

reading

year 5

supplement to teacher guide autumn

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First published 2017

by the National Foundation for Educational Research, The Mere, Upton Park, Slough, Berkshire SL1 2DQ

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To access the standardised / age standardised score converter and the 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:								
(please write them in above for quick reference).								
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 5 reading test is undertaken and marked in line with the guidance in the teacher guide, then there are two outcomes that can be derived from a pupil's test score:

- · standardised score
- · age standardised score.

The starting point for these outcomes is to total a pupil's marks from the test. This gives each pupil's total score or 'raw' score. A subtotal box is provided on each double page to assist in recording marks.

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

If you wish to record and explore patterns of performance on the test across your 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. It also shows which questions address each of the elements of the content domain. Completing pupils' scores in the question grid will enable you to compare performance on different areas of the content domain with a nationally representative sample. This is available from the following website, which will require online registration for access:

www.nfer.ac.uk/portal

nfer tests – reading – year 5

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. This could assist when grouping your class by ability and help identify those pupils in need of targeted interventions. The average standardised score is set at 100, based on the performance of a nationally representative sample. About two-thirds of pupils will have standardised scores between 85 and 115 and scores within this range can be broadly 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 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.

For example, a teacher administered the test to her class. One pupil, Lucy, achieved a raw score of 23 on the test, giving her a standardised score of 105. The teacher could then say that Lucy achieved an average score on the test.

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 100 on these tests.** On these 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 Department for Education'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 date of birth and date of test. This spreadsheet is available from the following website:

www.nfer.ac.uk/portal

Raw score	Standardised score
0	***
1	71
2	74
3	76
4	78
5	79
6	81
7	83
8	85
9	86
10	88
11	89
12	91
13	92
14	94
15	95
16	97
17	98
18	99
19	100
20	101
21	103
22	104
23	105

Raw score	Standardised score
24	106
25	107
26	109
27	110
28	112
29	113
30	115
31	116
32	117
33	119
34	121
35	122
36	124
37	126
38	128
39	131
40	133
41	136
42	140
43	***
44	***
45	***
46	***

Confidence bands

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 reading.

The margin of error is simply 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 subtracted from and added to pupils' standardised scores at different score points to form the 90 per cent confidence bands.

Age standardised score range	To form 90% confidence band:				
	subtract	add			
71	6	10			
74	7	10			
76, 78, 79, 81, 83, 85, 86, 88, 89	7	9			
91, 92	8	9			
94, 95, 97–101, 103–107	8	8			
109, 110	9	8			
112, 113, 115–117, 119, 121, 122, 124	9	7			
126, 128	10	7			
131, 133, 136, 140	10	6			

Take three pupils, Rachel, Nathan and David, with standardised scores of 101, 99 and 124 respectively. For Rachel, with a standardised score of 101 on this test, the 90 per cent confidence band is plus or minus 8. Therefore, you can be 90 per cent certain (there is a nine-out-of-ten chance) that Rachel's true score is between 93 and 109.

Both Nathan, who has a standardised score of 99, and Rachel are working at about the average for their age. Nathan's true score is between 91 and 107.

However, David, with a standardised score of 124, achieved an above average score on the test and has a 90 per cent likelihood of having a true score between 115 and 131.

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 at the time of sitting the test, 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 age standardised scores in this booklet cover the age range 9 years 0 months to 10 years 7 months. If you have decided to give the 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 and age standardised score if you enter their date of birth and date of test, from:

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 and 9
- locate the pupil's total 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 set at 100, based on the performance of a nationally representative sample. 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, an age standardised score of 100 on these tests.** On these 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 Department for Education's scaled score of 100 represents the 'expected standard' and is not the average.

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 chart 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.

Confidence bands

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 reading.

The margin of error is simply a statistical estimate, based on the fact that tests can only sample the particular area of learning which they assess and 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			
70–71	6	10			
72-74	7	10			
75–89	7	9			
90-92	8	9			
93–107	8	8			
108–110	9	8			
111–125	9	7			
126–128	10	7			
129–140	10	6			

Take three pupils, Hannah, Ali and Robin, with age standardised scores of 100, 103 and 122 respectively. For Hannah, with an age standardised score of 100 on this test, the 90 per cent confidence band is plus or minus 8. Therefore, you can be 90 per cent certain (there is a nine-out-of-ten chance) that Hannah's true score is between 92 and 108.

Both Hannah and Ali, who has an age standardised score of 103, are working at about the average for their age. Ali's true score is between 95 and 111.

However, Robin, with an age standardised score of 122, achieved an above average score on the test and has a 90 per cent likelihood of having a true score between 113 and 129.

