Technical Manual

CAT·4
CANADIAN ACHIEVEMENT TESTS
FOURTH EDITION

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The development of the fourth edition of the *Canadian Achievement Tests* would not have been possible without the contribution of dozens of consultants, item writers and test reviewers from across Canada. Special mention goes to the following people who helped manage the development:

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Description

The *Canadian Achievement Tests, Fourth Edition* (CAT·4) are standardized achievement tests in Reading, Writing and Mathematics for Kindergarten through grade 12. Tables 1 and 2 show the allocation of test levels to grades, the multiple-choice (MC) and constructed-response (CR) tests available at each level, and the number of items/tasks for each test.

Table 1: Allocation of CAT·4 test levels to grades

Grade	CAT·4 Level	
	Fall	Spring
K	-	10
1	10	11
2	11	12
3	12	13
4	13	14
5	14	15
6	15	16
7	16	17
8	17	18
9	18	19
10	19	20–22
11	20–22	20–22
12	20–22	20–22
postsecondary	20–22	20–22

Table 2: Number of test items/tasks by test and level

	Level 10 #items	Level 11 #items	Level 12 #items	Level 13 #items	Levels 14–19 #items	Levels 20–22 #items
Reading Tests						
Reading (MC)	40	40	40	48	48	40
Word Analysis (MC)	24	24	30	30		
Vocabulary (MC)		24	30	33	40	30
Response to Text (CR)		6	6	6	6	6
Writing Tests						
Writing Conventions (MC)			30	36	40	30
Spelling (MC, CR for L11--13)		20	20	20	30	30
Writing (CR)		5	5	5	5	5
Mathematics Tests						
Mathematics (MC)	36	48	48	60	60	40
Computation & Estimation (MC)		36	36	36	36	36
Math Processes (CR)	5	5	5	5	5	

Development

Language and mathematics curriculum and assessment specialists from different regions of Canada drew up the test specifications after careful consideration of the various provincial curricula. Each test was designed to assess a number of objectives. The CAT·4 *Teacher Resource Manual* specifies the objectives and their definitions for the relevant test levels. For the multiple-choice tests, most objectives are represented by at least 12 test items.

Language curriculum specialists selected reading passages from published works. The language and mathematics test items and tasks were written by teachers from different regions in Canada and went through many rounds of review and revision by curriculum and assessment specialists from different regions of Canada.

A number of criteria guided the selection of reading passages and the writing and editing of items. The following is a list of some of the more important criteria:

1. Most of the passages in the Reading tests were to be at grade level, although a very easy and a very difficult passage at each level was desirable in order to facilitate discrimination among low and high ability students respectively. The reading levels were determined from teacher judgments.
2. As a rule, the reading level of mathematics items was to be at least one grade level below the grade for which the items were intended.
3. Test content was to be free of racial, ethnic, gender and social class stereotypes.
4. Test content was to reflect core Canadian values and to accurately depict the ethnic composition and occupational structure of Canadian society.

Norming

During the 2007 calendar year, the pool of CAT·4 items was administered to over 50,000 students across Canada. The list of participating schools is shown in Appendix A.

Sampling Design

A sample of Canadian anglophone schools was taken from a list provided by *Scott's Directories*. The schools were first stratified by region, area, type and grade range. The strata were defined as follows:

Region

Schools were stratified according to the first letter of their postal codes, as shown below.

V = British Columbia
T = Alberta
S = Saskatchewan
R = Manitoba
P = Northern Ontario
N = Southwestern Ontario
M = Toronto
L = Central Ontario
K = Eastern Ontario
H = Montreal
G, J = Quebec (excluding Montreal)
E = New Brunswick
C = Prince Edward Island
B = Nova Scotia
A = Newfoundland/Labrador
Y = Yukon Territory
X = Northwest Territories/Nunavut

Area

Schools were also stratified according to the first number of their postal codes. Those with "0" as the first number were classified as "rural" schools; those with any other number as the first number were classified as "non-rural" schools.

Type

Schools were further stratified by placing them in one of three categories: 1) private; 2) native; 3) public. For all regions, schools from Catholic school jurisdictions were classified as public schools.

Grade range

In addition, schools were stratified according to the grades taught in each school. Province/territory-specific criteria were use to classify schools as "secondary"or "elementary."

So the sampling design defined 17×2×3×2=204 strata cells (with some cells containing no schools). Within each of the cells, the assigned enrolments were summed across schools in order to get an estimate of the enrolment for the cell. All cells were then classified into one of two groups—Secondary

Schools and Elementary Schools. Then, enrolments were summed to get the total enrolment for the Secondary Schools group and the total enrolment for the Elementary Schools group.

The proportion of students needed from a particular cell was estimated by dividing the total enrolment for the cell by the total enrolment for the group to which the cell belonged (Secondary Schools or Elementary Schools). The proportion of students needed from each cell was then multiplied by 5000 (the target sample size for each grade) to get an estimate of the number of students needed from that cell at each grade.

The average school enrolment in a particular cell was divided by the number of grades defined by the cell's grade-range. (For example, the 10–12 grade-range category defines three grades: 10, 11 and 12.) This provided an estimate of the number of students per grade for each school belonging to the cell. An estimate of the number of schools needed from each cell was estimated by dividing the estimated number of students needed per grade by the estimated number of students per grade for each school. The estimate for the number of required schools was then increased by between 50% and 100% (depending on the province) in order to over-sample in anticipation of schools declining participation. Estimates were rounded to the nearest whole number, except estimates between 0 and .5, which were assigned a 1. Therefore, at least one school was sampled from each of the cells that had a school. Schools within a cell were sampled randomly, with all schools having an equal chance of selection.

School Characteristics

A School Characteristics Questionnaire for Principals was distributed to the 290 schools that participated in the CAT-4 norming study so as to obtain a profile of those schools. A total of 172 schools (59%) responded. Table 3 presents a general profile of those schools. It shows that every province/territory was represented in this study. The school survey sample included schools from two levels, elementary (71.51%) and secondary (28.49%), as well as three different types of schools, public (87.79%), private (9.30%), and native (2.33%).

Table 3: General profile of the schools that participated in the school survey

School profile	Number of schools		
Province	**Total (n=172)**	**Elementary (n=123)**	**Secondary (n=49)**
British Columbia	13	7	6
Alberta	28	19	9
Saskatchewan	18	14	4
Manitoba	12	7	5
Ontario	80	60	20
Quebec (anglophone schools only)	3	0	3
New Brunswick	3	3	0
Prince Edward Island	1	1	0
Nova Scotia	10	8	2
Newfoundland/Labrador	2	2	0
Yukon Territory	1	1	0
Northwest Territories/Nunavut	1	1	0
School Type			
Public/Separate	151	113	38
Private	16	6	10
Native	4	3	1
No information	1	1	0

Table 4 presents the distribution of student enrolment in the 172 schools that participated in the survey. It shows that more than half of the students (53%) were in Ontario, 14% in Alberta, and 8% in British Columbia and Saskatchewan respectively. The remaining 17% were in other provinces and territories. (The low percentage of student enrolment in Quebec is due to the fact that only anglophone schools in that province were included in the norming study.) The provincial/territorial enrolment was juxtaposed with the national numbers. Note that Statistics Canada had stopped collecting data on the number of private school enrolments after 1998; hence 1998 national enrolment data that includes all types of schools is provided. Compared to the 1998 enrolment profile, the norming sample overrepresented students in Ontario (+4%), and Saskatchewan (+3%), but underrepresented British Columbia (-7%). The inconsistency between the national enrolment profile and the norming sample might have resulted from a bias in questionnaire non-response (e.g., lower response rate for British Columbia and higher response rate for Ontario). The inconsistency may also be due to the national student enrolment profile having changed since 1998.

Table 4: Student enrolment for schools that participated in the school survey

Province	Student Enrolment in Participating Schools		Student Enrolment in Canada, 1998*	
	Number	Percent	Number	Percent
British Columbia	4,121	8%	667,070	15%
Alberta	7,315	14%	553,726	13%
Saskatchewan	4,308	8%	212,941	5%
Manitoba	2,640	5%	223,826	5%
Ontario	28,859	53%	2,161,483	49%
Quebec (anglophone schools only)	1,249	2%	1,165,504 **	3%
New Brunswick	1,193	2%	135,254	3%
Prince Edward Island	2	<1%	24,814	1%
Nova Scotia	3,486	6%	167,162	4%
Newfoundland/Labrador	303	1%	106,494	2%
Yukon Territory	52	<1%	6,378	<1%
Northwest Territories/Nunavut	436	1%	18,047	<1%
Total	53,964	100%	5,442,699	100%

*Source: Statistics Canada, *Education in Canada*, 1998. Cat. 81-229-XPB, Table 1 and *Scott's Directory of Canadian Schools 1998/99,* Southam Information Products Ltd.
** In order to make the data more comparable, the enrolment figure for Quebec includes only students in anglophone schools, which was based on an estimate from Scott's Directory of Canadian Schools 1998/99.

Table 5 shows student enrolment by type of school. Most of the students (94%) were enrolled in publicly funded schools. The juxtaposition of enrolments reported in the survey with those of the nation supports the claim that the proportion of the sample coming from each school type reflects the proportion of the Canadian student population found in each school type.

Table 6 shows student enrolment by grade level. The percentages of students were quite evenly distributed in each of the Grades, and resemble those of the national population, which were between 7% and 10%. Representation for lower grades tended to be slightly lower, and representation for Grade 7 and above tended to be slightly higher than the national population.

Table 5: Student enrolment for schools that participated in the school survey—by school type

School Type	Student Enrolment in the study		Student Enrolment in Canada, 1998*	
	Number	Percent	Number	Percent
Public/Separate	50,545	94%	5,065,914	94%
Private	2,710	5%	279,969	5%
Native	377	<1%	68,672	1%
No information	332	<1%	--	--
Total	53,964	100%	5,414,555	100%

*Source: Statistics Canada, Education in Canada, 1998. Cat. 81-229-XPB, Table 7.

Table 6: Student enrolment for schools that participated in the school survey—by grade

Grade	Student Enrolment in participating Schools		Student Enrolment in Canada, 1998*	
	Number	Percent	Number	Percent
K	4494	8.3%	511,088	9.6%
1	3523	6.5%	422,209	7.9%
2	3592	6.7%	403,300	7.6%
3	3540	6.6%	393,087	7.4%
4	3741	6.9%	387,366	7.3%
5	3784	7.0%	390,632	7.3%
6	3908	7.2%	397,345	7.5%
7	4579	8.5%	418,479	7.9%
8	4760	8.8%	405,208	7.6%
9	4874	9.0%	411,162	7.7%
10	4630	8.6%	410,136	7.7%
11	4091	7.6%	387,486	7.3%
12	4448	8.2%	391,119	7.3%
Total	53964	100.0%	5,328,617	100.0%

*Source: Statistics Canada, Education in Canada, 1998. Cat. 81-229-XPB, Table 6.

The survey also collected socio-demographic information about the school population. The types of information included home language, family composition and socio-economic status. Table 7 compares data provided by the schools with parallel 2006 Census data collected by Statistics Canada. The purpose was to determine how representative the participating schools were of the nation's population. The comparison indicates that, in general, characteristics of the communities served by these schools are fairly similar to those of the national population and hence reflective of the student population at large. The comparisons are summarized below:

- The percentage of students in the study who speak a language other than English at home was 9.0%, compared to 10.4% for the Canadian population (outside of Quebec).
- The percentage of students in French immersion program was 6%, compared to 7.6% for the population in Canada (outside of Quebec).
- The percentage of single parent families reported by the schools was 24%, compared to 25.8% of the single parent families (among all families with children) in the nation.
- While 62% of students in the study came from homes where both parents work, the 2006 census data shows that 57.5% of all females aged 25 to 54 reported employment in the labour market.[1]
- Sixteen percent of the families reported receiving some form of income assistance, compared to an 11%-13% national level of families with low income.
- Twenty percent of parents in the studied schools did not complete high school, whereas the, national level was 23.8%.
- Thirty-three percent of parents in the studied schools received a university-equivalent degree, compared to the national level of 22.6%.

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[1]No specific information about the percentage of school-age children whose parents were both working was available; hence, information about employment rate of women aged 25-54 was reported instead.

Table 7: Comparison of the school populations in the study with the Canadian populations in the census

School Characteristics	School population in the study	Canadian population (2006 Census)
Students who have English as second language	9%	10.4%[a]
French Immersion	6%	7.6%[b]
Students from lone parent families	24%	25.8%[c]
Students with both parents working	62%	57.5%[d]
Families on income assistance	16%	11.4%–13.0%[e]
Parent's Education		
did not complete high school	20%	23.8%[f]
university graduates	33%	22.6%[g]

[a.] Statistics Canada, 2006 Census, Reported language spoken most at home. Calculated from the table retrieve from http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/hlt/97-555/T402-eng.cfm?Lang=E&T=402&GH=4&SC=1&S=99&O=A

[b.] Statistics Canada. Official Languages: Annual Report 2007-2008, Volume 1, Official Language Support Programs." Canadian Heritage, Catalogue. No. CH10-2008-1, 2008, pg. 31.

[c.] Statistics Canada, Canadians in Context — Households and Families. Retrieved from http://www4.hrsdc.gc.ca/.3ndic.1t.4r@-eng.jsp?iid=37

[d.] Statistics Canada. Employment Rate, Labour Force. Data Retrieved from http://www12.statcan.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GID=837928&GK=0&GRP=1&PID=97614&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=0&Temporal=2006&THEME=80&VID=0&VNAMEE=&VNAMEF=

[e.] Earnings and Incomes of Canadians Over the Past Quarter Century, 2006 Census. Catalogue no. 97-563-X. The rate was 13.0% for children aged 6-16, and was 11.4% for teens aged 15-17.

[f.] Statistics Canada. 2006 Census data, Highest certificate, diploma or degree. Calculated from the table retrieved from http://www12.statcan.gc.ca/census-recensement/2006/dp-pd/tbt/Rp-eng.cfm?LANG=E&APATH=3&DETAIL=0&DIM=0&FL=A&FREE=0&GC=0&GID=0&GK=0&GRP=1&PID=97683&PRID=0&PTYPE=88971,97154&S=0&SHOWALL=0&SUB=0&Temporal=2006&THEME=75&VID=0&VNAMEE=&VNAMEF=

[g.] Same as f.

Tables 8 and 9 present detailed characteristics of those schools that responded to the survey, broken down by elementary/secondary school and by region respectively. Table 8 shows that:

- A slightly higher proportion of students in the participating elementary schools (+4%) spoke English as a second language compared to students in the participating secondary schools
- A higher proportion of students in the participating elementary schools (+8%) were in French immersion programs compared to the students in the participating secondary schools.
- A slightly higher proportion of students in the participating elementary schools (+3%) were from a single-parent family compared to students in the participating secondary schools.
- Five percent more students in the participating elementary schools had parents who did not complete high school compared to students in the participating secondary schools.
- Ten percent fewer students in the participating elementary schools had parents who finished a university degree, compared to students in the participating secondary schools.

Table 8: Characteristics of elementary and secondary schools that participated in the school survey

School Characteristics	Elementary		Secondary		Total	
	No. of Schools	Mean	No. of Schools	Mean	No. of Schools	Mean
Students who have English as second language	53	10%	17	6%	70	9%
French Immersion	8	11%	7	3%	15	6%
Students from lone parent families	101	25%	34	22%	135	24%
Students with both parents working	100	61%	31	64%	131	62%
Families on income assistance	91	16%	30	15%	121	16%
Parent's Education						
did not complete high school	91	22%	30	17%	121	20%
university graduates	93	30%	30	40%	123	33%

Table 9 shows that, for the norming schools in the Atlantic region who participated in the school survey, there was a lower proportion of students who spoke English as a second language. For the Central region, there was a higher proportion of parents who were both working and a higher proportion of parents who were university graduates.

Table 9: Characteristics of schools—by region

School Characteristics	West (n=73)	Central (n=83)	Altantic Provinces (n=16)
Students who have English as second language	10%	10%	3%
Students from lone parent families	23%	25%	23%
Students with both parents working	58%	67%	53%
Families on income assistance	15%	16%	19%
Parents' education			
did not complete high school	22%	19%	18%
university graduates	30%	37%	27%

School principals were also asked to report the number of special education students in their schools, as well as the number of students who were classified as Native, French Immersion or ESL. The principals were further asked to indicate the number of students who took part in the norming study for each of these groups. The purpose was to ascertain the testing practices in the participating schools with regards to specific groups of students.

Table 10 shows that, overall, 61% of the schools in the survey involved their special education students in the norming study, and 45% of the special education students from the surveyed schools participated in the norming study. The participation rates for students from the specific groups were, in general higher in the elementary panel than those in the secondary panel.

Table 10: Participation rates of students with special characteristics—by elementary and secondary panel

	Elementary (n= 123 schools)				Secondary (n= 49 schools)				Total (n= 172 schools)			
	Enrolled		Tested		Enrolled		Tested		Enrolled		Tested	
Student Characteristics	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools
Behaviour-emotional disturbed	646	89	59%	79%	646	36	23%	61%	1292	125	41%	74%
Communication												
-autistic	230	81	40%	52%	63	22	32%	50%	293	103	39%	51%
-speech impaired	386	44	43%	57%	105	18	70%	33%	491	62	49%	50%
-hearing impaired	86	45	36%	49%	41	19	46%	53%	127	64	39%	50%
Intellectual												
-gifted	515	61	67%	77%	334	21	35%	76%	849	82	54%	77%
-cognitive disabled	740	84	51%	65%	373	25	56%	56%	1113	109	43%	63%
Multiple disability	129	47	36%	43%	113	21	7%	38%	242	68	44%	41%
Physical-visual impaired	25	20	32%	35%	16	10	50%	60%	41	30	39%	43%
Severe Learning-Disabled	501	65	55%	65%	275	19	27%	37%	776	84	45%	58%
Others	349	25	55%	72%	315	14	29%	64%	664	39	43%	69%
Native	2152	62	61%	69%	806	17	56%	64%	2958	79	59%	68%
French Immersion	1480	9	25%	56%	575	7	23%	71%	2055	16	24%	63%
ESL	1704	55	55%	71%	390	17	43%	53%	2094	72	53%	67%
Overall			49%	61%			36%	58%			45%	61%

Table 11 reports the same special education student/school's participation rates broken down by region. Note that there was noticeable regional variation with respect to the participation rate of the specific special education groups.

Table 11: Participation rates of students with special characteristics—by region

	West (n= 73 schools)				Central (n= 83 schools)				Atlantic (n=16 schools)			
	Enrolled		Tested		Enrolled		Tested		Enrolled		Tested	
Student Characteristics	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools	Students	Schools
Behaviour-ADD/ADHD	402	55	53%	75%	698	58	36%	74%	192	12	36%	83%
Communication												
-autistic	98	39	47%	54%	155	53	34%	55%	40	11	35%	36%
-speech impaired	247	25	48%	40%	110	26	59%	58%	134	11	42%	55%
-hearing impaired	52	27	46%	52%	61	32	36%	50%	14	5	29%	40%
Intellectual												
-gifted	400	28	58%	79%	363	44	48%	77%	86	10	65%	70%
-cognitive disabled	551	49	48%	59%	423	49	46%	67%	139	11	12%	45%
Multiple Disability	80	24	18%	38%	151	38	25%	45%	11	6	18%	17%
Physical-visual impaired	15	12	60%	58%	18	13	28%	38%	8	5	25%	20%
Severe Learning-Disabled	202	33	33%	48%	514	42	47%	67%	60	9	67%	56%
Others	262	14	42%	71%	397	22	43%	68%	5	3	40%	67%
Native	2446	53	59%	74%	503	22	59%	59%	9	4	56%	75%
French Immersion	870	6	34%	67%	909	8	23%	75%	276	2	0%	0%
ESL	1055	36	53%	67%	963	29	52%	62%	76	7	55%	86%
			45%	62%			41%	62%			38%	48%

Summary Statistics

Items

Appendix 1 shows the item mean (i.e., p-values, the proportion of students answering an item correctly) and standard deviation (SD) by grade level using only spring data. As can be seen from the tables, the easiest items generally appeared near the beginning of each test and the most difficult items appeared near the end of each test. The last column of the table in Appendix 1 displays the item difficulty parameter, denoted as b. The b parameter was estimated based on the Rasch model of Item Response Theory (IRT)[2]. A larger b value indicates an item being more difficult. It can be seen that item difficulty increased as the test level and grade level progressed.

Test Scores

Appendix 2 shows the Test Score summary statistics. The mean and standard deviation for the Rasch student ability estimates (θ) are shown at each test level. The standard error of measurement (SEM) and its corresponding reliability were also reported. The mean student ability scores increased across levels, except from Level 13 to Level 14 for Mathematics and Writing Conventions (Scores were later smoothed). The variation in the test scores was relatively higher for lower level of tests (level 10-13). Across all levels of tests, the SEM was approximately two fifths of the SD. The average reliability was 0.84 with Levels 10 and 11 showing relatively lower reliabilities. The finding of relatively higher SD and lower reliabilities in Levels 10 and 11 is consistent with the research literature that suggests younger (Grades K-1) students' achievement performance tends to be less homogeneous and consistent (Gullo, 1994, p.72)[3].

Before the norms tables were produced the scale was transformed to have the mean 500 and standard deviation 70 across all grades. The Levels 20–22 Informational Reading and Literary Reading tests were put on the same scale as the Reading tests for other levels. The Levels 20–22 Pre-Algebra test was put on the same scale as the Mathematics tests for other levels, but the Levels 20–22 Algebra test was put on its own separate scale.

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[2] The b parameters for the Level 10 test items were calibrated based on the combined Grade K and Grade 1 samples. Hence, they appear identical between Grade K and Grade 1 of the Level 10 test in Appendix 1. The same applied to Grade 10, 11, and 12 of the Level 20 test. The b-parameter of the first two items of Grade 11 and 12 Algebra test was not provided because they were originally placed in the Pre-Algebra test and not being calibrated with the other Algebra items. As an alternative, the mean (p-value) can be interpreted as a measure of item difficulty.

[3] Gullo, D.F. (1994). *Understanding assessment and evaluation in early childhood education*. Columbia University, NY: Teachers College Press.

Test Objective Scores

Appendix 3 shows the number of items for each Objective at each grade level. The means and standard deviations were reported on the Number Correct Score scale (from 0 to the number of items for each Objective). Note that the means and standard deviations are not directly comparable across Objectives and across grade levels because they were not measured and reported on a common scale (as is the case for the ability scores reported in Appendix 2). Appendix 3 also shows the KR-20 reliability and its corresponding SEM (on the number-correct scale) for each Objective and grade level. The KR-20 ranged from 0.41 to 0.99 with an average of 0.70 for a mean length of 14.5 items. Irrespective of the number of items for each Objective (length), Objectives scores at higher grade-levels (Grade 11 and 12) tended to be relatively more reliable. Reliabilities for Objectives scores at lower grade levels were similar to those at middle grade levels. Over all objectives, the SEMs were approximately half of the SDs.

The last three columns of the table in Appendix 3 show the distributions of students by the three levels of objective achievement; low, competent, and proficient. The word "competent" is used to describe students who are meeting end-of-grade expectations, "low" means not meeting end-of-grade expectations, and "proficient" means exceeding end-of-grade expectations. Across all Objectives and all grade levels, 27.9% did not meet the end-of-grade expectations, 57.4% met the end-of-grade expectations, and 14.7% exceeded the end-of-grade expectations. In general, the percentage of low-achieving students increased as grade level progressed, while the percentage of proficient students decreased.

Establishing the objective cut scores

The objective cut scores for "competent" and "proficient" at each level were set after collecting expert ratings on item difficulty. Ratings were collected from three expert panels—one in Alberta, one in Ontario and one in Nova Scotia. Within a province, each item was usually rated by two experts. The experts were asked to reference the difficulty of each test item against their provincial curriculum expectations/outcomes. Experts were to consider both the stem and the choices of each multiple-choice item as they classified the item. Experts were given the definitions of "low," "competent" and "proficient" as well as the definitions of the test objectives.

Experts were asked to classify an item as "low" if students who are at a "low" level of achievement (not meeting grade-level-expectations) would likely answer the item correctly. The item was to be classified "competent" if students would have to be at a "competent" level of achievement (meeting grade-level expectations) to answer the item correctly. If an item could not be classified "low" or "competent," then it was classified proficient. In this way, all the items were classified in one of the three difficulty level categories.

The item difficulties were then recoded 1=low, 2=competent, 3=proficient. The average of the within-province ratings for an item was calculated and then the average rating was rounded to the nearest whole number and item's province-specific difficulty level was assigned to the item. The province-specific number-correct cut scores for Proficient and Competent levels of achievement for an objective were established using the following formulas:

Proficient cut score =   total number of "low" items
                               + total number of "competent" items
                               + ½ total number of "proficient" items

Competent cut score =   total number of "low" items
                               + ½ total number of "competent" items

When calculating a "proficient" cut score, rounding down was applied (e.g., 10.5 was rounded to 10). When calculating a "competent" cut score, rounding up was applied (e.g., 4.5 was rounded to 5).

The "proficient" and "competent" cut scores for each objective were then averaged across the three provinces to get the final CAT·4 cut scores. For Levels 20-22, cut scores for grades 10-12 were smoothed to ensure cut scores did not decrease with grade.

Factor Structure

Factor analyses were conducted to examine the dimensionality of the scores at each test level and grade level. First, exploratory factor analysis (EFA) was conducted. The two-factor model produced the most interpretable results. The results clearly suggested that the two factors reflected the two constructs of English Language and Mathematics respectively. The Language construct tapped the tests of Reading, Word Analysis, Vocabulary, Writing Conventions, and Spelling, whereas the Mathematics construct tapped the tests of Math and Computation/Estimation. The results of two-factor exploratory models are reported in Appendix 4. Next, confirmatory factor analyses with one, two, and three factors were employed to test different hypotheses about the factor structure of the tests at different levels. At all levels, the two-factors, specified according to the result of EFA stated above, fit the data better than single-factor and 3-factor models.

Gender Bias

An item was considered to be gender biased if it was detected as having "differential item functioning" (DIF). DIF is present if the probability of answering an item correctly is different among students with the same ability. The item response theory (IRT) based hypothesis test was used to detect gender DIF. This method examines gender equality in the IRT b-parameter (i.e., item difficulty) estimates. The computer program BILOG MG was used to estimate item parameters and test if DIF is present for all CAT·4 items. DIF is flagged if there was a statistically significant difference ($\alpha<.01$) in the b-parameter estimates between the male and female students.

Of the 2,587 test items found in the various levels of CAT-4, one hundred and forty five items (5.60%) were flagged as DIF (see Table 10). Ninety six (66.21%) of the 145 DIF items were biased in favour of males. Forty nine (33.79%) of the 145 DIF items were biased in favour of females. Lower level tests (L10-L14) had relatively smaller proportion of DIF items (2.36%-4.38%) compared to higher level tests (5.51%-9.84%, see Table 12). Table 13 lists the item numbers of each level of test that were flagged as DIF.

Table 12: Distributions of items showing gender DIF

Tests	L10	L11	L12	L13	L14	L15	L16	L17	L18	L19	L20-22	Total
Total number of items	100	192	234	251	254	254	254	254	254	254	286	2587
favoring males	4	3	6	7	4	12	9	11	15	12	13	96
favoring females	0	2	1	4	2	2	10	7	10	3	8	49
Total number of DIF items	4	5	7	11	6	14	19	18	25	15	21	145
Percentage of DIF items	4.00	2.60	2.99	4.38	2.36	5.51	7.48	7.09	9.84	5.91	7.34	5.60

Table 13: Items showing gender DIF for each level and test

Tests/Level	10	11	12	13	14	15	16	17	18	19	20–22
Reading	7,36(M)	3(M)	21,23(M) 40(F)	35(M) 41(F)	18(F)	5,22,29(M)	35(M) 24,47(F)	6(M)	23,27,31,42(M) 9,29,45,46(F)	13,18,35(M) 36(F)	INFORMATIONAL 19,32(M) 36,40(F) / LITERARY 2(M) 9,26,40(F)
Word Analysis	23(M)	16(F)		25(F)							
Vocabulary		8(M)	17,18(M)		3,19(M) 28(F)	17,23,25(M) 11(F)	5,6(M) 21(F)	7,28(M) 16,31(F)	11,20,25(M) 14,36(F)	4,23(M)	5,7,20(M) 16(F)
Writing Conventions						9,38(M)	35(M) 12(F)	28,37(M) 31(F)	23,24,36,37(M) 15,39(F)	24(M) 16(F)	13,28(M)
Math	30(M)			3,28(M)	23,31(M)	11,44(M) 19(F)	34,45(M) 2,17,44(F)	14,16(M) 18,40(F)	11,20(M)	11,20,44(M)	PRE-ALGEBRA 23,33(M) / ALGEBRA 2(M) 30(F)
Computation /Estimation			35(M)	34,36(M) 12(F)			21,28(M) 5,8(F)	18,34(M) 4,13(F)	33(M) 28(F)		
Spelling		19(M) 16(F)	15(M)	18,20(M) 9(F)		10,23(M)	22(M) 10(F)	1,27(M)	28(M) 23(F)	20,22,29(M) 24(F)	26,29(M) 16(F)

M= biased in favor of males; F= based in favor of females. Results of Level 10 tests were based on data from Grade 1 students, and results of level 20–22 tests were based on data from Grade 11 students.

