Spring 2011

Nebraska State Accountability (NeSA)

Grades 3-8 and 11

Reading Operational and Field Test

Mathematics Operational and Field Test

Science Field Test

Technical Report Appendices

October 2011

Prepared by Data Recognition Corporation

DATA RECOGNITION

DRC

CORPORATION

Appendix A: Legislative Bill 1157

LEGISLATURE OF NEBRASKA

ONE HUNDREDTH LEGISLATURE

SECOND SESSION

LEGISLATIVE BILL 1157

FINAL READING

Introduced by Raikes, 25.

Read first time January 23, 2008

Committee: Education

A BILL

FOR AN ACT relating to education; to amend sections 79-758, 79-760.01, 79-760.02, 79-760.03, and 79-760.05, Revised Statutes Supplement, 2007; to change provisions relating to statewide assessment and reporting; and to repeal the original sections.

Be it enacted by the people of the State of Nebraska,

Section 1. Section 79-758, Revised Statutes Supplement, 2007, is amended to read:

79-758 For purposes of the Quality Education Accountability Act:

(1) Assessment means the process of measuring student achievement and progress on ~~state and locally adopted~~ state-adopted standards;

(2) Assessment instrument means a test aligned with state ~~and local~~ standards that is designed to measure student progress and achievement; and

~~(3) Assessment portfolio means the compilation of assessment practices and procedures, assessment instruments, and national assessment instruments used by a school district in meeting assessment and reporting requirements; and~~

~~(4)~~ (3) National assessment instrument means a nationally norm-referenced test developed and scored by a national testing service.

Sec. 2. Section 79-760.01, Revised Statutes Supplement, 2007, is amended to read:

79-760.01 The State Board of Education shall adopt measurable ~~model~~ academic content standards for at least ~~three~~ the grade levels required for statewide assessment pursuant to section 79-760.03. The standards shall cover the subject areas of reading, writing, mathematics, science, and social studies. The standards adopted shall be sufficiently clear and measurable to be

used for testing student performance with respect to mastery of the content described in the state standards. The State Board of Education shall develop a plan to review and update standards for each subject area every five years. The state board shall review and update the standards in reading by July 1, 2009, the standards in mathematics by July 1, 2010, and the standards in all other subject areas by July 1, 2013. The state board plan shall include a review of commonly accepted standards adopted by school districts.

Sec. 3. Section 79-760.02, Revised Statutes Supplement, 2007, is amended to read:

79-760.02 In accordance with timelines that are adopted by the State Board of Education, but in no event later than one year following the adoption or modification of state standards, each school district shall adopt measurable quality academic content standards in the subject areas of reading, writing, mathematics, science, and social studies. The standards may be the same as, or may be equal to or exceed in rigor, the measurable ~~model~~ academic content standards adopted by the state board and shall cover at least the same grade levels. School districts may work collaboratively with educational service units, with learning communities, or through interlocal agreements to develop such standards. Educational service units and learning communities shall develop a composite set of standards shared by member school districts. ~~The State Department of Education shall adopt and promulgate appropriate rules and regulations to insure the rigor of~~

~~the measurable quality academic content standards.~~

Sec. 4. Section 79-760.03, Revised Statutes Supplement, 2007, is amended to read:

79-760.03 (1) For school year 2009-10 and each school year thereafter, the State Board of Education shall implement a statewide system for the assessment of student learning and for reporting the performance of school districts and learning communities pursuant to this section. The assessment and reporting system shall measure student knowledge of subject matter materials covered by measurable academic content standards selected by the state board.

(2) The state board shall adopt a plan for an assessment and reporting system and implement and maintain the assessment and reporting system according to such plan. The plan shall be submitted annually to the State Department of Education, the Governor, the chairperson of the Education Committee of the Legislature, and the Clerk of the Legislature. The state board shall select ~~three~~ grade levels for assessment and reporting required pursuant to subsections (4) through (7) of this section. The purposes of the system are to:

(a) Determine how well public schools are performing in terms of achievement of public school students related to the state academic content standards;

(b) Report the performance of public schools based upon the results of state assessment instruments and national assessment

instruments;

(c) Provide information for the public and policymakers on the performance of public schools; and

(d) Provide for the comparison among Nebraska public schools and the comparison of Nebraska public schools to public schools elsewhere.

(3) The Governor shall appoint a technical advisory committee to review the statewide assessment plan and state assessment instruments developed under the Quality Education Accountability Act. The technical advisory committee shall consist of three nationally recognized experts in educational assessment and measurement, one administrator from a school in Nebraska, and one teacher from a school in Nebraska. The members shall serve terms of three years, except that two of the members shall be appointed for initial terms of two years. Any vacancy shall be filled by the Governor for the remainder of the term. One of the members shall be designated as chairperson by the Governor. Members shall be reimbursed for their actual and necessary expenses as provided in sections 81-1174 to 81-1177. The committee shall advise the Governor, the state board, and the State Department of Education on the development of statewide assessment instruments and the statewide assessment plan. The appointments to the committee shall be confirmed by the Legislature.

~~(3)~~ (4) The state board shall prescribe a statewide assessment of writing that relies on writing samples in each of

three grades selected by the state board. Each year at least one of the three selected grades shall participate in the statewide writing assessment with each selected grade level participating at least once every three years.

~~(4)~~ (5) For school year 2009-10 and for each school year thereafter, the state board shall prescribe a statewide assessment of reading. ~~that is based on model assessments developed pursuant to section 79-760. The reading assessment instruments shall be developed in collaboration with educational service units and be approved by a majority of the educational service unit administrators.~~ The statewide assessment of reading shall include assessment instruments for each of the grade levels three through eight and for one grade in high school and standards ~~selected~~ adopted by the state board pursuant to section 79-760.01.

~~(5)~~ (6) For no later than school year 2010-11 and for each school year thereafter, the state board shall prescribe a statewide assessment of mathematics. ~~that is based on model assessments developed pursuant to section 79-760. The mathematics assessment instruments shall be developed in collaboration with educational service units and be approved by a majority of the educational service unit administrators.~~ The statewide assessment of mathematics shall include assessment instruments for each of the grade levels three through eight and for one grade in high school and standards ~~selected~~ adopted by the state board pursuant to section 79-760.01. If no statewide assessment of mathematics

is administered in school year 2009-10, school districts shall report mathematics assessment results in the same manner as such information was reported in school year 2008-09.

~~(6) School districts shall develop assessment portfolios. Such assessment portfolios may be developed through school district collaboration with educational service units and learning communities or through interlocal agreements. Educational service units shall conduct a peer review of local district assessments annually. Educational service units shall submit documentation of the district portfolios for review by the State Department of Education not more than once every three years. Assessment portfolios shall include all assessment instruments required by the state board and by the Quality Education Accountability Act.~~

~~(7) The department shall identify criteria for rating assessment instruments and assessment portfolios. The department shall establish statewide minimum proficiency levels for local assessments and shall include proficiency levels in the rating of assessment instruments and assessment portfolios. The department shall contract with independent, recognized assessment experts to review and rate locally developed assessment instruments and portfolios according to such criteria and proficiency levels.~~

(7) For no later than school year 2011-12 and each school year thereafter, the state board shall prescribe a statewide assessment of science. The statewide assessment of science shall include assessment instruments for each of the grade levels

selected by the state board and standards adopted by the state board pursuant to section 79-760.01. The grade levels shall include at least one grade in elementary school, one grade in middle school or junior high school, and one grade in high school.

(8) The department shall conduct studies to verify the technical quality of assessment instruments and demonstrate the comparability of assessment instrument results required by the ~~Quality Education Accountability Act.~~ act. The department shall annually report such findings to the Governor, the Legislature, and the ~~State Board of Education.~~ state board.

(9) The ~~State Board of Education~~ state board shall recommend national assessment instruments for the purpose of national comparison. Each school district shall ~~include national assessment instruments in its assessment portfolio.~~ report individual student data for scores and sub-scores according to procedures established by the state board and the department pursuant to section 79-760.05.

(10) The aggregate results of assessment instruments and national assessment instruments shall be reported by the district on a building basis to the public in that district, to the learning community coordinating council if such district is a member of a learning community, and to the department. Each learning community shall also report the aggregate results of any assessment instruments and national assessment instruments to the public in that learning community and to the department. The

department shall report the aggregate results of any assessment instruments and national assessment instruments on a learning community, district, and building basis as part of the statewide assessment and reporting system.

(11)(a) The assessment and reporting plan shall:

(i) Provide for the confidentiality of the results of individual students; and

(ii) Include all public schools and all public school students.

(b) The state board shall adopt criteria for the inclusion of students with disabilities, students entering the school for the first time, and students with limited English proficiency.

The department may determine appropriate accommodations for the assessment of students with disabilities or any student receiving special education programs and services pursuant to section 79-1139. Alternate academic achievement standards in reading, mathematics, and science and alternate assessment instruments aligned with the standards may be among the accommodations for students with severe cognitive disabilities.

(12) The state board may select additional grade levels and additional subject areas for statewide assessment instruments to comply with federal requirements.

(13) The state board shall not require school districts to administer assessments or assessment instruments other than as

prescribed by the act.

(14) The state board shall appoint committees of teachers, from each appropriate subject area, and administrators to assist in the development of statewide assessment instruments required by the act.

Sec. 5. Section 79-760.05, Revised Statutes Supplement, 2007, is amended to read:

79-760.05 (1) The State Board of Education shall implement a statewide system for tracking individual student achievement, using the student identifier system of the State Department of Education, that can be aggregated to track student progress by demographic characteristics, including, but not limited to, race, poverty, high mobility, attendance, and limited English proficiency, on available measures of student achievement which include, but need not be limited to, national assessment instruments~~,~~ and state assessment instruments. ~~, local assessment instruments, and other similar measures.~~ Such a system shall be designed so as to aggregate student data by available educational input characteristics, which may include class size, teacher education, teacher experience, special education, early childhood programs, federal programs, and other targeted education programs. School districts shall provide the department with individual student achievement data ~~as requested~~ from assessment instruments required pursuant to section 79-760.03 in order to implement the statewide system.

(2) The department and the coordinator appointed pursuant to section 79-11,150 shall annually analyze and report on student achievement for the state, each school district, and each learning community aggregated by the demographic characteristics described in subsection (1) of this section. The department shall report the findings to the Governor, the Legislature, school districts, educational service units, and each learning community. Such analysis shall include aggregated data that would indicate differences in achievement due to available educational input characteristics described in subsection (1) of this section. Such analysis shall include indicators of progress toward state achievement goals for students in poverty, limited English proficient students, and highly mobile students according to the plan developed by the coordinator pursuant to section 79-11,150.

Sec. 6. Original sections 79-758, 79-760.01, 79-760.02, 79-760.03, and 79-760.05, Revised Statutes Supplement, 2007, are repealed.

Appendix B: NeSA-R Test Blueprint

Nebraska State Accountability - Reading Table of Specifications					
Grade 3					
Gr3 Vocabulary	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 3.1.5 Vocabulary: Students will build literary, general academic, and content specific grade level vocabulary.					
LA 3.1.5.a *Apply word structure elements, known words, and word patterns to determine meanings (e.g., contractions, plurals, possessives, basic parts of speech, compounds, syllables)*	1	4-6	0	0	4-6
LA 3.1.5.b *Relate new grade level vocabulary to prior knowledge and use in new situations*	Assessed at the local level				
LA 3.1.5.c *Apply context clues (e.g., word, phrase, and sentence clues, re-reading) and text features (e.g., table of contents, maps, charts, font/format styles) to help infer meaning of unknown word*	2	2-3	2-3	0	4-6
LA 3.1.5.d *Identify semantic relationships (e.g., patterns and categories, synonyms, antonyms, homonyms, multiple meanings)*	1	4-6	0	0	4-6
LA 3.1.5.e *Identify meaning using print and digital reference materials (e.g., dictionary, glossary)*	Assessed at the local level				
LA 3.1.5.f *Locate words in reference materials (e.g., alphabetical order, guide words)*	Assessed at the local level				
Gr3 Comprehension	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 3.1.6 Comprehension: Students will extract and construct meaning using prior knowledge, applying text information, and monitoring comprehension while reading grade level text.					

Nebraska State Accountability - Reading
Table of Specifications

Grade 3

LA 3.1.6.a *Identify author purpose(s) (e.g., explain, entertain, inform, persuade) to support text comprehension*	3	0	0-1	1-2	1-3
LA 3.1.6.b *Identify elements of narrative text (e.g., characters, setting, plot, point of view)*	1	4-6	0	0	4-6
LA 3.1.6.c *Retell and summarize narrative text including characters, setting, and plot with supporting details*	2	1-2	3-4	0	4-6
LA 3.1.6.d *Identify literary devices and explain the ways in which language is used (e.g., simile, alliteration, onomatopoeia, imagery, rhythm)*	2	0-1	1-2	0	1-3
LA 3.1.6.e *Retell and summarize the main idea from informational text using supporting details*	2	1-2	2-4	0	3-6
LA 3.1.6.f *Recognize and apply knowledge of organizational patterns found in informational text (e.g., sequence, description, cause and effect, compare/contrast)*	2	1-2	2-3	0	3-5
LA 3.1.6.g *Apply knowledge of text features to locate information and gain meaning from a text (e.g., table of contents, maps, charts, illustrations, headings, captions, font/format styles)*	2	1-3	2-3	0	3-6
LA 3.1.6.h *Describe the defining characteristics of narrative and informational genres (e.g., folk tales, poetry, historical fiction, biographies, chapter books, textbooks)*	2	0	1-3	0	1-3
LA 3.1.6.i *Use narrative or informational text to develop a multi-cultural perspective*	Assessed at the local level				
LA 3.1.6.j *Generate and/or answer literal, inferential, and critical questions, supporting answers using prior knowledge and literal and inferential information from the text*	3	1-2	1-2	1-2	3-6
LA 3.1.6.k *Identify and explain purpose for reading (e.g., information, pleasure, understanding)*	Assessed at the local level				

Nebraska State Accountability - Reading Table of Specifications	
Grade 3	
LA 3.1.6.l *Build and activate prior knowledge in order to identify text to self, text to text, and text to world connections before, during, and after reading*	Assessed at the local level
LA 3.1.6.m *Self-monitor comprehension by recognizing when meaning is disrupted and apply strategies to clarify, confirm, or correct*	Assessed at the local level
LA 3.1.6.n *Make and confirm/modify predictions before, during, and after reading (e.g., captions, headings, character traits, personal experience)*	Assessed at the local level
LA 3.1.6.o *Use examples and details in a text to make inferences about a story or situation*	Assessed at the local level
LA 3.1.6.p *Respond to text verbally, in writing, or artistically*	Assessed at the local level

Nebraska State Accountability - Reading Table of Specifications					
Grade 4					
Gr4 Vocabulary	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 4.1.5 Vocabulary: Students will build literary, general academic, and content specific grade level vocabulary.					
LA 4.1.5.a *Apply knowledge of word structure elements, known words, and word patterns to determine meaning (e.g., parts of speech, plurals, possessives, suffixes, prefixes, base and root words)*	1	4-6	0	0	4-6
LA 4.1.5.b *Relate new grade level vocabulary to prior knowledge and use in new situations*	Assessed at the local level				

Nebraska State Accountability - Reading
Table of Specifications

Grade 4

LA 4.1.5.c *Apply context clues (e.g., word, phrase, sentence and paragraph clues, re-reading) and text features (e.g., glossary, headings, subheadings, captions) to infer meaning of unknown words*	2	1-2	2-4	0	3-6
LA 4.1.5.d *Identify semantic relationships (e.g., patterns and categories, homographs, homophones, synonyms, antonyms, multiple meanings)*	1	4-6	0	0	4-6
LA 4.1.5.e *Determine meaning using print and digital reference materials (e.g., dictionary, thesaurus, glossary)*	Assessed at the local level				
Gr4 Comprehension	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 4.1.6 Comprehension: Students will extract and construct meaning using prior knowledge, applying text information, and monitoring comprehension while reading grade level text.					
LA 4.1.6.a *Identify author purpose(s) (e.g., explain, entertain, inform, persuade) and recognize how author perspective (e.g., beliefs, assumptions, biases) influences text*	3	0	0-1	1-2	1-3
LA 4.1.6.b *Identify and analyze elements of narrative text (e.g., character development, setting, plot, theme)*	2	2-3	2-3	0	4-6
LA 4.1.6.c *Summarize narrative text including characters, setting, and plot with supporting details*	2	1-2	2-4	0	3-6
LA 4.1.6.d *Identify literary devices and explain the ways in which language is used (e.g., simile, metaphor, alliteration, onomatopoeia, imagery, rhythm)*	2	1-2	1-2	0	2-4
LA 4.1.6.e *Retell and summarize the main idea from informational text using supporting details*	2	1-2	2-4	0	3-6

Nebraska State Accountability - Reading
Table of Specifications

Grade 4

LA 4.1.6.f *Recognize and apply knowledge of organizational patterns found in informational text (e.g., sequence, description, cause and effect, compare/contrast, fact/opinion)*	2	1-2	2-4	0	3-6
LA 4.1.6.g *Apply knowledge of text features to locate information and gain meaning from a text (e.g., glossary, maps, charts, tables, graphs, illustrations, headings, subheadings, captions, font/format styles)*	2	1-3	2-3	0	3-6
LA 4.1.6.h *Describe the defining characteristics of narrative and informational genres (e.g., folk tales, poetry, historical fiction, biographies, chapter books, textbooks)*	2	0	1-3	0	1-3
LA 4.1.6.i *Use narrative or informational text to develop a multi-cultural perspective*	Assessed at the local level				
LA 4.1.6.j *Generate and/or answer literal, inferential, critical, and interpretive questions, supporting answers using prior knowledge and literal and inferential information from the text*	3	1-2	1-2	1-2	3-6
LA 4.1.6.k *Identify and explain purpose for reading (e.g., information, pleasure, understanding)*	Assessed at the local level				
LA 4.1.6.l *Build and activate prior knowledge in order to identify text to self, text to text, and text to world connections before, during, and after reading*	Assessed at the local level				
LA 4.1.6.m *Self-monitor comprehension by recognizing when meaning is disrupted and apply strategies to clarify, confirm, or correct*	Assessed at the local level				
LA 4.1.6.n *Make and confirm/modify predictions before, during, and after reading (e.g., title, topic sentences, font, key words, foreshadowing clues)*	Assessed at the local level				
LA 4.1.6.o *Use examples and details in a text to make inferences about a story or situation*	Assessed at the local level				

Nebraska State Accountability - Reading Table of Specifications	
Grade 4	
LA 4.1.6.p *Respond to text verbally, in writing, or artistically*	Assessed at the local level

Nebraska State Accountability - Reading Table of Specifications					
Grade 5					
Gr5 Vocabulary	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 5.1.5 Vocabulary: Students will build literary, general academic, and content specific grade level vocabulary.					
LA 5.1.5.a *Apply knowledge of word structure elements, known words, and word patterns to determine meaning (e.g., affixes, abbreviations, parts of speech, word origins)*	1	4-6	0	0	4-6
LA 5.1.5.b *Relate new grade level vocabulary to prior knowledge and use in new situations*	Assessed at the local level				
LA 5.1.5.c *Select and apply context clues (e.g., word, phrase, sentence and paragraph clues, re-reading) and text features (e.g., glossary, headings, subheadings, captions, maps) to determine meaning of unknown words in a variety of text structures*	2	1-2	3-4	0	4-6
LA 5.1.5.d *Identify semantic relationships (e.g., multiple meanings, metaphors, similes, idioms, analogies)*	1	2-4	0	0	2-4
LA 5.1.5.e *Determine meaning using print and digital reference materials (e.g., dictionary, thesaurus, glossary)*	Assessed at the local level				
Gr5 Comprehension	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Accountability - Reading
Table of Specifications

Grade 5

LA 5.1.6 Comprehension: Students will extract and construct meaning using prior knowledge, applying text information, and monitoring comprehension while reading grade level text.					
LA 5.1.6.a *Identify author purpose(s) (e.g., explain, entertain, inform, persuade) and recognize how author perspective (e.g., beliefs, assumptions, biases) influences text*	3	0	0-1	1-2	1-3
LA 5.1.6.b *Identify and analyze elements of narrative text (e.g., character development, setting, plot, theme)*	2	1-2	2-4	0	3-6
LA 5.1.6.c *Summarize narrative text including characters, setting, plot, and theme with supporting details*	2	1-2	3-4	0	4-6
LA 5.1.6.d *Identify literary devices and explain the ways in which language is used (e.g., simile, metaphor, alliteration, onomatopoeia, imagery, rhythm)*	2	1-2	1-2	0	2-4
LA 5.1.6.e *Summarize and analyze the main idea from informational text using supporting details*	2	1-2	3-4	0	4-6
LA 5.1.6.f *Understand and apply knowledge of organizational patterns found in informational text (e.g., sequence, description, cause and effect, compare/contrast, fact/opinion)*	2	1-2	2-4	0	3-6
LA 5.1.6.g *Apply knowledge of text features to locate information and gain meaning from a text (e.g., index, maps, charts, tables, graphs, headings, subheadings)*	2	1-2	1-2	0	2-4
LA 5.1.6.h *Describe the defining characteristics of narrative and informational genres (e.g., textbooks, myths, fantasies, science fiction, drama, periodicals, essays)*	2	0	1-3	0	1-3
LA 5.1.6.i *Recognize the social, historical, cultural, and biographical influences in a variety of genres*	Assessed at the local level				
LA 5.1.6.j *Use narrative and informational text to develop a national and globalmulti-cultural perspective*	Assessed at the local level				

Nebraska State Accountability - Reading Table of Specifications					
Grade 5					
LA 5.1.6.k *Generate and/or answer literal, inferential, critical, and interpretive questions, supporting answers using prior knowledge and literal and inferential information from the text and additional sources*	3	1-2	2-4	1-2	4-8
LA 5.1.6.l *Select text for a particular purpose (e.g., information, pleasure, answer a specific question)*	Assessed at the local level				
LA 5.1.6.m *Build and activate prior knowledge in order to identify text to self, text to text, and text to world connections before, during, and after reading*	Assessed at the local level				
LA 5.1.6.n *Self-monitor comprehension by recognizing when meaning is disrupted and apply strategies to clarify, confirm, or correct*	Assessed at the local level				
LA 5.1.6.o *Use examples and details to make inferences or logical predictions while previewing and reading text*	Assessed at the local level				
LA 5.1.6.p *Respond to text verbally, in writing, or artistically*	Assessed at the local level				

Nebraska State Accountability - Reading Table of Specifications					
Grade 6					
Gr6 Vocabulary	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 6.1.5 Vocabulary: Students will build literary, general academic, and content specific grade level vocabulary.					
LA 6.1.5.a *Determine the meaning of words through structural analysis, using knowledge of Greek, Latin, and Anglo Saxon roots, prefixes, and suffixes to understand complex words, including words in science, mathematics, and social studies*	1	4-6	0	0	4-6

Nebraska State Accountability - Reading
Table of Specifications

Grade 6

LA 6.1.5.b *Relate new grade level vocabulary to prior knowledge and use in new situations*	Assessed at the local level				
LA 6.1.5.c *Select and apply knowledge of context clues (e.g., word, phrase, sentence and paragraph clues, re-reading) and text features (e.g., glossary, headings, subheadings, index, tables, maps, charts) to determine meaning of unknown words in a variety of text structures*	2	1-2	3-4	0	4-6
LA 6.1.5.d *Identify semantic relationships (e.g., metaphors, similes, idioms, analogies, comparisons)*	1	2-4	0	0	2-4
LA 6.1.5.e *Determine meaning using print and digital reference materials (e.g., dictionary, thesaurus, glossary)*	Assessed at the local level				
Gr6 Comprehension	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 6.1.6 Comprehension: Students will extract and construct meaning using prior knowledge, applying text information, and monitoring comprehension while reading grade level text.					
LA 6.1.6.a *Explain how author's purpose and perspective affect the meaning and reliability of the text*	3	0	1-2	1-2	2-4
LA 6.1.6.b *Identify and analyze elements of narrative text (e.g., character development, setting, plot development, conflict, point of view, theme)*	2	1-3	2-3	0	3-6
LA 6.1.6.c *Summarize narrative text using understanding of characters, setting, sequence of events, plot, and theme*	2	1-2	2-4	0	3-6
LA 6.1.6.d *Interpret and explain the author's use of literary devices (e.g., simile, metaphor, alliteration, onomatopoeia, imagery, rhythm)*	3	0	1-2	1-2	2-4
LA 6.1.6.e *Summarize, analyze, and synthesize informational text using main idea and supporting details*	3	1-2	1-2	2-3	4-7

