# Secondary accountability measures 

Guide for maintained secondary schools, academies and free schools

October 2023

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## Summary

This document explains how Key Stage 4 (KS4) performance measures have been calculated based on pupils at the end of KS4 ${ }^{1}$ in the academic year 2022/23.

The headline measures which appear in performance tables are:

- Progress 8 - progress across 8 qualifications
- EBacc entry - percentage of pupils entering the English Baccalaureate
- Pupil destinations - percentage of students staying in education or going into employment after Key Stage 4
- Attainment in English and maths - percentage of pupils achieving a grade 5 or above in English and maths.
- Attainment 8 - attainment across the same 8 qualifications as Progress 8
- EBacc APS - English Baccalaureate Average Point Score

A range of additional performance measures and contextual information is also published alongside the headline measures.

The KS4 measures are designed to encourage schools to offer a broad and balanced curriculum with a focus on an academic core.

## Expiry or review date

This guidance will be reviewed before February 2024.

## Who is this publication for?

This guidance is for:

- senior leaders working in secondary schools and trusts, including maintained schools, academies, alternative provision, free schools and special schools;
- independent schools or colleges with 14-16 provision seeking information on secondary accountability measures;
- governors and trustees;

[^0]
## Main points

The guidance includes further information about KS4 performance measures for 2022/23 and the use of 2022/23 KS4 school and college level performance data. This update also includes information about how we will calculate KS4 MAT measures for the academic year 2022/23.

The tables and diagrams in the guidance have been updated to reflect the provisional 2022/23 data.

The guidance also includes information about KS4 performance measures for 2023/24 and plans for the headline EBacc attainment measure.

## 2022/23 performance measures

We will publish provisional KS4 school and college level performance data for academic year 2022/23 in autumn 2023. It is important we have publicly available data about exam results in a school or college, for transparency and as a starting point to support parents and students when choosing schools or post-16 institutions.

We intend to present the 2022/23 performance measures in a broadly similar way to prior to the pandemic, for example, with comparison tables for schools, local authorities and multi-academy trusts.

For 2022/23, all headline KS4 performance measures will remain the same. These are:

- Progress 8 - progress across 8 qualifications
- EBacc entry - percentage of pupils entering the English Baccalaureate
- Pupil destinations - percentage of students staying in education or going into employment after Key Stage 4
- Attainment in English and maths - percentage of pupils achieving a grade 5 or above in English and maths.
- Attainment 8 - attainment across the same 8 qualifications as Progress 8
- EBacc APS - English Baccalaureate Average Point Score


## 2023/24 performance measures

We plan to make the following changes to KS4 performance measures for 2023/24, to be published in autumn 2024:
entries into triple science (the percentage of pupils entered for biology, chemistry and physics) and entries into languages (the percentage of pupils entered for an EBacc language) will change from being additional measures to become headline measures for 2023/24, and will be reported on the main school page in performance tables from autumn 2024.

## EBacc headline attainment measure

We want to move to a headline EBacc attainment measure that incentivises full EBacc entry. We will explore making changes to the headline EBacc attainment measure (EBacc Average Point Score). We plan to engage with the sector on this during the autumn, with a view to confirming the approach in early 2024. The change would be introduced for 2024/25 measures, to be published in autumn 2025.

## How will the 2022/23 KS4 performance data be used?

We have always been clear that all users of education school performance data need to consider this data alongside a range of other information about the school and its individual circumstances, for example by speaking to the school or college directly, and that conclusions should not be drawn on a single piece of data alone. This will continue to be important given the ongoing impacts of the pandemic which we know affected individual schools/colleges and pupils differently.

When we publish 2022/23 KS4 performance measures in performance tables in October 2023, we will place wording alongside the data to make clear that users should be aware of the following:

- The return to pre-pandemic grading, with some protections, in 2023.
- Performance data may include results achieved in 2022 and 2023, and there were different approaches to grading in those years.
- Performance data may include entries, but not results, from 2020 and 2021 due to DfE's commitment not to use results achieved in 2020 and 2021 in future performance measures and adaptions to the way we calculate performance measures.
- Ongoing uneven impacts of the pandemic on pupils, schools and colleges.
- KS4 data based on qualification outcomes cannot be compared between 2021/22 and 2022/23. This is because for the majority of qualifications that count in performance measures, a different grading approach was used in 2021/22, to take account of the impact of the pandemic.
- 2022/23 KS4 data can be used to make cautious comparisons between schools/colleges, trusts, local authority and national averages from the same year.
As set out in DfE guidance ${ }^{2}$, school and trust leaders should not make pay progression for teachers dependent on the assessment data for a single group of pupils. Performance management targets relating to pupil performance should not be used in isolation and other factors, in this case the ongoing uneven impact of the pandemic on pupils and schools and the caution needed when using the 2022/23 performance data, should also be taken into account.


## Ofsted

Last year, Ofsted set out that 2022 outcomes would only be used with caution, that 2021/22 data would only be used to inform discussion with the schools about pupil outcomes, and that no school would be marked down on the basis of 2021/22 data alone.

[^1]That continues to be the case for 2021/22 data, but 2022/23 performance data will be used to inform inspection in the normal way. This means, as set out in Ofsted's school inspection handbook, Inspectors will use nationally published school performance data as a starting point on inspection, where it is available. National assessments and examinations are useful indicators of pupils' outcomes, but they only represent a sample of what pupils have learned. Inspectors will consider any outcomes data, where this is available in nationally published data, but it does not constitute a substitute for inspectors' first-hand inspection activities. Inspectors will be aware of the return to prepandemic grading, with some protections, in 2022/23, and the impact this may have on nationally published school performance data.

## Regional Directors

As set out in Section 2 of the Comissioning High-Quality Trusts and Annex B - Trust Quality Evidence Regional Directors will have 2022/23 assessment, test and exam results data to refer to. This data will be treated with caution due to the ongoing impacts of the pandemic. 2022/23 data can be used to make comparisons between schools, trusts and with local authority and national averages. Decisions will not be made on a single year's data and will continue to be informed by a range of factors. KS2 data for 2022/23 may be cautiously considered alongside data from 2021/22, as the STA standards setting and maintenance approach was consistent across both years.

## KS4 performance measures

The following sections set out how we have calculated the headline KS4 performance measures for 2022/23. Pupils reaching the end of KS4 in 2022/23 will have achieved most of their qualifications in academic years 2021/22 and 2022/23. We have used the usual methodology to calculate KS4 performance measures as far as that is possible. A few pupils may have results from qualifications achieved in 2019/20 or 2020/21. Where a pupil has entered a qualification early and has a qualification result from 2019/20 or 2020/21, we will apply the adapted methodology set out in annex D, whereby we will count the entry but not the result. This is in line with our commitment not to use qualification results achieved between January 2020 and August 2021 in future performance measures.

## Progress 8

Progress 8 aims to capture the progress that pupils in a school make from the end of primary school to the end of KS4. It is a type of value-added measure, which means that pupils' results are compared to other pupils nationally with similar prior attainment. Every increase in grade a pupil achieves in their Attainment 8 subjects counts towards a school's Progress 8 score.

Progress 8 is calculated for individual pupils solely in order to calculate average Progress 8 scores including school Progress 8 scores. Schools should not share individual pupil progress scores with pupils or parents.

A Progress 8 score is calculated for each pupil by comparing their Attainment 8 score with the average Attainment 8 scores of all pupils nationally who had a similar starting point, using assessment results from the end of primary school. In 2016, changes were introduced to KS2 outcomes in English reading and maths. They are now reported as scaled scores instead of national curriculum levels (more information is available in the measurement of prior attainment section).

The greater the Progress 8 score, the greater the progress made by the pupil compared to the average for pupils with similar prior attainment.

A school's Progress 8 score is calculated as the average of its pupils' Progress 8 scores. It gives an indication of whether, as a group, pupils in the school made above or below average progress compared to similar pupils in other schools.

- a score of zero means pupils in this school on average did as well at KS4 as other pupils across England who got similar results at the end of KS2
- a score above zero means pupils made more progress, on average, than pupils across England who got similar results at the end of KS2
- a score below zero means pupils made less progress, on average, than pupils across England who got similar results at the end of KS2

A negative progress score does not mean pupils made no progress, or the school has failed, rather it means pupils in the school made less progress than other pupils across England with similar results at the end of KS2.

Worked examples on how Attainment 8 and Progress 8 measures are calculated are shown in annex $A$.

## Gaps in the Progress 8 baseline

As primary tests and assessments were cancelled in academic years 2019/20 and 2020/21 due to COVID-19 disruption, there will be no KS2 prior attainment data available to use to calculate Progress 8 when the relevant cohorts reach the end of KS4 in academic years 2024/25 and 2025/26. We will explore whether there are any alternative options for producing a progress measure in the affected years, and will announce our approach nearer the time.

## Pupils with extremely negative progress scores

We limit how negative ${ }^{3}$ a pupil's progress score can be when calculating the school average. These pupils still have large negative scores (to reflect that the pupils have made much less progress than other pupils in the same prior attainment group as them), but the disproportionate effect they have on their school's score has been reduced.

We do this by setting a minimum progress score that can be assigned to pupils within the prior attainment groups where extremely negative scores exist. Prior attainment groups from 1 to 16 (inclusive), will not have a minimum progress score threshold set as the average Attainment 8 scores at KS4 for these groups are not high enough to allow for extremely negative progress scores.

Further information on the calculation and minimum thresholds for each prior attainment group is available in annex $B$.

Progress figures published in performance tables are calculated using the methodology outlined above, and in annex B. We also publish figures in download data that do not place limits on pupil progress scores for transparency.

[^2]
## Attainment 8

Attainment 8 measures pupils' attainment across 8 qualifications including:

- maths (double weighted) and English (double weighted, if both English language and English literature are sat)
- 3 qualifications that count in the English Baccalaureate (EBacc) measures (see EBacc entry and attainment measures section)
- 3 further qualifications that can be GCSE qualifications (including EBacc subjects) or technical awards from the DfE approved list Key stage 4 qualifications, discount codes and point scores - GOV.UK (www.gov.uk).

Attainment 8 and Progress 8 calculations are described in more detail in the calculating Attainment 8 and Progress 8 section, with worked examples in annex A.

## EBacc entry and attainment measures

The EBacc entry measure reports the percentage of pupils entered for the EBacc. To enter the EBacc, pupils must take up to eight GCSEs across five subject 'pillars.' ${ }^{4}$ The structure of the EBacc is set out on page 7 of the Government's response to its consultation on implementing the EBacc.

EBacc APS measures pupils' point scores across the five pillars of the EBacc. This ensures the attainment of all pupils is recognised, not just those at particular grade boundaries, encouraging schools to enter pupils of all abilities, and support them to achieve their full potential. For English results to be included in the EBacc APS calculation, pupils must sit both English language and English literature. The better grade counts towards EBacc APS. The way we calculate EBacc APS is set out in annex C.

## Percentage of pupils staying in education or going into employment after Key Stage 4 (pupil destinations)

The headline pupil destination measure shows the percentage of pupils continuing to a sustained education, employment, or training destination in the year after completing KS4 study (after year 11). The data published is for pupils who finished year 11 in 2021. Pupils are counted in a sustained destination if they have a recorded activity throughout the first two terms of the 2021/22 academic year (or any consecutive 6 months in the year for apprenticeships).

[^3]Additional breakdowns show whether pupils were in education, apprenticeships, or employment, did not stay in education or employment for at least two terms, or whether activity was not captured in the data. Education destinations including further education (FE) colleges and other FE providers, sixth-form colleges, school sixth forms and other education destinations are also shown. Further information on the KS4 destination measures can be found in annex $E$.

We recognise that destination measures may have been affected by the broader impacts of COVID-19, including school and college closures during 2020 and 2021 and alternative grading arrangements. Guidance will be provided alongside the data, to encourage users to approach the data with this in mind.

## Attainment in English and maths measures

These measures show the proportion of pupils achieving a grade 5 and above (a headline measure) and the proportion of pupils achieving a grade 4 and above in GCSE English and maths. A pupil has to achieve the relevant threshold grade in either English literature or English language; there is no requirement to sit both.

## Publication of KS4 secondary accountability measures

Headline secondary accountability measures are published as a statistical publication at national and local authority level on Explore Education Statistics and at school level on the performance tables website. From 2022/23 institution level data for all schools, including independent schools and FE colleges, will be published in October. ${ }^{5}$ The statistical publication includes student characteristic breakdowns including gender and disadvantaged status.

Progress 8 and its constituent elements, and pupil destinations, are not published for independent schools and independent special schools. ${ }^{6}$ Pupil destinations are also only published for schools which had pupils completing the key stage two years previously.

As usual, suppression is applied at school level, so we do not disclose the results of small numbers of pupils. Figures are suppressed if the school has five or fewer pupils included in the cohort. This applies to sub-groups of pupils as well as the whole cohort; for example, if there were 5 boys and 3 girls in a school, we would not publish attainment for boys or girls separately but would publish attainment for all pupils (as this is based on 8 pupils). The same rules are applied across pupils included in each headline measure. We apply extra suppression, where appropriate, to destination measures because it contains employment data and to protect confidentiality. The Progress 8 score is suppressed if fewer than $50 \%$ of pupils at the end of KS4 are included in the measure (for example because they do not have KS2 prior attainment recorded).

Schools, colleges and local authorities also have access to school and pupil level performance data via Analyse School Performance (ASP) and pupil level performance data via Get Information About Pupils (GIAP).

[^4]
## Calculating Attainment 8 and Progress 8

## Qualifications included in the measures

Progress 8 and Attainment 8 are based on a calculation of pupils' performance across 8 qualifications. These qualifications are:

1. a double weighted maths element that will contain the point score of the pupil's English Baccalaureate (EBacc) maths qualification.
2. an English element based on the higher point score of a pupils' EBacc English language or English literature qualification. This will be double weighted provided a pupil has taken both qualifications.
3. an element which can include the three highest point scores from any of the EBacc qualifications in science subjects, computer science, history, geography, and languages. For more information see the list of qualifications that count in the EBacc. The qualifications can count in any combination and there is no requirement to take qualifications in each of the 'pillars' of the EBacc.
4. the open element contains the three highest point scores in any three other subjects, including English language or literature (if not counted in the English slot), further GCSE qualifications (including EBacc subjects) or any other technical awards from the DfE approved list: Performance measures: technical and vocational qualifications. For more information, see the list of qualifications included in the KS4 performance measures: Key Stage 4 qualifications discount codes and point-scores.

If a pupil has not taken the maximum number of qualifications that count in each group then they will receive a point score of zero where a slot is empty.

## Maths qualifications

This element of Progress 8 is double weighted. Only maths qualifications which also count towards the EBacc can count in the maths element of Progress 8.

Where a pupil has taken more than one EBacc maths qualification, qualifications which are not used in the maths element cannot count elsewhere in Progress $8 .{ }^{7}$

[^5]Approved mathematical type qualifications that do not count towards the EBacc, for example GCSE statistics, can be counted in a slot in the 'open' element of Progress 8 regardless of whether or not a pupil has also taken an EBacc maths qualification.