Appendix A: List of Schools Who Participated in the CAT·4 Norming Study

Alberta (40)

Airdrie Koinonia Christian School	Lawrence Grassi Middle School
Banff Community High School	Mamawi Atosketan Native School
Barrhead Composite High School	Menno Simons Community School
Calvin Christian School	Milk River Elementary
Camilla School	Morrin School
Carbon School	Notre Dame School
Central Park Elementary School	Ochre Park School
Coaldale Christian School	Percy Lake Colony School
Colchester Elementary	Riverside Colony School
Dene Tha Community School	Robert Rundle Elementary
Eastbrook Elementary	Sand Hills Elementary School
Elizabeth Rummel School	Spruce View School
Foothills Composite High	St. Dominic Elementary (French Immersion)
Fox Creek School	St. Mary Catholic School
Fulham Elementary	St. Mary's Elementary
George Davison Elementary School	St. Patrick's Elementary
Hillside Community School	Ste. Marie School
Holy Family Academy	Swanavon Elementary
Holy Rosary High School	Towers Colony School
Hussar School	Trochu Valley School

British Columbia (24)

Agassiz Elementary/Secondary School	Moricetown Elementary School
Alpha Secondary School	North Shuswap Elementary
Charles Hays Secondary School	Our Lady of Perpetual Help
Clayburn Middle School	Qualicum Beach Elementary
Comox Valley Christian School	Rutland Middle School
Cornerstone Christian School	South Okanagan Adventist Christian School
Dr. Thomas A. Swift Elementary	St. Joseph's School
Dufferin Elementary	Steeples Elementary
Garibaldi (Nelson Annex)	Sunrise Ridge Elementary
Lord Kitchener Elementary	Valley Christian School
Lyndhurst Elementary	Westsyde Secondary School
Malakwa Elementary	Xit'olacw Community School

Manitoba (23)

Arborg Collegiate	Nature Valley Colony School
Bon Homme Colony School	Neil Dennis Kematch Memorial School
Boyne View School	Newdale Colony School
Cartwright School	Our Lady of Victory School
Community Bible Fellowship School	Rossburn Collegiate
Crystal Springs Colony School	Scott Bateman Middle School
Donald Ahmo School	St. Paul's High School
Erickson Collegiate	Stevenson School
Fisher Branch Collegiate	Strathclair Community School
Henderson Elementary School	Winkler Elementary School
Juniper Elementary School	Winnipegosis Elementary
Mel Johnson School	

New Brunswick (12)

Forest Glen School	Napan Elementary
Lewisville Middle School	Port Elgin Regional School

Ridgeview Middle School
Riverview Middle School
Somerville Christian Academy
St. Patrick's School

Summerhill Street Elementary
Sussex Regional High School
Westfield Elementary
Wulastukw Elementary School

Newfoundland (7)

Amalgamated Academy
Elwood Elementary
First Baptist Academy
Fortune Bay Academy

Lake Academy
Menihek High School
St. Mary's Elementary School

Nova Scotia (14)

Bridgetown Regional Elementary
Bridgetown Regional High School
Chapel Island First Nation
Dr. John Hugh Gillis Regional
Dr. T.L. Sullivan Jr. High School
East Antigonish Education Centre/Academy
Eskasoni Elementary & Middle School
Glace Bay Elementary

King's County Christian School
Kingston District School
Park West School
Sandy Lake Adventist Academy
Somerset District Elementary School
St. Michael Junior High
Wekoqmaq First Nation Secondary School

Northwest Territories (1)

Weledeh Catholic School

Nunavut (1)

Arnaqjuaq School

Ontario (132)

Abbey Park High School
Bakersfield Public School
Bayshore Catholic School
Beatty Fleming Senior Public School
Beth Jacob High School
Blenheim District High School
Blessed Teresa of Calcutta Catholic Elementary
Bnei Akiva Schools - Ulpanet Orot Girls School
Breslau Public School
C.C Carrothers Elementary School
Caledon Central Public School
Camilla Road Senior Public School
Century Montessori Elementary School
Charles C. McLean Public School
Chippewa Secondary School
Clarkson Secondary School
Community Christian School - Metcalfe
Cornerstone Preparatory School
Crestview Public School
Curve Lake First Nation School
D.A. Gordon Elementary
Dr. J.M. Denison Secondary School
Dr. Marion Hilliard Sr. School
Dublin Heights Elementary-Middle School
E.T. Carmichael Elementary
Etienne Brule Public School
Evergreen Public School
Forest Hill Collegiate Institute
Francine J. Wesley Secondary School
Front of Yonge Public School
Georges Vanier Catholic Elementary
German Mills Public School

Glebe Collegiate Institute
Grand View Public School
Great Lakes Christian College
Gregory Drive Elementary
H.W. Burgess
Hanna Memorial Elementary
Harrow District High School
Hensall Public School
Hillcrest Public School
Hitherfield Preparatory School
Holy Family School
Immanuel Christian School
J.P. Robarts Public School
Joseph A. Gibson Public School
Josyf Cardinal Slipyj School
Kingsway Child Care
Kirkland Lake District Composite School
Lambton Park Community School
Lansdowne Elementary School
Levi Creek Public School
Madawaska Valley District High School
Madoc Township Public School
Magnetawan Central Elementary
Mamawmatawa Holistic/Constance Lake First Nation
Manitouwadge High School
Meadowvale Public School
Mentor College
Monsignor Doyle Catholic Secondary School
Muskoka Christian School
Neil McNeil Catholic High School
Nobleton Junior Public School
Odessa Public School

Our Lady of Victory School
Park Public School
Parkview Public School
Precious Blood Catholic School
Queen's Ranger Public School
R.L. Hyslop Public School
Redwood Acres Public School
Rehoboth Christian School
Rosseau Lake College
Royal St. George's College
Sacred Heart School
Samson Beardy Memorial School
Sandalwood Heights Secondary School
Sawmill Creek Elementary School
Scriven Christian Academy
Seaforth Public School
Seaway District High School
Sheridan Public School
Silverthorn Public School
Spruce Ridge Community School
Sprucedale Public School
St. Alphonsus Catholic Elementary
St. Andrew's College
St. Andrew's Elementary
St. Anne's Catholic Elementary School
St. Augustine Catholic High School
St. Brendan Catholic Elementary School
St. Bruno Catholic School
St. Catherine of Siena School
St. Clement Catholic School
St. Daniel Catholic Elementary School
St. Edith Stein Catholic School
St. Finnan's Catholic School
St. Frances Cabrini Elementary School

St. Francis Catholic Secondary School
St. Francis of Assisi Catholic School
St. Gabriel Lalemont Catholic School
St. Gregory Catholic Elementary
St. James Catholic Elementary School
St. James Elementary
St. Joseph Catholic School
St. Luigi Catholic Elementary
St. Mary Catholic High School
St. Monica Catholic School
St. Patrick Catholic School (ON)
St. Paul Catholic Elementary
St. Paul Elementary
St. Vincent de Paul Elementary
Suddaby Public School
Thamesville Area Central
Thomas D'Arcy McGee Catholic School
Thornwood Public School
Trinity College School
Uplands Catholic School
Venta Preparatory School
W.J. Holsgrove Public School
Warren Public School
Wasauksing Kinomaugewgamik School
West Carleton Secondary School
West Elgin Sr. Elementary School
West Humber Collegiate Institute
Westacres Public School
Westminster Public School
White Oaks Public School
Whitestone Lake Central School
Whitney Public School
William Merrifield VC Public School
Wingham Public School

Prince Edward Island (1)
Fair Isle Adventist School

Quebec (6)

Harmony Elementary
Laurentian Regional High School
Mountainview Secondary School (Batshaw)

Rawdon Elementary/Middle School
Stanstead College
St-Jude Elementary School

Saskatchewan (27)

Allegro Montessori School Inc.
Bedford Road Collegiate
Bishop James Mahoney High School
Brunskill School
Chief Moses Ratt School
Connaught Elementary
Father Robinson Elementary
Friesen Hutterite Elementary
Glaslyn Central School
Howard Coad Elementary
Marsden Jubilee School
Maymont Central School
Milden Central School
Oskayak High School (Joe Duquette High School)
Oxbow Elementary
Pleasantdale School

Prince Arthur Community School
Rivier Elementary School
St Michael Community School
St. Luke Elementary
St. Matthew Elementary
St. Patrick Elementary School
Sturgis Composite High School
Sweetgrass Band School
Turtleford Community School
Victoria School
Westmount Community School

Yukon Territories (3)
Golden Horn Elementary School
Grey Mountain Primary School
J.V. Clark School

Appendix 1: Item Descriptive Statistics: Mean (p-value), Standard Deviation, and Rasch Item Difficulty-by Test Level

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
K	Reading	1	2169	0.99	0.11	-2.72
K	Reading	2	2169	0.46	0.50	-0.09
K	Reading	3	2169	0.96	0.20	-2.04
K	Reading	4	2169	0.99	0.12	-2.65
K	Reading	5	2169	0.65	0.48	-1.22
K	Reading	6	2169	0.62	0.49	-1.06
K	Reading	7	2169	0.53	0.50	-0.48
K	Reading	8	2169	0.83	0.38	-0.24
K	Reading	9	2169	0.66	0.48	-1.11
K	Reading	10	2169	0.85	0.35	-0.56
K	Reading	11	2169	0.82	0.39	-0.55
K	Reading	12	2169	0.95	0.22	-1.89
K	Reading	13	2169	0.82	0.38	-1.08
K	Reading	14	2169	0.89	0.31	-1.43
K	Reading	15	2169	0.84	0.36	-1.17
K	Reading	16	2169	0.92	0.28	-1.68
K	Reading	17	2169	0.64	0.48	-1.82
K	Reading	18	2169	0.93	0.25	-1.99
K	Reading	19	2169	0.94	0.24	-1.54
K	Reading	20	2169	0.91	0.29	-1.78
K	Reading	21	2169	0.70	0.46	-1.52
K	Reading	22	2169	0.76	0.43	-0.53
K	Reading	23	2169	0.78	0.42	-1.74
K	Reading	24	2169	0.80	0.40	-1.59
K	Reading	25	2169	0.84	0.37	-0.69
K	Reading	26	2169	0.96	0.20	-0.87
K	Reading	27	2169	0.93	0.26	-0.92
K	Reading	28	2169	0.94	0.23	-0.99
K	Reading	29	2169	0.96	0.21	-1.16
K	Reading	30	2169	0.91	0.29	-2.05
K	Reading	31	2169	0.79	0.41	-0.97
K	Reading	32	2169	0.91	0.29	-1.55
K	Reading	33	2169	0.85	0.36	-1.19
K	Reading	34	2169	0.84	0.36	-1.18
K	Reading	35	2169	0.80	0.40	-0.99
K	Reading	36	2169	0.74	0.44	-0.79
K	Reading	37	2169	0.96	0.20	-2.01
K	Reading	38	2169	0.84	0.37	-1.16
K	Reading	39	2169	0.92	0.27	-1.64
K	Reading	40	2169	0.89	0.31	-1.42
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
K	Word Analysis	1	2127	0.98	0.14	-2.48
K	Word Analysis	2	2127	0.96	0.19	-2.11
K	Word Analysis	3	2127	0.98	0.14	-2.45
K	Word Analysis	4	2127	0.95	0.21	-1.96

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
K	Word Analysis	5	2127	0.98	0.14	-2.48
K	Word Analysis	6	2127	0.97	0.17	-2.22
K	Word Analysis	7	2127	0.93	0.26	-1.72
K	Word Analysis	8	2127	0.96	0.20	-2.04
K	Word Analysis	9	2127	0.95	0.22	-1.94
K	Word Analysis	10	2127	0.96	0.19	-2.08
K	Word Analysis	11	2127	0.95	0.21	-1.99
K	Word Analysis	12	2127	0.91	0.29	-1.56
K	Word Analysis	13	2127	0.91	0.28	-1.60
K	Word Analysis	14	2127	0.91	0.28	-1.80
K	Word Analysis	15	2127	0.92	0.28	-1.61
K	Word Analysis	16	2127	0.91	0.29	-1.53
K	Word Analysis	17	2127	0.96	0.21	-2.01
K	Word Analysis	18	2127	0.94	0.24	-1.57
K	Word Analysis	19	2127	0.95	0.21	-1.98
K	Word Analysis	20	2127	0.97	0.17	-2.23
K	Word Analysis	21	2127	0.94	0.24	-1.81
K	Word Analysis	22	2127	0.95	0.22	-1.93
K	Word Analysis	23	2127	0.93	0.26	-1.69
K	Word Analysis	24	2127	0.91	0.28	-1.59

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
K	Mathematics	1	2160	0.99	0.10	0.00
K	Mathematics	2	2160	1.00	0.06	0.00
K	Mathematics	3	2160	0.98	0.13	0.01
K	Mathematics	4	2160	1.00	0.01	0.00
K	Mathematics	5	2160	0.99	0.12	0.01
K	Mathematics	6	2160	0.99	0.08	0.00
K	Mathematics	7	2160	0.98	0.12	0.01
K	Mathematics	8	2160	0.99	0.08	0.00
K	Mathematics	9	2160	0.99	0.10	0.00
K	Mathematics	10	2160	0.80	0.40	0.09
K	Mathematics	11	2160	0.93	0.26	0.03
K	Mathematics	12	2160	0.97	0.18	0.01
K	Mathematics	13	2160	0.98	0.13	0.01
K	Mathematics	14	2160	0.95	0.22	0.02
K	Mathematics	15	2160	0.98	0.15	0.01
K	Mathematics	16	2160	0.88	0.32	0.05
K	Mathematics	17	2160	0.97	0.16	0.01
K	Mathematics	18	2160	0.97	0.18	0.01
K	Mathematics	19	2160	0.83	0.38	0.08
K	Mathematics	20	2160	0.97	0.18	0.01
K	Mathematics	21	2160	0.95	0.21	0.02
K	Mathematics	22	2160	0.84	0.37	0.07
K	Mathematics	23	2160	0.94	0.24	0.03
K	Mathematics	24	2160	0.90	0.30	0.05
K	Mathematics	25	2160	0.87	0.34	0.06
K	Mathematics	26	2160	0.78	0.41	0.10
K	Mathematics	27	2160	0.80	0.40	0.09
K	Mathematics	28	2160	0.84	0.37	0.07

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
K	Mathematics	29	2160	0.49	0.50	0.22
K	Mathematics	30	2160	0.73	0.45	0.12
K	Mathematics	31	2160	0.63	0.48	0.16
K	Mathematics	32	2160	0.53	0.50	0.20
K	Mathematics	33	2160	0.57	0.49	0.19
K	Mathematics	34	2160	0.66	0.47	0.15
K	Mathematics	35	2160	0.31	0.46	0.25
K	Mathematics	36	2160	0.31	0.46	0.25
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Reading	1	1090	0.99	0.09	-2.72
1	Reading	2	1090	0.59	0.49	-0.09
1	Reading	3	1090	0.98	0.16	-2.04
1	Reading	4	1090	0.99	0.09	-2.65
1	Reading	5	1090	0.76	0.43	-1.22
1	Reading	6	1090	0.73	0.44	-1.06
1	Reading	7	1090	0.65	0.48	-0.48
1	Reading	8	1090	0.89	0.31	-0.24
1	Reading	9	1090	0.76	0.43	-1.11
1	Reading	10	1090	0.91	0.29	-0.56
1	Reading	11	1090	0.88	0.32	-0.55
1	Reading	12	1090	0.97	0.18	-1.89
1	Reading	13	1090	0.88	0.32	-1.08
1	Reading	14	1090	0.93	0.25	-1.43
1	Reading	15	1090	0.90	0.30	-1.17
1	Reading	16	1090	0.95	0.22	-1.68
1	Reading	17	1090	0.75	0.43	-1.82
1	Reading	18	1090	0.96	0.20	-1.99
1	Reading	19	1090	0.96	0.19	-1.54
1	Reading	20	1090	0.94	0.23	-1.78
1	Reading	21	1090	0.80	0.40	-1.52
1	Reading	22	1090	0.84	0.36	-0.53
1	Reading	23	1090	0.85	0.35	-1.74
1	Reading	24	1090	0.87	0.34	-1.59
1	Reading	25	1090	0.90	0.30	-0.69
1	Reading	26	1090	0.98	0.15	-0.87
1	Reading	27	1090	0.96	0.21	-0.92
1	Reading	28	1090	0.96	0.19	-0.99
1	Reading	29	1090	0.97	0.16	-1.16
1	Reading	30	1090	0.94	0.23	-2.05
1	Reading	31	1090	0.86	0.34	-0.97
1	Reading	32	1090	0.94	0.23	-1.55
1	Reading	33	1090	0.90	0.30	-1.19
1	Reading	34	1090	0.90	0.30	-1.18
1	Reading	35	1090	0.87	0.34	-0.99
1	Reading	36	1090	0.82	0.38	-0.79
1	Reading	37	1090	0.97	0.16	-2.01
1	Reading	38	1090	0.90	0.30	-1.16
1	Reading	39	1090	0.95	0.21	-1.64
1	Reading	40	1090	0.93	0.25	-1.42

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Word Analysis	1	1079	0.99	0.11	-2.48
1	Word Analysis	2	1079	0.98	0.15	-2.11
1	Word Analysis	3	1079	0.99	0.11	-2.45
1	Word Analysis	4	1079	0.97	0.16	-1.96
1	Word Analysis	5	1079	0.99	0.11	-2.48
1	Word Analysis	6	1079	0.98	0.13	-2.22
1	Word Analysis	7	1079	0.96	0.20	-1.72
1	Word Analysis	8	1079	0.98	0.15	-2.04
1	Word Analysis	9	1079	0.97	0.17	-1.94
1	Word Analysis	10	1079	0.98	0.15	-2.08
1	Word Analysis	11	1079	0.97	0.16	-1.99
1	Word Analysis	12	1079	0.95	0.23	-1.56
1	Word Analysis	13	1079	0.95	0.22	-1.60
1	Word Analysis	14	1079	0.95	0.22	-1.80
1	Word Analysis	15	1079	0.95	0.22	-1.61
1	Word Analysis	16	1079	0.94	0.23	-1.53
1	Word Analysis	17	1079	0.97	0.16	-2.01
1	Word Analysis	18	1079	0.96	0.19	-1.57
1	Word Analysis	19	1079	0.97	0.16	-1.98
1	Word Analysis	20	1079	0.98	0.13	-2.23
1	Word Analysis	21	1079	0.96	0.18	-1.81
1	Word Analysis	22	1079	0.97	0.17	-1.93
1	Word Analysis	23	1079	0.96	0.20	-1.69
1	Word Analysis	24	1079	0.95	0.22	-1.59

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Mathematics	1	1	1,143.00	1.00	0.00
1	Mathematics	2	2	1,143.00	1.00	0.00
1	Mathematics	3	3	1,143.00	1.00	0.01
1	Mathematics	4	4	1,143.00	1.00	0.00
1	Mathematics	5	5	1,143.00	1.00	0.01
1	Mathematics	6	6	1,143.00	1.00	0.00
1	Mathematics	7	7	1,143.00	1.00	0.01
1	Mathematics	8	8	1,143.00	1.00	0.00
1	Mathematics	9	9	1,143.00	1.00	0.00
1	Mathematics	10	10	1,143.00	0.95	0.09
1	Mathematics	11	11	1,143.00	0.98	0.03
1	Mathematics	12	12	1,143.00	0.99	0.01
1	Mathematics	13	13	1,143.00	1.00	0.01
1	Mathematics	14	14	1,143.00	0.99	0.02
1	Mathematics	15	15	1,143.00	0.99	0.01
1	Mathematics	16	16	1,143.00	0.97	0.05
1	Mathematics	17	17	1,143.00	0.99	0.01
1	Mathematics	18	18	1,143.00	0.99	0.01
1	Mathematics	19	19	1,143.00	0.96	0.08
1	Mathematics	20	20	1,143.00	0.99	0.01
1	Mathematics	21	21	1,143.00	0.99	0.02
1	Mathematics	22	22	1,143.00	0.96	0.07

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Mathematics	23	23	1,143.00	0.99	0.03
1	Mathematics	24	24	1,143.00	0.98	0.05
1	Mathematics	25	25	1,143.00	0.97	0.06
1	Mathematics	26	26	1,143.00	0.94	0.10
1	Mathematics	27	27	1,143.00	0.95	0.09
1	Mathematics	28	28	1,143.00	0.96	0.07
1	Mathematics	29	29	1,143.00	0.83	0.22
1	Mathematics	30	30	1,143.00	0.93	0.12
1	Mathematics	31	31	1,143.00	0.89	0.16
1	Mathematics	32	32	1,143.00	0.85	0.20
1	Mathematics	33	33	1,143.00	0.87	0.19
1	Mathematics	34	34	1,143.00	0.90	0.15
1	Mathematics	35	35	1,143.00	0.71	0.25
1	Mathematics	36	36	1,143.00	0.71	0.25
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Reading	1	1839	0.61	0.49	-0.68
1	Reading	2	1839	0.70	0.46	-1.37
1	Reading	3	1839	0.21	0.41	-1.20
1	Reading	4	1839	0.66	0.47	-0.42
1	Reading	5	1839	0.58	0.49	0.70
1	Reading	6	1839	0.74	0.44	0.64
1	Reading	7	1839	0.84	0.37	-1.37
1	Reading	8	1839	0.66	0.48	-0.14
1	Reading	9	1839	0.48	0.50	-0.96
1	Reading	10	1839	0.58	0.49	-0.47
1	Reading	11	1839	0.62	0.49	-1.32
1	Reading	12	1839	0.44	0.50	0.15
1	Reading	13	1839	0.70	0.46	-0.10
1	Reading	14	1839	0.21	0.41	0.11
1	Reading	15	1839	0.90	0.29	-0.25
1	Reading	16	1839	0.97	0.18	-0.26
1	Reading	17	1839	0.96	0.20	0.03
1	Reading	18	1839	0.86	0.35	0.29
1	Reading	19	1839	0.48	0.50	0.50
1	Reading	20	1839	0.50	0.50	-0.16
1	Reading	21	1839	0.97	0.18	0.39
1	Reading	22	1839	0.79	0.41	-0.97
1	Reading	23	1839	0.94	0.24	0.99
1	Reading	24	1839	0.87	0.34	-0.41
1	Reading	25	1839	0.97	0.18	-0.58
1	Reading	26	1839	0.70	0.46	-0.45
1	Reading	27	1839	0.64	0.48	0.39
1	Reading	28	1839	0.56	0.50	0.14
1	Reading	29	1839	0.80	0.40	1.43
1	Reading	30	1839	0.61	0.49	0.25
1	Reading	31	1839	0.94	0.24	0.45
1	Reading	32	1839	0.36	0.48	0.03
1	Reading	33	1839	0.89	0.32	-0.34
1	Reading	34	1839	0.87	0.34	0.26

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Reading	35	1839	0.86	0.35	0.70
1	Reading	36	1839	0.78	0.41	0.45
1	Reading	37	1839	0.71	0.45	0.36
1	Reading	38	1839	0.82	0.38	0.78
1	Reading	39	1839	0.82	0.38	0.14
1	Reading	40	1839	0.74	0.44	1.41
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Word Analysis	1	1822	0.98	0.14	-1.59
1	Word Analysis	2	1822	0.98	0.12	-1.79
1	Word Analysis	3	1822	0.95	0.21	-1.13
1	Word Analysis	4	1822	0.96	0.19	-1.25
1	Word Analysis	5	1822	0.92	0.26	-0.33
1	Word Analysis	6	1822	0.94	0.23	-0.81
1	Word Analysis	7	1822	0.95	0.21	-1.10
1	Word Analysis	8	1822	0.84	0.36	-0.97
1	Word Analysis	9	1822	0.88	0.32	-0.53
1	Word Analysis	10	1822	0.82	0.38	-0.23
1	Word Analysis	11	1822	0.72	0.45	0.12
1	Word Analysis	12	1822	0.74	0.44	0.05
1	Word Analysis	13	1822	0.91	0.28	-0.72
1	Word Analysis	14	1822	0.87	0.34	-0.31
1	Word Analysis	15	1822	0.95	0.22	-0.01
1	Word Analysis	16	1822	0.93	0.25	-0.86
1	Word Analysis	17	1822	0.95	0.21	-1.03
1	Word Analysis	18	1822	0.93	0.26	-0.83
1	Word Analysis	19	1822	0.93	0.25	-0.62
1	Word Analysis	20	1822	0.91	0.29	-0.68
1	Word Analysis	21	1822	0.90	0.30	-0.89
1	Word Analysis	22	1822	0.89	0.31	-1.11
1	Word Analysis	23	1822	0.84	0.37	-0.57
1	Word Analysis	24	1822	0.76	0.43	-0.44
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Vocabulary	1	1632	0.98	0.15	-0.17
1	Vocabulary	2	1632	0.96	0.19	-1.25
1	Vocabulary	3	1632	0.94	0.23	-0.19
1	Vocabulary	4	1632	0.92	0.26	0.21
1	Vocabulary	5	1632	0.80	0.40	-0.26
1	Vocabulary	6	1632	0.90	0.30	-0.63
1	Vocabulary	7	1632	0.91	0.29	-1.00
1	Vocabulary	8	1632	0.89	0.32	-0.70
1	Vocabulary	9	1632	0.82	0.38	-0.56
1	Vocabulary	10	1632	0.80	0.40	-1.58
1	Vocabulary	11	1632	0.68	0.47	0.70
1	Vocabulary	12	1632	0.47	0.50	-0.83
1	Vocabulary	13	1632	0.82	0.39	-0.08
1	Vocabulary	14	1632	0.89	0.31	-0.23
1	Vocabulary	15	1632	0.93	0.26	-0.84
1	Vocabulary	16	1632	0.81	0.39	0.16

1	Vocabulary	17	1632	0.79	0.41	-0.53
1	Vocabulary	18	1632	0.70	0.46	-0.58
1	Vocabulary	19	1632	0.88	0.32	-0.14
1	Vocabulary	20	1632	0.84	0.37	-0.18
1	Vocabulary	21	1632	0.80	0.40	0.38
1	Vocabulary	22	1632	0.77	0.42	0.87
1	Vocabulary	23	1632	0.61	0.49	-0.20
1	Vocabulary	24	1632	0.40	0.49	-0.33

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Spelling	1	1611	0.98	0.14	-2.57
1	Spelling	2	1611	0.93	0.26	-1.60
1	Spelling	3	1611	0.91	0.29	-0.77
1	Spelling	4	1611	0.94	0.23	-0.53
1	Spelling	5	1611	0.88	0.33	-0.59
1	Spelling	6	1611	0.96	0.20	-1.87
1	Spelling	7	1611	0.94	0.24	-0.71
1	Spelling	8	1611	0.91	0.28	-1.43
1	Spelling	9	1611	0.90	0.29	-0.39
1	Spelling	10	1611	0.73	0.44	-1.80
1	Spelling	11	1611	0.88	0.32	-1.63
1	Spelling	12	1611	0.80	0.40	-1.91
1	Spelling	13	1611	0.80	0.40	-0.86
1	Spelling	14	1611	0.55	0.50	-1.48
1	Spelling	15	1611	0.70	0.46	-1.67
1	Spelling	16	1611	0.72	0.45	-2.14
1	Spelling	17	1611	0.68	0.47	0.17
1	Spelling	18	1611	0.61	0.49	-1.10
1	Spelling	19	1611	0.63	0.48	-0.82
1	Spelling	20	1611	0.32	0.47	-1.10

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Mathematics	1	1917	1.00	0.06	-2.48
1	Mathematics	2	1917	0.99	0.09	-1.54
1	Mathematics	3	1917	0.98	0.12	-1.84
1	Mathematics	4	1917	0.99	0.09	0.75
1	Mathematics	5	1917	0.98	0.14	-0.01
1	Mathematics	6	1917	0.95	0.21	-0.37
1	Mathematics	7	1917	0.98	0.15	-0.21
1	Mathematics	8	1917	0.93	0.26	0.32
1	Mathematics	9	1917	0.97	0.18	-0.78
1	Mathematics	10	1917	0.90	0.30	-0.64
1	Mathematics	11	1917	0.94	0.24	-0.30
1	Mathematics	12	1917	0.97	0.18	0.55
1	Mathematics	13	1917	0.96	0.20	-0.56
1	Mathematics	14	1917	0.95	0.22	1.39
1	Mathematics	15	1917	0.95	0.22	1.63
1	Mathematics	16	1917	0.87	0.34	-0.88
1	Mathematics	17	1917	0.93	0.25	-0.67
1	Mathematics	18	1917	0.87	0.33	-0.21

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Mathematics	19	1917	0.89	0.32	-1.06
1	Mathematics	20	1917	0.87	0.33	-0.46
1	Mathematics	21	1917	0.92	0.27	0.38
1	Mathematics	22	1917	0.93	0.26	0.40
1	Mathematics	23	1917	0.91	0.28	0.16
1	Mathematics	24	1917	0.87	0.34	0.86
1	Mathematics	25	1917	0.81	0.39	0.69
1	Mathematics	26	1917	0.67	0.47	0.24
1	Mathematics	27	1917	0.83	0.38	2.03
1	Mathematics	28	1917	0.65	0.48	2.37
1	Mathematics	29	1917	0.78	0.41	1.59
1	Mathematics	30	1917	0.71	0.45	0.05
1	Mathematics	31	1917	0.76	0.43	1.66
1	Mathematics	32	1917	0.76	0.42	-0.21
1	Mathematics	33	1917	0.74	0.44	-1.26
1	Mathematics	34	1917	0.71	0.46	1.34
1	Mathematics	35	1917	0.57	0.50	-0.82
1	Mathematics	36	1917	0.52	0.50	-1.96
1	Mathematics	37	1917	0.60	0.49	0.91
1	Mathematics	38	1917	0.50	0.50	-0.91
1	Mathematics	39	1917	0.45	0.50	0.50
1	Mathematics	40	1917	0.48	0.50	0.23
1	Mathematics	41	1917	0.33	0.47	-0.53
1	Mathematics	42	1917	0.31	0.46	-0.57
1	Mathematics	43	1917	0.24	0.43	-1.08
1	Mathematics	44	1917	0.13	0.34	-1.40
1	Mathematics	45	1917	0.24	0.43	-0.18
1	Mathematics	46	1917	0.22	0.41	1.02
1	Mathematics	47	1917	0.23	0.42	1.60
1	Mathematics	48	1917	0.08	0.27	0.97
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Computation	1	1664	0.94	0.24	-1.75
1	Computation	2	1664	0.81	0.40	-1.11
1	Computation	3	1664	0.76	0.43	-1.21
1	Computation	4	1664	0.80	0.40	-0.96
1	Computation	5	1664	0.86	0.35	-1.09
1	Computation	6	1664	0.85	0.35	-1.10
1	Computation	7	1664	0.84	0.37	-0.38
1	Computation	8	1664	0.84	0.37	-0.72
1	Computation	9	1664	0.83	0.37	-1.18
1	Computation	10	1664	0.80	0.40	-0.95
1	Computation	11	1664	0.73	0.45	-0.98
1	Computation	12	1664	0.60	0.49	-0.81
1	Computation	13	1664	0.89	0.31	-1.10
1	Computation	14	1664	0.87	0.33	-0.66
1	Computation	15	1664	0.76	0.42	-0.83
1	Computation	16	1664	0.85	0.36	-1.37
1	Computation	17	1664	0.86	0.35	-1.14
1	Computation	18	1664	0.87	0.34	-0.74

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
1	Computation	19	1664	0.86	0.34	-1.20
1	Computation	20	1664	0.84	0.36	-1.24
1	Computation	21	1664	0.84	0.37	-1.23
1	Computation	22	1664	0.71	0.45	-1.13
1	Computation	23	1664	0.73	0.44	-1.28
1	Computation	24	1664	0.76	0.42	-0.83
1	Computation	25	1664	0.91	0.28	-1.21
1	Computation	26	1664	0.94	0.24	-0.84
1	Computation	27	1664	0.83	0.37	-0.26
1	Computation	28	1664	0.86	0.35	0.06
1	Computation	29	1664	0.77	0.42	-1.52
1	Computation	30	1664	0.81	0.39	-1.72
1	Computation	31	1664	0.76	0.43	-0.59
1	Computation	32	1664	0.55	0.50	-1.08
1	Computation	33	1664	0.68	0.47	-0.19
1	Computation	34	1664	0.52	0.50	-0.98
1	Computation	35	1664	0.41	0.49	-0.83
1	Computation	36	1664	0.27	0.44	0.44
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Reading	1	1855	0.77	0.42	1.86
2	Reading	2	1855	0.77	0.42	-0.41
2	Reading	3	1855	0.77	0.42	-0.41
2	Reading	4	1855	0.77	0.42	0.71
2	Reading	5	1855	0.75	0.43	0.53
2	Reading	6	1855	0.35	0.48	0.75
2	Reading	7	1855	0.74	0.44	0.55
2	Reading	8	1855	0.73	0.44	1.51
2	Reading	9	1855	0.72	0.45	0.54
2	Reading	10	1855	0.61	0.49	0.51
2	Reading	11	1855	0.83	0.37	0.54
2	Reading	12	1855	0.72	0.45	0.54
2	Reading	13	1855	0.74	0.44	0.59
2	Reading	14	1855	0.77	0.42	0.62
2	Reading	15	1855	0.75	0.43	0.51
2	Reading	16	1855	0.58	0.49	0.60
2	Reading	17	1855	0.96	0.20	1.04
2	Reading	18	1855	0.70	0.46	0.48
2	Reading	19	1855	0.44	0.50	0.35
2	Reading	20	1855	0.72	0.45	0.19
2	Reading	21	1855	0.41	0.49	1.10
2	Reading	22	1855	0.22	0.41	1.32
2	Reading	23	1855	0.36	0.48	0.06
2	Reading	24	1855	0.26	0.44	1.59
2	Reading	25	1855	0.94	0.23	1.22
2	Reading	26	1855	0.94	0.23	0.50
2	Reading	27	1855	0.71	0.45	-0.60
2	Reading	28	1855	0.77	0.42	0.74
2	Reading	29	1855	0.70	0.46	1.38
2	Reading	30	1855	0.76	0.43	0.69

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Reading	31	1855	0.39	0.49	1.44
2	Reading	32	1855	0.78	0.41	2.00
2	Reading	33	1855	0.82	0.38	1.57
2	Reading	34	1855	0.86	0.35	1.60
2	Reading	35	1855	0.56	0.50	0.62
2	Reading	36	1855	0.47	0.50	0.66
2	Reading	37	1855	0.88	0.32	0.68
2	Reading	38	1855	0.36	0.48	0.99
2	Reading	39	1855	0.51	0.50	0.29
2	Reading	40	1855	0.78	0.42	0.67