Nebraska State Accountability - Reading
Table of Specifications

Grade 6

LA 6.1.6.f *Apply knowledge of organizational patterns found in informational text (e.g., sequence, description, cause and effect, compare/contrast, fact/opinion)*	2	1-2	2-4	0	3-6
LA 6.1.6.g *Apply knowledge of text features to locate information and gain meaning from a text (e.g., index, maps, charts, tables, graphs, headings, subheadings)*	2	1-2	1-2	0	2-4
LA 6.1.6.h *Distinguish between the defining characteristics of different narrative and informational genres (e.g., textbooks, myths, fantasies, science fiction, drama, periodicals, and essays)*	2	0	1-3	0	1-3
LA 6.1.6.i *Describe the social, historical, cultural, and biographical influences in a variety of genres*	Assessed at the local level				
LA 6.1.6.j *Use narrative and informational text to develop a national and global multi-cultural perspective*	Assessed at the local level				
LA 6.1.6.k *Generate and/or answer literal, inferential, critical, and interpretive questions, supporting answers using prior knowledge and literal and inferential information from the text and additional sources*	3	1-2	2-4	1-2	4-8
LA 6.1.6.l *Select text for a particular purpose (e.g., information, pleasure, answer a specific question)*	Assessed at the local level				
LA 6.1.6.m *Build and activate prior knowledge in order to identify text to self, text to text, and text to world connections before, during, and after reading*	Assessed at the local level				
LA 6.1.6.n *Self-monitor comprehension for accuracy and understanding when errors detract from meaning by applying appropriate strategies to self-correct*	Assessed at the local level				
LA 6.1.6.o *Use examples and details to make inferences or logical predictions while previewing and reading text*	Assessed at the local level				
LA 6.1.6.p *Respond to text verbally, in writing, or artistically*	Assessed at the local level				

Nebraska State Accountability - Reading Table of Specifications					
Grade 7					
Gr7 Vocabulary	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 7.1.5 Vocabulary: Students will build literary, general academic, and content specific grade level vocabulary.					
LA 7.1.5.a *Determine meaning of words through structural analysis, using knowledge of Greek, Latin, and Anglo-Saxon roots, prefixes, and suffixes to understand complex words, including words in science, mathematics, and social studies*	1	3-5	0	0	3-5
LA 7.1.5.b *Relate new grade level vocabulary to prior knowledge and use in new situations.*	Assessed at the local level				
LA 7.1.5.c *Select and apply knowledge of context clues (e.g., word, phrase, sentence and paragraph clues, re-reading) and text features (e.g., glossary, headings, subheadings, index, tables, maps, graphs, charts) appropriate to a particular text to determine meaning of unknown words*	2	1-2	3-5	0	4-7
LA 7.1.5.d *Analyze semantic relationships (e.g., figurative language, connotations, subtle distinctions)*	2	1-2	1-2	0	2-4
LA 7.1.5.e *Determine meaning using print and digital reference materials*	Assessed at the local level				
Gr7 Comprehension	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 7.1.6 Comprehension: Students will extract and construct meaning using prior knowledge, applying text information, and monitoring comprehension while reading grade level text.					
LA 7.1.6.a *Analyze the meaning, reliability, and validity of the text considering author's purpose and perspective*	3	0	1-2	1-2	2-4

Nebraska State Accountability - Reading Table of Specifications					
Grade 7					
LA 7.1.6.b *Identify and analyze elements of narrative text (e.g., character development, setting, plot development, conflict, point of view, theme)*	2	2-4	2-4	0	4-8
LA 7.1.6.c *Analyze author's use of literary devices (e.g., foreshadowing, personification, idiom, oxymoron, hyperbole, flashback, suspense, symbolism, irony)*	3	0	1-2	1-2	2-4
LA 7.1.6.d *Summarize, analyze, and synthesize informational text using main idea and supporting details*	3	0	2-3	2-3	4-6
LA 7.1.6.e *Apply knowledge of organizational patterns found in informational text (e.g., sequence, description, cause and effect, compare/contrast, fact/opinion, proposition/support)*	2	1-2	2-4	0	3-6
LA 7.1.6.f *Apply knowledge of text features to locate information and gain meaning from a text (e.g., index, annotations, maps, charts, tables, graphs, headings, subheadings)*	2	1-2	1-2	0	2-4
LA 7.1.6.g *Explain and make inferences based on the characteristics of narrative and informational genres (e.g., textbooks, myths, fantasies, science fiction, drama, periodicals, essays)*	2	0	1-3	0	1-3
LA 7.1.6.h *Explain the social, historical, cultural, and biographical influences in a variety of genres*	Assessed at the local level				
LA 7.1.6.i *Use narrative and informational text to develop a national and global multi-cultural perspective*	Assessed at the local level				
LA 7.1.6.j *Generate and/or answer literal, inferential, critical, and interpretive questions, analyzing prior knowledge, information from the text and additional sources, to support answers*	3	2-3	2-3	1-2	5-8
LA 7.1.6.k *Select text for a particular purpose (e.g., understand, interpret, enjoy, solve problems, form an opinion, answer a specific question, discover models for own writing)*	Assessed at the local level				

Nebraska State Accountability - Reading Table of Specifications	
Grade 7	
LA 7.1.6.l *Build and activate prior knowledge in order to clarify text, deepen understanding, and make connections while reading*	Assessed at the local level
LA 7.1.6.m *Self-monitor comprehension for accuracy and understanding when errors detract from meaning by applying appropriate strategies to self-correct*	Assessed at the local level
LA 7.1.6.n *Use examples and details to make inferences or logical predictions while previewing and reading text*	Assessed at the local level
LA 7.1.6.o *Respond to text verbally, in writing, or artistically*	Assessed at the local level

Nebraska State Accountability - Reading Table of Specifications					
Grade 8					
Gr8 Vocabulary	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 8.1.5 Vocabulary: Students will build literary, general academic, and content specific grade level vocabulary.					
LA 8.1.5.a *Determine meaning of words through structural analysis, using knowledge of Greek, Latin, and Anglo-Saxon roots, prefixes, and suffixes to understand complex words, including words in science, mathematics, and social studies*	1	3-5	0	0	3-5
LA 8.1.5.b *Relate new grade level vocabulary to prior knowledge and use in new situations*	Assessed at the local level				
LA 8.1.5.c *Select a context clue strategy to determine meaning of unknown word appropriate to text (e.g., restatement, example, gloss, annotations, sidebar)*	2	1-3	3-5	0	4-8

Nebraska State Accountability - Reading Table of Specifications					
Grade 8					
LA 8.1.5.d *Analyze semantic relationships (e.g., figurative language, connotations, subtle distinctions)*	2	1-2	1-2	0	2-4
LA 8.1.5.e *Determine meaning using print and digital reference materials*	Assessed at the local level				
Gr8 Comprehension	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 8.1.6 Comprehension: Students will extract and construct meaning using prior knowledge, applying text information, and monitoring comprehension while reading grade level text.					
LA 8.1.6.a *Analyze the meaning, reliability, and validity of the text considering author's purpose, perspective, and information from additional sources*	3	0	0-1	1-2	1-3
LA 8.1.6.b *Identify and analyze elements of narrative text (e.g., character development, setting, plot development, conflict, point of view, inferred and recurring themes)*	2	1-2	3-5	0	4-7
LA 8.1.6.c *Analyze author's use of literary devices (e.g., foreshadowing, personification, idiom, oxymoron, hyperbole, flashback, suspense, symbolism, irony, transitional devices)*	3	0	1-2	1-2	2-4
LA 8.1.6.d *Summarize, analyze, and synthesize informational text using main idea and supporting details*	3	0	3-5	2-3	5-8
LA 8.1.6.e *Apply knowledge of organizational patterns found in informational text (e.g., sequence, description, cause and effect, compare / contrast, fact / opinion, proposition / support)*	2	0	4-6	0	4-6
LA 8.1.6.f *Analyze and evaluate information from text features (e.g., index, annotations, maps, charts, tables, graphs, headings, subheadings, lists)*	2	1-2	1-2	0	2-4
LA 8.1.6.g *Analyze and make inferences based on the characteristics of narrative and informational genres*	2	1-2	1-2	0	2-4

Nebraska State Accountability - Reading Table of Specifications					
Grade 8					
LA 8.1.6.h *Analyze a variety of genres for the social, historical, cultural, and biographical influences*	Assessed at the local level				
LA 8.1.6.i *Use narrative and informational text to develop a national and global multi-cultural perspective*	Assessed at the local level				
LA 8.1.6.j *Generate and/or answer literal, inferential, critical, and interpretive questions, analyzing and synthesizing prior knowledge, information from the text and additional sources, to support answers*	3	1-2	2-3	1-2	4-7
LA 8.1.6.k *Select text for a particular purpose (e.g., understand, interpret, enjoy, solve problems, form an opinion, answer a specific question, discover models for own writing)*	Assessed at the local level				
LA 81.6.l *Build and activate prior knowledge in order to clarify text, deepen understanding, and make connections while reading*	Assessed at the local level				
LA 8.1.6.m *Self-monitor comprehension for accuracy and understanding when errors detract from meaning by applying appropriate strategies to self-correct*	Assessed at the local level				
LA 8.1.6.n *Make complex or abstract inferences or predictions by synthesizing information while previewing and reading text*	Assessed at the local level				
LA 8.1.6.o *Respond to text verbally, in writing, or artistically*	Assessed at the local level				

Nebraska State Accountability - Reading
Table of Specifications

Grade 12

Gr12 Vocabulary	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
LA 12.1.5 Vocabulary: Students will build literary, general academic, and content specific grade level vocabulary.					
LA 12.1.5.a *Determine meaning of words through structural analysis, using knowledge of Greek, Latin, and Anglo-Saxon roots, prefixes, and suffixes to understand complex words, including words in science, mathematics, and social studies*	1	2-4	0	0	2-4
LA 12.1.5.b *Relate new grade level vocabulary to prior knowledge and use in new situations.*	Assessed at the local level				
LA 12.1.5.c *Independently apply appropriate strategy to determine meanings of unknown words in text*	2	1-2	2-4	0	3-6
LA 12.1.5.d *Use semantic relationships to evaluate, defend, and make judgments*	3	0	1-2	1-2	2-4
LA 12.1.5.e *Determine meaning using print and digital reference materials*	Assessed at the local level				
Gr12 Comprehension	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
LA 12.1.6 Comprehension: Students will extract and construct meaning using prior knowledge, applying text information, and monitoring comprehension while reading grade level text.					
LA 12.1.6.a *Evaluate the meaning, reliability, and validity of the text considering author's purpose, perspective, and information from additional sources*	3	0	1-2	1-2	2-4
LA 12.1.6.b *Analyze and evaluate elements of narrative text (e.g., characterization, setting, plot development, internal and external conflict, inferred and recurring themes, point of view, tone, mood)*	3	0	2-3	1-2	3-5

Nebraska State Accountability - Reading Table of Specifications					
Grade 12					
LA 12.1.6.c *Analyze the function and critique the effects of the author's use of stylistic and literary devices (e.g., allusion, symbolism, irony, foreshadowing, flashback, metaphor, personification, epiphany, oxymoron, dialect, tone, mood, transitional devices)*	3	0	2-3	1-2	3-5
LA 12.1.6.d *Summarize, analyze, synthesize, and evaluate informational text*	3	0	3-4	2-3	5-7
LA 12.1.6.e *Apply knowledge of organizational patterns found in informational text (e.g., sequence, description, cause and effect, compare/contrast, fact/opinion, proposition/support, concept definition, question/answer)*	2	1-2	3-6	0	4-8
LA 12.1.6.f *Analyze and evaluate information from text features (e.g., index, annotations, photographs, charts, tables, graphs, headings, subheadings, lists)*	2	1-2	1-2	0	2-4
LA 12.1.6.g *Analyze and evaluate inferences based on the characteristics of narrative and informational genres and provide evidence from the text to support understanding*	3	1-2	1-2	0	2-4
LA 12.1.6.h *Critique the effects of historical, cultural, political, and biographical influences in a variety of genres*	Assessed at the local level				
LA 12.1.6.i *Use narrative and informational text to develop a national and global multi-cultural perspective*	Assessed at the local level				
LA 12.1.6.j *Generate and/or answer literal, inferential, critical, and interpretive questions, analyzing, synthesizing, and evaluating prior knowledge, information from the text and additional sources, to support answers*	3	1-2	2-3	1-2	4-7
LA 12.1.6.k *Select a text for a particular purpose (e.g., understand a specific viewpoint, enjoy, solve problems, form an opinion, discover models for own writing, predict outcomes, accomplish a task)*	Assessed at the local level				

Nebraska State Accountability - Reading Table of Specifications	
Grade 12	
LA 12.1.6.l *Build and activate prior knowledge in order to clarify text, deepen understanding, and make connections while reading*	Assessed at the local level
LA 12.1.6.m *Self-monitor comprehension for accuracy and understanding when errors detract from meaning by applying appropriate strategies to self-correct*	Assessed at the local level
LA 12.1.6.n *Make complex or abstract inferences or predictions by synthesizing information while previewing and reading text*	Assessed at the local level
LA 12.1.6.o *Respond to text verbally, in writing, or artistically*	Assessed at the local level

Appendix C: NeSA-M Test Blueprint

Nebraska State Mathematics Test Table of Specifications					
Grade 3					
NUMBER SENSE					
Gr3 Number System	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.1.1 Students will represent and show relationships among positive rational numbers within the base-ten number system.					
MA 3.1.1.a Read and write numbers to one-hundred thousand.	Assessed at the local level				
MA 3.1.1.b Count by multiples of 5 to 200	Assessed at the local level				
MA 3.1.1.c Count by multiples of 10 to 400	Assessed at the local level				
MA 3.1.1.d Count by multiples of 100 to 1000	Assessed at the local level				
MA 3.1.1.e Demonstrate multiple equivalent representations for numbers up to 10,000	1	3-5	0	0	3-5
MA 3.1.1.f Demonstrate multiple equivalent representations for decimals numbers through the tenths place.	Assessed at the local level				
MA 3.1.1.g Compare and order whole numbers through the thousands	1	4-6	0	0	4-6
MA 3.1.1.h Find parts of whole and parts of a set for 1/2, 1/3, or 1/4	2	0-1	3-5	0	3-6
MA 3.1.1.i Round a given number to tens, hundreds, or thousands	1	1-3	0	0	1-3
Gr3 Operations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.1.2 Students demonstrate the meaning of multiplication with whole numbers.					
MA 3.1.2.a Represent multiplication as repeated addition using objects, drawings, words, and symbols	2	0-1	1-2	0	1-3
MA 3.1.2.b Use objects, drawings, words, and symbols to explain the relationship between multiplication and division	Assessed at the local level				
MA.3.1.2.c Use drawings, words and symbols to explain the meaning of the factors and product in a multiplication sentence	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 3					
MA.3.1.2.d Use drawings, words, and symbols to explain the meaning of multiplication using an array	2	0-1	1-2	0	1-3
Gr3 Computation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.1.3 Students will compute fluently and accurately using appropriate strategies and tools.					
MA 3.1.3.a Compute whole number multiplication facts 0-10 fluently	Assessed at the local level				
MA 3.1.3.b Add and subtract through four-digit whole numbers with regrouping	Assessed at the local level				
MA 3.1.3.c Select and apply the appropriate methods of computation when problem solving with four-digit whole numbers through the thousands	Assessed at the local level				
Gr3 Estimation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.					
MA 3.1.4.a Estimate the two-digit product of whole number multiplication and check the reasonableness	Assessed at the local level				
GEOMETRIC/MEASUREMENT CONCEPTS					
Gr3 Characteristics	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.2.1 Students will identify characteristics and describe properties of two-dimensional shapes and three-dimensional objects.					
MA 3.2.1.a Identify the number of sides, angles, and vertices of two-dimensional shapes	1	2-4	0	0	2-4
MA 3.2.1.b Identify congruent two-dimensional figures given multiple two-dimensional shapes	1	1-2	0	0	1-2
MA 3.2.1.c Identify lines, line segments, rays, and angles	Assessed at the local level				
MA 3.2.1.d Describe attributes of solid shapes	Assessed at the local level				
Gr3 Coordinate Geometry	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Mathematics Test Table of Specifications					
Grade 3					
MA 3.2.2 Students will identify distances on a number line.					
MA 3.2.2.a Draw a number line and plot points	Assessed at the local level				
MA 3.2.2.b Determine the distance between two whole number points on a number line	1	1-3	0	0	1-3
Gr3 Transformations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.2.3 Students will draw all lines of symmetry.					
MA 3.2.3.a Draw all possible lines of symmetry in two-dimensional shapes	Assessed at the local level				
Gr3 Spatial Modeling	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.2.4 Students will create two-dimensional shapes and three-dimensional objects.					
MA 3.2.4.a Sketch and label lines, rays, line segments, and angles	Assessed at the local level				
MA 3.2.4.b Build three-dimensional objects	Assessed at the local level				
Gr3 Measurement	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.2.5 Students will apply appropriate procedures and tools to determine measurements using customary and metric units.					
3.2.5.a Select and use appropriate tools to measure perimeter of simple two-dimensional shapes	Assessed at the local level				
MA 3.2.5.b Count mixed coins and bills greater than $1.00	Assessed at the local level				
MA 3.2.5.c Identify time of day	Assessed at the local level				
MA 3.2.5.d State multiple ways for the same time using 15 minute intervals	Assessed at the local level				
MA 3.2.5.e Identify the appropriate customary unit for measuring length, weight, and capacity/volume	1	2-4	0	0	2-4
MA 3.2.5.f Measure length to the nearest 1/2 inch and centimeter	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 3					
MA 3.2.5.g Compare and order objects according to length using centimeters and meters	1	1-3	0	0	1-3
ALGEBRAIC CONCEPTS					
Gr3 Relationships	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.3.1 Students will represent relationships.					
MA 3.3.1.a Identify, describe, and extend numeric and non-numeric patterns	1	1-3	0	0	1-3
MA 3.3.1.b Identify patterns using words, tables, and graphs	Assessed at the local level				
Gr3 Modeling in Context	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.3.2 Students will create and use models to represent mathematical situations.					
MA 3.3.2.a Model situations that involve the addition and subtraction of whole numbers using objects, number lines, and symbols	3	0	1-2	1-2	2-4
MA 3.3.2.b Describe and model quantitative change involving subtraction	Assessed at the local level				
Gr3 Procedures	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.3.3 Students will identify and apply properties of whole numbers to solve equations involving addition and subtraction.					
MA 3.3.3.a Use symbolic representation of the identity property of addition	Assessed at the local level				
MA 3.3.3.b Solve simple one-step whole number equations involving addition and subtraction	1	2-4	0	0	2-4
MA 3.3.3.c Explain the procedure(s) used in solving simple one-step whole number equations involving addition and subtraction	Assessed at the local level				
DATA ANALYSIS/PROBABILITY CONCEPTS					
Gr3 Display and Analysis	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Mathematics Test Table of Specifications					
Grade 3					
MA 3.4.1 Students will organize, display, compare, and interpret data.					
MA 3.4.1.a Represent data using horizontal and vertical bar graphs	2	0-1	1-2	0	1-3
MA 3.4.1.b Use comparative language to describe the data	Assessed at the local level				
MA 3.4.1.c Interpret data using horizontal and vertical bar graphs	2	0-1	1-2	0	1-3
Gr3 Predictions and Inferences	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.4.2 Mastery not expected at this level					
Gr3 Probability	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 3.4.3 Students will find and describe experimental probability.					
MA 3.4.3.a Perform simple experiments and describe outcomes as possible, impossible, or certain	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 4					
NUMBER SENSE					
Gr4 Number System	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.1.1 Students will represent and show relationships among positive rational numbers within the base-ten number system.					
MA 4.1.1.a Read and write numbers through the millions	Assessed at the local level				
MA 4.1.1.b Demonstrate multiple equivalent representations for decimal numbers through the hundredths place	2	0-1	2-3	0	2-4

Nebraska State Mathematics Test Table of Specifications					
Grade 4					
MA 4.1.1.c Compare and order whole numbers and decimals through the hundredths place	1	2-4	0	0	2-4
MA 4.1.1.d Classify a number as even or odd	Assessed at the local level				
MA 4.1.1.e Represent a fraction as parts of a whole, and/or parts of a set	2	0-1	1-2	0	1-3
MA 4.1.1.f Use visual models to find equivalent fractions	1	1-3	0	0	1-3
MA 4.1.1.g Determine the size of a fraction relative to one half using equivalent forms	Assessed at the local level				
MA 4.1.1.h Locate fractions on a number line	1	1-3	0	0	1-3
MA 4.1.1.i Round a whole number to millions	Assessed at the local level				
Gr4 Operations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.1.2 Students will demonstrate the meaning of division with whole numbers.					
MA 4.1.2.a Use drawings, words, and symbols to explain the meaning of division	2	0-1	1-2	0	1-3
Gr4 Computation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
4.1.3 Students will compute fluently and accurately using appropriate strategies and tools.					
MA 4.1.3.a Compute whole number division facts 0-10 fluently	Assessed at the local level				
MA 4.1.3.b Add and subtract decimals to the hundredth place	1	1-2	0	0	1-2
MA 4.1.3.c Multiply two-digit whole numbers	1	1-3	0	0	1-3
MA 4.1.3.d Divide a three-digit number by a one digit divisor with and without a remainder	Assessed at the local level				
MA 4.1.3.e Mentally compute multiplication and division involving powers of 10	1	1-3	0	0	1-3
MA 4.1.3.f Select and apply the appropriate method of computation when problem solving	2	0-1	3-4	0	3-5
Gr4 Estimation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Mathematics Test Table of Specifications					
Grade 4					
4.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.					
MA 4.1.4.a Estimate the three-digit product and the two-digit quotient of whole number multiplication and division and check the reasonableness	Assessed at the local level				
GEOMETRIC/MEASUREMENT CONCEPTS					
Gr4 Characteristics	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.2.1 Students will classify two-dimensional shapes and three-dimensional objects.					
MA 4.2.1.a Identify two- and three- dimensional shapes according to their sides and angle properties	2	0-1	2-3	0	2-4
MA 4.2.1.b Classify an angle as acute, obtuse, and right	2	0-1	1-2	0	1-3
MA 4.2.1.c Identify parallel, perpendicular, and intersecting lines	1	1-2	0	0	1-2
MA 4.2.1.d Identify the property of congruency when dealing with plane geometric shapes	Assessed at the local level				
Gr4 Coordinate Geometry	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.2.2 Students will describe locations using coordinate geometry.					
MA 4.2.2.a Identify the ordered pair of a plotted point in first quadrant by its location	1	1-2	0	0	1-2
Gr4 Transformations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.2.3 Students will identify simple transformations.					
MA 4.2.3.a Given two congruent geometric shapes, identify the transformation applied to an original shape to create a transformed shape	Assessed at the local level				
Gr4 Spatial Modeling	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Mathematics Test Table of Specifications					
Grade 4					
MA 4.2.4 Students will use geometric models to solve problems.					
MA 4.2.4.a Given a geometric model, use it to solve a problem	Assessed at the local level				
Gr4 Measurement	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.2.5 Students will apply appropriate procedures and tools to estimate and determine measurement using customary units and metric units.					
MA 4.2.5.a Select and use appropriate tools to measure perimeter of polygons	Assessed at the local level				
MA 4.2.5.b Identify time to the minute on an analog clock	2	0-1	1-2	0	1-3
MA 4.2.5.c Solve problems involving elapsed time	2	0-1	1-2	0	1-3
MA 4.2.5.d Identify the appropriate metric unit for measuring length, weight, and capacity/volume	1	2-4	0	0	2-4
MA 4.2.5.e Estimate and measure length using customary and metric units	Assessed at the local level				
MA 4.2.5.f Measure weight and temperature using customary units	Assessed at the local level				
MA 4.2.5.g Compute simple unit conversions for length within a system of measurement	2	0-1	1-2	0	1-3
ALGEBRAIC CONCEPTS					
Gr4 Relationships	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.3.1 Students will represent and analyze relationships.					
MA 4.3.1.a Describe, extend, and apply rules about numeric patterns	Assessed at the local level				
MA 4.3.1.b Represent and analyze a variety of patterns using words, tables, and graphs	Assessed at the local level				
MA 4.3.1.c Use ≤ and ≥ symbols to compare quantities	2	0-1	1-2	0	1-3
MA 4.3.1.d Select appropriate operational and relational symbols to make a number sentence true	2	0-1	1-2	0	1-3

Nebraska State Mathematics Test Table of Specifications

Grade 4

Gr4 Modeling in Context	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
MA 4.3.2 Students will create and use models to represent mathematical situations.					
MA 4.3.2.a Model situations that involve the multiplication of whole numbers using number lines and symbols	Assessed at the local level				
MA 4.3.2.b Describe and model quantitative change involving quantitative change involving multiplication	Assessed at the local level				
Gr4 Procedures	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.3.3 Students will identify and apply properties of whole numbers to solve equations involving multiplication and division.					
MA 4.3.3.a Represent the idea of a variable as an unknown quantity using a letter or a symbol	Assessed at the local level				
MA 4.3.3.b Use symbolic representation of the identity property of multiplication	Assessed at the local level				
MA 4.3.3.c Use symbolic representations of the commutative property of multiplication	1	1-3	0	0	1-3
MA 4.3.3.d Solve simple one-step whole number equations	1	2-4	0	0	2-4
MA 4.3.3.e Explain the procedures(s) used in solving simple one-step whole number equations	Assessed at the local level				
DATA ANALYSIS/PROBABILITY CONCEPTS					
Gr4 Display and Analysis	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.4.1 Students will organize, display, compare, and interpret data.					
MA 4.4.1.a Represent data using bar dot/line plots	Assessed at the local level				
MA 4.4.1.b Compare different representations of the same data	2	0-1	1-2	0	1-3
MA 4.4.1.c Interpret data and draw conclusions using dot/line plots	2	0-1	1-2	0	1-3
MA 4.4.1.d Find the mode and range for a set of whole numbers	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 4					
MA 4.4.1.e Find the whole number mean for a set of whole numbers	Assessed at the local level				
Gr4 Predictions and Inferences	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.4.2 Students will construct predictions based on data.					
MA 4.4.2.a Make predictions based on data to answer questions from tables and bar graphs	2	0-1	1-2	0	1-3
Gr4 Probability	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 4.4.3 Students will find, describe, and compare experimental probabilities.					
MA 4.4.3.a Perform simple experiments and compare the degree of likelihood	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 5					
NUMBER SENSE					
Gr5 Number System	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.1.1 Students will represent and show relationships among positive rational numbers.					
MA 5.1.1.a Demonstrate multiple equivalent representations for whole numbers and decimals through the thousandths place	2	0-1	2-3	0	2-4
MA 5.1.1.b Compare and order whole numbers, fractions, and decimals through the thousandths place	1	2-4	0	0	2-4
MA 5.1.1.c Identify and name fractions in their simplest form and find common denominators for fractions	1	2-4	0	0	2-4

Nebraska State Mathematics Test Table of Specifications					
Grade 5					
MA 5.1.1.d Recognize and generate equivalent forms of commonly used fractions, decimals, and percents	2	0-1	2-3	0	2-4
MA 5.1.1.e Classify a number as prime or composite	1	1-2	0	0	1-2
MA 5.1.1.f Identify factors and multiples of any whole number	1	1-2	0	0	1-2
MA 5.1.1.g Round whole numbers and decimals to any given place	Assessed at the local level				
Gr5 Operations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.1.2 Students will demonstrate the meaning of arithmetic operations with whole numbers.					
MA 5.1.2.a Use words and symbols to explain the meaning of the identity properties for addition and multiplication	Assessed at the local level				
MA 5.1.2.b Use words and symbols to explain the meaning of the commutative and associative properties of addition and multiplication	Assessed at the local level				
MA 5.1.2.c Use words and symbols to explain the distributive property of multiplication over addition	2	0-1	1-2	0	1-3
Gr5 Computation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.1.3 Students will compute fluently and accurately using appropriate strategies and tools.					
MA 5.1.3.a Add and subtract positive rational numbers	1	2-4	0	0	2-4
MA 5.1.3.b Select, apply, and explain the appropriate method of computation when problem solving	2	0-1	3-4	0	3-5
MA 5.1.3.c Multiply decimals	1	1-3	0	0	1-3
MA 5.1.3.d Divide a decimal by a whole number	1	1-3	0	0	1-3
Gr5 Estimation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.					