For more information on Free Standing Maths Qualifications see Level 3 qualifications section.

## English qualifications

If a student sits both English language and English literature, the higher grade is double weighted in the English element. The lower grade can count in the 'open' element of subjects (not in the EBacc element).

If only one of GCSE English literature or English language is taken then this qualification will count in the English element but will not be double-weighted.

An explanation of how English counts towards other headline performance measures is provided in annex F.

## Qualifications in the English Baccalaureate (EBacc) subjects

Only qualifications that count towards the EBacc measure can be included in the Progress 8 element reserved for EBacc qualifications.

Maths cannot be included in the EBacc element. English literature and English language cannot be included in the EBacc element - the better of these qualifications will count in the 'English' element, and the other can count in the 'open' element if the grade is higher than other eligible subjects.

There are no other stipulations about the types of EBacc subjects which can count in the three slots of the EBacc element. Any combination of EBacc subjects can be used to fill these slots, including for example:

- biology, chemistry, French
- or Spanish, French, German
- or history, geography, Spanish


## Science and computer science qualifications

All students have to study science up to the age of 16 . The KS4 science and computing curricula are compulsory in state-funded maintained schools, and academies are required to provide a broad and balanced curriculum, including English, maths and science, up to the age of 16.

There is the combined science GCSE (double award), the single science GCSEs (biology, chemistry and physics) and computer science GCSE.

Separate GCSEs in biology, chemistry, physics and computer science each take up one slot, and can count in Progress 8 in any combination. The combined science GCSE can take up two slots in either the EBacc or open elements of Progress 8 where this represents the highest relevant grades achieved. One grade from this qualification can fill one slot if higher grades are achieved in other qualifications.

The points awarded to combined science are averaged, which means for example, that a combined science grade of a grade 6 and a grade 5 would be averaged to two 5.5 points to fill either one or two slots as appropriate (a maximum of 11 points across two slots). This is shown in more detail in Table 22.

Any other science subject may count in the open element of Progress 8.
Details of the combined science, single science and computer science qualification pathways and how they may count in the headline measures can be found in the Discounting and Early Entry Guidance at: Key Stage 4 qualifications discount codes and point-scores and an example of the science pathways is found in annex G.

## Qualifications in the 'open' element

Up to 3 GCSE qualifications (including EBacc subjects not used to fill the slots in the EBacc element) and/or technical awards that are included in the approved list for the year in which the student will reach the end of KS4 can count towards the three slots in the 'open' element in the Progress 8 measure. For example if a student takes a technical award early in Year 10 in 2022/23 the technical award must be on the approved list for 2023/24 to count in performance measures as this is when the student will reach the end of KS4.

Technical awards are approved level 1 and 2 qualifications that equip 14 to 16-year-olds with applied knowledge and practical skills not usually acquired through general education ${ }^{8}$.

The Department introduced a revised approval process for KS4 technical qualifications for inclusion in 2024 performance measures. Only those technical qualifications that meet stretching requirements, have been approved by the Department to be included in the 2024 KS4 performance measures alongside academic qualifications.

[^6]
## Level 3 qualifications

AS levels can count in the appropriate element of the Progress 8 measure for their subject (for example, maths AS-levels count in the maths slot, a French AS-level in the 'EBacc group', and an Art AS-level in the 'open' element). If a GCSE in the same subject has been taken the AS-level will always count in Progress 8 and the GCSE will not count, even if the AS has a lower point score than the GCSE. AS-levels at grade A score higher points in Progress 8 than a grade 9 GCSE.

Level 3 qualifications not included in the EBacc list can only count in an 'open’ slot. This includes Free Standing Maths qualifications (FSMQ).

FSMQ will only count in an 'open' slot if a pupil has not taken an EBacc maths qualification. FSMQ do not discount EBacc maths qualifications therefore early entry rules are not applicable across these qualifications. For example, even if a pupil sat an FSMQ in year 10 and an EBacc maths qualification in year 11, the 'open' slot would not be filled by the FSMQ as the pupil would have an EBacc maths qualification which counts. ${ }^{9}$

One graded music qualification can count in the 'open' element of Progress 8 and can count alongside GCSE music.

## Point Scores

The point scores for different types of qualifications for performance measures for academic year 2022/23 and in future performance measures can be found in annex G.

## Discounting, pathway and first entry rules

Discounting ensures that, where a pupil has taken two or more qualifications with a significant overlap in content, the performance tables only give credit once for teaching a single course of study.

Rules for first entry in a particular subject apply under Progress 8 and Attainment 8, as do rules for pathways in English, maths and science qualifications. The discounting and early entry guidance is published here: Key stage 4 qualifications discount codes and point-scores.

[^7]
## Interpreting Progress 8 scores

A school's Progress 8 score is calculated as the average of its pupils' Progress 8 scores. For all mainstream pupils nationally, the average Progress 8 score will be zero. When including pupils at special schools the national average will be slightly less than zero as Progress 8 scores for special schools are calculated using Attainment 8 averages based upon mainstream pupils. School scores should be interpreted alongside their associated confidence intervals (see annex I for more information).

The minimum grades each pupil requires to achieve a positive Progress 8 score will not be known in advance. This is because each pupil's results are compared to other pupils with similar prior attainment within the same national cohort.

It is highly advisable that care should be taken when using a previous year's attainment averages as a guide to potential future Progress 8 results. This is because changes to national subject entry patterns and performance, as well as changes to the methodology for calculating measures and to grading as a result of the pandemic will cause these averages to change. Schools may change their curriculum offer in response to the Progress 8 measure and to the Government's EBacc ambition, so any modelling based on current national results could be misleading.

## Pupils reaching their estimated grades

A pupil's estimated grade is what they are anticipated to achieve based on the national average for their prior attainment group. Progress 8 does not give particular credit to a school for helping a pupil reach his or her estimated grade. Schools get credit for each increase in grade a pupil achieves, regardless of how this grade relates to their estimated grade. For example, the Progress 8 score can improve equally if a pupil working well below their estimated grade moves up one grade, or if another pupil moves up one grade to achieve their estimated grade.

## Impact of the number of qualifications taken on a pupil's Progress 8 score

The number of qualifications each pupil should enter remains a professional judgement for schools led by what best meets the needs of an individual.

The Progress 8 score for each pupil will always be determined by dividing the points total for their eight qualifications included in Attainment 8 by 10 (the eight qualifications with English and maths both double-weighted), regardless of how many qualifications the pupil sits.

This approach supports the policy aim to encourage schools to offer a broad and balanced curriculum with an academic core.

It may benefit some less able pupils to work towards good grades (and hence score more points) in fewer subjects, with the emphasis on doing well in English and maths, rather than to take more subjects but achieve lower grades overall.

## Presentation of Progress 8 scores in performance tables

Progress 8 scores are presented in performance tables alongside confidence intervals and a banding. Further information on bandings can be found in annex $O$.

## Confidence intervals

Progress 8 results are calculated for a school based on a specific cohort of pupils. A school may have been just as effective but have performed differently with a different set of pupils. Similarly, some pupils may be more likely to achieve high or low grades independently of which school they attend. To account for this natural uncertainty $95 \%$ confidence intervals around Progress 8 scores are provided as a proxy for the range of scores within which each school's underlying performance measure can be confidently said to lie. The results of schools with a small cohort tend to have wider confidence intervals; this reflects the fact that the performance of a small number of pupils taking their KS4 exams can have a disproportionate effect on the school's overall results. Both the Progress 8 score and the confidence interval for a school should be taken into account when comparing with other schools, pupil groups or national or local authority averages.

Information about how confidence intervals are calculated is described in Annex H.

## Rounding method used in performance tables

Progress scores (including confidence intervals) are published to two decimal places and use normal rounding conventions. For example, digits less than 5 are rounded down and those that are 5 or more are rounded up. Therefore a score of 0.21453 will be rounded down to 0.21 and a score of 0.09540 will be rounded up to 0.10 . The bandings are calculated on rounded data and this is an established convention within the performance tables. We base our bandings, and whether we consider a school's score to be above or below average (significantly different from 0 ), on the published value of the confidence interval at two decimal places. For example, we do not treat a school with an upper confidence limit of -0.00234 , which is shown as 0.00 , as significantly below average.

## Making comparisons between years

Progress 8 is a relative, in-year measure and cannot be compared directly year on year. For example, knowing a school had a Progress 8 score of -0.2 in 2022 and a score of 0.3 in 2023 tells you how the school did compared to the national average in those years
but not whether their performance improved across years. Scores may also be affected by the different approaches to grading in those years and by changes made to way we calculate measures due to the impact of the pandemic. We have made clear in performance tables that KS4 performance measures based on qualification results from 2022/23 cannot be directly compared to measures from 2021/22 due to the different approaches to grading in 2021/22 and 2022/23.

## Using performance data to predict individual pupils' scores and sharing pupils' progress data

The Government response to the Workload Advisory Group report 'Making Data Work'10 provides advice to schools about proportionate use of setting predictions or targets for individual pupils to aid teaching. It makes clear that predicting pupils' attainment can sometimes be appropriate, but that pupils or their parents need not be routinely told the levels that they 'should' or 'are likely to' achieve at the end of KS4. The Group also stated that 'flight paths', where pupils are told the levels they will achieve based on the performance data of pupils with similar starting points in previous years, are not valid as a prediction, as they understate the variation in pupil trajectories of development. Schools are not held to account by the Department for pupil targets and predictions, and local authorities or multi-academy trusts should not routinely request such information.

Similarly, schools should not share individual pupil progress scores with pupils or parents. Schools should not try to predict pupil or school level progress scores in advance of official provisional data being available in the autumn. The Progress 8 score is an in-year relative measure.

[^8]
## Measurement of Prior Attainment

## Changes to the KS2 baseline for calculating Progress 8

In 2016, changes were introduced to KS2 national curriculum tests, with pupil outcomes expressed as KS2 scaled scores for English reading and maths instead of national curriculum levels. Further information can be found here.

Most pupils reaching the end of KS4 in 2022/23 took national curriculum tests in 2018. A few may have completed KS4 in a longer or shorter period of time, and will have taken national curriculum tests in 2017 or 2019.

Most of the first cohort who took national curriculum tests in summer 2016 reached the end of KS4 in 2020/21 academic year. We did not publish Progress 8 in 2020/21, so many of these changes came into effect in the 2021/22 performance measures. The way we define low, middle and high prior attainment at KS4 using KS2 scaled scores was reflected in KS4 attainment statistics and accompanying data files published in November 2021.

When reporting on prior attainment, we define low, middle and high prior attainment at KS4 using KS2 scaled scores as follows:

Table 1: Low, middle and high prior attainment definitions

| Prior Attainment Group | Average scaled score in English reading and <br> maths |
| :--- | :--- |
| Low prior attainers | Below 100 |
| Middle prior attainers | Greater than or equal to 100 but less than 110 |
| High prior attainers | Greater than or equal to 110 |

Using these definitions changed the percentage of pupils in each group, compared to when prior attainment was defined using national curriculum levels. This is discussed in the KS4 attainment statistics publication (on Explore Education Statistics) published in November 2021.

Pupils working below the standard of the test at KS2 are assigned nominal point scores for the purposes of including them in prior attainment measures. The process used from 2021 to define low, middle and high prior attainment is described in guidance accompanying the 2023 KS4 attainment statistics publication.

## Pupils with test results in both English reading and maths

Most pupils will have been awarded a scaled score for English reading and maths. For these pupils, their prior attainment has been calculated as the average of their English reading and maths scaled scores.

Average scaled scores are calculated to one decimal place meaning, for example, a pupil getting an English reading scaled score of 110 and a maths scaled score of 105 would be allocated an average scaled score of 107.5.

KS2 scaled scores, when used for the purpose of the Progress 8 baseline, do not have special consideration applied. ${ }^{11}$

## Pupils working below the level of the test

Pupils working below the level of the test will have KS2 teacher assessed outcomes instead of test results. For the purposes of including these pupils in KS4 progress measures, their teacher assessed outcomes have been assigned nominal scaled scores, with the calculation of average scaled scores then proceeding as described above (i.e., a pupil's average scaled score is the average of their English reading and maths nominal scaled scores or, in the case of pupils with one teacher assessed outcome and one test result, the average of their test result and nominal scaled score).

As we have done in previous years, we have allocated a nominal point score for pupils without a pre-key stage teacher assessment who were entered for the test but gained too few marks to achieve a scaled score. These pupils will have been allocated a code $\mathrm{N}^{12}$. In 2023, the points assigned to code N are 79.

Pupils with a pre-key stage teacher assessed outcome are converted into nominal scaled scores using the KS2 methodology from the year the pupil completed their KS2 studies. Most pupils reaching the end of KS4 in academic year 2022/23 will have completed their KS2 assessments in 2018, while a minority will have completed KS2 in 2017 (taking one year longer between Key Stages 2 and 4) or 2019 (taking one year less between Key Stages 2 and 4). The methodology used to convert KS2 teacher assessed outcomes to nominal scaled scores in 2016, 2017, 2018 and 2019 is described below.

[^9]In 2016, pupils were allocated one of four nominal scaled scores, depending on whether they were assessed as being below the interim pre-key stage standards, meeting the foundations for the expected standard, showing early development of the expected standard or showing evidence for growing development of the expected standard.

For 2017 and 2018, changes were made to the nominal scores allocated to pupils assessed as being below the interim pre-key stage standards, with nominal scores between 59 and 71 being allocated depending on the pupil's P scale teacher assessment outcome.

In 2019 new pre-key stage standards were used for the first time to report teacher assessment in English reading, English writing and mathematics for pupils working below the standard of national curriculum assessments engaged in subject-specific study. The pre-key stage standards replaced the interim pre-key stage standards and $P$ scales 5-8. The pre-key stage standards included six standards at key stage 2.
$P$ scales 1 to 4 were still used for the statutory assessment of pupils not yet engaged in subject-specific study at the end of Key Stage 2.

The nominal scaled scores allocated to pupils with KS2 teacher assessed outcomes obtained from 2016 to 2019 are shown in the tables 2 and 3.

