

OHIO ACHIEVEMENT ASSESSMENT GRADE 3 READING TEST STATISTICAL SUMMARY

Spring 2015 Test Administration

These data describe the entire population of Ohio grade 3 public school students (including community schools) tested during the Spring 2015 administration.

Table 1 – Summary of Parameters from the Spring 2015 Administration of the Ohio Achievement Assessment for Grade 3 Reading.

N-count	125,927
Max Raw Score	49
Raw Score Mean	37.88
Raw Score Standard Deviation	8.76
Raw Score SEM	3.06
Max Scaled Score	496
Scaled Score Mean	421.57
Scaled Score Standard Deviation	29.88
Scaled Score SEM	10.44
Reliability	0.88

Table 2 – Cut Score Points for the Basic, Proficient, Accelerated, and Advanced Standards and Percentages of Students at each Performance Level.

Standard	Raw Score	Scaled Score	Percent
Limited	Below 25 Below 385		9.7
Basic	25	385	11.4
Proficient	32	400	17.3
Accelerated	38	415	23.5
Advanced	43	432	38.2

Table 3 – Subscale (Raw Score) Bands for the Minimally Proficient Student in Grade 3, Spring 2015 Administration.

	Content Standard	Below	At or Near Proficient	Above	Possible Score
	Vocabulary	0 – 6	7 – 9	10	10
Grade 3	Reading Process	0 – 10	11 – 13	14 – 16	16
Reading	Informational Text	0 – 5	6 – 8	9 – 11	11
	Literary Text	0 – 7	8 – 10	11 – 12	12

Equating and Scaling: How Raw Scores Are Converted Into Scaled Scores

TEST FORM CONSTRUCTION

The test form for the Spring 2015 Ohio Grade 3 Reading Achievement Test was previously used for operational testing in Spring 2014.

POST-TEST EQUATING

Because the test form was used operationally in the spring of 2014, post-test equating was not done.

SCALING

Because the meaning of raw scores changes across test forms and test administrations, scaled scores are usually used in place of raw scores.

After administering the spring 2014 operational test, test items were calibrated and equated on the basis of the spring 2014 early return sample, and Rasch ability estimates were computed for each possible raw score. The Rasch ability estimates were then transformed to the Ohio Grade 3 Reading Achievement Test scale, on which the proficient standard is equal to 400. The raw score to scale score conversion tables for the Spring 2015 test administration are the same as for the Spring 2014 test administration.

OHIO ROUNDING RULE

When transforming raw scores to scaled scores, if the scaled score nearest to a performance standard cut score is below the cut score, then the scaled score is rounded up to equal the cut score. Otherwise, no special rounding is done. For example, if a raw score is associated with an observed scaled score of 398.94 and 398.94 is the closest observed scaled score to the proficient level cut score, then this value is rounded up to 400, corresponding to the proficient level performance standard. Conversely, if the closest scaled score value to the proficient level cut score is 401.12, no special rounding rules are invoked because the value is greater than the cut score.



Table 4 – Raw Score to Scaled Score Conversion Table (Cut scores indicated in **bold**.)

Raw Score	Scaled Score	Raw Score	Scaled Score
0	260	25	385
1	279	26	387
2	297	27	389
3	308	28	391
4	317	29	393
5	323	30	395
6	329	31	398
7	334	32	400
8	338	33	402
9	342	34	404
10	345	35	406
11	349	36	409
12	352	37	411
13	355	38	415
14	358	39	417
15	361	40	420
16	363	41	423
17	366	42	427
18	368	43	432
19	371	44	436
20	373	45	442
21	376	46	450
22	378	47	460
23	380	48	478
24	382	49	496