Nebraska State Mathematics Test Table of Specifications					
Grade 5					
MA 5.1.4.a Estimate the sums and differences of positive rational numbers to check the reasonableness of such results	2	0-1	1-2	0	1-3
GEOMETRIC/MEASUREMENT CONCEPTS					
Gr5 Characteristics	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.2.1 Students will describe relationships among two-dimensional shapes and three-dimensional objects.					
MA 5.2.1.a Identify the number of edges, faces, and vertices of triangular and rectangular prisms	1	1-3	0	0	1-3
MA 5.2.1.b Justify congruence of two-dimensional shapes	Assessed at the local level				
MA 5.2.1.c Justify the classification of two-dimensional shapes	Assessed at the local level				
MA 5.2.1.d Identify degrees on a circle	1	1-2	0	0	1-2
Gr5 Coordinate Geometry	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
5.2.2 Students will identify locations using coordinate geometry.					
MA 5.2.2.a Plot the location of an ordered pair in the first quadrant	1	1-2	0	0	1-2
Gr5 Transformations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.2.3 Students will identify simple transformations.					
MA 5.2.3.a Perform one-step transformations on two-dimensional shapes	Assessed at the local level				
Gr5 Spatial Modeling	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
5.2.4 Students will create and use geometric models to solve problems.					
MA 5.2.4.a Build or sketch a geometric model to solve a problem	Assessed at the local level				
MA 5.2.4.b Sketch congruent shapes	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 5					
MA 5.2.4.c Build rectangular prisms using cubes	Assessed at the local level				
Gr5 Measurement	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.2.5 Students will apply appropriate procedures, tools, and formulas to determine measurements using customary units and metric units.					
MA 5.2.5.a Select and use appropriate tools to measure perimeter and angles	Assessed at the local level				
MA 5.2.5.b Identify correct unit (customary or metric) to the measurement situation	2	0-1	1-2	0	1-3
MA 5.2.5.c Estimate and measure length with customary units to the nearest 1/4 inch	Assessed at the local level				
MA 5.2.5.d Measure capacity/volume with customary units	Assessed at the local level				
MA 5.2.5.e Measure weight (mass) and temperature using metric units	Assessed at the local level				
MA 5.2.5.f Determine the area of rectangles and squares	2	0-1	1-2	0	1-3
ALGEBRAIC CONCEPTS					
Gr5 Relationships	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.3.1 Students will represent, analyze, and generalize relationships.					
MA 5.3.1.a Describe, extend, apply rules, and make generalizations about numeric and geometric patterns	Assessed at the local level				
MA 5.3.1.b Create and analyze numeric patterns using words, tables, and graphs	Assessed at the local level				
MA 5.3.1.c Communicate relationships using expressions and equations	Assessed at the local level				
Gr5 Modeling in Context	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.3.2 Students will create, use, and compare models representing mathematical situations.					

Nebraska State Mathematics Test Table of Specifications					
Grade 5					
MA 5.3.2.a Model situations that involve the addition, subtraction, and multiplication of positive rational numbers using words, graphs, and tables	2	0-1	1-2	0	1-3
MA 5.3.2.b Represent a variety of quantitative relationships using tables and graphs	Assessed at the local level				
MA 5.3.2.c Compare different models to represent mathematical situations	Assessed at the local level				
Gr5 Procedures	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.3.3 Students will apply properties of simple positive rational numbers to solve one-step equations.					
MA 5.3.3.a Explain the addition property of equality	Assessed at the local level				
MA 5.3.3.b Use symbolic representations of the associative property	2	0	1-2	0	1-2
MA 5.3.3.c Evaluate numerical expressions by using parentheses with respect to order of operations	1	2-4	0	0	2-4
MA 5.3.3.d Evaluate simple algebraic expressions involving addition and subtraction	2	0	1-2	0	1-2
MA 5.3.3.e Solve one-step addition and subtraction equations involving common positive rational numbers	1	1-2	0	0	1-2
MA 5.3.3.f Identify and explain the properties of equality used in solving one-step equations involving common positive rational numbers	Assessed at the local level				
DATA ANALYSIS/PROBABILITY CONCEPTS					
Gr5 Display and Analysis	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.4.1 Students will organize, display, compare, and interpret data.					
MA 5.4.1.a Represent data using line graphs	2	0	1-2	0	1-2
MA 5.4.1.b Represent the same set of data in different formats	2	0-1	1-2	0	1-3
MA 5.4.1.c Draw conclusions based on a set of data	3	0	0-1	1-2	1-3
MA 5.4.1.d Find the mean, median, mode, and range for a set of whole numbers	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 5					
MA 5.4.1.e Generate questions and answers from data sets and their graphical representations	Assessed at the local level				
Gr5 Predictions and Inferences	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.4.2 Students will construct predictions based on data.					
MA 5.4.2.a Make predictions based on data to answer questions from tables, bar graphs, and line graphs	Assessed at the local level				
Gr5 Probability	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 5.4.3 Students will determine theoretical probabilities.					
MA 5.4.3.a Perform and record results of probability experiments	Assessed at the local level				
MA 5.4.3.b Generate a list of possible outcomes for a simple event	1	1-3	0	0	1-3
MA 5.4.3.c Explain the likelihood of an event that can be represented by a number from 0 to 1	1	1-3	0	0	1-3

Nebraska State Mathematics Test Table of Specifications					
Grade 6					
NUMBER SENSE					
Gr6 Number System	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.1.1 Students will represent and show relationships among positive rational numbers and integers.					
MA 6.1.1.a Show equivalence among common fractions and non-repeating decimals and percents	Assessed at the local level				
MA 6.1.1.b Compare and order positive and negative integers	1	1-3	0	0	1-3

Nebraska State Mathematics Test Table of Specifications					
Grade 6					
MA 6.1.1.c Identify integers less than 0 on a number line	Assessed at the local level				
MA 6.1.1.d Represent large numbers using exponential notation	1	1-2	0	0	1-2
MA 6.1.1.e Identify the prime factorization of numbers	1	1-3	0	0	1-3
MA 6.1.1.f Classify numbers as natural, whole, or integer	Assessed at the local level				
Gr6 Operations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.1.2 Students will demonstrate the meaning of arithmetic operations with positive fractions and decimals.					
MA 6.1.2.a Use drawings, words, and symbols to explain the meaning of addition and subtraction of fractions	2	0-1	1-3	0	1-4
MA 6.1.2.b Use drawings, words and symbols to explain the meaning of addition and subtraction of decimals	2	0-1	1-3	0	1-4
Gr6 Computation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.1.3 Students will compute fluently and accurately using appropriate strategies and tools.					
MA 6.1.3.a Multiply and divide positive rational numbers	1	1-3	0	0	1-3
MA 6.1.3.b Select and apply the appropriate method of computation when problem solving	2	0-1	2-3	0	2-4
Gr6 Estimation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.					
MA 6.1.4.a Use appropriate estimation methods to check the reasonableness of solutions for problems involving positive rational numbers	2	0-1	1-2	0	1-3
GEOMETRIC/MEASUREMENT CONCEPTS					

Nebraska State Mathematics Test Table of Specifications					
Grade 6					
Gr6 Characteristics	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.2.1 Students will compare and contrast properties among two-dimensional shapes and three-dimensional objects.					
MA 6.2.1.a Justify the classification of three-dimensional objects	Assessed at the local level				
Gr6 Coordinate Geometry	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.2.2 Students will label points using coordinate geometry.					
MA 6.2.2.a Identify the ordered pair of a plotted point in the coordinate plane	1	1-3	0	0	1-3
Gr6 Transformations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.2.3 Students will use and describe results of transformations on geometric shapes.					
MA 6.2.3.a Perform and describe positions and orientation of shapes under single transformations not on a coordinate plane	Assessed at the local level				
Gr6 Spatial Modeling	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.2.4 Students will use visualization of geometric models to solve problems.					
MA 6.2.4.a Identify two-dimensional drawings of three-dimensional objects	2	1-2	1-2	0	2-4
Gr6 Measurement	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.2.5 Students will apply appropriate procedures, tools, and formulas to determine measurements.					
MA 6.2.5.a Estimate and measure length with customary and metric units to the nearest 1/16 inch and mm	Assessed at the local level				
MA 6.2.5.b Measure volume/capacity using the metric system	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 6					
MA 6.2.5.c Convert length, weight, and liquid capacity from one unit to another within the same system	Assessed at the local level				
MA 6.2.5.d Determine the perimeter of polygons	2	1-2	1-2	0	2-4
MA 6.2.5.e Determine the area of parallelograms and triangles	2	1-2	1-2	0	2-4
MA 6.2.5.f Determine the volume of rectangular prisms	2	1-2	1-2	0	2-4
ALGEBRAIC CONCEPTS					
Gr6 Relationships	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.3.1 Students will represent, analyze, and use relationships to make generalizations.					
MA 6.3.1.a Describe and create simple algebraic expressions from words and tables	2	0-1	1-2	0	1-3
MA 6.3.1.b Use a variable to describe a situation with an equation	2	0-1	1-2	0	1-3
MA 6.3.1.c Identify relationships as increasing, decreasing, or constant	Assessed at the local level				
Gr6 Modeling in Context	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.3.2 Students will create, use, and interpret models of quantitative relationships.					
MA 6.3.2.a Model contextualized problems using various representations	2	2-3	2-3	0	4-6
MA 6.3.2.b Represent a variety of quantitative relationships using symbols and words	Assessed at the local level				
Gr6 Procedures	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.3.3 Students will apply properties to solve equations.					
MA 6.3.3.a Explain the multiplication property of equality	Assessed at the local level				
MA 6.3.3.b Evaluate numerical expressions containing multiple operations with respect to order of operations	1	2-4	0	0	2-4

Nebraska State Mathematics Test Table of Specifications					
Grade 6					
MA 6.3.3.c Evaluate simple algebraic expressions involving multiplication and division	1	1-3	0	0	1-3
MA 6.3.3.d Solve one-step equations involving positive rational numbers	1	1-3	0	0	1-3
MA 6.3.3.e Identify and explain the properties of equality used in solving one-step equations	2	0-1	1-2	0	1-3
DATA ANALYSIS/PROBABILITY CONCEPTS					
Gr6 Display and Analysis	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.4.1 Students will organize, display, compare, and interpret data.					
MA 6.4.1.a Represent data using stem and leaf plots, histograms, and frequency charts	Assessed at the local level				
MA 6.4.1.b Compare and interpret data sets and their graphical representations	2	0-1	3-4	0	3-5
MA 6.4.1.c Find the mean, median, mode, and range for a set of data	1	2-4	0	0	2-4
MA 6.4.1.d Compare the mean, median, mode, and range from two sets of data	Assessed at the local level				
Gr6 Predictions and Inferences	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.4.2 Students will construct predictions based on data.					
MA 6.4.2.a *Make predictions based on data and create questions to further investigate the quality of the predictions*	Assessed at the local level				
Gr6 Probability	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 6.4.3 Students will apply basic concepts of probability.					
MA 6.4.3.a Describe the theoretical probability of an event using a fraction, percentage, decimal, or ratio	Assessed at the local level				
MA 6.4.3.b Compute theoretical probabilities for independent events	2	0-1	1-2	0	1-3

Nebraska State Mathematics Test Table of Specifications					
Grade 6					
MA 6.4.3.c Find experimental probability for independent events	1	1-3	0	0	1-3

Nebraska State Mathematics Test Table of Specifications					
Grade 7					
NUMBER SENSE					
Gr7 Number System	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.1.1 Students will represent and show relationships among rational numbers.					
MA 7.1.1.a Show equivalence among fractions, decimals, and percents	2	0-1	2-3	0	2-4
MA 7.1.1.b Compare and order rational numbers	2	0-1	1-2	0	1-3
MA 7.1.1.c Represent large numbers using scientific notation	1	1-3	0	0	1-3
MA 7.1.1.d Classify numbers as natural, whole, integer, or rational	Assessed at the local level				
MA 7.1.1.e Find least common multiple and greatest common divisor given two numbers	Assessed at the local level				
Gr7 Operations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.1.2 Students will demonstrate the meaning of arithmetic operations with positive fractions, decimals, and integers.					
MA 7.1.2.a Use drawings, words, and symbols to explain the meaning of multiplication and division of fractions	Assessed at the local level				
MA 7.1.2.b Use drawings, words, and symbols to explain the meaning of multiplication and division of decimals	Assessed at the local level				
MA 7.1.2.c Use drawings, words, and symbols to explain the addition and subtraction of integers	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 7					
Gr7 Computation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.1.3 Students will compute fluently and accurately using appropriate strategies and tools.					
MA 7.1.3.a Compute accurately with integers	1	2-3	0	0	2-3
MA 7.1.3.b Select, apply, and explain the method of computation when problem solving using integers and positive rational numbers	2	1-2	1-2	0	2-4
MA 7.1.3.c Solve problems involving percent of numbers	2	1-2	1-2	0	2-4
Gr7 Estimation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.					
MA 7.1.4.a Use estimation methods to check the reasonableness of solutions for problems involving integers and positive rational numbers	2	0-1	1-2	0	1-3
GEOMETRIC/MEASUREMENT CONCEPTS					
Gr7 Characteristics	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.2.1 Students will describe, compare, and contrast properties and relationships of geometric shapes and objects.					
MA 7.2.1.a Identify and describe similarity of two-dimensional shapes using side and angle measurement	Assessed at the local level				
MA 7.2.1.b Name line, line segment, ray, and angle	Assessed at the local level				
Gr7 Coordinate Geometry	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.2.2 Students will specify locations and describe relationships using coordinate geometry.					
MA 7.2.2.a Plot the location of an ordered pair in the coordinate plane	1	1-2	0	0	1-2

Nebraska State Mathematics Test Table of Specifications					
Grade 7					
MA 7.2.2.b Identify the quadrant of a given point in the coordinate plane	Assessed at the local level				
MA 7.2.2.c Find the distance between points along horizontal and vertical lines of a coordinate plane	1	1-2	0	0	1-2
Gr7 Transformations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.2.3 Students will use transformations and symmetry to analyze geometric shapes.					
MA 7.2.3.a Identify lines of symmetry for a reflection	Assessed at the local level				
MA 7.2.3.b Perform and describe positions and orientation of shapes under a single transformation on a coordinate plane	2	0-1	1-2	0	1-3
Gr7 Spatial Modeling	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.2.4 Students will use visualization to create geometric models in solving problems.					
MA 7.2.4.a Identify the shapes that make up the three-dimensional object	Assessed at the local level				
MA 7.2.4.b Create two-dimensional representations of three-dimensional objects to visualize and solve problems	Assessed at the local level				
MA 7.2.4.c Draw angles to given degree	Assessed at the local level				
Gr7 Measurement	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.2.5 Students will select and apply appropriate procedures, tools, and formulas to determine measurements.					
MA 7.2.5.a Measure angles to the nearest degree	Assessed at the local level				
MA 7.2.5.b Determine the area of trapezoids and circles, and the circumference of circles	2	1-2	2-3	0	3-5
MA 7.2.5.c Recognize the inverse relationship between the size of a unit and the number of units used when measuring	Assessed at the local level				
ALGEBRAIC CONCEPTS					
Gr7 Relationships	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Mathematics Test Table of Specifications					
Grade 7					
MA 7.3.1 Students will represent and analyze relationships using algebraic symbols.					
MA 7.3.1.a Describe and create algebraic expressions from words, tables, and graphs	2	0-1	2-3	0	2-4
MA 7.3.1.b Use a variable to describe a situations with an inequality	2	0	1-2	0	1-2
MA 7.3.1.c Recognize and generate equivalent forms of simple algebraic expressions	Assessed at the local level				
Gr7 Modeling in Context	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.3.2 Students will create, use, and interpret models of quantitative relationships.					
MA 7.3.2.a Model contextualized problems using various representations	2	1-2	2-3	0	3-5
MA 7.3.2.b Represent a variety of quantitative relationships using algebraic expressions and one-step equations	Assessed at the local level				
Gr7 Procedures	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.3.3 Students will apply properties to solve equations and inequalities.					
MA 7.3.3.a Explain additive inverse of addition	Assessed at the local level				
MA 7.3.3.b Use symbolic representation of the distributive property	Assessed at the local level				
MA 7.3.3.c Given the value of the variable(s), evaluate algebraic expressions with respect to order of operations	1	3-5	0	0	3-5
MA 7.3.3.d Solve two-step equations involving integers and positive rational numbers	2	0-1	1-3	0	2-4
MA 7.3.3.e Solve one-step inequalities involving positive rational numbers	2	0-1	2-3	0	2-4
MA 7.3.3.f Identify and explain the properties used in solving two-step equations	Assessed at the local level				
DATA ANALYSIS/PROBABILITY CONCEPTS					
Gr7 Display and Analysis	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Mathematics Test Table of Specifications					
Grade 7					
MA 7.4.1 Students will formulate questions that can be addressed with data, and then organize, display, and analyze the relevant data to answer their questions.					
MA 7.4.1.a Analyze data sets and interpret their graphical representations	2	0-1	2-3	0	2-4
MA 7.4.1.b Find and interpret mean, median, mode, and range for sets of data	2	0-1	1-2	0	1-3
MA 7.4.1.c Explain the difference between a population and a sample	Assessed at the local level				
MA 7.4.1.d List biases that may be created by various data collection processes	Assessed at the local level				
MA 7.4.1.e Formulate a question about a characteristic that can be answered by simulation or a survey	Assessed at the local level				
Gr7 Predictions and Inferences	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.4.2 Students will evaluate predictions and make inferences based on data.					
MA 7.4.2.a Determine if data collected from a sample can be used to make predictions about a population	Assessed at the local level				
Gr7 Probability	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 7.4.3 Students will apply and interpret basic concepts of probability.					
MA 7.4.3.a Find the probability of independent compound events	2	0	1-2	0	1-2
MA 7.4.3.b Compare and contrast theoretical and experimental probabilities	2	0	1-2	0	1-2

Nebraska State Mathematics Test Table of Specifications

Grade 8

NUMBER SENSE

Gr8 Number System	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
MA 8.1.1 Students will represent and show relationships among real numbers.					
MA 8.1.1.a Compare and order real numbers	2	0	1-2	0	1-2
MA 8.1.1.b Demonstrate relative position of real numbers on the number line	Assessed at the local level				
MA 8.1.1.c Represent small numbers using scientific notation	2	0-1	1-2	0	1-3
MA 8.1.1.d Classify numbers as natural, whole, integer, rational, irrational, or real	1	1-2	0	0	1-2
Gr8 Operations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.1.2 Students will demonstrate the meaning of arithmetic operations with integers.					
MA 8.1.2.a Use drawings, words, and symbols to explain the meaning of addition, subtraction, multiplication, and division of integers	Assessed at the local level				
MA 8.1.2.b Use words and symbols to explain the zero property of multiplication	Assessed at the local level				
MA 8.1.2.c Use words and symbols to explain why division by zero is undefined	Assessed at the local level				
Gr8 Computation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.1.3 Students will compute fluently and accurately using appropriate strategies and tools.					
MA 8.1.3.a Compute accurately with rational numbers	1	2-4	0	0	2-4
MA 8.1.3.b Evaluate expressions involving absolute value of integers	1	1-3	0	0	1-3
MA 8.1.3.c Calculate squares of integers, the square roots of perfect squares, and the square roots of whole numbers using technology	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 8					
MA 8.1.3.d Select, apply, and explain the method of computation when problem solving using rational numbers	2	0-1	2-3	0	2-4
MA 8.1.3.e Solve problems involving ratios and proportions	2	0-1	2-3	0	2-4
Gr8 Estimation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.					
MA 8.1.4.a Use estimation methods to check the reasonableness of solutions for problems involving rational numbers	2	0-1	1-2	0	1-3
GEOMETRIC/MEASUREMENT CONCEPTS					
Gr8 Characteristics	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.2.1 Students will describe, compare, and contrast characteristics, properties, and relationships of geometric shapes and objects.					
MA 8.2.1.a Identify and describe similarity of three-dimensional objects	Assessed at the local level				
MA 8.2.1.b Compare and contrast relationships between similar and congruent objects	Assessed at the local level				
MA 8.2.1.c Identify geometric properties of parallel lines cut by a transversal and related angles	1	2-4	0	0	2-4
MA 8.2.1.d Identify pairs of angles	1	2-4	0	0	2-4
MA 8.2.1.e Examine the relationships of the interior angles of a triangle	2	0-1	1-2	0	1-3
Gr8 Coordinate Geometry	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.2.2 Students will specify locations and describe spatial relationships using coordinate geometry.					