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

Age standardised scores

	Age in ye	ars and co	mpleted	months						1]
Total score	9.00	9.01	9.02	9.03	9.04	9.05	9.06	9.07	9.08	9.09	Total score
0	***	***	***	***	***	***	***	***	***	***	0
1	70	70	70	70	70	***	***	***	***	***	1
2	74	74	74	74	74	74	73	73	73	73	2
3	77	77	77	76	76	76	76	76	76	75	3
4	79	79	78	78	78	78	78	77	77	77	4
5	81	80	80	80	79	79	79	79	79	79	5
6	83	83	82	82	82	81	81	81	80	80	6
7	85	85	84	84	84	83	83	83	82	82	7
8	87	87	86	86	85	85	85	84	84	84	8
9	89	89	88	88	87	87	86	86	86	85	9
10	91	91	90	90	89	89	88	88	87	87	10
11	92	92	92	91	91	91	90	90	89	89	11
12	94	94	93	93	92	92	92	91	91	90	12
13	95	95	95	94	94	93	93	93	92	92	13
14	97	96	96	96	95	95	94	94	93	93	14
15	98	98	97	97	96	96	96	95	95	94	15
16	100	99	99	98	98	97	97	97	96	96	16
17	101	101	100	100	99	99	98	98	97	97	17
18	102	102	101	101	101	100	100	99	99	98	18
19	103	103	103	102	102	101	101	100	100	100	19
20	105	104	104	103	103	103	102	102	101	101	20
21	106	105	105	104	104	104	103	103	102	102	21
22	107	107	106	106	105	105	104	104	104	103	22
23	108	108	107	107	106	106	105	105	105	104	23
24	110	109	109	108	108	107	107	106	106	105	24
25	111	111	110	110	109	109	108	108	107	107	25
26	112	112	111	111	110	110	109	109	109	108	26
27	114	113	113	112	112	111	111	110	110	109	27
28	115	114	114	114	113	113	112	112	111	111	28
29	116	116	115	115	114	114	114	113	113	112	29
30	118	117	117	116	116	115	115	114	114	114	30
31	119	119	118	118	117	117	116	116	115	115	31
32	121	120	120	119	119	118	118	117	117	116	32
33	122	122	121	121	120	120	119	119	118	118	33
34	124	124	123	123	122	122	121	121	120	120	34
35	126	126	125	125	124	124	123	123	122	121	35
36	128	128	127	127	126	126	125	125	124	124	36
37	131	130	129	129	128	128	127	127	126	126	37
38	133	132	132	131	131	130	130	129	129	128	38
39	136	135	135	134	134	133	132	132	131	131	39
40	139	138	138	137	137	136	136	135	134	134	40
41	***	***	***	***	140	140	139	138	138	137	41
42	***	***	***	***	***	***	***	***	***	***	42
43	***	***	***	***	***	***	***	***	***	***	43
44	***	***	***	***	***	***	***	***	***	***	44
45	***	***	***	***	***	***	***	***	***	***	45
46	***	***	***	***	***	***	***	***	***	***	46

	Age in years and completed months]	
Total score	9.10	9.11	10.00	10.01	10.02	10.03	10.04	10.05	10.06	10.07	Total score
0	***	***	***	***	***	***	***	***	***	***	0
1	***	***	***	***	***	***	***	***	***	***	1
2	73	72	72	72	72	72	72	71	71	71	2
3	75	75	75	75	74	74	74	74	74	74	3
4	77	77	77	76	76	76	76	76	75	75	4
5	78	78	78	78	78	77	77	77	77	77	5
6	80	79	79	79	79	79	78	78	78	78	6
7	82	81	81	81	80	80	80	79	79	79	7
8	83	83	83	82	82	82	81	81	81	80	8
9	85	84	84	84	83	83	83	82	82	82	9
10	87	86	86	85	85	84	84	84	83	83	10
11	88	88	87	87	86	86	86	85	85	84	11
12	90	90	89	89	88	88	87	87	86	86	12
13	91	91	91	90	90	89	89	88	88	87	13
14	93	92	92	91	91	91	90	90	89	89	14
15	94	94	93	93	92	92	92	91	91	90	15
16	95	95	94	94	94	93	93	92	92	92	16
17	97	96	96	95	95	94	94	94	93	93	17
18	98	97	97	96	96	96	95	95	94	94	18
19	99	99	98	98	97	97	96	96	96	95	19
20	100	100	100	99	99	98	98	97	97	96	20
21	102	101	101	100	100	99	99	99	98	98	21
22	103	102	102	101	101	101	100	100	99	99	22
23	104	103	103	103	102	102	101	101	101	100	23
24	105	105	104	104	103	103	103	102	102	101	24
25	106	106	105	105	104	104	104	103	103	102	25
26	108	107	107	106	106	105	105	104	104	104	26
27	109	108	108	108	107	106	106	106	105	105	27
28	110	110	109	109	108	108	107	107	106	106	28
29	112	111	111	110	110	109	109	108	108	107	29
30	113	113	112	112	111	111	110	110	109	109	30
31	114	114	114	113	113	112	112	111	111	110	31
32	116	115	115	115	114	114	113	113	112	112	32
33	117	117	116	116	116	115	115	114	114	113	33
34	119	119	118	118	117	117	116	116	115	115	34
35	121	120	120	119	119	118	118	118	117	117	35
36	123	122	122	121	121	120	120	119	119	118	36
37	125	125	124	124	123	123	122	121	121	120	37
38	128	127	127	126	126	125	124	124	123	123	38
39	130	130	129	129	128	128	127	127	126	126	39
40	133	133	132	132	131	131	130	130	129	129	40
41	137	136	136	135	135	134	134	133	133	132	41
42	***	***	140	139	139	138	138	137	137	136	42
43	***	***	***	***	***	***	***	***	***	***	43
44	***									***	44
45	***	***	***	***	***	***	***	***	***	***	45
46	***	***	***	***	***	***	***	***	***	***	46

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