

# Calculating learners' scores English Reading Tests Years 7–9

National Reading Tests

**2018**



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Llywodraeth Cymru  
Welsh Government

## Purpose of this document

The purpose of this booklet is to enable schools to convert raw scores from the tests to age-standardised scores and progress measures where these have not been collected via the Welsh National Tests Data Collection (WNTDC). This will be relevant for independent schools. It will also be relevant where a learner has taken a test outside of the test window or an out-of-year test for diagnostic purposes.

Please note: only progress measures can be calculated for learners taking out-of-year tests.

## Calculating learners' scores from national tests

The age-standardised scores and the progress measures were established using the data submitted by all schools in Wales with learners who had taken the 'live' English reading tests in April/May 2018.

## Age-standardised scores

The age-standardised score scales make it possible to compare an individual learner's performance on the test in 2018 with the performance of all other learners of the same age, in years and completed months, taking the test.

Age-standardised scores are adjusted for age.

## Working out age at date of test

You can use the 'age calculator' tool at <http://learning.gov.wales/resources/browse-all/reporting-and-interpreting-national-test-results-2018/?lang=en> to calculate age at date of test using the learner's date of birth and the date on which the test was taken. This will give you the learner's age in years and completed months.

## Working out an age-standardised score

To work out the age-standardised score for an individual learner you will need:

- their raw score (total number of marks awarded when the test was marked)
- their age on the date the test was taken in years and **completed** months.

Use Tables 1 and 2 to look up the corresponding age-standardised score. Using the appropriate table for the test taken, locate the learner's raw score on the left-hand side of the table. Then read across the row to the column headed by the learner's age. The age-standardised score for this learner is in the cell where the row and column intersect. For example, a learner who has taken test EC6 and is 11 years and 3 months (11.03) and has a raw score of 23 would have an age-standardised score of 97.

## Interpreting an age-standardised score

When age-standardised score scales are developed, the average raw score for all the learners of a given age taking the test is set to be equivalent to a standardised score of 100. About 68 per cent of learners would be expected to have age-standardised scores

between 85 and 115. An age-standardised score lower than 85 **might** suggest some difficulty with reading as measured on the test. An age-standardised score greater than 115 **might** suggest that a learner is performing well in comparison to other learners of the same age and that it may be appropriate to provide them with more challenging reading-related activities.

Very low age-standardised scores are shown in the table as \* which can be interpreted as 'less than 70' and very high scores are shown as \*\* which can be interpreted as 'more than 140'. The tests are designed to measure the range of performance in reading that would be expected from learners in the specified year groups. In the case of learners whose reading skills are developing more slowly than would be expected for their age or learners who achieve very highly on the tests, their scores cannot be determined as accurately as those for learners scoring within the range expected. If a school wishes to calculate class averages, the use of 69 or 141 would be accurate enough estimates for these learners.

**Table 1: EC6 raw score to age-standardised score conversion table**

<b>Year 7 English EC6</b>													
<b>Raw score</b>	<b>Age in years and (completed) months</b>												
	<b>10.08</b>	<b>10.09</b>	<b>10.10</b>	<b>10.11</b>	<b>11.00</b>	<b>11.01</b>	<b>11.02</b>	<b>11.03</b>	<b>11.04</b>	<b>11.05</b>	<b>11.06</b>	<b>11.07</b>	<b>11.08</b>
0	*	*	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*
5	72	72	71	71	71	71	71	71	71	71	*	*	71
6	74	74	74	74	74	73	73	73	73	73	72	73	74
7	76	76	76	76	76	76	76	75	75	75	75	75	76
8	78	78	78	78	78	78	77	77	77	77	77	77	78
9	81	80	80	80	79	79	79	79	78	78	78	78	79
10	83	82	82	81	81	81	80	80	80	79	79	80	80
11	84	84	83	83	83	82	82	81	81	81	80	81	82
12	86	85	85	84	84	84	83	83	82	82	82	82	83
13	87	87	86	86	85	85	85	84	84	83	83	84	85
14	89	88	88	87	87	86	86	85	85	85	85	85	86
15	90	89	89	88	88	88	87	87	86	86	86	87	87
16	91	91	90	90	89	89	88	88	88	87	87	88	89
17	92	92	91	91	90	90	90	89	89	89	89	89	90
18	94	93	93	92	92	91	91	91	90	90	90	90	91
19	95	95	94	94	93	93	92	92	92	91	91	92	92
20	97	96	96	95	95	94	94	93	93	93	93	93	94
21	98	97	97	96	96	96	95	95	94	94	94	94	95
22	100	99	99	98	97	97	96	96	96	95	95	96	96
23	101	100	100	99	99	98	98	97	97	97	97	97	98
24	102	102	101	101	100	100	99	99	99	98	98	99	99

