

**Supplementary written evidence submitted by Ofqual****National Reference Tests**

1. The Chief Regulator offered to provide to the Committee additional information on the National Reference Tests and our work with NFER in selecting schools and students to sit the Tests. Appendix 1 provides an outline of the proposed Tests and Appendix 2 describes how the sample of schools and students will be selected each year to take part in the Tests.
2. We are discussing with DfE whether it would be possible to introduce legislation that would make it mandatory for a sampled school to take part in the Tests. DfE is considering our request and we understand it may consult soon on this proposal. (There is similar legislation already used to support the key stage 2 science sample testing and also PISA.)
3. We will be holding a full-scale operational trial next March – the Preliminary Reference Test – to investigate whether aspects of the Test’s design and delivery work well. This trial is an important step in our development of the new Test. It will help us to determine whether the Test can provide sufficiently reliable information that can be used to support setting grade standards at GCSE. We need to validate our school sampling strategy, be as sure as possible that the questions asked of students are sufficiently well-targeted and the Tests are able to differentiate exceptionally well between the broad range of candidates that in turn sit GCSEs. We will assess whether the new information that the Tests will provide for setting grades at GCSE justifies the additional burden that the testing will place on the sampled schools and students, together with the cost that we will incur each year to run the tests.
4. Subject to a satisfactory outcome from the trial, the first year of live testing will be 2017. From 2018, the second year of live testing, we will be able to compare Test performance between years. However, the first years of GCSE awarding are likely to see improvements in performance driven by increased exam familiarity rather than improvements in underlying mathematics and English language ability (this is known as the sawtooth effect). Hence, it is likely to be in subsequent years when Test results can be fully taken into account in GCSE awarding. Further, if the changes in student performance from one year to the next are very small, they will need to accumulate across more than one year to be detected by the Test. We are conducting research to explore the extent of the sawtooth effect and the likely size of year on year changes in student performance.

**Appendix 1****An overview of the National Reference Tests<sup>1</sup>**

Ofqual is introducing the new National Reference Tests to provide additional information to support the setting of grades awarded for GCSEs. The purpose of the Test is to provide evidence on changes in performance standards over time in English language and mathematics in England at the end of year 11. The Test should show, over several years, if there is a change in how students perform at the national level, which will be considered carefully when setting grades at GCSE.

The Test will provide additional information that we expect will significantly advance our ability to detect genuine changes in performance and so improve awarding. We will act cautiously as we build our understanding over several years of the information that the Test will provide and form a judgement on how this is used in setting grades at GCSE.

**Test design**

There will be separate Tests for mathematics and English. They will be based on the new content for GCSEs in mathematics and English language, which students will take for the first time in summer 2017.

The questions may not be in exactly the same style as the new GCSE questions, but they will be suitable for students who are studying for the GCSE. The questions used in the Test will not reflect any particular exam board's style of GCSE questions. Ofqual will publish some example questions early next year.

Each Test is divided into several booklets. Each student takes just one booklet, so no student has to take the whole Test.

The Reference Test for mathematics, unlike the GCSE, will not be tiered. Most of the questions will be based on the GCSE content that all students taking the qualification have to study. There will be a few questions at the end of each booklet that will be based on the content only studied by those preparing to take the higher tier GCSE.

The Reference Test for English will include questions that require students to write longer responses as well others that can be answered with short, one sentence responses. There is no testing of spoken language in the English Test.

The questions will remain largely the same from year to year to enable performance standards to be compared. Therefore, the questions used in the Test have to remain confidential and will not be published, and we will not be able to provide individual feedback to the students or schools who have taken part in the Test.

---

<sup>1</sup> Based on information that Ofqual published on 1 June 2015:  
<https://www.gov.uk/government/news/national-reference-tests-an-overview>

**Timetable**

The first National Reference Tests be held in March 2017. In future years the information from the Tests will be taken into account when GCSEs are awarded.

