

Briefing: How did England's students perform in the most recent international assessments?

November 2025

Introduction

This briefing looks at the performance of England's students in the latest international assessments, including how their average scores compared to students in other education systems across the UK and internationally, and the country's results in previous years. It is based on data from the following three key international assessments.

Progress in International Reading Literacy Study

The Progress in International Reading Literacy Study (PIRLS) has been conducted every 5 years since 2001.² PIRLS tests students aged 10 (in England's year 5) in reading. Students and their headteachers and teachers also complete 'context questionnaires' that capture student attitudes to reading and information about their schools.³

The most recent assessment was PIRLS 2021, which England's students took in May to July 2022. (England was in a minority in delaying students taking the PIRLS 2021 assessment until 2022 due to disruption from the Covid-19 pandemic.) The international results for PIRLS 2021 were published in May 2023. The Department for Education then published a report on England's performance. Among the UK nations, only England and Northern Ireland took part in PIRLS 2021. Scotland is due to take part in the next assessment, PIRLS 2026.

Programme for International Student Assessment

The Programme for International Student Assessment (PISA) has been conducted every 3 years since 2000.⁷ PISA tests 15-year-old students' knowledge and skills in maths, reading and science. Each PISA assessment has a 'major domain': a particular focus on one of the three subjects. Students and their headteacher also complete 'background questionnaires', including on student attitudes to education and the school 'learning environment'.

¹ The 'education systems' that take part in international assessments include both countries and regions.

² PIRLS is run by the International Association for the Evaluation of Educational Achievement (IEA).

³ A 'home questionnaire' can be completed by parents/guardians of students who take part in a PIRLS assessment, but the home questionnaire was not completed in England for the latest PIRLS assessment.

⁴ Mullis, I. et al (2023) <u>PIRLS 2021 International Results in Reading</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

Lindorff, A. et al (2024) PIRLS 2021: National Report for England. London: DfE (accessed 16/09/25).

⁶ Pearson UK (2025) About PIRLS: PIRLS 2026 Scotland (accessed 16/09/25).

⁷ PISA is run by the Organisation for Economic Co-operation and Development (OECD).

The most recent assessment was PISA 2022,⁸ with maths as the major domain. The international results were published in December 2023.⁹ All four UK nations took part in PISA 2022. The UK received its overall results,¹⁰ the Department for Education then published a report on England's results¹¹ and relevant bodies in the devolved administrations in Wales, Scotland and Northern Ireland did the same.

Trends in International Mathematics and Science Study

The Trends in International Mathematics and Science Study (TIMSS) has been conducted every 4 years since 1995.¹² TIMSS tests students aged 9–10 and 13–14 (in England's year 5 and year 9) in maths and science. Students, teachers, headteachers and parents also complete 'context questionnaires' to provide data on student attitudes to maths and science, home resources, and school discipline.¹³

The most recent assessment was TIMSS 2023. The international results were published in December 2024.¹⁴ The Department for Education published a report on England's performance.¹⁵ A second volume with insights from England's contextual data was published in March 2025.¹⁶ England was the only UK nation that took part in TIMSS 2023. Scotland is due to take part in TIMSS 2027.¹⁷

Differences between the international assessments

There are significant differences between PIRLS, PISA and TIMSS. For example, they test students across different education systems, because different countries and regions take part in each assessment.¹⁸ They also test different student cohorts:

- PISA is age based, testing students aged 15;
- TIMSS is grade based, testing students in grades 4 and 8 (England's years 5 and 9);
- PIRLS is also grade based, but it tests only students in grade 4 (England's year 5).

The assessments also test students on different content:

• PISA assesses maths, science and reading, and focuses on students' ability to 'address real-life challenges' (whether and how students can apply what they have learnt);¹⁹

⁸ The PISA 2021 assessment was postponed to 2022, due to disruption from the Covid-19 pandemic.

⁹ OECD (2023) <u>PISA 2022 Results (Volume I): The State of Learning and Equity in Education</u>. Paris: OECD Publishing (accessed 16/09/25).

¹⁰ OECD (2023) <u>PISA 2022 Results (Volume I and II) – Country Notes: UK</u>. Paris: OECD Publishing (accessed 16/09/25).

¹¹ Ingram, J. et al (2023) <u>PISA 2022: National Report for England</u>. London: DfE (accessed 16/09/25).

¹² TIMSS is run by the IEA (which also runs the PIRLS assessments).

¹³ Only the parents of year 5 students complete a 'home questionnaire' for TIMSS assessments.

von Davier, M., et al (2024) <u>TIMSS 2023 International Results in Mathematics and Science</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

¹⁵ Golding, J. et al (2024) <u>TIMSS 2023: National report for England – volume 1</u>. London: DfE (accessed 16/09/25).

¹⁶ Richardson, M. et al (2025) <u>TIMSS 2023: National report for England – volume 2</u>. London: DfE (accessed 16/09/25).

¹⁷ Scottish Government (2023) <u>School research plan 2023–26</u> (accessed 16/09/25).

For example, the highest performing European country in PISA 2022 (Estonia) did not take part in TIMSS 2023, and some participating countries/regions did not take part in all areas of TIMSS 2023 (in Canada only grade 4 (year 5) students took part). While all four UK nations took part in PISA 2022, only England took part in TIMSS 2023 and only England and Northern Ireland took part in PIRLS 2021 (but their results are not comparable: see page 6).

¹⁹ Golding, J. et al (2024) <u>TIMSS 2023: National report for England – volume 1</u>, p135. London: DfE (accessed 16/09/25).

- TIMSS assesses maths and science, and focuses on the 'intended curriculum' (what students know and understand about what they have learnt);^{20,21}
- PIRLS assesses reading (comprehension and reading of different types of texts).

Furthermore, while these three international assessments all gauge an education system's performance by testing a sample of its students,²² they each have different study designs. PISA and PIRLS are cross-sectional, looking at data collected at one point in time, whereas TIMSS is quasi-longitudinal,²³ testing samples of students in year 5 and year 9 on a 4-year cycle.

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²¹ While TIMSS 2023 was considered to be 'well matched to the content' of England's national curriculum, a 'high level of curriculum match is not necessarily associated with high levels of performance' (Ibid, p38).