## Year 7 English EC6

Raw score	Age in years and (completed) months											
	11.09	11.10	11.11	12.00	12.01	12.02	12.03	12.04	12.05	12.06	12.07	12.08
0	*	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*
5	72	72	72	72	72	72	72	72	72	72	72	72
6	75	75	74	74	74	74	74	74	74	73	73	73
7	77	77	77	76	76	76	76	76	75	75	75	75
8	78	78	78	78	78	78	78	77	77	77	76	76
9	80	80	80	80	79	79	79	79	78	78	78	78
10	81	82	82	81	81	81	80	80	79	79	79	79
11	83	83	83	83	82	82	82	81	81	80	80	80
12	84	84	84	84	84	83	83	82	82	82	81	81
13	85	85	85	85	85	84	84	84	83	83	83	82
14	87	87	87	86	86	86	85	85	84	84	84	83
15	88	88	88	88	87	87	86	86	86	85	85	85
16	89	89	89	89	88	88	88	87	87	86	86	86
17	91	90	90	90	90	89	89	88	88	88	87	87
18	92	92	91	91	91	91	90	90	89	89	89	88
19	93	93	93	93	92	92	91	91	91	90	90	90
20	94	94	94	94	93	93	92	92	92	91	91	91
21	95	95	95	95	95	94	94	93	93	93	93	93
22	97	97	97	97	96	96	95	94	94	94	94	94
23	99	99	98	98	98	97	97	96	95	95	95	95
24	100	100	100	99	99	99	98	98	97	97	96	96





**Table 2: ED6 raw score to age-standardised score conversion table**

<b>Year 8/9 English ED6</b>													
<b>Raw score</b>	<b>Age in years and (completed) months</b>												
	<b>12.08</b>	<b>12.09</b>	<b>12.10</b>	<b>12.11</b>	<b>13.00</b>	<b>13.01</b>	<b>13.02</b>	<b>13.03</b>	<b>13.04</b>	<b>13.05</b>	<b>13.06</b>	<b>13.07</b>	<b>13.08</b>
0	*	*	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*	*
5	71	71	71	71	71	*	*	*	*	*	*	*	*
6	73	73	73	73	73	73	72	72	71	71	71	71	71
7	76	75	75	75	75	75	74	74	73	73	73	73	73
8	77	77	77	77	77	77	76	76	75	75	75	74	74
9	79	79	78	78	78	78	78	77	77	77	76	76	76
10	80	80	80	80	79	79	79	78	78	78	78	78	77
11	81	81	81	81	81	81	80	80	79	79	79	79	79
12	83	82	82	82	82	82	81	81	81	80	80	80	80
13	84	84	83	83	83	83	83	82	82	82	81	81	81
14	85	85	85	85	85	84	84	83	83	83	82	82	82
15	86	86	86	86	86	86	85	85	84	84	84	83	83
16	87	87	87	87	87	87	86	86	85	85	85	84	84
17	89	89	88	88	88	88	87	87	86	86	86	86	85
18	90	90	89	89	89	89	88	88	87	87	87	87	87
19	91	91	91	90	90	90	89	89	88	88	88	88	88
20	92	92	92	92	91	91	91	90	90	89	89	89	89
21	93	93	93	93	92	92	92	91	91	90	90	90	90
22	95	94	94	94	94	93	93	92	92	92	91	91	91
23	96	96	95	95	95	94	94	94	93	93	92	92	92
24	97	97	96	96	96	96	95	95	94	94	94	93	93



## Year 8/9 English ED6

Raw score	Age in years and (completed) months											
	13.09	13.10	13.11	14.00	14.01	14.02	14.03	14.04	14.05	14.06	14.07	14.08
0	*	*	*	*	*	*	*	*	*	*	*	*
1	*	*	*	*	*	*	*	*	*	*	*	*
2	*	*	*	*	*	*	*	*	*	*	*	*
3	*	*	*	*	*	*	*	*	*	*	*	*
4	*	*	*	*	*	*	*	*	*	*	*	*
5	*	*	*	*	*	*	*	*	*	*	*	*
6	71	71	71	71	71	71	71	*	*	*	*	*
7	73	73	73	72	72	72	72	72	71	71	71	71
8	74	74	74	74	74	74	74	73	73	72	72	72
9	76	76	76	75	75	75	75	74	74	74	74	73
10	77	77	77	77	77	76	76	76	75	75	75	75
11	79	78	78	78	78	78	77	77	77	76	76	76
12	80	80	79	79	79	79	78	78	78	77	77	77
13	81	81	80	80	80	80	79	79	79	78	78	78
14	82	82	82	81	81	81	80	80	80	79	79	79
15	83	83	83	82	82	82	81	81	81	80	80	79
16	84	84	84	83	83	83	83	82	82	81	81	80
17	85	85	85	84	84	84	84	83	83	82	82	81
18	86	86	86	86	85	85	85	84	84	83	83	82
19	88	87	87	87	86	86	86	85	85	84	84	84
20	89	89	88	88	87	87	87	86	86	85	85	85
21	90	90	89	89	88	88	88	87	87	87	86	86
22	91	91	90	90	90	89	89	88	88	88	87	87
23	92	92	91	91	91	90	90	90	89	89	89	88
24	93	93	93	92	92	92	91	91	91	90	90	90