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Word Analysis	1	1854	0.94	0.23	-0.08
2	Word Analysis	2	1854	0.92	0.27	-0.30
2	Word Analysis	3	1854	0.62	0.49	1.06
2	Word Analysis	4	1854	0.89	0.32	1.19
2	Word Analysis	5	1854	0.88	0.33	0.37
2	Word Analysis	6	1854	0.86	0.35	0.51
2	Word Analysis	7	1854	0.83	0.37	0.39
2	Word Analysis	8	1854	0.82	0.38	1.75
2	Word Analysis	9	1854	0.84	0.37	0.38
2	Word Analysis	10	1854	0.84	0.37	0.70
2	Word Analysis	11	1854	0.80	0.40	0.45
2	Word Analysis	12	1854	0.75	0.43	0.29
2	Word Analysis	13	1854	0.56	0.50	1.50
2	Word Analysis	14	1854	0.43	0.50	0.14
2	Word Analysis	15	1854	0.33	0.47	0.19
2	Word Analysis	16	1854	0.98	0.15	-0.35
2	Word Analysis	17	1854	0.92	0.27	-0.69
2	Word Analysis	18	1854	0.97	0.17	-0.44
2	Word Analysis	19	1854	0.95	0.21	-0.90
2	Word Analysis	20	1854	0.95	0.22	0.24
2	Word Analysis	21	1854	0.87	0.34	-0.08
2	Word Analysis	22	1854	0.97	0.16	0.60
2	Word Analysis	23	1854	0.97	0.17	0.64
2	Word Analysis	24	1854	0.96	0.20	0.48
2	Word Analysis	25	1854	0.94	0.24	0.55
2	Word Analysis	26	1854	0.92	0.28	-0.68
2	Word Analysis	27	1854	0.81	0.39	-0.80
2	Word Analysis	28	1854	0.79	0.40	-0.06
2	Word Analysis	29	1854	0.78	0.42	-0.51
2	Word Analysis	30	1854	0.77	0.42	-0.24

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Vocabulary	1	1848	0.94	0.24	0.15
2	Vocabulary	2	1848	0.95	0.22	0.59
2	Vocabulary	3	1848	0.94	0.24	-0.03
2	Vocabulary	4	1848	0.92	0.28	-0.11
2	Vocabulary	5	1848	0.92	0.27	-0.24
2	Vocabulary	6	1848	0.92	0.27	-0.52

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Vocabulary	7	1848	0.87	0.34	0.90
2	Vocabulary	8	1848	0.93	0.26	0.93
2	Vocabulary	9	1848	0.68	0.47	-0.03
2	Vocabulary	10	1848	0.94	0.24	-0.23
2	Vocabulary	11	1848	0.69	0.46	0.86
2	Vocabulary	12	1848	0.96	0.19	-0.04
2	Vocabulary	13	1848	0.92	0.28	0.28
2	Vocabulary	14	1848	0.79	0.41	1.57
2	Vocabulary	15	1848	0.71	0.45	-0.22
2	Vocabulary	16	1848	0.89	0.31	-0.07
2	Vocabulary	17	1848	0.42	0.49	2.07
2	Vocabulary	18	1848	0.24	0.42	-0.34
2	Vocabulary	19	1848	0.87	0.34	0.27
2	Vocabulary	20	1848	0.78	0.41	0.63
2	Vocabulary	21	1848	0.85	0.36	0.37
2	Vocabulary	22	1848	0.86	0.35	0.30
2	Vocabulary	23	1848	0.80	0.40	0.57
2	Vocabulary	24	1848	0.95	0.22	-0.36
2	Vocabulary	25	1848	0.89	0.31	0.15
2	Vocabulary	26	1848	0.90	0.30	0.08
2	Vocabulary	27	1848	0.85	0.36	0.37
2	Vocabulary	28	1848	0.94	0.24	-0.23
2	Vocabulary	29	1848	0.82	0.39	0.50
2	Vocabulary	30	1848	0.90	0.31	0.12

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Writing Conventions	1	1641	0.61	0.49	-0.31
2	Writing Conventions	2	1641	0.66	0.47	-0.42
2	Writing Conventions	3	1641	0.74	0.44	-0.64
2	Writing Conventions	4	1641	0.59	0.49	-0.25
2	Writing Conventions	5	1641	0.59	0.49	-0.24
2	Writing Conventions	6	1641	0.88	0.33	-1.19
2	Writing Conventions	7	1641	0.52	0.50	-0.08
2	Writing Conventions	8	1641	0.50	0.50	-0.02
2	Writing Conventions	9	1641	0.91	0.28	-1.43
2	Writing Conventions	10	1641	0.65	0.48	-0.40
2	Writing Conventions	11	1641	0.55	0.50	-0.16
2	Writing Conventions	12	1641	0.84	0.36	-1.03
2	Writing Conventions	13	1641	0.87	0.34	-1.13
2	Writing Conventions	14	1641	0.73	0.44	-0.63
2	Writing Conventions	15	1641	0.51	0.50	-0.06
2	Writing Conventions	16	1641	0.86	0.35	-1.10
2	Writing Conventions	17	1641	0.85	0.36	-0.63
2	Writing Conventions	18	1641	0.73	0.44	-1.06
2	Writing Conventions	19	1641	0.85	0.36	0.10
2	Writing Conventions	20	1641	0.60	0.49	-0.27
2	Writing Conventions	21	1641	0.44	0.50	-1.05
2	Writing Conventions	22	1641	0.93	0.26	-0.82
2	Writing Conventions	23	1641	0.86	0.35	-0.16
2	Writing Conventions	24	1641	0.79	0.41	-1.10

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Writing Conventions	25	1641	0.90	0.30	-1.11
2	Writing Conventions	26	1641	0.91	0.29	-0.86
2	Writing Conventions	27	1641	0.76	0.43	-1.55
2	Writing Conventions	28	1641	0.55	0.50	-1.40
2	Writing Conventions	29	1641	0.86	0.35	-1.34
2	Writing Conventions	30	1641	0.80	0.40	-0.70

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Spelling	1	1795	0.95	0.22	0.59
2	Spelling	2	1795	0.89	0.31	0.59
2	Spelling	3	1795	0.69	0.46	0.47
2	Spelling	4	1795	0.38	0.48	0.69
2	Spelling	5	1795	0.93	0.25	-0.77
2	Spelling	6	1795	0.63	0.48	-0.35
2	Spelling	7	1795	0.64	0.48	-0.60
2	Spelling	8	1795	0.13	0.33	-0.30
2	Spelling	9	1795	0.90	0.31	2.13
2	Spelling	10	1795	0.64	0.48	0.60
2	Spelling	11	1795	0.71	0.45	0.94
2	Spelling	12	1795	0.63	0.48	1.23
2	Spelling	13	1795	0.60	0.49	1.52
2	Spelling	14	1795	0.50	0.50	1.68
2	Spelling	15	1795	0.90	0.30	1.03
2	Spelling	16	1795	0.69	0.46	2.06
2	Spelling	17	1795	0.46	0.50	0.40
2	Spelling	18	1795	0.27	0.44	0.46
2	Spelling	19	1795	0.22	0.41	0.61
2	Spelling	20	1795	0.12	0.32	-0.34

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Mathematics	1	1880	0.95	0.21	1.10
2	Mathematics	2	1880	0.95	0.21	1.61
2	Mathematics	3	1880	0.95	0.23	0.38
2	Mathematics	4	1880	0.94	0.23	-0.16
2	Mathematics	5	1880	0.45	0.50	0.36
2	Mathematics	6	1880	0.86	0.35	0.54
2	Mathematics	7	1880	0.86	0.34	1.18
2	Mathematics	8	1880	0.92	0.27	1.72
2	Mathematics	9	1880	0.90	0.30	1.39
2	Mathematics	10	1880	0.87	0.33	0.67
2	Mathematics	11	1880	0.87	0.34	0.61
2	Mathematics	12	1880	0.87	0.33	1.35
2	Mathematics	13	1880	0.84	0.37	0.73
2	Mathematics	14	1880	0.87	0.33	0.63
2	Mathematics	15	1880	0.83	0.37	1.13
2	Mathematics	16	1880	0.82	0.38	2.27
2	Mathematics	17	1880	0.73	0.44	1.37
2	Mathematics	18	1880	0.74	0.44	0.56
2	Mathematics	19	1880	0.83	0.37	0.44
2	Mathematics	20	1880	0.81	0.39	1.08

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Mathematics	21	1880	0.81	0.39	1.10
2	Mathematics	22	1880	0.79	0.41	2.19
2	Mathematics	23	1880	0.80	0.40	1.66
2	Mathematics	24	1880	0.79	0.41	0.37
2	Mathematics	25	1880	0.65	0.48	0.72
2	Mathematics	26	1880	0.67	0.47	1.09
2	Mathematics	27	1880	0.66	0.47	0.99
2	Mathematics	28	1880	0.67	0.47	-0.27
2	Mathematics	29	1880	0.55	0.50	1.90
2	Mathematics	30	1880	0.67	0.47	1.12
2	Mathematics	31	1880	0.68	0.47	1.65
2	Mathematics	32	1880	0.68	0.47	2.07
2	Mathematics	33	1880	0.59	0.49	0.91
2	Mathematics	34	1880	0.67	0.47	0.87
2	Mathematics	35	1880	0.71	0.46	1.06
2	Mathematics	36	1880	0.63	0.48	0.36
2	Mathematics	37	1880	0.63	0.48	0.19
2	Mathematics	38	1880	0.56	0.50	1.73
2	Mathematics	39	1880	0.56	0.50	-0.25
2	Mathematics	40	1880	0.44	0.50	0.41
2	Mathematics	41	1880	0.40	0.49	-0.18
2	Mathematics	42	1880	0.51	0.50	1.48
2	Mathematics	43	1880	0.41	0.49	0.56
2	Mathematics	44	1880	0.43	0.50	0.64
2	Mathematics	45	1880	0.34	0.47	1.18
2	Mathematics	46	1880	0.21	0.41	1.06
2	Mathematics	47	1880	0.28	0.45	0.05
2	Mathematics	48	1880	0.24	0.42	1.28

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Computation	1	1864	0.69	0.46	0.33
2	Computation	2	1864	0.80	0.40	-0.47
2	Computation	3	1864	0.78	0.42	0.27
2	Computation	4	1864	0.79	0.40	-0.39
2	Computation	5	1864	0.75	0.44	-0.13
2	Computation	6	1864	0.76	0.43	-0.45
2	Computation	7	1864	0.51	0.50	-0.33
2	Computation	8	1864	0.53	0.50	0.39
2	Computation	9	1864	0.65	0.48	-0.28
2	Computation	10	1864	0.56	0.50	0.21
2	Computation	11	1864	0.53	0.50	0.29
2	Computation	12	1864	0.48	0.50	-0.03
2	Computation	13	1864	0.79	0.41	0.78
2	Computation	14	1864	0.70	0.46	-0.20
2	Computation	15	1864	0.72	0.45	0.06
2	Computation	16	1864	0.64	0.48	0.94
2	Computation	17	1864	0.62	0.49	-0.42
2	Computation	18	1864	0.68	0.46	0.00
2	Computation	19	1864	0.44	0.50	-0.11
2	Computation	20	1864	0.51	0.50	-0.14

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
2	Computation	21	1864	0.32	0.47	0.49
2	Computation	22	1864	0.27	0.44	0.33
2	Computation	23	1864	0.23	0.42	1.05
2	Computation	24	1864	0.23	0.42	1.06
2	Computation	25	1864	0.81	0.39	0.30
2	Computation	26	1864	0.81	0.39	-0.19
2	Computation	27	1864	0.69	0.46	0.43
2	Computation	28	1864	0.83	0.38	-0.57
2	Computation	29	1864	0.50	0.50	0.36
2	Computation	30	1864	0.46	0.50	-0.51
2	Computation	31	1864	0.34	0.47	-0.52
2	Computation	32	1864	0.35	0.48	0.39
2	Computation	33	1864	0.71	0.45	-0.13
2	Computation	34	1864	0.47	0.50	0.45
2	Computation	35	1864	0.52	0.50	0.75
2	Computation	36	1864	0.48	0.50	0.72
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Reading	1	1732	0.80	0.40	1.02
3	Reading	2	1732	0.91	0.29	0.37
3	Reading	3	1732	0.86	0.34	1.24
3	Reading	4	1732	0.26	0.44	0.50
3	Reading	5	1732	0.65	0.48	0.10
3	Reading	6	1732	0.80	0.40	1.65
3	Reading	7	1732	0.53	0.50	0.58
3	Reading	8	1732	0.75	0.43	1.87
3	Reading	9	1732	0.65	0.48	1.53
3	Reading	10	1732	0.84	0.36	1.43
3	Reading	11	1732	0.08	0.28	1.26
3	Reading	12	1732	0.64	0.48	1.16
3	Reading	13	1732	0.47	0.50	1.79
3	Reading	14	1732	0.51	0.50	0.53
3	Reading	15	1732	0.54	0.50	1.45
3	Reading	16	1732	0.74	0.44	1.78
3	Reading	17	1732	0.90	0.30	0.77
3	Reading	18	1732	0.66	0.47	0.38
3	Reading	19	1732	0.87	0.33	0.13
3	Reading	20	1732	0.95	0.22	1.27
3	Reading	21	1732	0.50	0.50	0.08
3	Reading	22	1732	0.86	0.35	0.14
3	Reading	23	1732	0.41	0.49	0.46
3	Reading	24	1732	0.55	0.50	0.87
3	Reading	25	1732	0.59	0.49	0.28
3	Reading	26	1732	0.66	0.47	1.05
3	Reading	27	1732	0.70	0.46	0.32
3	Reading	28	1732	0.44	0.50	0.31
3	Reading	29	1732	0.87	0.34	0.47
3	Reading	30	1732	0.58	0.49	1.79
3	Reading	31	1732	0.44	0.50	1.16
3	Reading	32	1732	0.82	0.39	2.19

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Reading	33	1732	0.97	0.17	0.76
3	Reading	34	1732	0.93	0.26	0.84
3	Reading	35	1732	0.65	0.48	0.29
3	Reading	36	1732	0.93	0.25	0.57
3	Reading	37	1732	0.93	0.26	2.27
3	Reading	38	1732	0.88	0.32	1.28
3	Reading	39	1732	0.79	0.41	0.84
3	Reading	40	1732	0.91	0.29	1.57
3	Reading	41	1732	0.73	0.44	0.99
3	Reading	42	1732	0.91	0.29	1.28
3	Reading	43	1732	0.91	0.29	0.66
3	Reading	44	1732	0.88	0.32	3.06
3	Reading	45	1732	0.44	0.50	1.29
3	Reading	46	1732	0.70	0.46	1.71
3	Reading	47	1732	0.28	0.45	1.62
3	Reading	48	1732	0.82	0.39	1.56
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Word Analysis	1	1725	0.99	0.09	0.68
3	Word Analysis	2	1725	0.98	0.14	-0.04
3	Word Analysis	3	1725	0.99	0.12	-0.92
3	Word Analysis	4	1725	0.96	0.19	2.47
3	Word Analysis	5	1725	0.94	0.24	-0.40
3	Word Analysis	6	1725	0.88	0.32	1.78
3	Word Analysis	7	1725	0.79	0.41	1.27
3	Word Analysis	8	1725	0.73	0.44	1.14
3	Word Analysis	9	1725	0.77	0.42	0.28
3	Word Analysis	10	1725	0.54	0.50	1.08
3	Word Analysis	11	1725	0.46	0.50	-0.62
3	Word Analysis	12	1725	0.40	0.49	2.11
3	Word Analysis	13	1725	0.26	0.44	1.95
3	Word Analysis	14	1725	0.99	0.11	-0.26
3	Word Analysis	15	1725	0.99	0.12	-0.75
3	Word Analysis	16	1725	0.97	0.16	-0.66
3	Word Analysis	17	1725	0.97	0.16	-0.24
3	Word Analysis	18	1725	0.96	0.20	0.00
3	Word Analysis	19	1725	0.96	0.19	-0.05
3	Word Analysis	20	1725	0.96	0.20	0.01
3	Word Analysis	21	1725	0.96	0.20	0.01
3	Word Analysis	22	1725	0.99	0.10	-0.89
3	Word Analysis	23	1725	0.98	0.14	-0.47
3	Word Analysis	24	1725	0.86	0.35	0.80
3	Word Analysis	25	1725	0.82	0.39	0.99
3	Word Analysis	26	1725	0.76	0.42	1.17
3	Word Analysis	27	1725	0.97	0.16	-0.24
3	Word Analysis	28	1725	0.96	0.19	0.95
3	Word Analysis	29	1725	0.96	0.20	0.05
3	Word Analysis	30	1725	0.83	0.38	-0.02
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Vocabulary	1	1724	0.92	0.27	0.48
3	Vocabulary	2	1724	0.77	0.42	0.62
3	Vocabulary	3	1724	0.70	0.46	0.82
3	Vocabulary	4	1724	0.85	0.36	0.71
3	Vocabulary	5	1724	0.78	0.41	0.30
3	Vocabulary	6	1724	0.93	0.26	2.12
3	Vocabulary	7	1724	0.83	0.38	1.24
3	Vocabulary	8	1724	0.69	0.46	0.97
3	Vocabulary	9	1724	0.88	0.33	1.23
3	Vocabulary	10	1724	0.89	0.31	1.26
3	Vocabulary	11	1724	0.43	0.49	1.27
3	Vocabulary	12	1724	0.87	0.34	1.00
3	Vocabulary	13	1724	0.78	0.42	1.90
3	Vocabulary	14	1724	0.70	0.46	1.01
3	Vocabulary	15	1724	0.69	0.46	0.58
3	Vocabulary	16	1724	0.34	0.47	0.23
3	Vocabulary	17	1724	0.71	0.45	-0.28
3	Vocabulary	18	1724	0.88	0.33	2.16
3	Vocabulary	19	1724	0.91	0.28	0.82
3	Vocabulary	20	1724	0.89	0.31	1.06
3	Vocabulary	21	1724	0.77	0.42	1.35
3	Vocabulary	22	1724	0.97	0.18	2.23
3	Vocabulary	23	1724	0.33	0.47	1.37
3	Vocabulary	24	1724	0.82	0.38	0.95
3	Vocabulary	25	1724	0.76	0.43	1.87
3	Vocabulary	26	1724	0.66	0.48	0.85
3	Vocabulary	27	1724	0.30	0.46	1.92
3	Vocabulary	28	1724	0.65	0.48	0.61
3	Vocabulary	29	1724	0.79	0.41	1.20
3	Vocabulary	30	1724	0.44	0.50	0.56
3	Vocabulary	31	1724	0.82	0.39	0.34
3	Vocabulary	32	1724	0.42	0.49	0.50
3	Vocabulary	33	1724	0.87	0.33	1.02
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Writing Conventions	1	1707	0.95	0.23	-1.40
3	Writing Conventions	2	1707	0.52	0.50	0.24
3	Writing Conventions	3	1707	0.93	0.26	-1.22
3	Writing Conventions	4	1707	0.77	0.42	-0.43
3	Writing Conventions	5	1707	0.95	0.22	-1.45
3	Writing Conventions	6	1707	0.71	0.46	-0.22
3	Writing Conventions	7	1707	0.72	0.45	-0.26
3	Writing Conventions	8	1707	0.89	0.32	-0.91
3	Writing Conventions	9	1707	0.89	0.31	-0.94
3	Writing Conventions	10	1707	0.77	0.42	-0.41
3	Writing Conventions	11	1707	0.35	0.48	0.66
3	Writing Conventions	12	1707	0.65	0.48	-0.07
3	Writing Conventions	13	1707	0.85	0.36	-0.72
3	Writing Conventions	14	1707	0.83	0.37	-0.65
3	Writing Conventions	15	1707	0.79	0.41	-0.50

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Writing Conventions	16	1707	0.90	0.29	-1.03
3	Writing Conventions	17	1707	0.80	0.40	-0.53
3	Writing Conventions	18	1707	0.96	0.20	0.50
3	Writing Conventions	19	1707	0.96	0.20	-1.08
3	Writing Conventions	20	1707	0.91	0.28	-1.54
3	Writing Conventions	21	1707	0.88	0.32	-0.90
3	Writing Conventions	22	1707	0.89	0.31	-0.94
3	Writing Conventions	23	1707	0.64	0.48	-0.06
3	Writing Conventions	24	1707	0.41	0.49	-1.56
3	Writing Conventions	25	1707	0.65	0.48	-0.42
3	Writing Conventions	26	1707	0.63	0.48	-0.56
3	Writing Conventions	27	1707	0.54	0.50	0.11
3	Writing Conventions	28	1707	0.59	0.49	-0.45
3	Writing Conventions	29	1707	0.58	0.49	-0.47
3	Writing Conventions	30	1707	0.43	0.50	0.08
3	Writing Conventions	31	1707	0.40	0.49	0.54
3	Writing Conventions	32	1707	0.81	0.39	0.46
3	Writing Conventions	33	1707	0.77	0.42	-0.06
3	Writing Conventions	34	1707	0.78	0.41	0.10
3	Writing Conventions	35	1707	0.78	0.41	0.21
3	Writing Conventions	36	1707	0.58	0.49	-0.02

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Spelling	1	1674	0.87	0.34	0.30
3	Spelling	2	1674	0.92	0.27	0.96
3	Spelling	3	1674	0.94	0.25	0.53
3	Spelling	4	1674	0.86	0.34	0.15
3	Spelling	5	1674	0.86	0.35	0.64
3	Spelling	6	1674	0.88	0.32	1.03
3	Spelling	7	1674	0.67	0.47	1.33
3	Spelling	8	1674	0.85	0.36	1.64
3	Spelling	9	1674	0.76	0.42	2.21
3	Spelling	10	1674	0.79	0.41	0.60
3	Spelling	11	1674	0.66	0.47	0.66
3	Spelling	12	1674	0.54	0.50	1.87
3	Spelling	13	1674	0.44	0.50	1.30
3	Spelling	14	1674	0.30	0.46	2.47
3	Spelling	15	1674	0.26	0.44	2.32
3	Spelling	16	1674	0.23	0.42	2.45
3	Spelling	17	1674	0.22	0.41	0.70
3	Spelling	18	1674	0.23	0.42	2.81
3	Spelling	19	1674	0.16	0.37	2.69
3	Spelling	20	1674	0.14	0.34	2.43

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Mathematics	1	1678	0.96	0.20	0.73
3	Mathematics	2	1678	0.87	0.33	0.39
3	Mathematics	3	1678	0.92	0.28	1.16
3	Mathematics	4	1678	0.91	0.28	0.69
3	Mathematics	5	1678	0.89	0.31	-0.07

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Mathematics	6	1678	0.82	0.38	1.69
3	Mathematics	7	1678	0.85	0.36	1.67
3	Mathematics	8	1678	0.82	0.38	1.59
3	Mathematics	9	1678	0.86	0.35	1.39
3	Mathematics	10	1678	0.82	0.39	3.63
3	Mathematics	11	1678	0.86	0.34	1.26
3	Mathematics	12	1678	0.84	0.37	0.37
3	Mathematics	13	1678	0.80	0.40	1.93
3	Mathematics	14	1678	0.80	0.40	0.80
3	Mathematics	15	1678	0.84	0.36	2.07
3	Mathematics	16	1678	0.75	0.43	1.81
3	Mathematics	17	1678	0.76	0.43	1.37
3	Mathematics	18	1678	0.77	0.42	1.48
3	Mathematics	19	1678	0.74	0.44	2.21
3	Mathematics	20	1678	0.74	0.44	1.59
3	Mathematics	21	1678	0.69	0.46	1.38
3	Mathematics	22	1678	0.63	0.48	2.53
3	Mathematics	23	1678	0.74	0.44	2.30
3	Mathematics	24	1678	0.67	0.47	0.55
3	Mathematics	25	1678	0.71	0.45	0.76
3	Mathematics	26	1678	0.67	0.47	1.15
3	Mathematics	27	1678	0.56	0.50	0.83
3	Mathematics	28	1678	0.58	0.49	0.95
3	Mathematics	29	1678	0.54	0.50	1.64
3	Mathematics	30	1678	0.53	0.50	2.92
3	Mathematics	31	1678	0.58	0.49	1.70
3	Mathematics	32	1678	0.49	0.50	2.10
3	Mathematics	33	1678	0.47	0.50	2.40
3	Mathematics	34	1678	0.55	0.50	2.30
3	Mathematics	35	1678	0.55	0.50	0.89
3	Mathematics	36	1678	0.26	0.44	2.38
3	Mathematics	37	1678	0.44	0.50	1.10
3	Mathematics	38	1678	0.37	0.48	1.65
3	Mathematics	39	1678	0.33	0.47	1.31
3	Mathematics	40	1678	0.66	0.47	1.17
3	Mathematics	41	1678	0.33	0.47	0.66
3	Mathematics	42	1678	0.38	0.49	0.89
3	Mathematics	43	1678	0.29	0.46	1.07
3	Mathematics	44	1678	0.26	0.44	0.95
3	Mathematics	45	1678	0.29	0.45	2.21
3	Mathematics	46	1678	0.22	0.41	0.91
3	Mathematics	47	1678	0.13	0.33	1.17
3	Mathematics	48	1678	0.04	0.20	1.85
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Computation	1	1659	0.92	0.27	1.01
3	Computation	2	1659	0.92	0.27	1.01
3	Computation	3	1659	0.89	0.31	-0.39
3	Computation	4	1659	0.87	0.34	-0.12
3	Computation	5	1659	0.84	0.37	0.64

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
3	Computation	6	1659	0.80	0.40	0.33
3	Computation	7	1659	0.71	0.45	-0.25
3	Computation	8	1659	0.69	0.46	0.51
3	Computation	9	1659	0.64	0.48	0.69
3	Computation	10	1659	0.57	0.50	0.02
3	Computation	11	1659	0.61	0.49	0.58
3	Computation	12	1659	0.59	0.49	-0.59
3	Computation	13	1659	0.43	0.50	0.37
3	Computation	14	1659	0.43	0.50	-0.59
3	Computation	15	1659	0.79	0.41	0.90
3	Computation	16	1659	0.77	0.42	1.20
3	Computation	17	1659	0.48	0.50	0.99
3	Computation	18	1659	0.44	0.50	0.07
3	Computation	19	1659	0.38	0.49	0.12
3	Computation	20	1659	0.30	0.46	1.20
3	Computation	21	1659	0.32	0.47	1.34
3	Computation	22	1659	0.36	0.48	1.35
3	Computation	23	1659	0.35	0.48	1.13
3	Computation	24	1659	0.30	0.46	1.30
3	Computation	25	1659	0.70	0.46	0.55
3	Computation	26	1659	0.62	0.48	0.36
3	Computation	27	1659	0.54	0.50	0.76
3	Computation	28	1659	0.47	0.50	0.93
3	Computation	29	1659	0.73	0.44	1.07
3	Computation	30	1659	0.70	0.46	1.07
3	Computation	31	1659	0.75	0.43	0.20
3	Computation	32	1659	0.55	0.50	0.73
3	Computation	33	1659	0.49	0.50	0.27
3	Computation	34	1659	0.41	0.49	0.88
3	Computation	35	1659	0.41	0.49	1.12
3	Computation	36	1659	0.39	0.49	0.35
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Reading	1	1923	0.85	0.35	0.87
4	Reading	2	1923	0.45	0.50	2.03
4	Reading	3	1923	0.85	0.35	0.87
4	Reading	4	1923	0.86	0.34	0.81
4	Reading	5	1923	0.83	0.37	0.96
4	Reading	6	1923	0.56	0.50	1.75
4	Reading	7	1923	0.62	0.48	1.61
4	Reading	8	1923	0.75	0.43	1.24
4	Reading	9	1923	0.28	0.45	1.80
4	Reading	10	1923	0.58	0.49	1.66
4	Reading	11	1923	0.48	0.50	1.96
4	Reading	12	1923	0.42	0.49	1.54
4	Reading	13	1923	0.37	0.48	2.28
4	Reading	14	1923	0.22	0.41	2.40
4	Reading	15	1923	0.25	0.43	2.79
4	Reading	16	1923	0.13	0.34	1.23
4	Reading	17	1923	0.25	0.43	1.82

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Reading	18	1923	0.58	0.49	0.55
4	Reading	19	1923	0.43	0.50	1.02
4	Reading	20	1923	0.54	0.50	1.05
4	Reading	21	1923	0.59	0.49	1.17
4	Reading	22	1923	0.48	0.50	1.35
4	Reading	23	1923	0.67	0.47	1.37
4	Reading	24	1923	0.25	0.43	1.65
4	Reading	25	1923	0.69	0.46	2.14
4	Reading	26	1923	0.29	0.45	1.72
4	Reading	27	1923	0.50	0.50	2.07
4	Reading	28	1923	0.58	0.49	1.80
4	Reading	29	1923	0.43	0.50	1.69
4	Reading	30	1923	0.44	0.50	1.95
4	Reading	31	1923	0.64	0.48	1.49
4	Reading	32	1923	0.54	0.50	2.54
4	Reading	33	1923	0.60	0.49	1.44
4	Reading	34	1923	0.48	0.50	2.44
4	Reading	35	1923	0.65	0.48	1.91
4	Reading	36	1923	0.35	0.48	1.71
4	Reading	37	1923	0.30	0.46	2.06
4	Reading	38	1923	0.18	0.39	2.05
4	Reading	39	1923	0.76	0.43	1.57
4	Reading	40	1923	0.53	0.50	2.46
4	Reading	41	1923	0.91	0.29	1.71
4	Reading	42	1923	0.82	0.39	1.94
4	Reading	43	1923	0.81	0.39	2.08
4	Reading	44	1923	0.78	0.42	2.22
4	Reading	45	1923	0.72	0.45	2.64
4	Reading	46	1923	0.71	0.45	2.54
4	Reading	47	1923	0.60	0.49	3.01
4	Reading	48	1923	0.40	0.49	2.55
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Vocabulary	1	1980	0.50	0.50	1.91
4	Vocabulary	2	1980	0.50	0.50	1.91
4	Vocabulary	3	1980	0.50	0.50	1.91
4	Vocabulary	4	1980	0.50	0.50	1.91
4	Vocabulary	5	1980	0.69	0.46	1.53
4	Vocabulary	6	1980	0.45	0.50	2.10
4	Vocabulary	7	1980	0.32	0.47	1.44
4	Vocabulary	8	1980	0.35	0.48	2.26
4	Vocabulary	9	1980	0.28	0.45	2.35
4	Vocabulary	10	1980	0.66	0.48	2.46
4	Vocabulary	11	1980	0.42	0.49	2.04
4	Vocabulary	12	1980	0.83	0.37	2.17
4	Vocabulary	13	1980	0.85	0.36	0.73
4	Vocabulary	14	1980	0.82	0.38	1.57
4	Vocabulary	15	1980	0.85	0.36	0.83
4	Vocabulary	16	1980	0.68	0.47	2.16
4	Vocabulary	17	1980	0.47	0.50	2.08

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Vocabulary	18	1980	0.26	0.44	1.53
4	Vocabulary	19	1980	0.52	0.50	1.54
4	Vocabulary	20	1980	0.77	0.42	1.43
4	Vocabulary	21	1980	0.25	0.43	2.51
4	Vocabulary	22	1980	0.74	0.44	1.87
4	Vocabulary	23	1980	0.61	0.49	1.19
4	Vocabulary	24	1980	0.39	0.49	2.56
4	Vocabulary	25	1980	0.88	0.32	1.30
4	Vocabulary	26	1980	0.64	0.48	1.64
4	Vocabulary	27	1980	0.86	0.35	0.90
4	Vocabulary	28	1980	0.39	0.49	1.00
4	Vocabulary	29	1980	0.43	0.49	1.47
4	Vocabulary	30	1980	0.66	0.48	1.97
4	Vocabulary	31	1980	0.65	0.48	0.96
4	Vocabulary	32	1980	0.69	0.46	0.89
4	Vocabulary	33	1980	0.61	0.49	1.64
4	Vocabulary	34	1980	0.65	0.48	1.84
4	Vocabulary	35	1980	0.65	0.48	1.54
4	Vocabulary	36	1980	0.74	0.44	1.44
4	Vocabulary	37	1980	0.69	0.46	1.55
4	Vocabulary	38	1980	0.56	0.50	1.65
4	Vocabulary	39	1980	0.53	0.50	1.77
4	Vocabulary	40	1980	0.61	0.49	1.28