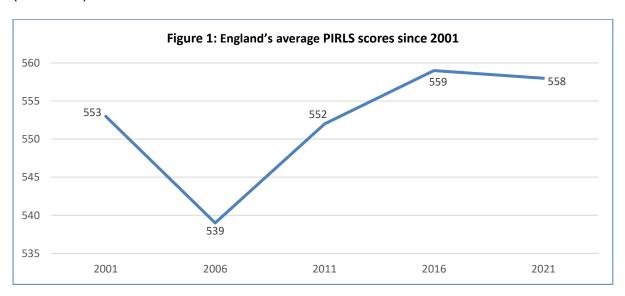
For example, PIRLS 2021 was taken by 4,150 year 5 students in 162 primary schools in England (Lindorff, A. (2024) Additional findings from PIRLS 2021: Research report, p5. London: DfE); PISA 2022 was taken by 12,972 students in 451 schools in the UK (OECD (2023) PISA 2022 Results (Volume I and II) – Country Notes: United Kingdom. Paris: OECD Publishing); and TIMSS 2023 was taken by 8,330 students in 267 schools in England (Golding, J. et al (2024) TIMSS 2023: National report for England – volume 1, p5. London: DfE) (accessed 16/09/25).

²³ TIMSS is *quasi*-longitudinal because while the assessment tests students in year 5 and year 9 on a 4-year cycle, it is not the same cohort of students who take part in consecutive TIMSS assessment cycles.

England's performance across the international assessments

In the latest PIRLS assessment (PIRLS 2021), the average score of England's students was only one point lower than in the previous assessment (PIRLS 2016) and was once again above the PIRLS international median score (520).²⁴

Looking at England's PIRLS results over the longer term, as Figure 1 shows, following a significant decline between PIRLS 2001 and PIRLS 2006,²⁵ the average performance of England's students gradually improved up to PIRLS 2016 and was broadly maintained in the latest (PIRLS 2021) assessment.²⁶



In the latest PISA assessment (PISA 2022), the average scores achieved by England's students in all three assessed areas – reading, maths and science – were lower than in the previous assessment (PISA 2018).²⁷ However, on average, England's students continued to perform above the OECD average.²⁸ England's students also outperformed all the other UK nations across PISA 2022.²⁹

Looking at England's PISA results over the longer term, as Figure 2 shows, in science there has been a general decline in the average scores of England's students since the first PISA assessment in 2000. In maths, England's average score fell sharply between PISA 2000 and PISA 2006 and was then stable between PISA 2006 and PISA 2015, before rising in PISA 2018 ahead of the fall in PISA 2022. ^{30,31} Similarly in reading, following a large fall between PISA 2000 and PISA 2006, the average score achieved by England's students gradually increased until PISA 2018, before it declined in PISA 2022. ³²

³¹ Oates, T. <u>'England: England and PISA'</u> in Crato, N. (ed) (2020) *Improving a Country's Education: PISA 2018 results in 10 countries*, p84 (accessed 16/09/25).

²⁴ Lindorff, A. et al (2024) PIRLS 2021: National Report for England, p6 and p34. London: DfE (accessed 16/09/25).

²⁵ If an increase or decrease is 'not significant', the change was so small that it could simply be a coincidence.

²⁶ TIMSS & PIRLS International Study Center, <u>PIRLS: Progress in International Reading Literacy Study</u> (accessed 16/09/25).

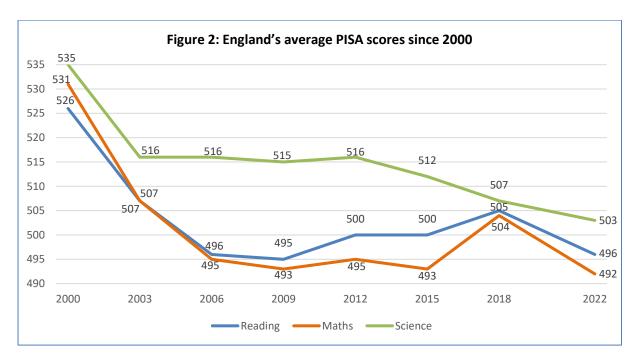
²⁷ Ingram, J. et al (2023) <u>PISA 2022: National Report for England</u>, pp9–11. London: DfE (accessed 16/09/25).

²⁸ The 'OECD average' is a useful benchmark for comparing the performance of participating countries/regions. It refers to the mean average of all OECD member countries for whom PISA data is available on any particular measure (in total, 37 OECD member countries participated in PISA 2022).

²⁹ Ingram, J. et al (2023) PISA 2022: National Report for England, p162. London: DfE (accessed 16/09/25).

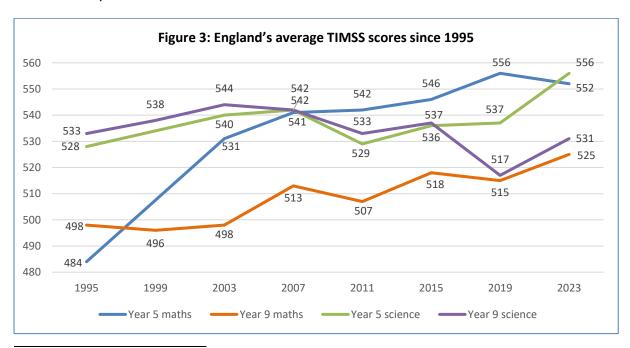
³⁰ OECD, 'PISA 2022 results' and 'Previous PISA cycles' (accessed 16/09/25).

³² For PISA 2000 and PISA 2003, England did not meet minimum response rates, so its average scores were excluded from internation comparisons and should be treated with caution.



In the latest TIMSS assessment (TIMSS 2023), England's students broadly maintained their average scores in maths and improved them in science, compared to the previous assessment (TIMSS 2019).³³

Looking at England's TIMSS results over the longer term, as Figure 3 shows, the average scores of England's students have generally improved since the first assessment (TIMSS 1995). 34,35,36 A notable decline in the year 9 science score in TIMSS 2019 was reversed in the TIMSS 2023 assessment.



