

GCSE Geology

Consultation on Conditions and guidance



January 2016

Ofqual/16/5827

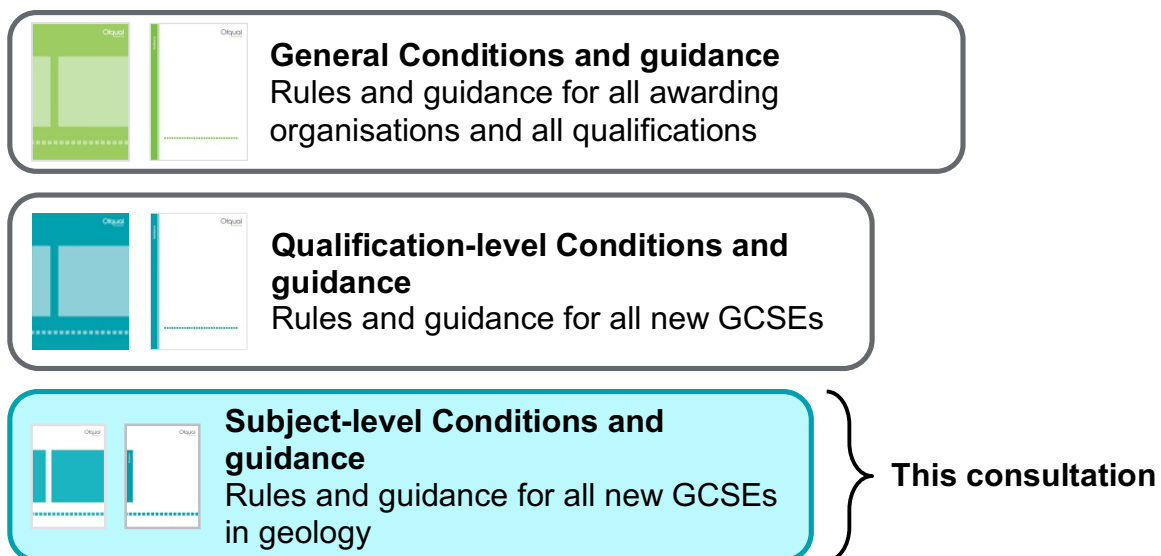
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1. Introduction

- 1.1 As most readers will know, changes are being made to GCSEs, AS and A levels taken by students in England. New GCSE qualifications in geology will be taught in schools from September 2017.
- 1.2 The Department for Education (DfE) published the subject content¹ for GCSE geology in December 2015.
- 1.3 Following our consultation on assessment arrangements for these subjects, we confirmed² in December 2015 that new GCSEs in geology will:
- be assessed entirely by examination; and
 - not be tiered
- 1.4 We also confirmed the assessment objectives for GCSE geology.

Scope of this consultation



- 1.5 This consultation builds on our – and the DfE’s – earlier decisions. It seeks views on the subject-specific rules and guidance we should put in place for GCSE geology.
- 1.6 As explained in Appendix A, and illustrated in the figure above, these new rules and guidance will sit alongside our existing rules and guidance for

¹ www.gov.uk/government/publications/gcse-geology

² www.gov.uk/government/consultations/development-of-new-gcse-and-a-levels-for-teaching-from-2017

- all qualifications,³ and
- all new GCSE qualifications.⁴

1.7 This document sets out, and seeks views on:

- our proposed approach to regulating new GCSEs in geology; and
- the subject-specific Conditions, requirements and guidance we propose to introduce to implement that approach.

³ www.gov.uk/guidance/awarding-organisations-understanding-our-regulatory-requirements#requirements-for-all-awarding-organisations-and-all-regulated-qualifications

⁴ www.gov.uk/government/collections/gcses-9-to-1-requirements-and-guidance

How to respond to this consultation

The closing date for responses is **26 February 2016**.

Please respond to this consultation in one of three ways:

- Complete the online response at <https://www.surveygizmo.com/s3/2567215/gcse-reform-regulations-for-geology>
- Complete the consultation questions at the end of this document and email your response to consultations@ofqual.gov.uk. Please include the consultation title (GCSE Geology Consultation 2016) in the subject line of the email and make clear who you are and in what capacity you are responding
- Post your response to: GCSE Geology Consultation 2016, Ofqual, Spring Place, Coventry Business Park, Herald Avenue, Coventry, CV5 6UB, making clear who you are and in what capacity you are responding

Evaluating the responses

To evaluate responses properly, we need to know who is responding to the consultation and in what capacity. We will therefore only consider your response if you complete the information page.

Any personal data (such as your name, address and any other identifying information) will be processed in accordance with the Data Protection Act 1998 and our standard terms and conditions.

We will publish our evaluation of responses. Please note that we may publish all or part of your response unless you tell us (in your answer to the confidentiality question) that you want us to treat your response as confidential. If you tell us you wish your response to be treated as confidential, we will not include your details in any published list of respondents, although we may quote from your response anonymously.

Please respond by **26 February 2016**.