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Writing Conventions	1	1911	0.65	0.48	0.20
4	Writing Conventions	2	1911	0.56	0.50	0.27
4	Writing Conventions	3	1911	0.88	0.32	1.46
4	Writing Conventions	4	1911	0.71	0.45	0.37
4	Writing Conventions	5	1911	0.63	0.48	2.03
4	Writing Conventions	6	1911	0.60	0.49	0.15
4	Writing Conventions	7	1911	0.16	0.37	0.37
4	Writing Conventions	8	1911	0.56	0.50	-0.69
4	Writing Conventions	9	1911	0.07	0.25	-0.02
4	Writing Conventions	10	1911	0.73	0.44	-0.08
4	Writing Conventions	11	1911	0.73	0.44	-0.07
4	Writing Conventions	12	1911	0.82	0.38	-0.39
4	Writing Conventions	13	1911	0.65	0.48	0.15
4	Writing Conventions	14	1911	0.37	0.48	0.83
4	Writing Conventions	15	1911	0.91	0.28	0.62
4	Writing Conventions	16	1911	0.73	0.44	0.78
4	Writing Conventions	17	1911	0.81	0.39	0.47
4	Writing Conventions	18	1911	0.66	0.47	0.87
4	Writing Conventions	19	1911	0.43	0.49	0.81
4	Writing Conventions	20	1911	0.39	0.49	0.42
4	Writing Conventions	21	1911	0.45	0.50	-0.33
4	Writing Conventions	22	1911	0.54	0.50	0.68
4	Writing Conventions	23	1911	0.52	0.50	0.11
4	Writing Conventions	24	1911	0.37	0.48	-0.87
4	Writing Conventions	25	1911	0.35	0.48	-0.08

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Writing Conventions	26	1911	0.69	0.46	1.04
4	Writing Conventions	27	1911	0.56	0.50	0.37
4	Writing Conventions	28	1911	0.29	0.45	0.04
4	Writing Conventions	29	1911	0.73	0.45	-0.07
4	Writing Conventions	30	1911	0.56	0.50	0.37
4	Writing Conventions	31	1911	0.32	0.47	0.95
4	Writing Conventions	32	1911	0.53	0.50	0.80
4	Writing Conventions	33	1911	0.47	0.50	0.43
4	Writing Conventions	34	1911	0.38	0.49	0.57
4	Writing Conventions	35	1911	0.27	0.44	1.39
4	Writing Conventions	36	1911	0.18	0.39	1.10
4	Writing Conventions	37	1911	0.36	0.48	0.84
4	Writing Conventions	38	1911	0.35	0.48	0.88
4	Writing Conventions	39	1911	0.34	0.47	0.89
4	Writing Conventions	40	1911	0.26	0.44	1.14
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Spelling	1	1908	0.90	0.30	1.27
4	Spelling	2	1908	0.94	0.23	1.78
4	Spelling	3	1908	0.93	0.26	1.33
4	Spelling	4	1908	0.87	0.34	1.05
4	Spelling	5	1908	0.89	0.32	1.04
4	Spelling	6	1908	0.82	0.38	1.34
4	Spelling	7	1908	0.92	0.27	0.91
4	Spelling	8	1908	0.88	0.32	1.24
4	Spelling	9	1908	0.88	0.33	2.70
4	Spelling	10	1908	0.88	0.33	1.32
4	Spelling	11	1908	0.88	0.33	0.70
4	Spelling	12	1908	0.85	0.36	1.04
4	Spelling	13	1908	0.83	0.38	0.76
4	Spelling	14	1908	0.82	0.38	1.02
4	Spelling	15	1908	0.84	0.37	1.31
4	Spelling	16	1908	0.83	0.38	1.10
4	Spelling	17	1908	0.81	0.39	0.99
4	Spelling	18	1908	0.81	0.39	1.31
4	Spelling	19	1908	0.67	0.47	0.54
4	Spelling	20	1908	0.82	0.38	2.10
4	Spelling	21	1908	0.73	0.44	1.29
4	Spelling	22	1908	0.76	0.43	1.88
4	Spelling	23	1908	0.63	0.48	1.18
4	Spelling	24	1908	0.62	0.48	1.94
4	Spelling	25	1908	0.55	0.50	2.25
4	Spelling	26	1908	0.61	0.49	1.91
4	Spelling	27	1908	0.49	0.50	2.22
4	Spelling	28	1908	0.48	0.50	1.61
4	Spelling	29	1908	0.50	0.50	1.54
4	Spelling	30	1908	0.30	0.46	2.21
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Mathematics	1	1990	0.52	0.50	1.89

4	Mathematics	2	1990	0.84	0.37	1.89
4	Mathematics	3	1990	0.82	0.39	1.89
4	Mathematics	4	1990	0.86	0.34	1.89
4	Mathematics	5	1990	0.77	0.42	1.89
4	Mathematics	6	1990	0.52	0.50	1.89
4	Mathematics	7	1990	0.84	0.36	1.89
4	Mathematics	8	1990	0.86	0.35	1.61
4	Mathematics	9	1990	0.80	0.40	2.05
4	Mathematics	10	1990	0.79	0.41	1.88
4	Mathematics	11	1990	0.77	0.42	2.27
4	Mathematics	12	1990	0.82	0.38	1.72
4	Mathematics	13	1990	0.85	0.36	1.66
4	Mathematics	14	1990	0.52	0.50	1.91
4	Mathematics	15	1990	0.68	0.47	2.15
4	Mathematics	16	1990	0.52	0.50	1.62
4	Mathematics	17	1990	0.78	0.41	2.50
4	Mathematics	18	1990	0.52	0.50	1.91
4	Mathematics	19	1990	0.59	0.49	2.09
4	Mathematics	20	1990	0.52	0.50	2.12
4	Mathematics	21	1990	0.67	0.47	1.55
4	Mathematics	22	1990	0.64	0.48	2.00
4	Mathematics	23	1990	0.74	0.44	1.33
4	Mathematics	24	1990	0.53	0.50	1.46
4	Mathematics	25	1990	0.52	0.50	1.83
4	Mathematics	26	1990	0.69	0.46	1.85
4	Mathematics	27	1990	0.52	0.50	2.47
4	Mathematics	28	1990	0.63	0.48	1.23
4	Mathematics	29	1990	0.64	0.48	1.05
4	Mathematics	30	1990	0.70	0.46	0.87
4	Mathematics	31	1990	0.66	0.47	1.52
4	Mathematics	32	1990	0.52	0.50	0.96
4	Mathematics	33	1990	0.55	0.50	1.15
4	Mathematics	34	1990	0.48	0.50	1.19
4	Mathematics	35	1990	0.45	0.50	2.50
4	Mathematics	36	1990	0.62	0.48	2.52
4	Mathematics	37	1990	0.44	0.50	1.64
4	Mathematics	38	1990	0.54	0.50	0.98
4	Mathematics	39	1990	0.38	0.49	0.88
4	Mathematics	40	1990	0.48	0.50	0.95
4	Mathematics	41	1990	0.29	0.45	1.07
4	Mathematics	42	1990	0.44	0.50	1.25
4	Mathematics	43	1990	0.42	0.49	1.17
4	Mathematics	44	1990	0.54	0.50	1.48
4	Mathematics	45	1990	0.51	0.50	2.10
4	Mathematics	46	1990	0.42	0.49	2.23
4	Mathematics	47	1990	0.36	0.48	2.03
4	Mathematics	48	1990	0.41	0.49	2.13
4	Mathematics	49	1990	0.43	0.49	1.54
4	Mathematics	50	1990	0.47	0.50	2.22
4	Mathematics	51	1990	0.46	0.50	1.99

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Mathematics	52	1990	0.28	0.45	2.07
4	Mathematics	53	1990	0.43	0.50	2.09
4	Mathematics	54	1990	0.41	0.49	2.31
4	Mathematics	55	1990	0.35	0.48	2.16
4	Mathematics	56	1990	0.39	0.49	1.84
4	Mathematics	57	1990	0.24	0.43	1.94
4	Mathematics	58	1990	0.37	0.48	2.28
4	Mathematics	59	1990	0.28	0.45	2.15
4	Mathematics	60	1990	0.28	0.45	2.64

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
4	Computation	1	1952	0.75	0.43	1.32
4	Computation	2	1952	0.72	0.45	1.32
4	Computation	3	1952	0.67	0.47	1.32
4	Computation	4	1952	0.82	0.39	0.38
4	Computation	5	1952	0.48	0.50	0.75
4	Computation	6	1952	0.52	0.50	1.33
4	Computation	7	1952	0.52	0.50	0.62
4	Computation	8	1952	0.71	0.45	0.82
4	Computation	9	1952	0.59	0.49	0.71
4	Computation	10	1952	0.69	0.46	0.84
4	Computation	11	1952	0.72	0.45	1.19
4	Computation	12	1952	0.48	0.50	1.28
4	Computation	13	1952	0.68	0.47	1.22
4	Computation	14	1952	0.47	0.50	1.35
4	Computation	15	1952	0.48	0.50	1.22
4	Computation	16	1952	0.39	0.49	1.24
4	Computation	17	1952	0.33	0.47	0.71
4	Computation	18	1952	0.37	0.48	1.37
4	Computation	19	1952	0.54	0.50	1.05
4	Computation	20	1952	0.51	0.50	0.79
4	Computation	21	1952	0.39	0.49	1.31
4	Computation	22	1952	0.48	0.50	1.27
4	Computation	23	1952	0.50	0.50	1.41
4	Computation	24	1952	0.37	0.48	1.82
4	Computation	25	1952	0.45	0.50	1.73
4	Computation	26	1952	0.28	0.45	1.85
4	Computation	27	1952	0.27	0.45	1.53
4	Computation	28	1952	0.45	0.50	1.39
4	Computation	29	1952	0.50	0.50	1.53
4	Computation	30	1952	0.46	0.50	1.39
4	Computation	31	1952	0.44	0.50	1.59
4	Computation	32	1952	0.31	0.46	1.59
4	Computation	33	1952	0.17	0.38	1.67
4	Computation	34	1952	0.25	0.43	1.92
4	Computation	35	1952	0.48	0.50	1.68
4	Computation	36	1952	0.34	0.47	2.19

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Reading	1	1931	0.67	0.47	1.99

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Reading	2	1931	0.73	0.45	1.61
5	Reading	3	1931	0.49	0.50	1.50
5	Reading	4	1931	0.51	0.50	1.67
5	Reading	5	1931	0.20	0.40	1.36
5	Reading	6	1931	0.36	0.48	1.95
5	Reading	7	1931	0.42	0.49	2.28
5	Reading	8	1931	0.46	0.50	1.54
5	Reading	9	1931	0.46	0.50	2.19
5	Reading	10	1931	0.20	0.40	1.93
5	Reading	11	1931	0.40	0.49	2.28
5	Reading	12	1931	0.69	0.46	2.30
5	Reading	13	1931	0.27	0.44	2.33
5	Reading	14	1931	0.48	0.50	2.15
5	Reading	15	1931	0.61	0.49	1.71
5	Reading	16	1931	0.28	0.45	2.09
5	Reading	17	1931	0.53	0.50	1.42
5	Reading	18	1931	0.69	0.46	2.01
5	Reading	19	1931	0.73	0.45	1.81
5	Reading	20	1931	0.66	0.47	1.51
5	Reading	21	1931	0.77	0.42	1.90
5	Reading	22	1931	0.55	0.50	1.40
5	Reading	23	1931	0.41	0.49	1.53
5	Reading	24	1931	0.71	0.45	2.65
5	Reading	25	1931	0.45	0.50	1.81
5	Reading	26	1931	0.56	0.50	2.06
5	Reading	27	1931	0.41	0.49	2.36
5	Reading	28	1931	0.40	0.49	2.08
5	Reading	29	1931	0.39	0.49	1.16
5	Reading	30	1931	0.46	0.50	2.46
5	Reading	31	1931	0.65	0.48	2.01
5	Reading	32	1931	0.49	0.50	1.69
5	Reading	33	1931	0.75	0.43	1.66
5	Reading	34	1931	0.53	0.50	1.49
5	Reading	35	1931	0.61	0.49	2.08
5	Reading	36	1931	0.72	0.45	2.03
5	Reading	37	1931	0.57	0.49	2.89
5	Reading	38	1931	0.76	0.43	2.39
5	Reading	39	1931	0.72	0.45	2.26
5	Reading	40	1931	0.27	0.45	2.17
5	Reading	41	1931	0.61	0.49	2.15
5	Reading	42	1931	0.50	0.50	2.90
5	Reading	43	1931	0.38	0.49	2.30
5	Reading	44	1931	0.34	0.47	1.60
5	Reading	45	1931	0.49	0.50	2.67
5	Reading	46	1931	0.82	0.38	2.12
5	Reading	47	1931	0.53	0.50	1.81
5	Reading	48	1931	0.66	0.47	2.63
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Vocabulary	1	1928	0.94	0.24	0.43

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Vocabulary	2	1928	0.92	0.27	1.99
5	Vocabulary	3	1928	0.63	0.48	2.14
5	Vocabulary	4	1928	0.62	0.48	1.74
5	Vocabulary	5	1928	0.52	0.50	0.60
5	Vocabulary	6	1928	0.54	0.50	2.42
5	Vocabulary	7	1928	0.45	0.50	1.93
5	Vocabulary	8	1928	0.34	0.47	1.72
5	Vocabulary	9	1928	0.91	0.29	0.79
5	Vocabulary	10	1928	0.88	0.33	1.75
5	Vocabulary	11	1928	0.87	0.34	1.27
5	Vocabulary	12	1928	0.85	0.36	2.38
5	Vocabulary	13	1928	0.77	0.42	1.70
5	Vocabulary	14	1928	0.73	0.44	1.65
5	Vocabulary	15	1928	0.64	0.48	1.50
5	Vocabulary	16	1928	0.87	0.33	0.90
5	Vocabulary	17	1928	0.32	0.46	2.49
5	Vocabulary	18	1928	0.23	0.42	2.74
5	Vocabulary	19	1928	0.48	0.50	2.08
5	Vocabulary	20	1928	0.87	0.34	0.93
5	Vocabulary	21	1928	0.63	0.48	1.72
5	Vocabulary	22	1928	0.62	0.48	1.74
5	Vocabulary	23	1928	0.32	0.47	2.48
5	Vocabulary	24	1928	0.89	0.31	1.44
5	Vocabulary	25	1928	0.62	0.49	0.92
5	Vocabulary	26	1928	0.78	0.41	1.69
5	Vocabulary	27	1928	0.36	0.48	1.04
5	Vocabulary	28	1928	0.64	0.48	1.33
5	Vocabulary	29	1928	0.66	0.47	0.69
5	Vocabulary	30	1928	0.71	0.45	0.87
5	Vocabulary	31	1928	0.41	0.49	2.01
5	Vocabulary	32	1928	0.54	0.50	1.92
5	Vocabulary	33	1928	0.70	0.46	2.24
5	Vocabulary	34	1928	0.51	0.50	2.53
5	Vocabulary	35	1928	0.66	0.47	1.71
5	Vocabulary	36	1928	0.64	0.48	1.65
5	Vocabulary	37	1928	0.30	0.46	1.53
5	Vocabulary	38	1928	0.55	0.50	2.29
5	Vocabulary	39	1928	0.40	0.49	2.37
5	Vocabulary	40	1928	0.36	0.48	1.95

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Writing Conventions	1	1917	0.55	0.50	0.10
5	Writing Conventions	2	1917	0.78	0.41	0.84
5	Writing Conventions	3	1917	0.49	0.50	1.06
5	Writing Conventions	4	1917	0.53	0.50	1.79
5	Writing Conventions	5	1917	0.28	0.45	1.31
5	Writing Conventions	6	1917	0.73	0.44	-0.05
5	Writing Conventions	7	1917	0.44	0.50	1.12
5	Writing Conventions	8	1917	0.34	0.48	1.89
5	Writing Conventions	9	1917	0.13	0.34	0.39

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Writing Conventions	10	1917	0.26	0.44	0.57
5	Writing Conventions	11	1917	0.78	0.42	-0.06
5	Writing Conventions	12	1917	0.32	0.47	0.71
5	Writing Conventions	13	1917	0.11	0.32	0.61
5	Writing Conventions	14	1917	0.62	0.48	1.23
5	Writing Conventions	15	1917	0.94	0.24	0.11
5	Writing Conventions	16	1917	0.91	0.29	0.45
5	Writing Conventions	17	1917	0.88	0.33	0.83
5	Writing Conventions	18	1917	0.79	0.41	-0.13
5	Writing Conventions	19	1917	0.80	0.40	-0.92
5	Writing Conventions	20	1917	0.73	0.44	0.10
5	Writing Conventions	21	1917	0.75	0.43	-0.09
5	Writing Conventions	22	1917	0.62	0.49	-0.67
5	Writing Conventions	23	1917	0.73	0.45	-0.47
5	Writing Conventions	24	1917	0.60	0.49	0.04
5	Writing Conventions	25	1917	0.44	0.50	0.40
5	Writing Conventions	26	1917	0.74	0.44	1.16
5	Writing Conventions	27	1917	0.50	0.50	0.07
5	Writing Conventions	28	1917	0.31	0.46	0.69
5	Writing Conventions	29	1917	0.63	0.48	0.80
5	Writing Conventions	30	1917	0.49	0.50	0.37
5	Writing Conventions	31	1917	0.57	0.50	0.75
5	Writing Conventions	32	1917	0.45	0.50	0.93
5	Writing Conventions	33	1917	0.47	0.50	1.16
5	Writing Conventions	34	1917	0.40	0.49	1.19
5	Writing Conventions	35	1917	0.31	0.46	0.71
5	Writing Conventions	36	1917	0.30	0.46	0.53
5	Writing Conventions	37	1917	0.31	0.46	1.17
5	Writing Conventions	38	1917	0.30	0.46	1.12
5	Writing Conventions	39	1917	0.26	0.44	1.16
5	Writing Conventions	40	1917	0.32	0.47	1.31
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Spelling	1	1919	0.86	0.34	1.37
5	Spelling	2	1919	0.83	0.37	0.94
5	Spelling	3	1919	0.94	0.23	1.16
5	Spelling	4	1919	0.94	0.23	0.95
5	Spelling	5	1919	0.93	0.25	2.02
5	Spelling	6	1919	0.90	0.29	0.51
5	Spelling	7	1919	0.92	0.27	1.71
5	Spelling	8	1919	0.87	0.34	1.22
5	Spelling	9	1919	0.90	0.30	1.49
5	Spelling	10	1919	0.91	0.29	1.13
5	Spelling	11	1919	0.80	0.40	0.85
5	Spelling	12	1919	0.78	0.42	1.62
5	Spelling	13	1919	0.75	0.43	2.31
5	Spelling	14	1919	0.69	0.46	1.11
5	Spelling	15	1919	0.92	0.27	0.93
5	Spelling	16	1919	0.95	0.22	1.64
5	Spelling	17	1919	0.84	0.36	1.43

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Spelling	18	1919	0.79	0.41	1.94
5	Spelling	19	1919	0.81	0.39	1.21
5	Spelling	20	1919	0.81	0.40	1.83
5	Spelling	21	1919	0.72	0.45	1.40
5	Spelling	22	1919	0.97	0.18	1.02
5	Spelling	23	1919	0.86	0.35	1.05
5	Spelling	24	1919	0.90	0.31	0.82
5	Spelling	25	1919	0.69	0.46	2.02
5	Spelling	26	1919	0.93	0.25	1.54
5	Spelling	27	1919	0.93	0.25	1.67
5	Spelling	28	1919	0.91	0.28	1.62
5	Spelling	29	1919	0.81	0.39	0.78
5	Spelling	30	1919	0.57	0.49	1.74
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Mathematics	1	1962	0.94	0.24	1.52
5	Mathematics	2	1962	0.87	0.34	2.91
5	Mathematics	3	1962	0.82	0.38	1.64
5	Mathematics	4	1962	0.83	0.37	1.38
5	Mathematics	5	1962	0.77	0.42	0.50
5	Mathematics	6	1962	0.81	0.39	2.22
5	Mathematics	7	1962	0.76	0.43	1.98
5	Mathematics	8	1962	0.66	0.47	2.36
5	Mathematics	9	1962	0.70	0.46	2.55
5	Mathematics	10	1962	0.75	0.43	2.67
5	Mathematics	11	1962	0.72	0.45	1.79
5	Mathematics	12	1962	0.73	0.44	3.33
5	Mathematics	13	1962	0.65	0.48	1.58
5	Mathematics	14	1962	0.69	0.46	1.54
5	Mathematics	15	1962	0.62	0.48	2.02
5	Mathematics	16	1962	0.33	0.47	2.12
5	Mathematics	17	1962	0.58	0.49	2.18
5	Mathematics	18	1962	0.66	0.47	1.91
5	Mathematics	19	1962	0.71	0.45	2.35
5	Mathematics	20	1962	0.60	0.49	2.31
5	Mathematics	21	1962	0.69	0.46	1.93
5	Mathematics	22	1962	0.65	0.48	2.50
5	Mathematics	23	1962	0.66	0.47	2.34
5	Mathematics	24	1962	0.56	0.50	1.93
5	Mathematics	25	1962	0.58	0.49	1.01
5	Mathematics	26	1962	0.63	0.48	1.86
5	Mathematics	27	1962	0.58	0.49	2.53
5	Mathematics	28	1962	0.61	0.49	1.60
5	Mathematics	29	1962	0.63	0.48	1.63
5	Mathematics	30	1962	0.55	0.50	2.46
5	Mathematics	31	1962	0.48	0.50	1.71
5	Mathematics	32	1962	0.53	0.50	1.17
5	Mathematics	33	1962	0.58	0.49	1.45
5	Mathematics	34	1962	0.57	0.49	1.72
5	Mathematics	35	1962	0.58	0.49	1.21

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Mathematics	36	1962	0.54	0.50	1.91
5	Mathematics	37	1962	0.49	0.50	1.81
5	Mathematics	38	1962	0.51	0.50	1.72
5	Mathematics	39	1962	0.49	0.50	1.74
5	Mathematics	40	1962	0.54	0.50	2.01
5	Mathematics	41	1962	0.47	0.50	2.40
5	Mathematics	42	1962	0.64	0.48	2.16
5	Mathematics	43	1962	0.46	0.50	1.96
5	Mathematics	44	1962	0.47	0.50	1.91
5	Mathematics	45	1962	0.47	0.50	1.85
5	Mathematics	46	1962	0.40	0.49	1.26
5	Mathematics	47	1962	0.34	0.47	1.42
5	Mathematics	48	1962	0.45	0.50	1.74
5	Mathematics	49	1962	0.42	0.49	1.80
5	Mathematics	50	1962	0.39	0.49	2.57
5	Mathematics	51	1962	0.68	0.47	2.09
5	Mathematics	52	1962	0.48	0.50	2.13
5	Mathematics	53	1962	0.35	0.48	1.67
5	Mathematics	54	1962	0.11	0.31	2.17
5	Mathematics	55	1962	0.38	0.49	2.17
5	Mathematics	56	1962	0.40	0.49	2.02
5	Mathematics	57	1962	0.31	0.46	2.17
5	Mathematics	58	1962	0.32	0.47	1.77
5	Mathematics	59	1962	0.20	0.40	2.20
5	Mathematics	60	1962	0.28	0.45	1.91

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Computation	1	1950	0.45	0.50	1.71
5	Computation	2	1950	0.45	0.50	1.71
5	Computation	3	1950	0.45	0.50	1.71
5	Computation	4	1950	0.45	0.50	1.71
5	Computation	5	1950	0.45	0.50	1.71
5	Computation	6	1950	0.45	0.50	1.71
5	Computation	7	1950	0.74	0.44	0.97
5	Computation	8	1950	0.61	0.49	1.39
5	Computation	9	1950	0.58	0.49	1.47
5	Computation	10	1950	0.57	0.49	1.33
5	Computation	11	1950	0.55	0.50	1.38
5	Computation	12	1950	0.59	0.49	1.89
5	Computation	13	1950	0.60	0.49	1.34
5	Computation	14	1950	0.43	0.49	1.81
5	Computation	15	1950	0.43	0.50	1.89
5	Computation	16	1950	0.50	0.50	1.58
5	Computation	17	1950	0.37	0.48	1.76
5	Computation	18	1950	0.34	0.47	1.72
5	Computation	19	1950	0.43	0.49	1.64
5	Computation	20	1950	0.48	0.50	1.98
5	Computation	21	1950	0.44	0.50	2.05
5	Computation	22	1950	0.46	0.50	1.76
5	Computation	23	1950	0.46	0.50	1.93

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
5	Computation	24	1950	0.36	0.48	1.72
5	Computation	25	1950	0.31	0.46	1.68
5	Computation	26	1950	0.41	0.49	1.42
5	Computation	27	1950	0.44	0.50	2.00
5	Computation	28	1950	0.34	0.47	1.68
5	Computation	29	1950	0.33	0.47	1.98
5	Computation	30	1950	0.32	0.46	1.74
5	Computation	31	1950	0.37	0.48	2.44
5	Computation	32	1950	0.25	0.43	2.26
5	Computation	33	1950	0.31	0.46	2.05
5	Computation	34	1950	0.25	0.43	2.24
5	Computation	35	1950	0.24	0.43	2.25
5	Computation	36	1950	0.19	0.39	2.04
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Reading	1	1879	0.81	0.39	1.67
6	Reading	2	1879	0.42	0.49	2.49
6	Reading	3	1879	0.22	0.42	1.44
6	Reading	4	1879	0.29	0.46	2.54
6	Reading	5	1879	0.49	0.50	1.62
6	Reading	6	1879	0.54	0.50	1.08
6	Reading	7	1879	0.38	0.49	2.16
6	Reading	8	1879	0.47	0.50	2.92
6	Reading	9	1879	0.21	0.41	2.91
6	Reading	10	1879	0.20	0.40	1.83
6	Reading	11	1879	0.71	0.45	2.34
6	Reading	12	1879	0.37	0.48	3.01
6	Reading	13	1879	0.52	0.50	3.01
6	Reading	14	1879	0.35	0.48	2.25
6	Reading	15	1879	0.73	0.45	2.19
6	Reading	16	1879	0.78	0.41	2.36
6	Reading	17	1879	0.87	0.34	1.43
6	Reading	18	1879	0.41	0.49	1.46
6	Reading	19	1879	0.70	0.46	0.96
6	Reading	20	1879	0.66	0.47	2.74
6	Reading	21	1879	0.33	0.47	2.01
6	Reading	22	1879	0.72	0.45	2.69
6	Reading	23	1879	0.63	0.48	1.34
6	Reading	24	1879	0.22	0.41	2.37
6	Reading	25	1879	0.54	0.50	2.93
6	Reading	26	1879	0.54	0.50	2.71
6	Reading	27	1879	0.61	0.49	2.21
6	Reading	28	1879	0.34	0.47	2.10
6	Reading	29	1879	0.41	0.49	2.47
6	Reading	30	1879	0.42	0.49	2.27
6	Reading	31	1879	0.53	0.50	2.97
6	Reading	32	1879	0.27	0.45	3.01
6	Reading	33	1879	0.24	0.43	2.40
6	Reading	34	1879	0.43	0.50	1.70
6	Reading	35	1879	0.23	0.42	1.81

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Reading	36	1879	0.65	0.48	2.60
6	Reading	37	1879	0.23	0.42	1.64
6	Reading	38	1879	0.44	0.50	1.88
6	Reading	39	1879	0.20	0.40	2.94
6	Reading	40	1879	0.20	0.40	2.10
6	Reading	41	1879	0.48	0.50	2.10
6	Reading	42	1879	0.50	0.50	1.93
6	Reading	43	1879	0.79	0.41	2.58
6	Reading	44	1879	0.78	0.42	2.40
6	Reading	45	1879	0.89	0.31	2.76
6	Reading	46	1879	0.28	0.45	2.87
6	Reading	47	1879	0.58	0.49	2.12
6	Reading	48	1879	0.30	0.46	2.38
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Vocabulary	1	1871	0.80	0.40	2.65
6	Vocabulary	2	1871	0.44	0.50	1.57
6	Vocabulary	3	1871	0.74	0.44	2.56
6	Vocabulary	4	1871	0.70	0.46	2.30
6	Vocabulary	5	1871	0.34	0.47	1.37
6	Vocabulary	6	1871	0.31	0.46	1.66
6	Vocabulary	7	1871	0.35	0.48	2.53
6	Vocabulary	8	1871	0.89	0.32	1.41
6	Vocabulary	9	1871	0.70	0.46	1.42
6	Vocabulary	10	1871	0.72	0.45	2.06
6	Vocabulary	11	1871	0.56	0.50	1.81
6	Vocabulary	12	1871	0.60	0.49	2.43
6	Vocabulary	13	1871	0.60	0.49	2.63
6	Vocabulary	14	1871	0.78	0.41	2.24
6	Vocabulary	15	1871	0.78	0.41	1.95
6	Vocabulary	16	1871	0.54	0.50	2.21
6	Vocabulary	17	1871	0.65	0.48	2.05
6	Vocabulary	18	1871	0.39	0.49	3.25
6	Vocabulary	19	1871	0.32	0.46	2.72
6	Vocabulary	20	1871	0.47	0.50	2.68
6	Vocabulary	21	1871	0.59	0.49	2.37
6	Vocabulary	22	1871	0.48	0.50	3.19
6	Vocabulary	23	1871	0.55	0.50	1.88
6	Vocabulary	24	1871	0.14	0.34	1.63
6	Vocabulary	25	1871	0.28	0.45	2.98
6	Vocabulary	26	1871	0.30	0.46	1.93
6	Vocabulary	27	1871	0.42	0.49	1.66
6	Vocabulary	28	1871	0.15	0.36	2.03
6	Vocabulary	29	1871	0.62	0.48	1.61
6	Vocabulary	30	1871	0.71	0.45	0.95
6	Vocabulary	31	1871	0.20	0.40	1.93
6	Vocabulary	32	1871	0.70	0.46	2.40
6	Vocabulary	33	1871	0.65	0.48	2.05
6	Vocabulary	34	1871	0.59	0.49	2.62
6	Vocabulary	35	1871	0.69	0.46	2.19

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Vocabulary	36	1871	0.55	0.50	1.96
6	Vocabulary	37	1871	0.26	0.44	2.80
6	Vocabulary	38	1871	0.49	0.50	1.68
6	Vocabulary	39	1871	0.40	0.49	1.71
6	Vocabulary	40	1871	0.32	0.47	1.81
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Writing Conventions	1	1863	0.74	0.44	1.49
6	Writing Conventions	2	1863	0.83	0.38	0.15
6	Writing Conventions	3	1863	0.86	0.35	0.69
6	Writing Conventions	4	1863	0.83	0.38	-1.06
6	Writing Conventions	5	1863	0.75	0.43	1.62
6	Writing Conventions	6	1863	0.59	0.49	-0.76
6	Writing Conventions	7	1863	0.21	0.41	0.03
6	Writing Conventions	8	1863	0.94	0.24	0.49
6	Writing Conventions	9	1863	0.80	0.40	-0.08
6	Writing Conventions	10	1863	0.65	0.48	0.21
6	Writing Conventions	11	1863	0.25	0.44	0.63
6	Writing Conventions	12	1863	0.77	0.42	0.25
6	Writing Conventions	13	1863	0.57	0.49	-0.06
6	Writing Conventions	14	1863	0.96	0.19	-0.21
6	Writing Conventions	15	1863	0.97	0.18	0.14
6	Writing Conventions	16	1863	0.95	0.22	0.54
6	Writing Conventions	17	1863	0.94	0.23	-1.16
6	Writing Conventions	18	1863	0.92	0.27	-0.86
6	Writing Conventions	19	1863	0.89	0.32	-0.35
6	Writing Conventions	20	1863	0.77	0.42	-0.80
6	Writing Conventions	21	1863	0.63	0.48	-0.56
6	Writing Conventions	22	1863	0.88	0.33	0.43
6	Writing Conventions	23	1863	0.88	0.32	-0.07
6	Writing Conventions	24	1863	0.88	0.32	-0.32
6	Writing Conventions	25	1863	0.83	0.38	-0.34
6	Writing Conventions	26	1863	0.67	0.47	-0.30
6	Writing Conventions	27	1863	0.68	0.46	1.25
6	Writing Conventions	28	1863	0.65	0.48	1.54
6	Writing Conventions	29	1863	0.68	0.47	0.80
6	Writing Conventions	30	1863	0.67	0.47	0.83
6	Writing Conventions	31	1863	0.67	0.47	0.40
6	Writing Conventions	32	1863	0.52	0.50	0.40
6	Writing Conventions	33	1863	0.51	0.50	0.49
6	Writing Conventions	34	1863	0.34	0.47	0.44
6	Writing Conventions	35	1863	0.24	0.43	0.44
6	Writing Conventions	36	1863	0.58	0.49	0.59
6	Writing Conventions	37	1863	0.63	0.48	0.66
6	Writing Conventions	38	1863	0.61	0.49	0.53
6	Writing Conventions	39	1863	0.58	0.49	0.84
6	Writing Conventions	40	1863	0.51	0.50	0.67
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Spelling	1	1858	0.95	0.22	1.45