Table 2a: Points allocated to each Key Stage 2 teacher assessment category 2016 to 2018

| Teacher assessment for pupils <br> below the level of the test at Key <br> Stage 2 | Points <br> (below the <br> scaled score <br> range) <br> 2016 to 2018 | Points <br> (below the <br> scaled score <br> range) <br> 2016 | Points <br> (below the <br> scaled score <br> range) <br> 2017 |
| :--- | :--- | :--- | :--- |
| Below the standard of the interim <br> pre-key stage standards - <br> assessment based on P-scales | See <br> table 3 | See <br> table 3 | See <br> table 3 |
| Pupils below the interim pre-key <br> stage standard but not on P-scales | 70 | 71 | 71 |
| Foundations for the expected <br> standard | 73 | 73 | 73 |
| Early development of the expected <br> standard | 76 | 76 | 76 |


| Growing development of the <br> expected standard | 79 | 79 | 79 |
| :--- | :--- | :--- | :--- |

Table 2b: Points allocated to each Key Stage 2 teacher assessment category 2019

| Teacher assessment for pupils <br> below the level of the test at Key <br> Stage 2 <br> 2019 | Points (below the <br> scaled score range) <br> 2019 |
| :--- | :--- |
| Below the standard of the pre-key <br> stage standards - assessment based <br> on P-scales | See <br> table 3 |
| Below pre key stage standard but not <br> on p scales | 62 |
| Standard 1 | 64 |
| Standard 2 | 67 |
| Standard 3 | 70 |
| Standard 4 | 73 |
| Standard 5 (working towards the KS1 <br> expected standard) | 76 |
| Standard 6 (working at the KS1 <br> expected standard) | 79 |

Table 2c: Disregard codes for Key Stage 2 teacher assessment categories

| Disregard codes |  |
| :--- | :--- |
| M - Missing | A - Absent |
| U - Unable to access test | J - Just arrived |
| CA - Ability to represent their actual <br> ability in the test affected | CN - Ability to represent their actual <br> ability in the test not affected |
| HNM - Has not met the standard | D - Disapplied |
| F - Pupil will take the test in the future | P - Pupil has taken the test in the past |
| L- Left | Z - Ineligible |
| Q - Maladministration | S - Pending maladministration |
| X - Lost |  |

Table 3: Points scores for pupils working below the pre-key stage standards

| P-scale teacher assessment <br> for pupils below the level of <br> the test and below (interim) <br> pre-key stage standards at <br> Key Stage 2 | Points <br> (below the <br> scaled <br> score <br> range) <br> 201613 | Points <br> (below the <br> scaled <br> score <br> range) <br> 2017 | Points <br> (below the <br> scaled <br> score <br> range) <br> 2018 | Points <br> (below the <br> scaled <br> score <br> range) <br> 2019 |
| :--- | :--- | :--- | :--- | :--- |
| P1i to P3ii | 70 | 59 | 59 | 59 |
| P4 | 70 | 61 | 61 | 61 |
| P5 | 70 | 63 | 63 | n/a |
| P6 | 70 | 65 | 65 | n/a |
| P7 | 70 | 67 | 67 | n/a |
| P8 | 70 | 69 | 69 | n/a |

## Pupils missing one result

Some pupils might not have test results or teacher assessed outcomes in both English reading and maths. Where pupils have one result (either a test result or a teacher assessed outcome) their average scaled score is equal to their one result. These pupils are then treated in the same way as pupils with results in both English reading and maths for the purposes of placing them into prior attainment groups and calculating their Progress 8 scores.

## Pupils who have no KS2 assessment

There will be some pupils who have no KS2 results to use as the baseline for the Progress 8 measure, for example, those arriving at secondary school from the

[^10]independent sector or abroad or where test results have been annulled due to KS2 maladministration. These pupils' scores will not be included in the Progress 8 measure (and the pupils will not be included in the denominator when calculating the average of the progress scores for the school).

However, these pupils will be included in the attainment measures for the school, unless they have arrived from a non-English speaking country in year 10 or year 11 and the school requests for their results to be removed. We also expect the school to be able to discuss with Ofsted, parents and others the progress these pupils have made through secondary school.

## Information available to secondary schools about their year 7 pupils

Secondary schools receive information via common transfer files on the teacher assessment and test score (the scaled score) awarded to each pupil.

Question Level Analysis data is available to secondary schools via the Analyse School Performance (ASP) service. This will help secondary schools identify strengths and weaknesses of incoming year 7 pupils in each test subject.

Get information about pupils (GIAP) provides access to pupil level census and attainment data as well as providing pupil level pupil premium allocation details. The service can be accessed via the DfE Sign-in.

Secondary schools should continue to view KS2 test results as just one piece of data available to them and continue to supplement this data with their own ongoing assessments of what pupils know and can do.

## KS4 multi-academy trust (MAT) measures

We intend to produce and publish KS4 MAT measures in February 2024 for the 2022/23 academic year based on revised data. As in previous years, we will produce the following KS4 measures at MAT level:

- Progress 8
- percentage entering EBacc
- EBacc Average Point Score (APS)
- percentage achieving EBacc at grade 5 and above/grade 4 and above ${ }^{14}$
- Attainment 8
- percentage of pupils achieving grade 5 or above in English and maths GCSE

As MAT-level measures are an aggregate of school-level measures, we have used the usual methodology to calculate MAT measures, as far as possible. Where appropriate, the adapted methodology for calculating KS4 performance measures set out in annex D will also apply to MAT-level measures.

## Eligibility for inclusion in the MAT measures

We include data at MAT level for MATs that are sufficiently well established to have had time to a) have an impact on the performance of schools within the MAT and b) so that aggregate data tells you more than the individual institution data would.

For the 2022/23 academic year, we will produce measures for MATs:

- that have at least three schools with results at KS4, and
- where those schools have been with the MAT for at least three academic years (defined as having joined that MAT before 14 September 2020). ${ }^{15}$

This means that we do not produce measures for all MATs. It also means that, where we do produce measures for a MAT, the measures may be based on the results from only some of their schools (i.e., if they have at least 3 schools, that have been part of the MAT for 3 or more years that have results at KS4, but also have schools with results at KS4 that have been with the MAT for less than 3 years).

[^11]The measures cover state-funded mainstream schools within MATs only. Special schools, pupil referral units, alternative provision academies and alternative provision free schools are not included.

As the MAT sector continues to mature, each year the number of MATs that have at least 3 academies, that have been part of the MAT for at least 3 years increases. This means that each year we expect to produce measures for more MATs than we did for the previous academic year, and some MATs will have MAT measures produced for the first time.

Previously, we have calculated and reported at sponsor level, for the very small number of MATs this affects. We will no longer be reporting at this level and will be reporting at trust level only.

## Calculating KS4 measures at MAT level

For each of the measures we publish at MAT level, the score or percentage for each MAT is based on the weighted average of its individual schools' respective progress/attainment scores. This is to ensure that a school's contribution to the overall MAT level score is proportional to its size when calculating the average.

For Progress 8, Attainment 8, EBacc entry and attainment measures, and attainment in English and maths, the score is weighted for:

- the number of pupils at the end of the key stage;
- the length of time the school has been with that MAT (those that have been with the MAT for three years are given a weight of three, those with the MAT for four years are given a weight of four and those with the MAT for five or more years are given a weight of five; as the usual combined duration of KS3 and KS4 is five years).


## Disadvantaged pupils and MAT measures

We calculate breakdowns of all KS4 MAT level measures for disadvantaged pupils. Evidence shows that overall performance of disadvantaged pupils is lower than that of other pupils. This data indicates how well a MAT improves the performance of disadvantaged pupils. Disadvantaged pupils are those who were eligible for free school meals at any time during the last six years and children looked after (in the care of the local authority for a day or more or who have been adopted from care).

Worked examples of KS4 MAT measures are included in annex I.

## Annex A - Progress 8 and Attainment 8 worked examples - usual methodology

## Calculating Attainment 8

## Worked Example A

Table 4 sets out how the Attainment 8 score would be calculated for a particular pupil, Gillian, based on current point scores.

Table 4: Key stage 4 results for Gillian

| ID | Qualification | Grade | Points | Included <br> in the <br> measure | Element | Doubled? | Total <br> points |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Qa1 | GCSE maths | 7 | 7 | Yes | Maths | Yes | 14 |
| Qa2 | GCSE English <br> language | 8 | 8 | Yes | English | Yes | 16 |
| Qa3 | GCSE English <br> literature | 6 | 6 | Yes | Open | No | 6 |
| Qa4 | GCSE biology | 7 | 7 | Yes | EBacc | No | 7 |
| Qa5 | GCSE art | 4 | 4 | Yes | Open | No | 4 |
| Qa6 | GCSE physics | 6 | 6 | Yes | EBacc | No | 6 |
| Qa7 | GCSE French | 9 | 9 | No |  |  |  |
| Qa8 | AS Level <br> French | C | 7 | Yes | EBacc | No | 7 |
| Qa9 | GCSE <br> Spanish | 6 | 6 | Yes | Open | No | 6 |
| Qa10 | GCSE <br> religious <br> studies | 3 | 3 | No |  |  |  |

Referring to the IDs of qualifications above, the following illustrates the calculation of the Attainment 8 score for Gillian:


```
Attainment 8 score \(=(\mathrm{Qa} 1+\mathrm{Qa} 1)+(\mathrm{Qa} 2+\mathrm{Qa} 2\) as taken English literature \()\)
    \(+\mathrm{Qa} 4+\mathrm{Qa} 6+\mathrm{Qa} 8+\mathrm{Qa} 3+\mathrm{Qa} 5+\mathrm{Qa} 9\)
    \(=(7+7)+(8+8)+7+6+7+6+4+6\)
    \(=66\)
```

Dividing the Attainment 8 score by 10 gives a pupil's average grade. In this case it is 6.6.

## Worked Example B

Table 5 sets out how the Attainment score would be calculated for another pupil, Hardip.

Table 5: Key stage 4 results for Hardip

| ID | Qualification | Grade | Points | Included <br> in the <br> measure | Element | Doubled? | Total <br> points |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Qb1 | GCSE Maths | 3 | 3 | Yes | Maths | Yes | 6 |
| Qb2 | GCSE English <br> Language | 4 | 4 | Yes | English | No | 4 |
| Qb3 | GCSE <br> Combined <br> Science | $5-5$ | 5 | Yes | EBacc <br> Ebacc | No <br> No | 5 <br> 5 |
| Qb4 | GCSE <br> Computer <br> Science | 4 | 4 | Yes | EBacc | No | 4 |
| Qb5 | WJEC <br> Vocational <br> Award in <br> Hospitality and <br> Catering | Distinction | 7 | Yes | Open | No | 7 |


| Qb6 | BTEC First <br> Award in Sport | Merit | 5.5 | Yes | Open | No | 5.5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Qb7 | NCFE <br> Certificate in <br> Business and <br> Enterprise | Level 2 <br> Pass | 4 | Yes | Open | No | 4 |
| Qb8 | Pearson <br> BTEC Tech <br> Award in <br> Health and <br> Social Care | Level 1 <br> Pass | 1.25 | No |  |  |  |



Mathematics


English


Other EBacc qualifications


Other qualifications

Attainment 8 score $=(Q b 1+Q b 1)+(Q b 2+0)$
Qb3 + Qb3+ Qb4 + Qb5 + Qb6 +Qb7

$$
\begin{aligned}
& =(3+3)+(4+0)+5+5+4+7+5.5+4 \\
& =40.5
\end{aligned}
$$

Dividing the Attainment 8 score by 10 gives a pupil's average grade. In this case it is 4.05 .

Hardip has not taken English literature, so his score for English language is not doubled. Furthermore, he has taken two EBacc subjects, as computer science ${ }^{16}$ counts as a separate science in addition to combined science, so he scores in each of the three EBacc slots. The three highest scores from the four technical awards he entered count towards the open slots.

[^12]
## Calculating a pupil's Progress 8 score

Hardip has an Attainment 8 score of 40.5 . His KS2 scaled score was 101. The national average revised Attainment 8 score for pupils with Hardip's KS2 result is 38.00 in 2023. Provisional 2023 attainment averages are shown in annex J Hardip's Progress 8 score is the difference between his actual Attainment 8 score and the estimated Attainment 8 score, divided by 10 that is $40.5-38=2.5 / 10=0.25$ (to 2d.p.).

Table 6: Worked example of pupil Progress 8 score

| Hardip's Prior Attainment Group includes those with scaled score of | Average Attainment 8 score of all pupils in this Prior Attainment Group | Hardip's estimated Attainment 8 score | Hardip's actual Attainment 8 score | Hardip's <br> Progress 8 score (actual - estimate) |
| :---: | :---: | :---: | :---: | :---: |
| 100.5 to 101 |  | 38.00 | 40.5 | $\begin{aligned} & 40.5-38 / 10= \\ & 0.25 \end{aligned}$ |

## Calculating a school's Progress 8 score

The school's Progress 8 score is the mean average of its pupils' Progress 8 scores.

## Worked Example A

Hardip is one of 142 pupils in his school's KS4 cohort, who gain a range of Progress 8 scores:

Table 7: Worked example of unadjusted school Progress 8 score

| Pupil Number | Pupil name | P8 score |
| :--- | :--- | :--- |
| 1 | Hardip | +0.25 |
| 2 | Sarah | -0.20 |
| $\ldots$ |  | $\ldots$ |
| 142 | Ollie | +1.10 |
|  |  | Sum |

So the school's unadjusted Progress 8 score is calculated as $36.94 / 142=0.26$.

## Calculating a school (adjusted) Progress 8 score

At Hardip's school there is a pupil called Stuart, who is the only person in the school with an extremely negative Progress 8 score, Stuart's KS2 prior attainment was higher than most pupils nationally and has a KS2 scaled score of 116. He achieved no Attainment 8 points by the end of KS4. As a result, his (unadjusted) Progress 8 score is -7.32 .

In this hypothetical example, the minimum progress for pupils in Stuart's prior attainment group is -3.32 therefore this extremely negative pupil progress score will be adjusted from -7.32 to -3.725 .

Table 8: Worked example of school adjusted Progress 8 score

| Pupil Number | Pupil name | P8 score |
| :--- | :--- | :--- |
| 1 | Poppy | +0.56 |
| 2 | Sarah | -0.20 |
| 3 | Stuart | -3.72 |
| $\ldots$ |  | $\ldots$ |
| 142 | Ollie | +1.10 |
|  |  |  |

So the school's adjusted Progress 8 score is calculated as $40.54 / 142=0.29$. Note that the unadjusted score was 0.26 .

The impact is larger on smaller schools, for example, if there 50 pupils in this school at the end of KS4 then this would raise the school's adjusted Progress 8 score to 0.81 .

## Annex B - Prior Attainment Group thresholds for pupils with extremely negative progress scores

Minimum thresholds are set using provisional data for mainstream provision. ${ }^{17}$ Where a minimum score is set for a prior attainment group, this is based on the variation in pupil progress scores within that prior attainment group (as measured by the standard deviation). The minimum scores are fixed at a set number of standard deviations below the mean for that prior attainment group so that approximately $1 \%$ of pupils are identified nationally ${ }^{18}$ (in most cases, this is no more than 1 or 2 pupils per school). By design, these minimum scores will change each year. As such, predicting which pupils will, and will not, have their score affected by this methodology change, in advance of progress scores being made available, will not be possible.

## Adjusting extremely negative progress scores, number of standard deviations and prior attainment group thresholds

The threshold score applied to the pupil's progress score is dependent on the prior attainment group that the pupil is in. ${ }^{19}$ To work these thresholds out:

The first step is to calculate the mean and standard deviation of Progress 8 scores within each prior attainment group.

The second step to ascertain the number of standard deviations each pupil's Progress 8 score is from their prior attainment group average.