2. Regulating GCSE geology

Compliance with subject content and assessment objectives

- 2.1 As we explained in paragraph 1.2, DfE has published the subject content for new GCSEs in geology.⁵
- 2.2 One of the ways we ensure new GCSEs, AS and A levels are comparable across exam boards is by requiring them to be in line with the relevant subject content and our assessment objectives.
- 2.3 The approach we have taken in every other new GCSE, AS and A level qualification is to introduce subject-specific Conditions which:
- require exam boards to comply with the requirements of the subject content (and have regard to any guidance within the subject content); and
 - require exam boards to comply with our assessment objectives (and have regard to our guidance on those assessment objectives).
- 2.4 In all other subjects this Condition includes a provision which requires exam boards to interpret the subject content in line with any rules we set and to have regard to any guidance we publish. Although we do not always specify how the subject content should be interpreted, we think it is important for us to be able to do so when there is a good reason for that (for example, if a different interpretation could compromise qualification standards or comparability).
- 2.5 We see no reason to take a different approach for GCSE geology. We are therefore proposing that we should introduce a Condition which requires exam boards to:
- comply with the requirements (and have regard to any guidance) set out in the subject content;
 - comply with any requirements (and have regard to any guidance) we publish on interpreting the subject content; and
 - comply with our assessment objectives (and have regard to our guidance on those assessment objectives).

⁵ www.gov.uk/government/publications/gcse-geology

Question 1: To what extent do you agree or disagree that we should introduce a Condition which requires exam boards to comply with the relevant subject content and assessment objectives?

Guidance on assessment objectives

- 2.6 For all other new GCSE, AS and A level qualifications, we have published guidance which explains how exam boards should interpret our assessment objectives. This is designed to ensure exam boards have a common understanding of – and take a consistent approach to targeting – the different assessment objectives.
- 2.7 We are proposing we should introduce similar guidance for GCSE geology.

Question 2: To what extent do you agree or disagree that we should introduce guidance which clarifies how exam boards should interpret our assessment objectives?

Rules and guidance for exam assessment

- 2.8 In a number of other new GCSE, AS and A level subjects, we have specified rules which cover how specific areas of the subject content should be assessed. We normally do this where we think it is important that exam boards take a consistent and comparable approach to assessing an area of content (in terms of the weighting assigned to that content area and/or the types of question used to target it).
- 2.9 For example, the subject content for GCSE geography identifies fieldwork skills which must be assessed indirectly in exams, and the subject content for the new science GCSEs, AS and A levels which have been developed for first teaching from September 2015 and September 2016 include:
- mathematical skills that students should be able to demonstrate; and
 - practical skills that should be indirectly assessed in exams.
- 2.10 In these subjects, either we or the DfE have set minimum proportions of exam marks which must be allocated to these content areas, and we have specified further rules around how they should be assessed.
- 2.11 The subject content for GCSE geology includes specified mathematical skills, geological skills and techniques for indirect assessment in exams, and requirements for students to carry out fieldwork.

2.12 For GCSE geology, we believe we should take a similar approach to regulating exam assessments as we have in GCSE geography and the science subjects. So we are proposing to introduce rules so that exam boards take a consistent approach to assessing mathematical skills and practical work in GCSE geology.

Question 3: To what extent do you agree or disagree that we should introduce rules for exam assessment to ensure exam boards take a consistent approach to assessing mathematical skills and practical work in GCSE geology?

Assessing mathematical skills in exams

2.13 Appendix 1 to the subject content specifies the mathematical skills that students taking GCSE geology should be able to use and apply.

2.14 When the DfE consulted on the subject content for GCSE geology, it included a requirement that exams should allocated at least 10 per cent of marks to the assessment of mathematical skills. Respondents to the DfE's consultation did not comment specifically on this element of the subject content.

2.15 Since this requirement relates to how GCSE geology should be assessed, we have agreed with the DfE that it should form part of our rules on assessment, rather than the subject content. We have therefore included it within our draft assessment requirements set out below.

2.16 We also want to make sure that mathematical skills are assessed in a way which is appropriate to the subject. In particular, we want to make sure that:

- mathematical skills are assessed at a comparable level of demand across exam boards;
- mathematical skills are assessed in the context of other areas of the subject content (and not in isolation); and
- students across the ability range have opportunities to access marks for mathematical skills (and these marks are not targeted solely at higher or lower ability candidates).

2.17 To do this, we are proposing to set rules which require exam boards to:

- assess mathematical skills in the context of other areas of the subject content, and not in isolation;

- allocate at least 10 per cent of the marks for the qualification to rewarding use of mathematical skills at a level of demand which is at least equivalent to Key Stage 3; and
- assess mathematical skills across a range of levels of demand which supports effective differentiation between candidates.

Question 4: To what extent do you agree or disagree with our proposed approach to assessing mathematical skills in exams (including the 10 per cent minimum weighting) for GCSE geology?

Assessing geological skills and techniques in exams

2.18 The subject content requirements for GCSE geology identifies a range of geological skills and techniques that students should develop during their course of study, and which should be assessed indirectly in exams.

2.19 When the DfE consulted on the subject content for GCSE geology, it included a requirement that exam boards should allocate at least 15 per cent of marks to the indirect assessment of geological skills and techniques. The minimum percentage reflects the importance of these practical skills and techniques within geology, and is consistent with the percentage given in other science subjects. Respondents to the DfE’s consultation did not comment specifically on this element of the subject content.

