OXFORD AQA
INTERNATIONAL QUALIFICATIONS

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International GCSE

Combined Science (9204)

Tiering Guide

For teaching from September 2016 onwards
For International GCSE exams in June 2018 onwards

Introduction

Tiering decisions for GCSE Combined Science aren't always easy, especially for potential grade 5-5 students.

Nobody is a better judge of a student's ability than their teacher, but we can recap some key considerations.

You know your students best, so our help can only go so far. This resource covers the essential key points along with the context needed for a true understanding.

Tiering explained

The grades available on each tier changed when specifications moved from using letter grades to a numbered grading system. The highest grade available on OxfordAQA Combined Science Core tier is different to GCSE specifications that use letter grades. Students can gain the equivalent of a B grade on Core tier, making it a better option for some potential grade 5 students.

- The Core tier covers grades **1-1 to 5-5** for GCSE Combined Science.
- The Extension tier covers grades **4-4 to 9-9** for GCSE Combined Science, with an allowed grade 3-3.
- An 'allowed grade 3-3' offered on the Extension tier is the so-called safety net grade.

Why does GCSE Combined Science have tiers?

The GCSE Combined Science tiers target different sections of the ability range. There are two main reasons why this is the case:

1. The GCSE Combined Science assessments would need to be longer if tiering did not exist, as untiered papers need to assess the entire ability range. The idea of needing to sit more and/or longer science assessments is not an attractive proposition for many students.

2. On tiered papers, students working at either end of the ability range do not see questions that are not intended for them. Students working at low demand are not asked high demand questions on the Core tier and vice versa for the Extension tier. High demand questions are likely to prove beyond the capabilities of a student working at low demand and could potentially provide a negative or demoralising exam experience, whereas students working at high demand will often find many low demand questions trivial.

Grading explained

Students achieve grades in OxfordAQA GCSE Combined Science based on their performance across three exam papers.

Students sit one Biology, one Chemistry and one Physics paper, and all three papers are either taken at the Core tier or the Extension tier. **Students cannot mix tiers of papers when entering for this specification.**

GCSE Combined Science is a double award GCSE qualification, **which means that students receive a result of two GCSE grades for the qualification.** This specification is a double-award due to the amount of subject content being roughly double the total amount of a standard GCSE qualification.

The grades that students receive on OxfordAQA Combined Science will always be two numbers that are the same value i.e. 9-9, 5-5, 2-2 etc. The only exception to this is when a student does not achieve enough marks to achieve a grade, when they will receive an 'Unclassified' result also known as a 'U'. Students can receive a 'U' on either tier, when they do not meet the minimum threshold of marks required to achieve a grade.

The only requirement to achieve a particular grade in GCSE Combined Science is to reach the total number of marks required in that exam series. Students may (and often do) score their marks unevenly across the three papers. The total score across all three papers will ultimately be what determines their final grades.

The safety net

When we think of grade boundaries, the distance between the ‘top’ of the grade and the ‘bottom’ of the grade is known as the ‘width’.

For example the Extension tier of Combined Science target six grades: 9-9 through to 4-4 at different widths.

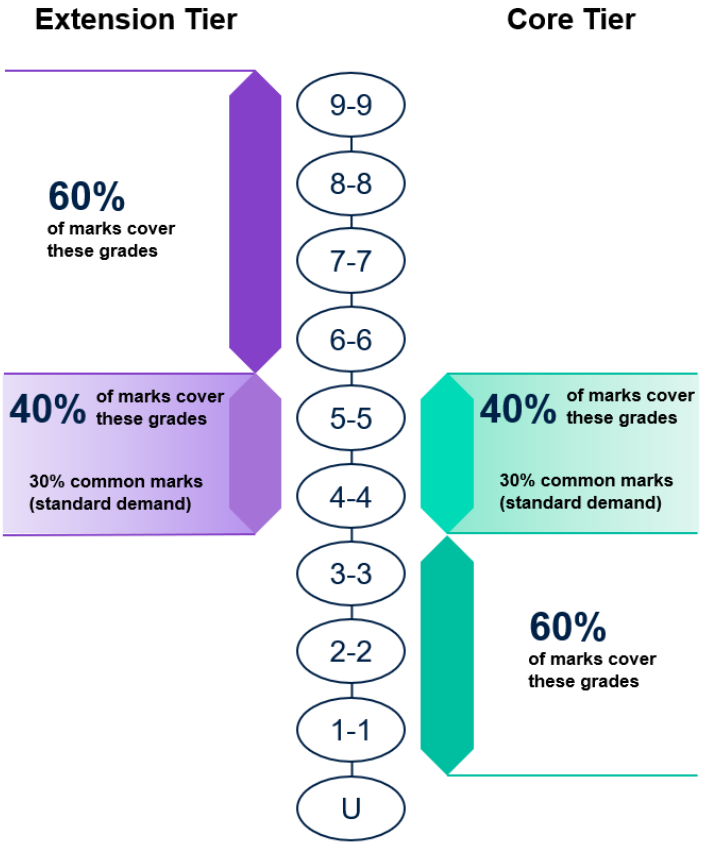
The width of these grades will change slightly year-on-year depending on the ability of the cohort and how the papers perform.

