



Department  
for Education

# **Primary school accountability in 2024: technical guide**

**A technical guide for primary maintained  
schools, academies and free schools**

**December 2024**

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## Summary

This guidance explains the primary accountability measures for academic year 2023/24.

As previously announced, it will not be possible to calculate KS1-KS2 progress measures for academic years 2023/24 and 2024/25. This is because there is no KS1 baseline available to calculate primary progress measures for these years due to Covid-19 disruption.

This guidance explains how we have calculated KS2 attainment measures for 2023/24. It also includes information on the calculation of KS1-KS2 progress measures in previous years.

Schools received their provisional performance data for 2023/24 on 9 September 2024. Revised school level data will be published on Compare school and College Performance (CSCP) on 12 December 2024.

## Who this publication is for

This guidance is for:

- senior leaders working in primary schools and trusts, including maintained schools, academies, alternative provision, free schools and special schools
- governors and trustees
- local authorities

## Main points

This update includes information about KS2 performance measures for the academic year 2023/24. It also includes information about how we will calculate KS2 MAT measures for 2023/24.

The previous update to this guidance made on 9 September 2024 was to reflect that DfE is unable to publish primary progress measures for 2023/24 and to clarify how 2023/24 KS2 school performance data would be used. On 12 December 2024 DfE updated the guidance to reflect a change in how we include pupils who miss a test paper due to absence in performance measures (see page 12).

## Primary school accountability measures

There continues to be a range of forms of accountability in place for primary schools, including KS2 performance data and school inspection.

### 2023/24 key stage 2 performance measures

DfE will publish KS2 performance data at school level on Compare School and College Performance (CCSP) for academic year 2023/24 on 12 December 2024.

As previously announced, it will not be possible to calculate KS1-KS2 progress measures for academic years 2023/24 and 2024/25. This is because there is no relevant KS1 data required to calculate KS1-KS2 progress measures for these cohorts, as primary tests and assessments were cancelled in academic years 2019/20 and 2020/21 due to COVID-19 disruption. DfE will continue to publish the usual attainment measures as set out on page 13. Information about the calculation of KS1-KS2 progress measures is in Annex A.

In July 2023 the previous government announced that, given the lack of a statistically robust alternative baseline to calculate primary progress measures, DfE would not be producing or publishing primary progress measures for 2023/24 and 2024/25.

The Early Years Foundation Stage Profile (EYFSP), Phonics Screening Check (PSC) and the Multiplication Tables Check (MTC) were considered as possible alternative baselines, but all were found to have statistical issues which made them unsuitable.

It will be possible to return to producing KS1-KS2 progress measures in 2025/26 and 2026/27. For the cohort reaching the end of KS2 in 2027/28, baseline data available to calculate progress will be from the Reception Baseline Assessment taken in 2021/22.

When DfE publishes 2023/24 KS2 performance measures on CCSP on 12 December 2024 messaging will be included to explain why it is not possible to calculate KS1-KS2 progress measures for 2023/24 and to caution users about the limitations of using attainment only data to interpret school performance. We will also continue to show a school's 2022/23 progress scores in reading, writing and maths.

## How will the 2023/24 key stage 2 performance data be used?

Users of education school performance data need to consider this data alongside a range of other information about a school and its individual circumstances, for example by speaking to the school directly. Conclusions should not be drawn on a single piece of data alone.

DfE officials may use 2023/24 KS2 performance data when setting criteria to allocate additional funding.

As set out in DfE guidance<sup>1</sup>, 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 should also be taken into account. From the 2024/25 academic year, the requirement for objectives and the appraisal process to lead to performance-related pay outcomes for teachers and leaders will be removed. The statutory requirement to make a pay decision following the completion of the appraisal process remains.

### Ofsted

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. Ofsted inspectors will be aware there will be no KS1-KS2 progress measures for 2023/24 and of the limitations of attainment only data.

### Regional directors

Regional Directors will have 2023/24 assessment and test data to refer to. They will be aware there will be no KS1-KS2 progress measures for 2023/24 and of the limitations of attainment only data. Decisions will not be made on a single year's data and will continue to be informed by a range of factors. 2023/24 KS2 school performance data can be used to make comparisons between schools, trusts and with local authority and national

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<sup>1</sup> [School teachers' pay and conditions: guidance - GOV.UK \(www.gov.uk\)](https://www.gov.uk/guidance/school-teachers-pay-and-conditions)

averages, and can be considered alongside data from 2022/23, as the STA standards setting and maintenance approach was consistent across years.



## Key stage 2 headline measures

The KS2 headline measures for 2023/24 are:

- the percentage of pupils achieving the 'expected standard' in English reading, English writing and maths at the end of KS2
- the pupils' average scaled score in:
  - English reading at the end of KS2
  - maths at the end of KS2
- the percentage of pupils who achieve at a higher standard in English reading, English writing and maths

The **percentage of pupils achieving the expected standard** is a combined measure across the three subjects. To be counted towards the measure, a pupil must have a scaled score of 100 or more in reading and a scaled score of 100 or more in maths; and have been teacher assessed in writing as 'working at the expected standard' or 'working at greater depth'.

The **percentage of pupils achieving at a higher standard** is also a combined measure across the three subjects. To be counted towards the measure, a pupil must have a 'high scaled score' of 110 or more in reading and maths; and have been teacher assessed in writing as 'working at greater depth'.

Unlike the expected standard, which was determined by the STA's standard-setting teacher panel, the high score was determined by the department solely with reference to the distribution of pupils' test results, to identify the pupils who achieved the highest marks on the tests.

The **average scaled score in English reading and maths** is the mean scaled score of all pupils awarded a scaled score. It only includes pupils who took the test and achieved a scaled score. It provides a measure of the typical performance of pupils taking the tests and is affected by the performance of pupils at all points in the range of scores.

There is also a range of additional measures, which cover attainment in individual subjects and breakdowns of measures for various pupil groups. For example, the percentage of pupils meeting the expected standard in maths and breakdowns showing performance of pupils with particular characteristics, such as disadvantaged pupils, or those for whom English is an additional language. It will not be possible to produce breakdowns of attainment measures by prior attainment for 2023/24 and 2024/25 as there is no KS1 baseline available to calculate prior attainment.

DfE shares detailed information on performance measures with school leaders, governors, and other relevant stakeholders, including local authorities, academy trusts, dioceses via Analyse School Performance (ASP) - a secure platform providing users with restricted access to performance data relevant to their role and/or function.

Statistics on attainment in KS2 national curriculum assessments in England are also published at national, regional, local authority, local authority district and parliamentary constituency level by DfE on the [Explore Education Statistics website](#).

## **Pupils below the standard of the test or assessment in academic year 2023/24**

In 2023/24 pre-key stage standards were used to report teacher assessment in English reading, English writing and maths for pupils working below the standard of national curriculum assessments engaged in subject-specific study. The pre-key stage standards include six standards at KS2.

In 2023/24 pupils working below the standard of national curriculum assessments and not engaged in subject-specific study were assessed using the engagement model.

Pupils who are working below the standard of the national curriculum assessments are included in KS2 school attainment measures as “not meeting the expected standard”. Information on how pupils working below the standard of the national curriculum assessments are included in KS1-KS2 progress measures can be found in Annex A.

## Pupils in particular circumstances

There are some circumstances where a pupil's results are included in the attainment measure as 'not meeting' the expected standard. These pupils will contribute to the cohort in the denominator but are not included in the numerator. These include:

KS2 code	Description
Q	Mark suppressed
H	Paper annulled
U	Performing at the standard of the test but unable to access the test
J	Just arrived

**Table 1: KS2 codes for pupils in particular circumstances**

In limited circumstances, schools may request that a pupil be omitted from performance measures (for example, if pupils have recently arrived from overseas and English is not their first language) this can be done via the Primary Schools Checking Exercise.

Pupils are not included in school performance measures until they have reached the end of KS2. A pupil is assigned a code F if they have been held back a school year or have taken one or more of the subjects early. Where a pupil has a result missing, please see Annex B.

