.

### **Analysing data/information (2 marks)**

What do my results/findings show?

This section was very poorly completed by most candidates, with 48% awarded 0 marks and only 8% achieving both marks.

Here, candidates should interpret their findings (which may or may not include the processed data). The aim is to identify relationships by considering their results, assessing patterns and trends or other appropriate analysis.

### **Conclusion (1 mark)**

Do my findings support my aim/hypothesis?

Conclusions were often very basic or brief, typically not summarising the findings and/or relating back to the aim. 55% of candidates failed to achieve this mark.

It is not enough for the candidate to simply state that the aim has/has not been achieved. They must discuss why this was the case. Some candidates included multiple aims, in which case a conclusion must be provided for each aim.

### **Evaluation (3 marks)**

What might have had an impact (positive or negative) on my findings?

54% of candidates failed to achieve any marks in this section, either because an evaluation was missing or because it was too basic or inappropriate. Only 4% of candidates gave a full evaluation of their investigation.

Candidates should judge their investigation using criteria such as robustness of findings, validity of sources, reliability of data/information, or evaluation of their investigative procedure.

Most candidates focused on validity and reliability of sources of data/information, discussing the source type (eg a scientific journal, general website, textbook) and why the data/information might/might not be appropriate, biased, reliable, robust etc.

Some centres conducted practical investigations, and candidates then evaluated the procedure(s).

### **Presentation (2 marks)**

Have I written my report in an appropriate style and structure, and clearly shown where I obtained my data/information?

Most candidates achieved marks in this section, but 37% were not awarded any marks. It is recognised that resource availability (eg appropriate supervision) meant that some candidates completed the communication stage of their assignment under exam conditions, and this could have impacted on style and structure. Presentation was fair in general but some candidates presented essays rather than reports, while others included sub-headings but in random order.

One of the marks available here is awarded for appropriate title and structure, both of which have already been discussed. The other mark is awarded for listing the references at the end of the report. Some candidates included their data/information notes as appendices, and it is important to note that the reference list should be inserted **before** these — appendices are additional to the report. Where references were added after the appendices, no mark was awarded.

References should be given in full (including full URLs for websites) and at least two sources of information should be provided to gain this mark. These should be for different sources of information/data, for example two links to Wikipedia would only count as one source.

### **Appendix**

There is no requirement for candidates to include the notes they use to write their report, and it is unlikely that markers will look at them as all relevant data/information, graphics and source references should be included in the report. However, if candidates wish to include these, they should be clearly labelled as an Appendix and placed at the end of the report after the reference list.

## **Section 5: Advice to centres for preparation of future candidates**

### **Component 1: Question paper**

Centres should now have access to a range of Higher Environmental Science question papers (two specimen papers and the 2015 question paper), and may also find Higher MER, Biology and Geography past papers of value for exam revision. Candidates may also find it useful to have access to a copy of the 3-column table showing mandatory content, which can be found in the Course and Unit Support Notes.

A range of different question types has been included in the restricted response section of the question paper, some asking for 1-mark responses and others for 3–4-mark responses. While some questions are only seeking short responses (command word: state, name, identify, describe), others are inviting candidates to demonstrate their knowledge and understanding, and sometimes to apply these to new situations (command word: explain, discuss, suggest). Candidates should be encouraged to provide in-depth responses where possible, using the stated mark allocation as a guide.

Candidates should be encouraged to practice calculations and graph preparation.

Candidates should be encouraged to practice exam time management to ensure they have enough time to complete the paper, particularly the extended response questions.

## **Component 2: Assignment**

It is recommended that candidates be given practice in report writing prior to starting the assignment so that, read in conjunction with the candidate guide, they are fully aware of the required content.

Although not a requirement, it is highly recommended that candidates use a report format with a logical structure such as outlined in section 4. It is also suggested that they include an introduction section at the start of the report in which they outline the underpinning environmental science. If they opt to use an essay format instead, they should make changes in required content obvious in their paragraph structure.

Investigations may be desk-based or practical but all should be written up as investigative reports and not simply as lab reports. Candidates should make sure to introduce and make use of data/information from at least two sources, and to reference these sources both within and at the end of the report.

## Statistical information: update on Courses

Number of resulted entries in 2014	0
Number of resulted entries in 2015	83

## Statistical information: Performance of candidates

### Distribution of Course awards including grade boundaries

Distribution of Course awards	%	Cum. %	Number of candidates	Lowest mark
Maximum Mark - 120				
A	13.3%	13.3%	11	81
B	21.7%	34.9%	18	69
C	30.1%	65.1%	25	57
D	14.5%	79.5%	12	51
No award	20.5%	-	17	0

For this Course, the intention was to set an assessment with grade boundaries at the notional values of 50% for a Grade C and 70% for a Grade A. A 2 mark adjustment was made for the assignment as it was agreed that there was a general insufficiency in support for centres for this component in relation to the support available for the other sciences. A 1 mark adjustment was made for Q7(b)(i) due to the wording not being as clear as it could have been and therefore the question did not function as intended.

## General commentary on grade boundaries

- ◆ While SQA aims to set examinations and create marking instructions which will allow a competent candidate to score a minimum of 50% of the available marks (the notional C boundary) and a well prepared, very competent candidate to score at least 70% of the available marks (the notional A boundary), it is very challenging to get the standard on target every year, in every subject at every level.
- ◆ Each year, SQA therefore holds a grade boundary meeting for each subject at each level where it brings together all the information available (statistical and judgemental). The Principal Assessor and SQA Qualifications Manager meet with the relevant SQA Business Manager and Statistician to discuss the evidence and make decisions. The meetings are chaired by members of the management team at SQA.
- ◆ The grade boundaries can be adjusted downwards if there is evidence that the exam is more challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ The grade boundaries can be adjusted upwards if there is evidence that the exam is less challenging than usual, allowing the pass rate to be unaffected by this circumstance.
- ◆ Where standards are comparable to previous years, similar grade boundaries are maintained.
- ◆ An exam paper at a particular level in a subject in one year tends to have a marginally different set of grade boundaries from exam papers in that subject at that level in other years. This is because the particular questions, and the mix of questions, are different. This is also the case for exams set in centres. If SQA has already altered a boundary in a particular year in, say, Higher Chemistry, this does not mean that centres should necessarily alter boundaries in their prelim exam in Higher Chemistry. The two are not that closely related, as they do not contain identical questions.
- ◆ SQA's main aim is to be fair to candidates across all subjects and all levels and maintain comparable standards across the years, even as arrangements evolve and change.