## grammar and punctuation

year

supplement to teacher guide

## Copyright details

First published 2018
by the National Foundation for Educational Research, The Mere, Upton Park, Slough, Berkshire SL1 2DQ
www.nfer.ac.uk
© National Foundation for Educational Research 2018
Registered Charity No. 313392
All rights reserved. No part of this document may be reproduced or transmitted in any form or by any means, electronic, mechanical, photocopying, or otherwise, without prior written permission of NFER, unless within the terms of licences issued by the Copyright Licensing Agency.

To access the age standardised score converter and question grid spreadsheets, you will need to go to our secure School Portal on the NFER's website:
www.nfer.ac.uk/portal
and then enter your

NFER Number:

Project Number:
Unique Password: $\qquad$

You may like to record them above for quick reference in the future.

The letter and despatch notes that accompanied the test materials are pre-populated with the details of the numbers and password.

If you have lost the letter and despatch notes, the portal website has links where you can request your details again.

## Using the outcomes of the test

This section provides teachers with information to convert pupils' test scores into more useful measures of their attainment.

If the year 4 grammar and punctuation test is undertaken and marked in line with the guidance in this booklet, then both a standardised score and an age standardised score can be derived from a pupil's test score.

Standardised scores enable a comparison to be made between the performance of a pupil and that of other pupils who have taken the test. Age standardised scores mean that the comparison is with pupils who, in the case of the NFER tests, are the same age in years and completed months.

The starting point for this outcome is to total a pupil's marks from the grammar and punctuation test. A box is provided on the front of the test to assist in this. This gives each pupil's total score or 'raw' score.

In order to obtain reliable standardised scores and age standardised scores, you should administer the test according to the guidance given in this booklet. It is particularly important that you mark the questions strictly according to the mark scheme and observe time limits. If not, the information derived from this section cannot be used reliably.

If you wish to record and explore patterns of performance across the test as a whole, or across the whole class, you may find it helpful to complete a question grid. For each question, the question grid shows the average mark of pupils in the standardisation sample. Completing pupils' scores in the question grid will enable you to compare areas of performance with a nationally representative sample of year 4 pupils. The grids are available from the following website, which will require online registration for access: www.nfer.ac.uk/portal

## Standardised scores

Standardised scores enable a comparison to be made between the performance of a pupil and that of other pupils who have taken the same test. The average nationally standardised score is 100.
About two-thirds of pupils will have standardised scores between 85 and 115 and scores within this range can be broadly described as 'average'.

For example, a teacher administered the test to her class in June. One pupil, Lucy, achieved a raw score of 19 on the test, giving her a standardised score of 101. The teacher could then say that Lucy achieved an average score on the test.

Almost all pupils fall within the range 70 to 140 , so scores outside this range can be regarded as exceptional. These exceptional scores are marked with ${ }^{* * *}$ on the charts below as standardised scores cannot be calculated with the necessary statistical reliability. If an exact score is needed, for example to calculate an average score for the class, 69 or 141 should be used as appropriate for these pupils.

It is worth noting here that the scaled score of 100 defined by the Department for Education as the national expectation at the end of Key Stage 2 is not the same as, nor equivalent to, a standardised score of $\mathbf{1 0 0}$ on these tests. On NFER tests, a standardised score of 100 represents the average performance, based on a normal distribution, of the sample of pupils on which the tests were standardised. At the end of Key Stage 2, the DfE's scaled score of 100 represents the 'expected standard' and is not the average.

In order to save time and ensure accuracy, you can download a spreadsheet which will calculate each pupil's standardised score and age standardised score if you enter their total score, date of birth and date of test. The spreadsheet can be found at www.nfer.ac.uk/portal

| Raw score | Standardised <br> score |
| :---: | :---: |
| $\mathbf{0}$ | $* * *$ |
| $\mathbf{1}$ | $* * *$ |
| $\mathbf{2}$ | $* * *$ |
| $\mathbf{3}$ | $* * *$ |
| $\mathbf{4}$ | 71 |
| $\mathbf{5}$ | 74 |
| $\mathbf{6}$ | 77 |
| $\mathbf{7}$ | 79 |
| $\mathbf{8}$ | 81 |
| $\mathbf{9}$ | 83 |
| $\mathbf{1 0}$ | 84 |
| $\mathbf{1 1}$ | 86 |
| $\mathbf{1 2}$ | 87 |
| $\mathbf{1 3}$ | 89 |
| $\mathbf{1 4}$ | 92 |
| $\mathbf{1 5}$ | 94 |
| $\mathbf{1 6}$ | 96 |
| $\mathbf{1 7}$ | 97 |


