NFER
Classroom

reading

year
3

supplement to teacher guide autumn

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 3 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 reading answer booklet. (A subtotal box is provided on each double page to assist with this.) This gives each pupil's total score or 'raw' score.

In order to obtain reliable outcomes, you should administer the test 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

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 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.

For example, a teacher administered the test to her class. One pupil, Lucy, achieved a raw score of 21 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	Raw score	Standardised score
0	***	19	102
1	73	20	104
2	78	21	105
3	80	22	106
4	83	23	107
5	85	24	108
6	86	25	109
7	88	26	110
8	90	27	112
9	91	28	113
10	93	29	115
11	94	30	117
12	95	31	119
13	96	32	122
14	97	33	125
15	98	34	129
16	99	35	134
17	100	36	***
18	101	37	***

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.

Standardised score	To form 90% confidence band:	
	subtract	add
73	6	8
78, 80, 83, 85, 86, 88, 90, 91, 93–97	6	7
98–102	7	7
104–110, 112, 113, 115, 117, 119, 122, 125	7	6
129	8	6
134	8	5

Take three pupils, Rachel, Nathan and David, with standardised scores of 101, 99 and 125 respectively. For Rachel, with a standardised score of 101 on this test, the 90 per cent confidence band is plus or minus 7. Therefore, you can be 90 per cent certain (there is a nine-out-of-ten chance) that Rachel's true score is between 94 and 108.

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 92 and 106.

However, David, with a standardised score of 125, achieved an above average score on the test and has a 90 per cent likelihood of having a true score between 118 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 7 years 0 months to 8 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 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	5	8
71–74	6	8
75–97	6	7
98–102	7	7
103–125	7	6
126–129	8	6
130–140	8	5

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 7. Therefore, you can be 90 per cent certain (there is a nine-out-of-ten chance) that Hannah's true score is between 93 and 107.

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 96 and 109.

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 115 and 128.

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

Age standardised scores

Total score	Age in years and completed months										Total score
	7.00	7.01	7.02	7.03	7.04	7.05	7.06	7.07	7.08	7.09	
0	***	***	***	***	***	***	***	***	***	***	0
1	76	76	75	75	74	74	73	73	72	72	1
2	81	81	80	80	79	79	78	78	77	77	2
3	84	84	83	83	82	82	81	81	80	79	3
4	87	86	86	85	84	84	83	83	82	82	4
5	89	89	88	87	86	86	85	84	84	83	5
6	92	91	90	89	88	88	87	86	86	85	6
7	93	93	92	91	90	90	89	88	87	87	7
8	95	94	93	93	92	91	91	90	89	88	8
9	96	96	95	94	93	93	92	91	91	90	9
10	98	97	96	96	95	94	93	93	92	91	10
11	99	98	98	97	96	95	95	94	93	93	11
12	100	100	99	98	97	97	96	95	94	94	12
13	102	101	100	99	99	98	97	96	96	95	13
14	103	102	101	101	100	99	98	98	97	96	14
15	104	103	102	102	101	100	99	99	98	97	15
16	105	104	104	103	102	101	101	100	99	98	16
17	106	105	105	104	103	102	102	101	100	99	17
18	107	107	106	105	104	104	103	102	101	100	18
19	108	108	107	106	105	105	104	103	102	102	19
20	110	109	108	107	106	106	105	104	104	103	20
21	111	110	109	108	108	107	106	105	105	104	21
22	112	111	110	110	109	108	107	106	106	105	22
23	113	112	112	111	110	109	108	108	107	106	23
24	114	114	113	112	111	111	110	109	108	107	24
25	116	115	114	113	113	112	111	110	109	109	25
26	117	116	115	115	114	113	112	112	111	110	26
27	119	118	117	116	115	115	114	113	112	111	27
28	121	120	119	118	117	116	115	114	114	113	28
29	122	121	121	120	119	118	117	116	115	114	29
30	124	123	122	122	121	120	119	118	117	116	30
31	126	125	124	124	123	122	121	120	119	119	31
32	128	128	127	126	125	124	123	123	122	121	32
33	131	130	130	129	128	127	126	125	125	124	33
34	135	134	133	132	131	131	130	129	128	127	34
35	140	139	138	137	136	135	135	134	133	132	35
36	***	***	***	***	***	***	***	***	***	140	36
37	***	***	***	***	***	***	***	***	***	***	37

Total score	7.10	7.11	8.00	8.01	8.02	8.03	8.04	8.05	8.06	8.07	Total score
	Age in years and completed months										
0	***	***	***	***	***	***	***	***	***	***	0
1	71	71	70	70	***	***	***	***	***	***	1
2	76	76	75	75	74	74	73	73	72	72	2
3	79	78	78	77	77	76	76	75	75	74	3
4	81	81	80	80	79	79	78	78	77	77	4
5	83	82	82	81	81	80	80	79	79	78	5
6	84	84	83	83	82	82	81	81	80	80	6
7	86	85	85	84	84	83	83	82	82	81	7
8	88	87	86	86	85	84	84	83	83	82	8
9	89	88	88	87	86	86	85	84	84	83	9
10	90	90	89	88	87	87	86	85	85	84	10
11	92	91	90	90	89	88	87	87	86	85	11
12	93	92	92	91	90	89	89	88	87	86	12
13	94	93	93	92	91	91	90	89	88	87	13
14	95	94	94	93	92	92	91	90	89	89	14
15	96	96	95	94	93	93	92	91	91	90	15
16	98	97	96	95	94	94	93	92	92	91	16
17	99	98	97	96	96	95	94	93	93	92	17
18	100	99	98	97	97	96	95	94	94	93	18
19	101	100	99	98	98	97	96	96	95	94	19
20	102	101	100	100	99	98	97	97	96	95	20
21	103	102	101	101	100	99	98	98	97	96	21
22	104	103	103	102	101	100	100	99	98	97	22
23	105	105	104	103	102	101	101	100	99	98	23
24	106	106	105	104	104	103	102	101	100	100	24
25	108	107	106	105	105	104	103	102	102	101	25
26	109	108	107	107	106	105	104	104	103	102	26
27	111	110	109	108	107	106	106	105	104	104	27
28	112	111	110	110	109	108	107	106	106	105	28
29	114	113	112	111	110	110	109	108	107	106	29
30	115	115	114	113	112	111	111	110	109	108	30
31	118	117	116	115	114	113	113	112	111	110	31
32	120	119	118	117	117	116	115	114	113	113	32
33	123	122	121	120	120	119	118	117	116	115	33
34	126	126	125	124	123	122	121	121	120	119	34
35	131	130	130	129	128	127	126	125	125	124	35
36	139	138	138	137	136	135	134	133	133	132	36
37	***	***	***	***	***	***	***	***	***	***	37

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