³³ Golding, J. et al (2024) <u>TIMSS 2023: National report for England, volume 1</u>, pp7–16. London: DfE (accessed 16/09/25).

³⁴ Greany, T. (2016) <u>TIMSS: National Report for England</u>, pp7–10. London: DfE (accessed 16/09/25).

³⁵ TIMSS & PIRLS International Study Center, '<u>TIMSS: Trends in International Mathematics and Science Study</u>' (accessed 16/09/25).

³⁶ TIMSS 1995 tested students in grades 3, 4, 7 and 8 (England's years 4, 5, 8 and 9). England's average score for 'year 5' is therefore the average score for years 4 and 5 students who took part, and the score for 'year 9' is the average score for years 8 and 9 students who took part. TIMSS 1999 tested only grade 8 students (England's year 9) students, it did not test grade 4 students (England's year 5). (Greany, T. (2016) <u>TIMSS: National Report for England</u>, pp7–8. London: DfE (accessed 16/09/25).)

England's average scores and rankings in the latest assessments

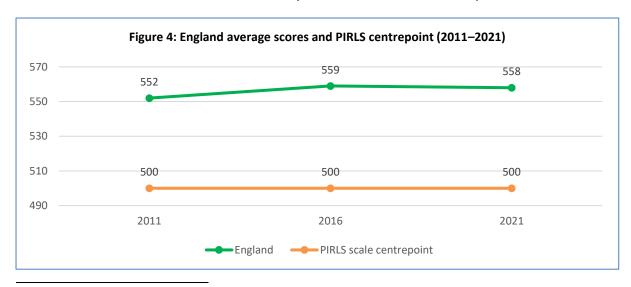
PIRLS 2021

Students from 57 countries and regions took part in PIRLS 2021.³⁷ Among the UK nations, students in England and Northern Ireland took part. In total, 14 participating countries/regions (including Northern Ireland) delayed data collection by 6 months – due to disruption from the Covid-19 pandemic – and therefore tested an older cohort of students.^{38,39} This briefing only compares participating countries/regions that tested year 5 students; that is, those that tested year 5 students as planned and those that delayed for 12 months but still tested year 5 students, such as England.

On average, students in England scored above the PIRLS 2021 international median score.

	PIRLS 2021 average score ⁴⁰	
England	558	
PIRLS international median	520	

As shown in Figure 4, the average score achieved by England's students in PIRLS 2021 (558) was almost unchanged from the previous (2016) assessment (559).⁴¹ The average score achieved by England's students in the decade to 2021 was consistently above the PIRLS scale centrepoint.^{42,43,44}



³⁷ Lindorff, A. et al (2024) PIRLS 2021: National Report for England, p5. London: DfE (accessed 16/09/25).

³⁸ Students in most participating countries/regions took the PIRLS 2021 assessment as planned. However, owing to disruption from the Covid-19 pandemic, England and five other participants (Australia, Israel, Brazil, Iran and South Africa) delayed by 12 months (but still tested year 5 students) and 14 participants – including Northern Ireland – delayed by 6 months (and therefore tested older students). (Mullis, I. et al (2023) PIRLS 2021 International Results in Reading, p15. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).)

³⁹ As the Department for Education notes: 'direct comparisons to countries who delayed the assessment and tested older children should not be drawn'. DfE (2023) 'England moves to fourth in international rankings for reading', 16 May (accessed 16/09/25).

⁴⁰ Lindorff, A. et al (2024) PIRLS 2021: National Report for England, p6. London: DfE (accessed 16/09/25).

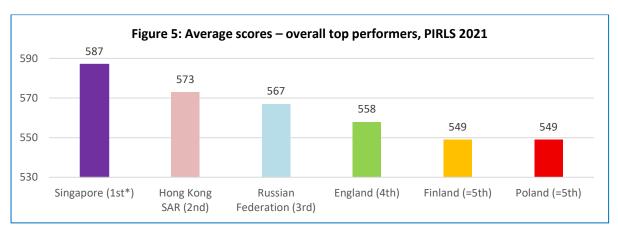
⁴¹ McGrane, J. (2017) PIRLS 2016: National Report for England Research report, p12. London: DfE (accessed 16/09/25).

⁴² The 'scale centrepoint' is the mean average score across all results from PIRLS 2001 (the first assessment), where 100 points corresponds to one standard deviation. It is not an average from the latest assessment.

⁴³ Twist, L. et al (2012) PIRLS 2011: Reading Achievement in England. Slough: NFER, p2 (accessed 16/09/25).

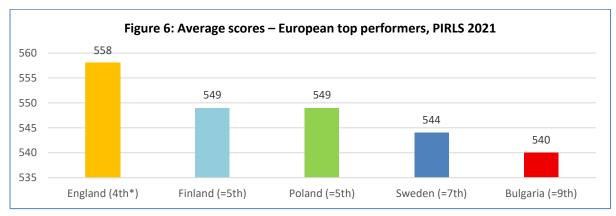
⁴⁴ TIMSS & PIRLS International Study Center, 'PIRLS: Progress in International Reading Literacy Study' (accessed 16/09/25).

Looking at the international rankings – the positioning of participating countries/regions in order of their average $score^{45}$ – England's ranking improved in PIRLS 2021 compared to the previous assessment because, unlike many participating countries/regions, students in England maintained the country's average score from PIRLS 2016. As Figure 5 shows, this put England in fourth place in PIRLS 2021 (up from joint eighth place in PIRLS 2016). 46,47,48,49 Singapore was the top performer in PIRLS 2021.



*PIRLS 2021 international ranking

As Figure 6 shows, England was the top performer among the European countries/regions that participated in PIRLS 2021,⁵⁰ having ranked joint fifth among European participants in PIRLS 2016.⁵¹



*PIRLS 2021 international ranking

⁴⁵ International rankings are useful to compare the average performance of participating countries/regions within an assessment. However, drawing comparisons between international results needs to be done cautiously, given the unique and varied contexts of countries and regions. It can also be misleading to directly compare rankings over time without considering factors other than average student attainment that can affect a country's/region's ranking in different assessments, such as a differing number/type of participating countries/regions having taken part.

 $^{^{}m 46}$ Note that country/region names are stated as within each international study.