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Spelling	2	1858	0.93	0.26	2.10
6	Spelling	3	1858	0.40	0.49	1.28
6	Spelling	4	1858	0.84	0.37	0.77
6	Spelling	5	1858	0.89	0.31	1.82
6	Spelling	6	1858	0.37	0.48	2.10
6	Spelling	7	1858	0.94	0.24	0.91
6	Spelling	8	1858	0.96	0.20	1.30
6	Spelling	9	1858	0.77	0.42	1.12
6	Spelling	10	1858	0.78	0.41	1.68
6	Spelling	11	1858	0.96	0.19	2.92
6	Spelling	12	1858	0.88	0.32	1.40
6	Spelling	13	1858	0.91	0.29	1.85
6	Spelling	14	1858	0.38	0.49	2.56
6	Spelling	15	1858	0.53	0.50	2.64
6	Spelling	16	1858	0.96	0.20	1.94
6	Spelling	17	1858	0.87	0.34	2.97
6	Spelling	18	1858	0.95	0.22	1.89
6	Spelling	19	1858	0.91	0.29	3.72
6	Spelling	20	1858	0.71	0.45	1.05
6	Spelling	21	1858	0.80	0.40	0.75
6	Spelling	22	1858	0.71	0.45	0.77
6	Spelling	23	1858	0.50	0.50	0.69
6	Spelling	24	1858	0.14	0.35	1.29
6	Spelling	25	1858	0.91	0.29	0.70
6	Spelling	26	1858	0.84	0.36	1.52
6	Spelling	27	1858	0.91	0.29	2.88
6	Spelling	28	1858	0.79	0.40	0.95
6	Spelling	29	1858	0.97	0.18	1.29
6	Spelling	30	1858	0.96	0.18	1.65
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Mathematics	1	1943	0.45	0.50	2.41
6	Mathematics	2	1943	0.45	0.50	2.41
6	Mathematics	3	1943	0.45	0.50	2.41
6	Mathematics	4	1943	0.45	0.50	2.41
6	Mathematics	5	1943	0.45	0.50	2.41
6	Mathematics	6	1943	0.45	0.50	2.41
6	Mathematics	7	1943	0.45	0.50	2.41
6	Mathematics	8	1943	0.45	0.50	2.41
6	Mathematics	9	1943	0.45	0.50	2.41
6	Mathematics	10	1943	0.45	0.50	2.41
6	Mathematics	11	1943	0.45	0.50	2.41
6	Mathematics	12	1943	0.45	0.50	2.41
6	Mathematics	13	1943	0.87	0.33	1.81
6	Mathematics	14	1943	0.75	0.43	2.29
6	Mathematics	15	1943	0.70	0.46	2.54
6	Mathematics	16	1943	0.74	0.44	2.97
6	Mathematics	17	1943	0.65	0.48	2.57
6	Mathematics	18	1943	0.77	0.42	2.02
6	Mathematics	19	1943	0.71	0.45	2.80

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Mathematics	20	1943	0.66	0.47	2.58
6	Mathematics	21	1943	0.65	0.48	2.10
6	Mathematics	22	1943	0.70	0.46	3.22
6	Mathematics	23	1943	0.73	0.45	2.74
6	Mathematics	24	1943	0.65	0.48	3.19
6	Mathematics	25	1943	0.56	0.50	1.16
6	Mathematics	26	1943	0.58	0.49	1.80
6	Mathematics	27	1943	0.61	0.49	1.69
6	Mathematics	28	1943	0.58	0.49	1.77
6	Mathematics	29	1943	0.58	0.49	1.72
6	Mathematics	30	1943	0.54	0.50	1.92
6	Mathematics	31	1943	0.50	0.50	2.33
6	Mathematics	32	1943	0.58	0.49	3.14
6	Mathematics	33	1943	0.47	0.50	2.52
6	Mathematics	34	1943	0.55	0.50	2.09
6	Mathematics	35	1943	0.53	0.50	2.69
6	Mathematics	36	1943	0.41	0.49	2.64
6	Mathematics	37	1943	0.47	0.50	2.16
6	Mathematics	38	1943	0.49	0.50	2.41
6	Mathematics	39	1943	0.49	0.50	1.92
6	Mathematics	40	1943	0.41	0.49	2.11
6	Mathematics	41	1943	0.33	0.47	2.51
6	Mathematics	42	1943	0.45	0.50	2.44
6	Mathematics	43	1943	0.44	0.50	1.94
6	Mathematics	44	1943	0.38	0.49	2.72
6	Mathematics	45	1943	0.40	0.49	1.66
6	Mathematics	46	1943	0.48	0.50	2.36
6	Mathematics	47	1943	0.36	0.48	2.79
6	Mathematics	48	1943	0.40	0.49	1.58
6	Mathematics	49	1943	0.38	0.49	2.21
6	Mathematics	50	1943	0.32	0.47	2.52
6	Mathematics	51	1943	0.34	0.47	2.17
6	Mathematics	52	1943	0.34	0.47	2.10
6	Mathematics	53	1943	0.30	0.46	1.91
6	Mathematics	54	1943	0.30	0.46	2.36
6	Mathematics	55	1943	0.24	0.43	3.06
6	Mathematics	56	1943	0.21	0.41	2.31
6	Mathematics	57	1943	0.21	0.41	2.20
6	Mathematics	58	1943	0.19	0.39	2.69
6	Mathematics	59	1943	0.18	0.38	2.32
6	Mathematics	60	1943	0.17	0.38	3.06
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Computation	1	1929	0.48	0.50	1.87
6	Computation	2	1929	0.48	0.50	1.87
6	Computation	3	1929	0.48	0.50	1.87
6	Computation	4	1929	0.85	0.36	0.88
6	Computation	5	1929	0.83	0.38	1.00
6	Computation	6	1929	0.86	0.35	0.74
6	Computation	7	1929	0.80	0.40	0.78

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
6	Computation	8	1929	0.77	0.42	1.45
6	Computation	9	1929	0.65	0.48	1.63
6	Computation	10	1929	0.61	0.49	1.54
6	Computation	11	1929	0.65	0.48	1.54
6	Computation	12	1929	0.61	0.49	1.54
6	Computation	13	1929	0.55	0.50	1.99
6	Computation	14	1929	0.67	0.47	1.40
6	Computation	15	1929	0.61	0.49	1.95
6	Computation	16	1929	0.58	0.49	1.98
6	Computation	17	1929	0.55	0.50	1.95
6	Computation	18	1929	0.44	0.50	2.06
6	Computation	19	1929	0.42	0.49	1.44
6	Computation	20	1929	0.41	0.49	1.11
6	Computation	21	1929	0.44	0.50	1.68
6	Computation	22	1929	0.43	0.49	2.02
6	Computation	23	1929	0.36	0.48	2.26
6	Computation	24	1929	0.41	0.49	2.16
6	Computation	25	1929	0.36	0.48	1.70
6	Computation	26	1929	0.40	0.49	2.22
6	Computation	27	1929	0.33	0.47	2.28
6	Computation	28	1929	0.31	0.46	2.52
6	Computation	29	1929	0.32	0.47	2.31
6	Computation	30	1929	0.31	0.46	2.02
6	Computation	31	1929	0.33	0.47	2.23
6	Computation	32	1929	0.26	0.44	2.15
6	Computation	33	1929	0.29	0.45	2.43
6	Computation	34	1929	0.30	0.46	2.41
6	Computation	35	1929	0.27	0.44	2.28
6	Computation	36	1929	0.23	0.42	2.35
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Reading	1	2284	0.46	0.50	2.50
7	Reading	2	2284	0.37	0.48	2.79
7	Reading	3	2284	0.11	0.31	1.18
7	Reading	4	2284	0.70	0.46	1.47
7	Reading	5	2284	0.78	0.42	0.55
7	Reading	6	2284	0.64	0.48	1.70
7	Reading	7	2284	0.53	0.50	2.53
7	Reading	8	2284	0.80	0.40	1.72
7	Reading	9	2284	0.15	0.35	2.63
7	Reading	10	2284	0.60	0.49	3.54
7	Reading	11	2284	0.49	0.50	1.81
7	Reading	12	2284	0.43	0.50	2.40
7	Reading	13	2284	0.26	0.44	1.58
7	Reading	14	2284	0.37	0.48	1.98
7	Reading	15	2284	0.35	0.48	2.25
7	Reading	16	2284	0.47	0.50	1.50
7	Reading	17	2284	0.38	0.48	2.55
7	Reading	18	2284	0.39	0.49	1.35
7	Reading	19	2284	0.17	0.37	3.02

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Reading	20	2284	0.29	0.45	1.62
7	Reading	21	2284	0.90	0.30	1.88
7	Reading	22	2284	0.75	0.43	2.92
7	Reading	23	2284	0.55	0.50	2.20
7	Reading	24	2284	0.22	0.42	3.26
7	Reading	25	2284	0.26	0.44	2.85
7	Reading	26	2284	0.55	0.50	1.02
7	Reading	27	2284	0.82	0.39	1.67
7	Reading	28	2284	0.42	0.49	2.21
7	Reading	29	2284	0.31	0.46	3.05
7	Reading	30	2284	0.87	0.33	2.92
7	Reading	31	2284	0.81	0.39	2.19
7	Reading	32	2284	0.95	0.21	1.44
7	Reading	33	2284	0.73	0.44	2.37
7	Reading	34	2284	0.74	0.44	1.82
7	Reading	35	2284	0.41	0.49	3.45
7	Reading	36	2284	0.48	0.50	1.80
7	Reading	37	2284	0.70	0.46	2.14
7	Reading	38	2284	0.13	0.33	2.64
7	Reading	39	2284	0.71	0.46	3.35
7	Reading	40	2284	0.57	0.49	2.07
7	Reading	41	2284	0.36	0.48	2.34
7	Reading	42	2284	0.40	0.49	2.47
7	Reading	43	2284	0.84	0.37	2.94
7	Reading	44	2284	0.23	0.42	2.61
7	Reading	45	2284	0.77	0.42	2.63
7	Reading	46	2284	0.55	0.50	2.57
7	Reading	47	2284	0.68	0.47	2.68
7	Reading	48	2284	0.26	0.44	2.39
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Vocabulary	1	2260	0.49	0.50	2.36
7	Vocabulary	2	2260	0.91	0.28	2.36
7	Vocabulary	3	2260	0.74	0.44	3.06
7	Vocabulary	4	2260	0.70	0.46	2.25
7	Vocabulary	5	2260	0.58	0.49	2.23
7	Vocabulary	6	2260	0.51	0.50	1.97
7	Vocabulary	7	2260	0.48	0.50	2.39
7	Vocabulary	8	2260	0.46	0.50	2.41
7	Vocabulary	9	2260	0.47	0.50	3.09
7	Vocabulary	10	2260	0.35	0.48	2.40
7	Vocabulary	11	2260	0.49	0.50	2.07
7	Vocabulary	12	2260	0.49	0.50	3.07
7	Vocabulary	13	2260	0.68	0.47	3.54
7	Vocabulary	14	2260	0.42	0.49	1.96
7	Vocabulary	15	2260	0.64	0.48	1.45
7	Vocabulary	16	2260	0.77	0.42	2.61
7	Vocabulary	17	2260	0.25	0.43	2.63
7	Vocabulary	18	2260	0.60	0.49	1.70
7	Vocabulary	19	2260	0.63	0.48	1.84

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Vocabulary	20	2260	0.74	0.44	2.61
7	Vocabulary	21	2260	0.59	0.49	2.52
7	Vocabulary	22	2260	0.42	0.49	2.11
7	Vocabulary	23	2260	0.38	0.49	1.71
7	Vocabulary	24	2260	0.82	0.39	2.02
7	Vocabulary	25	2260	0.70	0.46	2.08
7	Vocabulary	26	2260	0.65	0.48	2.97
7	Vocabulary	27	2260	0.74	0.44	1.63
7	Vocabulary	28	2260	0.38	0.48	2.00
7	Vocabulary	29	2260	0.38	0.49	2.52
7	Vocabulary	30	2260	0.11	0.32	1.89
7	Vocabulary	31	2260	0.65	0.48	2.15
7	Vocabulary	32	2260	0.61	0.49	2.41
7	Vocabulary	33	2260	0.54	0.50	1.72
7	Vocabulary	34	2260	0.53	0.50	2.68
7	Vocabulary	35	2260	0.48	0.50	1.83
7	Vocabulary	36	2260	0.47	0.50	2.38
7	Vocabulary	37	2260	0.47	0.50	0.95
7	Vocabulary	38	2260	0.22	0.42	2.30
7	Vocabulary	39	2260	0.22	0.41	2.39
7	Vocabulary	40	2260	0.22	0.41	2.36

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Writing Conventions	1	2228	0.94	0.23	-0.65
7	Writing Conventions	2	2228	0.26	0.44	1.63
7	Writing Conventions	3	2228	0.94	0.23	-0.63
7	Writing Conventions	4	2228	0.94	0.24	-0.57
7	Writing Conventions	5	2228	0.74	0.44	0.38
7	Writing Conventions	6	2228	0.89	0.31	-0.24
7	Writing Conventions	7	2228	0.84	0.37	0.05
7	Writing Conventions	8	2228	0.07	0.26	2.50
7	Writing Conventions	9	2228	0.76	0.43	0.35
7	Writing Conventions	10	2228	0.37	0.48	1.32
7	Writing Conventions	11	2228	0.70	0.46	0.50
7	Writing Conventions	12	2228	0.78	0.42	0.28
7	Writing Conventions	13	2228	0.46	0.50	1.12
7	Writing Conventions	14	2228	0.95	0.22	-0.68
7	Writing Conventions	15	2228	0.62	0.49	0.73
7	Writing Conventions	16	2228	0.80	0.40	0.21
7	Writing Conventions	17	2228	0.87	0.34	-0.89
7	Writing Conventions	18	2228	0.92	0.28	-0.78
7	Writing Conventions	19	2228	0.96	0.19	-0.44
7	Writing Conventions	20	2228	0.92	0.27	-0.40
7	Writing Conventions	21	2228	0.95	0.21	-0.90
7	Writing Conventions	22	2228	0.96	0.19	-0.11
7	Writing Conventions	23	2228	0.82	0.39	0.62
7	Writing Conventions	24	2228	0.79	0.41	0.13
7	Writing Conventions	25	2228	0.77	0.42	0.31
7	Writing Conventions	26	2228	0.66	0.47	0.22
7	Writing Conventions	27	2228	0.64	0.48	0.68

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Writing Conventions	28	2228	0.58	0.49	0.83
7	Writing Conventions	29	2228	0.85	0.36	0.73
7	Writing Conventions	30	2228	0.78	0.42	0.27
7	Writing Conventions	31	2228	0.71	0.45	1.05
7	Writing Conventions	32	2228	0.68	0.46	0.01
7	Writing Conventions	33	2228	0.60	0.49	0.49
7	Writing Conventions	34	2228	0.62	0.49	1.45
7	Writing Conventions	35	2228	0.48	0.50	0.56
7	Writing Conventions	36	2228	0.32	0.47	0.78
7	Writing Conventions	37	2228	0.39	0.49	1.27
7	Writing Conventions	38	2228	0.31	0.46	1.47
7	Writing Conventions	39	2228	0.30	0.46	1.57
7	Writing Conventions	40	2228	0.28	0.45	1.50
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Spelling	1	2254	0.52	0.50	1.15
7	Spelling	2	2254	0.94	0.23	2.39
7	Spelling	3	2254	0.94	0.24	1.95
7	Spelling	4	2254	0.95	0.22	1.07
7	Spelling	5	2254	0.94	0.24	2.08
7	Spelling	6	2254	0.91	0.28	1.16
7	Spelling	7	2254	0.92	0.27	1.93
7	Spelling	8	2254	0.91	0.28	2.64
7	Spelling	9	2254	0.89	0.32	2.10
7	Spelling	10	2254	0.86	0.34	2.56
7	Spelling	11	2254	0.76	0.43	1.37
7	Spelling	12	2254	0.84	0.36	2.49
7	Spelling	13	2254	0.83	0.38	2.40
7	Spelling	14	2254	0.86	0.35	1.34
7	Spelling	15	2254	0.81	0.40	3.19
7	Spelling	16	2254	0.76	0.43	2.76
7	Spelling	17	2254	0.80	0.40	1.77
7	Spelling	18	2254	0.72	0.45	1.84
7	Spelling	19	2254	0.74	0.44	1.68
7	Spelling	20	2254	0.69	0.46	2.21
7	Spelling	21	2254	0.65	0.48	1.12
7	Spelling	22	2254	0.55	0.50	2.16
7	Spelling	23	2254	0.62	0.49	2.29
7	Spelling	24	2254	0.67	0.47	1.37
7	Spelling	25	2254	0.65	0.48	1.56
7	Spelling	26	2254	0.58	0.49	1.69
7	Spelling	27	2254	0.59	0.49	2.54
7	Spelling	28	2254	0.50	0.50	2.35
7	Spelling	29	2254	0.37	0.48	2.72
7	Spelling	30	2254	0.33	0.47	3.07
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Mathematics	1	2276	0.46	0.50	2.61
7	Mathematics	2	2276	0.46	0.50	2.61
7	Mathematics	3	2276	0.46	0.50	2.61

7	Mathematics	4	2276	0.46	0.50	2.61
7	Mathematics	5	2276	0.46	0.50	2.61
7	Mathematics	6	2276	0.46	0.50	2.61
7	Mathematics	7	2276	0.46	0.50	2.61
7	Mathematics	8	2276	0.46	0.50	2.61
7	Mathematics	9	2276	0.46	0.50	2.61
7	Mathematics	10	2276	0.46	0.50	2.61
7	Mathematics	11	2276	0.82	0.38	2.79
7	Mathematics	12	2276	0.74	0.44	2.45
7	Mathematics	13	2276	0.79	0.41	1.93
7	Mathematics	14	2276	0.67	0.47	2.67
7	Mathematics	15	2276	0.73	0.44	1.74
7	Mathematics	16	2276	0.65	0.48	2.57
7	Mathematics	17	2276	0.78	0.42	2.86
7	Mathematics	18	2276	0.67	0.47	2.31
7	Mathematics	19	2276	0.25	0.43	2.69
7	Mathematics	20	2276	0.64	0.48	3.42
7	Mathematics	21	2276	0.67	0.47	2.45
7	Mathematics	22	2276	0.59	0.49	2.59
7	Mathematics	23	2276	0.57	0.50	2.63
7	Mathematics	24	2276	0.60	0.49	2.44
7	Mathematics	25	2276	0.59	0.49	2.61
7	Mathematics	26	2276	0.57	0.49	3.58
7	Mathematics	27	2276	0.56	0.50	1.95
7	Mathematics	28	2276	0.58	0.49	3.16
7	Mathematics	29	2276	0.53	0.50	2.09
7	Mathematics	30	2276	0.53	0.50	3.17
7	Mathematics	31	2276	0.59	0.49	2.36
7	Mathematics	32	2276	0.52	0.50	3.40
7	Mathematics	33	2276	0.47	0.50	1.62
7	Mathematics	34	2276	0.48	0.50	2.81
7	Mathematics	35	2276	0.45	0.50	3.52
7	Mathematics	36	2276	0.58	0.49	2.73
7	Mathematics	37	2276	0.44	0.50	1.91
7	Mathematics	38	2276	0.50	0.50	2.51
7	Mathematics	39	2276	0.47	0.50	2.30
7	Mathematics	40	2276	0.46	0.50	2.96
7	Mathematics	41	2276	0.41	0.49	2.27
7	Mathematics	42	2276	0.43	0.50	2.16
7	Mathematics	43	2276	0.43	0.50	2.14
7	Mathematics	44	2276	0.43	0.49	2.68
7	Mathematics	45	2276	0.32	0.47	1.77
7	Mathematics	46	2276	0.39	0.49	2.29
7	Mathematics	47	2276	0.31	0.46	2.31
7	Mathematics	48	2276	0.23	0.42	2.35
7	Mathematics	49	2276	0.34	0.47	2.57
7	Mathematics	50	2276	0.36	0.48	2.30
7	Mathematics	51	2276	0.25	0.43	3.06
7	Mathematics	52	2276	0.37	0.48	2.66
7	Mathematics	53	2276	0.28	0.45	2.08

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Mathematics	54	2276	0.18	0.38	2.91
7	Mathematics	55	2276	0.26	0.44	2.34
7	Mathematics	56	2276	0.15	0.36	2.10
7	Mathematics	57	2276	0.72	0.45	3.79
7	Mathematics	58	2276	0.14	0.35	3.23
7	Mathematics	59	2276	0.18	0.39	2.99
7	Mathematics	60	2276	0.10	0.30	3.13
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
7	Computation	1	2251	0.48	0.50	2.03
7	Computation	2	2251	0.90	0.30	1.13
7	Computation	3	2251	0.81	0.39	1.09
7	Computation	4	2251	0.82	0.38	1.36
7	Computation	5	2251	0.72	0.45	1.55
7	Computation	6	2251	0.72	0.45	1.44
7	Computation	7	2251	0.69	0.46	1.52
7	Computation	8	2251	0.83	0.38	1.97
7	Computation	9	2251	0.74	0.44	2.15
7	Computation	10	2251	0.74	0.44	1.81
7	Computation	11	2251	0.72	0.45	0.70
7	Computation	12	2251	0.61	0.49	1.79
7	Computation	13	2251	0.68	0.47	2.01
7	Computation	14	2251	0.64	0.48	1.72
7	Computation	15	2251	0.57	0.49	2.07
7	Computation	16	2251	0.58	0.49	2.19
7	Computation	17	2251	0.60	0.49	1.65
7	Computation	18	2251	0.54	0.50	1.43
7	Computation	19	2251	0.51	0.50	2.22
7	Computation	20	2251	0.47	0.50	1.77
7	Computation	21	2251	0.59	0.49	1.89
7	Computation	22	2251	0.54	0.50	2.22
7	Computation	23	2251	0.39	0.49	2.52
7	Computation	24	2251	0.49	0.50	1.07
7	Computation	25	2251	0.45	0.50	2.11
7	Computation	26	2251	0.40	0.49	2.23
7	Computation	27	2251	0.40	0.49	1.37
7	Computation	28	2251	0.43	0.50	1.43
7	Computation	29	2251	0.37	0.48	2.67
7	Computation	30	2251	0.41	0.49	2.15
7	Computation	31	2251	0.29	0.45	1.90
7	Computation	32	2251	0.35	0.48	1.74
7	Computation	33	2251	0.43	0.50	2.36
7	Computation	34	2251	0.24	0.43	2.31
7	Computation	35	2251	0.40	0.49	2.66
7	Computation	36	2251	0.24	0.43	2.25
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Reading	1	1978	0.33	0.47	1.65
8	Reading	2	1978	0.56	0.50	0.99
8	Reading	3	1978	0.74	0.44	1.57

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Reading	4	1978	0.61	0.49	2.07
8	Reading	5	1978	0.38	0.48	2.66
8	Reading	6	1978	0.34	0.47	2.26
8	Reading	7	1978	0.75	0.43	1.80
8	Reading	8	1978	0.62	0.48	1.84
8	Reading	9	1978	0.29	0.45	1.82
8	Reading	10	1978	0.58	0.49	2.17
8	Reading	11	1978	0.72	0.45	2.99
8	Reading	12	1978	0.62	0.48	2.28
8	Reading	13	1978	0.60	0.49	1.91
8	Reading	14	1978	0.30	0.46	2.17
8	Reading	15	1978	0.40	0.49	2.23
8	Reading	16	1978	0.21	0.41	2.95
8	Reading	17	1978	0.80	0.40	2.71
8	Reading	18	1978	0.92	0.26	3.25
8	Reading	19	1978	0.82	0.38	1.53
8	Reading	20	1978	0.66	0.47	1.66
8	Reading	21	1978	0.42	0.49	3.21
8	Reading	22	1978	0.59	0.49	2.17
8	Reading	23	1978	0.75	0.43	2.50
8	Reading	24	1978	0.74	0.44	2.19
8	Reading	25	1978	0.82	0.38	1.95
8	Reading	26	1978	0.42	0.49	1.56
8	Reading	27	1978	0.46	0.50	2.65
8	Reading	28	1978	0.43	0.49	2.56
8	Reading	29	1978	0.68	0.47	2.64
8	Reading	30	1978	0.79	0.41	2.02
8	Reading	31	1978	0.41	0.49	1.68
8	Reading	32	1978	0.83	0.38	2.69
8	Reading	33	1978	0.80	0.40	2.13
8	Reading	34	1978	0.22	0.41	1.59
8	Reading	35	1978	0.62	0.48	2.57
8	Reading	36	1978	0.49	0.50	3.42
8	Reading	37	1978	0.61	0.49	2.06
8	Reading	38	1978	0.71	0.46	3.15
8	Reading	39	1978	0.64	0.48	1.95
8	Reading	40	1978	0.82	0.39	1.64
8	Reading	41	1978	0.46	0.50	1.75
8	Reading	42	1978	0.16	0.37	3.17
8	Reading	43	1978	0.66	0.47	2.88
8	Reading	44	1978	0.24	0.43	2.32
8	Reading	45	1978	0.71	0.46	1.85
8	Reading	46	1978	0.80	0.40	2.21
8	Reading	47	1978	0.77	0.42	2.76
8	Reading	48	1978	0.23	0.42	2.85
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Vocabulary	1	1983	0.93	0.25	2.55
8	Vocabulary	2	1983	0.82	0.38	0.97
8	Vocabulary	3	1983	0.42	0.49	2.58

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Vocabulary	4	1983	0.47	0.50	2.69
8	Vocabulary	5	1983	0.38	0.49	1.61
8	Vocabulary	6	1983	0.23	0.42	3.20
8	Vocabulary	7	1983	0.59	0.49	2.78
8	Vocabulary	8	1983	0.82	0.38	2.30
8	Vocabulary	9	1983	0.56	0.50	1.60
8	Vocabulary	10	1983	0.83	0.37	2.35
8	Vocabulary	11	1983	0.44	0.50	1.55
8	Vocabulary	12	1983	0.37	0.48	2.65
8	Vocabulary	13	1983	0.09	0.29	2.80
8	Vocabulary	14	1983	0.69	0.46	3.86
8	Vocabulary	15	1983	0.82	0.38	2.03
8	Vocabulary	16	1983	0.68	0.47	1.61
8	Vocabulary	17	1983	0.67	0.47	2.05
8	Vocabulary	18	1983	0.42	0.49	2.09
8	Vocabulary	19	1983	0.69	0.46	2.70
8	Vocabulary	20	1983	0.42	0.49	2.02
8	Vocabulary	21	1983	0.70	0.46	2.69
8	Vocabulary	22	1983	0.93	0.26	2.01
8	Vocabulary	23	1983	0.76	0.43	0.99
8	Vocabulary	24	1983	0.56	0.50	1.82
8	Vocabulary	25	1983	0.86	0.35	2.36
8	Vocabulary	26	1983	0.82	0.38	1.79
8	Vocabulary	27	1983	0.78	0.41	2.33
8	Vocabulary	28	1983	0.77	0.42	1.74
8	Vocabulary	29	1983	0.79	0.41	2.78
8	Vocabulary	30	1983	0.57	0.49	3.26
8	Vocabulary	31	1983	0.38	0.49	1.73
8	Vocabulary	32	1983	0.48	0.50	1.43
8	Vocabulary	33	1983	0.21	0.41	1.61
8	Vocabulary	34	1983	0.78	0.41	1.85
8	Vocabulary	35	1983	0.75	0.43	2.06
8	Vocabulary	36	1983	0.68	0.47	1.75
8	Vocabulary	37	1983	0.52	0.50	3.00
8	Vocabulary	38	1983	0.52	0.50	2.46
8	Vocabulary	39	1983	0.30	0.46	2.99
8	Vocabulary	40	1983	0.30	0.46	2.45
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Writing Conventions	1	1975	0.66	0.47	0.76
8	Writing Conventions	2	1975	0.66	0.47	0.74
8	Writing Conventions	3	1975	0.58	0.49	0.95
8	Writing Conventions	4	1975	0.68	0.47	0.69
8	Writing Conventions	5	1975	0.69	0.46	0.67
8	Writing Conventions	6	1975	0.53	0.50	1.08
8	Writing Conventions	7	1975	0.56	0.50	1.01
8	Writing Conventions	8	1975	0.72	0.45	1.77
8	Writing Conventions	9	1975	0.40	0.49	0.83
8	Writing Conventions	10	1975	0.68	0.47	0.75
8	Writing Conventions	11	1975	0.26	0.44	1.15

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Writing Conventions	12	1975	0.63	0.48	0.59
8	Writing Conventions	13	1975	0.66	0.47	1.38
8	Writing Conventions	14	1975	0.50	0.50	0.70
8	Writing Conventions	15	1975	0.80	0.40	0.33
8	Writing Conventions	16	1975	0.66	0.47	0.74
8	Writing Conventions	17	1975	0.76	0.43	0.46
8	Writing Conventions	18	1975	0.50	0.50	1.14
8	Writing Conventions	19	1975	0.93	0.25	1.09
8	Writing Conventions	20	1975	0.78	0.41	0.40
8	Writing Conventions	21	1975	0.52	0.50	0.38
8	Writing Conventions	22	1975	0.66	0.47	1.60
8	Writing Conventions	23	1975	0.60	0.49	0.76
8	Writing Conventions	24	1975	0.39	0.49	0.90
8	Writing Conventions	25	1975	0.43	0.49	1.32
8	Writing Conventions	26	1975	0.51	0.50	1.13
8	Writing Conventions	27	1975	0.31	0.46	1.41
8	Writing Conventions	28	1975	0.66	0.48	0.76
8	Writing Conventions	29	1975	0.67	0.47	1.02
8	Writing Conventions	30	1975	0.58	0.49	0.73
8	Writing Conventions	31	1975	0.58	0.49	1.22
8	Writing Conventions	32	1975	0.57	0.50	0.95
8	Writing Conventions	33	1975	0.55	0.50	1.19
8	Writing Conventions	34	1975	0.47	0.50	1.54
8	Writing Conventions	35	1975	0.48	0.50	0.98
8	Writing Conventions	36	1975	0.34	0.47	0.94
8	Writing Conventions	37	1975	0.23	0.42	1.87
8	Writing Conventions	38	1975	0.46	0.50	1.24
8	Writing Conventions	39	1975	0.50	0.50	1.14
8	Writing Conventions	40	1975	0.43	0.50	1.30
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Spelling	1	1986	0.95	0.21	2.23
8	Spelling	2	1986	0.96	0.19	1.88
8	Spelling	3	1986	0.95	0.22	1.43
8	Spelling	4	1986	0.95	0.21	1.92
8	Spelling	5	1986	0.96	0.21	1.58
8	Spelling	6	1986	0.92	0.26	1.11
8	Spelling	7	1986	0.93	0.26	3.03
8	Spelling	8	1986	0.89	0.31	2.43
8	Spelling	9	1986	0.92	0.27	0.99
8	Spelling	10	1986	0.91	0.29	1.57
8	Spelling	11	1986	0.92	0.27	1.20
8	Spelling	12	1986	0.92	0.27	1.63
8	Spelling	13	1986	0.86	0.35	1.13
8	Spelling	14	1986	0.90	0.31	1.64
8	Spelling	15	1986	0.89	0.31	1.43
8	Spelling	16	1986	0.90	0.29	1.46
8	Spelling	17	1986	0.85	0.36	1.85
8	Spelling	18	1986	0.84	0.37	2.08
8	Spelling	19	1986	0.78	0.41	3.02