### **Absence**

Pupils who do not take the reading test due to absence will be assigned code A and included in attainment measures as not meeting the expected standard. Pupils who do not take all test papers in maths and/or grammar, punctuation and spelling due to absence will receive a mark for the papers they have completed but will not receive a scaled score. Pupils who have achieved sufficient marks on completed papers to demonstrate that they are working at least at the expected standard will be included in attainment measures as meeting the expected standard and will be awarded an overall outcome of AS for the relevant subject. These pupils will also be included in national and regional statistics as meeting the expected standard. It is not possible to achieve sufficient marks to achieve the higher standard without completing all papers, so these pupils will be included in the higher standard measures for the relevant subject as not meeting the higher standard. Pupils who are absent for a test paper in these subjects and do not achieve enough marks in the remaining test papers to meet the expected standard will receive an overall outcome of A for the subject and will be included in attainment measures as not meeting the expected standard.

Pupils with absence in one or more papers do not receive a scaled score as it would likely have been higher if they had completed all papers. They are therefore not included in average scaled score attainment measures or in KS1-KS2 progress measures.

## Key stage 2 multi-academy trust (MAT) measures

For 2023/24, DfE will produce the following KS2 measure at MAT level:

- percentage meeting the expected standard in reading, writing and maths combined

We will also produce a breakdown of this measure for disadvantaged pupils.

As at school level, it will not be possible to calculate MAT level KS1-KS2 progress measures for academic years 2023/24 and 2024/25. This is because there is no KS1 baseline available to calculate primary progress measures for these cohorts due to Covid-19 disruption.

Once it is possible to calculate KS1-KS2 progress measures again for 2025/26, it will be possible to return to publishing progress measures at MAT level.

## Eligibility for inclusion in the MAT measures

We include data at MAT level for MATs that are sufficiently large and well established to have had time to have an impact on the performance of schools within the MAT.

Previously, we also reported at sponsor level, for the very small number of MATs this affected. Since 2021/22, we no longer report at this level.

For 2023/24, we will produce measures for MATs that as of 12 September 2023:

- have at least three schools with results at KS2, and
- where those schools have been with the MAT for at least three academic years (defined as having joined that MAT before 12 September 2021<sup>2</sup>).

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 KS2, but also have schools with results at KS2 that have been with the MAT for less than 3 years).

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<sup>2</sup> Where an academy has joined a trust since 12 September 2021 but immediately prior to that date the academy was part of a trust that was sponsored by their current trust since at least 12 September 2021, we will include the academy in the measures for their trust.

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.

Year on year the number of MATs with at least 3 academies, that have been part of the MAT for at least 3 years, tends to increase. This means that each year, we tend to publish measures for more MATs, MATs already published have more of their academies included in their MAT data, and some MATs have MAT measures published for the first time.

## **Calculating key stage 2 measures at MAT level**

The MAT level measures are based on the weighted average of a MAT's individual schools' respective attainment scores. Weighting is employed when calculating the average to ensure a school's contribution to the overall score is proportional to its size and length of time with that MAT.

Each of the measures are 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 a MAT for 3 years are given a weight of 3, those with the MAT for 4 or more years are given a weight of 4).

Worked examples of KS2 MAT measures are included in Annex C.

## **Disadvantaged pupils and MAT measures**

We calculate breakdowns of KS2 MAT level measures for disadvantaged pupils. Evidence shows that overall performance of disadvantaged pupils across all school types tends to be lower than that of other 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).

## Annex A: KS1-KS2 progress measures methodology

**It will not be possible to calculate KS1-KS2 progress measures for academic years 2023/24 and 2024/25. This is because there is no relevant KS1 data required to calculate KS1-KS2 progress measures for these cohorts, as primary tests and assessments were cancelled in academic years 2019/20 and 2020/21 due to COVID-19 disruption.**

This annex explains how DfE calculated KS1-KS2 progress measures reading, writing and maths for 2022/23.

### Overview of the progress measures

The progress measures aim to capture the progress that pupils make from the end of KS1 to the end of primary school. They are a type of value-added measure, which means that pupils' results are compared to the actual achievements of other pupils nationally with similar prior attainment.

This type of progress measure rewards schools for making progress with all their pupils, whether they are low-, middle- or high-attainers. Any increase in attainment achieved by each pupil is reflected in the school's progress scores.

This measure is a school-level accountability measure. Progress is calculated for individual pupils solely to calculate the school's overall progress scores. Schools should not share individual pupil progress scores with pupils or parents.

Schools should continue to focus on improving the attainment of all their pupils and report on their attainment and progress to parents, as specified in the Assessment and Reporting Arrangements for KS1<sup>3</sup> and KS2<sup>4</sup>. For more information, see the Standard and Testing Agency's pages on Gov.uk<sup>5</sup>.

A school's progress scores in English reading, English writing and maths are calculated as the average of its pupils' subject progress scores. These scores give an indication of whether, as a group, pupils in the school made above or below average progress in a subject compared with pupils with similar starting points in other schools.

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<sup>3</sup> [2024 assessment and reporting arrangements \(phonics screening check\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/2024-assessment-and-reporting-arrangements-phonics-screening-check)

<sup>4</sup> [2024 key stage 2: assessment and reporting arrangements \(ARA\) - GOV.UK \(www.gov.uk\)](https://www.gov.uk/government/publications/2024-key-stage-2-assessment-and-reporting-arrangements-ara)

<sup>5</sup> <https://www.gov.uk/government/organisations/standards-and-testing-agency>

## Calculating an individual pupil's progress scores

Progress scores are calculated for individual pupils for the sole purpose of constructing a school progress score. Pupil scores are calculated separately for English reading, English writing and maths. Pupils who do not have KS1 data for all of English reading, English writing and maths (for example, they have arrived at primary school from abroad or from the independent sector, or who were absent at the time of the KS1 assessments), cannot be included in the progress measures, but their KS2 scores will be included in their school's attainment measures (see page 27).

The first step is to assign pupils into groups with other pupils nationally, who had similar starting points (KS1 achievement, see pages 18-25).

The second step is to work out the average KS2 score for each prior attainment group. This is worked out as the mean average of the actual KS2 scores of all the pupils in the prior attainment group.

Finally, a pupil's progress score is calculated. This is done by working out the difference between their actual KS2 outcome and the average KS2 outcome for the other pupils nationally, who are in the same prior attainment group.

For example:

- Jamie has an average KS1 score of 8.5, which means Jamie is in prior attainment group 18 (for further explanation of prior attainment groups, please see page 23).
- Jamie's result in the KS2 maths test is a scaled score of 108.
- The national average scaled score in maths for pupils in prior attainment group 18 is 107.85
- Jamie, therefore, has a maths progress score of 0.15

Jamie's KS1 point score and Prior Attainment Group (PAG)	Jamie's estimated KS2 maths score based on his Prior Attainment Group	Jamie's actual KS2 maths score	Jamie's KS2 maths progress score (actual - estimate)
8.5 PAG = 18	107.85	108	$108 - 107.85 = 0.15$

**Table A.1: Calculating an individual pupil's progress score**

In this example, Jamie has met the 'expected standard' (a scaled score of 100 or more). Jamie has done better than other pupils with the same KS1 attainment and, therefore, has a positive progress score. This will not necessarily be the case for all pupils.



Some pupils will meet the 'expected standard' but will make less progress compared to other pupils in their prior attainment group.

Other pupils will not meet the 'expected standard' but will make more progress than the other pupils in their prior attainment group.

## Calculating a school's progress scores

A school's progress score, for a subject, is the mean average of its pupils' progress scores in that subject.

For example:

Jamie is one of 60 pupils in their school's KS2 cohort. These pupils have maths progress scores as follows:

Pupil #	Pupil name	Maths progress score
1	Jamie	+0.15
2	Chloe	+2.20
(Pupils 3-58)	(Pupil names 3-58)	(Progress scores 3-58)
59	Ebony	-1.90
60	Harry	-5.36
	<b>Sum</b>	<b>+132.40</b>

**Table A.2: Calculating a school's progress score**

The school's maths progress score will be  $132.40 / 60 = \mathbf{+2.21}$

This process is then repeated for each subject.