⁴⁷ As mentioned, this briefing does not include 14 PIRLS 2021 participating countries/regions that delayed data collection by 6 months due to disruption from the Covid-19 pandemic. England's PIRLS 2021 score is therefore ranked against fewer participating countries/regions than it was for PIRLS 2016.

⁴⁸ Mullis, I. et al (2023) <u>PIRLS 2021 International Results in Reading</u>, Exhibit 1.1. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

⁴⁹ Mullis, I. *et al* (2017). *PIRLS 2016 International Results in Reading*. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

⁵⁰ Mullis, I. et al (2023) <u>PIRLS 2021 International Results in Reading</u>, Exhibit 1.1. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

⁵¹ Mullis, I. et al (2017). <u>PIRLS 2016 International Results in Reading</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

PISA 2022

Students from 81 countries and regions took part in PISA 2022.⁵² All four UK nations took part. On average, UK students scored above the OECD average in all three areas of PISA 2022.

	PISA 2022: Average scores ⁵³			
	UK	OECD		
Maths	489	472		
Reading	494	476		
Science	500	485		

However, the average scores achieved by UK students in PISA 2022 were lower than in the previous assessment (PISA 2018).54

The downward trend in the UK's average scores matched the trend across OECD participating countries/regions in PISA 2022. Compared to PISA 2018, average student performance across the OECD fell in all three assessment areas of PISA 2022. The average scores in maths and reading showed 'significant deterioration', with more than half of PISA 2018 participating countries/regions seeing a fall in their students' average maths and reading performance in PISA 2022.55 The OECD referred to 'an unprecedented performance drop' compared to PISA 2018, which it said was equivalent to students across the OECD missing three-quarters of an academic year for maths, and half an academic year for reading. 56,57

As shown in Figures 7 and 8, the UK's average PISA scores broadly improved in maths and reading between PISA 2012 and PISA 2018 before the decline in PISA 2022, which coincided with the occurrence of the pandemic.58 However, not every participating country's/region's average scores fell in PISA 2022 compared to PISA 2018, which suggests that the downward trajectory was not singularly a 'Covid effect'. Looking more broadly at UK students' average score for science, it declined over the decade to 2022 (as shown in Figure 9)⁵⁹ – a downward trajectory therefore predating the Covid-19 pandemic. While the fall in the UK's average score for science was similar to the fall in the other areas of PISA 2022, the OECD stated that the UK's results for science confirmed 'a decade-long decline that began around 2012'.60,61

⁵² OECD (2023) PISA 2022 Results (Volume 1): The State of Learning and Equity in Education, p3. Paris: OECD Publishing (accessed 16/09/25).

⁵⁴ OECD (2023) PISA 2022 Results (vol 1 and 2) - Country notes UK, p1. Paris: OECD Publishing (accessed 16/09/25).

⁵⁵ OECD (2023) PISA 2022 Results (Volume 2): Learning During - and From - Disruption, p249. Paris: OECD Publishing (accessed 16/09/25).

⁵⁶ OECD (2023) PISA 2022 Results (Volume I): The State of Learning and Equity in Education, p44. Paris: OECD Publishing (accessed 16/09/25).

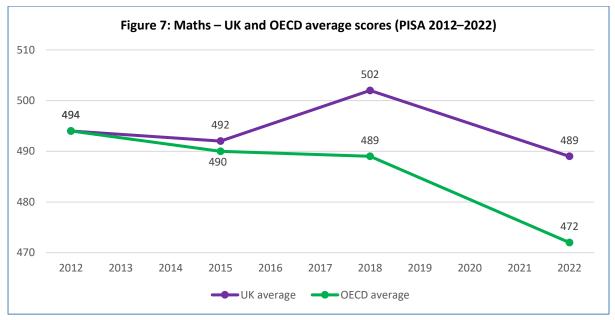
⁵⁷ On average, 'what students learn over a school year' corresponds to around 20 PISA points. (OECD (2021) PISA in Focus: How much do 15-year-olds learn over one year of schooling?, p2. Paris: OECD Publishing (accessed 16/09/25).)

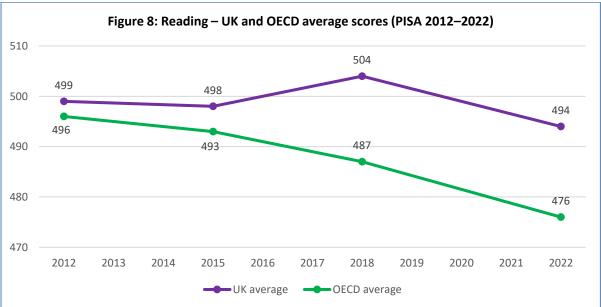
⁵⁸ OECD, 'PISA 2022 results' and 'Previous PISA cycles' (accessed 16/09/25).

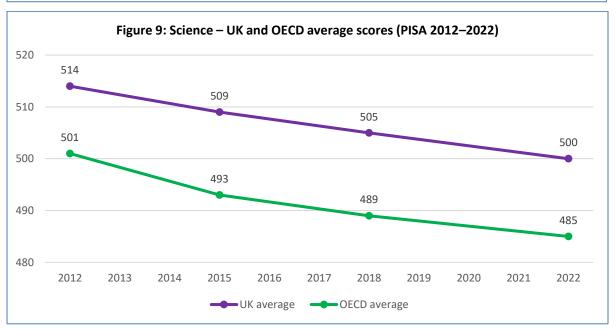
⁵⁹ Ibid.

⁶⁰ OECD (2023) PISA 2022 Results (vol 1 and 2) - Country notes UK, p1. Paris: OECD Publishing (accessed 16/09/25).

⁶¹ It has been suggested that falls in science scores across PISA participating countries/regions since 2015 could indicate a 'mode effect', as students took the PISA assessment digitally for the first time in 2015, having previously taken paper-based tests. The lower scores could therefore indicate that PISA science tests are more difficult when undertaken digitally. (Jerrim, J. (2018) 'Is PISA still a fair basis for comparison? Some serious questions have emerged' on FFT Education Datalab Blog, 26 January (accessed 16/09/25).)