Nebraska State Mathematics Test Table of Specifications					
Grade 8					
MA 8.2.2.a Use coordinate geometry to represent and examine the properties of rectangles and squares using horizontal and vertical segments	2	0-1	1-2	0	1-3
Gr8 Transformations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.2.3 Students will perform transformations and use them to analyze the orientation and size of geometric shapes.					
MA 8.2.3.a Identify the similarity of dilated shapes	Assessed at the local level				
MA 8.2.3.b Perform and describe positions and sizes of shapes under dilations	Assessed at the local level				
Gr8 Spatial Modeling	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.2.4 Students will use visualization, spatial reasoning, and geometric modeling to solve problems.					
MA 8.2.4.a Draw geometric objects with specified properties	Assessed at the local level				
Gr8 Measurement	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.2.5 Students will select and apply appropriate procedures, tools, and formulas to determine measurements.					
MA 8.2.5.a Use strategies to find the perimeter and area of complex shapes	Assessed at the local level				
MA 8.2.5.b Determine surface area and volume of three-dimensional objects	Assessed at the local level				
MA 8.2.5.c Apply the Pythagorean theorem to find missing lengths in right triangles and to solve problems	2	0-1	2-3	0	2-4
MA 8.2.5.d Use scale factors to find missing lengths in similar shapes	1	1-3	0	0	1-3
MA 8.2.5.e Convert between metric and standard units of measurement, given conversion factors	Assessed at the local level				
ALGEBRAIC CONCEPTS					

Nebraska State Mathematics Test Table of Specifications

Grade 8

Gr8 Relationships	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
MA 8.3.1 Students will represent and analyze relationships using algebraic symbols.					
MA 8.3.1.a Represent and analyze a variety of patterns with tables, graphs, words, and algebraic equations	Assessed at the local level				
MA 8.3.1.b Describe relationships using algebraic expressions, equations, and inequalities	2	0-1	2-4	0	2-5
MA 8.3.1.c Identify constant slope from tables and graphs	Assessed at the local level				
Gr8 Modeling in Context	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.3.2 Students will create, use, and interpret models of quantitative relationships.					
MA 8.3.2.a Model contextualized problems using various representations	3	0	2-3	1-2	3-5
MA 8.3.2.b Represent a variety of quantitative relationships using algebraic expressions and two-step/one-step variable equations	Assessed at the local level				
Gr8 Procedures	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.3.3 Students will apply properties to solve equations and inequalities.					
MA 8.3.3.a Explain the multiplicative inverse	Assessed at the local level				
MA 8.3.3.b Evaluate numerical expressions containing whole number exponents	2	1-3	1-2	0	2-5
MA 8.3.3.c Solve multi-step equations involving rational numbers	2	0-1	2-4	0	2-5
MA 8.3.3.d Solve two-step inequalities involving rational numbers	2	0-1	2-4	0	2-5
MA 8.3.3.e Identify and explain the properties used in solving two-step inequalities and multi-step equations	Assessed at the local level				
DATA ANALYSIS/PROBABILITY CONCEPTS					

Nebraska State Mathematics Test Table of Specifications

Grade 8

Gr8 Display and Analysis	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
MA 8.4.1 Students will formulate questions that can be addressed with data, and then organize, display, and analyze the relevant data to answer their questions.					
MA 8.4.1.a Represent data using circle graphs and box plots with and without the use of technology	Assessed at the local level				
MA 8.4.1.b Compare characteristics between sets of data or within a given set of data	3	0	1-2	1-2	2-4
MA 8.4.1.c Find, interpret, and compare measures of central tendency (mean, median, and mode) and the quartiles for sets of data	Assessed at the local level				
MA 8.4.1.d Select the most appropriate unit of central tendency for sets of data	2	0-1	1-2	0	1-3
MA 8.4.1.e Identify misrepresentation and misinterpretation of data represented in circle graphs and box plots	2	0-1	1-2	0	1-3
Gr8 Predictions and Inferences	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.4.2 Students will evaluate predictions and make inferences based on data.					
MA 8.4.2.a Evaluate predictions to formulate new questions and plan new studies	Assessed at the local level				
MA 8.4.2.b Compare and contrast two sets of data to make inferences	Assessed at the local level				
Gr8 Probability	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 8.4.3 Students will apply and interpret basic concepts of probability.					
MA 8.4.3.a Identify complementary events and calculate their probabilities	2	0-1	1-2	0	1-3
MA 8.4.3.b Compute probabilities for independent compound events	2	0-1	1-2	0	1-3

Nebraska State Mathematics Test Table of Specifications					
Grade 11					
NUMBER SENSE					
Gr11 Number System	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.1.1 Students will represent and show relationships among real numbers.					
MA 12.1.1.a Demonstrate multiple equivalent forms of irrational numbers	Assessed at the local level				
MA 12.1.1.b Compare, contrast, and apply the properties of numbers and the real number system, including the rational, irrational, imaginary and complex numbers	Assessed at the local level				
Gr11 Operations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.1.2 Students will demonstrate the meaning and effects of arithmetic operations with real numbers.					
MA 12.1.2.a Use drawings, words, and symbols to explain the effects of such operations as multiplication and division, and computing positive powers and roots on the magnitude of quantities	Assessed at the local level				
MA 12.1.2.b Use drawings, words, and symbols to explain that the distance between two numbers on the number line is the absolute value of their difference	Assessed at the local level				
Gr11 Computation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.1.3 Students will compute fluently and accurately using appropriate strategies and tools.					
MA 12.1.3.a Compute accurately with real numbers	1	1-2	0	0	1-2
MA 12.1.3.b Simplify exponential expressions	2	0	1-2	0	1-2
MA 12.1.3.c Multiply and divide numbers using scientific notation	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 11					
MA 12.1.3.d Select, apply, and explain the method of computation when problem solving using real numbers	Assessed at the local level				
Gr11 Estimation	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.1.4 Students will estimate and check reasonableness of answers using appropriate strategies and tools.					
MA 12.1.4.a Use estimation methods to check the reasonableness of real number computations and decide if the problem calls for an approximation or an exact number	2	0-1	1-2	0	1-3
MA 12.1.4.b Distinguish relevant from irrelevant information, identify missing information and either find what is needed or make appropriate estimates	Assessed at the local level				
GEOMETRIC/MEASUREMENT CONCEPTS					
Gr11 Characteristics	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.2.1 Students will analyze characteristics, properties, and relationships among geometric shapes and objects.					
12.2.1.a Identify and explain the necessity of and give examples of definitions and theorems	Assessed at the local level				
MA 12.2.1.b Analyze properties and relationships among classes of two and three dimensional geometric objects using inductive reasoning and counterexamples	Assessed at the local level				
MA 12.2.1.c State and prove geometric theorems using deductive reasoning	Assessed at the local level				
MA 12.2.1.d Apply geometric properties to solve problems	2	0-1	3-4	0	3-5
MA 12.2.1.e Identify and apply right triangle relationships	2	0-1	2-4	0	2-5
MA 12.2.1.f Recognize that there are geometries, other than Euclidean geometry, in which the parallel postulate is not true	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 11					
MA 12.2.1.g Know the definitions and basic properties of a circle and use them to prove basic theorems and solve problems	Assessed at the local level				
Gr11 Coordinate Geometry	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.2.2 Students will use coordinate geometry to analyze and describe relationships in the coordinate plane.					
MA 12.2.2.a Use coordinate geometry to analyze geometric situations	2	0-1	2-3	0	2-4
MA 12.2.2.b Apply the midpoint formula	Assessed at the local level				
MA 12.2.2.c Apply the distance formula	2	0-1	1-2	0	1-3
MA 12.2.2.d Prove special types of triangles and quadrilaterals	3	0	0-1	1-2	1-3
Gr11 Transformations	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.2.3 Students will apply and analyze transformations.					
MA 12.2.3.a Explain and justify the effects of simple transformations on the ordered pairs of two-dimensional shapes	Assessed at the local level				
MA 12.2.3.b Perform and describe multiple transformations	Assessed at the local level				
Gr11 Spatial Modeling	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.2.4 Students will use visualization, spatial reasoning, and geometric modeling to solve problems.					
MA 12.2.4.a Sketch and draw appropriate representations of geometric objects using ruler, protractor, or technology	Assessed at the local level				
MA 12.2.4.b Use geometric models to visualize, describe, and solve problems	2	0-1	2-3	0	2-4
Gr11 Measurement	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**

Nebraska State Mathematics Test Table of Specifications					
Grade 11					
MA 12.2.5 Students will apply the units, systems, and formulas to solve problems.					
MA 12.2.5.a Use strategies to find surface area and volume of complex objects	Assessed at the local level				
MA 12.2.5.b Apply appropriate units and scales to solve problems involving measurement	Assessed at the local level				
MA 12.5.c Convert between various units of area ad volume, such as square feet to square yards	Assessed at the local level				
MA 12.2.5.d Convert equivalent rates	2	1-2	1-2	0	2-4
MA 12.2.5.e Find arc length and area of sectors of a circle	Assessed at the local level				
MA 12.2.5.f Determine surface area and volume of three-dimensional objects	Assessed at the local level				
MA 12.2.5.g Know that the effect of a scale factor k on length, area and volume is to multiply each k, k^2 and k^3, respectively	Assessed at the local level				
ALGEBRAIC CONCEPTS					
Gr11 Relationships	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.3.1 Students will generalize, represent, and analyze relationships using algebraic symbols.					
MA 12.3.1.a Represent, interpret, and analyze functions with graphs, tables, and algebraic notation, and convert among these representations	3	0	2-3	1-2	3-5
MA 12.3.1.b Identify domain and range of functions represented in either symbolic or graphical form	Assessed at the local level				
MA 12.3.1.c Identify the slope and intercepts of a linear relationship from an equation or graph	2	0-1	2-3	0	2-4
MA 12.3.1.d Identify characteristics of linear and non-linear functions	3	0	2-3	1-2	3-5
MA 12.3.1.e Graph linear and non-linear functions	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 11					
MA 12.3.1.f Compare and analyze the rate of change by using ordered pairs, tables, graphs, and equations	3	0	1-2	1-2	2-4
MA 12.3.1.g Graph and interpret linear inequalities	Assessed at the local level				
MA 12.3.1.h Represent, interpret, and analyze functions and their inverses	Assessed at the local level				
MA 12.3.1.i Determine if a relation is a function	Assessed at the local level				
Gr11 Modeling in Context	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.3.2 Students will model and analyze quantitative relationships.					
MA 12.3.2.a Model contextualized problems using various representations	Assessed at the local level				
MA 12.3.2.b Represent a variety of quantitative relationships using linear equations and one variable inequalities	3	0	0	2-4	2-4
MA 12.3.2.c Analyze situations to determine the type of algebraic relationship	Assessed at the local level				
MA 12.3.2.d Model contextualized problems using various representations for non-linear functions	Assessed at the local level				
Gr11 Procedures	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.3.3 Students will represent and solve equations and inequalities.					
MA 12.3.3.a Explain/apply the reflexive, symmetric, and transitive properties of equality	Assessed at the local level				
MA 12.3.3.b Simplify algebraic expressions involving exponents	1	1-3	0	0	1-3
MA 12.3.3.c Add and subtract polynomials	1	1-3	0	0	1-3
MA 12.3.3.d Multiply and divide polynomials	1	1-3	0	0	1-3
MA 12.3.3.e Factor polynomials	Assessed at the local level				
MA 12.3.3.f Identify and generate equivalent forms of linear equations	1	1-3	0	0	1-3

Nebraska State Mathematics Test Table of Specifications

Grade 11

MA 12.3.3.g Solve linear equations and inequalities including absolute value	Assessed at the local level
MA 12.3.3.h Identify and explain the properties used in solving equations and inequalities	Assessed at the local level
MA 12.3.3.i Solve quadratic equations	Assessed at the local level
MA 12.3.3.j Add, subtract, and simplify rational expressions	Assessed at the local level
MA 12.3.3.k Multiply, divide, and simplify rational expressions	Assessed at the local level
MA 12.3.3.l Evaluate polynomial and rational expressions and expressions containing radicals and absolute values at specified values of their variables	Assessed at the local level
MA 12.3.3.m Derive and use the formulas for the general term and summation of finite arithmetic and geometric series	Assessed at the local level
MA 12.3.3.n Combine functions by composition, as well as by addition, subtraction, multiplication, and division	Assessed at the local level
MA 12.3.3.o Solve an equation involving several variables for one variable in terms of the others	Assessed at the local level
MA 12.3.3.p Analyze and solve systems of two linear equations in two variables algebraically and graphically	Assessed at the local level

DATA ANALYSIS/PROBABILITY CONCEPTS

Gr11 Display and Analysis	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
MA 12.4.1 Students will formulate a question and design a survey or an experiement in which data is collected and displayed in a variety of formats, then select and use appropriate statistical methods to analyze the data.					
MA 12.4.1.a Interpret data represented by the normal distribution and formulate conclusions	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 11					
MA 12.4.1.b Compute, identify, and interpret measures of central tendency (mean, median, mode) when provided a graph or data set	Assessed at the local level				
MA 12.4.1.c Explain how sample size and transformations of data affect measures of central tendency	Assessed at the local level				
MA 12.4.1.d Describe the shape and determine the spread (variance, standard deviation) and outliers of a data set	2	0	2-3	0	2-3
MA 12.4.1.e Explain how statistics are used or misused in the world	Assessed at the local level				
MA 12.4.1.f Create scatter plots, analyze patterns, and describe relationships in paired data	Assessed at the local level				
MA 12.4.1.g Explain the impact of sampling methods, bias, and the phrasing of questions asked during data collection and the conclusions that can rightfully be made	Assessed at the local level				
MA 12.4.1.h Explain the differences between randomized experiment and observational studies	Assessed at the local level				
Gr11 Predictions and Inferences	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.4.2 Students will develop and evaluate inferences to make predictions.					
MA 12.4.2.a Compare data sets and evaluate conclusions using graphs and summary statistics	Assessed at the local level				
MA 12.4.2.b Support inferences with valid arguments	Assessed at the local level				
MA 12.4.2.c Develop linear equations for linear models to predict unobserved outcomes using regression line and correlation coefficient	Assessed at the local level				
MA 12.4.2.d Recognize when arguments based on data confuse correlation with causation	Assessed at the local level				
Gr11 Probability	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
MA 12.4.3 Students will apply and analyze concepts of probability.					
MA 12.4.3.a Construct a sample space and a probability distribution	Assessed at the local level				

Nebraska State Mathematics Test Table of Specifications					
Grade 11					
MA 12.4.3.b Identify dependent and independent events and calculate their probabilities	2	1-2	1-2	0	2-4
MA 12.4.3.c Use the appropriate counting techniques to determine the probability of an event	2	1-2	0-1	0	1-3
MA 12.4.3.d Analyze events to determine if they are mutually exclusive	2	0-1	1-2	0	1-3
MA 12.4.3.e Determine the relative frequency of a specified outcome of an event to estimate the probability of the outcome	Assessed at the local level				

Appendix D: Confidentiality Agreement

NEBRASKA DEPARTMENT OF EDUCATION

NEBRASKA STATE ACCOUNTABILITY

_____, _____

MONTH YEAR

CONFIDENTIALITY AGREEMENT

TEST SECURITY IS OF THE UTMOST IMPORTANCE TO THE NEBRASKA DEPARTMENT OF EDUCATION. AS A PARTICIPANT IN THIS _____, YOU HAVE ACCESS TO TEST ITEMS THAT MUST BE REGARDED AS CONFIDENTIAL. **DO NOT REPRODUCE ANY MATERIALS, DIRECTLY OR INDIRECTLY, DISCLOSE THE CONTENTS OF THESE MATERIALS, OR DISCUSS THE MATERIALS OR ANY ISSUES THAT ARISE DURING THE MEETINGS WITH INDIVIDUALS OUTSIDE OF THE MEETING ITSELF.**

WE ARE CERTAIN THAT YOU SHARE OUR CONCERN FOR TEST SECURITY AND ASK THAT YOU ACKNOWLEDGE YOUR ADHERENCE TO THIS AGREEMENT BY SIGNING BELOW.

_____ _____ _____

LEGAL FIRST NAME *MI* *LEGAL LAST NAME*

_____

SCHOOL

_____ _____

SIGNATURE *DATE*

Appendix E: Fairness in Testing Manual

FAIRNESS IN TESTING

Guidelines for Training

Bias, Fairness, and Sensitivity Issues

Table of Contents

INTRODUCTION 126

DEFINITION OF BIAS 127

Types of Bias 127

Stereotyping 127

Gender Bias 129

Regional or Geographical Bias 131

Ethnic or Cultural Bias 131

Socioeconomic or Class Bias 132

Religious Bias 132

Ageism (Bias Against a Particular Age Group) 133

Bias Against Persons with Disabilities 134

Experiential Bias 134

Maintaining Balance 135

Topics to Avoid 136

Special Circumstances 137

Historical Contexts 137

Literary Contexts 137

POINTS TO REMEMBER 138

SAMPLE REVIEW FORM 139

References 140

INTRODUCTION

The most important part of the development of any new test is to ensure balanced treatment and control of potential bias, stereotyping, and insensitivity in the items or in the test-related materials. Data Recognition Corporation (DRC) understands that the presence of any type of bias in a test is undesirable not only from a civil rights point of view, but also from a measurement point of view. Issues of bias, fairness, and sensitivity in testing can have a direct impact on test scores. Our test developers are committed to the development of items and tests that are fair for all students. At every stage of the item and test development process, we employ procedures that are designed to ensure that our items and tests meet Standard 7.4 of the *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 1999).

> Standard 7.4: Test developers should strive to identify and eliminate language, symbols, words, phrases, and content that are generally regarded as offensive by members of racial, ethnic, gender, or other groups, except when judged to be necessary for adequate representation of the domain.

In meeting Standard 7.4, DRC employs a series of internal quality steps that we believe are among some of the best in the industry. We provide specific training for our test developers, item writers, and reviewers on how to write, review, revise, and edit items for issues of bias, fairness, and sensitivity, as well as for technical quality. Our training also includes an awareness of and sensitivity to issues of cultural diversity.

In addition to providing *internal* training in reviewing items in order to eliminate potential bias, we also provide *external* training to our clients, including state departments of education, review panels of minority experts, teachers, and other stakeholders. DRC understands the importance of having external panels with a wide variety of expertise in reviewing items and tests for potential bias. External panels of professionals provide a review of items for subtle forms of bias that often can be perceived only by individuals who possess a wide variety of appropriate expertise and represent specific constituencies.

This manual has been prepared to summarize DRC's guidelines for bias, fairness, and sensitivity, including how to eliminate language, symbols, words, phrases, and content that might be considered offensive by members of racial, ethnic, gender, or other groups. Our guidelines may be modified to meet client's requirements and/or state-specific guidelines.

DEFINITION OF BIAS

While there are many definitions of bias, the following definition is provided on page 76 of the *Standards for Educational and Psychological Testing* (AERA, APA, NCME, 1999):

> The term *bias* in tests and testing refers to construct-irrelevant components that result in systematically lower or higher scores for identifiable groups of examinees. In other words, **bias is the presence of some characteristic of an item and/or test that results in two individuals of the same ability but from different subgroups performing differently on the item and/or test.** Therefore, it is most important that there are no ambiguities in the test items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries.

TYPES OF BIAS

There are many types of bias. They include stereotyping and discriminating against people because of gender, regional or geographical differences, ethnicity or culture, socioeconomic or class status, religion, or age, as well as bias against other groups of people, including those with disabilities. Another form of bias involves the use of questions and/or activities in the items or on a test as a whole that are not relevant to the life experiences of the students responding to the items or test. A definition of each type of bias, along with samples, is provided below.

STEREOTYPING

"Stereotype is an image formed by ascribing certain characteristics (e.g., physical, cultural, personal, occupational, historical) to all members of a group" (National Evaluation Systems, Inc. page 2). Stereotyping in test items and tests might include physical characteristics, intellectual characteristics, emotions, careers, activities, and domestic or social roles. In writing or reviewing test items, it is very important that all groups are portrayed fairly, without stereotyping. As a result, there should be a range of characteristics, careers, and social roles across all groups, and no one group should be characterized by any one particular attribute or characteristic. Following are examples of stereotyping.

Stereotype	***Examples***
PHYSICAL CHARACTERISTICS	MALES ARE STRONG AND CAPABLE LEADERS. Females are weak.

Types of Bias

Stereotyping (continued)

	The elderly are feeble and sickly. Children are healthy and full of energy. The elderly are dependent upon others. People with disabilities are dependent upon others. Females worry about their hair.
Intellectual characteristics	Males do better in mathematics and science. Females do better in reading and language arts. Asian Americans excel in academics.
Emotions	Males are aggressive, courageous, and strong. Females are weak, weepy, tender, and fearful.

Stereotyping	***Examples***
Careers	Females are nurses, teachers, and secretaries. Males are doctors, principals, superintendents, lawyers, and skilled laborers (e.g., plumbers, construction workers, painters). African-Americans are athletes. Hispanics operate lawn care businesses. Asian-Americans own dry cleaning businesses.
Activities	Females play with dolls and read books. Females do domestic chores (e.g., clean house, cook, sew). Females spend money. Males play sports and work with tools. Boys are rowdy. Girls are quiet.
Domestic and/or Social Roles	Females are responsible for childcare. Men work outside of the home and are the breadwinners.
Community	Asian-Americans live in ethnic neighborhoods. African-Americans live in high-rise apartment buildings located in urban areas. American Indians live on reservations.
Leadership	Men are leaders and rulers.

Women are followers.
Women are dependent on men.
Men are elected to political positions.
Females in leadership roles are aggressive and pushy.

TYPES OF BIAS (CONTINUED)

GENDER BIAS

Gender bias involves items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries that show members of either sex in stereotypical activities, emotions, occupations, characteristics, and/or situations. Gender bias also involves the use of demeaning labels.

Examples of gender bias

TITLES AND SPECIFIC TERMS REFERRING TO HUMANITY AT LARGE, SUCH AS

- Mankind
- Manhood
- Manpower
- Man of the hour
- Man-hours
- Man-made

Use of gender specific terms for occupations, such as

- Fireman
- Workman
- Chairman
- Policeman
- Mailman
- Salesman
- Insurance man
- Businessman
- Congressman

Use of pronouns that imply a stereotype, such as

- The nurse went to the hospital, and *she* was able to talk with the patient.
- The factory worker needed to earn more money for *his* family.
- When the lawyer delivered *his* closing remarks, the jury listened carefully.
- A politician must give a lot of speeches when *he* runs for office.

TYPES OF BIAS

GENDER BIAS (CONTINUED)

Use of phrases that identify genders in terms of their roles or occupations, such as

- Men and girls were invited to the lecture.
- The travelers took their wives and children with them.
- The happy couple was introduced as man and wife.

Use of phrases or words with an emphasis on marital status, such as

- Abraham Lincoln and Mrs. Lincoln attended the play.
- George Washington and Martha visited the new building.
- Dr. and Mrs. Jones attended the opening of the new warehouse.
- The admirable Dr. George Halstead and his wife, Maria, visited the library.

Use of words that identify genders in the salutation of a business letter, such as

- Dear Sir:
- Dear Madam:
- Dear Gentlemen:

Use of words or phases that are not parallel, such as

- The girls' restroom is down the hall, and the men's restroom is on the second floor.
- The boys' locker room door is painted green, and the women's locker room door is painted yellow.
- The men's department is on the right; the ladies' department is on the left.

Use of figures of speech, such as

- Old wives' tale
- Right-hand man
- Man versus nature
- The best man for the job
- The better half

Use of gender-specific terms or diminutive words, such as

- Sweet young thing
- Usherette
- Housewife
- Maid
- Cleaning lady
- Little woman
- Career girl
- Houseboy
- Steward

Regional or Geographical Bias

Regional and/or geographical bias involves items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries that include terms that are not commonly used nationwide or within a particular region or state to which the test will be given. It also involves the use of terms that have different connotations in different parts of the country and/or geographical regions. It is important to note that some experiences may not be common to all students. For example, within a given geographic area not all students might be familiar with snow, so questions involving sleds and toboggans, for example, may well reflect a regional or geographical bias.

Examples of regional or geographical bias

- She ordered a new davenport (couch or sofa).
- Go get your toboggan (hat or type of sled).
- The students stood in line at the bubbler (water fountain or drinking fountain).
- Turn left at the berm (curb).
- Take the pike (road).

Ethnic or Cultural Bias

Ethnic bias involves items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries that include terms that are demeaning and/or offensive to a particular ethnic group or culture. In addition, no minority group should be portrayed as being uneducated or poor.

Examples of ethnic or cultural bias

- Maria was in the kitchen making tacos.
- The Chinese owned a laundry in our area.
- Native Americans are very close to nature.

Terminology

Terms that have a negative connotation or that reinforce negative judgments should also be avoided. Following is a list of **acceptable** terms.

- African-American
- Asian-American or Pacific Island American
- Latino, Mexican-American, Hispanic
- Tribal name (preferred), Native American, American Indian
- European-American

Socioeconomic or Class Bias

Socioeconomic or class bias involves items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries that include activities, possessions, or ideas that may not be common to all students within a given area. For example, not all students in a given area own CD players or video games, nor do all students in a given area participate in certain sports activities, such as golf, snow skiing, or sailing. In addition, not all students in a given area take expensive vacations or attend expensive schools.

Examples of socioeconomic or class bias

- They were members of the country club.
- Boarding school.
- How many golf balls landed in the lake?
- The club members plan to go snow skiing over the holidays.
- My great aunt lives in a town house overlooking Lake Michigan.

Religious Bias

Religious bias involves items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries that include terms that are demeaning and/or offensive to a particular religious group.

Examples of religious bias

- The house on Smith Street is decorated for Halloween.
- There were several Christmas trees in the window.
- The students in the class will stand and say the *Pledge of Allegiance*.
- The high school students will be attending a rock-and-roll dance at the community center.

It is also important to note that no religious belief or practice should be portrayed as a universal norm or as inferior or superior to any other.

Ageism (Bias Against a Particular Age Group)

There are other subtle forms of bias, including bias against the elderly or ageism. Ageism involves items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries that include terms that are demeaning and/or offensive to the elderly or older persons (65 years or older). Ageism can also involve issues of bias with other age groups, including teenagers and young children.

It is important to note, however, that representing older persons or any age group fairly does not mean that the content of the items has to be revised or rewritten to seem unrealistic. Rather, as a whole, the items and the test should show older people or any age group in a variety of roles and activities whenever they appear naturally in the test content.

Examples of ageism (bias against a particular age group)

- Despite the fact that she was very old, she was able to walk down the stairs.
- The child's grandfather seemed senile.
- They were acting like typical irresponsible teenagers.

Bias Against Persons with Disabilities

Another form of subtle bias involves issues of bias related to persons with disabilities. This type of bias involves items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries that include terms that are demeaning and/or offensive to persons with disabilities. It is important to note, however, that representing persons with disabilities does not mean that the content of the items has to be revised or rewritten to seem unrealistic. Rather, as a whole, the items and the test should show people with disabilities in a variety of roles and activities whenever they appear naturally in the test content.

Examples of bias against persons with disabilities

- After the car accident, the student was confined to a wheelchair.
- He became a successful writer despite his disability.
- She is a blind person.
- The student is handicapped.
- The child made great strides in overcoming her disability.

TYPES OF BIAS

Bias Against Persons with Disabilities (continued)

Terminology

Terms that have a negative connotation or that reinforce negative judgments (crippled, victim, afflicted, confined, etc.) should also be avoided. It is also important that no one with a disability should be pictured as helpless or portrayed as pitiful.

