2003 Year 4 Reading and Spelling Optional SATs Age Standardised Scores

This section explains how to work out age standardised scores for reading and spelling. They are not available for writing.

Age standardised scores take into account the child's age in years and months, so you have a better indication of how each child is performing relative to other children of the same age. It also means that the tests can be administered at different points in the school year including, in the case of the year 4 tests, in the first half of the autumn term in year 5 and comparative information still be obtained. The standardised scores in this booklet cover the age range 8 years 5 months to 10 years 3 months. If you have decided to give the tests to children outside this range, you will not be able to use the tables. You will still, though, be able to calculate national curriculum levels.

Calculating age standardised scores

To convert a raw score into an age standardised score:

- list the ages of all children in your class in *years and completed months* at the time of testing;
- for each child, locate his or her age in years and months along the top of the table;
- locate the child's raw score down the left side of the table;
- read off the standardised score from where the row and column meet.

Statistically, the 'average' standardised score is 100. A higher score is above 'average' and a score below 100 is below 'average'. About two-thirds of children will have standardised scores between 85 and 115. Almost all children fall within the range 70 to 130, so scores outside this range can be regarded as exceptional.

Making use of age standardised scores

If you choose to work out age standardised scores, you may use this additional information about the children's performance in various ways, for example:

- Age standardised scores could be averaged across a group, for example a class or year group. In the average school, year group or class, the mean score should be close to 100; if it is much above or below this, the performance of your class or school varies from the national 'average'.
- You may include it as part of the information to parents, eg: *an age standardised score of 112 shows us that the test performance was above average for his or her age*.
- You may be able to identify patterns and results which indicate teaching and learning issues to be addressed, eg: *the difference in older/younger children's performance.*
- Similarly, age standardised scores can help analyses where age is possibly a factor in differences between boys and girls, or children who have English as an additional language and those who do not. In order to provide useful information, these groups need to be reasonably large; small groups will not provide reliable information.
- The progress made by an individual, a class or a school can be monitored from one year to the next. Age standardised scores can be calculated and reported for individual children. However, because of the nature of the scores and the fact that they are a statistical estimate (see confidence bands below), the scores are much more reliable when calculated for groups of children. In addition, if reported to parents, the fact that a child who is making typical progress year to year will remain on a similar age standardised score will need to be explained.

National comparisons – using the shaded bands

The tables of standardised scores are divided into five shaded bands. These bands give an indication of how the scores relate to the national population. The band nearest the top of the table contains the scores that correspond to the lowest fifth of the population; the next band, the next fifth; and so on. If a child has a score in the final band, you know that his or her score is in the top 20 per cent nationally, once age has been taken into account.

Very low and very high standardised scores are printed in the table as . This means that they would be below the lowest score in the table or above the highest, but cannot be calculated with the necessary degree of statistical reliability. If an exact score is needed, for example to calculate an average for the class in reading, 69 or 141 should be used as appropriate for these children.

Confidence bands

As the standardised scores in the table are derived from only one short test, some margin of error is inevitable, as is the case for all standardised tests. A margin of error does not mean children have been assessed incorrectly. It is simply a statistical estimate, based on the fact that tests can sample only the particular area of learning which they assess. 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 child's true score lies within the confidence band. In this case, the 90 per cent confidence band is plus or minus 9 for reading and 8 for spelling. So, for example, if a child has a standardised score of 110 in reading, you can be 90 per cent certain that the true score is between 101 and 119.