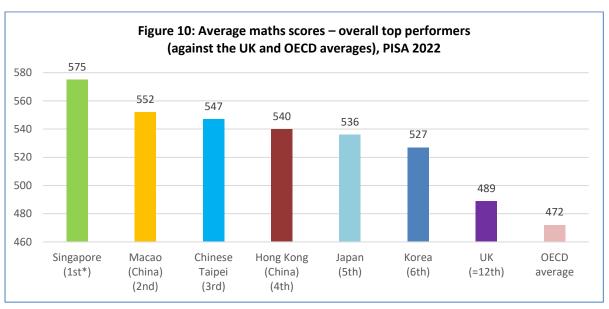






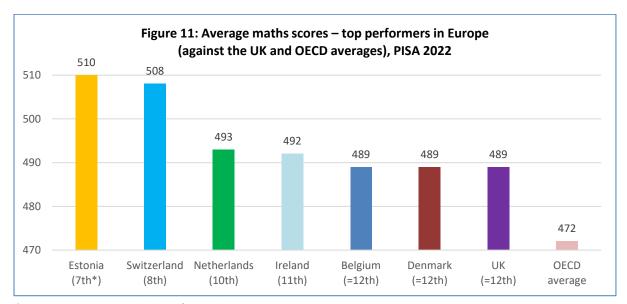
The relative performance of the UK's students in maths (the focus for the PISA 2022 assessment) improved from PISA 2018: the UK ranked joint 12th for maths in 2022,⁶² up from joint 17th in 2018.⁶³

The PISA 2022 participating countries/regions where students achieved the highest average scores for maths were all in East Asia and Southeast Asia, as Figure 10 shows.⁶⁴



*PISA 2022 international ranking for maths

Students in some countries outside Asia – including Estonia, Canada and Ireland – achieved high average results in individual areas of the PISA 2022 assessment. Among the European countries that took part, students in Estonia attained the highest average score for maths, as shown in Figure 11.⁶⁵



^{*} PISA 2022 international ranking for maths

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⁶² OECD (2023) <u>PISA 2022 Results (Volume I): The State of Learning and Equity in Education</u>, p52. Paris: OECD Publishing (accessed 16/09/25).

⁶³ OECD (2019) <u>PISA 2018 Results (Volume I): What Students Know and Can Do</u>, p59 Paris: OECD Publishing (accessed 16/09/25).

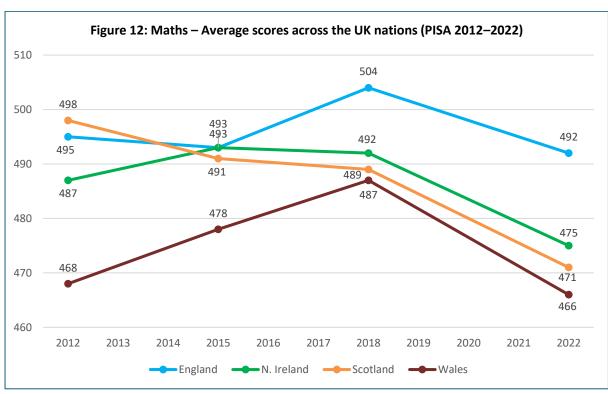
⁶⁴ OECD (2023) <u>PISA 2022 Results (Volume I): The State of Learning and Equity in Education</u>, p52. Paris: OECD Publishing (accessed 16/09/25).

⁶⁵ Ibid.

Looking specifically at the results of England's students (separately from the other UK nations), on average they outperformed students in all the other UK nations, across all areas of PISA 2022.⁶⁶ As shown below, England students' average scores in science and maths were significantly higher than all the other UK nations. In reading, students in England had a similar average score to students in Scotland and Northern Ireland, and all three countries had significantly higher scores than Wales.⁶⁷

	PISA 2022 average scores ⁶⁸			
	England	Northern Ireland	Scotland	Wales
Maths	492	475	471	466
Reading	496	485	493	466
Science	503	488	483	473

Matching the trend for the UK overall, on average England's students scored lower in all areas of PISA 2022, compared to PISA 2018.⁶⁹ However, as Figures 12 to 14 show, England's students outperformed students in the other UK nations in almost all areas of the PISA assessments in the decade to 2022.⁷⁰



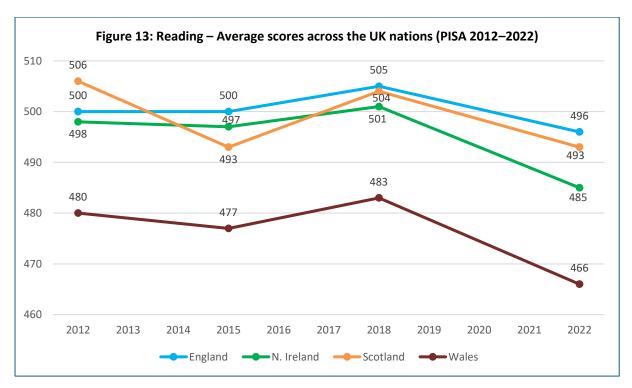
⁶⁶ Some caution is needed when looking at England's PISA 2022 scores because they are likely inflated by up to 8 points owing to a low response rate (i.e. too few schools took part). As a result, higher performing students may be over-represented while students who are eligible for free school meals may be under-represented. (Ingram, J. et al (2023) PISA 2022: National Report for England, pp21–22. London: DfE (accessed 16/09/25).)

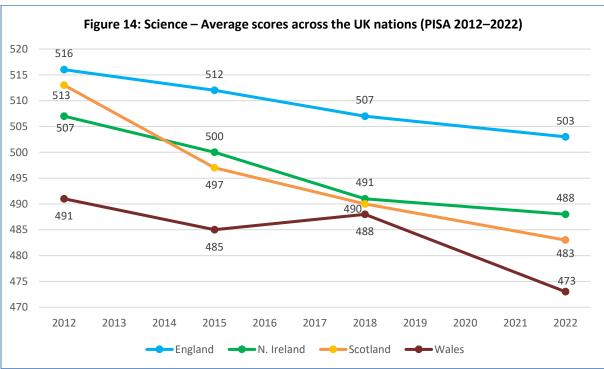
⁶⁷ Jerrim, J. *et al* have queried whether Wales' PISA scores may have been affected by issues with translation. (Jerrim J. *et al* (2022) 'The impact of test language on PISA scores. New evidence from Wales' in *British Educational Research Journal* 2022;48(3):420-445 (accessed 16/09/25).)