Schools are then allocated three progress scores:

- one for English reading
- one for English writing<sup>6</sup>
- one for maths

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<sup>6</sup> See page 24 for an explanation of how we calculate writing progress scores.

## Key stage 1 point scores

### Key stage 1 prior attainment groupings

To calculate progress scores, pupils are allocated into prior attainment groupings with all other pupils nationally with similar KS1 attainment.

Pupils who reached the end of KS2 in academic year 2022/23 took their end of KS1 assessments in 2019. Changes were made to KS1 assessments in 2019 when interim pre-stage standards (foundations for the expected standard – PKF) and P scaled 5-8 were replaced with final pre-key stage standards (PK1-4).

	2017/18	2018/19	2021/22 <sup>7</sup>
<b>Subject specific study</b>	Interim pre-key stage standards Foundations for the expected standard <hr/> P scales 5 to 8	Final pre-key stage standards <ul style="list-style-type: none"> <li>• Standard 4</li> <li>• Standard 3</li> <li>• Standard 2</li> <li>• Standard 1</li> </ul>	Final pre-key stage standards <ul style="list-style-type: none"> <li>• Standard 4</li> <li>• Standard 3</li> <li>• Standard 2</li> <li>• Standard 1</li> </ul>
<b>Not subject specific study</b>	P scales 1 to 4	P scales 1 to 4	Engagement model

**Table A.3: Summary of changes to KS1 assessments from 2017/18 to 2021/22**

Individual KS1 subject teacher assessments from 2019 are converted into points as outlined in the table below.

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<sup>7</sup> Pupils who took their KS1 assessments in 2021/22 will reach the end of KS2 in 2025/26

National curriculum teacher assessment	Point score equivalent
Working at greater depth (GDS)	10
Working at the expected standard (EXS)	8
Working towards the expected standard (WTS)	6
Final pre-key stage standard - standard 4	4
Final pre-key stage standard - standard 3	3.5
Final pre-key stage standard - standard 2	3
Final pre-key stage standard - standard 1	2.5
Below the standard of the final pre-key stage standards (BLW)	See the next section
M – Missing	Disregard
D – Disapplied	Disregard
A – Absent	Disregard

**Table A.4: Key stage 1 point scores for all subjects - individual KS1 subject teacher assessments from 2019 converted into points**

A pupil's KS1 point scores for English reading, English writing and maths are then combined to give them a KS1 average point score (APS).

The average point score is weighted 50:50 for English and maths, as this provides a strong correlation to KS2 results in all three subjects – English reading, English writing and maths.

This is calculated by working out an average score for English (reading and writing) and giving this equal weight alongside maths.

### Worked example

Jamie was assessed at the end of KS1 to be working at the expected standard for English reading, towards the expected standard for English writing and working at greater depth within the expected standard for maths.

The diagram below sets out how these are converted into an average point score for Jamie.

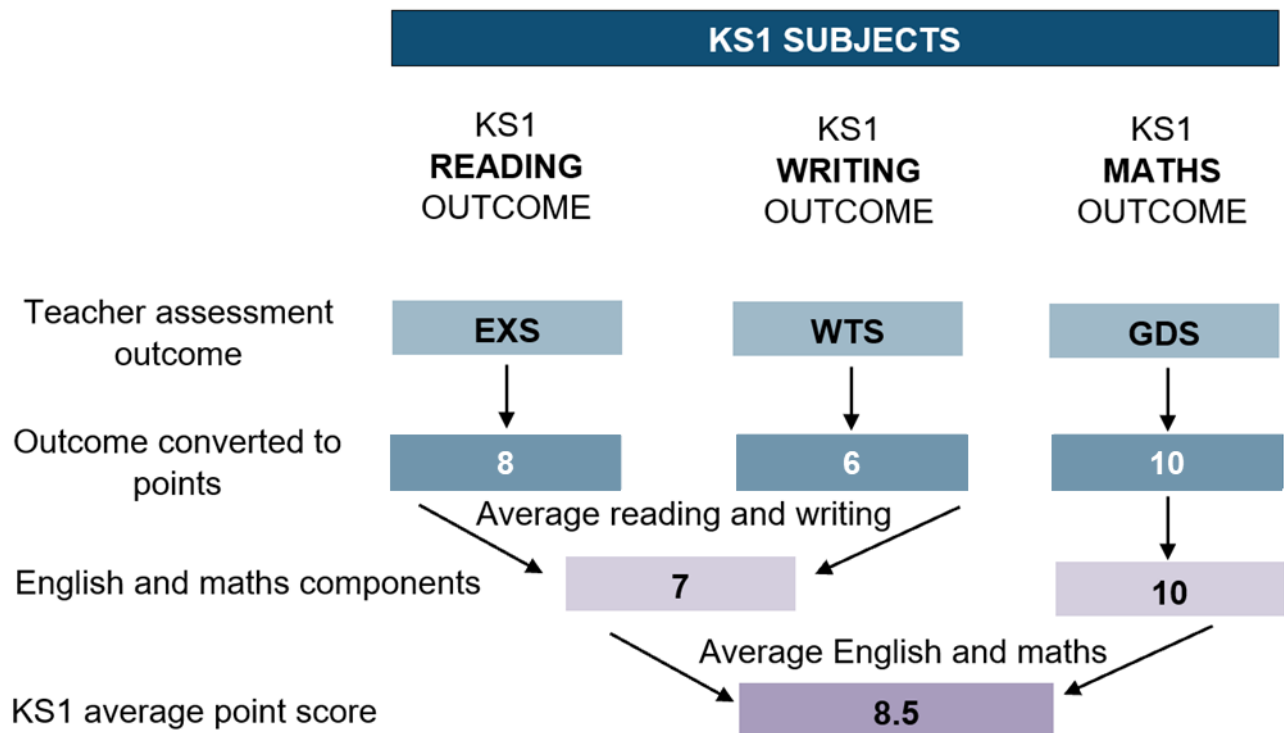


Figure A.1: A worked example for working out a pupil's KS1 average point score

Pupils stay in the same prior attainment group, which is based on their average point score at KS1, when we calculate their separate progress scores in English reading, English writing and maths.

### Pupils working below the standard of the final pre-key stage standards (BLW)

As with all other pupils, we allocate point scores to pupils working below the standard of the final pre-key stage standards.

The following table show the point scores associated with each P scale for KS1 assessments that took place in 2019.

<b>Teacher assessment</b>	<b>Point score equivalent</b>
Below the standard of the final pre-key stage standards (BLW) and no P scale info	3.00
P4	1.75
P3ii	1.50
P3i	1.25
P2ii	1.00
P2i	0.75
P1ii	0.50
P1i	0.25

**Table A.5: key stage 1 point scores for pupils working below the final pre-key stage standards**

The following rules apply to the way we allocate these points to each subject:

