## National curriculum assessments: key stage 1. 2016 (revised)

SFR42/2016

## Contents

New assessments and headline measures in 2016 ..... 2
Attainment by school type ..... 6
Attainment by school cohort size ..... 6
Pupil characteristics ..... 7
Free school meals (FSM) ..... 10
English as an Additional Language (EAL) ..... 14
Special Educational Needs (SEN) ..... 19
Month of birth ..... 23

## New assessments and headline measures in 2016

Pupils were assessed against the new more challenging curriculum, which was introduced in 2014, for the first time this year. Results are no longer reported as levels, the interim frameworks for teacher assessment have been used by teachers to assess if a pupil has met the new, higher expected standard. This report presents attainment based on teacher assessments. Because of these assessment changes, figures for 2016 are not comparable to those for earlier years. The expectations for pupils at the end of key stage 1 have been raised. The department for education does not collect or report test results (which are conducted at key stage 1 in order to inform the overall teacher assessment judgement).

At the end of key stage 1, fewer pupils across England reach the expected standard in writing then in either reading or mathematics. This pattern was true across Herefordshire where $68 \%$ of pupils reached the expected standard in writing compared to $74 \%$ in mathematics and $75 \%$ in reading. Across state-funded schools in England $73 \%$ of pupils reached the expected standard in mathematics and $74 \%$ in reading meaning that a greater percentage of pupils in Herefordshire reached the expected standard in all three subjects at the end of key stage 1 in 2016.




24\% of pupils in England achieved the higher standard (Working at greater depth) in writing, 18\% in mathematics and $13 \%$ in writing. Across Herefordshire $24 \%$ of pupils were working at greater depth in reading, $18 \%$ in mathematics and $14 \%$ in writing, which very much reflects the national average.




In terms of quartile performance, Herefordshire was in the second quartile for reading, writing and mathematics.


For context only, the table below shows the 2013 to 2015 figures for the number of pupils in England achieving level 2 b or above, for each of reading, writing and mathematics. The new expected standards were designed
to be broadly similar but are not equivalent to an old level 2 b . The performance descriptors, used by teachers in the standard setting process, were developed with an understanding of the performance of pupils working at level $2 b$. However, given the curricula differences, there is not a direct equivalence between the new expected standard and level $2 b$ in previous years.

|  | Achieved L2B <br> or above in <br> reading | Reached the <br> expected <br> standard in <br> reading | Achieved L2B <br> or above in <br> writing | Reached the <br> expected <br> standard in <br> writing | Achieved L2B <br> or above in <br> mathematics | Reached the <br> expected <br> standard in <br> mathematics |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- |
| 2013 | $79 \%$ |  | $67 \%$ |  | $78 \%$ |  |
| 2014 | $81 \%$ |  | $70 \%$ |  | $80 \%$ |  |
| 2015 | $82 \%$ |  | $72 \%$ |  | $82 \%$ |  |
| 2016 |  |  |  |  |  |  |

## Attainment by school type

Attainment levels in local authority maintained mainstream schools, and academies and free schools are very similar. But this masks variation between the different types of schools within the academies and free schools group.
There are differences in attainment in the individual subjects - in every subject attainment is highest in free schools, then converter academies and lowest in sponsored academies. This reflects that many sponsored academies were low performing schools before becoming an academy and converter academies were usually high performing schools before becoming an academy. Despite the change in the expected standard, the different school types have maintained similar relative positions.

|  | Reading | Writing | Maths | Science |
| :--- | :--- | :--- | :--- | :--- |
| LA maintained <br> schools | $75 \%$ | $66 \%$ | $73 \%$ | $83 \%$ |
| Academies and <br> free schools | $74 \%$ | $66 \%$ | $74 \%$ | $81 \%$ |
| of which: | Sponsored <br> academies | $70 \%$ | $62 \%$ | $70 \%$ |
| Converter <br> academies | $76 \%$ | $68 \%$ | $75 \%$ | $76 \%$ |
| Free schools | $79 \%$ | $73 \%$ | $79 \%$ | $86 \%$ |

## Attainment by school cohort size

There is little difference in the percentages of pupils achieving the expected standard between cohort sizes. The largest proportion of pupils are in schools with a key stage 1 cohort size between 31 and 60 pupils, and their percentage of pupils attaining the expected standard is just 1-2 percentage points behind those with smaller cohorts. In attainment at the higher standard, the gap is slightly wider. Cohorts of 31 to 60 pupils attainment is 3 percentage points behind those with the smallest cohort size of 1 to 15 pupils in reading and by 1 percentage point in writing and mathematics. At the higher standard, attainment is highest in schools with bigger cohorts in mathematics; however, they have a smaller proportion of pupils.