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Spelling	20	1986	0.80	0.40	2.14
8	Spelling	21	1986	0.79	0.41	2.27
8	Spelling	22	1986	0.74	0.44	1.09
8	Spelling	23	1986	0.76	0.43	2.35
8	Spelling	24	1986	0.66	0.47	2.68
8	Spelling	25	1986	0.72	0.45	1.38
8	Spelling	26	1986	0.69	0.46	3.70
8	Spelling	27	1986	0.59	0.49	2.12
8	Spelling	28	1986	0.44	0.50	1.65
8	Spelling	29	1986	0.45	0.50	1.48
8	Spelling	30	1986	0.20	0.40	2.50
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Mathematics	1	2016	0.48	0.50	2.78
8	Mathematics	2	2016	0.48	0.50	2.78
8	Mathematics	3	2016	0.48	0.50	2.78
8	Mathematics	4	2016	0.48	0.50	2.78
8	Mathematics	5	2016	0.48	0.50	2.78
8	Mathematics	6	2016	0.48	0.50	2.78
8	Mathematics	7	2016	0.48	0.50	2.78
8	Mathematics	8	2016	0.48	0.50	2.78
8	Mathematics	9	2016	0.48	0.50	2.78
8	Mathematics	10	2016	0.48	0.50	2.78
8	Mathematics	11	2016	0.48	0.50	2.78
8	Mathematics	12	2016	0.48	0.50	2.78
8	Mathematics	13	2016	0.48	0.50	2.78
8	Mathematics	14	2016	0.48	0.50	2.78
8	Mathematics	15	2016	0.48	0.50	2.78
8	Mathematics	16	2016	0.48	0.50	2.78
8	Mathematics	17	2016	0.48	0.50	2.78
8	Mathematics	18	2016	0.48	0.50	2.78
8	Mathematics	19	2016	0.48	0.50	2.78
8	Mathematics	20	2016	0.52	0.50	2.19
8	Mathematics	21	2016	0.75	0.43	3.07
8	Mathematics	22	2016	0.48	0.50	2.13
8	Mathematics	23	2016	0.48	0.50	3.02
8	Mathematics	24	2016	0.48	0.50	3.44
8	Mathematics	25	2016	0.74	0.44	2.29
8	Mathematics	26	2016	0.72	0.45	2.95
8	Mathematics	27	2016	0.66	0.47	2.59
8	Mathematics	28	2016	0.65	0.48	2.85
8	Mathematics	29	2016	0.63	0.48	2.90
8	Mathematics	30	2016	0.66	0.48	2.58
8	Mathematics	31	2016	0.68	0.47	3.51
8	Mathematics	32	2016	0.60	0.49	2.87
8	Mathematics	33	2016	0.57	0.50	2.44
8	Mathematics	34	2016	0.41	0.49	2.84
8	Mathematics	35	2016	0.64	0.48	3.03
8	Mathematics	36	2016	0.56	0.50	2.65
8	Mathematics	37	2016	0.54	0.50	3.11

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Mathematics	38	2016	0.36	0.48	2.94
8	Mathematics	39	2016	0.45	0.50	2.08
8	Mathematics	40	2016	0.41	0.49	2.51
8	Mathematics	41	2016	0.43	0.50	2.36
8	Mathematics	42	2016	0.42	0.49	3.13
8	Mathematics	43	2016	0.39	0.49	2.36
8	Mathematics	44	2016	0.46	0.50	2.39
8	Mathematics	45	2016	0.38	0.49	2.92
8	Mathematics	46	2016	0.38	0.49	2.38
8	Mathematics	47	2016	0.33	0.47	3.03
8	Mathematics	48	2016	0.42	0.49	3.00
8	Mathematics	49	2016	0.45	0.50	3.28
8	Mathematics	50	2016	0.45	0.50	2.86
8	Mathematics	51	2016	0.32	0.47	3.19
8	Mathematics	52	2016	0.29	0.45	2.94
8	Mathematics	53	2016	0.38	0.49	3.16
8	Mathematics	54	2016	0.34	0.47	3.65
8	Mathematics	55	2016	0.25	0.44	3.38
8	Mathematics	56	2016	0.23	0.42	3.67
8	Mathematics	57	2016	0.21	0.41	2.69
8	Mathematics	58	2016	0.17	0.38	2.78
8	Mathematics	59	2016	0.18	0.38	2.78
8	Mathematics	60	2016	0.35	0.48	2.78
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Computation	1	1986	0.48	0.50	2.22
8	Computation	2	1986	0.48	0.50	2.22
8	Computation	3	1986	0.48	0.50	2.22
8	Computation	4	1986	0.48	0.50	2.22
8	Computation	5	1986	0.48	0.50	2.22
8	Computation	6	1986	0.48	0.50	2.22
8	Computation	7	1986	0.48	0.50	2.22
8	Computation	8	1986	0.48	0.50	1.52
8	Computation	9	1986	0.75	0.43	2.13
8	Computation	10	1986	0.76	0.43	2.03
8	Computation	11	1986	0.59	0.49	2.26
8	Computation	12	1986	0.59	0.49	2.19
8	Computation	13	1986	0.69	0.46	2.20
8	Computation	14	1986	0.59	0.49	1.48
8	Computation	15	1986	0.52	0.50	2.59
8	Computation	16	1986	0.56	0.50	2.43
8	Computation	17	1986	0.52	0.50	3.03
8	Computation	18	1986	0.46	0.50	2.02
8	Computation	19	1986	0.50	0.50	1.69
8	Computation	20	1986	0.49	0.50	1.96
8	Computation	21	1986	0.49	0.50	2.27
8	Computation	22	1986	0.49	0.50	1.95
8	Computation	23	1986	0.46	0.50	2.68
8	Computation	24	1986	0.56	0.50	2.19
8	Computation	25	1986	0.46	0.50	2.58

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
8	Computation	26	1986	0.49	0.50	2.22
8	Computation	27	1986	0.40	0.49	2.44
8	Computation	28	1986	0.39	0.49	2.12
8	Computation	29	1986	0.39	0.49	2.41
8	Computation	30	1986	0.58	0.49	1.97
8	Computation	31	1986	0.40	0.49	2.18
8	Computation	32	1986	0.33	0.47	2.18
8	Computation	33	1986	0.48	0.50	1.97
8	Computation	34	1986	0.30	0.46	2.42
8	Computation	35	1986	0.19	0.39	2.27
8	Computation	36	1986	0.33	0.47	2.22
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Reading	1	806	0.33	0.47	2.44
9	Reading	2	806	0.56	0.50	2.26
9	Reading	3	806	0.26	0.44	2.95
9	Reading	4	806	0.37	0.48	2.69
9	Reading	5	806	0.52	0.50	2.62
9	Reading	6	806	0.43	0.49	2.03
9	Reading	7	806	0.20	0.40	2.36
9	Reading	8	806	0.50	0.50	2.21
9	Reading	9	806	0.45	0.50	1.75
9	Reading	10	806	0.31	0.46	2.92
9	Reading	11	806	0.59	0.49	2.31
9	Reading	12	806	0.66	0.47	1.71
9	Reading	13	806	0.37	0.48	2.46
9	Reading	14	806	0.48	0.50	2.75
9	Reading	15	806	0.51	0.50	1.61
9	Reading	16	806	0.74	0.44	1.20
9	Reading	17	806	0.62	0.49	1.98
9	Reading	18	806	0.49	0.50	1.23
9	Reading	19	806	0.64	0.48	2.16
9	Reading	20	806	0.69	0.46	1.28
9	Reading	21	806	0.24	0.43	2.67
9	Reading	22	806	0.65	0.48	2.31
9	Reading	23	806	0.83	0.38	2.17
9	Reading	24	806	0.90	0.30	3.33
9	Reading	25	806	0.64	0.48	2.28
9	Reading	26	806	0.41	0.49	1.72
9	Reading	27	806	0.68	0.47	1.37
9	Reading	28	806	0.82	0.38	2.30
9	Reading	29	806	0.39	0.49	2.85
9	Reading	30	806	0.64	0.48	2.37
9	Reading	31	806	0.83	0.38	2.90
9	Reading	32	806	0.58	0.49	1.70
9	Reading	33	806	0.45	0.50	3.27
9	Reading	34	806	0.61	0.49	2.51
9	Reading	35	806	0.39	0.49	3.20
9	Reading	36	806	0.83	0.37	2.38
9	Reading	37	806	0.26	0.44	2.32

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Reading	38	806	0.56	0.50	2.57
9	Reading	39	806	0.28	0.45	3.06
9	Reading	40	806	0.61	0.49	2.51
9	Reading	41	806	0.63	0.48	3.26
9	Reading	42	806	0.53	0.50	2.96
9	Reading	43	806	0.85	0.35	2.61
9	Reading	44	806	0.92	0.27	2.82
9	Reading	45	806	0.76	0.43	3.46
9	Reading	46	806	0.92	0.28	2.65
9	Reading	47	806	0.70	0.46	2.77
9	Reading	48	806	0.91	0.29	3.10
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Vocabulary	1	799	0.88	0.32	3.14
9	Vocabulary	2	799	0.88	0.33	1.68
9	Vocabulary	3	799	0.84	0.36	1.82
9	Vocabulary	4	799	0.81	0.39	1.89
9	Vocabulary	5	799	0.81	0.40	1.51
9	Vocabulary	6	799	0.79	0.41	1.90
9	Vocabulary	7	799	0.79	0.41	1.48
9	Vocabulary	8	799	0.31	0.46	1.83
9	Vocabulary	9	799	0.59	0.49	2.96
9	Vocabulary	10	799	0.93	0.25	1.60
9	Vocabulary	11	799	0.88	0.33	1.78
9	Vocabulary	12	799	0.85	0.36	2.62
9	Vocabulary	13	799	0.85	0.36	1.90
9	Vocabulary	14	799	0.85	0.36	2.50
9	Vocabulary	15	799	0.82	0.39	2.19
9	Vocabulary	16	799	0.66	0.47	1.81
9	Vocabulary	17	799	0.50	0.50	2.37
9	Vocabulary	18	799	0.29	0.45	2.01
9	Vocabulary	19	799	0.75	0.43	2.64
9	Vocabulary	20	799	0.51	0.50	3.17
9	Vocabulary	21	799	0.30	0.46	3.05
9	Vocabulary	22	799	0.34	0.48	1.50
9	Vocabulary	23	799	0.38	0.49	2.27
9	Vocabulary	24	799	0.86	0.35	1.64
9	Vocabulary	25	799	0.82	0.39	1.79
9	Vocabulary	26	799	0.52	0.50	2.68
9	Vocabulary	27	799	0.79	0.41	1.66
9	Vocabulary	28	799	0.57	0.50	3.21
9	Vocabulary	29	799	0.69	0.46	1.66
9	Vocabulary	30	799	0.81	0.39	2.09
9	Vocabulary	31	799	0.62	0.48	3.04
9	Vocabulary	32	799	0.73	0.45	2.82
9	Vocabulary	33	799	0.35	0.48	2.25
9	Vocabulary	34	799	0.44	0.50	3.13
9	Vocabulary	35	799	0.67	0.47	1.98
9	Vocabulary	36	799	0.31	0.46	2.97
9	Vocabulary	37	799	0.76	0.43	2.81

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Vocabulary	38	799	0.37	0.48	2.46
9	Vocabulary	39	799	0.44	0.50	1.10
9	Vocabulary	40	799	0.50	0.50	2.66
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Writing Conventions	1	791	0.67	0.47	0.81
9	Writing Conventions	2	791	0.69	0.46	0.75
9	Writing Conventions	3	791	0.79	0.41	0.44
9	Writing Conventions	4	791	0.25	0.43	1.89
9	Writing Conventions	5	791	0.45	0.50	1.35
9	Writing Conventions	6	791	0.76	0.43	0.56
9	Writing Conventions	7	791	0.76	0.43	0.55
9	Writing Conventions	8	791	0.32	0.47	1.66
9	Writing Conventions	9	791	0.20	0.40	2.05
9	Writing Conventions	10	791	0.79	0.41	0.45
9	Writing Conventions	11	791	0.33	0.47	1.64
9	Writing Conventions	12	791	0.62	0.48	0.94
9	Writing Conventions	13	791	0.59	0.49	1.03
9	Writing Conventions	14	791	0.50	0.50	1.23
9	Writing Conventions	15	791	0.77	0.42	0.51
9	Writing Conventions	16	791	0.83	0.37	0.28
9	Writing Conventions	17	791	0.60	0.49	0.99
9	Writing Conventions	18	791	0.89	0.32	0.03
9	Writing Conventions	19	791	0.74	0.44	0.62
9	Writing Conventions	20	791	0.80	0.40	0.84
9	Writing Conventions	21	791	0.74	0.44	1.22
9	Writing Conventions	22	791	0.69	0.46	0.83
9	Writing Conventions	23	791	0.71	0.45	0.43
9	Writing Conventions	24	791	0.53	0.50	0.76
9	Writing Conventions	25	791	0.66	0.47	0.61
9	Writing Conventions	26	791	0.66	0.47	1.16
9	Writing Conventions	27	791	0.51	0.50	0.69
9	Writing Conventions	28	791	0.75	0.43	0.57
9	Writing Conventions	29	791	0.66	0.47	1.48
9	Writing Conventions	30	791	0.68	0.47	0.80
9	Writing Conventions	31	791	0.48	0.50	0.84
9	Writing Conventions	32	791	0.52	0.50	1.53
9	Writing Conventions	33	791	0.37	0.48	1.19
9	Writing Conventions	34	791	0.40	0.49	2.27
9	Writing Conventions	35	791	0.41	0.49	1.87
9	Writing Conventions	36	791	0.25	0.43	1.28
9	Writing Conventions	37	791	0.15	0.35	1.45
9	Writing Conventions	38	791	0.68	0.47	1.91
9	Writing Conventions	39	791	0.48	0.50	1.28
9	Writing Conventions	40	791	0.24	0.43	0.80
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Spelling	1	789	0.97	0.18	1.71
9	Spelling	2	789	0.94	0.24	2.71
9	Spelling	3	789	0.63	0.48	2.09

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Spelling	4	789	0.87	0.33	2.83
9	Spelling	5	789	0.74	0.44	1.60
9	Spelling	6	789	0.89	0.31	1.91
9	Spelling	7	789	0.92	0.27	1.09
9	Spelling	8	789	0.92	0.26	1.82
9	Spelling	9	789	0.91	0.29	2.73
9	Spelling	10	789	0.96	0.20	2.76
9	Spelling	11	789	0.91	0.28	2.97
9	Spelling	12	789	0.88	0.33	2.84
9	Spelling	13	789	0.87	0.34	3.62
9	Spelling	14	789	0.81	0.39	1.68
9	Spelling	15	789	0.83	0.37	2.15
9	Spelling	16	789	0.64	0.48	1.94
9	Spelling	17	789	0.83	0.38	1.23
9	Spelling	18	789	0.82	0.39	1.47
9	Spelling	19	789	0.60	0.49	2.59
9	Spelling	20	789	0.72	0.45	2.20
9	Spelling	21	789	0.93	0.26	2.21
9	Spelling	22	789	0.65	0.48	1.56
9	Spelling	23	789	0.60	0.49	1.87
9	Spelling	24	789	0.69	0.46	2.44
9	Spelling	25	789	0.71	0.45	3.37
9	Spelling	26	789	0.55	0.50	1.97
9	Spelling	27	789	0.84	0.36	2.12
9	Spelling	28	789	0.88	0.32	2.55
9	Spelling	29	789	0.38	0.49	2.53
9	Spelling	30	789	0.28	0.45	1.62
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Mathematics	1	650	0.50	0.50	2.96
9	Mathematics	2	650	0.50	0.50	2.96
9	Mathematics	3	650	0.50	0.50	2.96
9	Mathematics	4	650	0.50	0.50	2.96
9	Mathematics	5	650	0.50	0.50	2.96
9	Mathematics	6	650	0.50	0.50	2.96
9	Mathematics	7	650	0.76	0.43	3.32
9	Mathematics	8	650	0.70	0.46	2.58
9	Mathematics	9	650	0.68	0.47	2.62
9	Mathematics	10	650	0.67	0.47	3.17
9	Mathematics	11	650	0.64	0.48	2.53
9	Mathematics	12	650	0.67	0.47	2.83
9	Mathematics	13	650	0.66	0.47	2.97
9	Mathematics	14	650	0.68	0.47	3.09
9	Mathematics	15	650	0.58	0.49	2.52
9	Mathematics	16	650	0.65	0.48	2.30
9	Mathematics	17	650	0.67	0.47	2.56
9	Mathematics	18	650	0.68	0.47	3.25
9	Mathematics	19	650	0.61	0.49	2.46
9	Mathematics	20	650	0.25	0.43	2.53
9	Mathematics	21	650	0.25	0.43	2.54

9	Mathematics	22	650	0.56	0.50	3.02
9	Mathematics	23	650	0.56	0.50	3.15
9	Mathematics	24	650	0.55	0.50	3.41
9	Mathematics	25	650	0.56	0.50	3.22
9	Mathematics	26	650	0.42	0.49	3.21
9	Mathematics	27	650	0.50	0.50	2.70
9	Mathematics	28	650	0.50	0.50	3.06
9	Mathematics	29	650	0.50	0.50	2.93
9	Mathematics	30	650	0.51	0.50	2.60
9	Mathematics	31	650	0.46	0.50	3.16
9	Mathematics	32	650	0.48	0.50	2.96
9	Mathematics	33	650	0.42	0.49	3.31
9	Mathematics	34	650	0.50	0.50	2.84
9	Mathematics	35	650	0.50	0.50	3.18
9	Mathematics	36	650	0.47	0.50	2.55
9	Mathematics	37	650	0.45	0.50	2.97
9	Mathematics	38	650	0.34	0.47	2.82
9	Mathematics	39	650	0.40	0.49	3.06
9	Mathematics	40	650	0.41	0.49	3.17
9	Mathematics	41	650	0.48	0.50	3.24
9	Mathematics	42	650	0.46	0.50	3.42
9	Mathematics	43	650	0.41	0.49	3.28
9	Mathematics	44	650	0.37	0.48	3.12
9	Mathematics	45	650	0.45	0.50	3.02
9	Mathematics	46	650	0.44	0.50	3.11
9	Mathematics	47	650	0.38	0.49	3.40
9	Mathematics	48	650	0.39	0.49	3.48
9	Mathematics	49	650	0.32	0.46	3.32
9	Mathematics	50	650	0.44	0.50	3.35
9	Mathematics	51	650	0.42	0.49	3.09
9	Mathematics	52	650	0.38	0.49	2.96
9	Mathematics	53	650	0.32	0.47	3.35
9	Mathematics	54	650	0.36	0.48	2.83
9	Mathematics	55	650	0.32	0.47	2.77
9	Mathematics	56	650	0.34	0.47	3.03
9	Mathematics	57	650	0.36	0.48	3.91
9	Mathematics	58	650	0.29	0.46	3.62
9	Mathematics	59	650	0.35	0.48	2.96
9	Mathematics	60	650	0.17	0.37	3.60

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Computation	1	634	0.48	0.50	2.43
9	Computation	2	634	0.48	0.50	2.43
9	Computation	3	634	0.48	0.50	2.43
9	Computation	4	634	0.48	0.50	2.43
9	Computation	5	634	0.48	0.50	1.76
9	Computation	6	634	0.48	0.50	1.71
9	Computation	7	634	0.76	0.43	2.27
9	Computation	8	634	0.74	0.44	2.52
9	Computation	9	634	0.60	0.49	2.15

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
9	Computation	10	634	0.57	0.49	2.39
9	Computation	11	634	0.55	0.50	2.21
9	Computation	12	634	0.57	0.50	2.78
9	Computation	13	634	0.57	0.49	2.38
9	Computation	14	634	0.56	0.50	2.75
9	Computation	15	634	0.58	0.49	2.37
9	Computation	16	634	0.64	0.48	2.20
9	Computation	17	634	0.57	0.49	2.25
9	Computation	18	634	0.49	0.50	2.05
9	Computation	19	634	0.51	0.50	2.41
9	Computation	20	634	0.48	0.50	2.60
9	Computation	21	634	0.51	0.50	2.41
9	Computation	22	634	0.49	0.50	2.23
9	Computation	23	634	0.45	0.50	2.21
9	Computation	24	634	0.50	0.50	2.42
9	Computation	25	634	0.49	0.50	2.46
9	Computation	26	634	0.49	0.50	2.38
9	Computation	27	634	0.50	0.50	2.42
9	Computation	28	634	0.41	0.49	2.44
9	Computation	29	634	0.35	0.48	2.22
9	Computation	30	634	0.47	0.50	2.97
9	Computation	31	634	0.44	0.50	2.53
9	Computation	32	634	0.43	0.49	2.93
9	Computation	33	634	0.34	0.47	2.56
9	Computation	34	634	0.27	0.44	2.93
9	Computation	35	634	0.28	0.45	2.43
9	Computation	36	634	0.28	0.45	2.43
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Informational Reading	1	667	0.90	0.30	1.52
10	Informational Reading	2	667	0.73	0.44	2.24
10	Informational Reading	3	667	0.84	0.37	1.87
10	Informational Reading	4	667	0.62	0.49	2.56
10	Informational Reading	5	667	0.57	0.50	2.68
10	Informational Reading	6	667	0.50	0.50	2.83
10	Informational Reading	7	667	0.77	0.42	2.13
10	Informational Reading	8	667	0.44	0.50	2.97
10	Informational Reading	9	667	0.70	0.46	2.33
10	Informational Reading	10	667	0.69	0.46	2.37
10	Informational Reading	11	667	0.53	0.50	2.76
10	Informational Reading	12	667	0.40	0.49	3.07
10	Informational Reading	13	667	0.48	0.50	1.97
10	Informational Reading	14	667	0.68	0.47	2.69
10	Informational Reading	15	667	0.41	0.49	1.86
10	Informational Reading	16	667	0.58	0.49	2.83
10	Informational Reading	17	667	0.53	0.50	3.15
10	Informational Reading	18	667	0.72	0.45	2.36
10	Informational Reading	19	667	0.35	0.48	2.63
10	Informational Reading	20	667	0.37	0.48	2.69
10	Informational Reading	21	667	0.49	0.50	2.18

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Informational Reading	22	667	0.54	0.50	3.03
10	Informational Reading	23	667	0.52	0.50	2.53
10	Informational Reading	24	667	0.55	0.50	3.10
10	Informational Reading	25	667	0.64	0.48	2.89
10	Informational Reading	26	667	0.30	0.46	2.39
10	Informational Reading	27	667	0.53	0.50	3.06
10	Informational Reading	28	667	0.65	0.48	2.65
10	Informational Reading	29	667	0.81	0.39	2.78
10	Informational Reading	30	667	0.56	0.50	2.29
10	Informational Reading	31	667	0.84	0.37	3.20
10	Informational Reading	32	667	0.50	0.50	3.16
10	Informational Reading	33	667	0.37	0.48	2.87
10	Informational Reading	34	667	0.69	0.46	2.75
10	Informational Reading	35	667	0.59	0.49	2.79
10	Informational Reading	36	667	0.56	0.50	2.71
10	Informational Reading	37	667	0.75	0.43	2.50
10	Informational Reading	38	667	0.42	0.49	3.34
10	Informational Reading	39	667	0.63	0.48	2.77
10	Informational Reading	40	667	0.39	0.49	2.47
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Literary Reading	1	81	0.61	0.49	2.58
10	Literary Reading	2	81	0.56	0.50	2.69
10	Literary Reading	3	81	0.76	0.43	2.16
10	Literary Reading	4	81	0.55	0.50	2.71
10	Literary Reading	5	81	0.44	0.50	2.98
10	Literary Reading	6	81	0.43	0.49	3.01
10	Literary Reading	7	81	0.35	0.48	3.21
10	Literary Reading	8	81	0.63	0.48	2.53
10	Literary Reading	9	81	0.55	0.50	2.72
10	Literary Reading	10	81	0.32	0.47	3.28
10	Literary Reading	11	81	0.31	0.46	3.29
10	Literary Reading	12	81	0.61	0.49	2.56
10	Literary Reading	13	81	0.32	0.47	3.28
10	Literary Reading	14	81	0.53	0.50	2.77
10	Literary Reading	15	81	0.76	0.43	2.15
10	Literary Reading	16	81	0.70	0.46	2.33
10	Literary Reading	17	81	0.48	0.50	2.87
10	Literary Reading	18	81	0.32	0.47	3.29
10	Literary Reading	19	81	0.76	0.43	2.17
10	Literary Reading	20	81	0.63	0.48	2.52
10	Literary Reading	21	81	0.57	0.50	2.68
10	Literary Reading	22	81	0.63	0.48	2.53
10	Literary Reading	23	81	0.61	0.49	2.56
10	Literary Reading	24	81	0.39	0.49	3.11
10	Literary Reading	25	81	0.51	0.50	2.81
10	Literary Reading	26	81	0.31	0.46	3.31
10	Literary Reading	27	81	0.49	0.50	2.87
10	Literary Reading	28	81	0.74	0.44	2.22
10	Literary Reading	29	81	0.56	0.50	2.70

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Literary Reading	30	81	0.66	0.47	2.43
10	Literary Reading	31	81	0.36	0.48	3.16
10	Literary Reading	32	81	0.57	0.49	2.66
10	Literary Reading	33	81	0.47	0.50	2.92
10	Literary Reading	34	81	0.49	0.50	2.86
10	Literary Reading	35	81	0.50	0.50	2.82
10	Literary Reading	36	81	0.30	0.46	3.35
10	Literary Reading	37	81	0.51	0.50	2.82
10	Literary Reading	38	81	0.17	0.37	3.78
10	Literary Reading	39	81	0.24	0.43	3.52
10	Literary Reading	40	81	0.43	0.50	3.00

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Vocabulary	1	742	0.94	0.24	1.61
10	Vocabulary	2	742	0.66	0.48	1.94
10	Vocabulary	3	742	0.88	0.32	2.31
10	Vocabulary	4	742	0.64	0.48	2.87
10	Vocabulary	5	742	0.30	0.46	3.17
10	Vocabulary	6	742	0.77	0.42	3.31
10	Vocabulary	7	742	0.67	0.47	2.76
10	Vocabulary	8	742	0.48	0.50	3.25
10	Vocabulary	9	742	0.26	0.44	3.09
10	Vocabulary	10	742	0.30	0.46	1.21
10	Vocabulary	11	742	0.52	0.50	2.43
10	Vocabulary	12	742	0.32	0.47	1.62
10	Vocabulary	13	742	0.38	0.49	2.46
10	Vocabulary	14	742	0.88	0.32	3.31
10	Vocabulary	15	742	0.81	0.39	2.11
10	Vocabulary	16	742	0.70	0.46	2.41
10	Vocabulary	17	742	0.47	0.50	2.85
10	Vocabulary	18	742	0.35	0.48	3.43
10	Vocabulary	19	742	0.72	0.45	2.81
10	Vocabulary	20	742	0.71	0.45	2.26
10	Vocabulary	21	742	0.50	0.50	3.09
10	Vocabulary	22	742	0.39	0.49	3.17
10	Vocabulary	23	742	0.35	0.48	3.58
10	Vocabulary	24	742	0.21	0.41	2.28
10	Vocabulary	25	742	0.09	0.28	4.20
10	Vocabulary	26	742	0.79	0.41	2.93
10	Vocabulary	27	742	0.45	0.50	2.04
10	Vocabulary	28	742	0.45	0.50	2.94
10	Vocabulary	29	742	0.26	0.44	3.50
10	Vocabulary	30	742	0.24	0.43	3.44

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Writing Conventions	1	732	0.87	0.33	0.16
10	Writing Conventions	2	732	0.91	0.28	-0.09
10	Writing Conventions	3	732	0.26	0.44	1.92
10	Writing Conventions	4	732	0.92	0.28	-0.11
10	Writing Conventions	5	732	0.33	0.47	1.71

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Writing Conventions	6	732	0.77	0.42	1.51
10	Writing Conventions	7	732	0.53	0.50	0.79
10	Writing Conventions	8	732	0.80	0.40	1.50
10	Writing Conventions	9	732	0.58	0.49	0.74
10	Writing Conventions	10	732	0.52	0.50	1.84
10	Writing Conventions	11	732	0.41	0.49	1.34
10	Writing Conventions	12	732	0.70	0.46	0.57
10	Writing Conventions	13	732	0.41	0.49	1.23
10	Writing Conventions	14	732	0.72	0.45	0.47
10	Writing Conventions	15	732	0.28	0.45	1.10
10	Writing Conventions	16	732	0.48	0.50	1.24
10	Writing Conventions	17	732	0.86	0.34	-0.09
10	Writing Conventions	18	732	0.91	0.28	1.87
10	Writing Conventions	19	732	0.57	0.50	2.13
10	Writing Conventions	20	732	0.27	0.44	2.17
10	Writing Conventions	21	732	0.19	0.39	0.21
10	Writing Conventions	22	732	0.18	0.39	1.13
10	Writing Conventions	23	732	0.75	0.44	1.20
10	Writing Conventions	24	732	0.54	0.50	0.66
10	Writing Conventions	25	732	0.35	0.48	1.42
10	Writing Conventions	26	732	0.43	0.50	1.64
10	Writing Conventions	27	732	0.44	0.50	1.45
10	Writing Conventions	28	732	0.57	0.50	1.12
10	Writing Conventions	29	732	0.60	0.49	1.05
10	Writing Conventions	30	732	0.34	0.47	1.68
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Spelling	1	727	0.96	0.19	1.36
10	Spelling	2	727	0.97	0.17	2.22
10	Spelling	3	727	0.94	0.24	2.52
10	Spelling	4	727	0.94	0.24	3.64
10	Spelling	5	727	0.89	0.31	1.95
10	Spelling	6	727	0.87	0.33	2.80
10	Spelling	7	727	0.90	0.29	2.26
10	Spelling	8	727	0.88	0.33	1.66
10	Spelling	9	727	0.86	0.35	2.97
10	Spelling	10	727	0.85	0.36	2.08
10	Spelling	11	727	0.88	0.32	2.07
10	Spelling	12	727	0.89	0.32	2.11
10	Spelling	13	727	0.86	0.35	1.24
10	Spelling	14	727	0.87	0.34	2.03
10	Spelling	15	727	0.89	0.31	3.97
10	Spelling	16	727	0.80	0.40	3.61
10	Spelling	17	727	0.84	0.37	2.93
10	Spelling	18	727	0.81	0.39	2.31
10	Spelling	19	727	0.83	0.38	2.13
10	Spelling	20	727	0.78	0.41	2.46
10	Spelling	21	727	0.73	0.44	2.16
10	Spelling	22	727	0.69	0.46	2.20
10	Spelling	23	727	0.63	0.48	2.02

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Spelling	24	727	0.64	0.48	3.02
10	Spelling	25	727	0.60	0.49	1.66
10	Spelling	26	727	0.57	0.50	2.41
10	Spelling	27	727	0.36	0.48	3.97
10	Spelling	28	727	0.35	0.48	2.68
10	Spelling	29	727	0.23	0.42	3.11
10	Spelling	30	727	0.23	0.42	2.36