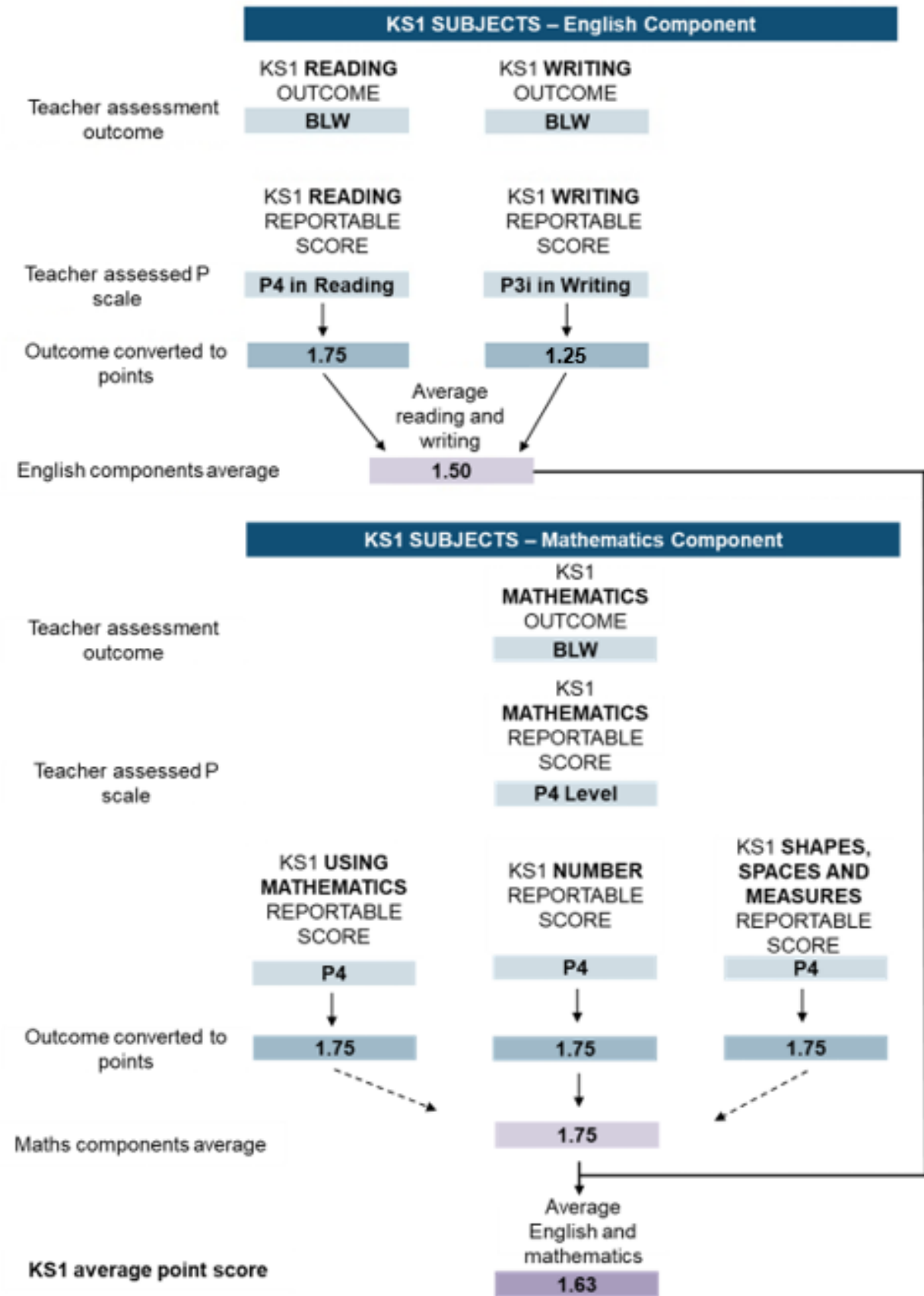


Figure A.2: A worked example showing how we allocate points to each subject for pupils working below the standard of the final pre-key stage standards (BLW)

## **2022/23 Prior attainment groups**

The process described above created 20 prior attainment groups to which pupils have been allocated depending on their KS1 results. Schools can use the table below to see which prior attainment group a pupil will have been allocated to depending on their KS1 average point score and the revised national KS2 averages for each of these groups in 2022/23 by subject. As described earlier in this guide, a pupil's progress score is the difference between their own KS2 result and the national average KS2 result for their prior attainment group.

Prior attainment group (PAG)	KS1 average points score	Average KS2 reading score for PAG	Average KS2 writing score for PAG	Average KS2 maths score for PAG
1	0 to < 1.5	62.84	62.56	63.05
2	>= 1.5 to < 1.75	67.75	67.11	67.84
3	>= 1.75 to < 2.0	70.60	69.33	70.80
4	>= 2.0 to < 3.0	73.65	72.27	74.13
5	>= 3 to < 3.25	80.32	77.85	80.49
6	>= 3.25 to < 3.5	82.08	79.41	82.23
7	>= 3.5 to < 3.75	85.74	82.46	85.37
8	>= 3.75 to < 4.0	88.53	84.51	88.05
9	= 4.0	90.51	86.66	89.38
10	> 4 to < 5	92.24	87.86	92.18
11	= 5.0	94.22	89.77	93.38
12	> 5.0 to < 6.0	95.58	90.33	95.10
13	= 6.0	96.78	93.01	95.81
14	> 6.0 to < 7.0	100.85	96.35	97.86
15	= 7.0	101.04	97.37	100.93
16	> 7.0 to < 8.0	103.29	98.23	102.84
17	= 8.0	105.38	102.02	104.61
18	> 8.0 to < 9.50	109.50	104.72	107.85
19	>= 9.50 to < 10.0	111.29	105.50	110.84
20	= 10	113.29	108.88	112.15

**Table A.6: 2023 prior attainment groups**

## Progress and attainment at key stage 2 by prior attainment

Where we report breakdowns of KS2 attainment and progress measures by prior attainment, we define low, middle, and high prior attainment at KS2 using KS1 average point scores as follows:

Low prior attainers achieved an average point score of below 7. Middle prior attainers achieved an average point score of 7 or higher and less than or equal to 8. High prior



attainers achieved an average point score of higher than 8. Pupils without KS1 results are not included in these figures.

## Key stage 2 point scores

### English reading and maths tests

For English reading and maths, KS2 test results have been reported as scaled scores, with 100 as the 'expected standard'. The scaled score for each subject is used as the pupil's KS2 outcome in the progress score calculation.

### English writing teacher assessment

In 2022/23, as in previous years, KS2 English writing results were reported as teacher assessments. Pupils working at the standard of the national curriculum were assessed against the revised statutory framework for the teacher assessment of writing, first used in 2017/18. The framework includes three categories: working towards the expected standard, working at the expected standard, and working at greater depth.

For the purpose of calculating writing progress scores **only**, pupils were allocated points for each of the teacher assessment outcomes. Pupils still receive their teacher assessment as their KS2 outcome and no pupil will receive our point score as their KS2 outcome. The points that were allocated to each teacher assessment category are detailed below:

Teacher assessed writing categories	Points (within the scaled score range)
Working towards the standard	91
Working at the expected standard	103
Working at greater depth	113

**Table A.7: Points for each teacher assessed writing category**

The same point score is attached to all pupils in the same category. This is because there are only three categories of teacher assessment for those working at the standard of the KS2 framework and it was therefore not possible to differentiate between pupils within each category. This means, for example, that all pupils working at the expected standard were allocated 103 points.

The points for English writing have been guided by outcomes on the KS2 English reading and maths tests, and performance in English writing. The points were determined by considering the percentage of pupils achieving each category of English writing teacher assessment, identifying the corresponding percentages of pupils on the English reading and maths tests, and finding the mean scaled score for each group. The points allocated to each writing teacher assessment reflect the most appropriate points for a typical pupil's performance in English writing.

This method means that the writing points are based on available information that aligns with a pupil's performance in English reading and maths.

## **Pupils below the standard of the test or assessment in academic year 2022/23**

In 2022/23 pre-key stage standards were used to report teacher assessment in English reading, English writing and maths for pupils working below the standard of national curriculum assessments engaged in subject-specific study. The pre-key stage standards include six standards at KS2.

From the 2020/21 academic year, DfE replaced P scales 1 to 4 with a new assessment approach, based on the engagement model. The engagement model is the assessment for pupils working below the standard of national curriculum assessments and not engaged in subject-specific study.

As in previous years, we allocated a nominal point 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. In 2022/23, the points assigned were 79.<sup>8</sup>

The points allocated to each teacher assessment category are detailed below:

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<sup>8</sup> Where a pupil has been entered for the test and also has a teacher assessment outcome, only the test outcome data is used in school performance measures.

<b>Pre-key stage teacher assessment for pupils below the level of the test at KS2</b>	<b>Points (below the scaled score range)</b>
Standard 6 (working at the KS1 expected standard)	79
Standard 5 (working towards the KS1 expected standard)	76
Standard 4	73
Standard 3	70
Standard 2	67
Standard 1	64
Pupils working on the engagement model	60

**Table A.8: Key stage 2 points for pupils below the standard of the test in 2022/23**

## **Pupils in particular circumstances**

Pupils who are working below the standard of the national curriculum assessments are included in school progress and attainment measures. They are included in attainment measures as “not meeting the expected standard”. We allocate nominal point scores to their teacher assessment outcomes in order to calculate KS1-KS2 progress measures as set out in key stage 2 point scores above.