The third step is to order the numbers of standard deviations from step two from low to high and select the number of standard deviations such that about $1 \%$ of pupils nationally ${ }^{20}$ are below this value. In 2023 this number is -2.815121 , to 6 decimal places.

The fourth step is to multiply the standard deviations found in the first step with the results from the third step to give the threshold for each prior attainment group - the minimum score for that prior attainment group.

The fifth step: a pupil's progress score will be replaced by the minimum, only if their original score falls below this minimum.

[^13]Finally, the school's progress score is calculated by averaging the adjusted progress score.

Table 9: Minimum scores in 2023

| Prior Attainment Group | Key Stage 2 average <br> scaled score range | Minimum threshold for <br> adjusted Progress 8 |
| :--- | :--- | :--- |
| 1 to 16 | 59 to 102 | N/A |
| 17 | 102.5 to 103 | -4.133 |
| 18 | 103.5 to 104 | -4.150 |
| 19 | 104.5 to 105 | -4.203 |
| 20 | 105.5 to 106 | -4.243 |
| 21 | 106.5 to 107 | -4.251 |
| 22 | 107.5 to 108 | -4.299 |
| 23 | 108.5 to 109 | -4.283 |
| 24 | 109.5 to 110 | -4.299 |
| 25 | 110.5 to 111 | -4.249 |
| 26 | 111.5 to 112 | -4.234 |
| 27 | 112.5 to 113 | -4.125 |
| 28 | 113.5 to 114 | -3.974 |
| 29 | 114.5 to 115 | -3.854 |
| 30 | 115.5 to 116 | -3.715 |
| 31 | 116.5 to 117 | -3.592 |
| 32 | 117.5 to 118 | -3.394 |
| 33 | 118.5 to 119 | -3.162 |
| 34 | 119.5 to 120 | -2.997 |

Schools can use table 9 above to see which prior attainment group a pupil will have been allocated to depending on their KS2 average scaled score, and what the lowest score they can be allocated in 2023 is.

Not all prior attainment groups have extremely negative scores. This is because the average Attainment 8 score for pupils in the lowest prior attainment groups will be relatively low, for example in prior attainment group 1 (scaled scores between 59 and 82), the average Attainment 8 score was 15.83, whereas for prior attainment group 34 (scaled scores between 119.5 and 120), the average Attainment 8 score was 81.85 . So, a pupil doing very badly in group 34 can get an extremely negative score (e.g.,-8.19 ), whereas the lowest score a pupil in group 1 can get is -1.58 ln short, it is pupils in the middle to higher prior attainment groups that can gain a Progress 8 score that is so far below those for others with similar prior attainment that it has a disproportionate impact on the school's score. There is, in effect, already a minimum possible score for the lower groups.

As set out in the table 9, the lowest prior attainment groups (1-16) have minimum scores that are above the threshold for that prior attainment group, due to no pupils having scores extreme enough to be below the threshold. The middle to higher prior attainment groups (17-34) have pupils with extreme progress scores below the threshold. These are the only prior attainment groups where pupils' scores have been changed by this methodology.

## Annex C: EBacc APS worked examples - usual methodology

This measure shows pupils' point scores across the five pillars of the EBacc. The EBacc APS is calculated by allocating points to a pupil's best grades in EBacc subjects:

- the better grade of either English language or English literature when both subjects are taken
- the grade for maths
- the best two grades from exams taken in science - grades will be taken from the following: - if the single sciences option is chosen, three out of four single sciences must be chosen. The best two grades will be taken from these subjects - grades for GCSE combined science
- the better grade of either geography or history
- the best grade in a language

These points will be totalled for each pupil, with a zero for any missing pillars, and then divided by six to create an average point score per pupil ${ }^{21}$. These scores are added together for all pupils in a school's end of key stage 4 cohort and divided by the number in the cohort, to calculate the EBacc average point score per pupil for each school.

## Worked example 1

Table 10 sets out how the EBacc APS would be calculated for a particular pupil, Sumita, based on her attainment in EBacc subjects.

Table 10: Key stage 4 results for Sumita

| ID | Qualification | Grade | Points | Included in <br> the <br> measure | Element | Points <br> used <br> toward <br> EBacc <br> APS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Qc1 | GCSE English <br> language | 8 | 8 | Yes | English | 8 |
| Qc2 | GCSE English <br> literature | 7 | 7 | No | English | No |
| Qc3 | GCSE Maths | 5 | 5 | Yes | Maths | 5 |

[^14]| Qc4 | GCSE Biology | 4 | 4 | No | Science | No |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Qc5 | GCSE Physics | 5 | 5 | No | Science | No |
| Qc6 | GCSE <br> Chemistry | 7 | 7 | Yes | Science | 7 |
| Qc7 | GCSE Computer <br> Science | 7 | 7 | Yes | Science | 7 |
| Qc8 | GCSE History | 5 | 5 | Yes | Humanities | 5 |
| Qc9 | GCSE French | 4 | 4 | Yes | Languages | 4 |
| Qc10 | GCSE Religious <br> studies | 5 | 5 | No | None - <br> does not <br> count <br> towards <br> EBacc | No |

Sumita sat both English language and English literature, so her English score can be used toward her EBacc APS. Her score in the English element was taken from English language as this was her best result. Sumita took a maths GCSE that counts towards the EBacc maths element, so this score is used.

Sumita chose the single sciences option and sat four single sciences, so her science score can be used toward her EBacc APS. Her two highest scoring grades were in GCSE chemistry and GCSE computer science.

Sumita's results for history and French are used toward the humanities and languages elements, respectively. Sumita did not enter for other qualifications in these areas so these points are used. GCSE religious studies does not count toward the EBacc so is not used in the calculation of EBacc APS.

Total EBacc point score $=$ Qc1 + Qc3 + + Qc6 + Qc7 + Qc8 + Qc9
$=8+5+(7+7)+5+4$
$=36$

## Average EBacc point score =

$36 \div 6=6$

## Worked example 2

Table 11 sets out how the EBacc APS would be calculated for a particular pupil, Steven, based on his attainment in EBacc subjects.

Table 11: Key stage 4 results for Steven

| ID | Qualification | Grade | Points | Included <br> in the <br> measure | Element | Points <br> used <br> toward <br> EBacc <br> APS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Qd1 | GCSE English <br> language | 3 | 3 | No | English | No |
| Qd2 | GCSE Maths | 5 | 5 | Yes | Maths | 5 |
| Qd3 | GCSE <br> Combined <br> Science | $3-3$ | 6 | Yes | Science | 6 |
| Qd4 | GCSE German | 4 | 4 | Yes | Languages | 4 |
| Qd5 | GCSE Music | 4 | 4 | No | None - <br> does not <br> count <br> towards <br> EBacc | No |
| Qd6 | BTEC Travel <br> and Tourism | Distinction | 7 | No | None - <br> does not <br> count <br> towards <br> EBacc | No |

Steven did not sit both English language and English literature, so his English score cannot be used toward his EBacc APS. Steven took GCSE maths, which counts towards the EBacc maths element, so this score can be used.

Steven took GCSE combined science so both grades are used towards EBacc APS. His GCSE German qualification counts towards the EBacc languages element. However, Steven did not take any humanities qualifications so scores a 0 for this element for EBacc APS. His remaining two qualifications do not count towards EBacc so cannot be included in the calculation.

Total EBacc point score $=$ Qd2 + Qd3 + Qd4
$=0($ English $)+5+(3+3)+0$ (Humanities) +4
$=15$

## Average EBacc point score $=$

$15 \div 6=2.5$

## Calculating a school's EBacc APS score

Let us then say that Steven and Sumita are two of 200 pupils in their school's key stage 4 cohort, each assigned EBacc APS scores:

Table 12: School Ebacc APS score

| Pupil \# | Pupil name | EBacc APS |  |  |
| :---: | :--- | :---: | :---: | :---: |
| 1 | Sumita | 6.0 |  |  |
| 2 | Sarah | 5.42 |  |  |
| $\ldots$ | $\ldots$ | $\ldots$ |  |  |
| 200 | Steven | 2.5 |  |  |
| Sum: |  |  |  | $\mathbf{9 1 2 . 4 3}$ |

So the school's EBacc APS is calculated as $912.43 / 200=4.56$

## Annex D - adapted methodology and worked examples for results achieved between January 2020 and August 2021

## Early entries achieved between January 2020 to August 2021

We have made clear that results from qualifications achieved between January 2020 and August 2021 would not be used in school and college level performance measures in future years ${ }^{22}$. In light of this, we adjusted the methodology for calculating KS4 performance measures for the 2021/22 academic year. This was to take account of pupils entered early ${ }^{23}$ for qualifications between January 2020 and August 2021, who have reached the end of KS4 in the 2021/22 academic year. We will continue to apply this adapted methodology when calculating KS4 performance measures for 2022/23, where a pupil has entered a qualification early and has a qualification result achieved between January 2020 and August 2021.

It is important to note that these changes to methodology minimise, but cannot eliminate completely, the impact of gaps in data. The approach is the best option available, given our commitment not to use qualification results achieved between January 2020 and August 2021. We will ensure messages are placed in performance tables to highlight the change in methodology and potential impact on a school's performance measures.

When calculating KS4 performance measures for 2022/23, we have counted entries but not results from qualifications taken between January 2020 and August 2021. ${ }^{24}$ This means that, for example, if a pupil has taken GCSE English literature in summer 2021, and GCSE English language in summer 2023, we will count the summer 2021 entry in English literature for the purposes of triggering the double weighting for English in Progress 8 and Attainment 8 . However, only the summer 2023 result in English language will count towards the Progress 8 and Attainment 8 scores, regardless of which grade is higher.

[^15]
## Discounting and early entries from qualifications achieved between January 2020 and August 2021 and re-entries in the 2022/23 academic year

Discounting ensures that, where a pupil has taken two or more qualifications with a significant overlap in content, the performance measures only give credit once for teaching a single course of study.

Where a pupil has been entered early in a subject between January 2020 and August 2021 and is then re-entered for the same subject in the 2022/23 academic year, the first entry rule will apply and the result achieved in the re-entry in 2022/23 academic year will not count towards any KS4 performance measures for 2022/23. More information can be found in the discounting and early entries guidance.

## Technical Awards and unit grades achieved in 2019/20 and 2020/21 academic years

We will include qualification grades in Technical Awards achieved in 2021/22 academic year in KS4 performance measures for academic year 2022/23 and in future KS4 performance measures, even if some of the constituent units of that qualification were given a grade in the 2019/20 or 2020/21 academic years via Centre Assessment Grades, Teacher Assessed Grades or another process, such as remote invigilation or special consideration.

## Worked example of Progress 8/Attainment 8 with adapted methodology

Figure 1: Progress 8 and Attainment 8 buckets


Poppy has entered GCSE English literature early in year 10 in the academic year 2020/21, gaining a grade 7, and GCSE English language in year 11 in 2022/23 academic year, gaining a grade 6. The 2020/21 entry in English literature is used to trigger the double weighting for English. In line with the Department's commitment not to use qualification results achieved between January 2020 and August 2021 in future measures, only the grade 6 (double weighted) in English language gained in the 2022/23 academic year would count towards her school's performance measures.

Poppy would be assigned 12 performance measure points for English in Attainment 8/Progress 8 for the 2022/23 academic year. The English literature grade from the 2020/21 academic year would not be included.

Step 1: English \& Maths

Poppy has entered both English Literature and English language, and so triggers double weighting. However, because her English Literature entry was in 2021, we cannot use the grade. Instead, we double weight her English Language grade in the final calculation.

Table 13: Step 1 in Progress 8 worked example using adapted methodology

| Subject | Year Taken | Grade | Points Used in P8/A8 |
| :--- | :--- | :--- | :--- |
| English Literature | 2021 | 7 | No |
| English Language | 2023 | 6 | 12 |
| Maths | 2023 | 7 | 14 |

Step 2: EBacc qualifications
Poppy's three highest scoring EBacc qualifications count towards the EBacc bucket. The remaining qualifications can count in the 'Other' bucket.

Table 14: Step 2 in Progress 8 worked example using adapted methodology

| Subject | Year Taken | Grade | Points Used in P8/A8 |
| :--- | :--- | :--- | :--- |
| Chemistry | 2023 | 8 | 8 |
| Biology | 2023 | 6 | 6 |
| Physics | 2023 | 5 | 5 |
| History | 2023 | 5 | No |
| German | 2023 | 4 | No |

Step 3: Other qualifications
The three best results of the remaining qualifications are counted from the 'Other' bucket.
Poppy's final Attainment 8 score $=12+14+8+6+5+5+6+8=64$
Table 15: Step 3 in Progress 8 worked example using adapted methodology

| Subject | Year Taken | Grade | Points Used in P8/A8 |
| :--- | :--- | :--- | :--- |
| History | 2023 | 5 | 5 |
| German | 2023 | 4 | No |
| Music | 2023 | 6 | 6 |
| Art | 2023 | 8 | 8 |

## Calculating a pupil's Progress 8 score - adapted methodology continued

Poppy has an Attainment 8 score of 64 . Her KS2 scaled score was 110. The national average revised Attainment 8 score for pupils with Poppy's KS2 result is 58.14 in 2023. Provisional 2023 attainment averages are shown in annex J Poppy's Progress 8 score is the difference between her actual Attainment 8 score and the estimated Attainment 8 score, divided by 10 - that is $64-58.14=5.86 / 10=0.59$ (to 2d.p.).

Table 16: Worked example of pupil Progress 8 score

| Poppy's Prior <br> Attainment <br> Group - <br> includes <br> those with <br> scaled score <br> of | Average <br> Attainment 8 <br> score of all <br> pupils in this <br> Prior <br> Attainment <br> Group | Poppy's <br> estimated <br> Attainment 8 <br> score | Poppy's <br> actual <br> Attainment 8 <br> score | Poppy's <br> Progress 8 <br> score (actual <br> - estimate) |
| :--- | :--- | :--- | :--- | :--- |
| 109.5 to 110 |  | 58.14 | 64 | $64-58.14 / 10$ <br> $=0.59$ |

## Calculating a school's Progress 8 score

The school's Progress 8 score is the mean average of its pupils' Progress 8 scores.
Poppy is one of 142 pupils in her school's KS4 cohort, who gain a range of Progress 8 scores:

Table 17: Worked example of unadjusted school Progress 8 score

| Pupil Number | Pupil name | P8 score |
| :--- | :--- | :--- |
| 1 | Poppy | +0.59 |
| 2 | Sarah | -0.20 |
| $\ldots$ |  | $\ldots$ |
| 142 | Ollie | +1.10 |
|  |  |  |

So the school's unadjusted Progress 8 score is calculated as $36.94 / 142=0.26$.

Details of how an adjusted Progress 8 score is calculated are set out in annex A.

## Worked example of EBacc attainment measures with adapted methodology

When calculating EBacc entry and attainment measures, we will count entries but not results from qualifications taken between January 2020 and August 2021.