⁶⁸ OECD (2023) <u>PISA 2022 Results (Volume I): The State of Learning and Equity in Education</u>, p66–70. Paris: OECD Publishing (accessed 16/09/25).

⁶⁹ Ingram, J. et al (2023) PISA 2022: National Report for England, pp170–172. London: DfE (accessed 16/09/25).

⁷⁰ OECD, 'PISA 2022 results' and 'Previous PISA cycles' (accessed 16/09/25).





Despite England's average scores falling in PISA 2022 compared to PISA 2018, the country's relative international ranking improved for maths and was stable for reading and science. England's ranking for maths rose to 11th place (from 17th in PISA 2018).⁷¹ England maintained its rankings in reading and science, taking 13th place for both in PISA 2022, having ranked 14th and 13th respectively in PISA 2018.⁷²

⁷¹ DfE (2023) 'England among highest performing western countries in education', 5 December (accessed 16/09/25).
⁷² Ibid.

TIMSS 2023

Overall, there were 64 participating countries/regions in TIMSS 2023 (59 at year 5 and 44 at year 9); there were also 6 additional 'benchmarking systems'. ⁷³ England was the only UK nation to take part.

On average, across all areas of the assessment, England's students scored above both the international average and the TIMSS 'scale centrepoint'.⁷⁴

		TIMSS 2023 ⁷⁵		
		England's average score	International average score	Scale centrepoint
Year 5	Maths	552	503	500
	Science	556	495	500
Year 9	Maths	525	478	500
	Science	531	478	500

There was an improvement in most, but not all, average scores achieved by England's students across TIMSS 2023 compared to TIMSS 2019. In science, England's average scores for both the year 5 and year 9 cohorts were higher in TIMSS 2023 than in TIMSS 2019.⁷⁶ As mentioned, this reversed the aforementioned significant fall in the average score in science for year 9 students in TIMSS 2019. In maths, the average score for year 9 students rose in TIMSS 2023. However, the average maths score for year 5 students was slightly lower than in TIMSS 2019 (falling from 556 to 552).⁷⁷ This decrease was 'not significant', but it was the first time that the average maths score for England's year 5 students had not increased from the previous TIMSS assessment.⁷⁸

As shown in Figure 15, England's average scores have been consistently above the TIMSS scale centrepoint during the decade up to the most recent assessment.⁷⁹

⁷³ von Davier, M. (2024) <u>TIMSS 2023 International Results in Mathematics and Science</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

⁷⁴ The 'scale centrepoint' is the mean average score across all results since TIMSS 1995, with '100 points on the scale originally corresponding to one standard deviation'. The centrepoint is therefore an 'ongoing baseline' that provides a reference point for comparisons. It is not an average from the most recent TIMSS assessment.

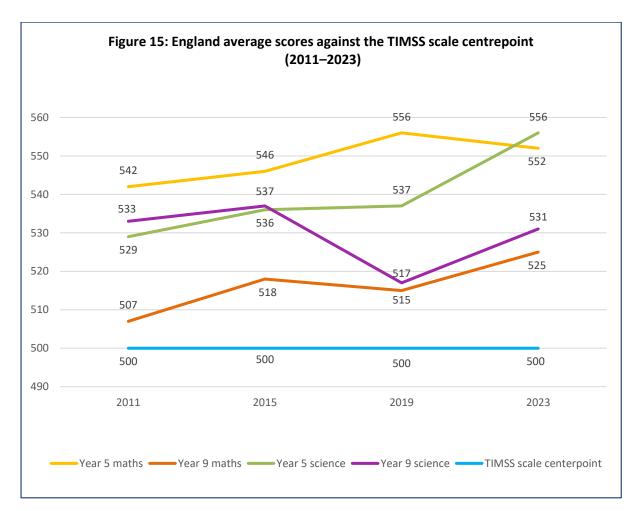
⁷⁵ Golding, J. *et al* (2024) *TIMSS 2023: National report for England – Volume 1*, pp7–16, p45, p60, p80 and p95. London: DfE (accessed 16/09/25).

⁷⁶ Ibid, p13 and p16.

⁷⁷ Ibid, p7 and p10.

⁷⁸ Norden, J. (2024) '<u>Timss 2023: Year 5 maths declines for first time but science scores surge</u>' in *Tes magazine*, 4 December (accessed 16/09/25).

⁷⁹ IEA, 'TIMSS: Trends in International Mathematics and Science Study' (accessed 16/09/25).



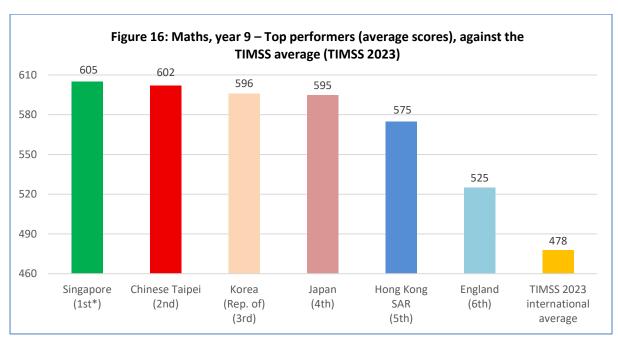
Looking at the relative ranking of all TIMSS 2023 participating countries/regions, England's ranking improved compared to TIMSS 2019 for science in both year groups and for maths in year 9, and it was almost unchanged for maths in year 5. In TIMSS 2023, England ranked 5th for science for both year groups, a rise from joint 11th for year 5 and 14th for year 9 in TIMSS 2019. For maths, England ranked 9th for year 5 in TIMSS 2023 (down from 8th in TIMSS 2019) and 6th for year 9 maths (a rise from joint 12th place in TIMSS 2019). 80,81

Echoing the latest PIRLS and PISA assessments (PIRLS 2021 and PISA 2022), the participating countries/regions where students achieved the highest average scores across TIMSS 2023 were all in East Asia and Southeast Asia. This was the case across both subjects and year groups, as reflected in Figure 16, which shows the top performers in maths for year 9.82