There are some circumstances where a pupil’s results are not included in the progress measures but are included in the attainment measure as ‘not meeting’ the expected standard. These pupils will contribute to the cohort in the denominator but are not included in the numerator. These include:

KS2 code	Description
A	Absent <sup>9</sup>
Q	Mark suppressed
H	Paper annulled
U	Performing at the standard of the test but unable to access the test
J	Just arrived

**Table A.9: KS2 codes for pupils in particular circumstances**

In cases where pupils have no KS1 data, for example they have arrived at primary school from abroad or from the independent sector, their results are treated in a similar way and are not included in the school's progress measures but are included in the attainment measures.

If pupils have moved schools between KS1 and KS2, we will retrieve their KS1 data and include them in the progress calculation for their current school.

In limited circumstances, schools may request that a pupil be omitted from performance measures (for example, if pupils have recently arrived from overseas and English is not their first language) this can be done via the Primary Schools Checking Exercise.

Pupils are not included in school performance measures until they have reached the end of key stage 2. A pupil is assigned a code F if they have been held back a school year or have taken one or more of the subjects early. Where a pupil has a result missing, please see Annex B.

## Interpreting a school's progress scores

Individual pupil-level progress scores are calculated in comparison to other pupils nationally. For all state-funded pupils nationally, the average progress score will be zero.

A school's progress scores for English reading, English writing and maths are calculated as its pupils' average progress scores. This means that school-level progress scores are presented as positive and negative numbers either side of zero.

- A score of zero means pupils in this school, on average, did about as well at KS2 as those with similar prior attainment nationally.

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<sup>9</sup> Pupils who do not take all test papers for a subject will receive a mark for the papers they have completed but will not receive a scaled score. The overall outcome for a pupil who does not complete all test papers for a subject will be 'A' (absent).

- A positive score means pupils in this school, on average, did better at KS2 than those with similar prior attainment nationally.
- A negative score means pupils in this school, on average, did not make as much progress by the end of KS2 as those with similar prior attainment nationally. 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 KS1.

For example, a school with a maths progress score of -4 would mean that, on average, pupils in this school achieved 4 scaled score points lower in the KS2 maths test than other pupils with similar prior attainment nationally.

English writing progress scores differ from English reading and maths progress scores and do not directly relate to scaled scores. As there is no test in writing, KS2 teacher assessments are used to create the progress scores. To do this we assign points to teacher assessment before creating the progress scores in our model (see page 19). A progress score of -5 in English writing, therefore, could be seen as meaning pupils in this school on average achieve 5 points lower in our progress model than other pupils with similar prior attainment nationally.

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

The previous government's response to the Workload Advisory Group report 'Making Data Work'<sup>10</sup> 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 outcomes they are likely to achieve at the end of Key Stages 1 or 2. The Group also stated that 'flight paths', where pupils are told the outcomes 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 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

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<sup>10</sup> <https://www.gov.uk/government/publications/teacher-workload-advisory-group-report-and-government-response>

advance of official provisional data being available each September. The primary progress scores are an in-year relative measure.

## **Pupil with extremely negative progress scores**

DfE limits how negative<sup>11</sup> a pupil's progress score can be when calculating the school average. These pupils still have large negative scores (to reflect that they have made much less progress than other pupils in the same prior attainment group as them), but the disproportionate effect they have on a school's score has been reduced.

Data published on the Compare School and College Performance service and releases of data in Analyse School Performance (ASP) will show schools their own progress figures calculated using the methodology outlined below. We will also make available in ASP, scores that do not place limits on pupil progress, for each subject (reading, writing and maths).

## **Methodology**

We set a minimum progress score that can be assigned to pupils within the prior attainment groups (for further explanation of prior attainment groups please see page 23) where extremely negative scores exist. These are given on page 33. Some of the prior attainment groups will not have a minimum progress score threshold set. These are prior attainment groups 1 to 7, where the average scaled scores at KS2 are not high enough to allow for extreme negative progress scores. For example:

- If the average scale score at KS2 for prior attainment group 7 was 85.74 in English reading, then the minimum possible progress score for that group would be -25.74 (60-85.74). This minimum progress score would be above the threshold for this prior attainment group as -25.74 is not an extremely negative score; but
- If the average scaled score at KS2 for prior attainment group 16 was 103.29 in English reading, then the minimum possible score for that group would be -43.29 (60-103.29). This minimum progress score is extremely negative compared to other pupils nationally in group 16 and would be below the limit for prior attainment group 16. Therefore, the pupil's score would be adjusted to -16.29

Where a minimum score is set for a prior attainment group, this is determined based on the variation in pupil progress scores within that prior attainment group (as measured by

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<sup>11</sup> 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.

the standard deviation).<sup>12</sup> The minimum scores are fixed at a set number of standard deviations below the mean so that approximately 1% of pupils are identified nationally<sup>13</sup> (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, is not possible. Further information on the calculation, the number of standard deviation(s) and minimum thresholds per prior attainment group is below.

### Worked example

The threshold score applied to the pupil's progress score will be dependent on the prior attainment group that the pupil is in.

The first step is to ascertain the standard deviation of the bottom 1% of pupils for each of the subjects, English reading, English writing and maths.

The second step is to calculate the standard deviation of all pupils within each prior attainment group for each of the subjects.

The third step is to multiply the result from the first step with the results from the second step to give the threshold for each prior attainment group – the minimum score for that prior attainment group.

For example:

- The standard deviation that corresponds to 1% of pupils nationally is -2.54 in English reading.
- The standard deviations for each prior attainment group and the corresponding threshold for English reading are shown below:

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<sup>12</sup> Minimum thresholds are set using provisional data

<sup>13</sup> 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.

KS1 PAG	SD	Threshold score (-2.54)
1	6.4915	-16.4658
2	10.6619	-27.0440
3	11.7912	-29.9084
4	10.5621	-26.7909
5	11.2640	-28.5712
6	10.8402	-27.4963
7	10.6299	-26.9629
8	9.9298	-25.1869
9	9.5590	-24.2464
10	9.6139	-24.3857
11	8.4895	-21.5336
12	8.6386	-21.9118
13	7.7350	-19.6199
14	6.7744	-17.1834
15	6.5904	-16.7165
16	6.4222	-16.2900
17	5.8530	-14.8461
18	5.4799	-13.8998
19	5.0717	-12.8644
20	4.8172	-12.2188

**Table A.10: Adjusting progress scores for pupils with extremely negative progress scores**

The lowest prior attainment groups (1-7) have minimum scores that are above the threshold for that prior attainment group, due to the average for those prior attainment groups being close to the lowest possible scaled score (i.e. no pupils have scores extreme enough to be below the threshold). The middle to higher prior attainment groups (8-20) contain pupils with extreme progress scores below the threshold as defined by the standard deviation. These are the only prior attainment groups (groups 8-20 in the table above) where pupils' scores have been changed by this methodology.

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



For example:

School B has nine pupils with the following progress scores for English reading.

The pupils' progress scores are reviewed against the threshold at each prior attainment group.

Pupil	KS1 PAG	Progress Score	Threshold Score	Adjusted Progress Score
1	4	-4.02	-26.79	-4.02
2	7	13.34	-26.96	13.34
3	11	4.86	-21.53	4.86
4	3	-3.64	-29.91	-3.64
5	8	-27.15	-25.19	-25.19
6	15	3.28	-16.72	3.28
7	19	-15.18	-12.86	-12.86
8	8	1.85	-25.19	1.85
9	15	0.28	-16.72	0.28

**Table A.11: Example showing pupils progress scores reviewed against the threshold at each prior attainment group**

If the pupil's progress score is lower than the threshold, the score will be replaced with the threshold score (as for pupils 5 and 7 in the table above).

Finally, the school's progress score is calculated by averaging the adjusted progress score.