EBacc attainment measures including EBacc Average Point Score (APS), EBacc threshold attainment measures (9-5, 9-4, 9-1) and EBacc value added measures at school level may be impacted by our commitment not to use results from qualifications achieved between January 2020 and August 2021.

If a pupil was entered for GCSE Spanish in summer 2021 and received a teacher assessed grade (TAG) and is entered for the other subjects required for EBacc entry in summer 2023, then the GCSE Spanish entry from summer 2021 would count towards the EBacc entry measure.

Given our previous commitment not to include qualification results achieved from January 2020 to August 2021 in performance measures, the grade achieved in GCSE Spanish in summer 2021 would not count towards any of the EBacc attainment measures for 2022/23 academic year. This would mean that the pupil would not be counted as having achieved a grade 5 or above in all EBacc subjects (even if the summer 2021 result is a grade 5 or above), and their EBacc APS score would be affected as they would not receive a score for the languages pillar.

Table 18 below sets out how the EBacc APS would be calculated in 2023 for Luke, based on his attainment in EBacc subjects taken in 2021 and 2023 exam years.

Table 18: EBacc average point score (EBacc APS) using adapted methodology

| Exam Number | Qualification | Grade | Points | Exam year | Exam season | Element | Points used toward EBacc APS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E1 | GCSE English language | 7 | 7 | 2023 | Summer | English | 7 |
| E2 | GCSE <br> English literature | 8 | 0 | 2021 | Summer | English | No |
| E3 | GCSE maths | 7 | 7 | 2023 | Winter | Maths | 7 |
| E4 | GCSE combined science | 55 | 10 | 2023 | Summer | Science | 10 |


| E5 | GCSE <br> geography | $\mathbf{6}$ | $\mathbf{6}$ | $\mathbf{2 0 2 3}$ | Summer | Humanities | $\mathbf{6}$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| E6 | GCSE <br> physical <br> education | 7 | 7 | 2023 | Summer | None - <br> does not <br> count <br> towards <br> EBacc | No |
| E7 | GCSE <br> Spanish | 9 | 0 | 2021 | Winter | Languages | No |
| E8 | GCSE <br> French | 8 | 8 | 2023 | Summer | Languages | 8 |
| E9 | GCSE history | 7 | 0 | 2021 | Summer | Humanities | No |
| E10 | BTEC travel <br> and tourism | Distinction | 7 | 2023 | Summer | None - <br> does not <br> (ount <br> towards <br> EBacc | No |

Total EBacc point score $=\mathrm{E} 1+\mathrm{E} 3+\mathrm{E} 4+\mathrm{E} 5+\mathrm{E} 8$
$=7+7+10+6+8=38$

EBacc average point score (EBacc APS) =
$38 \div 6=6.33$

Note that any exam from summer of 2021 has its points set to 0 .

Therefore, despite Luke achieving a higher grade in GCSE English literature than GCSE English language, the GCSE English language score is the one used in the calculation.

The GCSE maths exam is a 2021 Autumn resit, taken in the winter season, but not classed as an extraordinary resit, so therefore the grade will be counted.

The GCSE Spanish exam is a 2021 Autumn resit, taken in the winter season, but falls into the extraordinary exam series, so the grade will not count.

Note that GCSE French and GCSE Spanish do not discount each other, so the GCSE French result in 2022 can be counted.

## Worked examples of science pathways with adapted methodology and impact on EBacc APS

## Science pathways example 1

Table 19 below sets out how the science pathways would work when calculating EBacc APS in 2023 for Liam, based on his attainment in EBacc subjects in 2021 and 2023 exam years.

Table 19: Science pathways 1

| Exam <br> Number | Qualification | Grade | Points | Exam year | Exam Season | Element | Points used toward EBacc APS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| E1 | GCSE <br> English language | 6 | 6 | 2023 | Summer | English | No |
| E2 | GCSE <br> English <br> literature | 8 | 8 | 2023 | Summer | English | 8 |
| E3 | GCSE maths | 7 | 7 | 2023 | Summer | Maths | 7 |
| E4 | GCSE biology | 7 | 0 | 2021 | Summer | Science | No |
| E5 | GCSE chemistry | 6 | 0 | 2021 | Summer | Science | No |
| E6 | GCSE computer science | 5 | 5 | 2023 | Summer | Science | 5 |
| E7 | GCSE history | 7 | 7 | 2023 | Summer | Humanities | 7 |
| E8 | GCSE music | 6 | 6 | 2023 | Summer | None does not count towards EBacc | No |
| E9 | GCSE <br> religious <br> studies | 7 | 6 | 2023 | Summer | None does not count towards EBacc | No |


| E10 | GCSE <br> German | 6 | 6 | 2023 | Summer | Languages | 6 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

Total EBacc point score $=\mathrm{E} 2+\mathrm{E} 3+(\mathrm{E} 4+\mathrm{E} 6)+\mathrm{E} 7+\mathrm{E} 10$
$=8+7+(0+5)+7+6$
$=33$
EBacc average point score (EBacc APS) =
$33 \div 6=5.5$

Note how the Science results are treated.
Liam is on the Individual Science pathway because he entered GCSE biology and chemistry in summer 2021.

We are able to count his entries from summer 2021 but the results for those qualifications are allocated 0 points.

Therefore, in the calculation (taking the two best grades in the individual sciences), we use the grade 5 from Computer Science, but it is coupled with a 0 from Biology.

The calculation is still divided by 6 , despite two qualification results not counting in the Science pillar.

## Science pathways example 2

Table 20 below sets out how the science pathways would work when calculating EBacc APS in 2023 for Noah, based on his attainment in EBacc subjects in 2021 and 2023 exam years.

Table 20: Science pathways 2

| Exam <br> Number | Qualification | Grade | Points | Exam <br> year | Exam <br> Season | Element | Points <br> used <br> toward <br> EBacc <br> APS |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| E1 | GCSE <br> English <br> language | 6 | 6 | 2023 | Summer | English | None |
| E2 | GCSE <br> English <br> literature | 8 | 8 | 2023 | Summer | English | $\mathbf{8}$ |


| E3 | GCSE maths | 7 | 7 | 2023 | Summer | Maths | 7 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| E4 | GCSE <br> physics | 6 | 0 | 2021 | Summer | Science | None |
| E5 | GCSE <br> combined <br> science | $7: 7$ | 0 | 2023 | Summer | Science | None |
| E6 | GCSE <br> geography | 4 | 4 | 2023 | Summer | Humanities | 4 |
| E7 | GCSE <br> French | 6 | 6 | 2023 | Summer | Languages | 6 |
| E8 | GCSE art | 6 | 6 | 2023 | Summer | None - not <br> part of the <br> EBacc | None |
| E9 | GCSE drama | 5 | 5 | 2023 | Summer | None - not <br> part of the <br> EBacc | None |
| E10 | GCSE <br> physical <br> education | 7 | 7 | 2023 | Summer | None - not <br> part of the <br> EBacc | None |

Total EBacc point score $=\mathrm{E} 2+\mathrm{E} 3+\mathrm{E} 6+\mathrm{E} 7$
$=8+7+0+4+6$
$=25$

## EBacc average point score (EBacc APS) =

$25 \div 6=4.17$
This example highlights how a pupil is allocated to a science pathway.
Noah starts on the Individual Science pathway in 2021, because he is entered for GCSE physics. Noah then enters GCSE combined science in 2023. Noah is considered to be on the Individual Science pathway, and therefore his GCSE combined science results are discounted.

Note that Noah has also not met EBacc requirements for individual sciences. If a pupil is on the individual science pathway, three out of four single sciences must be chosen, and the two best grades will count towards EBacc APS.

## Worked example of Attainment in English and maths measures with adapted methodology

When calculating attainment in English and maths measures, we will count entries but not results from qualifications taken between January 2020 and August 2021.

If a pupil was entered for GCSE English literature in summer 2021 and received a TAG and entered for GCSE English language and GCSE maths in 2022/23 academic year, then we will count the results from GCSE English language and GCSE maths in 2022/23.

In the event that the pupil achieved a grade 5 in GCSE English literature in summer 2021 and a grade 4 in GCSE English language in 2022/23 academic year, this means that their result in 2022/23 would count towards the attainment in English and maths at grade 4 and above, but not towards attainment in English and maths at grade 5 and above (because we would not count the result achieved in GCSE English literature in summer 2021).

If a pupil was entered for GCSE maths in summer 2021 and GCSE English language and/or GCSE English literature in 2022/23, they would count as "entered in both subject areas" but their GCSE maths grade from summer 2021 would not count towards the attainment in English and maths measure at grade 4 and above, or at grade 5 and above in 2022/23 academic year.

Table 21: Attainment in English and maths with adapted methodology

| Exam <br> Number | Qualification | Grade | Exam <br> year | Exam <br> Season | Points | Discounted | Achieved 9-5 |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| E1 | GCSE English <br> language | 6 | 2021 | Winter | 6 | No | Yes |
| E2 | GCSE English <br> literature | 4 | 2023 | Summer | 4 | No | No |
| E3 | GCSE maths | 7 | 2021 | Summer | 0 | No | No |
| E4 | GCSE maths | 8 | 2023 | Summer | 0 | Yes | No |

Sumita has taken the above exams relating to English and maths GCSEs.
The GCSE English language exam is a 2021 Autumn resit, taken in the winter season, but not classed as an extraordinary resit, so therefore the grade will count.

Sumita has also re-entered for GCSE maths in 2023, after receiving a TAG in 2021.

The 2021 TAG result cannot be used in 2023 calculations. However, because there is already an entry to GCSE maths in 2021, the 2023 re-entry is still discounted because of the first entry rule.

So Sumita will receive a score of 0 for her maths element of this measure - and therefore not achieve the 9-5 English and maths measure overall.

## Annex E: Understanding Destination measures

## Data sources

Data from the national pupil database (NPD) are used to calculate education destinations. The national pupil database links pupil and student characteristics (for example age, gender, and ethnicity) to school and college learning aims and attainment information for children in schools in England. Five administrative data sources used in compiling the national pupil database have been used to determine pupils' education destinations:

- Individualised Learner Record (ILR) covering English further education providers and specialist post-16 institutions
- school census covering English schools
- awarding body data
- alternative provision census
- Higher Education Statistics Authority (HESA) data covering UK universities

Employment data and out-of-work benefit data have been linked to the national pupil database to form the longitudinal education outcomes (LEO) dataset. Along with local authority data, LEO data is used to calculate employment destinations. Three administrative datasets are used as follows

- employment data from His Majesty's Revenue and Customs (HMRC)
- out-of-work benefit data from the Department for Work and Pensions (DWP) and local authority data from the National Client Caseload Information System (NCCIS)


## Cohort

The KS4 cohort is from state-funded mainstream schools and maintained and nonmaintained special schools.

The national and local authority totals on the performance tables website include both state-funded mainstream and special schools.

Destinations are not reported for independent schools (including independent special schools).

## Schools with destinations reported

The 2023 KS4 performance measures include information on schools which were open during the 2022/23 academic year, and which had pupils at the end of KS4 in this academic year.

Because destinations measures are calculated for pupils who completed KS4 at the school two years previously (in the 2020/21 academic year) not all schools with attainment results have destination measures reported.

The reference date for open schools is at the start of each academic year, so changes to school types, openings and closures between 12 September 2020 and 12 September 2022 affect reporting.

## Information included in the table

## Destination categories reported

Pupils staying in education or employment for at least two terms after KS4
Any sustained education, apprenticeship, or employment destination.
Total number of pupils included in destination measures (cohort)
This is the total number of pupils in the 2020/21 academic year cohort and is used to create the denominator for the measure.

Pupils staying in education for at least two terms after KS4
Students finishing KS4 who stayed in education from October to March the following year, including at school sixth forms, sixth-form colleges, further education colleges and other settings in England.

## Further education college or other further education provider

Sustained participation in one or more FE institutions identified from the Individualised Learner Record collection (ILR). General and specialist FE colleges (other than sixthform colleges) are reported here as well as other FE providers.

Any provider in the ILR not identified as a sixth form college or FE college is designated as 'other FE provider'. It also includes pupils studying further education in a higher education institution. Pupils may be identified within the higher education statistics agency (HESA) data as being registered for FE level study at an HE institution.

## School sixth form

State-funded mainstream school sixth forms are identified from the school census data.
The measure reports the proportion of the cohort participating at these institutions.

## Sixth-form college

Sixth-form colleges are identified separately from the ILR data. The measure reports the proportion of the cohort participating at these institutions.

## Other education

All remaining education destinations are grouped under this heading and include:

- independent schools: These destinations were identified from awarding body data that has been used to provide an indication of participation. For example, if a student sat an A level exam in Summer 2023, it has been assumed the student completed a two-year course of study and fulfilled the full six months participation from October 2021 to March 2022.
- alternative provision: Data on pupils in alternative provision includes those who have their primary registration at a Pupil Referral Unit, an AP academy, an AP free school or a hospital school. These destinations include other alternative provision of education funded by the local authority outside of state place funded schools, including independent schools, non-maintained special schools, and providers who do not meet the criteria for registration as a school.

Attendance via alternative provision for a period of time in the first five months of the academic year is used as a proxy for sustained participation.

- special schools: Pupils recorded on the school census as attending maintained or non-maintained special schools.
- specialist post-16 institutions: This includes data on pupils attending specialist post-16 institutions, obtained from the ILR data.
- UK higher education institutions: Pupils who have gone to any HE institution in the UK, for higher level study (level 4 and above), as recorded in HESA data.
- education combinations: A number of students were identified as attending more than one type of institution over the 6 months. For example, a student may have attended an FE college for 3 months and a school sixth form for 3 months. Providing they fulfilled the sustained participation criteria across the institution types, they were counted in the measure.


## Apprenticeships

Pupils who started an apprenticeship at any point in the year and continued it for at least 6 months (2021/22 academic year). Since October 2018, apprenticeship destinations have been reported separately from education and employment.

Pupils staying in employment for at least two terms after KS4
Pupils finishing KS4 who were in employment in the UK from October to March the following year.

Employment destinations are calculated from HMRC data in the LEO dataset and NCCIS data recorded by local authorities. To count as a sustained destination a pupil must be recorded as in employment in 5 out of the 6 months between October and March. A onemonth pause is permitted to allow for those pupils taking separate periods of temporary employment. Should the one month pause occur in March then the student is required to be in employment in April for the destination to be counted as sustained.

Pupils with training participation recorded in NCCIS are also included in this category as are those completing the required 6 months participation through a combination of employment and education.

This category also includes pupils who have been identified as being self-employed because they completed a self-assessed tax return in the destination year (covering the financial year form April 2021 to April 2022). This is provided that they did not claim benefits for more than one month in the period from October to March.

Pupils who have sustained participation in education throughout the period are reported as being in a sustained education destination and not in employment, even if they were in employment alongside their study.

## Pupils not staying in education or employment for at least two terms after KS4

Students finishing KS4 study who did not stay in education or employment for at least two terms. They may have been enrolled on a course or in employment for part of this time, but not sustained this activity, or have been recorded by their local authority as 'NEET' or claimed out-of-work benefits in the year.