⁸⁰ von Davier, M. *et al* (2024). <u>TIMSS 2023 International Results in Mathematics and Science</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

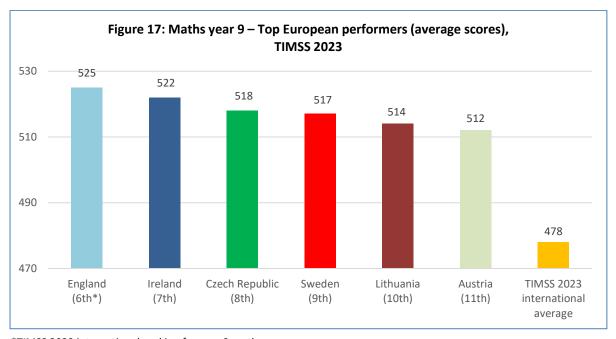
⁸¹ Mullis, I. et al (2020) <u>TIMSS 2019 International Results in Mathematics and Science</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

⁸² von Davier, M. *et al* (2024). <u>TIMSS 2023 International Results in Mathematics and Science: Mathematics achievement</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).



^{*}TIMSS 2023 international ranking for year 9 maths

As Figure 17 shows,⁸³ England was the highest-ranking European participating country/region for year 9 maths. England was also the highest-ranking European participant for science in both year groups. England ranked second among European participants for year 5 maths.⁸⁴



*TIMSS 2023 international ranking for year 9 maths

Compared to the previous assessment (TIMSS 2019), there was therefore a rise in most of England's average scores across the year groups and subjects in TIMSS 2023. Looking at the international rankings, compared to TIMSS 2019 England's ranking for maths was stable and for science it improved.

⁸³ Ibid.

⁸⁴ von Davier, M. *et al* (2024). <u>TIMSS 2023 International Results in Mathematics and Science</u>. Boston College, TIMSS & PIRLS International Study Center (accessed 16/09/25).

Exploring patterns within England's results

Gender

There were correlations between gender and attainment within England's results across the latest international assessments. For example, in PIRLS 2021 England's results showed that, on average, girls outperformed boys.⁸⁵ This 'gender gap' has been present in England's results in every PIRLS assessment, although it has reduced overall since PIRLS 2001 (with the exception of a rise in 2011).⁸⁶ PIRLS 2021 also revealed that in every participating country/region, including England, a higher proportion of boys than girls 'do not like reading'.⁸⁷

England's results in the latest PISA assessment (PISA 2022) also showed a gender gap in reading, with girls 'significantly' outperforming boys. (Overall, boys did not score significantly higher than girls for reading in any PISA 2022 participating country/region.)⁸⁸ The size of the gender gap in England's results was similar to the average across the OECD. In contrast, England's PISA 2022 results for maths showed the opposite gender gap, with boys 'significantly' outperforming girls.⁸⁹ This trend has been evident in England's results since PISA 2006.⁹⁰ A gender gap in maths attainment was apparent in the PISA 2022 results of participating countries/regions across the OECD, but it was bigger in England than the average across the OECD.⁹¹ In science, there has not been a 'significant' gender gap in England's results since PISA 2012.⁹²

Echoing PISA 2022, England's results in the latest TIMSS assessment (TIMSS 2023) showed that boys outperformed girls in maths in both year 5 and year 9. The gender gap in both year groups had increased since the previous assessment (TIMSS 2019).⁹³ In science, although England's boys outperformed girls in year 5, the gap was not 'significant'. Boys did, however, significantly outperform girls in year 9.⁹⁴ Among the TIMSS 2023 participating countries/regions where boys outperformed girls for science in year 9, this gender gap was greatest in England.⁹⁵

Socioeconomic disadvantage

There was a correlation between student performance and socioeconomic background across all participating countries/regions in the latest international assessments. 96,97,98 This trend was identified

⁸⁵ Lindorff, A. et al (2024) PIRLS 2021: National Report for England, pp83–84. London: DfE (accessed 16/09/25).

⁸⁶ Ibid, p87.

⁸⁷ Ibid, p101.

⁸⁸ Ingram, J. et al (2023) PISA 2022: National Report for England, p89. London: DfE (accessed 16/09/25).

⁸⁹ Ibid, p80.

⁹⁰ Ibid, p82.

⁹¹ Ibid.

⁹² Ibid, p100.

⁹³ DfE (2025) Trends in TIMSS 2023: National report for England, Volume 2, p6 (accessed 16/09/25).

⁹⁴ Ibid, p7.

⁹⁵ Ibid.

⁹⁶ OECD (2023) PISA 2022 Results (vol 1 and 2) - Country notes UK, p5. Paris: OECD Publishing (accessed 16/09/25).

⁹⁷ IEA (2024) 'Substantial Percentages of Fourth- and Eighth-Grade Students Worldwide Reach at Least the Low International Benchmarks of Maths and Science in 2023', 4 December (accessed 16/09/25).

⁹⁸ Lindorff, A. et al (2024) PIRLS 2021: National Report for England, p7. London: DfE (accessed 16/09/25).

as 'a recurring theme' in TIMSS 2023,⁹⁹ and in PISA 2022 socioeconomic status was identified as 'a predictor of performance in mathematics' in all participating countries/regions.¹⁰⁰

In England's PISA 2022 results for maths, the average performance gap between the most and least socioeconomically disadvantaged groups of students was 85 points. There were similar gaps in reading (82 points) and science (92 points). Specifically, compared to students who had not been eligible for free school meals in the 6 years before the assessments, students who had been eligible 'performed significantly lower' in TIMSS 2023 and had a lower average maths score (by 44 points) in PISA 2022.

However, the PISA 2022 results still put the England among only 10 participating countries/regions that 'combined high levels of fairness in terms of socioeconomic status' with average maths performance 'significantly above' the OECD average. The OECD defined these 10 participating countries/regions as 'highly equitable', meaning that they had 'high levels of socio-economic fairness together with a large share of all 15-year-olds with basic proficiency in mathematics, reading and science'. The PISA 2022 results still put the England among only 10 participating countries/regions that 'combined high levels of fairness with average maths performance 'significantly above' the OECD average. The OECD defined these 10 participating countries/regions as 'highly equitable', meaning that they had 'high levels of socio-economic fairness together with a large share of all 15-year-olds with basic proficiency in mathematics, reading and science'.