2.20 Since this requirement relates to how GCSE geology should be assessed, we have agreed with the DfE that it should form part of our rules on assessment, rather than the subject content. We have therefore included it within our draft assessment requirements set out below.

2.21 We also want to make sure exam boards take a consistent and comparable approach to assessing geological skills and techniques in the exam. Our expectation is that exams will:

- test students’ knowledge, skills and understanding of geological skills and techniques across the three assessment objectives;
- include questions/tasks which draw on – and, where appropriate, combine – both theoretical and technical aspects of those skills and techniques; and
- cover the full range of skills and techniques specified in the subject content over the shortest period of time that is reasonably practicable.

2.22 We are therefore proposing to set rules which codify these expectations.

Question 5: To what extent do you agree or disagree with our proposed approach to assessing geological skills and techniques in exams (including the 15 per cent minimum weighting) for GCSE geology?

Practical work

- 2.23 As well as setting out the practical skills which should be assessed indirectly through exams, the subject content⁶ specifies that GCSE specifications in geology must require students to undertake a minimum of two days of work in the field, during which they should have at least one opportunity to carry out a directed investigation to answer a geological question.
- 2.24 These requirements reflect the importance of work in the field within GCSE geology. Fieldwork is central to good geology qualifications, and to teaching and learning – and schools should be devoting sufficient teaching time to those activities.
- 2.25 In turn, our proposed approach to practical work reflects the central role of fieldwork in geology, and the limited range of laboratory-based practical activities that students can carry out.
- 2.26 As set out above, and in line with other GCSE science subjects, we are proposing to require exam boards to design their exams in a way which rewards students who demonstrate what they have learned from practical work.
- 2.27 However, unlike GCSE biology, chemistry and physics, we are not proposing to require exam boards to include mandatory practical activities in their specifications. Our view is that this would be inappropriate in a subject where the practical activities are primarily field-based, rather than laboratory-based. This is because the fieldwork activities that students can participate in depend largely on their school's location.
- 2.28 Instead, we are proposing to adopt an approach which reflects how we have treated other subjects – such as GCSE geography – which have similar requirements for fieldwork or other practical activities which take place outside the classroom. In those subjects, we have required exam boards to collect statements from schools which confirm that students have been given reasonable opportunities to complete the required practical activities. This is designed to reflect the importance of practical activities in those subjects, and to

⁶ www.gov.uk/government/publications/gcse-geology

provide an extra safeguard that students are being given appropriate opportunities to carry out those activities.

Question 6: To what extent do you agree or disagree with our proposed approach to practical work in GCSE geology?

3. Our proposed Conditions and guidance

3.1 As set out above, we are proposing to introduce subject-specific Conditions, requirements and guidance to implement the proposals in this consultation. We set out our proposed Conditions, requirements and guidance below.

Proposed Conditions and requirements for GCSE geology

3.2 We are proposing to introduce the following Conditions and requirements which will apply to all new GCSE qualifications in geology:

- a Condition covering compliance with subject content and assessment objectives;
- a further enabling Condition which allows us to specify more detailed requirements on assessment;
- a Condition covering the field work statements exam boards should collect from schools;
- our assessment objectives; and
- requirements on assessment which relate to assessing mathematical skills and geological skills and techniques

Condition	Compliance with content requirements
GCSE(Geology)1	
GCSE(Geology)1.1	<p>In respect of each GCSE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must –</p> <p>(a) comply with the requirements relating to that qualification set out in the document published by the Secretary of State entitled ‘Geology GCSE subject content’⁷, document reference DFE-00211-2015,</p>

⁷ www.gov.uk/government/publications/gcse-geology

	<p>(b) have regard to any recommendations or guidelines relating to that qualification set out in that document, and</p> <p>(c) interpret that document in accordance with any requirements, and having regard to any guidance, which may be published by Ofqual and revised from time to time.</p>
GCSE(Geology)1.2	In respect of each GCSE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must comply with any requirements, and have regard to any guidance, relating to the objectives to be met by any assessment for that qualification which may be published by Ofqual and revised from time to time.
Condition GCSE(Geology)2	Assessment
GCSE(Geology)2.1	An awarding organisation must ensure that in respect of each assessment for a GCSE Qualification in Geology which it makes available it complies with any requirements, and has regard to any guidance, which may be published by Ofqual and revised from time to time.
Condition GCSE(Geology)3	Fieldwork statements
GCSE(Geology)3.1	<p>In respect of each assessment cycle for a GCSE Qualification in Geology which it makes available, an awarding organisation must –</p> <p>(a) require each Centre to provide a fieldwork statement to the awarding organisation, and</p> <p>(b) treat any failure by a Centre to provide a fieldwork statement to the awarding organisation in a timely manner as malpractice and/or maladministration (under General Condition A8 (<i>Malpractice and maladministration</i>)).</p>
GCSE(Geology)3.2	For the purposes of this condition, a ‘fieldwork statement’ is a true and accurate written statement made by a Centre to an awarding organisation which confirms that it has taken reasonable steps to secure that each Learner to which that Centre has delivered the assessments to be taken in a

particular assessment cycle for a GCSE Qualification in Geology which the awarding organisation makes available has met the requirements for practical work set out in Paragraph 10 of the document published by the Secretary of State entitled ‘Geology GCSE subject content’⁸, document reference DFE-00211-2015.