## Standard deviations

The set number of standard deviations below the mean so that approximately 1% of pupils are identified nationally when adjusting extremely negative progress scores are as follows:

Subject	Reading	Writing	Maths
Standard deviation	-2.5365	-2.6298	-2.5553

**Table A.12: Standard deviations below the mean when adjusting extremely negative progress scores**

The minimum thresholds derived from the above constants are as follows:

Prior Attainment Group (PAG)	KS1 average points score	Reading	Writing	Maths
1	0 to < 1.5	N/A	N/A	N/A
2	>= 1.5 to < 1.75	N/A	N/A	N/A
3	>= 1.75 to < 2.0	N/A	N/A	N/A
4	>= 2.0 to < 3.0	N/A	N/A	N/A
5	>= 3 to < 3.25	N/A	N/A	N/A
6	>= 3.25 to < 3.5	N/A	N/A	N/A
7	>= 3.5 to < 3.75	N/A	N/A	N/A
8	>= 3.75 to < 4.0	-25.1869	-24.4180	-23.9019
9	= 4.0	-24.2464	-23.9989	-23.0257
10	> 4 to < 5	-24.3857	-24.2444	-23.4430
11	= 5.0	-21.5336	-22.3091	-20.7752
12	> 5.0 to < 6.0	-21.9118	-22.7367	-21.0996
13	= 6	-19.6199	-20.4721	-19.1468
14	> 6.0 to < 7.0	-17.1834	-19.2392	-16.6029
15	= 7	-16.7165	-18.6707	-15.7688
16	> 7.0 to < 8.0	-16.2900	-17.8705	-14.6834
17	= 8	-14.8461	-13.4272	-13.7425
18	> 8.0 to < 9.50	-13.8998	-13.7001	-13.3305
19	>= 9.50 to < 10.0	-12.8644	-13.4124	-11.9745
20	= 10	-12.2188	-13.3150	-12.1406

Table A.13: Minimum thresholds by prior attainment group

## Confidence intervals

Progress 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 results independently of which school they attend. To account for the natural uncertainty, 95% confidence intervals around progress scores are provided as a proxy for the range of scores within which each school's underlying performance can be confidently said to lie.

The results of schools with small cohorts tend to have wider confidence intervals. This reflects the fact that performance of a small number of pupils taking KS2 tests can have a disproportionate effect on the school's overall results. Both the progress score and the confidence interval for a school should be taken into account when comparing with other schools or pupil groups.

If the lower bound of the school's confidence interval is greater than zero, it can be interpreted as meaning that the school has achieved greater than average progress compared to pupils with similar starting points nationally. Similarly, if the upper bound is below zero, then the school has made less than average progress. Where a confidence interval overlaps zero, this means that the school's progress score is not significantly different from the national average.

The confidence interval, denoted  $[LowCI_s, UppCI_s]$  is given by the formula:

$$[LowCI_s, UppCI_s] = [P_s - CI_s, P_s + CI_s],$$

where:

Variable	Description
LowCIS	is the lower confidence limit for the school's progress score
UppCIS	is the upper confidence limit for the school's progress score
PS	is the school's progress score
CIS	is the size of the confidence interval for the school's progress score

**Table A.14: Confidence intervals**

$$CI_s = 1.96x \frac{\sigma_N}{\sqrt{n_s}}$$

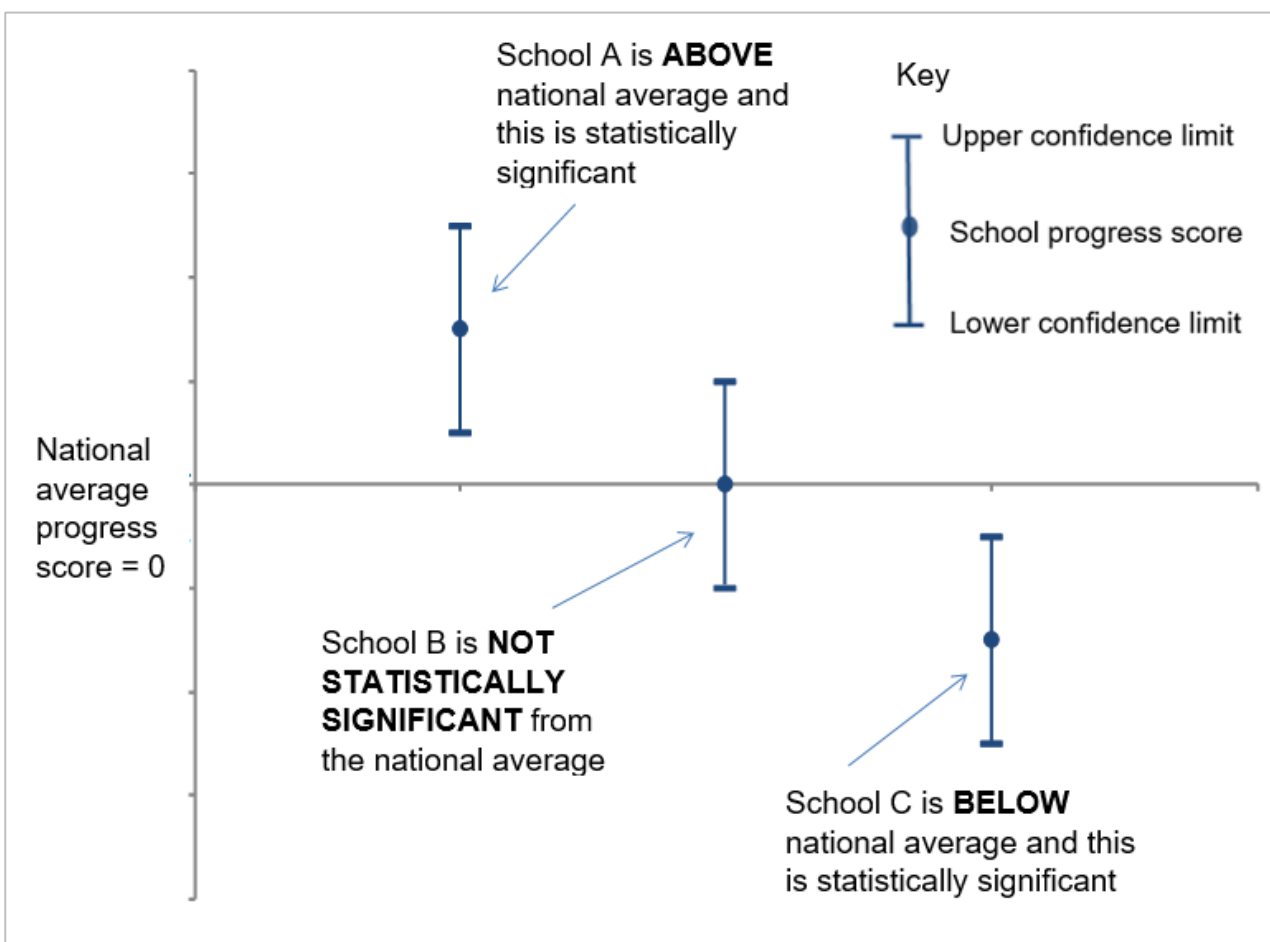
where:

Variable	Description
1.96	is the critical value for a 95% confidence interval;
$\sigma_N$	is the standard deviation of the progress scores for all eligible pupils <u>nationally</u> ;
$n_s$	is the number of eligible pupils that belong to the school

**Table A.15: Confidence intervals**

The national average progress 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 ( $LowCI_s > 0$ ), the school's progress 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 score is below average and the result is statistically significant
- in the other case when the confidence interval straddles zero ( $LowCI_s < 0 < UppCI_s$ ), we cannot say with confidence whether the school's progress score is above or below average, and say the result is not statistically significantly different from average.



**Figure A.3: Relation of school confidence intervals to their progress score**

The table below provides the standard deviation of pupil progress scores in each of the three subjects. The standard deviation is a measure to quantify the amount of variation in a set of values. A low standard deviation indicates that the data points tend to be close to the mean, while a high standard deviation indicates the data are spread out over a wider range of values.