Do not use	*Use*
Retarded	Developmentally delayed
Hard of hearing	Hearing impaired
Deaf and Dumb or Deaf-mute	Deaf or hard-of-hearing used accurately
Learning-disabled	Person with a learning disability
Handicap	Disability
	Visually-impaired or Blind used accurately

EXPERIENTIAL BIAS

The questions and activities reflected in the items or test, as a whole, should also be relevant to the life experiences of the students responding to the items. In other words, for a student to respond sensibly to the test questions, he or she must know what the question is about. In addition, culturally specific knowledge should be avoided, along with the use of difficult words and figures of speech.

Examples of experiential bias

- Pat knew she would win the race as she had an ace up her sleeve.
- Put the pedal to the metal and clean up your room.
- I needed change for the subway turnstile.
- The arroyos filled quickly during the storm.
- The super takes care of cleaning the foyer.

MAINTAINING BALANCE

Bias may also occur as a result of having a lack of balance through underrepresentation of a particular ethnic group and/or gender. Therefore, whenever possible, tests and test-related materials should contain content that is balanced across ethnic groups and across gender. The content of the pool of items and/or test, as a whole, should also reflect cultural diversity. In order to achieve balance, the test developers at DRC review the pool of items or the test, as a whole, to determine whether or not there is an adequate representation of

- Females and males in both traditional and nontraditional roles
- Female and male names
- Minority groups in various environments and occupations
- Minority groups, including the use of names

The issue of fairness also involves content inclusiveness. Subtle forms of bias can result from omitting certain areas of information and/or from omitting certain topics. Wherever possible, the content should show people in everyday situations and groups should be depicted as fully integrated in the society, reflecting the diverse multicultural composition of society as a whole (NES, page 9).

TOPICS TO AVOID

Because issues of bias, fairness, and sensitivity in testing can have a direct impact on the test scores, it is also important that sensitive and offensive topics be avoided. A topic might be considered offensive or controversial if it offends teachers, students, parents, or the community at large. This includes highly charged and controversial topics such as abortion, the death penalty, and evolution. Unacceptable content might also include less controversial topics, such as the use of tobacco or topics that could evoke unpleasant emotions on the part of a given student. In addition, topics that appear to promote or defend a particular set of values should be avoided. It is important to remember that the ability of the student to take the test should never be undermined. Following are examples of topics generally to be avoided.

Examples of topics to be generally avoided

- *ABORTION*
- Alcohol, including beer and wine
- Behaviors that are inappropriate, including stealing, cheating, lying, and other criminal and/or anti-social behaviors and activities
- Biographies of controversial figures whether or not they are still alive
- Birthdays
- Cancer and other diseases that might be considered fatal (HIV, AIDS)
- Criticism of democracy or capitalism
- Dangerous behavior
- Death of animals or animals dying or being mistreated
- Death, murder, and suicide
- Disasters, including tornadoes, hurricanes, etc. (unless treated as scientific subjects)
- Disrespect of any mainstream racial or religious group
- Double meanings of words that have sexually suggestive meanings
- Evolution
- Family experiences that may be upsetting, including divorce or loss of a job
- Feminist or chauvinistic topics
- Gambling
- Guns and gun control
- Holidays of religious origin (e.g., Halloween, Christmas, Easter)
- Junk food, including candy, gum, chips
- Left- or right-wing politics
- Luxuries (homes with swimming pools, expensive clothes, expensive vacations, and sports activities that typically require the purchase of expensive equipment such as snow skiing)
- Parapsychology

  - Physical, emotional, and/or mental abuse, including animal, child, and/or spousal abuse
- Religions, except in appropriate historical context; mythology, folk tales, and fables may contain religious elements as part of appropriately presented literary excerpts.
- Sex, including kissing and dating
- Slavery (unless presented in an historical context and presented appropriately)
- Tobacco
- Violence against a particular group of people or animals
- Rock music, including rap and heavy metal
- Wars
- Witchcraft, sorcery, or magic
- Words that might be problematic to a specific ethnic group

SPECIAL CIRCUMSTANCES

In certain subject areas, a sensitive topic may be acceptable because the topic is a part of the course of study or may be required in order to measure the specific curriculum content standards and/or test objectives. For example, it may be appropriate to have test questions dealing with hurricanes. However, the questions should not focus unduly upon the destruction of property or the deaths of human beings. Other special circumstances include historical and literary contexts. A discussion of these special circumstances is provided below.

Historical Contexts

In order to measure the content curriculum standards, social studies tests often include topics that might otherwise be deemed as controversial. For example, in a history test, the topic of slavery might be used. The student would know that such a controversial topic is used to access knowledge of a particular curriculum content standard and/or set of objectives and, therefore, the topic would not reflect the views of the test developer.

Literary Contexts

Today's tests often require the use of authentic or previously published passages. As a result, sometimes a given passage or prompt might contain controversial material, including sentences, phrases, and/or words. If the overall passage or prompt is acceptable, it may be possible to edit and or delete the objectionable sentences, phrases, words, and/or references in order to eliminate the potential bias. In such cases, DRC test developers request permission from the publisher to make such edits and/or changes, and they would do so only if permission is granted.

Points to Remember

When reviewing items (questions and responses), passages prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries for issues of bias, fairness, and sensitivity, the following questions should be asked.

1. Do the items (questions and responses), passages, prompts, stimulus materials, artwork, graphs, charts, and test-related ancillaries:

   Demean any religious, ethnic, cultural, or social group?
   Portray anyone or any group in a stereotypical manner?
   Contain any other forms of bias, including gender, regional or geographical, ethnic or cultural, socioeconomic or class, religious, age-related bias, or bias against persons with disabilities?

2. Are there any topics that might disadvantage a student for any reason?

3. Are there any culturally specific sets of knowledge, terms, difficult words and/or figures of speech that might disadvantage a group of students?

4. Are the questions and activities reflected in the items or test, as a whole, relevant to the life experiences of the students responding to the items?

5. As a whole, does the test or pool of items have a balance across ethnic groups and across genders, including an adequate representation of:

   Females and males in both traditional and nontraditional roles
   Female and male names
   Minority groups in various environments and occupations
   Minority groups, including the use of ethnic names

6. Wherever possible, does the content show minority groups in everyday situations and groups depicted as fully integrated in the society, reflecting the multicultural composition of society as a whole?

Sample Review Form

Name: _____

Date: _____

Subject Area: _____ **Grade Level:** _____

Item No.	Type of Bias							
	Gender	Regional	Ethnic	Socio-economic	Religious	Age	Exper-iential	Other

Comments:

_____

References

American Educational Research Association, American Psychological Association, and National Council on Measurement in Education. (1999). *Standards for educational and psychological testing*. Washington, DC: American Educational Research Association.

Haladyna, T. (1999). *Developing and validating multiple-choice test questions*. Mahwah, New Jersey: Lawrence Erlbawn.

Joint Committee on Testing Practices. (1988). *Code of fair testing practices in education.* Washington DC.

McDivitt, P.J., Newsome, D., Shoffner, M., Wall, J., and Watts, R. (2002). *Applying the standards for educational and psychological testing: what teachers and counselors need to know*. Association for Assessment in Counseling.

National Evaluation Systems, Inc. (1990). *Bias concerns in test development*. Washington DC: The National Evaluation Systems, Inc. (NES).

Osterlind, S.J. (1998). *Constructing test items: multiple-choice, constructed-response, performance, and other formats*, second edition. AH Dordrecht The Netherlands: Kluwer Academic Publishers.

Sandoval, J., Frisy, C.L., Geisinger, K.F., Scheuneman, J.D., and Grenier, J.R. Eds, (1998). *Test interpretation and diversity*. Washington DC: American Psychological Association.

Sebranek, P., Meyer, V., and Kemper, D. (1996). *Writers inc.: a handbook for writing and learning.* Lexington, MA: D.C. Heath and Company.

APPENDIX F: OVERVIEW OF RASCH MEASUREMENT

Most psychometricians agree that, when possible, the Rasch model is the preferred approach to manage the assessment and reporting processes (Rasch, 1960; Wright & Stone, 1979; Smith & Smith, 2004; Mead, 2008). For non-statisticians, the most compelling reasons may be that the Rasch model:

- is simple to apply, and
- preserves the number-correct ordering.

Simplicity makes the methods (relatively) easy to explain and the results to interpret. The results are straightforward and readily defended in front of administrators, parents, educators, and courts. And nontrivially, the simplicity helps meet the increasingly demanding time lines for reporting.

With number-correct scoring, students with more correct responses are always considered more proficient than students with fewer correct. This is intuitively obvious, based on more than a century of experience using and interpreting such scores.

For statisticians, the attractions of the Rasch model are more esoteric, including:

- an interval scale of measurement,
- meaningful estimates of the standard errors at each raw score, and,
- simple sufficient statistics for person and item parameters.

The interval scale makes it possible to construct a ruler and place the students and the items on the same ruler, along with any performance expectations or normative information. A difference of, say, 10 scale score units will have the same meaning at any point along the scale and will have the same implications when comparing a student to earlier assessments, to an item, to normative information, to expectations, to a growth target, or to another student.

The sufficient statistics are essential to the simplicity. They make it possible to derive estimation equations for person parameters that do not involve the item parameters and for the item parameters that do not involve person parameters. It does not matter which items are used for the assessment or which students are used for the calibration, given the items are appropriate for the students.

Still more compelling, once the sufficient statistics have been extracted, there is nothing remaining in the data that is directly relevant to the measurement. Any residual information can be used to control and monitor the model. The residuals contain diagnostic information about the student's performance on specific items or clusters of items.

The model does, however, place special demands on the item development and test construction processes. In essence, the model requires that all items, while imperfect, be equally valid and reliable instances of the construct. When sufficient care is taken in item and test development, most achievement test data can adequately satisfy the demands of the model and help realize its advantages of valid measurement, quality control, and effective, timely reporting.

The Rasch Philosophy of Measurement

Georg Rasch (1960), to derive data that he considered worthy of the name measurement, reasoned that the interaction between the person and the item must be governed by a single person parameter (ability) and a single item parameter (difficulty). If person *A* has more ability than person *B*, then *A* is more likely than *B* to answer any item correctly. If item *i* is more difficult than item *j*, then any person is less likely to answer item *i* correctly. These two common sense assertions are axiomatic to Rasch Measurement and must hold regardless of any other characteristics of the people or the items.

This reasoning led Rasch to the simple logistic model, which had several very useful and closely related properties touched on above (Rasch, 1960, 1977):

- *Simplicity*, which allows straightforward calculations, ready communication, and interpretation of the measures. (Wright & Stone, 1979)
- *Separability* of the model parameters (Rasch, 1960),
- *Sufficiency* that does not involve the parameters (Andersen, 1977),
- *Specific objectivity*, sometimes called *person-free[d]* calibration and *item-free[d]* measurement (Wright, 1968), and

Specific objectivity means that the estimation equations for ability do not involve the difficulty parameters, and the equations for difficulty do not involve the ability parameters. Specific objectivity is possible when *sufficient statistics* for the parameters exist. The sufficient statistics exist because the parameters are *separable* in the model.

In practical terms, the students can be ordered on the measurement continuum by their number correct scores and the items can be ordered on the same continuum by the number of correct responses. No other information is necessary for the measurement and anything remaining in the data can be used to control and monitor fit to the model. Specific objectivity is the cornerstone of the Rasch family of measurement models. (Wright, 1980)

THE MODEL FOR MEASUREMENT

Dichotomous Items

Multiple-choice items (MC) are calibrated using the most familiar form of the model (Rasch, 1960; Wright & Panchapakesan, 1969; Wright & Stone 1979; Andrich, 1988; Fischer & Molenaar, 1995; Smith & Smith, 2004). The Rasch model applicable to dichotomously scored items, given person ability and item difficulty, can be seen in the basic statement of the model.

The probability of success for a person with ability β_v on an item with difficulty δ_i is a function of the difference between the ability of the person and the difficulty of the item; mathematically:

1. $$P(right \mid \beta_v, \delta_i) = \frac{e^{\beta_v - \delta_i}}{1 + e^{\beta_v - \delta_i}} = \frac{\mathrm{B}_v}{\mathrm{B}_v + \Delta_,}, \text{ where } \mathrm{B}_v = e^{\beta_v} \text{ and } \Delta_i = e^{\delta_i}.$$

This is the probability of scoring one rather than zero on an item for which those are the only possibilities. This expression results in the familiar S-shaped curve relating the ability-difficulty metric to number correct score. Its simplicity makes it especially suited for educational assessment by drawing a clear distinction between the information (captured in the parameter estimates by the sufficient statistics) relevant to estimating the ability property that all examinees share and the information relevant to describing unique characteristics of individuals.

The model returns the identical estimated ability for every student with the same number correct score on a form. In the estimation phase, there is no distinction between the student who passes the easy item and misses the difficult items and the student who misses the easy items and passes the difficult ones. At the control and diagnostic stage, there is a great deal of difference between the two situations. In the first, there is a very clear statement of the person's true location on the construct; in the second, there are two very different statements when the two halves of the test are viewed separately.

This is the stage at which Rasch focuses his concern for the control of the model. The model itself provides a probability statement about any outcome. Typically, one examines the residuals, which can be expressed as the odds against the observed response. When these are collected and dissected, the conclusion for the first student would be nothing surprising occurred; for the second student, most of the responses were surprising. This diagnostic information can be put to good use when reporting and interpreting the test scores.

The strong measurement model is the instrument for understanding the scores, whether it concludes the student was accurately and validly measured or not. It will help lead the teacher and students to the most appropriate next steps.

CALIBRATION: ESTIMATING ITEM DIFFICULTIES

DRC uses the Rasch measurement model to estimate the student proficiencies and to control the assessment process. The model provides straightforward algorithms to compute ability estimates on a unidimensional, equal-interval scale of measurement from the number correct scores.

WINSTEPS (2011) implements the joint maximum likelihood estimation procedure (Linacre, 2011) for estimating item difficulties. This calibration software is commercially available and widely used in the testing industry. In addition to performing item calibration and ability estimation, the capabilities of the WINSTEPS program will be utilized to assess unidimensionality, item interdependence, and other deviations from the model. The program

also has several options for exploring the person-item residual matrix (Mead, 1976, 2008; Ludlow 1986; Smith, 2000).

In the simplest formulation, estimating either the item difficulty or the person ability involves solving the fundamental equation that states the observed score must equal the expected score. For example, the ability estimate for a person who scores *r* on a set of *L* items is derived from:

2. $r_v = \sum_{i=1}^{L}\sum_{k=0}^{m_i} k\hat{P}_{vik}$, where $\hat{P}_{vik}$ is defined by (9) with estimates replacing the parameters.

Rasch calibration and scaling have become relatively routine operations. Members of the DRC psychometric staff have been instrumental in the development of the Rasch model and its application over several decades and are intimately familiar with the software for its application.

Appendix G: Reading Key Verification and Foil Analysis

Grade 3

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
562871	21915	OP	.842	.062	.068	.025	.842	.004	.000	.398	-.241	-.182	-.192	.398
562872	21915	OP	.816	.069	.816	.071	.041	.004	.000	.300	-.187	.300	-.075	-.193
562874	21915	OP	.628	.139	.110	.119	.628	.003	.000	.318	-.080	-.175	-.186	.318
562882	21915	OP	.835	.052	.044	.065	.835	.004	.000	.422	-.266	-.191	-.192	.422
562886	21915	OP	.821	.821	.069	.030	.077	.004	.000	.396	.396	-.239	-.196	-.177
562888	21915	OP	.784	.101	.784	.068	.044	.003	.000	.356	-.189	.356	-.180	-.163
563108	21915	OP	.811	.022	.811	.072	.093	.002	.000	.405	-.241	.405	-.144	-.274
563115	21915	OP	.511	.511	.383	.086	.017	.003	.000	.252	.252	-.066	-.231	-.165
563118	21915	OP	.651	.651	.179	.045	.123	.002	.000	.292	.292	-.113	-.162	-.176
563119	21915	OP	.840	.042	.058	.840	.057	.003	.000	.378	-.183	-.217	.378	-.185
563122	21915	OP	.746	.746	.108	.083	.061	.003	.000	.432	.432	-.155	-.256	-.258
563127	21915	OP	.672	.068	.061	.195	.672	.003	.000	.403	-.248	-.248	-.149	.403
563142	21915	OP	.733	.201	.045	.733	.018	.003	.000	.421	-.331	-.101	.421	-.181
563143	21915	OP	.660	.095	.161	.081	.660	.003	.000	.328	-.183	-.097	-.210	.328
565092	21915	OP	.785	.088	.047	.785	.076	.003	.000	.486	-.297	-.233	.486	-.208
565093	21915	OP	.708	.036	.187	.708	.066	.003	.000	.414	-.245	-.200	.414	-.216
565109	21915	OP	.624	.127	.133	.114	.624	.001	.000	.293	-.043	-.225	-.148	.293
565111	21915	OP	.744	.055	.744	.042	.156	.003	.000	.562	-.225	.562	-.217	-.393
565112	21915	OP	.857	.072	.032	.857	.036	.003	.000	.439	-.261	-.194	.439	-.237
602276	21915	OP	.574	.150	.574	.030	.244	.003	.000	.291	-.308	.291	-.205	.021
602277	21915	OP	.725	.725	.108	.102	.062	.003	.000	.434	.434	-.261	-.182	-.204
602278	21915	OP	.548	.060	.548	.096	.293	.003	.000	.326	-.171	.326	-.218	-.106
602279	21915	OP	.668	.169	.668	.125	.036	.003	.000	.387	-.161	.387	-.227	-.207
602281	21915	OP	.747	.132	.068	.747	.049	.003	.000	.482	-.282	-.232	.482	-.221
602289	21915	OP	.728	.102	.114	.052	.728	.002	.000	.320	-.238	-.077	-.168	.320
602290	21915	OP	.884	.033	.048	.032	.884	.003	.000	.405	-.206	-.227	-.191	.405
602291	21915	OP	.762	.762	.062	.109	.063	.004	.000	.427	.427	-.203	-.185	-.261
602296	21915	OP	.409	.186	.409	.117	.285	.004	.000	.320	-.148	.320	-.126	-.106

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
602297	21915	OP	.505	.150	.117	.505	.224	.004	.000	.288	-.152	-.135	.288	-.083
602299	21915	OP	.357	.357	.284	.241	.113	.004	.000	.253	.253	-.031	-.092	-.178
602302	21915	OP	.757	.757	.059	.132	.048	.004	.000	.346	.346	-.235	-.117	-.198
602304	21915	OP	.402	.249	.402	.222	.124	.004	.000	.260	-.229	.260	.018	-.073
602325	21915	OP	.861	.045	.055	.036	.861	.003	.000	.391	-.190	-.217	-.190	.391
602326	21915	OP	.688	.688	.072	.091	.145	.004	.000	.351	.351	-.215	-.154	-.145
602330	21915	OP	.606	.184	.121	.606	.085	.004	.000	.476	-.350	-.135	.476	-.148
602331	21915	OP	.687	.687	.069	.209	.031	.004	.000	.313	.313	-.209	-.118	-.184
602332	21915	OP	.683	.683	.082	.140	.091	.004	.000	.447	.447	-.203	-.297	-.130
602333	21915	OP	.480	.087	.480	.234	.194	.004	.000	.278	-.232	.278	-.009	-.146
602337	21915	OP	.715	.063	.101	.118	.715	.004	.000	.448	-.202	-.210	-.244	.448
602339	21915	OP	.534	.169	.534	.166	.128	.004	.000	.403	-.212	.403	-.175	-.134
602341	21915	OP	.704	.090	.123	.704	.079	.003	.000	.246	-.107	-.061	.246	-.188
602343	21915	OP	.699	.699	.097	.079	.123	.003	.000	.374	.374	-.140	-.132	-.259
602348	21915	OP	.565	.135	.565	.203	.093	.003	.000	.416	-.175	.416	-.225	-.154
602349	21915	OP	.641	.104	.146	.641	.105	.004	.000	.263	-.026	-.182	.263	-.138
602354	21915	OP	.785	.084	.785	.072	.055	.003	.000	.443	-.264	.443	-.217	-.185
632654	3575	FT	.898	.898	.021	.039	.041	.001	.000	.360	.360	-.208	-.174	-.222
632655	3575	FT	.691	.063	.102	.144	.691	.001	.000	.235	-.221	-.084	-.080	.235
632660	3575	FT	.756	.055	.756	.060	.128	.001	.000	.452	-.195	.452	-.212	-.294
632661	3575	FT	.770	.770	.084	.102	.043	.001	.000	.370	.370	-.215	-.196	-.175
632663	3575	FT	.536	.114	.158	.536	.192	.001	.000	.323	-.171	-.121	.323	-.156
632665	3575	FT	.620	.108	.620	.200	.070	.001	.000	.240	-.166	.240	-.090	-.107
632667	3575	FT	.907	.907	.034	.033	.024	.001	.000	.393	.393	-.238	-.227	-.187
632668	3575	FT	.494	.219	.494	.131	.155	.001	.000	.099	.028	.099	-.098	-.072
632669	3575	FT	.849	.082	.025	.044	.849	.001	.000	.314	-.134	-.235	-.187	.314
632670	3575	FT	.243	.302	.276	.179	.243	.001	.000	.101	.038	-.045	-.103	.101
632682	3452	FT	.804	.076	.062	.057	.804	.001	.000	.348	-.163	-.191	-.199	.348
632684	3452	FT	.545	.545	.138	.119	.197	.001	.000	.243	.243	-.130	-.103	-.100
632685	3452	FT	.809	.118	.032	.809	.039	.001	.000	.269	-.111	-.206	.269	-.157
632686	3452	FT	.619	.088	.127	.165	.619	.001	.000	.395	-.077	-.259	-.218	.395
632687	3452	FT	.755	.096	.755	.036	.111	.001	.000	.365	-.231	.365	-.210	-.148
632688	3452	FT	.800	.800	.005	.189	.004	.001	.000	.261	.261	-.113	-.225	-.083

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
632690	3452	FT	.792	.086	.079	.042	.792	.001	.000	.436	-.291	-.180	-.219	.436
632691	3452	FT	.880	.062	.032	.880	.024	.001	.000	.389	-.227	-.213	.389	-.204
632694	3452	FT	.883	.033	.883	.049	.034	.001	.000	.308	-.188	.308	-.088	-.241
632695	3452	FT	.503	.503	.161	.204	.131	.001	.000	.141	.141	-.129	.050	-.119
632701	3420	FT	.821	.087	.821	.046	.046	.001	.000	.528	-.325	.528	-.252	-.277
632702	3420	FT	.711	.223	.017	.049	.711	.001	.000	.181	-.046	-.194	-.174	.181
632704	3420	FT	.658	.112	.145	.658	.084	.000	.000	.401	-.199	-.183	.401	-.226
632705	3420	FT	.346	.490	.346	.112	.050	.001	.000	.378	-.239	.378	-.077	-.163
632706	3420	FT	.926	.926	.013	.023	.038	.000	.000	.365	.365	-.180	-.214	-.226
632707	3420	FT	.642	.105	.175	.642	.077	.001	.000	.418	-.277	-.150	.418	-.215
632708	3420	FT	.777	.777	.111	.056	.055	.001	.000	.283	.283	-.045	-.221	-.228
632710	3420	FT	.868	.025	.071	.035	.868	.000	.000	.391	-.220	-.231	-.208	.391
632712	3420	FT	.689	.111	.071	.128	.689	.001	.000	.399	-.188	-.217	-.206	.399
632713	3420	FT	.711	.711	.115	.035	.138	.001	.000	.353	.353	-.231	-.145	-.173
632716	7927	FT	.542	.063	.285	.102	.542	.007	.000	.244	-.122	-.045	-.167	.244
632719	7927	FT	.803	.039	.803	.062	.088	.008	.000	.460	-.235	.460	-.190	-.248
632720	7927	FT	.598	.598	.184	.122	.088	.007	.001	.430	.430	-.250	-.098	-.212
632721	7927	FT	.631	.142	.107	.111	.631	.008	.001	.395	-.203	-.141	-.171	.395
632722	7927	FT	.495	.303	.094	.495	.101	.007	.001	.391	-.088	-.240	.391	-.219
632723	7927	FT	.510	.107	.510	.175	.199	.008	.000	.368	-.155	.368	-.178	-.114
632724	7927	FT	.703	.703	.137	.116	.037	.007	.001	.257	.257	-.096	-.075	-.212
632725	7927	FT	.847	.039	.049	.847	.057	.008	.000	.444	-.177	-.200	.444	-.264
632726	7927	FT	.712	.077	.077	.125	.712	.007	.001	.428	-.192	-.204	-.203	.428
632727	7927	FT	.571	.105	.115	.571	.200	.008	.000	.444	-.291	-.133	.444	-.163
632950	3541	FT	.921	.043	.921	.026	.010	.001	.000	.267	-.125	.267	-.205	-.138
632953	3541	FT	.911	.911	.046	.023	.019	.001	.000	.380	.380	-.199	-.224	-.233
632954	3541	FT	.530	.243	.530	.144	.082	.001	.000	.297	-.042	.297	-.200	-.215
632955	3541	FT	.618	.078	.618	.131	.171	.001	.000	.447	-.201	.447	-.161	-.287
632956	3541	FT	.803	.067	.023	.803	.106	.001	.000	.424	-.257	-.139	.424	-.269
632959	3541	FT	.795	.041	.080	.083	.795	.001	.000	.469	-.182	-.249	-.309	.469
632960	3541	FT	.770	.079	.023	.127	.770	.001	.000	.384	-.204	-.187	-.233	.384
632961	3541	FT	.395	.395	.376	.104	.125	.001	.000	.251	.251	-.142	-.090	-.078
632962	3541	FT	.528	.244	.088	.528	.140	.001	.000	.324	-.146	-.150	.324	-.162