Assessment objectives – GCSE Qualifications in Geology

Condition GCSE(Geology)1.2 allows us to specify requirements relating to the objectives to be met by any assessment for GCSE Qualifications in Geology.

The assessment objectives set out below constitute requirements for the purposes of Condition GCSE(Geology)1.2. Awarding organisations must comply with these requirements in relation to all GCSE Qualifications in Geology they make available.

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of geological ideas, skills and techniques	40%
AO2	Apply knowledge and understanding of geological ideas, skills and techniques	40%
AO3	Analyse, interpret and evaluate geological ideas, information and evidence to make judgements and draw conclusions	20%

Assessment requirements – GCSE Qualifications in Geology

Condition GCSE(Geology)2.1 allows us to specify requirements in relation to assessments for GCSE Qualifications in Geology.

We set out below our requirements for the purposes of Condition GCSE(Geology)2.1. Awarding organisations must comply with these requirements in relation to all GCSE Qualifications in Geology they make available.

⁸ www.gov.uk/government/publications/gcse-geology

Mathematical skills

The subject content for GCSE Qualifications in Geology is set out in the document published by the Secretary of State entitled ‘Geology GCSE subject content’, document reference DFE-00211-2015 (the ‘Content Document’).

Appendix 1 to the Content Document specifies the mathematical knowledge, skills and understanding which Learners will be required to use and apply in GCSE Qualifications in Geology (‘Mathematical Skills’).

In designing and setting the Assessments by Examination for a GCSE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must ensure that –

- (a) questions and tasks rewarding the use of Mathematical Skills assess those skills within the context of other areas of the subject content, and not in isolation,
- (b) in each set of assessments,⁹ at least 10 per cent of the total marks for the qualification reward the use of Mathematical Skills at a Level of Demand which is not lower than that which is expected of Learners at Key Stage 3 as outlined in the Department for Education’s document ‘Mathematics programmes of study: key stage 3’,¹⁰ document reference DFE-00179-2013, and
- (c) without prejudice to the above requirements and those outlined in the Content Document, in each set of assessments Mathematical Skills are assessed across a range of Levels of Demand which supports effective differentiation in relation to the qualification.

Assessment of Learners in relation to geological skills and techniques

In designing and setting the assessments for each GCSE Qualification in Geology which it makes available, or proposes to make available, an awarding organisation must ensure that, taking the assessments for that qualification together –

- (a) Learners’ knowledge, skills and understanding in relation to geological skills and techniques is assessed across assessment objectives AO1, AO2 and AO3,
- (b) the number of marks used to credit such knowledge, skills and understanding is no less than 15 per cent of the total marks for the qualification,
- (c) the questions and tasks which test Learners’ knowledge, skills and understanding in relation to geological skills and techniques draw on, and

combine as appropriate, the theoretical and technical aspects of those skills and techniques, and

- (d) over the shortest period of time that is reasonably practicable, Learners are assessed in relation to all of the skills and techniques specified in paragraphs 8 and 9 of the Content Document.

Proposed guidance for GCSE Geology

- 3.3 We are proposing to introduce guidance on assessment objectives which will apply to all new GCSEs in geology.

Guidance on assessment objectives for GCSE Qualifications in Geology

Condition GCSE(Geology)1.2 allows us to specify requirements and guidance relating to assessment objectives for GCSE Qualifications in Geology.

We published our requirements in relation to assessment objectives in *GCSE Subject Level Conditions and Requirements for Geology*, and reproduce them in the table below.

	Objective	Weighting
AO1	Demonstrate knowledge and understanding of geological ideas, skills and techniques	40%
AO2	Apply knowledge and understanding of geological ideas, skills and techniques	40%
AO3	Analyse, interpret and evaluate geological ideas, information and evidence to make judgements and draw conclusions	20%

We set out below our guidance for the purposes of Condition GCSE(Geology)1.2. This guidance explains how we expect awarding organisations to interpret these assessment objectives in terms of:

⁹ For the purposes of these requirements, a 'set of assessments' means the assessments to be taken by a particular Learner for a GCSE Qualification in Geology. For clarity, the assessments taken by Learners may vary, depending on any possible routes through the qualification.

¹⁰ www.gov.uk/government/publications/national-curriculum-in-england-mathematics-programmes-of-study

- the discrete 'elements' within each assessment objective that questions and tasks could target and/or seek to credit – our expectation is that each and every question/task should target or seek to credit at least one of these elements, and may target or seek to credit multiple elements across one or more assessment objectives;
- the coverage expectations, such as in relation to the different elements within each assessment objective and how those elements should be sampled over time; and
- the key areas of emphasis in each assessment objective and the particular meaning for the subject of any key terms and phrases used; defined terms are shown in bold text, followed by their definitions.

In line with the obligations set out in Condition GCSE(Geology)1.2, we expect awarding organisations to be able to demonstrate how they have had regard to this guidance. For example, an awarding organisation could map how it has regard to the guidance as it:

- develops its sample assessment materials;
- delivers the qualification;
- develops and applies its approach to sampling the elements into which the assessment objectives are divided; and
- monitors the qualification to make sure it addresses all elements appropriately.