|  |  |  | Reading |  | Writing |  | Maths |  |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |
|  | No. <br> schools | No. eligible <br> pupils | Reaching <br> expected <br> standard | Reaching <br> higher <br> standard | Reaching <br> expected <br> standard | Reaching <br> higher <br> standard | Reaching <br> expected <br> standard | Reaching <br> higher <br> standard |
| $\mathbf{1}$ to $\mathbf{1 5}$ <br> pupils | 2,284 | 23,628 | $75 \%$ | $26 \%$ | $64 \%$ | $14 \%$ | $73 \%$ | $18 \%$ |
| $\mathbf{1 6}$ to $\mathbf{3 0}$ <br> pupils | 5,476 | 143,036 | $76 \%$ | $24 \%$ | $67 \%$ | $14 \%$ | $74 \%$ | $18 \%$ |
| $\mathbf{3 1}$ to $\mathbf{6 0}$ <br> pupils | 5,806 | 290,030 | $74 \%$ | $23 \%$ | $66 \%$ | $13 \%$ | $73 \%$ | $17 \%$ |
| $\mathbf{6 1}$ to 90 <br> pupils | 1,740 | 137,426 | $74 \%$ | $24 \%$ | $66 \%$ | $14 \%$ | $73 \%$ | $19 \%$ |
| 91 or more <br> pupils | 371 | 42,229 | $74 \%$ | $24 \%$ | $66 \%$ | $14 \%$ | $73 \%$ | $19 \%$ |

Over $80 \%$ of the 78 primary schools in Herefordshire had a cohort of between 1 and 30 pupils. The small number of schools with larger cohorts means that comparison of performance by school size is not statistically reliable. For context only, in the six schools with cohorts 61+ the average attainment in reading was $75.7 \%$, in writing $68.7 \%$ and in mathematics $75.5 \%$. In the seventeen schools with 10 or fewer pupils in the cohort, the attainment in reading was $74.8 \%$, in writing $68.0 \%$ and in mathematics $74.4 \%$.

## Pupil characteristics

Across English state-funded schools, at key stage 1 (KS1) girls out-perform boys in all subjects. Against the new expected standard the largest difference in attainment by gender continues to be in writing with a gap of 14 percentage points, between girls ( $73 \%$ ) and boys ( $59 \%$ ). The attainment gap for reading is 8 percentage points. It is narrowest for mathematics at 2 percentage points. In 2015, the largest gap was for writing with 8 percentage points, followed by reading with 5 percentage points and mathematics with 3 percentage points. At the old level $2 b$ or above, the largest gap again was for writing ( 14 percentage points), followed by reading ( 8 percentage points and mathematics ( 3 percentage points).


The gender gap across Herefordshire was also largest in writing and was also 14 percentage points. The gap in reading is also very similar in Herefordshire (9 percentage points) but, the gap in mathematics between girls
and boys was quite different. In Herefordshire boys out-performed girls with $75 \%$ of male pupils reaching the expected standard compared to $74 \%$ of girls.

In terms of quartile performance Herefordshire boys were in the second quartile for both the percentage achieving the expected standard in reading and in writing, but achieved top quartile for the percentage achieving the expected standard in mathematics.


Quartile position: Percentage of BOYS reaching the expected standard in Writing



Girls in Herefordshire were in the second quartile for all subjects.


Quartile position: Percentage of GIRLS reaching the expected standard in Writing



## Free school meals (FSM)

In 2016, the attainment gap across state-funded schools in England between pupils eligible (and claiming) free school meals is 17 percentage points in reading and 18 percentage points in writing and 17 percentage points mathematics. For context, in 2015, the gap in attainment was 10 percentage points for reading, 13 percentage points for writing and 8 percentage points for mathematics.

In Herefordshire in 2016 the attainment gap was 24 percentage points in reading, 30 percentage points in writing and 27 percentage points in mathematics. The inequality between FSM pupils and their peers in Herefordshire is significantly greater than the national average. This is largely down to the poor attainment of FSM pupils locally. Non-FSM pupils do perform slightly better to non-FSM pupils across England which accentuates the gap still further.