| Raw score | Standardised <br> score |
| :---: | :---: |
| $\mathbf{1 8}$ | 99 |
| $\mathbf{1 9}$ | 101 |
| $\mathbf{2 0}$ | 103 |
| $\mathbf{2 1}$ | 105 |
| $\mathbf{2 2}$ | 107 |
| $\mathbf{2 3}$ | 109 |
| $\mathbf{2 4}$ | 110 |
| $\mathbf{2 5}$ | 112 |
| $\mathbf{2 6}$ | 115 |
| $\mathbf{2 7}$ | 117 |
| $\mathbf{2 8}$ | 119 |
| $\mathbf{2 9}$ | 122 |
| $\mathbf{3 0}$ | 124 |
| $\mathbf{3 1}$ | 127 |
| $\mathbf{3 2}$ | 131 |
| $\mathbf{3 3}$ | 136 |
| $\mathbf{3 4}$ | $* * *$ |
| $\mathbf{3 5}$ | $* * *$ |

## Confidence bands for standardised scores

Confidence bands are used to show the extent of the margin of error in the standardised scores. In other words, they show how accurately the test measures pupils' ability in grammar and punctuation.

The margin of error accounts for the fact that the score is a statistical estimate, based on the fact that tests can only sample the particular area of learning which they assess and that therefore the score a pupil achieves may vary within a few points of their 'true score'. To indicate how wide this margin of error is likely to be, a '90 per cent confidence band' has been calculated. This means that you can have 90 per cent certainty that the true score lies within the confidence band.

The table below gives the numbers that should be added to and subtracted from pupils' standardised scores at different score points to form the 90 per cent confidence bands.

| Standardised score | To form $\mathbf{9 0 \%}$ confidence band: |  |
| :---: | :---: | :---: |
|  | subtract | add |
| $\mathbf{7 1}, \mathbf{7 4}, \mathbf{7 7}$ | 7 | 11 |
| $\mathbf{7 9 , 8 1 , 8 3 , 8 4 , 8 6 , 8 7 , 8 9 , 9 2}$ | 8 | 10 |
| $\mathbf{9 4 , 9 6 , 9 7 , 9 9 , 1 0 1 , 1 0 3 , 1 0 5}$ | 9 | 9 |
| $\mathbf{1 0 7}$ | 10 | 9 |
| $\mathbf{1 0 9}, \mathbf{1 1 0 , 1 1 2 , 1 1 5 , 1 1 7 , 1 1 9}$ | 10 | 8 |
| $\mathbf{1 2 2}$ | 11 | 8 |
| $\mathbf{1 2 4 , 1 2 7 , 1 3 1}$ | 11 | 7 |
| $\mathbf{1 3 6}$ | 12 | 7 |

Here is an example of calculating the confidence bands. Three pupils, Agata, Nathan and Preeti, have standardised scores of 101, 105 and 131 respectively. For Agata, with a standardised score of 101 in this test, the 90 per cent confidence band is minus 9 and plus 9 . Therefore, you can be 90 per cent certain that Agata's true score is between 92 and 110.

Both Nathan, who has a standardised score of 105, and Agata are working at about the average for their age. There is no statistical difference between their scores: Nathan's true score is between 96 and 114.

However, Preeti, with a standardised score of 131, has a 90 per cent likelihood of having a true score between 120 and 138, and has scored higher, in statistical terms, than Agata or Nathan.

For high and low scores, the confidence bands are asymmetrical (they tend to be pulled towards the average test score).

## Age standardised scores

Age standardised scores take into account a pupil's age in years and months, in order that his or her performance can be compared with the performance of other pupils of the same age in a nationally representative sample. The age standardisation that has been undertaken means that these tests can be administered at different points in the school year and comparative information still be obtained. The standardised scores in this booklet cover the age range 8 years 0 months to 9 years 11 months. If you have decided to give a test to pupils outside this range, you will not be able to use the table. You will still, however, be able to calculate standardised scores.

In order to save time and ensure accuracy, you can download a spreadsheet which will calculate each pupil's standardised score and age standardised score if you enter their total score, date of birth and date of test. The spreadsheet can be found at www.nfer.ac.uk/portal

If you have not downloaded the spreadsheet, you should convert the total score into an age standardised score as follows:

- list the ages of all pupils in your class in years and completed months at the time of testing
- for each pupil, locate his or her age in years and months along the top of the table on pages 8-9
- locate the pupil's total score (raw score) down the left side of the table
- read off the age standardised score from where the row and column meet.