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
632963	3541	FT	.811	.103	.063	.811	.021	.001	.000	.418	-.246	-.242	.418	-.205

Grade 4

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
563203	21610	OP	.734	.040	.033	.734	.192	.002	.000	.406	-.174	-.192	.406	-.267
563204	21610	OP	.813	.030	.813	.035	.121	.002	.000	.422	-.249	.422	-.260	-.212
563217	21610	OP	.469	.237	.469	.155	.136	.001	.000	.272	-.100	.272	-.144	-.106
563222	21610	OP	.787	.116	.057	.037	.787	.002	.000	.327	-.214	-.149	-.131	.327
563283	21610	OP	.792	.049	.035	.121	.792	.002	.000	.383	-.233	-.224	-.177	.383
563293	21610	OP	.797	.056	.797	.097	.048	.002	.000	.486	-.271	.486	-.275	-.207
563297	21610	OP	.826	.103	.046	.023	.826	.002	.000	.362	-.242	-.213	-.080	.362
563299	21610	OP	.773	.773	.018	.097	.110	.002	.000	.367	.367	-.197	-.201	-.196
563359	21610	OP	.773	.090	.095	.038	.773	.004	.000	.439	-.249	-.220	-.191	.439
563360	21610	OP	.754	.754	.041	.017	.184	.003	.000	.414	.414	-.241	-.167	-.251
563361	21610	OP	.779	.029	.027	.779	.161	.003	.000	.301	-.102	-.144	.301	-.199
563362	21610	OP	.843	.843	.082	.019	.052	.003	.000	.320	.320	-.113	-.136	-.249
563370	21610	OP	.696	.049	.696	.101	.150	.004	.000	.231	-.143	.231	-.094	-.100
563374	21610	OP	.530	.075	.217	.174	.530	.003	.000	.356	-.200	-.116	-.173	.356
563377	21610	OP	.721	.063	.078	.721	.135	.003	.000	.370	-.167	-.191	.370	-.184
565123	21610	OP	.478	.151	.254	.478	.115	.002	.000	.231	-.019	-.165	.231	-.090
565174	21610	OP	.853	.045	.064	.853	.037	.001	.000	.388	-.210	-.195	.388	-.225
602361	21610	OP	.693	.119	.693	.044	.140	.003	.000	.359	-.171	.359	-.225	-.154
602363	21610	OP	.795	.023	.795	.164	.015	.003	.000	.230	-.183	.230	-.096	-.158
602367	21610	OP	.657	.222	.657	.044	.073	.003	.000	.357	-.145	.357	-.205	-.217
602369	21610	OP	.739	.046	.031	.739	.180	.003	.000	.348	-.194	-.240	.348	-.154
602370	21610	OP	.619	.619	.057	.177	.143	.003	.000	.363	.363	-.181	-.172	-.165
602375	21610	OP	.510	.025	.510	.430	.032	.003	.000	.227	-.204	.227	-.066	-.213
602393	21610	OP	.693	.252	.693	.023	.030	.002	.000	.191	-.072	.191	-.118	-.186
602395	21610	OP	.549	.276	.549	.079	.094	.002	.000	.260	-.106	.260	-.050	-.214
602396	21610	OP	.781	.035	.161	.781	.021	.002	.000	.237	-.200	-.077	.237	-.186
602399	21610	OP	.870	.058	.041	.029	.870	.002	.000	.293	-.181	-.162	-.113	.293

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
602400	21610	OP	.546	.175	.111	.166	.546	.002	.000	.330	-.150	-.137	-.158	.330
602401	21610	OP	.566	.094	.143	.566	.195	.002	.000	.308	-.168	-.115	.308	-.145
602407	21610	OP	.293	.480	.293	.170	.055	.002	.000	.266	.064	.266	-.239	-.250
602408	21610	OP	.348	.159	.082	.348	.408	.002	.000	.302	-.137	-.171	.302	-.081
602429	21610	OP	.822	.822	.051	.080	.043	.003	.000	.276	.276	-.207	-.046	-.177
602432	21610	OP	.677	.157	.094	.069	.677	.003	.000	.425	-.204	-.223	-.192	.425
602434	21610	OP	.556	.556	.154	.021	.265	.004	.000	.108	.108	-.209	-.195	.138
602435	21610	OP	.723	.110	.043	.120	.723	.003	.000	.291	-.167	-.174	-.097	.291
602436	21610	OP	.561	.150	.161	.561	.124	.003	.000	.401	-.177	-.129	.401	-.234
602442	21610	OP	.601	.601	.031	.054	.310	.004	.000	.350	.350	-.185	-.261	-.149
602443	21610	OP	.725	.056	.725	.067	.149	.004	.000	.439	-.211	.439	-.263	-.197
602446	21610	OP	.678	.136	.110	.073	.678	.002	.000	.246	-.226	-.015	-.092	.246
602447	21610	OP	.610	.610	.231	.121	.035	.003	.000	.435	.435	-.204	-.254	-.184
602449	21610	OP	.591	.136	.099	.171	.591	.003	.000	.386	-.156	-.153	-.216	.386
602450	21610	OP	.819	.060	.819	.059	.059	.003	.000	.465	-.238	.465	-.260	-.214
602455	21610	OP	.715	.715	.145	.080	.058	.002	.000	.329	.329	-.073	-.177	-.283
602456	21610	OP	.732	.040	.180	.045	.732	.003	.000	.383	-.204	-.185	-.238	.383
602460	21610	OP	.599	.306	.037	.599	.055	.003	.000	.337	-.191	-.177	.337	-.142
633012	7655	FT	.572	.161	.572	.077	.185	.006	.001	.368	-.126	.368	-.175	-.184
633013	7655	FT	.524	.153	.207	.524	.110	.005	.000	.307	-.184	-.100	.307	-.099
633014	7655	FT	.660	.660	.257	.054	.022	.005	.001	.361	.361	-.169	-.268	-.136
633016	7655	FT	.387	.136	.018	.453	.387	.006	.000	.213	-.215	-.209	.033	.213
633017	7655	FT	.667	.117	.667	.184	.026	.006	.001	.446	-.155	.446	-.284	-.211
633019	7655	FT	.867	.867	.030	.046	.050	.007	.001	.383	.383	-.187	-.149	-.221
633021	7655	FT	.328	.128	.289	.328	.251	.005	.000	.288	-.116	-.181	.288	-.001
633024	7655	FT	.773	.076	.084	.060	.773	.006	.000	.398	-.214	-.141	-.232	.398
633025	7655	FT	.466	.177	.090	.261	.466	.005	.001	.239	-.127	-.182	-.004	.239
633026	7655	FT	.708	.119	.067	.099	.708	.007	.000	.417	-.135	-.248	-.217	.417
633033	3525	FT	.862	.040	.075	.022	.862	.000	.000	.335	-.223	-.198	-.127	.335
633035	3525	FT	.931	.030	.931	.028	.011	.000	.000	.396	-.245	.396	-.257	-.149
633039	3525	FT	.721	.721	.048	.037	.193	.001	.000	.393	.393	-.195	-.164	-.258
633043	3525	FT	.812	.812	.057	.071	.060	.001	.000	.486	.486	-.245	-.229	-.307
633044	3525	FT	.767	.065	.084	.767	.084	.000	.000	.344	-.296	-.149	.344	-.109

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633046	3525	FT	.692	.125	.692	.123	.061	.000	.000	.292	-.083	.292	-.148	-.242
633047	3525	FT	.639	.639	.067	.103	.190	.000	.000	.365	.365	-.292	-.042	-.226
633048	3525	FT	.536	.102	.536	.237	.125	.000	.000	.327	-.202	.327	-.131	-.138
633049	3525	FT	.612	.068	.012	.612	.308	.001	.000	.267	-.166	-.183	.267	-.145
633053	3525	FT	.866	.043	.037	.054	.866	.000	.000	.411	-.202	-.201	-.268	.411
633054	3441	FT	.482	.149	.198	.482	.171	.000	.000	.229	-.158	-.106	.229	-.043
633056	3441	FT	.792	.073	.792	.090	.046	.000	.000	.402	-.253	.402	-.216	-.171
633059	3441	FT	.663	.122	.128	.086	.663	.001	.000	.195	-.105	-.055	-.139	.195
633060	3441	FT	.862	.862	.060	.019	.059	.000	.000	.415	.415	-.178	-.168	-.331
633062	3441	FT	.908	.908	.051	.024	.017	.000	.000	.355	.355	-.214	-.224	-.164
633063	3441	FT	.745	.085	.028	.745	.142	.001	.000	.335	-.296	-.198	.335	-.090
633066	3441	FT	.355	.178	.355	.361	.106	.000	.000	.137	-.056	.137	.023	-.179
633068	3441	FT	.392	.176	.311	.121	.392	.000	.000	.148	-.038	-.019	-.150	.148
633072	3441	FT	.866	.089	.006	.866	.039	.000	.000	.385	-.273	-.115	.385	-.231
633073	3441	FT	.550	.209	.139	.102	.550	.000	.000	.412	-.235	-.186	-.150	.412
633074	3463	FT	.777	.121	.048	.053	.777	.001	.000	.394	-.220	-.224	-.189	.394
633075	3463	FT	.561	.023	.561	.114	.301	.001	.000	.277	-.138	.277	-.139	-.154
633077	3463	FT	.679	.060	.679	.206	.054	.001	.000	.367	-.176	.367	-.178	-.248
633081	3463	FT	.674	.674	.051	.207	.067	.001	.000	.304	.304	-.150	-.150	-.186
633085	3463	FT	.857	.857	.056	.031	.055	.001	.000	.369	.369	-.239	-.189	-.172
633086	3463	FT	.754	.116	.036	.093	.754	.001	.000	.412	-.241	-.211	-.203	.412
633087	3463	FT	.609	.031	.200	.159	.609	.001	.000	.304	-.202	-.126	-.167	.304
633088	3463	FT	.602	.161	.602	.029	.208	.001	.000	.312	-.057	.312	-.196	-.240
633090	3463	FT	.682	.152	.078	.682	.087	.001	.000	.166	.078	-.122	.166	-.250
633093	3463	FT	.530	.259	.086	.530	.124	.001	.000	.293	-.091	-.267	.293	-.090
633098	3526	FT	.844	.095	.844	.037	.024	.001	.000	.303	-.213	.303	-.140	-.134
633099	3526	FT	.549	.104	.549	.220	.128	.000	.000	.259	-.248	.259	-.107	-.026
633101	3526	FT	.854	.854	.046	.080	.020	.000	.000	.341	.341	-.233	-.171	-.177
633102	3526	FT	.877	.008	.098	.877	.017	.000	.000	.348	-.161	-.247	.348	-.203
633105	3526	FT	.583	.332	.006	.078	.583	.001	.000	.236	-.128	-.120	-.171	.236
633106	3526	FT	.747	.113	.071	.747	.069	.001	.000	.383	-.218	-.233	.383	-.147
633107	3526	FT	.818	.818	.031	.087	.064	.000	.000	.310	.310	-.086	-.216	-.177
633111	3526	FT	.525	.121	.265	.090	.525	.000	.000	.281	-.129	-.087	-.209	.281

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633114	3526	FT	.483	.150	.334	.483	.032	.001	.000	.301	-.256	-.047	.301	-.204
633118	3526	FT	.816	.126	.816	.028	.031	.000	.000	.347	-.191	.347	-.208	-.211

Grade 5

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
563480	21401	OP	.749	.749	.058	.164	.025	.003	.000	.415	.415	-.207	-.251	-.182
563501	21401	OP	.712	.254	.016	.712	.015	.003	.000	.322	-.198	-.218	.322	-.180
563503	21401	OP	.585	.040	.585	.039	.331	.003	.000	.378	-.229	.378	-.215	-.189
563563	21401	OP	.716	.028	.716	.229	.025	.002	.000	.319	-.233	.319	-.172	-.171
563566	21401	OP	.816	.816	.051	.067	.063	.002	.001	.503	.503	-.223	-.260	-.304
563568	21401	OP	.838	.013	.128	.838	.020	.002	.000	.376	-.160	-.273	.376	-.176
563569	21401	OP	.755	.163	.067	.755	.013	.002	.000	.176	-.059	-.137	.176	-.114
563571	21401	OP	.634	.100	.634	.167	.097	.002	.000	.309	-.153	.309	-.187	-.091
563573	21401	OP	.721	.170	.721	.063	.044	.002	.000	.365	-.231	.365	-.148	-.169
563574	21401	OP	.582	.582	.105	.121	.191	.001	.000	.357	.357	-.226	-.182	-.110
563575	21401	OP	.403	.403	.173	.160	.263	.002	.000	.356	.356	-.221	-.081	-.127
563577	21401	OP	.754	.107	.092	.044	.754	.002	.000	.406	-.216	-.185	-.238	.406
563632	21401	OP	.871	.871	.028	.031	.066	.003	.000	.376	.376	-.213	-.199	-.185
563636	21401	OP	.629	.107	.164	.096	.629	.004	.000	.335	-.179	-.114	-.183	.335
563641	21401	OP	.810	.810	.050	.111	.025	.003	.000	.443	.443	-.196	-.271	-.224
563647	21401	OP	.599	.044	.205	.599	.149	.003	.000	.330	-.238	-.050	.330	-.230
565199	21401	OP	.903	.030	.052	.903	.012	.003	.000	.394	-.218	-.255	.394	-.129
565201	21401	OP	.798	.034	.113	.051	.798	.003	.000	.496	-.216	-.292	-.260	.496
565341	21401	OP	.505	.087	.244	.505	.161	.004	.000	.328	-.232	-.088	.328	-.137
602462	21401	OP	.475	.475	.164	.178	.179	.003	.000	.275	.275	-.210	-.122	-.006
602464	21401	OP	.416	.416	.359	.042	.180	.003	.000	.345	.345	-.168	-.230	-.087
602465	21401	OP	.536	.121	.171	.169	.536	.003	.000	.357	-.226	-.083	-.167	.357
602467	21401	OP	.482	.322	.148	.482	.045	.003	.000	.263	-.054	-.170	.263	-.172
602468	21401	OP	.661	.139	.141	.661	.056	.003	.000	.374	-.200	-.190	.374	-.136
602469	21401	OP	.719	.102	.135	.040	.719	.003	.000	.372	-.206	-.184	-.163	.372
602470	21401	OP	.663	.663	.207	.050	.077	.003	.000	.334	.334	-.144	-.170	-.195

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
602473	21401	OP	.784	.088	.784	.068	.056	.003	.000	.362	-.161	.362	-.190	-.194
602474	21401	OP	.624	.120	.174	.624	.079	.004	.000	.414	-.222	-.204	.414	-.150
602475	21401	OP	.760	.082	.116	.760	.039	.003	.000	.435	-.216	-.268	.435	-.155
602476	21401	OP	.792	.082	.058	.065	.792	.003	.000	.502	-.221	-.258	-.293	.502
602477	21401	OP	.534	.165	.534	.125	.172	.004	.000	.371	-.145	.371	-.180	-.161
602478	21401	OP	.665	.064	.049	.218	.665	.003	.000	.482	-.282	-.262	-.221	.482
602479	21401	OP	.676	.118	.676	.035	.168	.003	.000	.313	-.170	.313	-.239	-.100
602481	21401	OP	.787	.787	.096	.068	.046	.003	.000	.526	.526	-.240	-.350	-.221
602483	21401	OP	.753	.079	.070	.753	.094	.003	.000	.486	-.221	-.241	.486	-.267
602495	21401	OP	.599	.117	.113	.599	.169	.002	.000	.306	-.192	-.212	.306	-.039
602496	21401	OP	.789	.113	.050	.046	.789	.002	.000	.441	-.259	-.235	-.191	.441
602497	21401	OP	.848	.848	.086	.044	.020	.002	.000	.413	.413	-.247	-.222	-.194
602498	21401	OP	.423	.126	.161	.423	.288	.002	.000	.337	-.148	-.132	.337	-.138
602499	21401	OP	.419	.419	.086	.343	.150	.003	.000	.139	.139	-.192	.106	-.162
602500	21401	OP	.644	.644	.035	.128	.191	.002	.000	.327	.327	-.188	-.173	-.145
602501	21401	OP	.577	.196	.143	.577	.081	.002	.000	.367	-.157	-.110	.367	-.268
602507	21401	OP	.828	.090	.828	.050	.029	.002	.000	.365	-.155	.365	-.271	-.161
602509	21401	OP	.737	.055	.155	.737	.050	.003	.000	.379	-.143	-.219	.379	-.218
602510	21401	OP	.518	.165	.151	.163	.518	.002	.000	.196	-.121	-.033	-.092	.196
602511	21401	OP	.811	.044	.811	.101	.041	.002	.000	.419	-.248	.419	-.215	-.207
602512	21401	OP	.894	.894	.036	.041	.027	.002	.000	.406	.406	-.218	-.266	-.153
602513	21401	OP	.674	.153	.097	.674	.073	.002	.000	.405	-.198	-.194	.405	-.206
633217	3445	FT	.746	.051	.084	.118	.746	.001	.000	.388	-.134	-.230	-.230	.388
633218	3445	FT	.415	.415	.290	.073	.221	.000	.000	.208	.208	-.042	-.189	-.080
633219	3445	FT	.338	.028	.338	.370	.264	.001	.000	.249	-.202	.249	-.051	-.133
633220	3445	FT	.591	.591	.302	.057	.050	.000	.000	.155	.155	-.071	-.174	-.009
633222	3445	FT	.954	.016	.012	.954	.017	.000	.000	.325	-.171	-.196	.325	-.183
633223	3445	FT	.491	.102	.132	.491	.273	.000	.000	.226	-.110	-.237	.226	.004
633225	3445	FT	.943	.028	.943	.014	.015	.000	.000	.328	-.210	.328	-.138	-.200
633226	3445	FT	.788	.036	.105	.071	.788	.000	.000	.445	-.207	-.292	-.206	.445
633227	3445	FT	.824	.824	.111	.022	.042	.000	.000	.322	.322	-.130	-.194	-.260
633228	3445	FT	.276	.522	.091	.111	.276	.000	.000	.008	.054	-.097	-.005	.008
633233	3451	FT	.527	.186	.182	.105	.527	.001	.000	.220	-.144	-.054	-.106	.220

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633234	3451	FT	.521	.058	.346	.521	.074	.001	.000	.089	-.220	.084	.089	-.123
633235	3451	FT	.423	.121	.423	.097	.358	.001	.000	.280	-.302	.280	-.150	.014
633236	3451	FT	.296	.296	.322	.238	.143	.001	.000	.103	.103	.040	-.054	-.119
633237	3451	FT	.253	.261	.360	.125	.253	.001	.000	.155	-.007	-.027	-.151	.155
633238	3451	FT	.714	.714	.166	.065	.054	.001	.000	.283	.283	-.156	-.175	-.113
633240	3451	FT	.604	.297	.006	.604	.092	.001	.000	.394	-.311	-.141	.394	-.136
633241	3451	FT	.352	.211	.255	.180	.352	.001	.000	.235	-.090	-.084	-.097	.235
633243	3451	FT	.612	.130	.612	.056	.201	.001	.000	.283	-.083	.283	-.195	-.160
633244	3451	FT	.841	.841	.035	.105	.019	.001	.000	.460	.460	-.250	-.310	-.195
633267	3492	FT	.784	.078	.784	.038	.100	.000	.000	.446	-.237	.446	-.210	-.266
633268	3492	FT	.407	.424	.407	.117	.052	.000	.000	.178	-.087	.178	-.129	-.014
633269	3492	FT	.810	.075	.049	.810	.066	.000	.000	.419	-.197	-.242	.419	-.243
633270	3492	FT	.649	.124	.649	.046	.181	.000	.000	.454	-.180	.454	-.255	-.270
633271	3492	FT	.296	.296	.530	.125	.048	.000	.000	.285	.285	-.028	-.249	-.159
633272	3492	FT	.728	.728	.057	.122	.094	.000	.000	.377	.377	-.223	-.108	-.279
633273	3492	FT	.319	.117	.367	.197	.319	.000	.000	.264	-.169	-.149	.008	.264
633274	3492	FT	.667	.124	.048	.667	.160	.000	.000	.400	-.210	-.201	.400	-.207
633275	3492	FT	.500	.245	.087	.168	.500	.000	.000	.165	-.021	-.168	-.070	.165
633278	3492	FT	.758	.758	.155	.062	.025	.000	.000	.357	.357	-.251	-.144	-.175
633279	7479	FT	.353	.079	.219	.343	.353	.006	.000	.227	-.219	-.113	.029	.227
633281	7479	FT	.530	.530	.170	.129	.165	.006	.001	.396	.396	-.259	-.190	-.053
633282	7479	FT	.802	.049	.087	.055	.802	.006	.000	.474	-.249	-.223	-.238	.474
633283	7479	FT	.757	.056	.125	.757	.055	.006	.000	.509	-.273	-.262	.509	-.226
633284	7479	FT	.592	.223	.592	.103	.075	.007	.001	.338	-.144	.338	-.174	-.133
633285	7479	FT	.283	.271	.283	.304	.135	.007	.001	.099	-.003	.099	.059	-.156
633287	7479	FT	.694	.191	.054	.694	.055	.006	.000	.466	-.215	-.259	.466	-.246
633290	7479	FT	.312	.312	.260	.152	.269	.006	.000	-.045	-.045	.057	-.064	.081
633291	7479	FT	.816	.041	.816	.075	.061	.006	.001	.421	-.217	.421	-.285	-.113
633293	7479	FT	.641	.062	.116	.641	.176	.006	.000	.464	-.235	-.236	.464	-.196
633294	3534	FT	.915	.915	.034	.027	.024	.001	.000	.400	.400	-.232	-.221	-.214
633296	3534	FT	.641	.011	.641	.082	.265	.001	.000	.155	-.137	.155	-.201	-.008
633297	3534	FT	.656	.093	.144	.107	.656	.001	.000	.317	-.155	-.206	-.104	.317
633298	3534	FT	.910	.910	.027	.012	.051	.001	.000	.371	.371	-.229	-.188	-.217

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633299	3534	FT	.552	.091	.255	.101	.552	.001	.000	.341	-.144	-.153	-.199	.341
633301	3534	FT	.280	.280	.170	.397	.153	.001	.000	.247	.247	-.104	-.157	.017
633302	3534	FT	.852	.048	.051	.852	.048	.001	.000	.389	-.201	-.213	.389	-.219
633303	3534	FT	.787	.053	.787	.065	.094	.001	.000	.484	-.193	.484	-.266	-.300
633305	3534	FT	.477	.230	.138	.477	.154	.001	.000	.237	-.040	-.093	.237	-.188
633306	3534	FT	.392	.061	.488	.059	.392	.001	.000	.083	-.154	.131	-.285	.083

Grade 6

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
563804	20874	OP	.816	.050	.816	.040	.090	.004	.000	.437	-.206	.437	-.196	-.257
563809	20874	OP	.811	.032	.020	.133	.811	.003	.000	.432	-.198	-.150	-.298	.432
563812	20874	OP	.762	.139	.762	.070	.026	.004	.000	.287	-.127	.287	-.122	-.219
563815	20874	OP	.839	.839	.059	.085	.014	.003	.000	.461	.461	-.242	-.286	-.177
563818	20874	OP	.797	.099	.068	.032	.797	.003	.000	.363	-.133	-.229	-.206	.363
563821	20874	OP	.702	.061	.150	.084	.702	.003	.000	.320	-.203	-.126	-.147	.320
563827	20874	OP	.685	.685	.107	.045	.162	.002	.000	.371	.371	-.180	-.177	-.203
563828	20874	OP	.705	.047	.705	.194	.052	.002	.000	.320	-.177	.320	-.155	-.188
563832	20874	OP	.810	.038	.016	.134	.810	.002	.000	.359	-.273	-.233	-.156	.359
563834	20874	OP	.836	.836	.076	.069	.018	.002	.000	.463	.463	-.243	-.315	-.165
563838	20874	OP	.761	.107	.027	.761	.103	.002	.000	.281	-.154	-.104	.281	-.161
563868	20874	OP	.626	.186	.626	.111	.076	.001	.000	.316	-.133	.316	-.175	-.157
563869	20874	OP	.541	.146	.112	.541	.199	.001	.000	.357	-.279	-.030	.357	-.165
563874	20874	OP	.637	.307	.637	.050	.005	.001	.000	.300	-.224	.300	-.159	-.052
563878	20874	OP	.709	.709	.055	.195	.039	.002	.000	.393	.393	-.241	-.191	-.222
563879	20874	OP	.750	.056	.137	.055	.750	.002	.000	.442	-.206	-.263	-.211	.442
565900	20874	OP	.670	.157	.670	.018	.153	.002	.000	.296	-.103	.296	-.140	-.214
565903	20874	OP	.684	.081	.048	.684	.185	.001	.000	.362	-.248	-.212	.362	-.128
602529	20874	OP	.913	.029	.027	.027	.913	.004	.000	.396	-.150	-.230	-.228	.396
602531	20874	OP	.911	.017	.911	.028	.039	.004	.000	.318	-.206	.318	-.140	-.144
602532	20874	OP	.611	.132	.126	.611	.128	.004	.000	.361	-.133	-.219	.361	-.137
602533	20874	OP	.715	.042	.144	.095	.715	.004	.000	.549	-.237	-.306	-.273	.549