Amongst statistical neighbours, only Wiltshire (49\%), Dorset (51) and Gloucestershire (52\%) reported a smaller percentage of FSM pupils reaching the expected standard in reading. $54 \%$ of Herefordshire FSM pupils achieved the expected standard in reading. This was significantly below both the England state-funded schools average the regional average across the W Midlands (60\%).

In writing only Wiltshire ( $38 \%$ achieving) saw a smaller percentage of pupils achieving the expected standard than Herefordshire ( $40 \%$ ). Herefordshire was below both the national and regional average of $50 \%$.

In mathematics, similar to reading, only Wiltshire (48\%) and Gloucestershire (49\%) performed less well than Herefordshire where 50\% of FSM pupils achieved the standard. This was below the national and regional average of 58\%.




Reflecting the outcomes of Herefordshire FSM pupils in terms of quartile performance we find that in each of reading, writing and mathematics the county's pupils were in the fourth or bottom quartile.


Quartile position: Percentage of FSM pupils reaching the expected standard in Writing


Quartile position: Percentage of FSM pupils reaching the expected standard in Maths


The measure comparing performance by pupil characteristics looks at the difference between the percentage of pupils in the characteristic group achieving the expected standard against the percentage of pupils in the 'non-characteristic group' at national level. This is referred to a the 'Difference' and local authorities seek to 'diminish the difference'. As we saw earlier, the difference across England between FSM and non-FSM pupils in reading was 17 percentage points. The difference between Herefordshire FSM pupils (54\%) and non-FSM pupils nationally (77\%) was 23 percentage points. Compared to statistical neighbours only Wiltshire ( 29 percentage points), Dorset ( 26 percentage points) and Gloucestershire ( 25 percentage points) showed larger differences. The difference across the W Midlands was only 17 percentage points.


The difference in writing was 28 percentage points in Herefordshire with $40 \%$ of Herefordshire FSM pupils achieving the expected standard compared to 68\% of non-FSM pupils in England. Only Wilshire ( 30 percentage points) had a larger difference. The difference across the W Midlands was 18 percentage points - in line with the national average.

Herefordshire's difference in mathematics was 25 percentage points with $50 \%$ of Herefordshire FSM pupils achieving the expected standard compared to 75\% of non-FSM pupils in England. Interestingly it was only Wilshire ( 27 percentage points) and Gloucestershire ( 26 percentage points) that showed greater differences. The difference in Dorset was slightly smaller at 24 percentage points. The difference across the W Midlands was 17 percentage points - again, in line with the national average.



## English as an Additional Language (EAL)

The national gap at KS1 in 2016 between EAL pupils and those whose first language was English is shown below. Figures for 2013-15 are shown for context only and show the gaps that existed between the old KS1 performance measure of Level 2 or above.

| Attainment gap <br> between EAL and other <br> pupils | $\mathbf{2 0 1 3}$ | $\mathbf{2 0 1 4}$ | $\mathbf{2 0 1 5}$ | $\mathbf{2 0 1 6}$ |
| :--- | :--- | :--- | :--- | :--- |
| Reading | 4 | 4 | 4 | 5 |
| Writing | 3 | 4 | 3 | 2 |
| Mathematics | 3 | 3 | 2 | 1 |

In Herefordshire the equivalent gaps in 2016 were:

- Reading 9 percentage points
- Writing 12 percentage points
- Mathematics 8 percentage points

What is obvious is the discrepancy between the differences nationally and locally in the performance of EAL pupils and pupils whose first language is English.

The percentage of EAL pupils achieving the expected standard in Reading in Herefordshire and across statistical neighbours is shown below.


Herefordshire EAL pupils performed slightly below both the national and regional averages, with $67 \%$ reaching the expected standard. Amongst statistical neighbours only Somerset and Norfolk (69\%) and East Sussex (70\%) achieved better.
$57 \%$ of Herefordshire EAL pupils achieved the expected standard In writing. This was below both the England average and the regional average across the W Midlands. Cornwall (59\%), Somerset (63\%), East Sussex and Norfolk (66\%) all performed better than Herefordshire. Two statistical neighbours performed similarly and four neighbours performed less well than Herefordshire.

$67 \%$ of EAL pupils in Herefordshire achieved the expected standard in mathematics. Similar to the performance in both reading and writing this was below both the regional and national averages. Wiltshire (68\%), Somerset and Norfolk (70\%) and East Sussex (74\%) out-performed Herefordshire.