Reading test

Raw score □	Age in years and months																						
	8.05	8.06	8.07	8.08	8.09	8.10	8.11	9.00	9.01	9.02	9.03	9.04	9.05	9.06	9.07	9.08	9.09	9.10	9.11	10.00	10.01	10.02	10.03
0	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
2	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
3	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
4	72	71	71	70	70	70	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
5	74	74	74	73	73	73	72	72	71	71	71	70	70	□	□	□	□	□	□	□	□	□	□
6	77	77	76	76	75	75	75	74	74	73	73	73	72	72	72	71	71	70	70	70	□	□	□
7	79	79	78	78	78	77	77	76	76	76	75	75	74	74	74	73	73	73	72	72	71	71	71
8	81	81	80	80	79	79	79	78	78	78	77	77	76	76	76	75	75	74	74	74	73	73	72
9	83	82	82	81	81	81	80	80	80	79	79	79	78	78	77	77	77	76	76	75	75	75	74
10	84	84	83	83	83	82	82	82	81	81	80	80	80	79	79	79	78	78	77	77	77	76	76
11	86	85	85	84	84	84	83	83	83	82	82	81	81	81	80	80	80	79	79	79	78	78	77
12	87	87	86	86	85	85	85	84	84	83	83	83	82	82	82	81	81	81	80	80	80	79	79
13	89	88	88	87	87	86	86	86	85	85	84	84	84	83	83	83	82	82	81	81	81	80	80
14	90	89	89	89	88	88	87	87	86	86	86	85	85	84	84	84	83	83	83	82	82	82	81
15	92	91	91	90	90	89	89	88	88	87	87	87	86	86	85	85	84	84	84	83	83	83	82
16	93	93	92	92	91	91	90	90	89	89	88	88	87	87	87	86	86	85	85	85	84	84	83
17	95	94	94	93	93	92	92	91	91	90	90	89	89	88	88	87	87	87	86	86	85	85	84
18	97	96	96	95	94	94	93	93	92	92	91	91	90	90	89	89	88	88	87	87	87	86	86
19	98	98	97	97	96	95	95	94	94	93	93	92	92	91	91	90	90	89	89	88	88	87	87
20	100	99	99	98	98	97	96	96	95	95	94	94	93	93	92	92	91	91	90	90	89	89	88
21	101	101	100	99	99	98	98	97	97	96	96	95	95	94	94	93	93	92	92	91	91	90	90
22	103	102	102	101	100	100	99	99	98	98	97	97	96	96	95	95	94	93	93	92	92	91	91
23	105	104	103	103	102	101	101	100	100	99	99	98	98	97	97	96	96	95	94	94	93	93	92
24	106	106	105	105	104	103	103	102	101	101	100	100	99	99	98	98	97	97	96	95	95	94	94
25	108	108	107	106	106	105	104	104	103	102	102	101	101	100	100	99	99	98	98	97	96	96	95
26	110	109	109	108	107	107	106	106	105	104	104	103	102	102	101	101	100	99	99	99	98	97	97
27	112	111	111	110	109	109	108	107	107	106	106	105	104	104	103	102	102	101	101	100	99	99	98
28	114	113	113	112	111	111	110	109	109	108	107	107	106	106	105	104	104	103	102	102	101	101	100
29	116	115	115	114	113	113	112	111	111	110	109	109	108	107	107	106	106	105	104	104	103	102	102
30	118	117	117	116	115	115	114	113	113	112	111	111	110	109	109	108	108	107	106	106	105	104	104
31	120	119	119	118	117	117	116	116	115	114	114	113	112	112	111	110	110	109	108	108	107	107	106
32	122	122	121	120	120	119	118	118	117	116	116	115	114	114	113	112	112	111	111	110	109	109	108
33	124	124	123	123	122	121	121	120	119	119	118	117	117	116	116	115	114	114	113	112	112	111	110
34	127	126	126	125	124	124	123	122	122	121	121	120	119	119	118	117	117	116	115	115	114	113	113
35	129	129	128	127	127	126	126	125	124	124	123	123	122	121	121	120	119	119	118	117	117	116	116
36	132	131	131	130	130	129	128	128	127	126	126	125	125	124	123	123	122	122	121	120	120	119	118
37	135	134	134	133	133	132	131	131	130	130	129	128	128	127	126	126	125	125	124	123	123	122	122
38	138	138	137	137	136	135	135	134	134	133	132	132	131	130	130	129	129	128	127	127	126	126	125
39	□	□	□	140	140	139	139	138	137	137	136	136	135	134	134	133	133	132	131	131	130	129	129
40	□	□	□	□	□	□	□	□	□	□	□	140	140	139	138	138	137	137	136	135	135	134	134
41	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	140	139
42	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
43	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
44	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□

Spelling test

Raw score □	Age in years and months																						
	8.05	8.06	8.07	8.08	8.09	8.10	8.11	9.00	9.01	9.02	9.03	9.04	9.05	9.06	9.07	9.08	9.09	9.10	9.11	10.00	10.01	10.02	10.03
0	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□	□
1	79	78	78	77	77	76	76	75	74	74	73	73	72	72	71	71	70	70	□	□	□	□	□
2	84	83	83	82	82	81	81	80	80	79	79	78	78	77	77	76	76	75	75	74	74	73	73
3	87	86	86	85	85	84	84	83	83	83	82	82	81	81	80	80	79	79	78	78	77	77	76
4	90	89	89	88	87	87	86	86	85	85	84	84	83	83	82	82	82	81	81	80	80	79	79
5	92	92	91	90	90	89	89	88	87	87	86	86	85	85	84	84	83	83	82	82	82	81	81
6	95	94	93	93	92	91	91	90	89	89	88	88	87	87	86	86	85	85	84	84	83	83	82
7	97	96	95	95	94	93	93	92	91	91	90	90	89	88	88	87	87	86	86	85	85	84	84
8	99	98	97	97	96	95	95	94	93	93	92	91	91	90	90	89	88	88	87	87	86	86	85
9	100	100	99	98	98	97	96	96	95	95	94	93	93	92	91	91	90	89	89	88	88	87	87
10	102	102	101	100	100	99	98	98	97	96	96	95	95	94	93	93	92	91	91	90	89	89	88
11	104	103	103	102	101	101	100	100	99	98	98	97	96	96	95	94	94	93	92	92	91	90	90
12	106	105	105	104	103	103	102	101	101	100	99	99	98	97	97	96	96	95	94	94	93	92	92
13	108	107	106	106	105	105	104	103	103	102	101	101	100	99	99	98	97	97	96	96	95	94	94
14	110	109	108	108	107	107	106	105	105	104	103	103	102	101	101	100	100	99	98	98	97	96	96
15	111	111	110	110	109	109	108	107	107	106	106	105	104	104	103	102	102	101	101	100	99	99	98
16	113	113	112	112	111	111	110	110	109	109	108	107	107	106	106	105	104	104	103	102	102	101	101
17	116	116	115	114	114	113	113	112	112	111	111	110	110	109	109	108	107	107	106	106	105	104	104
18	118	118	118	117	117	117	116	116	115	115	114	114	113	113	112	112	111	111	110	110	109	108	108
19	122	122	121	121	121	121	120	120	119	119	119	118	118	117	117	117	116	116	115	115	114	114	113
20	135	135	134	134	134	134	133	133	133	133	132	132	132	132	131	131	131	131	130	130	130	130	129