## Destination unknown

Students finishing KS4 who had no participation in education or employment found from October to March the following year and were not recorded by their local authority as NEET, nor recorded as receiving out-of-work benefits at any point in the year. Possible reasons for this could be that the young person was:

- not in education, employment, or training
- living, working, or studying overseas
- attending a Scottish, Welsh, or Northern Irish school or college
- undertaking activity other than paid employment or study in the UK
- not successfully matched to a record in our data sources


## Suppression of destination data

The Code of Practice for Statistics requires us to take reasonable steps to ensure that our published or disseminated statistics protect confidentiality. Where appropriate we apply disclosure control to protect confidentiality.

## Annex F - English in the headline performance measures

## Progress 8 and Attainment 8

If a pupil sits both English language and English literature, the higher grade is doubleweighted. The lower grade can count in the 'open' element of these measures. If only GCSE English literature or English language is taken then this qualification will count but will not be double-weighted ${ }^{25}$.

## EBacc average point score (EBacc APS)

For English results to be included in the EBacc APS calculation, pupils must sit both English language and English literature. The better grade counts towards EBacc APS. ${ }^{26}$

## Attainment in English and maths at grade 5 or above

A pupil would have to achieve a grade 5 or above in either English literature or English language. There is no requirement to sit both.

The department also publishes as an additional measure the percentage of pupils achieving a grade 4 or above in English and maths. The same English requirements apply to this measure as for English and maths at grade 5 or above.

[^16]
## Annex G - Point score scales for 2022 and future years

This annex explains the point score scales that are used in 2022 and future performance measures.

The tables on the following pages contain the 2022 and future years performance measure points for level and grade structure combinations. A list of all qualifications which count at KS4, and their corresponding performance points is available here: Key Stage 4 qualifications discount codes and point-scores.

Table 22: Point score scales for combined science qualifications in Attainment 8 and Progress 8

| Combined science qualification grade | Points |
| :---: | :---: |
| Grade 9-9 (Double Award) | 9 |
| Grade 9-8 (Double Award) | 8.5 |
| Grade 8-8 (Double Award) | 8 |
| Grade 8-7 (Double Award) | 7.5 |
| Grade 7-7 (Double Award) | 7 |
| Grade 7-6 (Double Award) | 6.5 |
| Grade 6-6 (Double Award) | 6 |
| Grade 6-5 (Double Award) | 5.5 |
| Grade 5-5 (Double Award) | 5 |
| Grade 5-4 (Double Award) | 4.5 |
| Grade 4-4 (Double Award) | 4 |
| Grade 4-3 (Double Award) | 3.5 |
| Grade 3-3 (Double Award) | 3 |
| Grade 3-2 (Double Award) | 2.5 |
| Grade 2-2 (Double Award) | 2 |
| Grade 2-1 (Double Award) | 1.5 |
| Grade 1-1 (Double Award) | 1 |

Table 23: Point score scales for level 1 qualifications

| Level 1 grade structure | Example grade | Points |
| :--- | :--- | :--- |
|  | Distinction* | 3.00 |
|  | Distinction | 2.00 |
|  | Merit | 1.50 |
|  | Pass | 1.00 |
| 3 grade scheme | Distinction | 3.00 |
|  | Merit | 2.00 |
|  | Pass | 1.25 |
| 2 grade scheme | Advanced Credit | 2.5 |
|  | Credit | 1.25 |
| Pass only | Pass | 1.75 |

Table 24: Point score scales for level 2 qualifications

| Level 2 grade structure | Example grade | Points |
| :--- | :--- | :--- |
| 4 grade scheme | Distinction* | 8.50 |
|  | Distinction | 7.00 |
|  | Merit | 5.50 |
|  | Pass | 4.00 |
| 3 grade scheme | Distinction | 7.75 |
|  | Merit | 6.25 |
|  | Pass | 4.00 |
| Pass only | Pass | 5.50 |

Table 25: Point score scales for AS level

| AS level grade | Points |
| :--- | :--- |
| A | 10.75 |
| B | 8.88 |
| C | 7.00 |
| D | 5.13 |
| E | 3.50 |

Table 26: Point score scales for graded music examinations

| Graded music level | Grade | Points |
| :--- | :--- | :--- |
| Grade 8 | Distinction | 8.50 |
|  | Merit | 8.50 |
|  | Pass | 8.50 |
|  | Distinction | 8.50 |
|  | Merit | 8.50 |
|  | Pass | 7.00 |
| Grade 6 | Distinction | 8.50 |
|  | Merit | 8.50 |
|  | Pass | 7.00 |

Table 27: Point score scales for free standing maths qualifications

| Free standing maths qualification grade | Points |
| :--- | :--- |
| A | 5.13 |
| B | 4.00 |
| C | 3.25 |
| D | 2.50 |
| E | 1.88 |

## Illustrative examples of how to use these tables - points for all qualifications can be calculated following this method

## Example A - Calculating the points for a level 2 qualification with four passing grades

These qualifications are at level 2 , so table 24 should be used.
There are four possible passing grades (Distinction*, Distinction, Merit, Pass), so the level 2 four grade scheme should be used.

Table 28 below shows the 2022 points for a level 2 qualification with 4 passing grades:
Table 18: Point score scales for level 2 qualification with four passing grades

| Level 2 qualification with four passing grades | Points |
| :--- | :--- |
| Distinction* | 8.50 |
| Distinction | 7.00 |
| Merit | 5.50 |
| Pass | 4.00 |

The Performance Points a Practical Guide document provides a step by step guidance on points: Performance points: a practical guide to Key Stage 4 and 5 points.

## Example B - Calculating the points for a BTEC First Award

BTEC First Awards can be both level 1 and level 2 qualifications.
At level 1, there is a pass only grade structure, and table 23 gives the points of 1.75.
At level 2 in a BTEC First Award there are four possible outcomes
Distinction*/Distinction/Merit/Pass which makes for a 4-grade structure, and table 24 gives the points of between 4.00 and 8.50.

The table below shows the point score scales for the BTEC First Award:

Table 29: Point score scales for BTEC First Award

| BTEC First Award grade | Points |
| :--- | :--- |
| Level 2 Distinction* | 8.50 |
| Level 2 Distinction | 7.00 |
| Level 2 Merit | 5.50 |
| Level 2 Pass | 4.00 |
| Level 1 Pass | 1.75 |

## Example C - Calculating the points for an OCR Cambridge National Certificate

OCR Cambridge National Certificates can be both level 1 and level 2 qualifications.
Grades level 1 distinction/ level 1 merit/ level 1 pass are at level 1, which makes for a 3grade structure, and table 23 gives the points of between 1.25 and 3 .

Grades level 2 distinction*/ level 2 distinction/ level 2 merit/ level 2 pass are at level 2, which makes for a 4-grade structure, and table 24 gives the points of between 4 and 8.5.

Table 30 below shows the point scores for the OCR Cambridge National Certificate:

Table 30: Point score scales for OCR Cambridge National Certificate

| OCR Cambridge National Certificate grade | Points |
| :--- | :--- |
| Level 2 Distinction* | 8.50 |
| Level 2 Distinction | 7.00 |
| Level 2 Merit | 5.50 |
| Level 2 Pass | 4.00 |
| Level 1 Distinction | 3.00 |
| Level 1 Merit | 2.00 |
| Level 1 Pass | 1.25 |

Point scores for other qualifications can be calculated using a similar method as in examples $A, B$ and $C$ above.

## Annex H - Confidence Intervals

A 95\% confidence interval is calculated around each school's Progress 8 score, providing a proxy for the range of values within which we are statistically confident that the true value of the Progress 8 score for the school lies.

The confidence interval, denoted $\left[\operatorname{Low} C I_{s}, U p p C I_{s}\right]$, is given by the formula:

$$
\left[\operatorname{LowCI}_{s}, U p p C I_{s}\right]=\left[P 8_{s}-C I_{s}, P 8_{s}+C I_{s}\right]
$$

where:

| $\mathrm{LowCl}_{s}$ | is the lower confidence limit for the school's Progress <br> 8 score |
| :---: | :--- |
| $\mathrm{UppCl}_{s}$ | is the upper confidence limit for the school's Progress <br> 8 score |
| $P 8_{s}$ | is the school's Progress 8 score |
| $\mathrm{Cl} s$ | is the size of the confidence interval for the school's <br> Progress 8 score |

$$
C I_{-} s=1.96 \times \sigma_{-} N / \sqrt{ }\left(n_{-} S\right)
$$

where:

| 1.96 | is the critical value for a 95\% confidence interval <br> $\sigma_{N}$ |
| :---: | :--- |
| is the standard deviation of the Progress 8 scores for <br> all eligible pupils nationally |  |
| $\eta_{s}$ | is the number of eligible pupils that belong to the <br> school |

The national average Progress 8 score of all pupils at state-funded maintained mainstream school scores will be 0 .

- when a school has their lower confidence interval limit higher than zero (LowCl_s $>0$ ), the school's Progress 8 score is above average, and the result is statistically significant
- when a school has their upper confidence interval limit lower than zero (UppCI_s< 0 ), the school's Progress 8 score is below average, and the result is statistically significant
- in the other case when the confidence interval straddles zero (LowCl_s<0 <UppCl_s), the school's Progress 8 score is likely to be above or below average, and the result is not statistically significant

Figure 2: Confidence intervals
\(\left.\begin{array}{l}National <br>
average <br>
progress <br>
score=0 <br>
national average and <br>
this is statistically <br>

significant\end{array}\right]\)| Key |
| :--- |
| School B is NOT <br> STATISTICALLY <br> SIGNIFICANTLY <br> DIFFERENT from the <br> national average |

## Worked example A - continued

We can calculate the size of the confidence interval for the school's Progress 8 score using $C I_{s}$ :

$$
C I_{-} s=1.96 \times \sigma_{-} N / \sqrt{ }\left(n_{-} S\right) 1.96 \times 1.412814 / \sqrt{ } 142=1.96 \times 0.1186=0.23
$$

We derive the confidence interval for the school's Progress 8 score:

$$
=[+0.26-0.23,+0.26+0.23]=[+0.03,+0.49]
$$

As $L o w C I_{s}>0$, we can say that the school's Progress 8 score is above the national average Progress 8 score, and say this result is statistically significant.

## Standard deviation of all Progress 8 scores and Progress 8 element scores nationally

The below standard deviations are based on the Progress 8 scores of all eligible pupils at mainstream schools and are the national figures used in confidence interval calculations.

Table 31: Provisional 2023 standard deviations of Progress 8 and Progress 8 element scores nationally

| Measure | Provisional 2023 |
| :--- | :--- |
| Progress 8 | 1.412814 |
| Progress 8 English element | 1.635252 |
| Progress 8 Maths element | 1.488701 |
| Progress 8 EBacc element | 1.633377 |
| Progress 8 Open element | 1.621232 |

## Annex I: Worked examples of MAT measures

## MAT level Progress 8

Table 32 shows a MAT with 5 eligible academies, with a range of Progress 8 scores. In the worked example each academy is given a weighted score by multiplying the academy's Progress 8 score by the total weight (number of pupils at the end of key stage 4 multiplied by number of years in the MAT) of the academy. To get the MAT Progress 8 score, the total weight of all academies in the MAT is divided by the total weighted score also of all academies in the MAT. This value is then rounded to one decimal place.

Table 32: MAT measures Progress 8 worked example

|  | (i) <br> Progress 8 <br> score | (ii) <br> Number of <br> pupils at <br> end of key <br> stage | Number of <br> years with <br> MAT | (iv) <br> Total weight <br> (ii) * (iii) | Weighted <br> score <br> (i) * (iv) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Academy 1 | 2.5 | 140 | 5 | 700 | 1,750 |
| Academy 2 | -2.5 | 224 | 3 | 672 | $-1,680$ |
| Academy 3 | 3.3 | 188 | 4 | 752 | $2,481.6$ |
| Academy 4 | -1.5 | 111 | 3 | 333 | -499.5 |
| Academy 5 | -1.5 | 124 | 3 | 372 | -558 |
| Total |  | 787 |  | 2,829 | $1,494.1$ |

MAT score (sum of $v /$ sum of iv) $=+0.5$

## MAT level EBacc entry

Table 33 outlines a MAT with 5 eligible academies, with a range of EBacc entry percentages. Each academy is given a total weighted pupils entered for EBacc score by multiplying the pupils entered for the EBacc in that academy by the number of years in the MAT. The total weighted pupils entered for EBacc in all academies in the MAT is then divided by the total weighted pupils at end of key stage (number of pupils at end of key stage multiplied by number of years in the MAT) in all academies in the MAT, to give the MAT EBacc entry percentage.

Table 33: MAT measures EBacc entry worked example

|  | (i) <br> Number <br> of <br> pupils <br> at end <br> of key <br> stage | (ii) <br> Pupils <br> entered <br> for the <br> EBacc | \% of <br> pupils <br> entered <br> for the <br> EBacc | (iii) <br> Number <br> of years <br> with MAT | (iv) <br> Total <br> weighted <br> pupils at <br> end of <br> key <br> stage <br> (i) *(iii) | (v) <br> Total <br> weighted <br> pupils <br> entered <br> for <br> EBacc <br> (ii) * (iii) |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Academy 1 | 172 | 13 | $8 \%$ | 5 | 860 | 65 |
| Academy 2 | 264 | 121 | $46 \%$ | 4 | 1,056 | 484 |
| Academy 3 | 194 | 83 | $43 \%$ | 5 | 970 | 415 |
| Academy 4 | 102 | 25 | $25 \%$ | 4 | 408 | 100 |
| Academy 5 | 89 | 71 | $80 \%$ | 3 | 267 | 213 |
| Total | 821 | 313 |  |  | 3,561 | 1,277 |

Unweighted MAT EBacc entry rate ((sum of ii / sum of i) * 100) $=38 \%$
Weighted MAT EBacc entry rate ((sum of v/sum of iv) * 100) = 36\%

## MAT level achieving EBacc at grade 5 or above

Table 34 outlines a MAT with 5 eligible academies, with a range of achieving EBacc at grade 5 or above percentages. Each academy is given a total weighted pupils achieving grade 5 or above for EBacc score by multiplying the pupils achieving 9-5 for the EBacc in that academy by the number of years in the MAT. The total weighted pupils achieving 95 for EBacc in all academies in the MAT is then divided by the total weighted pupils at end of key stage (number of pupils at end of key stage multiplied by number of years in the MAT) in all academies in the MAT, to give the MAT EBacc entry percentage.