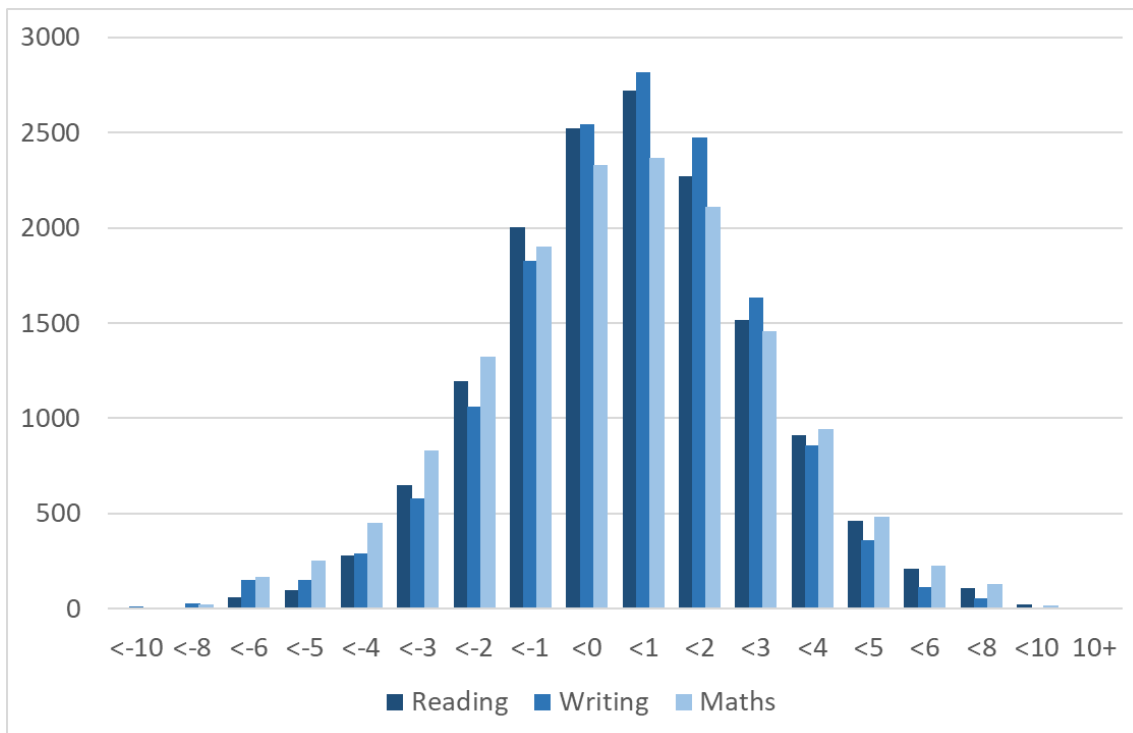
The values in the table have been used in the calculation of confidence intervals as outlined in this section.

Subject	Reading	Writing	Maths
Standard deviation	6.2893	6.0488	5.9145

**Table A.16: Standard deviation of pupil progress scores in reading, writing and maths**

## Distribution of progress scores for 2022/23

The chart below and table shows the distribution of schools' progress scores by subject.



**Figure A.4: Distribution of schools' progress scores for reading, writing and maths**

The table below provides the percentile distribution across the three subjects.

<b>Percentiles</b>	<b>Reading</b>	<b>Writing</b>	<b>Maths</b>
Top 5%	4 and above	3.6 and above	4.1 and above
Top 25%	1.7 and above	1.6 and above	1.7 and above
Top 40%	0.8 and above	0.8 and above	0.7 and above
Median	0.2	0.3	0.0
Bottom 40%	-0.3 and below	-0.3 and below	-0.6 and below
Bottom 25%	-1.3 and below	-1.2 and below	-1.6 and below
Bottom 5%	-3.5 and below	-3.8 and below	-4.3 and below

**Table A.17: Percentile distribution across reading, writing and maths**

## Progress scores in reading, writing and maths bandings

### How DfE calculated the bandings for 2023

#### Reading

Progress bandings	A school is given this banding if...
<b>Well above average</b>	The progress score is greater than or equal to 3.1, and the entire confidence interval is above 0.  10% of state-funded mainstream schools in England.
<b>Above average</b>	The progress score is greater than 0 but lower than 3.1, and the entire confidence interval is above 0.  9% of state-funded mainstream schools in England.
<b>Average</b>	The confidence interval for the progress score includes 0.  67% of state-funded mainstream schools in England.
<b>Below average</b>	The progress score is score is lower than 0 but greater than or equal to -2.7, and the entire confidence interval is below 0.  6% of state-funded mainstream schools in England.
<b>Well below average</b>	The progress score is score is lower than -2.7 and the entire confidence interval is below 0.  8% of state-funded mainstream schools in England.

## Writing

Progress bandings	A school is given this banding if...
Well above average	<p>The progress score is greater than or equal to 2.9, and the entire confidence interval is above 0.</p> <p>9% of state-funded mainstream schools in England.</p>
Above average	<p>The progress score is greater than 0 but lower than 2.9, and the entire confidence interval is above 0.</p> <p>9% of state-funded mainstream schools in England.</p>
Average	<p>The confidence interval for the progress score includes 0.</p> <p>67% of state-funded mainstream schools in England.</p>
Below average	<p>The progress score is score is lower than 0 but greater than or equal to -2.7, and the entire confidence interval is below 0.</p> <p>6% of state-funded mainstream schools in England.</p>
Well below average	<p>The progress score is score is lower than -2.7 and the entire confidence interval is below 0.</p> <p>9% of state-funded mainstream schools in England.</p>



## Maths

Progress bandings	A school is given this banding if...
Well above average	<p>The progress score is greater than or equal to 3.2, and the entire confidence interval is above 0.</p> <p>10% of state-funded mainstream schools in England.</p>
Above average	<p>The progress score is greater than 0 but lower than 3.2, and the entire confidence interval is above 0.</p> <p>11% of state-funded mainstream schools in England.</p>
Average	<p>The confidence interval for the progress score includes 0.</p> <p>59% of state-funded mainstream schools in England.</p>
Below average	<p>The progress score is score is lower than 0 but greater than or equal to -3.3, and the entire confidence interval is below 0.</p> <p>11% of state-funded mainstream schools in England.</p>
Well below average	<p>The progress score is score is lower than -3.3 and the entire confidence interval is below 0.</p> <p>9% of state-funded mainstream schools in England.</p>

## **Annex B: Rules for including missing data in accountability measures**

In the event that there are unexpected difficulties during the collection of KS2 data and returning pupils' end of KS2 results to schools the below shows how DfE treats the result when calculating a school's accountability measures.

### **Scenario: missing whole test subject – reading, GPS or maths – due to lost script**

#### **What STA reports**

If the reading script is missing (lost prior to marking/data capture) then STA records the test outcome on the Primary Assessment Gateway (PAG) as missing (M). STA does not award a scaled score.

If one or more GPS/maths scripts are missing (lost after collection from the school but prior to marking/data capture) then:

- STA records the test outcome as missing (M),
- UNLESS the pupil achieved enough marks in any non-missing scripts to achieve the expected standard, in which case they are given a test outcome of achieved the expected standard (AS). STA does not award a scaled score (even if the pupil is still recorded as meeting the expected standard).

#### **What codes schools will see in Analyse School Performance**

When viewing KS2 results in Analyse School Performance (ASP), the codes assigned when a script is missing are recoded as part of internal data processing and are different to those used by STA.

- ASP assigns 'X' for a missing test script – in all subjects, it is excluded from the numerator/denominator. For school level data in ASP, this is shown as N/A. In files produced and shared with local authorities in ASP, this is shown as X.

#### **How it is treated in a school's accountability measures**

- % Meeting expected/higher standard in RWM

If the pupil has missing ('M' as assigned by STA) in reading and/or maths as their test outcome (and is marked as not meeting the expected standard) they are not included in the % meeting the expected or higher standard in RWM measures (either numerator or denominator).

If the pupil is missing one or more scripts but is awarded a test outcome of achieving the expected standard ('AS') in maths, then they are included in the numerators/denominators for % meeting the expected and higher standard RWM measures.

(Note that it is not possible for pupils missing one or more scripts in maths to meet the higher standard, so such pupils would be recorded as meeting the expected standard but not meeting the higher standard.)

- % Meeting the expected/higher standard in individual subjects (Reading, maths and GPS)

If the pupil has missing ('M' as assigned by STA) as their test outcome they are not included in the % meeting the expected or higher standard in that subject (either numerator or denominator).