AO1: Demonstrate knowledge and understanding of geological ideas, skills and techniques			40%
Strands	Elements	Coverage	Interpretations and definitions
n/a	1a – Demonstrate knowledge of geological ideas	<ul style="list-style-type: none"> ■ Full coverage in each set of assessments¹¹ (but not in every assessment). ■ A maximum of 15% of the total marks for the qualification should reward demonstrating knowledge in isolation.¹² 	<ul style="list-style-type: none"> ■ Ideas are aspects of subject content outlined in Paragraph 6 of the document published by the Secretary of State entitled ‘Geology GCSE subject content’, document reference DFE-00211-2015 (the ‘Content Document’). ■ Skills and techniques are aspects of subject content and are related to the skills and techniques outlined in Paragraphs 7 to 9 of the Content Document and the mathematical skills requirement set out in Paragraph 11 of the Content Document. ■ The emphasis in this assessment objective should be on the demonstration of knowledge and understanding of geological ideas.
	1b – Demonstrate knowledge of geological skills and techniques		
	1c – Demonstrate understanding of geological ideas		
	1d – Demonstrate understanding of geological skills and techniques		

¹¹ For the purposes of this guidance, a ‘set of assessments’ means the assessments to be taken by a particular Learner for a GCSE Qualification in Geology. For clarity, the assessments taken by Learners may vary, depending on any possible routes through the qualification.

¹² Marks which ‘reward demonstrating knowledge in isolation’ means any mark awarded solely for recalling facts or other knowledge. It does not include marks awarded for selecting appropriate knowledge (for example, to evidence an argument), or for applying knowledge to a particular context.

AO2: Apply knowledge and understanding of geological ideas, skills and techniques			40%
Strands	Elements	Coverage	Interpretations and definitions
n/a	1a – Apply knowledge and understanding of geological ideas.	<ul style="list-style-type: none"> ■ Full coverage in each set of assessments (but not in every assessment). ■ A reasonable balance of the elements in each set of assessments (but not in every assessment). ■ Awarding organisations should justify the balance between elements 1a and 1b in their assessment strategies. 	<ul style="list-style-type: none"> ■ Ideas are aspects of subject content outlined in Paragraph 6 of the Content Document. ■ Skills and techniques are aspects of subject content and are related to the skills and techniques outlined in Paragraphs 7 to 9 of the Content Document and the mathematical skills requirement set out in Paragraph 11 of the Content Document. ■ Learners should be expected to apply their knowledge and understanding to stimulus and source material to provide meaning and explanations in particular contexts. This application should relate principally to developing further material that is covered in the specification by – <ul style="list-style-type: none"> □ exploring contexts and situations that are not explicitly indicated in the specification; □ making links between types of material which are not explicitly indicated in the specification.
	1b – Apply knowledge and understanding of geological skills and techniques		

AO3: Analyse, interpret and evaluate geological ideas, information and evidence to make judgements and draw conclusions			20%
Strands	Elements	Coverage	Interpretations and definitions
n/a	1a – Analyse geological ideas, information and evidence	<ul style="list-style-type: none"> ■ Full coverage in each set of assessments (but not in every assessment). ■ Reasonable balance of the elements in each set of assessments (but not in every assessment). ■ Awarding organisations should justify the balance between elements 1a to 1e in their assessment strategies. ■ Elements 1d and 1e may be assessed separately or together, but they should be assessed in combination with one or more of elements 1a – 1c. 	<ul style="list-style-type: none"> ■ Ideas, information and evidence are aspects of subject content. Awarding organisations should explain their approach to targeting them in their assessment strategy. Information and evidence includes sources covering the skills and techniques outlined in Paragraphs 7 to 9 of the Content Document. It should include: information and evidence from practical work and from fieldwork; both qualitative and quantitative approaches. ■ Interpret means describing and ascribing meaning. ■ Analyse means deconstructing ideas and/or information and/or evidence to find connections and provide logical chains of reasoning. ■ Evaluate means appraising and/or synthesising ideas and/or information and/or evidence. ■ Make judgements means coming to decisions, including in relation to information and evidence. ■ Drawing conclusions means providing a final view or outcome through a process of reasoning, including in relation to the use and summary of information and evidence.
	1b – Interpret geological ideas, information and evidence		
	1c – Evaluate geological ideas, information and evidence		
	1d – Make judgements		
	1e – Draw conclusions		

Questions on proposed Conditions, requirements and guidance

Question 7: Do you have any comments on our proposed Conditions and requirements for GCSE geology?

Question 8: Do you have any comments on our proposed guidance for GCSE geology?

4. Equality impact analysis

Ofqual's role, objectives and duties

- 4.1 We are subject to the public sector equality duty. We have set out in Appendix B how this duty interacts with our statutory objectives and other duties.