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Pre-Algebra	1	698	0.84	0.36	2.49
10	Pre-Algebra	2	698	0.77	0.42	3.52
10	Pre-Algebra	3	698	0.67	0.47	2.83
10	Pre-Algebra	4	698	0.77	0.42	3.08
10	Pre-Algebra	5	698	0.71	0.46	2.48
10	Pre-Algebra	6	698	0.69	0.46	3.02
10	Pre-Algebra	7	698	0.40	0.49	3.65
10	Pre-Algebra	8	698	0.68	0.47	3.38
10	Pre-Algebra	9	698	0.67	0.47	3.33
10	Pre-Algebra	10	698	0.65	0.48	3.10
10	Pre-Algebra	11	698	0.67	0.47	3.34
10	Pre-Algebra	12	698	0.63	0.48	3.23
10	Pre-Algebra	13	698	0.57	0.49	3.07
10	Pre-Algebra	14	698	0.58	0.49	2.76
10	Pre-Algebra	15	698	0.56	0.50	2.82
10	Pre-Algebra	16	698	0.54	0.50	3.00
10	Pre-Algebra	17	698	0.55	0.50	2.68
10	Pre-Algebra	18	698	0.53	0.50	3.17
10	Pre-Algebra	19	698	0.56	0.50	3.15
10	Pre-Algebra	20	698	0.55	0.50	2.20
10	Pre-Algebra	21	698	0.65	0.48	2.75
10	Pre-Algebra	22	698	0.51	0.50	3.71
10	Pre-Algebra	23	698	0.51	0.50	3.53
10	Pre-Algebra	24	698	0.52	0.50	2.77
10	Pre-Algebra	25	698	0.54	0.50	3.21
10	Pre-Algebra	26	698	0.36	0.48	3.10
10	Pre-Algebra	27	698	0.47	0.50	3.23
10	Pre-Algebra	28	698	0.49	0.50	3.12
10	Pre-Algebra	29	698	0.47	0.50	3.56
10	Pre-Algebra	30	698	0.44	0.50	3.26
10	Pre-Algebra	31	698	0.48	0.50	3.17
10	Pre-Algebra	32	698	0.44	0.50	3.25
10	Pre-Algebra	33	698	0.41	0.49	3.05
10	Pre-Algebra	34	698	0.49	0.50	2.89
10	Pre-Algebra	35	698	0.42	0.49	3.83
10	Pre-Algebra	36	698	0.35	0.48	2.78
10	Pre-Algebra	37	698	0.31	0.46	3.40
10	Pre-Algebra	38	698	0.37	0.48	2.73
10	Pre-Algebra	39	698	0.29	0.46	3.42
10	Pre-Algebra	40	698	0.25	0.43	3.05

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
10	Computation	1	746	0.40	0.49	1.96
10	Computation	2	746	0.40	0.49	1.76
10	Computation	3	746	0.82	0.38	2.69
10	Computation	4	746	0.77	0.42	2.25
10	Computation	5	746	0.78	0.41	2.38
10	Computation	6	746	0.67	0.47	2.43
10	Computation	7	746	0.67	0.47	3.14
10	Computation	8	746	0.67	0.47	2.54
10	Computation	9	746	0.54	0.50	3.16
10	Computation	10	746	0.62	0.49	2.31
10	Computation	11	746	0.65	0.48	2.68
10	Computation	12	746	0.55	0.50	2.48
10	Computation	13	746	0.55	0.50	2.58
10	Computation	14	746	0.53	0.50	2.25
10	Computation	15	746	0.53	0.50	2.59
10	Computation	16	746	0.49	0.50	3.20
10	Computation	17	746	0.57	0.49	2.71
10	Computation	18	746	0.52	0.50	2.90
10	Computation	19	746	0.60	0.49	2.25
10	Computation	20	746	0.53	0.50	2.55
10	Computation	21	746	0.53	0.50	2.60
10	Computation	22	746	0.49	0.50	3.22
10	Computation	23	746	0.48	0.50	3.27
10	Computation	24	746	0.40	0.49	1.90
10	Computation	25	746	0.42	0.49	3.35
10	Computation	26	746	0.44	0.50	2.59
10	Computation	27	746	0.28	0.45	2.57
10	Computation	28	746	0.26	0.44	2.62
10	Computation	29	746	0.28	0.45	2.85
10	Computation	30	746	0.30	0.46	2.79
10	Computation	31	746	0.33	0.47	3.44
10	Computation	32	746	0.30	0.46	3.08
10	Computation	33	746	0.21	0.41	3.26
10	Computation	34	746	0.26	0.44	3.08
10	Computation	35	746	0.33	0.47	2.88
10	Computation	36	746	0.24	0.43	2.88

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Literary Reading	1	546	0.66	0.47	2.58
11	Literary Reading	2	546	0.62	0.49	2.69
11	Literary Reading	3	546	0.80	0.40	2.16
11	Literary Reading	4	546	0.61	0.49	2.71
11	Literary Reading	5	546	0.50	0.50	2.98
11	Literary Reading	6	546	0.49	0.50	3.01
11	Literary Reading	7	546	0.40	0.49	3.21
11	Literary Reading	8	546	0.68	0.47	2.53
11	Literary Reading	9	546	0.61	0.49	2.72
11	Literary Reading	10	546	0.37	0.48	3.28

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Literary Reading	11	546	0.37	0.48	3.29
11	Literary Reading	12	546	0.67	0.47	2.56
11	Literary Reading	13	546	0.38	0.48	3.28
11	Literary Reading	14	546	0.59	0.49	2.77
11	Literary Reading	15	546	0.80	0.40	2.15
11	Literary Reading	16	546	0.75	0.43	2.33
11	Literary Reading	17	546	0.55	0.50	2.87
11	Literary Reading	18	546	0.37	0.48	3.29
11	Literary Reading	19	546	0.80	0.40	2.17
11	Literary Reading	20	546	0.69	0.46	2.52
11	Literary Reading	21	546	0.63	0.48	2.68
11	Literary Reading	22	546	0.68	0.46	2.53
11	Literary Reading	23	546	0.67	0.47	2.56
11	Literary Reading	24	546	0.45	0.50	3.11
11	Literary Reading	25	546	0.57	0.50	2.81
11	Literary Reading	26	546	0.36	0.48	3.31
11	Literary Reading	27	546	0.55	0.50	2.87
11	Literary Reading	28	546	0.79	0.41	2.22
11	Literary Reading	29	546	0.62	0.49	2.70
11	Literary Reading	30	546	0.72	0.45	2.43
11	Literary Reading	31	546	0.42	0.49	3.16
11	Literary Reading	32	546	0.63	0.48	2.66
11	Literary Reading	33	546	0.53	0.50	2.92
11	Literary Reading	34	546	0.55	0.50	2.86
11	Literary Reading	35	546	0.57	0.50	2.82
11	Literary Reading	36	546	0.35	0.48	3.35
11	Literary Reading	37	546	0.57	0.50	2.82
11	Literary Reading	38	546	0.20	0.40	3.78
11	Literary Reading	39	546	0.28	0.45	3.52
11	Literary Reading	40	546	0.49	0.50	3.00
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Vocabulary	1	594	0.95	0.22	1.61
11	Vocabulary	2	594	0.70	0.46	1.94
11	Vocabulary	3	594	0.90	0.29	2.31
11	Vocabulary	4	594	0.69	0.46	2.87
11	Vocabulary	5	594	0.35	0.48	3.17
11	Vocabulary	6	594	0.81	0.40	3.31
11	Vocabulary	7	594	0.71	0.45	2.76
11	Vocabulary	8	594	0.54	0.50	3.25
11	Vocabulary	9	594	0.30	0.46	3.09
11	Vocabulary	10	594	0.35	0.48	1.21
11	Vocabulary	11	594	0.58	0.49	2.43
11	Vocabulary	12	594	0.37	0.48	1.62
11	Vocabulary	13	594	0.44	0.50	2.46
11	Vocabulary	14	594	0.91	0.29	3.31
11	Vocabulary	15	594	0.85	0.36	2.11
11	Vocabulary	16	594	0.75	0.44	2.41
11	Vocabulary	17	594	0.53	0.50	2.85
11	Vocabulary	18	594	0.40	0.49	3.43

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Vocabulary	19	594	0.76	0.43	2.81
11	Vocabulary	20	594	0.76	0.43	2.26
11	Vocabulary	21	594	0.56	0.50	3.09
11	Vocabulary	22	594	0.44	0.50	3.17
11	Vocabulary	23	594	0.41	0.49	3.58
11	Vocabulary	24	594	0.25	0.44	2.28
11	Vocabulary	25	594	0.11	0.31	4.20
11	Vocabulary	26	594	0.82	0.38	2.93
11	Vocabulary	27	594	0.51	0.50	2.04
11	Vocabulary	28	594	0.50	0.50	2.94
11	Vocabulary	29	594	0.30	0.46	3.50
11	Vocabulary	30	594	0.28	0.45	3.44
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Writing Conventions	1	583	0.89	0.32	0.16
11	Writing Conventions	2	583	0.92	0.27	-0.09
11	Writing Conventions	3	583	0.28	0.45	1.92
11	Writing Conventions	4	583	0.92	0.26	-0.11
11	Writing Conventions	5	583	0.36	0.48	1.71
11	Writing Conventions	6	583	0.79	0.40	1.51
11	Writing Conventions	7	583	0.56	0.50	0.79
11	Writing Conventions	8	583	0.82	0.38	1.50
11	Writing Conventions	9	583	0.61	0.49	0.74
11	Writing Conventions	10	583	0.55	0.50	1.84
11	Writing Conventions	11	583	0.44	0.50	1.34
11	Writing Conventions	12	583	0.73	0.44	0.57
11	Writing Conventions	13	583	0.44	0.50	1.23
11	Writing Conventions	14	583	0.74	0.44	0.47
11	Writing Conventions	15	583	0.31	0.46	1.10
11	Writing Conventions	16	583	0.51	0.50	1.24
11	Writing Conventions	17	583	0.88	0.33	-0.09
11	Writing Conventions	18	583	0.92	0.27	1.87
11	Writing Conventions	19	583	0.60	0.49	2.13
11	Writing Conventions	20	583	0.30	0.46	2.17
11	Writing Conventions	21	583	0.21	0.41	0.21
11	Writing Conventions	22	583	0.20	0.40	1.13
11	Writing Conventions	23	583	0.77	0.42	1.20
11	Writing Conventions	24	583	0.57	0.49	0.66
11	Writing Conventions	25	583	0.38	0.49	1.42
11	Writing Conventions	26	583	0.47	0.50	1.64
11	Writing Conventions	27	583	0.48	0.50	1.45
11	Writing Conventions	28	583	0.60	0.49	1.12
11	Writing Conventions	29	583	0.63	0.48	1.05
11	Writing Conventions	30	583	0.37	0.48	1.68
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Spelling	1	585	0.97	0.17	1.36
11	Spelling	2	585	0.98	0.15	2.22
11	Spelling	3	585	0.95	0.21	2.52
11	Spelling	4	585	0.95	0.21	3.64

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Spelling	5	585	0.92	0.28	1.95
11	Spelling	6	585	0.90	0.30	2.80
11	Spelling	7	585	0.93	0.26	2.26
11	Spelling	8	585	0.90	0.29	1.66
11	Spelling	9	585	0.89	0.32	2.97
11	Spelling	10	585	0.88	0.33	2.08
11	Spelling	11	585	0.91	0.29	2.07
11	Spelling	12	585	0.91	0.29	2.11
11	Spelling	13	585	0.89	0.31	1.24
11	Spelling	14	585	0.90	0.31	2.03
11	Spelling	15	585	0.92	0.28	3.97
11	Spelling	16	585	0.84	0.37	3.61
11	Spelling	17	585	0.87	0.34	2.93
11	Spelling	18	585	0.85	0.36	2.31
11	Spelling	19	585	0.86	0.35	2.13
11	Spelling	20	585	0.82	0.38	2.46
11	Spelling	21	585	0.78	0.41	2.16
11	Spelling	22	585	0.75	0.44	2.20
11	Spelling	23	585	0.69	0.46	2.02
11	Spelling	24	585	0.70	0.46	3.02
11	Spelling	25	585	0.67	0.47	1.66
11	Spelling	26	585	0.63	0.48	2.41
11	Spelling	27	585	0.42	0.49	3.97
11	Spelling	28	585	0.41	0.49	2.68
11	Spelling	29	585	0.29	0.45	3.11
11	Spelling	30	585	0.29	0.45	2.36
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Algebra	1	611	0.49	0.50	NA
11	Algebra	2	611	0.49	0.50	NA
11	Algebra	3	611	0.72	0.45	-0.57
11	Algebra	4	611	0.67	0.47	-0.43
11	Algebra	5	611	0.63	0.48	-0.35
11	Algebra	6	611	0.63	0.48	-0.33
11	Algebra	7	611	0.64	0.48	-0.35
11	Algebra	8	611	0.64	0.48	-0.35
11	Algebra	9	611	0.57	0.49	-0.20
11	Algebra	10	611	0.55	0.50	-0.15
11	Algebra	11	611	0.68	0.47	-0.46
11	Algebra	12	611	0.56	0.50	-0.16
11	Algebra	13	611	0.50	0.50	-0.04
11	Algebra	14	611	0.48	0.50	0.02
11	Algebra	15	611	0.67	0.47	-0.45
11	Algebra	16	611	0.70	0.46	-0.53
11	Algebra	17	611	0.52	0.50	-0.08
11	Algebra	18	611	0.49	0.50	0.00
11	Algebra	19	611	0.60	0.49	-0.26
11	Algebra	20	611	0.44	0.50	0.12
11	Algebra	21	611	0.43	0.49	0.15

11	Algebra	22	611	0.58	0.49	-0.22
11	Algebra	23	611	0.43	0.50	0.13
11	Algebra	24	611	0.41	0.49	0.19
11	Algebra	25	611	0.39	0.49	0.24
11	Algebra	26	611	0.39	0.49	0.25
11	Algebra	27	611	0.41	0.49	0.18
11	Algebra	28	611	0.34	0.47	0.37
11	Algebra	29	611	0.40	0.49	0.22
11	Algebra	30	611	0.33	0.47	0.38
11	Algebra	31	611	0.33	0.47	0.39
11	Algebra	32	611	0.31	0.46	0.44
11	Algebra	33	611	0.27	0.45	0.55
11	Algebra	34	611	0.53	0.50	-0.10
11	Algebra	35	611	0.52	0.50	-0.08
11	Algebra	36	611	0.51	0.50	-0.06
11	Algebra	37	611	0.40	0.49	0.22
11	Algebra	38	611	0.44	0.50	0.11
11	Algebra	39	611	0.28	0.45	0.53
11	Algebra	40	611	0.34	0.47	0.37

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Computation	1	603	0.52	0.50	1.96
11	Computation	2	603	0.52	0.50	1.76
11	Computation	3	603	0.88	0.33	2.69
11	Computation	4	603	0.84	0.37	2.25
11	Computation	5	603	0.85	0.36	2.38
11	Computation	6	603	0.76	0.43	2.43
11	Computation	7	603	0.76	0.43	3.14
11	Computation	8	603	0.76	0.43	2.54
11	Computation	9	603	0.65	0.48	3.16
11	Computation	10	603	0.72	0.45	2.31
11	Computation	11	603	0.74	0.44	2.68
11	Computation	12	603	0.65	0.48	2.48
11	Computation	13	603	0.66	0.47	2.58
11	Computation	14	603	0.64	0.48	2.25
11	Computation	15	603	0.64	0.48	2.59
11	Computation	16	603	0.60	0.49	3.20
11	Computation	17	603	0.68	0.47	2.71
11	Computation	18	603	0.63	0.48	2.90
11	Computation	19	603	0.70	0.46	2.25
11	Computation	20	603	0.64	0.48	2.55
11	Computation	21	603	0.64	0.48	2.60
11	Computation	22	603	0.60	0.49	3.22
11	Computation	23	603	0.59	0.49	3.27
11	Computation	24	603	0.51	0.50	1.90
11	Computation	25	603	0.53	0.50	3.35
11	Computation	26	603	0.56	0.50	2.59
11	Computation	27	603	0.38	0.48	2.57
11	Computation	28	603	0.36	0.48	2.62

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
11	Computation	29	603	0.38	0.49	2.85
11	Computation	30	603	0.40	0.49	2.79
11	Computation	31	603	0.43	0.50	3.44
11	Computation	32	603	0.41	0.49	3.08
11	Computation	33	603	0.29	0.45	3.26
11	Computation	34	603	0.36	0.48	3.08
11	Computation	35	603	0.43	0.50	2.88
11	Computation	36	603	0.33	0.47	2.88
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Literary Reading	1	379	0.67	0.47	2.58
12	Literary Reading	2	379	0.62	0.48	2.69
12	Literary Reading	3	379	0.80	0.40	2.16
12	Literary Reading	4	379	0.61	0.49	2.71
12	Literary Reading	5	379	0.50	0.50	2.98
12	Literary Reading	6	379	0.49	0.50	3.01
12	Literary Reading	7	379	0.41	0.49	3.21
12	Literary Reading	8	379	0.68	0.46	2.53
12	Literary Reading	9	379	0.61	0.49	2.72
12	Literary Reading	10	379	0.38	0.48	3.28
12	Literary Reading	11	379	0.37	0.48	3.29
12	Literary Reading	12	379	0.67	0.47	2.56
12	Literary Reading	13	379	0.38	0.48	3.28
12	Literary Reading	14	379	0.59	0.49	2.77
12	Literary Reading	15	379	0.81	0.40	2.15
12	Literary Reading	16	379	0.75	0.43	2.33
12	Literary Reading	17	379	0.55	0.50	2.87
12	Literary Reading	18	379	0.37	0.48	3.29
12	Literary Reading	19	379	0.80	0.40	2.17
12	Literary Reading	20	379	0.69	0.46	2.52
12	Literary Reading	21	379	0.63	0.48	2.68
12	Literary Reading	22	379	0.69	0.46	2.53
12	Literary Reading	23	379	0.67	0.47	2.56
12	Literary Reading	24	379	0.45	0.50	3.11
12	Literary Reading	25	379	0.57	0.49	2.81
12	Literary Reading	26	379	0.36	0.48	3.31
12	Literary Reading	27	379	0.55	0.50	2.87
12	Literary Reading	28	379	0.79	0.41	2.22
12	Literary Reading	29	379	0.62	0.49	2.70
12	Literary Reading	30	379	0.72	0.45	2.43
12	Literary Reading	31	379	0.42	0.49	3.16
12	Literary Reading	32	379	0.63	0.48	2.66
12	Literary Reading	33	379	0.53	0.50	2.92
12	Literary Reading	34	379	0.55	0.50	2.86
12	Literary Reading	35	379	0.57	0.50	2.82
12	Literary Reading	36	379	0.35	0.48	3.35
12	Literary Reading	37	379	0.57	0.49	2.82
12	Literary Reading	38	379	0.20	0.40	3.78
12	Literary Reading	39	379	0.29	0.45	3.52
12	Literary Reading	40	379	0.49	0.50	3.00

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Vocabulary	1	398	0.96	0.19	1.61
12	Vocabulary	2	398	0.76	0.42	1.94
12	Vocabulary	3	398	0.93	0.26	2.31
12	Vocabulary	4	398	0.75	0.43	2.87
12	Vocabulary	5	398	0.42	0.49	3.17
12	Vocabulary	6	398	0.85	0.36	3.31
12	Vocabulary	7	398	0.77	0.42	2.76
12	Vocabulary	8	398	0.61	0.49	3.25
12	Vocabulary	9	398	0.37	0.48	3.09
12	Vocabulary	10	398	0.42	0.49	1.21
12	Vocabulary	11	398	0.65	0.48	2.43
12	Vocabulary	12	398	0.45	0.50	1.62
12	Vocabulary	13	398	0.51	0.50	2.46
12	Vocabulary	14	398	0.93	0.26	3.31
12	Vocabulary	15	398	0.88	0.32	2.11
12	Vocabulary	16	398	0.80	0.40	2.41
12	Vocabulary	17	398	0.60	0.49	2.85
12	Vocabulary	18	398	0.48	0.50	3.43
12	Vocabulary	19	398	0.81	0.39	2.81
12	Vocabulary	20	398	0.81	0.39	2.26
12	Vocabulary	21	398	0.63	0.48	3.09
12	Vocabulary	22	398	0.52	0.50	3.17
12	Vocabulary	23	398	0.48	0.50	3.58
12	Vocabulary	24	398	0.32	0.46	2.28
12	Vocabulary	25	398	0.14	0.34	4.20
12	Vocabulary	26	398	0.86	0.34	2.93
12	Vocabulary	27	398	0.58	0.49	2.04
12	Vocabulary	28	398	0.58	0.49	2.94
12	Vocabulary	29	398	0.37	0.48	3.50
12	Vocabulary	30	398	0.35	0.48	3.44
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Writing Conventions	1	396	0.92	0.28	0.16
12	Writing Conventions	2	396	0.94	0.23	-0.09
12	Writing Conventions	3	396	0.36	0.48	1.92
12	Writing Conventions	4	396	0.95	0.23	-0.11
12	Writing Conventions	5	396	0.44	0.50	1.71
12	Writing Conventions	6	396	0.85	0.36	1.51
12	Writing Conventions	7	396	0.64	0.48	0.79
12	Writing Conventions	8	396	0.87	0.34	1.50
12	Writing Conventions	9	396	0.69	0.46	0.74
12	Writing Conventions	10	396	0.64	0.48	1.84
12	Writing Conventions	11	396	0.52	0.50	1.34
12	Writing Conventions	12	396	0.79	0.41	0.57
12	Writing Conventions	13	396	0.53	0.50	1.23
12	Writing Conventions	14	396	0.80	0.40	0.47
12	Writing Conventions	15	396	0.39	0.49	1.10
12	Writing Conventions	16	396	0.60	0.49	1.24

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Writing Conventions	17	396	0.91	0.29	-0.09
12	Writing Conventions	18	396	0.94	0.23	1.87
12	Writing Conventions	19	396	0.68	0.47	2.13
12	Writing Conventions	20	396	0.37	0.48	2.17
12	Writing Conventions	21	396	0.28	0.45	0.21
12	Writing Conventions	22	396	0.26	0.44	1.13
12	Writing Conventions	23	396	0.83	0.38	1.20
12	Writing Conventions	24	396	0.65	0.48	0.66
12	Writing Conventions	25	396	0.47	0.50	1.42
12	Writing Conventions	26	396	0.55	0.50	1.64
12	Writing Conventions	27	396	0.56	0.50	1.45
12	Writing Conventions	28	396	0.68	0.47	1.12
12	Writing Conventions	29	396	0.71	0.45	1.05
12	Writing Conventions	30	396	0.45	0.50	1.68
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Spelling	1	394	0.97	0.17	1.36
12	Spelling	2	394	0.98	0.15	2.22
12	Spelling	3	394	0.95	0.21	2.52
12	Spelling	4	394	0.95	0.21	3.64
12	Spelling	5	394	0.92	0.28	1.95
12	Spelling	6	394	0.90	0.30	2.80
12	Spelling	7	394	0.93	0.26	2.26
12	Spelling	8	394	0.90	0.29	1.66
12	Spelling	9	394	0.89	0.32	2.97
12	Spelling	10	394	0.88	0.33	2.08
12	Spelling	11	394	0.91	0.29	2.07
12	Spelling	12	394	0.91	0.28	2.11
12	Spelling	13	394	0.89	0.31	1.24
12	Spelling	14	394	0.90	0.30	2.03
12	Spelling	15	394	0.92	0.28	3.97
12	Spelling	16	394	0.84	0.37	3.61
12	Spelling	17	394	0.87	0.34	2.93
12	Spelling	18	394	0.85	0.36	2.31
12	Spelling	19	394	0.86	0.35	2.13
12	Spelling	20	394	0.82	0.38	2.46
12	Spelling	21	394	0.78	0.41	2.16
12	Spelling	22	394	0.75	0.44	2.20
12	Spelling	23	394	0.69	0.46	2.02
12	Spelling	24	394	0.70	0.46	3.02
12	Spelling	25	394	0.67	0.47	1.66
12	Spelling	26	394	0.63	0.48	2.41
12	Spelling	27	394	0.42	0.49	3.97
12	Spelling	28	394	0.41	0.49	2.68
12	Spelling	29	394	0.29	0.45	3.11
12	Spelling	30	394	0.29	0.45	2.36
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Algebra	1	403	0.57	0.49	NA
12	Algebra	2	403	0.57	0.49	NA

Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Algebra	3	403	0.78	0.42	-0.57
12	Algebra	4	403	0.74	0.44	-0.43
12	Algebra	5	403	0.71	0.45	-0.35
12	Algebra	6	403	0.70	0.46	-0.33
12	Algebra	7	403	0.71	0.45	-0.35
12	Algebra	8	403	0.71	0.45	-0.35
12	Algebra	9	403	0.65	0.48	-0.20
12	Algebra	10	403	0.63	0.48	-0.15
12	Algebra	11	403	0.74	0.44	-0.46
12	Algebra	12	403	0.64	0.48	-0.16
12	Algebra	13	403	0.59	0.49	-0.04
12	Algebra	14	403	0.56	0.50	0.02
12	Algebra	15	403	0.74	0.44	-0.45
12	Algebra	16	403	0.77	0.42	-0.53
12	Algebra	17	403	0.60	0.49	-0.08
12	Algebra	18	403	0.57	0.49	0.00
12	Algebra	19	403	0.67	0.47	-0.26
12	Algebra	20	403	0.52	0.50	0.12
12	Algebra	21	403	0.51	0.50	0.15
12	Algebra	22	403	0.66	0.47	-0.22
12	Algebra	23	403	0.52	0.50	0.13
12	Algebra	24	403	0.49	0.50	0.19
12	Algebra	25	403	0.47	0.50	0.24
12	Algebra	26	403	0.47	0.50	0.25
12	Algebra	27	403	0.49	0.50	0.18
12	Algebra	28	403	0.41	0.49	0.37
12	Algebra	29	403	0.48	0.50	0.22
12	Algebra	30	403	0.41	0.49	0.38
12	Algebra	31	403	0.41	0.49	0.39
12	Algebra	32	403	0.39	0.49	0.44
12	Algebra	33	403	0.34	0.47	0.55
12	Algebra	34	403	0.61	0.49	-0.10
12	Algebra	35	403	0.60	0.49	-0.08
12	Algebra	36	403	0.60	0.49	-0.06
12	Algebra	37	403	0.48	0.50	0.22
12	Algebra	38	403	0.52	0.50	0.11
12	Algebra	39	403	0.35	0.48	0.53
12	Algebra	40	403	0.42	0.49	0.37
Grade	Test	Item Number	N	Mean (p)	SD	Difficulty (RASCH b)
12	Computation	1	400	0.58	0.49	1.96
12	Computation	2	400	0.58	0.49	1.76
12	Computation	3	400	0.90	0.29	2.69
12	Computation	4	400	0.87	0.34	2.25
12	Computation	5	400	0.88	0.33	2.38
12	Computation	6	400	0.80	0.40	2.43
12	Computation	7	400	0.80	0.40	3.14
12	Computation	8	400	0.80	0.40	2.54
12	Computation	9	400	0.70	0.46	3.16
12	Computation	10	400	0.76	0.42	2.31

12	Computation	11	400	0.79	0.41	2.68
12	Computation	12	400	0.71	0.45	2.48
12	Computation	13	400	0.71	0.45	2.58
12	Computation	14	400	0.69	0.46	2.25
12	Computation	15	400	0.69	0.46	2.59
12	Computation	16	400	0.66	0.47	3.20
12	Computation	17	400	0.73	0.44	2.71
12	Computation	18	400	0.68	0.46	2.90
12	Computation	19	400	0.75	0.43	2.25
12	Computation	20	400	0.70	0.46	2.55
12	Computation	21	400	0.69	0.46	2.60
12	Computation	22	400	0.66	0.47	3.22
12	Computation	23	400	0.65	0.48	3.27
12	Computation	24	400	0.57	0.49	1.90
12	Computation	25	400	0.59	0.49	3.35
12	Computation	26	400	0.62	0.49	2.59
12	Computation	27	400	0.44	0.50	2.57
12	Computation	28	400	0.42	0.49	2.62
12	Computation	29	400	0.45	0.50	2.85
12	Computation	30	400	0.46	0.50	2.79
12	Computation	31	400	0.50	0.50	3.44
12	Computation	32	400	0.47	0.50	3.08
12	Computation	33	400	0.35	0.48	3.26
12	Computation	34	400	0.42	0.49	3.08
12	Computation	35	400	0.50	0.50	2.88
12	Computation	36	400	0.39	0.49	2.88

Appendix 2: Rasch Student Ability (θ) Descriptive Statistics: Mean, Standard Deviation, Standard Error of Measurement (SEM), and Reliability- by Test Level

Name	Level	Mean	SD	SEM	Reliability
Reading	10	-0.17	0.59	0.26	0.80
Word Analysis	10	-0.23	0.90	0.55	0.63
Mathematics	10	-0.16	1.12	0.40	0.87
Reading	11	0.62	0.59	0.23	0.85
Word Analysis	11	0.69	0.83	0.44	0.72
Vocabulary	11	0.62	0.59	0.30	0.74
Spelling	11	-0.15	0.94	0.42	0.80
Mathematics	11	0.97	0.88	0.26	0.91
Computation & Estimation	11	-0.17	0.72	0.26	0.87
Reading	12	1.29	0.67	0.23	0.88
Word Analysis	12	1.44	0.72	0.33	0.79
Vocabulary	12	1.29	0.67	0.30	0.80
Writing Conventions	12	-0.06	0.68	0.27	0.85
Spelling	12	1.11	0.98	0.36	0.87
Mathematics	12	1.46	0.58	0.20	0.88
Computation & Estimation	12	0.34	0.65	0.22	0.88
Reading	13	1.77	0.56	0.21	0.86
Word Analysis	13	1.96	0.76	0.36	0.77
Vocabulary	13	1.77	0.56	0.25	0.81
Writing Conventions	13	0.46	0.69	0.27	0.85
Spelling	13	1.87	0.86	0.34	0.85
Mathematics	13	1.88	0.59	0.20	0.88
Computation	13	0.93	0.65	0.23	0.88
Reading	14	1.81	0.50	0.18	0.87
Vocabulary	14	1.81	0.50	0.20	0.85
Writing Conventions	14	0.41	0.54	0.20	0.86
Spelling	14	2.24	0.76	0.29	0.85
Mathematics	14	1.82	0.49	0.16	0.89
Computation	14	1.20	0.52	0.21	0.85
Reading	15	1.94	0.51	0.18	0.88
Vocabulary	15	1.94	0.51	0.20	0.84
Writing Conventions	15	0.63	0.61	0.21	0.88
Spelling	15	2.43	0.77	0.33	0.82
Mathematics	15	2.06	0.53	0.17	0.90
Computation	15	1.60	0.48	0.20	0.83
Reading	16	2.20	0.48	0.18	0.86

Vocabulary	16	2.20	0.48	0.19	0.83
Writing Conventions	16	0.94	0.60	0.23	0.85
Spelling	16	2.63	0.61	0.28	0.78
Mathematics	16	2.32	0.48	0.16	0.89
Computation	16	1.79	0.55	0.21	0.86
Reading	17	2.32	0.47	0.18	0.85
Vocabulary	17	2.32	0.47	0.19	0.83
Writing Conventions	17	1.03	0.52	0.22	0.82
Spelling	17	2.74	0.69	0.27	0.84
Mathematics	17	2.53	0.50	0.16	0.89
Computation	17	1.99	0.58	0.21	0.86
Reading	18	2.53	0.55	0.19	0.88
Vocabulary	18	2.53	0.55	0.21	0.85
Writing Conventions	18	1.12	0.49	0.19	0.85
Spelling	18	3.07	0.66	0.31	0.78
Mathematics	18	2.77	0.44	0.16	0.87
Computation	18	2.24	0.57	0.21	0.87
Reading	19	2.65	0.49	0.18	0.86
Vocabulary	19	2.65	0.49	0.21	0.83
Writing Conventions	19	1.19	0.50	0.20	0.84
Spelling	19	3.13	0.76	0.30	0.84
Mathematics	19	2.98	0.57	0.17	0.92
Computation	19	2.49	0.62	0.21	0.88
Informational Reading	20	2.92	0.49	0.20	0.84
Literary Reading	20	2.92	0.49	0.19	0.85
Vocabulary	20	2.92	0.49	0.23	0.79
Writing Conventions	20	1.42	0.49	0.23	0.79
Spelling	20	3.32	0.74	0.29	0.84
Pre-Algebra	20	3.47	0.71	0.22	0.90
Computation	20	2.81	0.65	0.22	0.89