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
602534	20874	OP	.556	.259	.556	.092	.090	.004	.000	.329	-.047	.329	-.255	-.199
602535	20874	OP	.747	.747	.060	.072	.117	.004	.000	.452	.452	-.221	-.251	-.207
602536	20874	OP	.888	.056	.029	.888	.023	.004	.000	.439	-.256	-.215	.439	-.208
602537	20874	OP	.362	.362	.148	.282	.204	.004	.000	.245	.245	-.110	-.043	-.117
602539	20874	OP	.900	.046	.900	.021	.029	.004	.000	.363	-.177	.363	-.199	-.183
602543	20874	OP	.774	.123	.073	.774	.027	.004	.000	.480	-.196	-.339	.480	-.225
602545	20874	OP	.308	.363	.187	.138	.308	.003	.000	.282	-.053	-.058	-.205	.282
602546	20874	OP	.623	.029	.623	.178	.167	.003	.000	.382	-.172	.382	-.145	-.243
602548	20874	OP	.761	.036	.761	.016	.184	.003	.000	.304	-.229	.304	-.187	-.136
602549	20874	OP	.711	.022	.231	.711	.033	.004	.000	.386	-.208	-.213	.386	-.239
602550	20874	OP	.768	.071	.768	.125	.034	.003	.000	.415	-.235	.415	-.221	-.174
602552	20874	OP	.731	.149	.063	.731	.054	.003	.000	.399	-.258	-.166	.399	-.151
602553	20874	OP	.693	.062	.693	.054	.188	.003	.000	.304	-.252	.304	-.168	-.078
602554	20874	OP	.882	.043	.882	.029	.045	.002	.000	.431	-.236	.431	-.198	-.259
602557	20874	OP	.524	.097	.181	.524	.197	.002	.000	.197	-.156	-.097	.197	-.025
602558	20874	OP	.554	.039	.333	.554	.072	.002	.000	.185	-.224	.004	.185	-.174
602559	20874	OP	.395	.294	.064	.395	.245	.002	.000	.234	-.002	-.090	.234	-.198
602561	20874	OP	.435	.082	.110	.372	.435	.002	.000	.149	-.221	-.151	.082	.149
602562	20874	OP	.595	.595	.082	.178	.141	.003	.000	.338	.338	-.196	-.173	-.097
602563	20874	OP	.596	.166	.054	.180	.596	.003	.000	.294	-.124	-.199	-.106	.294
602564	20874	OP	.656	.656	.031	.194	.116	.003	.000	.379	.379	-.214	-.127	-.252
602565	20874	OP	.869	.030	.869	.045	.053	.003	.000	.453	-.167	.453	-.232	-.288
602568	20874	OP	.648	.648	.160	.040	.150	.003	.000	.344	.344	-.131	-.222	-.172
602569	20874	OP	.613	.088	.188	.613	.108	.004	.000	.394	-.189	-.188	.394	-.169
602570	20874	OP	.804	.018	.047	.804	.127	.004	.000	.463	-.184	-.224	.463	-.299
602573	20874	OP	.480	.153	.185	.480	.178	.004	.000	.329	-.140	-.098	.329	-.166
632728	7698	FT	.473	.473	.263	.186	.072	.005	.000	.153	.153	-.047	-.027	-.108
632729	7698	FT	.770	.147	.042	.034	.770	.007	.000	.353	-.127	-.200	-.238	.353
632730	7698	FT	.906	.906	.019	.023	.045	.007	.000	.369	.369	-.214	-.202	-.134
632731	7698	FT	.697	.031	.697	.109	.158	.005	.000	.459	-.190	.459	-.180	-.295
632732	7698	FT	.582	.029	.582	.373	.010	.005	.000	.140	-.175	.140	-.020	-.154
632734	7698	FT	.735	.061	.155	.735	.044	.005	.000	.503	-.258	-.322	.503	-.133
632737	7698	FT	.727	.129	.046	.092	.727	.005	.000	.481	-.223	-.208	-.273	.481

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
632738	7698	FT	.284	.108	.549	.284	.054	.005	.000	.235	-.209	.019	.235	-.158
632740	7698	FT	.807	.085	.026	.076	.807	.005	.000	.448	-.199	-.220	-.263	.448
632741	7698	FT	.850	.850	.095	.038	.012	.005	.001	.346	.346	-.182	-.189	-.177
632742	3322	FT	.750	.117	.042	.089	.750	.001	.000	.265	-.200	-.100	-.103	.265
632744	3322	FT	.313	.310	.159	.313	.217	.000	.000	.169	-.062	.009	.169	-.127
632745	3322	FT	.763	.140	.065	.763	.031	.001	.000	.408	-.266	-.184	.408	-.201
632746	3322	FT	.841	.029	.841	.043	.086	.000	.000	.459	-.230	.459	-.264	-.266
632747	3322	FT	.516	.516	.405	.048	.030	.000	.000	.468	.468	-.330	-.168	-.204
632750	3322	FT	.695	.695	.095	.086	.124	.000	.000	.321	.321	-.146	-.121	-.214
632752	3322	FT	.481	.216	.250	.481	.052	.001	.000	.271	-.031	-.203	.271	-.153
632753	3322	FT	.855	.034	.039	.072	.855	.000	.000	.416	-.237	-.270	-.196	.416
632754	3322	FT	.793	.082	.793	.096	.029	.000	.000	.495	-.260	.495	-.311	-.221
632756	3322	FT	.861	.046	.861	.038	.055	.000	.000	.432	-.245	.432	-.189	-.270
632758	3197	FT	.539	.298	.539	.038	.125	.000	.000	.334	-.274	.334	-.170	-.026
632759	3197	FT	.507	.507	.151	.159	.182	.001	.000	.259	.259	-.119	-.113	-.117
632761	3197	FT	.501	.501	.369	.074	.055	.000	.000	.179	.179	.029	-.222	-.199
632763	3197	FT	.616	.038	.281	.616	.065	.000	.000	.365	-.043	-.229	.365	-.267
632764	3197	FT	.741	.048	.741	.188	.023	.000	.000	.235	-.174	.235	-.100	-.177
632765	3197	FT	.595	.264	.085	.056	.595	.000	.000	.398	-.235	-.122	-.252	.398
632767	3197	FT	.857	.041	.027	.857	.075	.000	.000	.435	-.258	-.220	.435	-.249
632768	3197	FT	.553	.061	.553	.025	.360	.000	.000	.389	-.254	.389	-.200	-.210
632770	3197	FT	.609	.017	.357	.017	.609	.001	.000	.150	-.181	-.057	-.170	.150
632771	3197	FT	.718	.139	.042	.718	.102	.000	.000	.394	-.154	-.191	.394	-.283
632772	3318	FT	.404	.207	.404	.254	.135	.000	.000	.265	-.176	.265	-.004	-.166
632773	3318	FT	.793	.079	.793	.021	.107	.000	.000	.397	-.261	.397	-.218	-.192
632774	3318	FT	.695	.125	.131	.695	.050	.000	.000	.404	-.177	-.288	.404	-.139
632775	3318	FT	.691	.184	.691	.037	.088	.000	.000	.381	-.270	.381	-.184	-.129
632776	3318	FT	.854	.854	.014	.024	.108	.000	.000	.317	.317	-.219	-.197	-.179
632777	3318	FT	.822	.061	.077	.822	.039	.000	.000	.441	-.269	-.257	.441	-.184
632778	3318	FT	.526	.399	.053	.022	.526	.000	.000	.358	-.196	-.258	-.172	.358
632780	3318	FT	.522	.159	.251	.522	.068	.000	.000	.282	-.091	-.153	.282	-.164
632781	3318	FT	.813	.813	.115	.051	.021	.000	.000	.179	.179	-.141	-.058	-.083
632782	3318	FT	.432	.432	.238	.230	.099	.000	.000	.190	.190	-.024	-.101	-.138

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
632784	3339	FT	.838	.057	.040	.064	.838	.001	.000	.492	-.279	-.240	-.280	.492
632785	3339	FT	.486	.206	.486	.141	.166	.001	.000	.379	-.212	.379	-.193	-.096
632786	3339	FT	.889	.037	.048	.026	.889	.001	.000	.445	-.215	-.272	-.254	.445
632787	3339	FT	.541	.123	.253	.541	.082	.001	.000	.254	-.110	-.067	.254	-.220
632788	3339	FT	.348	.246	.268	.348	.137	.001	.000	.237	-.123	-.045	.237	-.115
632789	3339	FT	.776	.776	.032	.101	.090	.001	.000	.499	.499	-.189	-.317	-.274
632791	3339	FT	.822	.072	.022	.822	.084	.001	.000	.369	-.222	-.212	.369	-.188
632792	3339	FT	.752	.141	.752	.049	.057	.001	.000	.499	-.289	.499	-.258	-.251
632796	3339	FT	.444	.444	.231	.160	.164	.001	.000	.309	.309	-.024	-.138	-.249
632797	3339	FT	.880	.024	.880	.070	.025	.001	.000	.466	-.183	.466	-.357	-.200

Grade 7

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
563893	20749	OP	.574	.574	.047	.284	.093	.003	.000	.348	.348	-.235	-.107	-.231
563896	20749	OP	.745	.101	.062	.089	.745	.003	.000	.444	-.183	-.270	-.228	.444
563897	20749	OP	.514	.071	.514	.253	.159	.003	.000	.348	-.081	.348	-.198	-.161
563900	20749	OP	.834	.035	.834	.011	.118	.003	.000	.388	-.245	.388	-.176	-.228
563904	20749	OP	.733	.733	.052	.057	.156	.002	.000	.407	.407	-.238	-.167	-.226
563907	20749	OP	.861	.070	.037	.861	.030	.002	.000	.415	-.240	-.234	.415	-.185
563909	20749	OP	.616	.269	.057	.056	.616	.002	.000	.316	-.160	-.190	-.139	.316
563953	20749	OP	.792	.792	.023	.095	.086	.005	.000	.379	.379	-.148	-.248	-.160
563954	20749	OP	.478	.369	.478	.101	.046	.005	.000	.366	-.086	.366	-.245	-.248
563957	20749	OP	.640	.151	.095	.109	.640	.005	.000	.342	-.141	-.205	-.125	.342
563959	20749	OP	.561	.173	.155	.561	.106	.005	.000	.445	-.162	-.204	.445	-.232
563960	20749	OP	.826	.826	.068	.074	.027	.005	.000	.400	.400	-.253	-.127	-.250
563964	20749	OP	.703	.703	.168	.083	.041	.005	.000	.387	.387	-.190	-.213	-.166
564023	20749	OP	.651	.651	.197	.048	.099	.005	.000	.362	.362	-.172	-.152	-.195
564024	20749	OP	.746	.126	.746	.088	.035	.005	.000	.444	-.186	.444	-.263	-.235
564025	20749	OP	.569	.173	.076	.176	.569	.005	.000	.347	-.065	-.121	-.264	.347
565519	20749	OP	.706	.184	.077	.706	.029	.004	.000	.293	-.152	-.121	.293	-.175
602574	20749	OP	.596	.207	.095	.596	.098	.005	.000	.404	-.260	-.196	.404	-.071

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
602575	20749	OP	.516	.099	.333	.047	.516	.005	.000	.328	-.164	-.098	-.254	.328
602578	20749	OP	.812	.049	.812	.030	.104	.005	.000	.457	-.271	.457	-.224	-.219
602580	20749	OP	.814	.814	.053	.040	.089	.005	.000	.330	.330	-.143	-.142	-.191
602582	20749	OP	.887	.037	.032	.039	.887	.005	.000	.453	-.215	-.235	-.241	.453
602583	20749	OP	.404	.404	.225	.121	.244	.005	.000	.257	.257	-.103	-.278	.052
602587	20749	OP	.661	.072	.110	.154	.661	.003	.000	.452	-.280	-.226	-.171	.452
602588	20749	OP	.538	.102	.538	.068	.288	.003	.000	.235	-.145	.235	-.164	-.051
602589	20749	OP	.725	.052	.134	.086	.725	.003	.000	.363	-.210	-.108	-.248	.363
602590	20749	OP	.840	.840	.065	.042	.050	.003	.000	.387	.387	-.218	-.245	-.136
602591	20749	OP	.505	.193	.505	.141	.159	.003	.000	.252	-.165	.252	-.105	-.043
602592	20749	OP	.542	.208	.182	.066	.542	.003	.000	.270	-.241	.025	-.156	.270
602593	20749	OP	.712	.125	.712	.123	.036	.003	.000	.393	-.304	.393	-.074	-.235
602597	20749	OP	.793	.018	.116	.793	.070	.003	.000	.467	-.172	-.325	.467	-.210
602617	20749	OP	.521	.090	.220	.166	.521	.003	.000	.407	-.209	-.200	-.140	.407
602618	20749	OP	.813	.813	.086	.025	.073	.003	.000	.443	.443	-.247	-.256	-.213
602619	20749	OP	.675	.057	.043	.222	.675	.003	.000	.518	-.271	-.299	-.264	.518
602620	20749	OP	.762	.040	.174	.762	.021	.003	.000	.435	-.216	-.276	.435	-.202
602622	20749	OP	.855	.069	.036	.037	.855	.004	.000	.449	-.183	-.268	-.279	.449
602623	20749	OP	.796	.097	.021	.083	.796	.003	.000	.349	-.215	-.238	-.122	.349
602624	20749	OP	.752	.141	.051	.752	.050	.005	.000	.451	-.242	-.268	.451	-.165
602625	20749	OP	.694	.139	.694	.070	.091	.005	.000	.294	-.079	.294	-.155	-.185
602626	20749	OP	.474	.169	.273	.079	.474	.005	.000	.437	-.013	-.398	-.077	.437
602630	20749	OP	.605	.153	.187	.605	.049	.005	.000	.360	-.177	-.116	.360	-.240
602631	20749	OP	.854	.044	.035	.061	.854	.005	.000	.518	-.259	-.262	-.277	.518
602632	20749	OP	.816	.050	.059	.070	.816	.005	.000	.556	-.271	-.261	-.312	.556
602633	20749	OP	.441	.441	.093	.203	.259	.005	.000	.391	.391	-.191	-.260	-.043
602634	20749	OP	.641	.123	.641	.148	.082	.005	.000	.353	-.143	.353	-.245	-.074
602635	20749	OP	.778	.778	.051	.029	.136	.005	.000	.459	.459	-.203	-.213	-.276
602636	20749	OP	.739	.119	.019	.118	.739	.005	.000	.316	-.228	-.216	-.063	.316
602640	20749	OP	.627	.054	.627	.162	.152	.005	.000	.322	-.210	.322	-.078	-.181
633138	3308	FT	.048	.029	.736	.186	.048	.002	.000	-.023	-.259	.265	-.173	-.023
633139	3308	FT	.621	.127	.621	.029	.222	.001	.000	.353	-.158	.353	-.191	-.204
633140	3308	FT	.399	.399	.291	.213	.095	.001	.000	.142	.142	-.051	-.056	-.073

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633141	3308	FT	.555	.226	.555	.120	.098	.001	.000	.167	-.005	.167	-.054	-.207
633142	3308	FT	.893	.018	.028	.893	.060	.001	.000	.417	-.197	-.219	.417	-.273
633144	3308	FT	.408	.408	.266	.256	.068	.002	.000	.247	.247	-.146	-.004	-.213
633145	3308	FT	.785	.020	.090	.103	.785	.001	.000	.380	-.206	-.097	-.319	.380
633149	3308	FT	.430	.058	.430	.258	.253	.002	.000	.243	-.207	.243	-.011	-.149
633150	3308	FT	.473	.113	.164	.473	.250	.001	.000	.356	-.115	-.174	.356	-.174
633151	3308	FT	.834	.057	.044	.834	.064	.001	.000	.447	-.235	-.197	.447	-.283
633152	7452	FT	.639	.164	.639	.050	.138	.008	.000	.409	-.217	.409	-.188	-.156
633154	7452	FT	.671	.069	.130	.671	.122	.008	.000	.461	-.233	-.195	.461	-.213
633155	7452	FT	.450	.450	.141	.271	.129	.009	.001	.337	.337	-.148	-.086	-.163
633156	7452	FT	.621	.150	.139	.621	.082	.008	.000	.290	-.080	-.136	.290	-.158
633157	7452	FT	.527	.212	.078	.172	.527	.010	.000	.368	-.165	-.193	-.102	.368
633159	7452	FT	.763	.158	.027	.044	.763	.008	.000	.433	-.194	-.220	-.271	.433
633160	7452	FT	.688	.688	.082	.072	.150	.008	.000	.476	.476	-.270	-.270	-.152
633161	7452	FT	.662	.056	.215	.662	.059	.008	.000	.499	-.223	-.268	.499	-.224
633165	7452	FT	.545	.107	.545	.236	.101	.010	.001	.464	-.215	.464	-.206	-.169
633166	7452	FT	.873	.061	.873	.031	.026	.008	.001	.477	-.266	.477	-.232	-.198
633171	3261	FT	.446	.098	.207	.446	.246	.002	.000	.148	-.151	-.123	.148	.059
633172	3261	FT	.840	.095	.044	.019	.840	.002	.000	.485	-.314	-.267	-.198	.485
633173	3261	FT	.343	.343	.263	.200	.191	.002	.000	.354	.354	-.079	-.249	-.075
633174	3261	FT	.756	.035	.128	.078	.756	.002	.000	.475	-.222	-.288	-.235	.475
633175	3261	FT	.860	.068	.037	.033	.860	.002	.000	.484	-.266	-.256	-.272	.484
633176	3261	FT	.609	.130	.609	.039	.220	.002	.000	.376	-.325	.376	-.237	-.058
633177	3261	FT	.543	.171	.161	.543	.123	.002	.000	.459	-.255	-.148	.459	-.226
633178	3261	FT	.353	.353	.097	.238	.310	.002	.000	.257	.257	-.197	-.011	-.121
633182	3261	FT	.697	.697	.094	.115	.092	.003	.000	.516	.516	-.276	-.264	-.236
633183	3261	FT	.579	.127	.579	.156	.136	.003	.000	.348	-.097	.348	-.186	-.199
633188	3362	FT	.372	.092	.321	.215	.372	.000	.000	.238	-.080	-.093	-.117	.238
633190	3362	FT	.861	.029	.060	.861	.048	.001	.000	.531	-.243	-.336	.531	-.284
633191	3362	FT	.352	.315	.128	.352	.206	.000	.000	.183	-.123	-.102	.183	.010
633192	3362	FT	.197	.370	.197	.323	.110	.001	.000	.132	.040	.132	-.115	-.056
633193	3362	FT	.456	.456	.054	.265	.225	.001	.000	.159	.159	-.253	.115	-.171
633194	3362	FT	.754	.754	.032	.147	.067	.000	.000	.457	.457	-.248	-.301	-.185

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633196	3362	FT	.308	.202	.305	.185	.308	.001	.000	.149	-.106	.008	-.076	.149
633197	3362	FT	.810	.810	.051	.056	.083	.000	.000	.432	.432	-.301	-.239	-.174
633198	3362	FT	.664	.205	.664	.095	.035	.001	.000	.345	-.098	.345	-.285	-.212
633199	3362	FT	.533	.309	.117	.533	.040	.001	.000	.322	.018	-.376	.322	-.243
633203	3366	FT	.737	.737	.121	.112	.028	.002	.000	.415	.415	-.219	-.225	-.214
633204	3366	FT	.522	.058	.522	.123	.295	.002	.000	.394	-.117	.394	-.268	-.167
633205	3366	FT	.867	.867	.069	.043	.019	.002	.000	.470	.470	-.313	-.266	-.155
633206	3366	FT	.897	.039	.052	.010	.897	.002	.000	.451	-.302	-.248	-.191	.451
633208	3366	FT	.658	.030	.045	.658	.264	.002	.000	.347	-.156	-.309	.347	-.157
633209	3366	FT	.593	.078	.593	.247	.079	.002	.000	.275	-.240	.275	-.043	-.174
633211	3366	FT	.860	.018	.051	.069	.860	.002	.000	.442	-.202	-.229	-.283	.442
633213	3366	FT	.774	.152	.046	.027	.774	.002	.000	.468	-.261	-.279	-.243	.468
633214	3366	FT	.735	.064	.016	.735	.183	.002	.000	.352	-.173	-.196	.352	-.214
633215	3366	FT	.793	.044	.070	.793	.090	.002	.000	.448	-.256	-.269	.448	-.191

Grade 8

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
564127	20599	OP	.558	.250	.141	.558	.048	.004	.000	.234	-.052	-.161	.234	-.122
564129	20599	OP	.838	.063	.838	.050	.044	.004	.000	.440	-.202	.440	-.276	-.196
564131	20599	OP	.729	.146	.102	.729	.019	.004	.000	.388	-.239	-.168	.388	-.187
564133	20599	OP	.622	.160	.087	.127	.622	.004	.000	.375	-.101	-.236	-.197	.375
564136	20599	OP	.644	.032	.644	.020	.300	.004	.000	.433	-.166	.433	-.188	-.303
564138	20599	OP	.739	.026	.163	.739	.067	.004	.000	.329	-.218	-.207	.329	-.085
564228	20599	OP	.577	.577	.279	.075	.066	.003	.000	.406	.406	-.228	-.187	-.165
564229	20599	OP	.707	.121	.707	.102	.068	.003	.000	.451	-.186	.451	-.263	-.228
564232	20599	OP	.713	.079	.713	.054	.151	.003	.000	.400	-.217	.400	-.272	-.149
564233	20599	OP	.810	.030	.077	.810	.080	.003	.000	.422	-.216	-.197	.422	-.252
564235	20599	OP	.708	.708	.131	.133	.026	.003	.000	.246	.246	-.122	-.097	-.183
564240	20599	OP	.496	.086	.075	.340	.496	.003	.000	.255	-.177	-.183	-.045	.255
564242	20599	OP	.521	.056	.284	.521	.135	.003	.000	.406	-.211	-.175	.406	-.197
564271	20599	OP	.604	.033	.113	.604	.246	.005	.000	.301	-.167	-.263	.301	-.050

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
564272	20599	OP	.583	.583	.137	.240	.035	.005	.000	.270	.270	-.140	-.072	-.218
564273	20599	OP	.681	.080	.681	.206	.028	.005	.000	.396	-.280	.396	-.158	-.191
564278	20599	OP	.692	.167	.692	.093	.043	.005	.000	.395	-.237	.395	-.119	-.227
564280	20599	OP	.659	.090	.070	.659	.176	.005	.000	.432	-.144	-.203	.432	-.259
564281	20599	OP	.565	.076	.084	.270	.565	.005	.000	.308	-.267	-.153	-.058	.308
602740	20599	OP	.617	.240	.617	.066	.076	.002	.000	.365	-.182	.365	-.166	-.199
602742	20599	OP	.472	.165	.215	.145	.472	.003	.000	.236	-.087	-.122	-.079	.236
602744	20599	OP	.756	.756	.071	.121	.050	.002	.000	.322	.322	-.210	-.135	-.158
602745	20599	OP	.869	.869	.101	.020	.008	.002	.000	.425	.425	-.326	-.189	-.138
602746	20599	OP	.875	.020	.071	.031	.875	.003	.000	.448	-.193	-.323	-.174	.448
602748	20599	OP	.796	.047	.127	.796	.027	.002	.000	.372	-.205	-.199	.372	-.201
602749	20599	OP	.910	.910	.034	.026	.027	.002	.000	.400	.400	-.285	-.151	-.194
602752	20599	OP	.561	.107	.135	.195	.561	.003	.000	.367	-.130	-.305	-.076	.367
602753	20599	OP	.754	.097	.092	.055	.754	.003	.000	.420	-.186	-.236	-.219	.420
602754	20599	OP	.804	.016	.804	.036	.142	.003	.000	.347	-.190	.347	-.164	-.215
602755	20599	OP	.642	.231	.092	.032	.642	.002	.000	.386	-.174	-.217	-.237	.386
602757	20599	OP	.884	.025	.063	.025	.884	.003	.000	.403	-.243	-.188	-.237	.403
602759	20599	OP	.619	.115	.201	.619	.062	.003	.000	.428	-.221	-.178	.428	-.235
602762	20599	OP	.671	.671	.088	.069	.169	.003	.000	.404	.404	-.256	-.229	-.135
602763	20599	OP	.743	.743	.043	.115	.097	.003	.000	.471	.471	-.253	-.242	-.234
602765	20599	OP	.494	.072	.383	.494	.046	.005	.000	.337	-.227	-.148	.337	-.116
602766	20599	OP	.635	.199	.635	.107	.054	.005	.000	.404	-.197	.404	-.142	-.260
602767	20599	OP	.549	.114	.130	.203	.549	.005	.000	.260	-.032	-.121	-.163	.260
602769	20599	OP	.753	.041	.091	.753	.110	.005	.000	.407	-.215	-.285	.407	-.120
602771	20599	OP	.685	.685	.147	.113	.050	.005	.000	.488	.488	-.273	-.230	-.202
602775	20599	OP	.743	.743	.044	.086	.123	.005	.000	.417	.417	-.232	-.265	-.145
602776	20599	OP	.499	.112	.499	.323	.062	.004	.000	.393	-.214	.393	-.121	-.246
602779	20599	OP	.757	.757	.042	.084	.112	.004	.000	.476	.476	-.262	-.244	-.224
602780	20599	OP	.591	.099	.591	.100	.206	.004	.000	.320	-.187	.320	-.189	-.079
602783	20599	OP	.647	.193	.089	.647	.065	.005	.000	.362	-.084	-.235	.362	-.242
602785	20599	OP	.602	.184	.109	.602	.100	.005	.000	.371	-.141	-.202	.371	-.171
602786	20599	OP	.564	.564	.095	.245	.091	.005	.000	.468	.468	-.258	-.193	-.209
602787	20599	OP	.684	.684	.042	.133	.136	.005	.000	.290	.290	-.237	-.082	-.134