The performance of EAL pupils in terms of quartiles is shown below.
Reading - $3^{\text {rd }}$ quartile
Writing $-4^{\text {th }}$ quartile
Mathematics $-3^{\text {rd }}$ quartile



In terms of diminishing the difference, we look at the performance of EAL pupils compared to the performance of pupils across England whose first language is English. In reading, Herefordshire's difference was 8 percentage points (Herefordshire EAL 67\%, England pupils whose first language is English 75\%). 8 percentage points was greater than both the national and regional difference but was significantly smaller than the gaps in Shropshire (19\%), Gloucestershire (15\%), Devon (13\%), Cornwall (12\%) and Suffolk and Wiltshire (10\%).


The difference in writing in Herefordshire was 9 percentage points which was greater than both the national (2 percentage points) and regional (5 percentage points). Greater differences were see in Shropshire and Gloucestershire (14 percentage points) as well as in Dorset and Devon (10 percentage points). In both Norfolk and East Sussex there was no difference between the performance of EAL pupils and the performance nationally of pupils whose first language is English.


Finally, the difference in mathematics was 6 percentage points. Similar to reading and writing this exceeded both the national ( 1 percentage point) and regional ( 5 percentage points) differences. Greater differences were reported in Shropshire (14 percentage points), Dorset (11 percentage points) and both Gloucestershire and Suffolk ( 7 percentage points).


## Special Educational Needs (SEN)

This report only covers SEN pupils with SEN but without a Statement or Education, Health and Care Plan (EHCP). The reason for reporting on the SEN Support cohort only is due to the small numbers of pupils with Statements/EHCP's across many local authorities meaning that results are suppressed to protect confidentiality.
Across English state-funded schools 32\% of SEN Support pupils achieved the expected standard in reading, $22 \%$ in writing and $33 \%$ in mathematics. Across Herefordshire, the percentage of similar children reaching the expected standard were $36 \%$ in reading, $27 \%$ in writing and $38 \%$ in mathematics. Herefordshire SEN Support pupils not only exceeded the national average in all subjects but also exceeded both the regional performance across the W Midlands and the performance of all statistical neighbours in all subjects.




The performance of SEN pupils in Herefordshire, in all subjects the cohort was in the top quartile.



Regarding the differences in performance of SEN Support and pupils nationally with no SEN, Herefordshire again performance very well, reflecting the attainment of the group.
Nationally, the difference between the cohorts is 50 percentage points in reading, 52 percentage points in writing and 47 percentage points in maths. Across Herefordshire the same differences were 46 percentage points in reading, 47 percentage points in writing and 42 percentage points in mathematics.
The difference in Herefordshire was smaller than the difference across all statistical neighbours in all subjects. In reading, only Herefordshire (46 percentage points difference) and Norfolk (48 percentage points difference) had smaller differences than that seen nationally
In writing, Herefordshire (47 percentage points difference), Norfolk (48 percentage points difference) and Somerset (51 percentage points difference) showed smaller differences than the national difference of 52 percentage points.
In mathematics, similar to reading, it was only Herefordshire (42 percentage points difference) and Norfolk (44 percentage points difference) that had smaller differences than the England average of 47 percentage points.



Difference in performance of SEN Support pupils and England
non-SEN Support pupils in Maths


## Month of birth

Nationally there is a direct correlation between the month of birth and the percentage of pupils achieving the expected standard in each of reading, writing and mathematics. The difference in performance of pupils born in the first month of the academic year (Sept) and the last month of the academic year (Aug) is 17 percentage points in reading, 22 in writing and 21 in mathematics.

|  | Percentage of pupils reaching the expected <br> standard |  |  |
| :--- | ---: | ---: | ---: |
|  | Reading | Writing | Mathematics |
| September | 82 | 76 | 82 |
| October | 81 | 74 | 81 |
| November | 80 | 73 | 79 |
| December | 78 | 70 | 77 |
| January | 76 | 68 | 75 |
| February | 75 | 67 | 74 |
| March | 74 | 65 | 73 |
| April | 72 | 63 | 71 |
| May | 71 | 61 | 69 |
| June | 68 | 59 | 66 |
| July | 67 | 57 | 64 |
| August | 65 | 54 | 61 |

Data at local authority level does not show the same stark correlation for reasons that have already been explained (the smaller the cohort, the larger the confidence interval). The graphs below showing performance by month of birth in Herefordshire unquestionably demonstrate the link between pupil age and pupil attainment. Whilst the correlation is not perfect (for example: fewer Nov births achieve the expected standard in reading than Jan), in each of the subjects the trend is obvious.