Equality impact analysis relating to proposed changes to GCSE geology

- 4.2 We have considered the potential impact on students who share protected characteristics¹³ of the application of the principles and features that will apply to all new GCSE, AS and A level qualifications. Our equality impact analysis for our earlier consultation on GCSE reform¹⁴ is therefore of interest and we encourage you to read it.
- 4.3 Issues concerning the proposed subject content have been considered by DfE, who have published their own Equalities Impact Analysis on their subject content proposals.¹⁵
- 4.4 We have also previously considered the potential impact on students who share protected characteristics of our decisions on assessment arrangements for this subject.¹⁶
- 4.5 We do not repeat here all of the evidence we have considered, as this can be found in our earlier reports. We focus instead on the specific issues that arise from the new proposals in this consultation, and from the way in which we are implementing our previous policy decisions.
- 4.6 We have not identified that any of the options would have an impact, positive or negative, on students because of their age, racial group, their religion or belief, their sex or their sexual orientation.
- 4.7 The subject content requires that students undertake a minimum of two days work in the field, during which they should have at least one opportunity to

¹³ For the purposes of the public sector equality duty, the protected characteristics are disability, racial group, age, religion or belief, pregnancy or maternity, sex, sexual orientation, gender reassignment.

¹⁴ <http://webarchive.nationalarchives.gov.uk/20141031163546/http://comment.ofqual.gov.uk/gcse-reform-june-2013/category/8-equality-impact-analysis/>

¹⁵ www.gov.uk/government/consultations/gcse-and-a-level-reform-content-for-teaching-from-september-2017

¹⁶ www.gov.uk/government/consultations/development-of-new-gcses-and-a-levels-for-teaching-from-2017

carry out a directed investigation to answer a geological question. To support this subject content requirement, and in line with the approach taken in other subjects, we are proposing to introduce a rule that requires exam boards to collect statements from schools which confirm that they have taken reasonable steps to secure that each student has completed the required practical activities.

- 4.8 The subject content also sets out a range of geological skills and techniques that students must demonstrate. Some of these skills and techniques will be developed through work in the field, and others are classroom-based activities. As set out above, we are proposing to introduce a requirement that 15 per cent of the marks in the exam assessments should be used for the indirect assessment of geological skills and techniques. This requirement was previously included within the subject content.
- 4.9 Arrangements may need to be made for students who are absent when the fieldwork or other practical activities take place to do them at another time. Such absence may occur because of a disability, pregnancy and maternity or gender reassignment. However, exams may also be missed for the same reasons. As the fieldwork and practical activities will not be directly assessed, it should be more straightforward for schools and colleges to reschedule any missed opportunities.
- 4.10 For some disabled students, the nature of their disability means they will not be able to demonstrate some or all of the geological skills and techniques. In legacy geology GCSEs, these geological skills and techniques are directly assessed (in a controlled assessment unit worth 25 per cent of total marks). Disabled students cannot use a practical assistant to support them in the controlled assessment, and can only apply to be exempted from the controlled assessment if they cannot access any part of it. As a consequence, disabled students' overall grades in legacy GCSEs can be affected if they cannot complete some of the required practical activities.
- 4.11 For new geology GCSEs, students' geological skills and techniques will not be directly assessed. Instead, exams will indirectly test students' knowledge and understanding of practical techniques. This means that disabled students will no longer be directly penalised if they are unable to complete some of the practical activities. Disabled students will, however, need to undertake practical-based learning in order to answer the exam questions which draw on that learning, but they could be supported by a practical assistant during that learning.
- 4.12 Overall, our view is that our proposed approach will reduce negative impacts on disabled students compared to the legacy GCSEs.

- 4.13 During this consultation, we will continue to seek and consider evidence and feedback to our proposals that might help us identify any potential subject-specific impacts on students who share a protected characteristic.
- 4.14 Exam boards are required to consider the accessibility of their qualifications at the design stage and to remove any unjustifiable barriers.

Question 9: We have identified some ways in which the proposals for GCSE geology would impact (positively or negatively) on persons who share a protected characteristic.¹⁷ Are there any potential impacts we have not identified?

Question 10: Are there any additional steps we could take to mitigate any negative impact resulting from these proposals on persons who share a protected characteristic?

Question 11: Do you have any other comments on the impacts of the proposals on students who share a protected characteristic?

¹⁷ 'Protected characteristic' is defined in the Equality Act 2010. Here, it means disability, racial group, age, religion or belief, pregnancy or maternity, sex, sexual orientation and gender reassignment.

Appendix A: Regulatory tools

Comparability and innovation

Exam boards operate in a market. They can design and deliver their qualifications in different ways, within the parameters we set. This provides some choice to schools or colleges, which is one of the benefits of a qualifications market. Exam boards must, however, make sure that the levels of attainment indicated by their qualifications are comparable to those of other exam boards' versions of the qualifications. The exam boards cooperate in a range of ways to make sure that the standards of their respective qualifications are comparable. To make sure standards are maintained and comparability is secured, we review AS and A level qualifications before they can be made available, by applying an accreditation requirement to the qualifications, and we oversee the awarding of AS and A level qualifications.

We do not wish to close down opportunities for exam boards to design and deliver their qualifications in different ways. Indeed, we have a statutory duty to have regard to the desirability of facilitating innovation in connection with the provision of regulated qualifications and a statutory objective with regard to the efficiency with which the qualifications market works. If we adopt a regulatory approach in which all aspects of a qualification are very tightly defined, we could effectively remove scope for exam boards to distinguish their qualifications from others and stop choice for schools or colleges. On the other hand, if exam boards have too much scope to vary their approach their qualifications might not be comparable.

In striking a balance, we use a range of tools to regulate qualifications and the exam boards that provide them. The main regulatory tools we use for the qualifications in this consultation are explained below.