## Progress measures

The progress measure scales are calculated separately for each national curriculum year group and each test.

Progress measures are not adjusted for age.

## Working out a progress measure

To work out the progress measure for an individual learner you will need their raw score (total number of marks awarded when the test was marked) and their year group.

Use Tables 3 and 4 to look up the corresponding progress measure. Please ensure you refer to the correct year group when looking up learners' progress measures.

Using the appropriate table for the test taken, locate the learner's raw score on the left-hand side of the table. Then read across the row to the column headed by the learner's year group. The progress measure for this learner is in the cell where the row and column intersect.

For example, a learner in national curriculum Year 8 who has taken test ED6 and has a raw score of 20 would have a progress measure of 987.

A learner in national curriculum Year 9 who has taken test ED6 and has a raw score of 20 would have a progress measure of 982.

## Interpreting a progress measure

The progress measure shows how well an individual learner has done in a given test compared with **all other learners in the same national curriculum year group taking the same test**. The progress measure should be presented as a time series allowing for a learner's achievement in the tests to be tracked over time.

The mean of the progress measure for each year group is set at 1000, and the scores range from 950 to 1050. Learners achieving between 980 and 1020 (i.e. scores within one standard deviation of the mean) have a progress measure that is in line with learners in the same year group (taking the same test). Approximately 68 per cent of learners will have a score in this range. Learners scoring outside of this range (i.e. below 980 or above 1020) have a progress measure that is either below or above that of most learners in their year group.

The progress measure for 2018 should be considered alongside any previous progress measure for this learner. Progress measures that are broadly similar from year to year would suggest that a learner is making steady progress within their year group. Small variations in the score from year to year are to be expected but if there are large changes in the progress measure between one year and the next, then this suggests that a learner has made either more or less progress than the rest of the learners taking the test. Please refer to the practitioner guidance at <http://learning.gov.wales/resources/browse-all/reporting-and-interpreting-national-test-results-2018/?lang=en> for further information on interpreting progress measures.

**Out-of-year testing**

Where a learner has taken a test that is different from their national curriculum year group test, look up their progress measure using the table appropriate for the test taken. Their progress measure compares the learner to all other learners who have taken the same test. For example, for a learner in national curriculum Year 8 who has taken test EC6 and has a raw score of 23 it is possible to look up a Year 7 progress measure. A raw score of 23 gives a Year 7 progress measure of 996 which indicates that the learner has performed at around the same level as the average learner in Year 7.

When comparing progress measures over time it is important to consider the reference group (the national curriculum year group the learner is compared with), as this may be different from one year to the next.

**Table 3: Year 7 Test EC6 raw score to progress measure conversion table**

<b>Total score</b>	<b>Progress measure Year 7</b>
0	950
1	950
2	952
3	956
4	960
5	963
6	966
7	968
8	970
9	972
10	974
11	976
12	977
13	979
14	981
15	982
16	984
17	985
18	987
19	989
20	990
21	992
22	994
23	996
24	998
25	1000
26	1002
27	1004
28	1007
29	1010
30	1012
31	1015
32	1019
33	1023
34	1028
35	1034
36	1041
37	1050
38	1050

**Table 4: Year 8 and Year 9 Test ED6 raw score to progress measure conversion table**

<b>Total score</b>	<b>Progress measure Year 8</b>	<b>Progress measure Year 9</b>
0	950	950
1	950	950
2	950	950
3	954	952
4	958	955
5	961	958
6	964	961
7	966	963
8	968	965
9	970	967
10	972	968
11	973	969
12	975	971
13	976	972
14	978	974
15	979	975
16	981	977
17	982	978
18	984	979
19	985	981
20	987	982
21	988	984
22	990	985
23	992	987
24	993	989
25	995	990
26	997	992
27	999	994
28	1001	997
29	1004	999
30	1006	1001
31	1009	1004
32	1012	1007
33	1015	1010
34	1019	1014
35	1023	1018
36	1028	1023
37	1034	1029
38	1041	1036
39	1050	1046
40	1050	1050
41	1050	1050