The average age standardised score is 100 , based on the performance of a nationally representative sample. About two-thirds of pupils will have age standardised scores between 85 and 115 and scores within this range can broadly be described as'average'. Almost all pupils fall within the range 70 to 140, so scores outside this range can be regarded as exceptional. These exceptional scores are marked with ${ }^{* * *}$ on the table on pages $8-9$ as age standardised scores cannot be calculated with the necessary statistical reliability. If an exact score is needed, for example to calculate an average for the class, 69 or 141 should be used as appropriate for these pupils. As age standardised scores take the ages of pupils into account, it is possible that a younger pupil may have a lower raw score than an older pupil but a higher age standardised score. This is because the younger pupil may have a higher performance relative to his or her own age group than the older pupil.

Age standardised scores from the reading, mathematics, grammar and punctuation, and spelling tests cover generally the same range, so for most pupils, performance on the grammar and punctuation tests can be compared directly to performance on the other NFER tests.

As mentioned for standardised scores, the scaled score of 100 defined by the Department for Education as the national expectation at the end of Key Stage 2 is not the same as, nor equivalent
to, an age standardised score of $\mathbf{1 0 0}$ on these tests. On NFER tests, an age standardised score of 100 represents the average performance, based on a normal distribution, of the sample of pupils of a specific age on which the tests were standardised. At the end of Key Stage 2, the DfE's scaled score of 100 represents the 'expected standard' and is not the average.

## Confidence bands for age standardised scores

Confidence bands are used to show the extent of the margin of error in the age standardised scores. In other words, how accurately the test measures the pupil's ability in grammar and punctuation.

The margin of error accounts for the fact that the score is a statistical estimate, based on the fact that tests can only sample the particular area of learning which they assess and that therefore the score a pupil achieves may vary within a few points of their'true score'. To indicate how wide this margin of error is likely to be, a '90 per cent confidence band' has been calculated. This means that you can have 90 per cent certainty that the true score lies within the confidence band.

The table below gives the numbers that should be added to and subtracted from pupils' age standardised scores in different score ranges to form the 90 per cent confidence bands.

| Age standardised score range | To form 90\% confidence band: |  |
| :---: | :---: | :---: |
|  | subtract | add |
| $\mathbf{7 0 - 7 7}$ | 7 | 11 |
| $\mathbf{7 8}$ | 8 | 11 |
| $\mathbf{7 9 - 9 2}$ | 8 | 10 |
| $\mathbf{9 3}$ | 9 | 10 |
| $\mathbf{9 4 - 1 0 6}$ | 9 | 9 |
| $\mathbf{1 0 7}$ | 10 | 9 |
| $\mathbf{1 0 8 - 1 2 1}$ | 10 | 8 |
| $\mathbf{1 2 2}$ | 11 | 8 |
| $\mathbf{1 2 3 - 1 3 5}$ | 11 | 7 |
| $\mathbf{1 3 6}$ | 12 | 7 |
| $\mathbf{1 3 7 - 1 4 0}$ | 12 | 6 |

Here is an example of calculating the confidence bands. Three pupils, Agata, Nathan and Preeti, have age standardised scores of 103, 107 and 130 respectively. For Agata, with an age standardised score of 103 in this test, the 90 per cent confidence band is minus 9 and plus 9 . Therefore, you can be 90 per cent certain that Agata's true score is between 94 and 112.

Both Nathan, who has an age standardised score of 107, and Agata are working at about the average for their age. There is no statistical difference between their scores: Nathan's true score is between 97 and 116.

However, Preeti, with an age standardised score of 130, has a 90 per cent likelihood of having a true score between 119 and 137, and has scored higher, in statistical terms, than Agata or Nathan.

For high and low scores, the confidence bands are asymmetrical (they tend to be pulled towards the average test score).