Conditions of Recognition

Exam boards must comply at all times with our Conditions of Recognition. These are the main regulatory rules that we use. We can take regulatory action against an exam board that breaches or is likely to breach a Condition.

There are three sets of Conditions that will apply to new GCSEs (graded 9 to 1):

- (i) the published *General Conditions of Recognition*¹⁸ that apply to all regulated qualifications;

¹⁸ www.gov.uk/government/publications/general-conditions-of-recognition

- (ii) GCSE (9 to 1) Qualification Level Conditions and Requirements¹⁹ that apply to all new GCSE qualifications;
- (iii) GCSE Subject Level Conditions that apply to new GCSEs (graded 9 to 1) in a specific subject. We are consulting now on draft GCSE Subject Level Conditions for Geology.

Regulatory documents

In some Conditions we refer to published regulatory requirements. We publish these in regulatory documents. The Conditions require exam boards to comply with such documents.

We are consulting on a regulatory document which covers our requirements in relation to assessment of mathematical skills and practical work.

The requirements will have effect as if they were part of a Condition. The requirements will be set out in a stand-alone section of the Conditions document, simply because they are technical and detailed so they sit better as separate from, rather than within, the Condition itself.

Statutory guidance

We publish guidance to help exam boards identify the types of behaviour or practices they could use to meet a Condition. Exam boards must have regard to such guidance, but they do not have to follow this guidance in the same way that they must comply with the Conditions; they are free to meet the outcomes of the Conditions in their own ways. An exam board that decides to take a different approach to that set out in our guidance must still be able to show that it is meeting the Condition or Conditions to which the guidance relates.

We are consulting now on draft guidance for new GCSEs in geology.

¹⁹ www.gov.uk/government/publications/gcse-9-to-1-qualification-level-conditions

Appendix B: Ofqual’s role, objectives and duties

Our statutory objectives include the qualifications standards objective, which is to secure that the qualifications we regulate:

- (a) give a reliable indication of knowledge, skills and understanding; and
- (b) indicate:
 - (i) a consistent level of attainment (including over time) between comparable regulated qualifications; and
 - (ii) a consistent level of attainment (but not over time) between qualifications we regulate and comparable qualifications (including those awarded outside the UK) that we do not regulate.

We must therefore regulate so that qualifications properly differentiate between students who have demonstrated that they have the knowledge, skills and understanding required to attain the qualification and those who have not.

We also have a duty under the Apprenticeship, Skills, Children and Learning Act 2009 to have regard to the reasonable requirements of relevant students, including those with special educational needs and disabilities, of employers and of the higher education sector, and to aspects of government policy when so directed by the Secretary of State.

As a public body, we are subject to the public sector equality duty.²⁰ This duty requires us to have due regard to the need to:

- (a) eliminate discrimination, harassment, victimisation and any other conduct that is prohibited under the Equality Act 2010;
- (b) advance equality of opportunity between persons who share a relevant protected characteristic and persons who do not share it;
- (c) foster good relations between persons who share a relevant protected characteristic and persons who do not share it.

The exam boards that design, deliver and award AS and A level qualifications are required by the Equality Act, among other things, to make reasonable adjustments for disabled people taking their qualifications, except where we have specified that such adjustments should not be made.

²⁰ Equality Act 2010, section 149.

When we decide whether such adjustments should not be made, we must have regard to:

- (a) the need to minimise the extent to which disabled persons are disadvantaged in attaining the qualification because of their disabilities;
- (b) the need to secure that the qualification gives a reliable indication of the knowledge, skills and understanding of a person upon whom it is conferred;
- (c) the need to maintain public confidence in the qualification.

Legislation therefore sets out a framework within which we must operate. We are subject to a number of duties and we must aim to achieve a number of objectives. These different duties and objectives can, from time to time, conflict with each other. For example, if we regulate to secure that a qualification gives a reliable indication of a student's knowledge, skills and understanding, a student who has not been able to demonstrate the required knowledge, skills and/or understanding will not be awarded the qualification. A person may find it more difficult, or impossible, to demonstrate the required knowledge, skills and/or understanding because they have a protected characteristic. This could put them at a disadvantage relative to others who have been awarded the qualification. It is not always possible for us to regulate so that we can both secure that qualifications give a reliable indication of knowledge, skills and understanding and advance equality between people who share a protected characteristic and those who do not. We must review all the available evidence and actively consider all the available options before coming to a final, rational decision.

Qualifications cannot be used to mitigate inequalities or unfairness in the education system or in society more widely than might affect, for example, students' preparedness to take the qualification and the assessments within it. While a wide range of factors can have an impact on a student's ability to achieve a particular mark in an assessment, our influence is limited to the way the qualification is designed and assessed.

We require the exam boards to design qualifications to give a reliable indication of the knowledge, skills and understanding of those on whom they are conferred. We also require the exam boards to avoid, where possible, features of a qualification that could, without justification, make a qualification more difficult for a student to achieve because they have a particular protected characteristic. We require exam boards to monitor whether any features of their qualifications have this effect.

In setting the overall framework within which exam boards will design, assess and award the reformed GCSE, A level and AS qualifications, we want to understand the possible impacts of the proposals on persons who share a protected characteristic.