In September and October 2015, we trialled questions that have been developed for the new Tests. In March 2016, we will hold a Preliminary Reference Test. We will ask the same number of schools and students to take part that we will require for the Tests that will be held in future years but the purpose of the Tests in 2016 is to confirm that all the operational arrangements are working well. The Preliminary Test is a very important step that will allow Ofqual to introduce the Reference Tests smoothly in 2017.

**Who takes the test?**

Each year, about 30 students from around 300 schools will be selected at random to take a test booklet in mathematics and another 30 students at these schools will be selected to take a test booklet in English. The students will be in year 11 and will take the test in early March, before they take their GCSEs (in late May and early June). The Test will take each student around an hour to complete. The results will be analysed only at the national level; there will be no results for individual schools or students.

Ofqual expects all randomly selected students to take the Test. This will provide the most statistically sound sample. However, head teachers will have the option to exclude students from the testing - at their discretion and in particular circumstances. This option would be used for a specific reason such as accessibility or situations where taking the Test may cause undue distress for the student. NFER, which is administering the Test on Ofqual's behalf, will make the Test as student-friendly as possible and allow all reasonable and appropriate access arrangements so it is hoped that such exclusions will be needed only in rare cases.

Ofqual will use a different sample of schools each year. NFER will select the schools to take part. The selected schools will provide a list of all their students in year 11 that they expect will take the GCSE (in mathematics or English language). From this list NFER will randomly select which students will be asked to take the Test to achieve a nationally representative sample.

**How will it be administered in schools?**

NFER is working with us to develop the Test. In order to minimise the burden on participating schools, a test administrator from NFER will go to the school on a pre-agreed day and carry out the Test. The school will need to provide a room where the students can take the Test and NFER's administrator will invigilate it. A member of the school's staff is also expected to be present to ensure that normal exam conditions are maintained during the Test itself. The Test will last around an hour for each student.

**What results will be published and when?**

Towards the end of August each year Ofqual will publish the national measures of performance in the Test, around when exam boards publish GCSE results. Ofqual will also explain how performance in the National Reference Tests has been taken into account in awarding the GCSEs.

The results of the Reference Test will set out the percentage of students in that year who are predicted, based on the Test, to achieve at least a grade 4, a grade 5 or a grade 7 in their GCSE. The Tests will show if these percentages change from year to year. And it is these changes, if any, that we and the exam boards will take into account when GCSEs are awarded. The first time that it will be able to compare performance between years will be in 2018.

There will be no results for individual students or schools. So, for example, no result can be recorded in students' school records or taken into account in school accountability measures. The only information will be for England as a whole.

**Appendix 2****Sample design for the National Reference Tests**

Each year, NFER will select the students who will be asked to take the Test to achieve a nationally representative sample. It will use a two-stage process to draw the sample.

First, it will select a stratified sample of schools from across the total population of schools that have students in year 11. It will use DfE's school census to define the population. The sample is stratified using two factors: the number of students at the school in year 11 and the school's historic performance in GCSE mathematics and English. (The sample will not be stratified by type of school. This is not necessary because the results from the Tests will not be analysed by school type; results from the Tests will only be available for England as a whole.)

To allow for the possibility that some schools may not agree to take part, for each school in the sample NFER will select one or more replacement schools that it can also approach to take part, the replacement schools being similar in size and GCSE performance to the school that was originally selected. This would therefore preserve the design of the school sample.

The second stage of the sampling process is to select the students at each sampled school who will be asked to take part in the Test. When the school has agreed to take part, it provides NFER with a list of all of its students in year 11 who will be entered for GCSE mathematics or English language. NFER then selects at random from this list about 30 students that will be asked to take the Test in mathematics and another 30 students that will be asked to take the Test in English. This provides a national sample of students for each subject that will be representative of the overall cohort taking the GCSE in that year. (The students from an individual school who are selected to take a Test do not need to be representative of that school's students. The Test requires only to have a sample that is nationally representative.)

We appreciate that a school may not wish for some of its students to take the Test. We will provide guidance to schools to ensure that a head teacher would withdraw a student only when it was genuinely necessary for the student's well-being and not for other reasons. NFER will analyse information on individual students that head teachers have withdrawn to take into account any bias that might have been introduced into the Test results.

November 2015