Unfortunately some students underperform on exam day. This is why there’s also an ‘allowed’ grade 3- 3 on Extension tier.

On Extension tier, no questions target the ‘allowed grades’, and the boundary width between grades 3-3 and 4-4 will always be half the width between grades 4-4 and 5-5. The grade 3-3 on Extension tier exists as a contingency to catch the students who have an off day and would otherwise fall off the scale completely and be Unclassified (U).

Summary

Every year, against all expectations, some students have off days. The safety net ‘allowed grade 3-3’ on Extension tier is designed to catch these students. If you feel a student might rely on this ‘allowed grade’ from the outset, it’s probably worth entering them for the Core tier. They are likely to have a better experience in exams designed for their ability, and possibly even achieve a higher grade as a result.



Common questions

The Core and Extension tiers overlap at grades 4-4 and 5-5.

30% of the marks on each tiered paper are common to both tiers. We use student performance on these common questions to equate the standard of grade 4-4 and 5-5 across the Core and Extension tiers. This is so standards are comparable across the two tiers.

These common questions are written at standard demand (see 'Level of demand' section of the Science Exam Guide for more information about standard demand) and form part of the 40% of marks that are targeted at standard demand on each tier. Performance on these questions can be useful when making tiering choices. For further guidance on what we mean by level of demand in GCSE papers, see the level of demand section of this document for more details.

The key to your tiering decision for an individual student could be:

- to find our sample papers and past papers
- identify the common questions that appear on both Core and Extension tiers
- look at student performance on these particular questions
- an extra step would be to check their performance on other standard demand questions (usually the first couple of questions after the common questions on the Extension tier.

Are they consistently performing well on these questions?

It's important that Combined Science students perform consistently well across all three papers – these cover all aspects of science.

If students perform consistently well on the common questions, they should not be at high risk of 'falling off' the tier.

All of the specimen and past papers can be found on Resources for teachers | OxfordAQA International Qualifications.

Summary

If students are unable to answer many common questions then they're unlikely to have a good experience on the Extension tier. 60% of the marks on the Extension tier are aimed at the top grades and there are no low demand (grade 1 to 3) questions. The easiest questions on Extension tier are targeted at standard demand (grades 4 to 5).

Key indicators for tiering

- How well do students perform on the common questions in their mock exams?
- How comfortable are students with maths questions in a scientific context?
- How confident are students at fully understanding the required practicals and the science behind them?
- Can students deal with questions where the science is in an unfamiliar context?
- How resilient are students when tackling challenging questions from the start of the paper?
- Have students got a good understanding of all the basic scientific concepts and phenomena?
- Are their graphing skills good and can they interpret data well?
- Words and terms: do they have a good understanding of them, and can they use precise scientific language?
- Can your students write a coherent, logical and structured extended answer?

Summary

Look at performance evidence from specific question papers, but remember that grades aren't allocated to individual papers. It is the total mark across all the papers for a specification that matters.

The most informed judgements will be based on performance from all papers. Which tier will be most appropriate to enable a student to demonstrate their best performance overall?

If circumstances change, so can your tier choice

Mock exams are a key part of decision making for many centres. Centres often sit mocks between November and March of the examination year, and sometimes will run two sets of mock exams in that period.

A lot can change in this time, but tier changes can be made for free until 21 April.

The entries deadline for the May/June exam series is 21 February every year. Centres can change tier for free until 21 April every year.

There is a charge for entries and amendments received after these two deadlines.

There is further information on the entries process on our website, but please contact us if you have a specific question.

How do the GCSE Combined Science Extension tier papers compare to the GCSE Biology/ Chemistry/ Physics Papers?

This is a commonly misunderstood aspect of the GCSE Science specifications. The main difference between GCSE Combined Science and GCSE Biology/Chemistry/Physics is the amount of subject content that is assessed.

The demand of the individual assessments differs because GCSE Combined Science is a tiered specification and GCSE Biology/Chemistry/Physics are not tiered specifications.

GCSE Combined Science is split into two tiers so that we can target science questions at students at different ends of the ability range. GCSE Combined Science Extension tier papers only assess students at standard demand (grades 4-5) and high demand (grades 6-9). As there are no questions aimed at low demand (grades 1-3), the only grades available to students entered on Combined Science Extension tier are 4-4 to 9-9, with an allowed grade 3-3 for any students that just misses the grade 4-4 boundary. This means that any students that drops below the allowed grade 3-3 boundary on Extension tier will not be graded and will instead receive an ‘Unclassified’ or ‘U’.

GCSE Biology/Chemistry/Physics papers assess students across low demand (grades 1-3), standard demand (grades 4-5) and high demand (grades 6-9). The full grade range from 1-9 is therefore available to students as questions on these papers target all three levels of demand in GCSE Science.

Making a comparison between the demand of GCSE Combined Science and GCSE Biology/Chemistry/Physics papers is not a like-for like comparison. The level of demand of the papers differ as the GCSE Combined Science Extension tier papers do not attempt to assess students working at low demand (grades 1-3), as those students are generally entered for the Core tier papers.