If the pupil is missing one or more scripts but is still awarded a test outcome of achieving the expected standard ('AS') in maths or GPS, then they are included in the denominators for the % meeting the expected or higher standard measures in that subject.

Note that it is not possible for pupils missing one or more scripts in maths to meet the higher standard, so such pupils would be recorded as meeting the expected standard but not meeting the higher standard. This is done on a subject-by-subject basis, so they would be included in measures for other subject(s) if they were not missing any scripts.

- Average scaled scores (reading, maths and GPS)

If the pupil has one or more scripts missing in a subject (whether this results in a test outcome of 'M' as assigned by STA, or 'AS') they would not be included in average scaled scores for this subject. This is done on a subject-by-subject basis, so they would be included in average scaled scores for the other subjects if they were not missing any papers.

- Reading and maths progress measures

If the pupil has one or more scripts missing in a subject (whether this results in a test outcome of 'M' as assigned by STA, or 'AS') and they do not have a scaled score, they would not be included in the progress measure for this subject. This is done on a subject-by-subject basis, so they would be included in progress measures for the other subject if they were not missing any papers.

- School-level suppression

If 50% or more pupils' scripts are missing, school level results are suppressed. This is done on a subject-by-subject basis, so the measures would only be suppressed for subjects affected by missing scripts.

## **Scenario: missing TA outcomes – for writing, science – where a school/LA has not submitted an outcome or an outcome has not been received by STA**

### **What STA reports**

There is no missing code for TA, therefore pupils without a TA outcome are assigned a blank code.

### **What codes schools will see in analyse school performance**

When viewing KS2 results in Analyse School Performance (ASP), the code assigned when there is no teacher assessment, is recoded as part of internal data processing.

- ASP assigns 'M' for a missing teacher assessment. In all subjects, it is included in the denominator. Users will see this as NULL in ASP.

### **How it is treated in a school's accountability measures**

We use the teacher assessment data provided by STA.

If a pupil is assigned a blank code by STA for writing and they have valid reading and maths outcomes, they are included in the % meeting the expected or higher standard in reading, writing and maths as not meeting the expected or higher standard. They are also included in the % working at the expected standard or working at greater depth in writing as not meeting the expected or higher standard.

These pupils are not included in the writing progress measure.

### **Use of mock results or teacher assessment for pupils working at the level of the test**

Since 2019, STA has not required schools to submit teacher assessment outcomes for reading or maths.

DfE does not use pupils mock test results or teacher assessments in reading or maths to calculate KS2 school performance measures for reading and mathematics in place of test results, as these would not be subject to moderation and would not necessarily be comparable with test results achieved under controlled conditions.

## **Clerical errors: e.g. wrong date of birth, wrong scores assigned to pupil**

A detailed pupil level data file is shared with schools via the checking exercise in September. In accordance with the normal process, no reported clerical errors are included in this file. Further updates including late results, outcomes of reviews or maladministration investigations are included in KS2 revised school level data due to be released to schools and published on 12 December 2024.

## Annex C: Worked examples of KS2 MAT measures

The example below demonstrates the calculation for the percentage meeting the expected standard in reading, writing and maths (RWM) at KS2 for a MAT:

	(i) Number of pupils at the end of KS2	(ii) Number of pupils meeting expected standard in RWM	(iii) Years with MAT	(iv) Total weighted pupils at the end of KS2 (i)*(iii)	(v) Total weighted pupils meeting expected standard in RWM (ii) * (iii)
Academy 1	25	17	5	100	68
Academy 2	59	31	3	177	93
Academy 3	50	39	4	200	156
Academy 4	22	7	3	66	21
Academy 5	90	79	3	270	237
<b>Total</b>	246	173	-	813	575
	Unweighted MAT % meeting expected standard in RWM	70.3%		<b>Weighted MAT % meeting expected standard in RWM</b>	70.7%

**Table C.1: Worked example for calculating the percentage meeting the expected standard in reading, writing and maths (RWM) at KS2 for a MAT**

Although Academy 1 has been in the MAT for 5 years, the academy is given a weight of 4 for the number of years with the MAT because this is the maximum weight permissible due to the usual duration of KS2 being 4 years.

The example below demonstrates the calculation for the percentage of disadvantaged pupils meeting the expected standard in reading, writing and maths (RWM) at KS2 for a

	(i) Number of disadvantaged pupils at the end of KS2	(ii) Number of disadvantaged pupils meeting expected standard in RWM	(iii) Years with MAT	(iv) Total weighted disadvantaged pupils at the end of KS2 (i) * (iii)	(v) Total weighted disadvantaged pupils meeting expected standard in RWM (ii) * (iii)
Academy 1	17	8	3	51	24
Academy 2	21	7	3	63	21
Academy 3	26	13	4	104	52
Academy 4	19	12	3	57	36
Academy 5	15	6	5	60	24
<b>Total</b>	98	46		335	157
	Unweighted MAT % meeting expected standard in RWM	46.9%		<b>Weighted MAT % meeting expected standard in RWM</b>	46.9%

MAT:

**Table C.2: Worked example showing the calculation for the percentage of disadvantaged pupils meeting the expected standard in reading, writing and maths at KS2 for a MAT**

Although Academy 5 has been in the MAT for 5 years, the academy is given a weight of 4 for the number of years with the MAT because this is the maximum weight permissible due to the usual duration of KS2 being 4 years.

The example below illustrates how we calculated MAT progress measures for 2022/23:

	(i) Progress score in reading	(ii) Number of pupils at end of key stage	(iii) Number of years with MAT	(iv) Total weight (ii) * (iii)	(v) Weighted score (i) * (iv)
Academy 1	2.5	52	3	156	390.0
Academy 2	-2.5	34	4	136	-340.0
Academy 3	3.3	28	4	112	369.6
Academy 4	-1.5	48	3	144	-216.0
Academy 5	-1.5	60	5	240	-360.0
<b>Total</b>		<b>222</b>		<b>788</b>	<b>-156.4</b>
				<b>MAT score</b> (sum of v / sum of iv)	<b>-0.2</b>

**Table C.3: Worked example for calculating KS2 MAT measures**

Although Academy 5 has been in the MAT for 5 years, the academy is given a weight of 4 for the number of years with the MAT because this is the maximum weight permissible due to the usual duration of KS2 being four years.



## Annex D: Primary performance measures

Table D.1 below shows the performance measures and breakdowns that will be available on a school's page in CSCP for 2023/24. Further performance data and information about a school are available in the download data.

**Table D.1: Primary performance measures**

<p><b>Headline measures</b></p>	<p><b>Pupils meeting expected standard in reading, writing and maths:</b> percentage of pupils achieving a scaled score of 100 or more in their reading and maths tests, and their teacher assesses them as 'working at the expected standard' or better in writing</p> <p><b>Pupils achieving at a higher standard in reading, writing and maths:</b> percentage of pupils achieving a scaled score of 110 or more in their reading and maths tests, and their teacher assesses them as 'working at a greater depth within the expected standard' in writing</p> <p><b>Average score in reading:</b> average reading 'scale score' for all pupils in the school</p> <p><b>Average score in maths:</b> average maths 'scale score' for all pupils in the school</p>
<p><b>Additional measures</b></p>	<p><b>Grammar, punctuation, spelling at the expected standard:</b> percentage of pupils that met the expected standard scaled score of 100 or more on the test</p> <p><b>Grammar, punctuation, spelling at the higher standard:</b> percentage of pupils that met the higher standard scaled score of 110 or more on the test</p>
<p><b>Results by pupil characteristics</b></p>	<p>Breakdowns of headline measures are presented for:</p> <ul style="list-style-type: none"> <li>• <b>Disadvantaged pupils</b></li> <li>• <b>English as an additional language (EAL)</b></li> <li>• <b>Gender</b></li> <li>• <b>Non mobile pupils</b></li> </ul>

<b>MATs</b>	<p><b>Pupils meeting expected standard in reading, writing and maths:</b> percentage of pupils achieving a scaled score of 100 or more in their reading and maths tests, and their teacher assesses them as 'working at the expected standard' or better in writing</p> <p>We will also present a breakdown of this measure for disadvantaged pupils.</p>
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