The protected characteristics under the Equality Act 2010 are:

- age;
- disability;
- gender reassignment;
- marriage and civil partnerships;
- pregnancy and maternity;
- race;
- religion or belief;
- sex;
- sexual orientation.

It should be noted that with respect to the public sector equality duty under section 149 of the 2010 Act, we are not required to have due regard to impacts on those who are married or in a civil partnership.

Responding to the consultation

Your details

To evaluate responses properly, we need to know who is responding to the consultation and in what capacity. We will therefore only consider your response if you complete the following information section.

We will publish our evaluation of responses. Please note that we may publish all or part of your response unless you tell us (in your answer to the confidentiality question) that you want us to treat your response as confidential. If you tell us you wish your response to be treated as confidential, we will not include your details in any published list of respondents, although we may quote from your response anonymously.

Please answer all questions marked with a star*

Name*

Position*

Organisation name (if applicable)*

Address

Email

Telephone

Would you like us to treat your response as confidential?*

If you answer yes, we will not include your details in any list of people or organisations that responded to the consultation.

Yes No

Is this a personal response or an official response on behalf of your organisation?*

Personal response (please answer the question ‘If you ticked “Personal response”...’)

Official response (please answer the question ‘If you ticked “Official response”...’)

If you ticked “Personal response”, which of the following are you?

Student

Parent or carer

Teacher (but responding in a personal capacity)

Other, including general public (please state below)

If you ticked “Official response”, please respond accordingly:

Type of responding organisation*

Awarding organisation

Local authority

School or college (please answer the question below)

Academy chain

Private training provider

University or other higher education institution

Employer

Other representative or interest group (please answer the question below)

School or college type

- Comprehensive or non-selective academy
 - State selective or selective academy
 - Independent
 - Special school
 - Further education college
 - Sixth form college
 - Other (please state below)
-

Type of representative group or interest group

- Group of awarding organisations
 - Union
 - Employer or business representative group
 - Subject association or learned society
 - Equality organisation or group
 - School, college or teacher representative group
 - Other (please state below)
-

Nation*

- England
- Wales
- Northern Ireland
- Scotland
- Other EU country: _____
- Non-EU country: _____

How did you find out about this consultation?

Our newsletter or another one of our communications

Our website

Internet search

Other

May we contact you for further information?

Yes No

Questions

Question 1: To what extent do you agree or disagree that we should introduce a Condition which requires exam boards to comply with the relevant subject content and assessment objectives?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

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Question 2: To what extent do you agree or disagree that we should introduce guidance which clarifies how exam boards should interpret our assessment objectives?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

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Question 3: To what extent do you agree or disagree that we should introduce rules for exam assessment to ensure exam boards take a consistent approach to assessing mathematical skills and practical work in GCSE geology?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

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Question 4: To what extent do you agree or disagree with our proposed approach to assessing mathematical skills in exams (including the 10 per cent minimum weighting) for GCSE geology?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

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Question 5: To what extent do you agree or disagree with our proposed approach to assessing geological skills and techniques in exams (including the 15 per cent minimum weighting) for GCSE geology?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

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Question 6: To what extent do you agree or disagree with our proposed approach to practical work in GCSE geology?

- Strongly agree
- Agree
- Neither agree nor disagree
- Disagree
- Strongly disagree

Please explain your reasons:

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Question 7: Do you have any comments on our proposed Conditions and requirements for GCSE geology?

Yes No

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Question 8: Do you have any comments on our proposed guidance for GCSE geology?

Yes No

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Question 9: We have identified some ways in which the proposals for GCSE geology would impact (positively or negatively) on persons who share a protected characteristic.²¹ Are there any potential impacts we have not identified?

Yes No

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²¹ 'Protected characteristic' is defined in the Equality Act 2010. Here, it means disability, racial group, age, religion or belief, pregnancy or maternity, sex, sexual orientation and gender reassignment.

Question 10: Are there any additional steps we could take to mitigate any negative impact resulting from these proposals on persons who share a protected characteristic?

Yes No

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Question 11: Do you have any other comments on the impacts of the proposals on students who share a protected characteristic?

Yes No

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Accessibility of our consultations

We are looking at how we provide accessible versions of our consultations and would appreciate it if you could spare a few moments to answer the following questions. Your answers to these questions will not be considered as part of the consultation and will not be released to any third parties.

We want to write clearly, directly and put the reader first. Overall, do you think we have got this right in this consultation?

Yes No

Do you have any comments or suggestions about the style of writing?

Yes No

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.....
.....

Do you have any special requirements to enable you to read our consultations? (for example, screen reader, large text, and so on)

Yes No

Which of the following do you currently use to access our consultation documents? (select all that apply)

- Screen reader / text-to-speech software
- Braille reader
- Screen magnifier
- Speech-to-text software
- Motor assistance (blow-suck tube, mouth stick, and so on)
- Other

Which of the following document formats would meet your needs for accessing our consultations? (select all that apply)

- A standard PDF
- Accessible web pages
- Large-type PDF (16 point text)
- Large-type Word document (16 point text)
- eBook (Kindle, iBooks, or similar format)
- Braille document
- Spoken document
- Other

How many of our consultations have you read in the last 12 months?

- 1
- 2
- 3
- 4
- 5
- More than 5

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