Table 34: MAT measures achieving 9-5 in EBacc worked example

|  | (i) | (ii) | \% of <br> pupils <br> Number <br> of <br> pupils <br> at end <br> of key <br> stage | (ii) <br> achieving <br> EBacc at <br> grade 5+ | EBacc at <br> grade 5+ | Number <br> of years <br> with <br> MAT |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| Total <br> weighted <br> pupils at <br> end of <br> key <br> stage | Total <br> weighted <br> pupils <br> achieving <br> EBacc at <br> grade 5+ <br> (ii) * (iii) |  |  |  |  |  |
| Academy 1 | 163 | 98 | $60 \%$ | 5 | 815 | 490 |
| Academy 2 | 215 | 61 | $28 \%$ | 5 | 1,075 | 305 |
| Academy 3 (iii) |  |  |  |  |  |  |

Unweighted MAT pupils achieving EBacc at grade 5+ ((sum of ii / sum of i) * 100) = 31\%

Weighted MAT pupils achieving EBacc at grade 5+ ((sum of v/sum of iv) * 100) = 32\%

## MAT level achieving grade 5 or above in English and Maths

Table 35 outlines a MAT with 5 eligible academies, with a range of achieving grade 5 or above in English and maths percentages. Each academy is given a total weighted pupils achieving grade 5 or above in English and maths score by multiplying the pupils achieving grade 5 or above in English and maths in that academy by the number of years in the MAT. The total weighted pupils achieving grade 5 or above in English and maths in all academies in the MAT is then divided by the total weighted pupils at end of key stage (number of pupils at end of key stage multiplied by number of years in the MAT) in all academies in the MAT, to give the MAT achieving English and maths percentage.

Table 35: MAT measures achieving grade 5 or above in English and maths worked example

|  | (i) <br> Number of pupils at end of key stage | (ii) <br> Pupils entered achieving grade 5+ in English and Maths | \% of pupils achieving grade 5+ in English and Maths | (iii) <br> Number of years with MAT | (iv) <br> Total weighted pupils at end of key stage (i) *(iii) | (v) <br> Total weighted pupils achieving grade 5+ in English and Maths (ii) * (iii) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Academy 1 | 155 | 91 | 59\% | 5 | 775 | 455 |
| Academy 2 | 162 | 68 | 42\% | 3 | 486 | 204 |
| Academy 3 | 123 | 61 | 50\% | 5 | 615 | 305 |
| Academy 4 | 223 | 105 | 47\% | 4 | 892 | 420 |
| Academy 5 | 198 | 116 | 59\% | 4 | 792 | 464 |
| Total | 861 | 441 |  |  | 3,560 | 1,848 |

Unweighted MAT pupils achieving grade 5+ in English and Maths ((sum of ii / sum of i) * 100) $=51 \%$

Weighted MAT pupils achieving grade 5+ in English and Maths ((sum of v/sum of iv) * 100) $=52 \%$

## MAT level Attainment 8

Table 36 shows the Attainment 8 score for a MAT, with 5 eligible academies, each with their own Attainment 8 score. Each academy is given their own weighted score by multiplying the academy's Attainment 8 score by the total weight of that academy (number of pupils at end of Key Stage 4 multiplied by the number of years in the MAT). To get the MAT score the total weighted score of all academies in the MAT is divided by the total weight of all academies in the MAT. This value is then rounded to the nearest decimal place.

Table 36: MAT measures Attainment 8 worked example

|  | (i) <br> Attainment <br> 8 score | (ii) <br> Number <br> of pupils <br> at end of <br> key stage | (iii) <br> Number <br> of years <br> with MAT | (iv) <br> Total <br> weight <br> (ii) * (iii) | (v) <br> Weighted <br> score <br> (i) * (iv) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Academy 1 | 54 | 140 | 5 | 700 | 37,800 |
| Academy 2 | 41 | 224 | 3 | 672 | 27,552 |
| Academy 3 | 36 | 188 | 4 | 752 | 27,072 |
| Academy 4 | 61 | 111 | 3 | 333 | 20,313 |
| Academy 5 | 58 | 124 | 3 | 372 | 21,576 |
| Total |  | 787 |  | 2,829 | 134,313 |

MAT score (sum of $v /$ sum of iv) $=47.5$

The same measure is also produced for disadvantaged pupils in the MAT:
Table 37: Attainment 8 for disadvantaged pupils in a MAT

|  | (i) <br> Disadvant <br> aged <br> Attainment <br> 8 score | (ii) <br> Number of <br> disadvanta <br> ged pupils <br> at end of <br> key stage | (iii) <br> Number of <br> years with <br> MAT | (iv) <br> Total <br> weight <br> (ii) * (iii) | (v) <br> Weighted <br> score <br> (i) * (iv) |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Academy 1 | 40 | 30 | 5 | 150 | 6,000 |
| Academy 2 | 45 | 59 | 3 | 177 | 7,965 |
| Academy 3 | 39 | 50 | 4 | 200 | 7,800 |
| Academy 4 | 51 | 22 | 3 | 66 | 3,366 |
| Academy 5 | 47 | 90 | 3 | 270 | 12,690 |
| Total |  | 251 |  | 863 | 37,821 |

MAT score (sum of $v /$ sum of iv) $=43.8$

## MAT level EBacc APS

Table 38 shows the EBacc APS score for a MAT, with 5 eligible academies, each with their own EBacc APS score. Each academy is given their own weighted score by multiplying the academy's EBacc APS score by the total weight of that academy (number of pupils at end of Key Stage 4 multiplied by the number of years in the MAT). To get the MAT score the total weighted score of all academies in the MAT is divided by the total weight of all academies in the MAT. This value is then rounded to the nearest 2 decimal places.

Table 38: MAT measures EBacc APS worked example

|  | $\begin{gathered} \text { (i) } \\ \text { EBacc } \\ \text { APS } \end{gathered}$ | (ii) Number of pupils at end of key stage | (iii) <br> Number of years with MAT | (iv) <br> Total weight <br> (ii) * (iii) | (v) <br> Weighted score (i) * (iv) |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Academy 1 | 3.74 | 210 | 4 | 840 | 3,141.6 |
| Academy 2 | 3.77 | 178 | 3 | 534 | 2,013.18 |
| Academy 3 | 5.44 | 142 | 5 | 710 | 3,862.4 |
| Academy 4 | 4.27 | 232 | 5 | 1,160 | 4,953.2 |
| Academy 5 | 4.96 | 114 | 3 | 342 | 1,696.32 |
| Total |  | 876 |  | 3,586 | 15,666.7 |

MAT score (sum of $v /$ sum of iv) $=4.37$

## Annex J - Provisional 2023 Attainment 8 averages

Each Attainment 8 average is the average Attainment 8 score of all pupils nationally in state-funded mainstream schools within the same prior attainment group at KS2. The following tables show the revised Attainment 8 averages for each KS2 prior attainment group, based on the 2022 cohort averages.

Changes to national subject entry patterns and performance, as well as changes in methodology for calculating measures and the approach to grading can cause these averages to change. Schools may change their curriculum offer in response to the Progress 8 measure and to the Government's EBacc ambition, so any modelling based on current national results could be misleading.

Table 39: Provisional 2023 Attainment 8 averages and English, maths, EBacc and open averages for each KS2 prior attainment group

| KS2 prior attainment group | KS2 average scaled score range | Attainment 8 average | English average | Maths average | EBacc average | Open average |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 59 to 82 | 15.83 | 3.81 | 2.29 | 4.19 | 5.55 |
| 2 | 82.5 to 86 | 16.44 | 4.08 | 2.37 | 4.13 | 5.86 |
| 3 | 86.5 to 87.5 | 19.24 | 4.74 | 3.03 | 4.89 | 6.57 |
| 4 | 88 to 89 | 20.73 | 5.02 | 3.34 | 5.33 | 7.03 |
| 5 | 89.5 to 90.5 | 22.14 | 5.35 | 3.63 | 5.77 | 7.4 |
| 6 | 91 to 92 | 23.82 | 5.65 | 4.07 | 6.2 | 7.9 |
| 7 | 92.5 to 93 | 25.65 | 6 | 4.5 | 6.73 | 8.43 |
| 8 | 93.5 to 94 | 26.96 | 6.31 | 4.79 | 7.08 | 8.77 |
| 9 | 94.5 to 95 | 28.14 | 6.56 | 5.1 | 7.42 | 9.07 |
| 10 | 95.5 to 96 | 29.73 | 6.88 | 5.44 | 7.9 | 9.51 |
| 11 | 96.5 to 97 | 31.05 | 7.13 | 5.77 | 8.29 | 9.86 |
| 12 | 97.5 to 98 | 33.02 | 7.52 | 6.21 | 8.88 | 10.42 |
| 13 | 98.5 to 99 | 34.57 | 7.81 | 6.59 | 9.34 | 10.83 |
| 14 | 99.5 to 100 | 36.31 | 8.15 | 6.94 | 9.89 | 11.32 |
| 15 | 100.5 to 101 | 38.00 | 8.46 | 7.35 | 10.42 | 11.77 |
| 16 | 101.5 to 102 | 39.81 | 8.8 | 7.75 | 11.02 | 12.25 |
| 17 | 102.5 to 103 | 41.48 | 9.12 | 8.09 | 11.57 | 12.7 |
| 18 | 103.5 to 104 | 43.64 | 9.53 | 8.53 | 12.28 | 13.3 |
| 19 | 104.5 to 105 | 45.47 | 9.88 | 8.9 | 12.9 | 13.79 |
| 20 | 105.5 to 106 | 47.68 | 10.28 | 9.39 | 13.64 | 14.37 |
| 21 | 106.5 to 107 | 50.31 | 10.73 | 9.95 | 14.56 | 15.07 |
| 22 | 107.5 to 108 | 52.77 | 11.18 | 10.47 | 15.4 | 15.72 |
| 23 | 108.5 to 109 | 55.5 | 11.65 | 11.09 | 16.32 | 16.43 |
| 24 | 109.5 to 110 | 58.14 | 12.11 | 11.65 | 17.23 | 17.15 |
| 25 | 110.5 to 111 | 60.52 | 12.54 | 12.15 | 18.01 | 17.81 |
| 26 | 111.5 to 112 | 63.26 | 13 | 12.74 | 18.98 | 18.54 |
| 27 | 112.5 to 113 | 66.03 | 13.44 | 13.36 | 19.91 | 19.31 |
| 28 | 113.5 to 114 | 68.46 | 13.88 | 13.85 | 20.73 | 19.99 |
| 29 | 114.5 to 115 | 70.88 | 14.22 | 14.47 | 21.56 | 20.64 |
| 30 | 115.5 to 116 | 73.19 | 14.6 | 14.93 | 22.32 | 21.34 |
| 31 | 116.5 to 117 | 75.46 | 14.97 | 15.4 | 23.08 | 22.02 |
| 32 | 117.5 to 118 | 77.37 | 15.36 | 15.75 | 23.64 | 22.62 |
| 33 | 118.5 to 119 | 79.63 | 15.71 | 16.26 | 24.37 | 23.29 |
| 34 | 119.5 to 120 | 81.85 | 16.16 | 16.6 | 24.98 | 24.11 |

Table 40: Provisional 2023 Attainment 8 averages for EBacc pillars

| KS2 prior attainment group | KS2 average scaled score range | Science average | Humanities average | Languages average |
| :---: | :---: | :---: | :---: | :---: |
| 1 | 59 to 82 | 1.78 | 1.61 | 4.31 |
| 2 | 82.5 to 86 | 1.70 | 1.43 | 3.16 |
| 3 | 86.5 to 87.5 | 1.96 | 1.63 | 3.11 |
| 4 | 88 to 89 | 2.12 | 1.73 | 3.39 |
| 5 | 89.5 to 90.5 | 2.24 | 1.89 | 3.35 |
| 6 | 91 to 92 | 2.40 | 1.98 | 3.31 |
| 7 | 92.5 to 93 | 2.54 | 2.14 | 3.34 |
| 8 | 93.5 to 94 | 2.68 | 2.28 | 3.36 |
| 9 | 94.5 to 95 | 2.79 | 2.37 | 3.34 |
| 10 | 95.5 to 96 | 2.91 | 2.52 | 3.43 |
| 11 | 96.5 to 97 | 3.05 | 2.64 | 3.44 |
| 12 | 97.5 to 98 | 3.21 | 2.82 | 3.49 |
| 13 | 98.5 to 99 | 3.37 | 2.98 | 3.61 |
| 14 | 99.5 to 100 | 3.54 | 3.14 | 3.66 |
| 15 | 100.5 to 101 | 3.70 | 3.32 | 3.72 |
| 16 | 101.5 to 102 | 3.88 | 3.52 | 3.84 |
| 17 | 102.5 to 103 | 4.05 | 3.73 | 3.91 |
| 18 | 103.5 to 104 | 4.26 | 4.00 | 4.05 |
| 19 | 104.5 to 105 | 4.44 | 4.20 | 4.18 |
| 20 | 105.5 to 106 | 4.67 | 4.45 | 4.27 |
| 21 | 106.5 to 107 | 4.95 | 4.76 | 4.47 |
| 22 | 107.5 to 108 | 5.21 | 5.06 | 4.62 |
| 23 | 108.5 to 109 | 5.49 | 5.35 | 4.87 |
| 24 | 109.5 to 110 | 5.78 | 5.65 | 5.09 |
| 25 | 110.5 to 111 | 6.03 | 5.90 | 5.28 |
| 26 | 111.5 to 112 | 6.33 | 6.23 | 5.58 |
| 27 | 112.5 to 113 | 6.64 | 6.52 | 5.83 |
| 28 | 113.5 to 114 | 6.90 | 6.78 | 6.08 |
| 29 | 114.5 to 115 | 7.18 | 7.00 | 6.34 |
| 30 | 115.5 to 116 | 7.44 | 7.26 | 6.64 |
| 31 | 116.5 to 117 | 7.69 | 7.49 | 6.89 |
| 32 | 117.5 to 118 | 7.87 | 7.66 | 7.1 |
| 33 | 118.5 to 119 | 8.12 | 7.86 | 7.39 |
| 34 | 119.5 to 120 | 8.33 | 8.08 | 7.65 |

Table 41: Provisional 2023 Average EBacc and open slots filled for each KS2 prior attainment group

| KS2 prior attainment group | KS2 average scaled score range | Average EBacc slots filled (out of 3) | Average open slots filled (out of 3 ) |
| :---: | :---: | :---: | :---: |
| 1 | 59 to 82 | 1.87 | 2.06 |
| 2 | 82.5 to 86 | 2.08 | 2.23 |
| 3 | 86.5 to 87.5 | 2.24 | 2.35 |
| 4 | 88 to 89 | 2.33 | 2.42 |
| 5 | 89.5 to 90.5 | 2.40 | 2.46 |
| 6 | 91 to 92 | 2.46 | 2.53 |
| 7 | 92.5 to 93 | 2.53 | 2.59 |
| 8 | 93.5 to 94 | 2.55 | 2.61 |
| 9 | 94.5 to 95 | 2.58 | 2.62 |
| 10 | 95.5 to 96 | 2.63 | 2.68 |
| 11 | 96.5 to 97 | 2.66 | 2.69 |
| 12 | 97.5 to 98 | 2.71 | 2.74 |
| 13 | 98.5 to 99 | 2.72 | 2.75 |
| 14 | 99.5 to 100 | 2.76 | 2.78 |
| 15 | 100.5 to 101 | 2.78 | 2.80 |
| 16 | 101.5 to 102 | 2.80 | 2.82 |
| 17 | 102.5 to 103 | 2.81 | 2.83 |
| 18 | 103.5 to 104 | 2.83 | 2.85 |
| 19 | 104.5 to 105 | 2.85 | 2.86 |
| 20 | 105.5 to 106 | 2.87 | 2.88 |
| 21 | 106.5 to 107 | 2.89 | 2.90 |
| 22 | 107.5 to 108 | 2.90 | 2.91 |
| 23 | 108.5 to 109 | 2.92 | 2.92 |
| 24 | 109.5 to 110 | 2.93 | 2.93 |
| 25 | 110.5 to 111 | 2.94 | 2.94 |
| 26 | 111.5 to 112 | 2.94 | 2.94 |
| 27 | 112.5 to 113 | 2.95 | 2.95 |
| 28 | 113.5 to 114 | 2.96 | 2.96 |
| 29 | 114.5 to 115 | 2.97 | 2.96 |
| 30 | 115.5 to 116 | 2.97 | 2.97 |
| 31 | 116.5 to 117 | 2.97 | 2.97 |
| 32 | 117.5 to 118 | 2.98 | 2.98 |
| 33 | 118.5 to 119 | 2.98 | 2.98 |
| 34 | 119.5 to 120 | 2.98 | 2.98 |

## Annex K - Other additional measures

We also publish some additional measures in performance tables. These are outlined below..