Appendix 3: Objective Score Descriptive Statistics: Mean, Standard Deviation, Reliability (KR-20), Standard Error of Measurement (SEM), and Achievement Cut Score Distributions-by Test Level and Grade

Objective Number	Level 10, Grade K	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
5	Reading	12	10.24	1.19	0.55	0.79	2.22	62.54	35.24
6	Reading	15	12.98	1.22	0.61	0.77	0.63	11.11	88.25
7	Reading	13	10.08	1.43	0.55	0.96	6.35	50.48	43.17
20	Word Analysis	12	11.48	0.70	0.87	0.26	0.64	5.73	93.63
21	Word Analysis	12	11.19	0.86	0.76	0.43	0.32	19.43	80.25
50	Mathematics	12	11.15	0.86	0.66	0.50	0.64	19.11	80.25
51	Mathematics	24	19.13	1.66	0.74	0.85	4.46	56.37	39.17
Objective Number	**Level 10, Grade 1**	**Number of Items**	**Mean**	**SD**	**KR-20**	**SEM**	**Low %**	**Competent %**	**Proficient %**
5	Reading	12	10.85	0.99	0.51	0.69	1.59	69.84	28.57
6	Reading	15	13.64	1.05	0.66	0.61	1.59	16.10	82.31
7	Reading	13	11.01	1.25	0.47	0.91	7.00	59.40	33.60
20	Word Analysis	12	11.70	0.54	0.83	0.22	2.90	12.90	84.10
21	Word Analysis	12	11.53	0.67	0.72	0.36	1.10	23.60	75.30
50	Mathematics	12	11.60	0.62	0.68	0.35	0.50	19.10	80.50
51	Mathematics	24	21.10	1.43	0.71	0.77	3.90	58.00	38.20
Objective Number	**Level 11, Grade 1**	**Number of Items**	**Mean**	**SD**	**KR-20**	**SEM**	**Low %**	**Competent %**	**Proficient %**
1	Reading	14	8.02	1.73	0.75	0.86	48.10	46.02	5.88
3	Reading	12	9.90	1.18	0.71	0.63	17.30	68.17	14.53
4	Reading	14	10.39	1.54	0.70	0.85	14.88	59.17	25.95
5	Reading	12	8.47	1.37	0.66	0.81	39.10	46.02	14.88
6	Reading	14	10.84	1.44	0.75	0.72	24.91	67.82	7.27
7	Reading	14	8.99	1.67	0.67	0.97	24.91	60.21	14.88
20	Word Analysis	12	10.70	1.03	0.76	0.50	2.77	20.76	76.47
21	Word Analysis	12	10.76	1.04	0.82	0.45	10.73	48.10	41.18
25	Vocabulary	24	19.31	1.81	0.88	0.63	21.18	48.26	30.56
35	Spelling	20	15.77	1.67	0.90	0.52	28.98	53.36	17.67
52	Mathematics	12	9.47	1.16	0.65	0.69	10.34	56.21	33.45
53	Mathematics	12	9.06	1.24	0.49	0.89	13.45	65.52	21.03
56	Mathematics	12	6.33	1.37	0.60	0.87	12.07	75.86	12.07
57	Mathematics	12	9.95	1.14	0.75	0.57	22.07	54.14	23.79
70	Computation & Estimation	12	9.65	1.35	0.85	0.53	23.08	46.85	30.07
74	Computation & Estimation	12	9.85	1.31	0.88	0.45	16.78	45.10	38.11
78	Computation & Estimation	12	8.32	1.44	0.73	0.75	4.20	65.03	30.77
Objective Number	**Level 12, Grade 2**	**Number of Items**	**Mean**	**SD**	**KR-20**	**SEM**	**Low %**	**Competent %**	**Proficient %**
1	Reading	14	8.51	1.66	0.57	1.09	14.58	70.51	14.92
3	Reading	13	9.29	1.49	0.63	0.91	10.85	69.83	19.32
4	Reading	13	8.85	1.58	0.66	0.92	19.32	69.15	11.53
5	Reading	13	8.09	1.59	0.68	0.90	20.68	68.81	10.51
6	Reading	14	10.81	1.48	0.68	0.84	10.85	64.41	24.75
7	Reading	13	7.76	1.66	0.48	1.19	11.19	74.24	14.58
20	Word Analysis	15	11.30	1.52	0.77	0.74	0.34	24.15	75.51
21	Word Analysis	15	13.53	1.11	0.74	0.57	4.76	35.71	59.52

		Number of Items	Mean	SD	KR-20	SEM			
25	Vocabulary	30	25.00	1.85	0.85	0.72	2.38	47.62	50.00
30	Writing Conventions	15	10.15	1.73	0.70	0.94	24.07	61.69	14.24
31	Writing Conventions	15	11.69	1.51	0.66	0.88	2.03	59.32	38.64
35	Spelling	20	11.85	1.87	0.88	0.66	8.47	49.49	42.03
53	Mathematics	12	8.24	1.49	0.43	1.12	2.36	77.36	20.27
56	Mathematics	12	7.09	1.51	0.57	0.99	11.49	80.07	8.45
57	Mathematics	12	9.15	1.36	0.68	0.77	10.14	62.84	27.03
70	Computation & Estimation	12	7.83	1.60	0.80	0.72	19.26	46.96	33.78
74	Computation & Estimation	12	6.15	1.59	0.79	0.74	19.26	63.18	17.57
78	Computation & Estimation	12	6.96	1.60	0.67	0.92	17.23	74.66	8.11
Objective Number	Level 13, Grade 3	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
1	Reading	15	9.29	1.67	0.58	1.09	25.69	72.22	2.08
3	Reading	17	11.52	1.79	0.67	1.04	26.39	63.54	10.07
4	Reading	16	12.65	1.44	0.66	0.84	13.54	59.38	27.08
5	Reading	12	7.54	1.56	0.55	1.04	27.43	58.33	14.24
6	Reading	17	13.05	1.54	0.62	0.94	26.04	68.40	5.56
7	Reading	19	12.88	1.81	0.65	1.07	19.10	71.18	9.72
20	Word Analysis	13	9.70	1.31	0.71	0.70	1.74	40.28	57.99
21	Word Analysis	17	15.89	0.98	0.71	0.53	2.08	53.47	44.44
25	Vocabulary	22	15.88	1.89	0.70	1.04	4.86	63.54	31.60
26	Vocabulary	11	8.16	1.35	0.61	0.84	15.63	57.29	27.08
30	Writing Conventions	12	9.09	1.35	0.66	0.79	12.15	53.47	34.38
31	Writing Conventions	12	9.84	1.23	0.73	0.64	6.60	40.63	52.78
32	Writing Conventions	12	7.53	1.61	0.77	0.78	15.97	52.78	31.25
35	Spelling	20	11.58	1.79	0.86	0.68	6.27	60.28	33.45
52	Mathematics	12	7.89	1.42	0.59	0.90	13.89	76.39	9.72
53	Mathematics	12	6.45	1.57	0.43	1.19	10.07	80.56	9.38
56	Mathematics	12	7.09	1.45	0.62	0.89	14.58	74.31	11.11
57	Mathematics	12	8.16	1.48	0.68	0.84	4.17	69.79	26.04
70	Computation	12	9.05	1.42	0.74	0.73	10.76	48.26	40.97
74	Computation	12	5.36	1.63	0.86	0.61	37.50	38.54	23.96
78	Computation	12	6.74	1.66	0.77	0.79	16.67	63.89	19.44
Objective Number	Level 14, Grade 4	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
1	Reading	14	5.58	1.75	0.60	1.10	20.21	76.03	3.77
3	Reading	17	10.17	1.84	0.71	0.99	21.92	73.97	4.11
4	Reading	17	10.26	1.87	0.78	0.88	34.25	59.25	6.51
5	Reading	12	6.33	1.64	0.63	1.00	25.34	64.73	9.93
6	Reading	12	8.30	1.50	0.74	0.77	23.63	59.59	16.78
7	Reading	12	6.56	1.61	0.66	0.94	26.71	68.49	4.79
8	Reading	12	4.82	1.55	0.49	1.10	29.11	69.86	1.03
25	Vocabulary	24	13.65	2.29	0.77	1.10	9.25	76.71	14.04
26	Vocabulary	16	9.83	1.80	0.73	0.94	9.59	83.22	7.19
30	Writing Conventions	14	8.12	1.64	0.63	1.00	2.05	83.22	14.73
31	Writing Conventions	14	7.69	1.74	0.60	1.10	3.77	76.71	19.52
32	Writing Conventions	12	4.76	1.62	0.65	0.96	18.49	72.26	9.25
35	Spelling	30	22.75	2.17	0.86	0.81	4.45	55.82	39.73
52	Mathematics	12	6.12	1.69	0.52	1.17	19.11	76.79	4.10
54	Mathematics	12	6.95	1.63	0.60	1.03	59.39	35.84	4.78

55	Mathematics	12	8.51	1.40	0.57	0.92	24.57	74.40	1.02
56	Mathematics	12	6.59	1.66	0.53	1.13	17.41	75.09	7.51
57	Mathematics	12	5.26	1.69	0.70	0.93	30.38	62.80	6.83
71	Computation	12	7.37	1.64	0.87	0.59	37.11	43.64	19.24
75	Computation	12	5.66	1.66	0.81	0.73	41.58	46.74	11.68
78	Computation	12	4.55	1.65	0.80	0.74	53.61	43.64	2.75
Objective Number	Level 15, Grade 5	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
1	Reading	16	7.23	1.88	0.63	1.15	19.88	77.33	2.80
3	Reading	16	8.86	1.92	0.72	1.02	24.22	73.29	2.48
4	Reading	16	9.25	1.88	0.76	0.91	47.83	50.00	2.17
5	Reading	12	5.66	1.65	0.60	1.04	50.93	45.96	3.11
6	Reading	12	7.04	1.66	0.65	0.97	35.40	58.70	5.90
7	Reading	12	5.82	1.63	0.55	1.10	17.39	77.95	4.66
8	Reading	12	6.83	1.63	0.62	1.00	21.43	74.22	4.35
25	Vocabulary	26	16.23	2.25	0.77	1.08	25.78	72.05	2.17
26	Vocabulary	14	8.46	1.68	0.77	0.81	18.63	77.95	3.42
30	Writing Conventions	14	6.38	1.68	0.48	1.22	40.63	59.38	0.00
31	Writing Conventions	14	9.73	1.59	0.71	0.86	43.13	48.75	8.13
32	Writing Conventions	12	4.81	1.65	0.49	1.18	40.00	58.75	1.25
35	Spelling	30	25.43	1.90	0.85	0.73	4.05	61.06	34.89
52	Mathematics	12	6.07	1.51	0.64	0.90	49.53	45.77	4.70
54	Mathematics	12	6.22	1.68	0.61	1.05	22.88	68.97	8.15
55	Mathematics	12	7.86	1.55	0.68	0.87	26.02	62.38	11.60
56	Mathematics	12	7.30	1.65	0.68	0.94	21.63	63.95	14.42
57	Mathematics	12	6.25	1.70	0.71	0.92	21.63	76.49	1.88
72	Computation	12	6.16	1.69	0.79	0.78	36.59	57.10	6.31
76	Computation	12	5.08	1.70	0.75	0.85	39.43	53.31	7.26
78	Computation	12	4.13	1.60	0.60	1.02	26.81	67.19	5.99
Objective Number	Level 16, Grade 6	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
1	Reading	16	7.59	1.89	0.63	1.16	13.91	83.46	2.62
3	Reading	16	7.68	1.81	0.58	1.18	29.13	69.03	1.84
4	Reading	16	7.65	1.78	0.54	1.21	42.26	57.74	0.00
5	Reading	12	5.61	1.61	0.42	1.22	24.41	75.07	0.52
6	Reading	12	6.26	1.51	0.41	1.16	23.10	76.90	0.00
7	Reading	12	5.11	1.65	0.52	1.15	15.49	80.84	3.67
8	Reading	12	5.94	1.58	0.52	1.09	20.21	77.95	1.84
25	Vocabulary	22	12.39	2.18	0.70	1.20	32.02	66.67	1.31
26	Vocabulary	18	8.38	1.94	0.73	1.00	15.75	77.43	6.82
30	Writing Conventions	14	9.76	1.51	0.76	0.74	6.82	65.62	27.56
31	Writing Conventions	12	10.21	1.18	0.72	0.63	15.75	71.92	12.34
32	Writing Conventions	14	7.88	1.79	0.71	0.96	6.56	76.90	16.54
35	Spelling	30	23.43	1.93	0.79	0.88	19.16	76.64	4.20
52	Mathematics	12	4.77	1.60	0.56	1.06	18.68	75.00	6.32
54	Mathematics	12	6.76	1.58	0.65	0.94	32.89	63.16	3.95
55	Mathematics	12	6.03	1.67	0.62	1.04	50.00	49.47	0.53
56	Mathematics	12	6.20	1.69	0.72	0.90	32.89	53.95	13.16
57	Mathematics	12	5.00	1.67	0.67	0.95	28.95	67.11	3.95
72	Computation	12	7.97	1.56	0.80	0.70	43.42	50.26	6.32

		Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
76	Computation	12	5.71	1.68	0.70	0.93	48.16	46.32	5.53
78	Computation	12	3.94	1.60	0.49	1.14	8.68	87.37	3.95

Objective Number	Level 17, Grade 7	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
1	Reading	16	6.83	1.87	0.52	1.30	20.36	77.20	2.43
3	Reading	16	9.64	1.73	0.57	1.13	31.91	68.09	0.00
4	Reading	16	8.24	1.74	0.56	1.15	38.30	61.70	0.00
5	Reading	12	4.61	1.52	0.45	1.12	47.42	52.28	0.30
6	Reading	12	7.64	1.46	0.50	1.03	12.16	87.54	0.30
7	Reading	12	5.62	1.60	0.46	1.18	24.92	74.77	0.30
8	Reading	12	6.84	1.58	0.54	1.07	15.20	79.94	4.86
25	Vocabulary	26	13.18	2.38	0.79	1.08	34.35	65.05	0.61
26	Vocabulary	14	7.79	1.76	0.63	1.07	10.94	78.42	10.64
30	Writing Conventions	16	11.05	1.53	0.68	0.87	36.17	59.88	3.95
31	Writing Conventions	12	9.84	1.25	0.60	0.79	10.33	71.43	18.24
32	Writing Conventions	12	6.33	1.59	0.64	0.95	21.28	72.64	6.08
35	Spelling	30	22.09	2.23	0.72	1.19	5.79	87.80	6.40
52	Mathematics	12	5.79	1.64	0.63	1.01	27.36	70.52	2.13
54	Mathematics	12	5.20	1.60	0.61	1.00	32.52	63.53	3.95
55	Mathematics	12	6.23	1.61	0.48	1.16	38.91	60.18	0.91
56	Mathematics	12	6.34	1.70	0.68	0.96	37.39	51.67	10.94
57	Mathematics	12	4.78	1.59	0.57	1.04	45.90	53.50	0.61
72	Computation	12	7.95	1.56	0.72	0.82	62.92	33.43	3.65
76	Computation	12	6.36	1.65	0.74	0.84	39.82	50.15	10.03
78	Computation	12	5.50	1.64	0.58	1.06	41.95	54.71	3.34

Objective Number	Level 18, Grade 8	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
1	Reading	14	8.44	1.80	0.64	1.08	13.91	82.90	3.19
3	Reading	18	10.80	1.90	0.70	1.04	17.10	79.71	3.19
4	Reading	16	8.29	1.71	0.62	1.05	24.64	73.33	2.03
5	Reading	12	7.23	1.63	0.56	1.08	13.91	80.58	5.51
6	Reading	12	7.64	1.56	0.67	0.90	27.54	62.03	10.43
7	Reading	12	5.41	1.55	0.49	1.11	8.41	88.70	2.90
8	Reading	12	7.25	1.51	0.57	0.99	6.96	79.42	13.62
25	Vocabulary	27	15.70	2.36	0.80	1.06	25.72	71.68	2.60
26	Vocabulary	13	8.13	1.51	0.62	0.93	15.61	80.06	4.34
30	Writing Conventions	18	10.92	2.00	0.59	1.28	12.14	86.42	1.45
31	Writing Conventions	9	5.13	1.38	0.41	1.06	5.49	86.71	7.80
32	Writing Conventions	13	6.50	1.75	0.62	1.08	7.51	79.48	13.01
35	Spelling	30	24.06	1.95	0.79	0.90	4.65	94.19	1.16
52	Mathematics	12	6.00	1.66	0.68	0.94	47.67	47.97	4.36
54	Mathematics	12	4.99	1.65	0.53	1.13	79.94	19.19	0.87
55	Mathematics	12	6.22	1.68	0.56	1.11	68.02	29.36	2.62
56	Mathematics	12	6.03	1.70	0.71	0.92	55.81	42.44	1.74
57	Mathematics	12	4.78	1.66	0.62	1.03	60.17	37.50	2.33
73	Computation	12	5.89	1.65	0.74	0.85	53.64	44.02	2.33
77	Computation	12	5.93	1.69	0.67	0.98	74.93	21.87	3.21
78	Computation	12	5.75	1.72	0.73	0.90	44.90	48.10	7.00

Objective Number	Level 19, Grade 9	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %

Objective Number		Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
1	Reading	19	8.63	2.06	0.70	1.13	33.23	64.63	2.13
3	Reading	14	8.35	1.76	0.68	1.00	48.78	49.70	1.52
4	Reading	15	10.54	1.60	0.72	0.85	23.17	70.12	6.71
5	Reading	12	3.37	1.05	0.61	0.65	7.62	86.89	5.49
6	Reading	12	8.50	1.71	0.61	1.07	43.29	54.88	1.83
7	Reading	12	7.87	1.79	0.63	1.09	33.54	64.63	1.83
8	Reading	12	7.78	1.63	0.63	0.99	23.48	73.17	3.35
25	Vocabulary	25	14.99	2.19	0.74	1.13	54.10	44.98	0.91
26	Vocabulary	15	10.85	1.64	0.69	0.92	18.54	78.12	3.34
30	Writing Conventions	15	8.50	1.75	0.64	1.05	38.60	58.36	3.04
31	Writing Conventions	12	8.36	1.55	0.69	0.87	47.42	44.38	8.21
32	Writing Conventions	13	6.06	1.67	0.64	1.01	15.81	68.69	15.50
35	Spelling	30	23.19	2.10	0.71	1.13	8.81	89.36	1.82
58	Mathematics	17	8.12	1.78	0.73	0.93	42.12	55.45	2.42
59	Mathematics	14	6.84	1.83	0.67	1.06	58.79	40.00	1.21
60	Mathematics	18	8.35	2.09	0.71	1.13	81.82	17.58	0.61
61	Mathematics	14	5.39	1.76	0.62	1.09	76.36	23.33	0.30
79	Computation	12	6.35	1.67	0.78	0.79	81.10	12.80	6.10
80	Computation	12	6.26	1.72	0.64	1.03	55.18	43.29	1.52
81	Computation	12	5.21	1.69	0.71	0.90	43.60	50.61	5.79
Objective Number	Level 20, Grade 10	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
2	Informational Reading	12	7.70	1.58	0.49	1.13	3.41	71.21	25.39
3	Informational Reading	16	8.31	1.94	0.64	1.16	12.69	76.78	10.53
4	Informational Reading	12	7.12	1.62	0.59	1.04	3.10	50.77	46.13
6	Informational Reading	12	9.02	1.87	0.58	1.21	9.60	65.94	24.46
7	Informational Reading	15	8.44	1.70	0.56	1.13	4.95	80.19	14.86
8	Informational Reading	13	5.66	1.58	0.48	1.14	3.41	62.85	33.75
9	Literary Reading	27	14.12	2.49	0.98	0.32	0.00	59.26	40.74
10	Literary Reading	13	6.00	1.71	0.96	0.35	18.52	66.67	14.81
11	Literary Reading	12	7.44	1.77	0.97	0.30	11.11	74.07	14.81
12	Literary Reading	14	6.95	1.81	0.95	0.39	7.41	59.26	33.33
13	Literary Reading	14	5.73	1.63	0.96	0.32	0.00	62.96	37.04
25	Vocabulary	18	8.70	1.92	0.65	1.13	1.90	76.58	21.52
26	Vocabulary	12	6.78	1.50	0.65	0.89	2.53	78.80	18.67
30	Writing Conventions	16	9.48	1.76	0.98	0.24	5.00	35.00	60.00
33	Writing Conventions	14	7.01	1.68	0.97	0.28	0.00	35.00	65.00
35	Spelling	30	22.56	2.07	0.99	0.17	0.00	35.00	65.00
62	Pre-Algebra	14	7.53	1.80	0.73	0.93	46.69	48.58	4.73
63	Pre-Algebra	13	7.33	1.71	0.79	0.78	43.53	50.79	5.68
64	Pre-Algebra	13	6.50	1.75	0.67	1.00	45.11	50.47	4.42
79	Computation	12	6.82	1.63	0.82	0.69	50.00	38.22	11.78
80	Computation	12	5.71	1.68	0.67	0.96	26.75	64.33	8.92
81	Computation	12	4.85	1.61	0.72	0.85	21.97	66.88	11.15
Objective Number	Level 20, Grade 11	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
2	Informational Reading	12	8.29	1.53	0.85	0.60	9.42	67.17	23.40
3	Informational Reading	16	9.23	1.92	0.85	0.75	28.27	65.05	6.69
4	Informational Reading	12	7.75	1.58	0.85	0.61	10.33	74.47	15.20
6	Informational Reading	12	9.85	1.81	0.85	0.70	26.14	59.57	14.29

7	Informational Reading	15	9.15	1.67	0.88	0.58	14.59	73.56	11.85
8	Informational Reading	13	6.28	1.57	0.81	0.69	8.51	83.28	8.21
9	Literary Reading	27	15.64	2.46	0.89	0.81	36.00	62.57	1.43
10	Literary Reading	13	6.72	1.71	0.84	0.68	53.43	42.57	4.00
11	Literary Reading	12	8.21	1.75	0.86	0.66	49.71	44.29	6.00
12	Literary Reading	14	7.76	1.80	0.76	0.89	48.00	51.14	0.86
13	Literary Reading	14	6.39	1.63	0.80	0.73	21.43	70.29	8.29
25	Vocabulary	18	9.53	1.91	0.85	0.74	16.86	77.33	5.81
26	Vocabulary	12	7.30	1.50	0.84	0.60	14.83	66.57	18.60
30	Writing Conventions	16	9.89	1.75	0.87	0.63	24.21	67.15	8.65
33	Writing Conventions	14	7.39	1.68	0.79	0.76	16.43	81.27	2.31
35	Spelling	30	23.66	1.97	0.96	0.38	9.09	54.25	36.66
62	Pre-Algebra	14	9.02	1.73	0.94	0.42	70.63	26.57	2.80
63	Pre-Algebra	13	8.67	1.63	0.95	0.37	70.63	23.08	6.29
64	Pre-Algebra	13	7.93	1.71	0.93	0.44	76.92	20.28	2.80
65	Algebra	16	9.11	1.94	0.92	0.54	53.92	41.67	4.41
66	Algebra	12	6.00	1.69	0.89	0.57	62.25	31.86	5.88
67	Algebra	12	4.62	1.66	0.85	0.66	79.41	19.12	1.47
79	Computation	12	7.98	1.56	0.93	0.42	62.29	33.14	4.57
80	Computation	12	6.98	1.66	0.90	0.53	62.29	37.71	0.00
81	Computation	12	6.05	1.64	0.88	0.56	74.29	21.71	4.00

Objective Number	Level 20, Grade 12	Number of Items	Mean	SD	KR-20	SEM	Low %	Competent %	Proficient %
2	Informational Reading	12	8.38	1.52	0.68	0.86	27.94	69.85	2.21
3	Informational Reading	16	9.38	1.92	0.73	1.00	58.82	40.44	0.74
4	Informational Reading	12	7.85	1.57	0.74	0.81	21.32	72.06	6.62
6	Informational Reading	12	9.98	1.80	0.67	1.04	53.68	44.85	1.47
7	Informational Reading	15	9.26	1.66	0.76	0.81	32.35	67.65	0.00
8	Informational Reading	13	6.37	1.57	0.60	0.99	25.74	72.06	2.21
9	Literary Reading	27	15.87	2.45	0.81	1.06	76.09	23.91	0.00
10	Literary Reading	13	6.83	1.71	0.78	0.80	71.01	27.54	1.45
11	Literary Reading	12	8.33	1.74	0.79	0.79	70.29	28.99	0.72
12	Literary Reading	14	7.89	1.80	0.54	1.22	81.88	18.12	0.00
13	Literary Reading	14	6.50	1.63	0.73	0.85	53.62	43.48	2.90
25	Vocabulary	18	9.84	1.91	0.83	0.79	46.97	53.03	0.00
26	Vocabulary	12	7.49	1.49	0.79	0.68	56.06	41.67	2.27
30	Writing Conventions	16	10.13	1.74	0.82	0.74	41.98	53.44	4.58
33	Writing Conventions	14	7.61	1.68	0.76	0.82	33.59	65.65	0.76
35	Spelling	30	23.83	1.95	0.94	0.47	19.85	60.31	19.85
62	Pre-Algebra	14	9.63	1.68	0.86	0.63	78.46	17.69	3.85
63	Pre-Algebra	13	9.21	1.58	0.88	0.55	68.46	20.77	10.77
64	Pre-Algebra	13	8.52	1.66	0.84	0.67	68.46	20.77	10.77
65	Algebra	16	9.52	1.93	0.94	0.46	70.21	27.66	2.13
66	Algebra	12	6.32	1.69	0.92	0.47	74.47	23.40	2.13
67	Algebra	12	4.93	1.68	0.90	0.52	80.85	19.15	0.00
79	Computation	12	8.27	1.53	0.83	0.63	69.47	27.48	3.05
80	Computation	12	7.30	1.64	0.79	0.76	68.70	29.77	1.53
81	Computation	12	6.37	1.64	0.80	0.73	77.10	18.32	4.58

Appendix 4: Factor Structure: Loadings and Standardized Residual Correlations—by Test Level and Grade

Level 10, Grade 1

Factor Loadings	
Test	Factor
	1
Reading	.792
Word **A**nalysis	.763
Computation & Estimation	.748

Note. Only one factor was extracted because there are only three tests
, which is the minimum number of the observed variables needed to
constitute one factor.
Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	WA
WA	.000	
M	.000	.000

Level 11, Grade 1

Factor Loadings		
Test	Factor	
	1	2
Reading	.717	.183
Word **A**nalysis	.699	.148
Vocabulary	.883	.012
Spelling	.899	-.049
Math	-.025	1.017
Computation & Estimation	.285	.419
Factor correlation	.706	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	WA	V	S	M
WA	-.032				
V	.024	-.004			
S	-.010	.025	-.010		
M	.000	.000	.000	.000	
C	-.004	.020	-.037	.036	.000

Level 12, Grade 2

Factor Loadings		
Test	Factor	
	1	2
Reading	.741	.151
Word **A**nalysis	.789	.049
Vocabulary	.834	.003
Writing **C**onventions	.721	.095
Spelling	.832	-.097
Math	-.045	1.029
Computation & Estimation	.087	.644
Factor correlation	.661	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	WA	V	WC	S	M
WA	-.016					
V	.040	-.015				
WC	-.006	-.005	-.005			
S	-.029	.052	-.031	.017		
M	.000	.000	.000	.000	.000	
C	-.005	-.050	.014	.031	.019	.000

Level 13, Grade 3

Factor Loadings		
Test	Factor	
	1	2
Reading	.703	.149
Word **A**nalysis	.573	.135
Vocabulary	.776	.054
Writing **C**onventions	.849	.014
Spelling	.748	-.037
Math	-.035	1.024
Computation & Estimation	.174	.546
Factor correlation	.707	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	WA	V	WC	S	M
WA	-.048					
V	.052	-.045				
WC	.012	-.009	-.013			
S	-.073	.163	-.014	.005		
M	.000	.000	.000	.000	.000	
C	.011	-.056	.000	.013	-.005	.000

Level 14, Grade 4

Factor Loadings		
Test	Factor	
	1	2
Reading	.853	.010
Vocabulary	.798	.055
Writing **C**onventions	.724	.144
Spelling	.673	-.037
Math	-.014	1.009
Computation & Estimation	.422	.296
Factor correlation	.713	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	V	WC	S	M
V	.018				
WC	.005	-.029			
S	-.066	.028	.053		
M	.000	.000	.000	.000	
C	.020	-.031	-.002	.020	.000

Level 15, Grade 5

Factor Loadings		
Test	Factor	
	1	2
Reading	.864	.010
Vocabulary	.941	-.071
Writing **C**onventions	.733	.155
Spelling	.595	.031
Math	.475	.410
Computation & Estimation	-.047	.940
Factor correlation	.715	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	V	WC	S	M
V	.001				
WC	.002	-.003			
S	-.011	.004	.011		
M	.000	.001	-.001	-.003	
C	.000	.000	.000	.000	.000

Level 16, Grade 6

Factor Loadings		
Test	Factor	
	1	2
Reading	.699	.115
Vocabulary	.652	.175
Writing **C**onventions	.863	.044
Spelling	.681	-.027
Math	-.036	1.026
Computation & Estimation	.253	.513
Factor correlation	.744	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	V	WC	S	M
V	.063				
WC	-.014	-.011			
S	-.040	-.047	.034		
M	.000	.000	.000	.000	
C	-.001	-.022	.006	.012	.000

Level 17, Grade 7

Factor Loadings		
Test	Factor	
	1	2
Reading	.885	-.020
Vocabulary	.875	-.034
Writing **C**onventions	.681	.169
Spelling	.450	.111
Math	.357	.504
Computation & Estimation	-.049	1.012
Factor correlation	.690	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	V	WC	S	M
V	.003				
WC	.010	-.021			
S	-.016	.014	.031		
M	-.018	.023	.011	-.045	
C	.001	-.001	-.001	.002	.000

Level 18, Grade 8

Factor Loadings		
Test	Factor	
	1	2
Reading	.906	.003
Vocabulary	.839	-.030
Writing **C**onventions	.738	.078
Spelling	.433	.126
Math	.323	.570
Computation & Estimation	-.062	1.040
Factor correlation	.666	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	V	WC	S	M
V	-.003				
WC	-.006	.012			
S	.025	-.054	.036		
M	.004	.022	-.020	-.056	
C	.000	.000	.000	.000	.000

Level 19, Grade 9

Factor Loadings		
Test	Factor	
	1	2
Reading	.951	-.026
Vocabulary	.811	.018
Writing **C**onventions	.681	.177
Spelling	.434	.128
Math	.048	.851
Computation & Estimation	.048	.898
Factor correlation	.718	

Note. Loadings of .4 and greater are shaded.

Standardized Residual Correlations

	R	V	WC	S	M
V	.006				
WC	-.003	-.012			
S	-.014	-.031	.090		
M	-.004	.016	.001	-.025	
C	.003	-.007	-.003	.007	.000

Level 20, Grade 10-12

Factor Loadings		
Test	Factor	
	1	2
Informational **R**eading	.814	.022
Literary **R**eading	.857	.058
Vocabulary	.796	.028
Writing **C**onventions	.743	.118
Spelling	.832	-.041
Pre-**A**lgebra	.189	.748
Algebra	-.122	1.022
Computation	.131	.768
Factor correlation	.714	

Standardized Residual Correlations

	InfoR	LitR	V	WC	S	Pre-A	A
LitR	-.013						
V	.003	.015					
WC	.008	.019	-.047				
S	.015	-.017	.007	.006			
Pre-A	.015	-.021	.033	-.022	.014		
A	.003	.000	-.004	.000	-.001	.001	
C	-.027	.022	-.024	.027	-.015	.000	-.002