## Age standardised score table

Age in years and (completed) months

| Raw score | 8.00 | 8.01 | 8.02 | 8.03 | 8.04 | 8.05 | 8.06 | 8.07 | 8.08 | 8.09 | 8.10 | 8.11 | Raw score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 0 |
| 1 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 1 |
| 2 | 70 | 70 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 2 |
| 3 | 75 | 74 | 74 | 74 | 73 | 73 | 72 | 72 | 72 | 71 | 71 | 70 | 3 |
| 4 | 78 | 78 | 78 | 77 | 77 | 76 | 76 | 75 | 75 | 75 | 74 | 74 | 4 |
| 5 | 81 | 81 | 80 | 80 | 79 | 79 | 79 | 78 | 78 | 77 | 77 | 77 | 5 |
| 6 | 83 | 83 | 82 | 82 | 82 | 81 | 81 | 80 | 80 | 80 | 79 | 79 | 6 |
| 7 | 85 | 85 | 84 | 84 | 84 | 83 | 83 | 82 | 82 | 82 | 81 | 81 | 7 |
| 8 | 87 | 87 | 86 | 86 | 85 | 85 | 84 | 84 | 84 | 83 | 83 | 83 | 8 |
| 9 | 90 | 89 | 89 | 88 | 87 | 87 | 86 | 86 | 85 | 85 | 84 | 84 | 9 |
| 10 | 93 | 92 | 91 | 91 | 90 | 89 | 89 | 88 | 87 | 87 | 86 | 86 | 10 |
| 11 | 95 | 94 | 94 | 93 | 92 | 92 | 91 | 90 | 90 | 89 | 88 | 88 | 11 |
| 12 | 97 | 96 | 96 | 95 | 95 | 94 | 93 | 93 | 92 | 91 | 91 | 90 | 12 |
| 13 | 99 | 98 | 98 | 97 | 97 | 96 | 95 | 95 | 94 | 93 | 93 | 92 | 13 |
| 14 | 101 | 100 | 100 | 99 | 98 | 98 | 97 | 97 | 96 | 95 | 95 | 94 | 14 |
| 15 | 103 | 102 | 101 | 101 | 100 | 100 | 99 | 98 | 98 | 97 | 97 | 96 | 15 |
| 16 | 104 | 104 | 103 | 103 | 102 | 101 | 101 | 100 | 100 | 99 | 98 | 98 | 16 |
| 17 | 106 | 106 | 105 | 104 | 104 | 103 | 103 | 102 | 101 | 101 | 100 | 100 | 17 |
| 18 | 108 | 108 | 107 | 106 | 106 | 105 | 104 | 104 | 103 | 103 | 102 | 101 | 18 |
| 19 | 110 | 110 | 109 | 108 | 108 | 107 | 106 | 106 | 105 | 104 | 104 | 103 | 19 |
| 20 | 112 | 111 | 111 | 110 | 110 | 109 | 108 | 108 | 107 | 106 | 106 | 105 | 20 |
| 21 | 113 | 113 | 112 | 112 | 111 | 111 | 110 | 110 | 109 | 108 | 108 | 107 | 21 |
| 22 | 115 | 115 | 114 | 114 | 113 | 112 | 112 | 111 | 111 | 110 | 110 | 109 | 22 |
| 23 | 117 | 116 | 116 | 115 | 115 | 114 | 114 | 113 | 113 | 112 | 112 | 111 | 23 |
| 24 | 119 | 118 | 118 | 117 | 117 | 116 | 115 | 115 | 114 | 114 | 113 | 113 | 24 |
| 25 | 121 | 121 | 120 | 119 | 119 | 118 | 118 | 117 | 116 | 116 | 115 | 115 | 25 |
| 26 | 123 | 122 | 122 | 121 | 121 | 121 | 120 | 119 | 119 | 118 | 117 | 117 | 26 |
| 27 | 124 | 124 | 124 | 123 | 123 | 122 | 122 | 121 | 121 | 121 | 120 | 119 | 27 |
| 28 | 126 | 126 | 126 | 125 | 125 | 124 | 124 | 123 | 123 | 122 | 122 | 122 | 28 |
| 29 | 129 | 128 | 128 | 127 | 127 | 126 | 126 | 125 | 125 | 125 | 124 | 124 | 29 |
| 30 | 131 | 131 | 130 | 130 | 129 | 129 | 128 | 128 | 127 | 127 | 127 | 126 | 30 |
| 31 | 134 | 133 | 133 | 133 | 132 | 132 | 131 | 131 | 130 | 130 | 130 | 129 | 31 |
| 32 | 137 | 137 | 137 | 136 | 136 | 135 | 135 | 134 | 134 | 134 | 133 | 133 | 32 |
| 33 | *** | *** | *** | *** | *** | 140 | 140 | 139 | 139 | 139 | 138 | 138 | 33 |
| 34 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 34 |
| 35 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 35 |