## The proportion of pupils achieving a grade 4 or above in English and maths

For transparency and to help schools show progress, the headline threshold attainment measure in English and maths is also published at grade 4 and above. This measure has the same methodology as its headline counterpart regarding qualification inclusion and requirements. The additional measure shows where pupils achieved a grade 4 or above in GCSE English language or English literature and maths.

## The proportion of pupils achieving the EBacc at grade 5 or above and grade 4 and above.

Following the introduction of EBacc APS in 2018, the EBacc attainment threshold measure is no longer a headline measure. We will continue to publish as additional measures the proportion of pupils achieving the EBacc at grade 5 and above, and at grade 4 and above.

## Average number of EBacc slots filled in Attainment 8 at school level

To help schools understand their EBacc entry rates in more detail, the number of EBacc slots filled per pupil within a school divided by the total number of pupils at the end of KS4 within the school. The number of EBacc slots filled per pupil is calculated according to Attainment 8 methodology outlined earlier in the guidance. ${ }^{27}$

[^17]
## Average number of open slots filled in Attainment 8 at school level

The number of Open slots filled per pupil within a school divided by the total number of pupils at the end of KS4 within the school. The number of Open slots filled per pupil is calculated according to Attainment 8 methodology outlined earlier in the guidance. ${ }^{28}$

## Pupils achieving 5 or more GCSEs at grade 4 or above including English and maths

This measure is calculated as per the following:

- the attainment threshold is set to include those who achieve a grade 4 or above
- a pupil would have to achieve a grade 4 or above in English literature or English language. There is no requirement to sit both.
- the combined science qualification is counted as one GCSE.

[^18]
## Annex L - Pupils and Institutions included in KS4 Performance Measures

## Pupils at the end of KS4

Pupils are identified as being at the end of KS4 if they were on roll at the school and in year 11 at the time of the January school census. Age is calculated as of 31 August at the start of the academic year, and the majority of pupils at the end of KS4 were age 15 at this point. Some pupils may complete this key stage in an earlier or later year group.

## Institutions

## Included in KS4 National statistics

National statistics include all state funded schools. This includes academies, free schools, city technology colleges, further education colleges with provision for 14- to 16-year-olds and state-funded special schools. The statistics also include separate figures for independent schools.

## Included at school level in performance tables

Provisional performance measures are published at school level for state funded schools ${ }^{29}$, FE colleges with 14-16 direct entry and for independent schools.

Pupils and their results are attributed to schools according to rules set out in the 'Understanding school and college performance measures' guidance.

[^19]
## Annex M - Timeline of changes since 2016

Table 42 provides a high-level summary of the range of school and college KS4 performance measures since 2016, detailing extensions to reporting (additional measures, or extending coverage to include more qualifications). It also outlines any methodological changes to how measures are calculated. Note methodological changes are not applied retrospectively to previous cohorts/tables.

Table 42: Timeline of changes since 2016

| Year | Change |
| :---: | :---: |
| 2016 | A new set of headline measures were introduced for all state funded secondary schools: <br> - Progress 8 <br> - Attainment 8 <br> - the percentage of pupils achieving $A^{*}-C$ in English and Maths <br> - the percentage of pupils achieving the English Baccalaureate <br> - the percentage of pupils entering the English Baccalaureate <br> - the percentage of students staying in education or employment after Key Stage 4 (destinations) <br> New additional measures introduced: <br> - percentage of pupils entering more than one language qualification <br> - the percentage of pupils entering physics, chemistry and biology <br> Methodology change: Point score scale changes from 16-58 scale to a 1-8 point scale, where 1 is equivalent to a grade G GCSE and 8 equivalent to an A* GCSE <br> Removal of 'in school' disadvantaged gap measures <br> Floor standard definition changed: Progress 8 score below -0.5, unless the confidence interval suggests the score may not be below average. |
| 2017 | Reformed GCSE qualifications: English and maths GCSEs, graded 9-1, were included in performance tables. <br> Change to headline performance measures to reflect changes in grading: <br> - the proportion of pupils achieving a grade 5 or above in English and maths <br> - the proportion of pupils achieving the EBacc - grade 5 or above in English and maths, and grade C or above in unreformed subjects <br> New additional measures: <br> - the proportion of pupils achieving in English and maths - grade 4 or above |


|  | - the proportion of pupils achieving the EBacc - grade 4 or above in English and maths, and grade C or above in unreformed subjects. <br> New supporting information published: <br> - average number of EBacc slots filled in Attainment 8 at school level <br> - average number of open slots filled in Attainment 8 at school level <br> Multi academy trust measures introduced: <br> - Progress 8 <br> - Percentage entering EBacc <br> - Percentage achieving EBacc at grade 5 and above/grade 4 and above |
| :---: | :---: |
| 2018 | Reformed GCSE qualifications: most GCSEs in EBacc subjects were graded 9 to 1. <br> Change in headline performance measure: EBacc threshold attainment measure replaced as a headline measure with a new measure; EBacc average point score (APS). <br> New additional measures (to replace old threshold measures based on unreformed GCSEs): <br> - EBacc attainment at grade 4 and above <br> - EBacc attainment at grade 5 and above <br> Methodology change: A minor change to Progress 8 to reduce the disproportionate effect that extremely negative individual scores can have on a school's overall score. <br> Multi academy trust measures introduced: <br> - EBacc average point score |
| 2019 | Almost all GCSEs were graded 9-1. <br> There were no changes to KS4 performance measures <br> The floor and coasting standards were removed. |
| 2020 | No accountability measures produced at school level (apart from destination measures) due to the COVID-19 pandemic and the cancellation of most exams, tests and assessments. The school and college checking exercise was also cancelled. <br> Centre Assessed Grades were used to award qualifications. |
| 2021 | No accountability measures produced at school level (apart from destination measures, exam entries information and EBacc entry measure) due |


|  | to the COVID-19 pandemic and the cancellation of most exams, tests and assessments. The school and college checking exercise was also cancelled. <br> Teacher Assessed Grades were used to award qualifications. |
| :---: | :---: |
| 2022 | Accountability measures at school level return, following return of exams. <br> Methodology changes: <br> - New KS2 baseline for Progress 8 due to the introduction of scaled scores to replace levels <br> - Qualification results achieved between January 2020 and August 2021 not included in performance measures but entries are. <br> New MAT measures published: <br> - Attainment 8 <br> - Percentage of pupils achieving grade 5 or above in English and maths |
| 2023 | No changes to KS4 performance measures. |

## Annex N: Secondary performance measures

Table 43 below shows the performance measures and breakdowns that will be available on a school's page for 2022/23. There is further performance data and measures available about a school in the download data.

Table 43: Secondary performance measures

|  | Progress 8: score <br> EBacc entry: percentage of pupils entering the EBacc <br> Destination measures: Percentage of pupils staying in education or employment for at least two terms after KS4 <br> Attainment in English and maths: percentage of pupils achieving a grade 5 or above in English and maths <br> Attainment 8: score <br> Attainment in EBacc: EBacc Average Point Score (APS) |
| :---: | :---: |
|  | The subjects entered by pupils attending the school at KS4 |
|  | Breakdowns of headline measures are presented for: <br> - Disadvantaged pupils <br> - Prior attainment (low, middle and high attainers) <br> - English as an additional language (EAL) <br> - Gender <br> - Non mobile pupils |
|  | EBacc attainment at grade 5 and above <br> EBacc attainment at grade 4 and above <br> EBacc attainment at grade 5 and grade 4 and above by subject groups <br> EBacc attainment at grade 1 or above by subject groups <br> EBacc entries by subject group <br> EBacc value added by subject group |


|  | Progress 8 and Attainment 8 scores by subject areas |
| :--- | :--- |
|  | Additional entry and achievement measures |

## Annex 0 - Progress 8 bandings

How we calculated the bandings for 2023

| Progress bandings | A school is given this banding if... |
| :---: | :---: |
| Well above average | The progress score is greater than or equal to 0.5 , and the entire confidence interval is above 0 . <br> 16\% of state-funded mainstream schools in England. |
| Above average | The progress score is greater than 0 but lower than 0.5 , and the entire confidence interval is above 0 . <br> 16\% of state-funded mainstream schools in England. |
| Average | The confidence interval for the progress score spans both above and below 0 . <br> 35\% of state-funded mainstream schools in England. |
| Below average | The progress score is score is lower than 0 but greater than or equal to -0.5 , and the entire confidence interval is below 0 . <br> 18\% of state-funded mainstream schools in England. |
| Well below average | The progress score is score is lower than -0.5 and the entire confidence interval is below 0 . <br> 15\% of state-funded mainstream schools in England. |

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[^0]:    ${ }^{1}$ Pupils are identified as being at the end of KS4 if they were on roll at the school and in year 11 at the time of the January school census. Age is calculated as of 31 August at the start of the academic year, and the majority of pupils at the end of KS4 were age 15 at this point. Some pupils may complete this key stage in an earlier or later year group.

[^1]:    ${ }^{2}$ School teachers' pay and conditions: guidance - GOV.UK (www.gov.uk)

[^2]:    ${ }^{3}$ We do not set a maximum limit on how positive a pupil's progress score can be as there are much smaller numbers of extremely positive progress scores that have a disproportionate impact than extremely negative ones.

[^3]:    ${ }^{4}$ Some AS level qualifications in the same subject pillars can also count towards the EBacc.

[^4]:    ${ }^{5}$ In previous years school level data for state-funded schools has been published in the provisional October publication. Results data for independent schools and FE colleges were published alongside statefunded schools with the revised February publication.
    ${ }^{6}$ We do not publish KS2 data for independent schools because they don't have to follow the national curriculum or enter pupils for KS2 tests. This means that independent schools are not included in the calculation of Progress 8. They are still included in other attainment measures at KS4.

[^5]:    ${ }^{7}$ First entry and discounting rules as set out in the discounting and early entry section still apply.

[^6]:    ${ }^{8}$ See the technical guidance for further information: 14 to 19 technical and applied qualifications technical guidance.

[^7]:    ${ }^{9}$ If the EBacc maths qualification was taken between January 2020 and August 2021 and therefore was impacted by COVID-19 the result for the EBacc maths qualification would not count but the Free Standing Maths Qualification could count in the 'open' element.

[^8]:    ${ }^{10}$ The teacher workload advisory group report and government response.

[^9]:    ${ }^{11}$ The DfE add 3 points to a pupil's scaled score for each subject where special consideration is applied. The score is capped at the maximum score available for a test. For pupils who took KS2 tests from 2018/19 onwards, KS2 scores for reading, maths and Grammar Punctuation and Spelling (GPS) without special consideration applied are shown in Get Information About Pupils (GIAP). There is also a flag to show where special consideration has been applied. More information on special consideration can be found in the KS2 tests: special consideration guidance.
    ${ }^{12}$ Code N was introduced from 2017 onwards.

[^10]:    ${ }^{13}$ In 2016, all pupils on P-scales at Key Stage 2 got the same nominal point (70).

[^11]:    14 More information on what counts in EBacc can be found in the 'English Baccalaureate: eligible qualifications' guidance.
    ${ }^{15}$ Where an academy has joined a trust since 14 September 2020 but immediately prior to that date the academy was part of a trust that was sponsored by their current trust since at least 14 September 2020, we will include the academy in the measures for their trust.

[^12]:    16 Since 2014 computer science has counted as an individual science in the performance tables. However, it can also count alongside combined science or single sciences in Attainment 8/Progress 8 and it is not involved in science pathway discounting, so it is possible for computer science to count in Attainment 8 and Progress 8 measures alongside combined science.

[^13]:    ${ }^{17}$ Data from special schools are not included when setting minimum thresholds. Students in special schools who have extremely negative progress scores are not capped.
    ${ }^{18}$ Due to natural fluctuation of performance year-on-year, it may not be possible to use the same standard deviation value each year to calculate the minimum scores.
    ${ }^{19}$ Set at the provisional data stage, updated in the amended data stage, based on mainstream provision.
    ${ }^{20}$ Of pupils who are included in Progress 8.

[^14]:    ${ }^{21}$ Science grades count in two pillars, meaning a total of six pillars for EBacc APS.

[^15]:    ${ }^{22}$ We will include results from qualifications taken in autumn 2019, as these were pre-pandemic. We will not include results from qualifications taken in autumn 2020.
    ${ }^{23}$ Most commonly when pupils were in year 10 but also in year 9.
    ${ }^{24}$ We also count the results of qualifications achieved in autumn 2019 and first entry rules will apply.

[^16]:    ${ }^{25}$ If a pupil is entered for both English language and English literature but does not sit one of them and receives a grade $X$ for that subject, then the pupil's numerical grade in the other English GCSE will count in the English element of Progress 8/Attainment 8 but will not be double weighted.
    ${ }^{26}$ If a pupil is entered for both English language and English literature but does not sit one of them and receives a grade $X$ for that subject, then the pupil's numerical grade in the other English GCSE is not included in EBacc APS and they will receive a zero for the English pillar.

[^17]:    ${ }^{27}$ In 2022, this measure did not include entries data from qualifications taken between January 2020 and August 2021, because the measure is calculated using results included in Attainment 8.

[^18]:    ${ }^{28}$ In 2022, this measure did not include entries data from qualifications taken between January 2020 and August 2021, because the measure is calculated using results included in Attainment 8.

[^19]:    ${ }^{29}$ All state-funded schools include local authority maintained mainstream schools, academies, free schools, city technology colleges, state-funded special schools and some information for further education colleges with provision for 14 to 16 year-olds. They exclude independent schools, independent special schools, nonmaintained special schools, hospital schools, pupil referral units and alternative provision. Alternative provision includes academy and free school alternative provision.