High and low performers

The proportion of England's students who were 'top performers' in PISA 2022 for maths (12 per cent) was above the OECD average (9 per cent). Similarly, in PIRLS 2021 the proportion of England's students who achieved the top ('Advanced') benchmark (18 per cent) was above the international median (7 per cent). And in TIMSS 2023 there was a significant increase in the proportion of England's year 9 students who reached the highest ('Advanced') benchmark in both maths and science, compared to TIMSS 2019. The percentage of England's year 5 students who achieved the 'Advanced' benchmark in science, almost doubled in TIMSS 2023 compared to TIMSS 2019.

England's results in PIRLS assessments have historically shown a wider gap between the country's highest- and lowest-performing students compared to many other participating countries/regions. The gap has, however, reduced over time – including in PIRLS 2021 – owing to 'increases in performance amongst the lowest-attainers'.¹¹³ In contrast, in certain areas of both PISA 2022 and

¹⁰⁴ Richardson, M. et al (2025) <u>TIMSS 2023: National report for England – volume 2</u>, p8. London: DfE (accessed 16/09/25).

¹⁰⁷ OECD (2023) <u>PISA 2022 Results (Volume I): The State of Learning and Equity in Education</u>, p110. Paris: OECD Publishing (accessed 16/09/25).

1010, p14.

⁹⁹ Richardson, M. et al (2025) <u>TIMSS 2023: National report for England – volume 2</u>, p18. London: DfE (accessed 16/09/25).

¹⁰⁰ OECD (2023) PISA 2022 Results (vol 1 and 2) - Country notes UK, p5. Paris: OECD Publishing (accessed 16/09/25).

¹⁰¹ As noted, within England's PISA 2022 results higher performing students may be over-represented while students who were eligible for free school meals may be under-represented.

¹⁰² Ingram, J. et al (2023) PISA 2022: National Report for England, p12. London: DfE (accessed 16/09/25).

¹⁰³ Ibid, p179.

¹⁰⁵ Ingram, J. et al (2023) PISA 2022: National Report for England, p107. London: DfE (accessed 16/09/25).

¹⁰⁶ Ibid, p106.

¹⁰⁸ In PISA, Level 2 is a 'minimum' or 'baseline' level of proficiency that students should acquire by the end of their secondary education. In contrast, students who reach Level 5 or Level 6 are 'top performers'.

¹⁰⁹ Ingram, J. et al (2023) <u>PISA 2022: National Report for England</u>, p36. London: DfE (accessed 16/09/25).

¹¹⁰ Lindorff, A. et al (2024) PIRLS 2021: National Report for England, p39. London: DfE (accessed 16/09/25).

¹¹¹ Golding, J. et al (2024) <u>TIMSS 2023: National report for England – volume 1</u>, p11 and p17. London: DfE (accessed 16/09/25).

¹¹² Ibid, p14.

¹¹³ Lindorff, A. et al (2024) PIRLS 2021: National Report for England, pp6-8. London: DfE (accessed 16/09/25).

TIMSS 2023, the gap between England's highest- and lowest-performing students widened. For example, in PISA 2022 the gap between England's highest-performing students (the 10 per cent with the highest scores) and lowest-performing students (the 10 per cent with the lowest scores) widened in maths compared to PISA 2018.¹¹⁴ In TIMSS 2023, the gap between England's highest- and lowest-performing year 9 students widened compared to TIMSS 2019 in both science and maths.¹¹⁵

Looking at 'lower achievers', in PISA 2022 the proportion of England's students who achieved below the 'minimum level' for maths (23 per cent) was lower than the OECD average (31 per cent). However, despite the smaller fall in England's average PISA score for science between 2018 and 2022 (4 points) compared to between 2015 and 2018 (5 points), looking back to PISA 2012, the average science score of the lowest-achieving 10 per cent of England's students had fallen by 19 points (from 384 in PISA 2012 to 365 in PISA 2022). The TIMSS 2023 results similarly indicated that the gap between high and low achievers increased not only because high achievers were performing better, but because the performance of low achievers had worsened; the *National report for England* stated there was 'some stagnation at the lowest levels of performance' in England's results. In maths, 11 per cent of England's year 9 students scored below the 'low' benchmark in TIMSS 2023.

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¹¹⁴ Ingram, J. et al (2023) PISA 2022: National Report for England, p31. London: DfE (accessed 16/09/25).

¹¹⁵ Golding, J. et al (2024) <u>TIMSS 2023: National report for England – volume 1</u>, p12 and p18. London: DfE (accessed 16/09/25).

¹¹⁶ Ingram, J. et al (2023) PISA 2022: National Report for England, p36. London: DfE (accessed 16/09/25).

¹¹⁷ Ibid, p76

¹¹⁸ Richardson, M. et al (2025) TIMSS 2023: National report for England – vol 2, p19. London: DfE (accessed 16/09/25).

¹¹⁹ Golding, J. et al (2024) <u>TIMSS 2023: National report for England – volume 1</u>, p59. London: DfE (accessed 16/09/25).

Conclusion

Overall, England performed well in the most recent international assessments. While many participating countries/regions saw a significant fall in their average scores in PIRLS 2021 compared to PIRLS 2016, the average score among England's students remained stable. In PISA 2022, while the average scores achieved by England's students fell across all subject areas compared to PISA 2018, students in England continued to perform above both the OECD average and the average in the other UK nations. In TIMSS 2023, England's students broadly maintained their average scores in maths and improved their scores in science, compared to TIMSS 2019.

As a result, overall England was a consistent 'top performer' in the latest international assessments. The country's average score in PIRLS 2021 put England in fourth place (up from joint eighth in PIRLS 2016), and first among European participating countries/regions. In PISA 2022 England similarly climbed up the international rankings, compared to PISA 2018. Finally, in TIMSS 2023 England ranked second among European countries for year 5 maths, and England was the highest-ranking European country for year 9 maths and for science across both year groups.



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