Age in years and (completed) months

| Raw score | 9.00 | 9.01 | 9.02 | 9.03 | 9.04 | 9.05 | 9.06 | 9.07 | 9.08 | 9.09 | 9.10 | 9.11 | Raw score |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 0 |
| 1 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 1 |
| 2 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 2 |
| 3 | 70 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 3 |
| 4 | 73 | 73 | 73 | 72 | 72 | 71 | 71 | 70 | 70 | 70 | *** | *** | 4 |
| 5 | 76 | 76 | 75 | 75 | 74 | 74 | 74 | 73 | 73 | 72 | 72 | 72 | 5 |
| 6 | 79 | 78 | 78 | 77 | 77 | 76 | 76 | 76 | 75 | 75 | 74 | 74 | 6 |
| 7 | 80 | 80 | 80 | 79 | 79 | 78 | 78 | 78 | 77 | 77 | 76 | 76 | 7 |
| 8 | 82 | 82 | 81 | 81 | 81 | 80 | 80 | 79 | 79 | 79 | 78 | 78 | 8 |
| 9 | 84 | 83 | 83 | 83 | 82 | 82 | 81 | 81 | 81 | 80 | 80 | 79 | 9 |
| 10 | 85 | 85 | 84 | 84 | 84 | 83 | 83 | 82 | 82 | 82 | 81 | 81 | 10 |
| 11 | 87 | 87 | 86 | 86 | 85 | 85 | 84 | 84 | 83 | 83 | 83 | 82 | 11 |
| 12 | 89 | 89 | 88 | 87 | 87 | 86 | 86 | 85 | 85 | 84 | 84 | 84 | 12 |
| 13 | 91 | 91 | 90 | 89 | 89 | 88 | 87 | 87 | 86 | 86 | 85 | 85 | 13 |
| 14 | 94 | 93 | 92 | 92 | 91 | 90 | 90 | 89 | 88 | 88 | 87 | 87 | 14 |
| 15 | 96 | 95 | 94 | 94 | 93 | 92 | 92 | 91 | 90 | 90 | 89 | 88 | 15 |
| 16 | 97 | 97 | 96 | 96 | 95 | 94 | 94 | 93 | 92 | 92 | 91 | 90 | 16 |
| 17 | 99 | 98 | 98 | 97 | 97 | 96 | 96 | 95 | 94 | 94 | 93 | 92 | 17 |
| 18 | 101 | 100 | 100 | 99 | 98 | 98 | 97 | 97 | 96 | 96 | 95 | 94 | 18 |
| 19 | 103 | 102 | 101 | 101 | 100 | 100 | 99 | 98 | 98 | 97 | 97 | 96 | 19 |
| 20 | 104 | 104 | 103 | 103 | 102 | 101 | 101 | 100 | 100 | 99 | 98 | 98 | 20 |
| 21 | 106 | 106 | 105 | 104 | 104 | 103 | 103 | 102 | 101 | 101 | 100 | 100 | 21 |
| 22 | 108 | 108 | 107 | 106 | 106 | 105 | 104 | 104 | 103 | 103 | 102 | 101 | 22 |
| 23 | 110 | 110 | 109 | 109 | 108 | 107 | 107 | 106 | 105 | 105 | 104 | 103 | 23 |
| 24 | 112 | 112 | 111 | 111 | 110 | 110 | 109 | 108 | 107 | 107 | 106 | 105 | 24 |
| 25 | 114 | 114 | 113 | 113 | 112 | 111 | 111 | 110 | 110 | 109 | 109 | 108 | 25 |
| 26 | 116 | 116 | 115 | 115 | 114 | 113 | 113 | 112 | 112 | 111 | 111 | 110 | 26 |
| 27 | 119 | 118 | 117 | 117 | 116 | 116 | 115 | 115 | 114 | 113 | 113 | 112 | 27 |
| 28 | 121 | 121 | 120 | 120 | 119 | 118 | 118 | 117 | 116 | 116 | 115 | 115 | 28 |
| 29 | 123 | 123 | 122 | 122 | 122 | 121 | 121 | 120 | 120 | 119 | 118 | 118 | 29 |
| 30 | 126 | 125 | 125 | 124 | 124 | 124 | 123 | 123 | 122 | 122 | 121 | 121 | 30 |
| 31 | 129 | 128 | 128 | 127 | 127 | 126 | 126 | 126 | 125 | 125 | 124 | 124 | 31 |
| 32 | 132 | 132 | 131 | 131 | 131 | 130 | 130 | 129 | 129 | 128 | 128 | 127 | 32 |
| 33 | 137 | 137 | 136 | 136 | 135 | 135 | 135 | 134 | 134 | 133 | 133 | 132 | 33 |
| 34 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 34 |
| 35 | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | *** | 35 |

## blank page

## blank page

Evidence for Excellence in Education
© National Foundation for Educational Research 2018