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
602788	20599	OP	.578	.131	.179	.107	.578	.005	.000	.404	-.161	-.171	-.215	.404
602789	20599	OP	.587	.174	.139	.094	.587	.005	.000	.352	-.073	-.218	-.193	.352
602790	20599	OP	.516	.516	.203	.185	.092	.005	.000	.383	.383	-.188	-.184	-.106
633314	7321	FT	.853	.055	.048	.853	.036	.008	.001	.489	-.221	-.265	.489	-.237
633316	7321	FT	.680	.069	.680	.217	.026	.008	.000	.362	-.250	.362	-.132	-.191
633317	7321	FT	.697	.026	.111	.697	.156	.009	.000	.449	-.211	-.226	.449	-.214
633319	7321	FT	.826	.826	.045	.031	.090	.008	.000	.440	.440	-.233	-.226	-.205
633320	7321	FT	.800	.025	.800	.069	.097	.008	.000	.406	-.195	.406	-.230	-.174
633322	7321	FT	.761	.057	.066	.106	.761	.009	.000	.504	-.242	-.254	-.232	.504
633323	7321	FT	.349	.113	.217	.312	.349	.009	.001	.289	-.159	-.191	.032	.289
633324	7321	FT	.699	.699	.035	.133	.126	.007	.001	.360	.360	-.275	-.088	-.195
633325	7321	FT	.835	.076	.046	.835	.035	.008	.000	.395	-.156	-.233	.395	-.193
633327	7321	FT	.416	.088	.268	.416	.220	.008	.000	.273	-.216	.004	.273	-.131
633328	3339	FT	.914	.041	.914	.030	.014	.001	.000	.422	-.283	.422	-.226	-.186
633329	3339	FT	.485	.126	.233	.485	.155	.001	.000	.352	-.215	-.064	.352	-.209
633332	3339	FT	.730	.079	.730	.098	.092	.001	.000	.325	-.248	.325	-.160	-.097
633334	3339	FT	.734	.013	.019	.734	.233	.001	.000	.102	-.166	-.219	.102	.014
633335	3339	FT	.444	.230	.185	.444	.139	.002	.000	.153	.064	-.137	.153	-.139
633336	3339	FT	.256	.401	.241	.101	.256	.001	.000	.129	-.097	.090	-.151	.129
633337	3339	FT	.792	.792	.054	.059	.094	.001	.000	.304	.304	-.227	-.229	-.056
633338	3339	FT	.149	.077	.149	.488	.284	.001	.000	-.127	-.177	-.127	.240	-.057
633339	3339	FT	.830	.830	.033	.050	.086	.001	.000	.419	.419	-.227	-.201	-.254
633340	3339	FT	.764	.072	.034	.130	.764	.001	.000	.406	-.243	-.235	-.195	.406
633342	3258	FT	.837	.063	.837	.041	.059	.001	.000	.405	-.219	.405	-.226	-.212
633343	3258	FT	.583	.078	.264	.073	.583	.001	.000	.374	-.099	-.226	-.216	.374
633345	3258	FT	.431	.024	.431	.382	.163	.001	.000	.059	-.144	.059	-.055	.058
633346	3258	FT	.491	.491	.154	.291	.062	.002	.000	.270	.270	-.221	-.071	-.086
633347	3258	FT	.679	.188	.083	.679	.049	.002	.000	.304	-.129	-.224	.304	-.124
633348	3258	FT	.707	.076	.068	.707	.147	.001	.000	.301	-.159	-.272	.301	-.068
633349	3258	FT	.413	.435	.413	.093	.058	.001	.000	.222	-.061	.222	-.116	-.184
633351	3258	FT	.674	.157	.139	.028	.674	.001	.000	.402	-.145	-.264	-.254	.402
633353	3258	FT	.715	.076	.099	.715	.109	.001	.000	.487	-.325	-.206	.487	-.224
633355	3258	FT	.644	.644	.089	.180	.084	.003	.000	.234	.234	-.265	-.063	-.033

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633356	3334	FT	.463	.463	.024	.258	.254	.001	.000	.311	.311	-.196	-.137	-.140
633357	3334	FT	.852	.047	.852	.082	.018	.002	.000	.438	-.231	.438	-.310	-.135
633360	3334	FT	.832	.081	.039	.047	.832	.002	.000	.510	-.276	-.293	-.258	.510
633361	3334	FT	.664	.664	.123	.062	.149	.002	.000	.492	.492	-.269	-.268	-.211
633362	3334	FT	.883	.024	.070	.883	.020	.002	.000	.266	-.199	-.088	.266	-.199
633364	3334	FT	.813	.813	.075	.080	.030	.002	.000	.386	.386	-.264	-.200	-.130
633365	3334	FT	.618	.046	.164	.171	.618	.001	.000	.401	-.196	-.271	-.132	.401
633366	3334	FT	.507	.107	.232	.507	.152	.001	.000	.215	-.184	-.027	.215	-.098
633367	3334	FT	.669	.103	.059	.167	.669	.001	.000	.441	-.245	-.270	-.174	.441
633370	3334	FT	.696	.153	.696	.092	.057	.002	.000	.395	-.224	.395	-.201	-.166
633371	3347	FT	.801	.071	.801	.072	.054	.002	.000	.430	-.254	.430	-.268	-.159
633372	3347	FT	.852	.022	.852	.066	.060	.001	.000	.332	-.225	.332	-.199	-.145
633374	3347	FT	.565	.142	.229	.565	.063	.001	.000	.341	-.036	-.244	.341	-.220
633376	3347	FT	.728	.728	.038	.142	.091	.001	.000	.432	.432	-.265	-.241	-.197
633377	3347	FT	.832	.030	.076	.832	.061	.001	.000	.421	-.229	-.206	.421	-.265
633378	3347	FT	.662	.152	.057	.128	.662	.001	.000	.478	-.220	-.277	-.246	.478
633380	3347	FT	.580	.023	.192	.205	.580	.001	.000	.280	-.226	-.009	-.248	.280
633382	3347	FT	.762	.762	.033	.156	.049	.001	.000	.437	.437	-.238	-.233	-.270
633383	3347	FT	.745	.745	.065	.104	.085	.001	.000	.371	.371	-.314	-.119	-.171
633384	3347	FT	.895	.033	.040	.031	.895	.001	.000	.457	-.256	-.309	-.192	.457

Grade 11

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
564301	21055	OP	.444	.444	.063	.223	.264	.005	.000	.327	.327	-.159	-.160	-.095
564302	21055	OP	.600	.600	.082	.168	.146	.005	.000	.396	.396	-.119	-.219	-.181
564304	21055	OP	.844	.044	.844	.072	.035	.004	.000	.391	-.164	.391	-.269	-.135
564305	21055	OP	.862	.051	.031	.862	.051	.005	.000	.442	-.257	-.197	.442	-.212
564310	21055	OP	.585	.585	.227	.029	.153	.005	.000	.268	.268	.081	-.238	-.306
564311	21055	OP	.870	.050	.035	.039	.870	.006	.000	.347	-.067	-.193	-.258	.347
564345	21055	OP	.612	.612	.141	.222	.015	.010	.000	.277	.277	-.177	-.063	-.159
564346	21055	OP	.621	.038	.181	.150	.621	.009	.000	.467	-.181	-.214	-.229	.467

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
564347	21055	OP	.522	.522	.105	.281	.082	.010	.000	.301	.301	-.196	-.053	-.140
564351	21055	OP	.648	.067	.159	.116	.648	.010	.000	.389	-.094	-.182	-.211	.389
564360	21055	OP	.511	.300	.160	.511	.019	.009	.000	.215	-.006	-.142	.215	-.189
564366	21055	OP	.845	.072	.041	.033	.845	.009	.000	.475	-.247	-.218	-.217	.475
564371	21055	OP	.585	.585	.161	.039	.206	.009	.000	.269	.269	-.203	-.271	.050
564374	21055	OP	.504	.154	.095	.238	.504	.009	.000	.242	-.122	-.143	-.018	.242
564385	21055	OP	.729	.729	.036	.155	.071	.010	.000	.394	.394	-.210	-.178	-.173
564388	21055	OP	.750	.750	.099	.120	.022	.009	.000	.366	.366	-.181	-.159	-.188
564389	21055	OP	.669	.032	.669	.139	.150	.009	.000	.438	-.205	.438	-.360	-.050
565549	21055	OP	.801	.801	.155	.021	.019	.005	.000	.458	.458	-.303	-.210	-.204
565551	21055	OP	.714	.190	.059	.714	.028	.009	.000	.429	-.201	-.249	.429	-.185
565552	21055	OP	.841	.841	.031	.070	.049	.009	.000	.473	.473	-.255	-.230	-.204
602805	21055	OP	.580	.327	.033	.580	.055	.004	.000	.278	-.142	-.150	.278	-.133
602808	21055	OP	.608	.287	.058	.608	.043	.005	.000	.281	-.060	-.224	.281	-.212
602810	21055	OP	.645	.645	.188	.085	.077	.003	.000	.514	.514	-.313	-.258	-.155
602811	21055	OP	.553	.277	.553	.033	.133	.005	.000	.401	-.216	.401	-.269	-.118
602813	21055	OP	.760	.090	.082	.063	.760	.005	.000	.282	.048	-.200	-.263	.282
602814	21055	OP	.501	.303	.501	.081	.111	.004	.000	.383	-.261	.383	-.136	-.067
602818	21055	OP	.520	.196	.206	.073	.520	.005	.000	.407	-.077	-.271	-.183	.407
602819	21055	OP	.561	.066	.561	.204	.165	.005	.000	.229	-.033	.229	-.214	-.013
602820	21055	OP	.595	.201	.595	.063	.136	.005	.000	.411	-.292	.411	-.136	-.106
602824	21055	OP	.511	.072	.511	.315	.097	.006	.000	.401	-.261	.401	-.109	-.223
602825	21055	OP	.322	.109	.393	.171	.322	.006	.000	.286	-.176	.045	-.224	.286
602826	21055	OP	.800	.051	.800	.061	.083	.005	.000	.412	-.212	.412	-.249	-.161
602830	21055	OP	.741	.022	.051	.741	.180	.005	.000	.391	-.190	-.257	.391	-.185
602833	21055	OP	.778	.093	.084	.778	.035	.010	.000	.367	-.147	-.149	.367	-.222
602835	21055	OP	.590	.157	.202	.041	.590	.010	.000	.434	-.228	-.115	-.282	.434
602839	21055	OP	.755	.092	.755	.092	.051	.010	.000	.433	-.165	.433	-.231	-.198
602840	21055	OP	.715	.068	.116	.091	.715	.010	.000	.453	-.240	-.212	-.169	.453
602841	21055	OP	.642	.642	.145	.110	.092	.010	.000	.439	.439	-.210	-.170	-.190
602842	21055	OP	.587	.252	.047	.587	.104	.010	.000	.457	-.157	-.276	.457	-.231
602843	21055	OP	.486	.193	.199	.113	.486	.009	.000	.365	-.077	-.113	-.249	.365
602844	21055	OP	.732	.067	.732	.109	.082	.010	.000	.460	-.123	.460	-.270	-.222

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
602845	21055	OP	.791	.122	.791	.057	.020	.010	.000	.528	-.358	.528	-.185	-.192
602860	21055	OP	.728	.728	.066	.123	.073	.009	.000	.499	.499	-.232	-.294	-.154
602861	21055	OP	.772	.045	.052	.772	.121	.010	.000	.468	-.259	-.286	.468	-.157
602867	21055	OP	.314	.245	.192	.239	.314	.010	.000	.284	-.091	-.058	-.097	.284
602868	21055	OP	.702	.702	.095	.073	.120	.009	.000	.484	.484	-.250	-.275	-.150
602869	21055	OP	.768	.061	.080	.768	.082	.009	.000	.506	-.246	-.255	.506	-.213
602870	21055	OP	.849	.849	.042	.047	.053	.010	.000	.502	.502	-.285	-.253	-.187
602871	21055	OP	.734	.734	.094	.094	.068	.009	.000	.470	.470	-.269	-.207	-.163
602872	21055	OP	.561	.058	.561	.330	.042	.009	.000	.251	-.212	.251	-.006	-.224
632799	3440	FT	.873	.035	.076	.873	.015	.001	.000	.426	-.260	-.281	.426	-.151
632800	3440	FT	.940	.020	.021	.940	.018	.001	.000	.398	-.213	-.238	.398	-.216
632801	3440	FT	.834	.072	.040	.052	.834	.001	.000	.438	-.187	-.289	-.248	.438
632803	3440	FT	.833	.833	.076	.063	.027	.001	.000	.400	.400	-.310	-.204	-.096
632804	3440	FT	.260	.112	.260	.064	.563	.001	.000	.120	-.238	.120	-.218	.156
632807	3440	FT	.525	.187	.525	.210	.076	.001	.000	.356	-.057	.356	-.229	-.228
632808	3440	FT	.430	.430	.204	.108	.257	.001	.000	.188	.188	-.074	-.213	.011
632809	3440	FT	.505	.505	.068	.387	.039	.001	.000	.099	.099	-.229	.097	-.192
632810	3440	FT	.503	.348	.503	.072	.076	.002	.000	.358	-.134	.358	-.285	-.149
632811	3440	FT	.926	.028	.026	.019	.926	.001	.000	.419	-.242	-.255	-.201	.419
632812	7004	FT	.718	.056	.091	.718	.120	.015	.000	.436	-.173	-.254	.436	-.135
632813	7004	FT	.662	.088	.124	.111	.662	.015	.000	.537	-.238	-.198	-.256	.537
632814	7004	FT	.760	.760	.071	.104	.051	.013	.000	.521	.521	-.287	-.230	-.185
632815	7004	FT	.596	.253	.080	.596	.057	.015	.000	.339	-.054	-.246	.339	-.161
632818	7004	FT	.849	.063	.849	.043	.031	.014	.000	.463	-.206	.463	-.246	-.157
632819	7004	FT	.868	.038	.050	.868	.029	.015	.000	.565	-.260	-.302	.565	-.215
632821	7004	FT	.671	.055	.671	.052	.208	.014	.000	.509	-.206	.509	-.289	-.219
632823	7004	FT	.761	.066	.761	.050	.108	.014	.000	.495	-.225	.495	-.269	-.186
632824	7004	FT	.607	.050	.070	.259	.607	.015	.000	.434	-.241	-.295	-.102	.434
632826	7004	FT	.832	.832	.047	.060	.046	.015	.000	.545	.545	-.255	-.247	-.244
632827	3445	FT	.818	.072	.071	.818	.036	.003	.000	.333	-.108	-.227	.333	-.204
632828	3445	FT	.909	.025	.008	.056	.909	.002	.000	.419	-.250	-.169	-.271	.419
632830	3445	FT	.749	.749	.046	.189	.013	.003	.000	.324	.324	-.316	-.132	-.159
632831	3445	FT	.904	.009	.904	.060	.025	.002	.000	.403	-.159	.403	-.264	-.233

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
632832	3445	FT	.860	.024	.085	.860	.029	.002	.000	.344	-.177	-.185	.344	-.216
632833	3445	FT	.807	.051	.080	.061	.807	.002	.000	.440	-.240	-.222	-.238	.440
632835	3445	FT	.610	.610	.039	.074	.275	.002	.000	.344	.344	-.264	-.322	-.065
632837	3445	FT	.814	.091	.033	.060	.814	.002	.000	.494	-.276	-.245	-.272	.494
632838	3445	FT	.629	.189	.629	.096	.084	.002	.000	.436	-.239	.436	-.173	-.222
632839	3445	FT	.910	.910	.046	.018	.023	.002	.000	.436	.436	-.251	-.220	-.255
632840	3592	FT	.534	.133	.534	.185	.146	.002	.000	.414	-.306	.414	-.176	-.091
632842	3592	FT	.232	.051	.424	.292	.232	.001	.000	.235	-.169	-.128	.008	.235
632844	3592	FT	.660	.186	.097	.660	.056	.002	.000	.487	-.325	-.216	.487	-.161
632845	3592	FT	.525	.334	.525	.054	.084	.002	.000	.377	-.160	.377	-.290	-.156
632846	3592	FT	.678	.252	.678	.050	.018	.002	.000	.123	.026	.123	-.188	-.175
632847	3592	FT	.724	.038	.068	.168	.724	.002	.000	.492	-.243	-.252	-.286	.492
632849	3592	FT	.801	.801	.077	.097	.024	.002	.000	.460	.460	-.285	-.233	-.224
632850	3592	FT	.549	.549	.183	.188	.079	.001	.000	.386	.386	-.183	-.176	-.187
632851	3592	FT	.323	.323	.440	.202	.034	.002	.000	.103	.103	-.034	.002	-.160
632852	3592	FT	.774	.080	.774	.073	.070	.002	.000	.428	-.212	.428	-.258	-.198
632853	3574	FT	.904	.075	.904	.016	.004	.001	.000	.260	-.168	.260	-.182	-.129
632856	3574	FT	.195	.125	.087	.592	.195	.001	.000	.208	-.077	-.182	-.008	.208
632857	3574	FT	.835	.111	.835	.027	.026	.001	.000	.284	-.101	.284	-.271	-.172
632858	3574	FT	.872	.872	.034	.036	.058	.001	.000	.424	.424	-.242	-.258	-.207
632859	3574	FT	.860	.081	.038	.860	.020	.001	.000	.444	-.277	-.254	.444	-.198
632860	3574	FT	.834	.834	.065	.084	.017	.001	.000	.371	.371	-.328	-.119	-.178
632861	3574	FT	.700	.147	.065	.086	.700	.001	.000	.425	-.177	-.294	-.206	.425
632862	3574	FT	.835	.032	.066	.065	.835	.001	.000	.434	-.195	-.224	-.280	.434
632868	3574	FT	.915	.040	.024	.915	.020	.001	.000	.362	-.216	-.249	.362	-.134
632870	3574	FT	.837	.078	.837	.045	.039	.001	.000	.427	-.219	.427	-.262	-.219

Appendix H: Mathematics Key Verification and Foil Analysis

Grade 3

General	Counts	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
598840	21907	OP	.841	.041	.067	.841	.051	.001	.000	.369	-.193	-.177	.369	-.235
599739	21907	OP	.697	.113	.057	.131	.697	.001	.001	.391	-.275	-.218	-.118	.391
599740	21907	OP	.842	.842	.055	.059	.043	.001	.000	.388	.388	-.160	-.250	-.218
599742	21907	OP	.789	.050	.789	.129	.032	.001	.000	.386	-.221	.386	-.210	-.210
599758	21907	OP	.642	.085	.084	.642	.188	.001	.001	.404	-.320	-.155	.404	-.151
599760	21907	OP	.581	.581	.082	.246	.090	.001	.000	.409	.409	-.228	-.170	-.225
599771	21907	OP	.400	.251	.285	.063	.400	.001	.000	.313	-.163	-.051	-.237	.313
599775	21907	OP	.787	.105	.047	.060	.787	.001	.000	.327	-.161	-.176	-.195	.327
599777	21907	OP	.651	.082	.232	.033	.651	.001	.001	.377	-.197	-.235	-.138	.377
599780	21907	OP	.749	.749	.061	.067	.121	.001	.000	.443	.443	-.141	-.269	-.271
599781	21907	OP	.633	.041	.120	.633	.205	.001	.000	.377	-.223	-.248	.377	-.138
599790	21907	OP	.589	.589	.098	.103	.209	.001	.000	.421	.421	-.193	-.252	-.177
599791	21907	OP	.659	.233	.082	.659	.024	.001	.000	.480	-.347	-.191	.480	-.175
599797	21907	OP	.803	.151	.026	.018	.803	.001	.001	.378	-.287	-.157	-.150	.378
599800	21907	OP	.706	.190	.706	.085	.018	.001	.000	.495	-.309	.495	-.276	-.190
599802	21907	OP	.577	.577	.092	.228	.101	.001	.000	.353	.353	-.177	-.109	-.249
599804	21907	OP	.870	.059	.037	.870	.033	.001	.000	.419	-.276	-.234	.419	-.165
599809	21907	OP	.847	.079	.043	.847	.029	.001	.001	.384	-.221	-.228	.384	-.176
599811	21907	OP	.531	.230	.171	.531	.067	.001	.000	.385	-.166	-.179	.385	-.214
599813	21907	OP	.690	.064	.154	.090	.690	.001	.000	.351	-.224	-.124	-.211	.351
599814	21907	OP	.899	.899	.057	.028	.015	.001	.000	.380	.380	-.270	-.179	-.171
599816	21907	OP	.776	.102	.776	.058	.062	.002	.000	.299	-.120	.299	-.142	-.216
599824	21907	OP	.841	.841	.028	.041	.089	.001	.000	.475	.475	-.192	-.169	-.372
599838	21907	OP	.602	.190	.602	.068	.139	.001	.000	.420	-.310	.420	-.157	-.122
599842	21907	OP	.729	.729	.136	.021	.113	.001	.000	.214	.214	-.259	-.116	.038
599845	21907	OP	.690	.070	.051	.187	.690	.001	.000	.458	-.184	-.273	-.263	.458
599850	21907	OP	.786	.043	.053	.117	.786	.001	.001	.444	-.295	-.260	-.193	.444
599855	21907	OP	.691	.259	.691	.024	.026	.001	.000	.498	-.379	.498	-.195	-.208
599880	21907	OP	.875	.016	.875	.024	.085	.000	.000	.286	-.161	.286	-.125	-.195

General	Counts	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
599882	21907	OP	.872	.113	.872	.007	.007	.001	.000	.288	-.238	.288	-.112	-.121
599888	21907	OP	.658	.284	.658	.027	.030	.001	.000	.496	-.433	.496	-.096	-.133
599894	21907	OP	.818	.064	.082	.818	.034	.001	.000	.434	-.295	-.213	.434	-.188
599904	21907	OP	.825	.044	.825	.034	.096	.001	.000	.365	-.204	.365	-.190	-.206
599907	21907	OP	.645	.173	.645	.074	.107	.001	.001	.509	-.182	.509	-.143	-.438
599909	21907	OP	.817	.112	.027	.043	.817	.001	.000	.462	-.365	-.169	-.169	.462
599911	21907	OP	.807	.041	.026	.807	.125	.001	.000	.359	-.265	-.166	.359	-.185
600456	21907	OP	.830	.830	.042	.069	.058	.001	.000	.347	.347	-.193	-.184	-.185
600457	21907	OP	.823	.823	.064	.053	.060	.001	.000	.360	.360	-.187	-.177	-.212
600460	21907	OP	.655	.044	.046	.253	.655	.001	.000	.350	-.238	-.113	-.209	.350
600464	21907	OP	.691	.220	.691	.037	.050	.001	.001	.475	-.276	.475	-.214	-.285
600468	21907	OP	.673	.120	.673	.133	.072	.001	.000	.411	-.245	.411	-.223	-.137
600469	21907	OP	.947	.947	.019	.019	.014	.001	.000	.317	.317	-.154	-.180	-.196
600470	21907	OP	.757	.009	.042	.190	.757	.001	.000	.341	-.122	-.196	-.237	.341
600816	21907	OP	.784	.031	.021	.784	.163	.001	.000	.493	-.214	-.150	.493	-.386
603145	21907	OP	.780	.100	.084	.780	.034	.001	.000	.426	-.304	-.188	.426	-.171
603147	21907	OP	.480	.054	.480	.066	.399	.001	.000	.465	-.069	.465	-.184	-.345
603149	21907	OP	.534	.108	.097	.534	.260	.001	.000	.294	-.053	-.082	.294	-.236
603152	21907	OP	.774	.040	.066	.774	.120	.001	.000	.467	-.227	-.244	.467	-.271
603156	21907	OP	.810	.084	.810	.041	.063	.001	.000	.459	-.289	.459	-.216	-.224
603157	21907	OP	.848	.043	.084	.024	.848	.001	.000	.463	-.292	-.319	-.110	.463
633857	11755	FT	.715	.095	.118	.070	.715	.002	.001	.406	-.265	-.185	-.168	.406
633858	3072	FT	.856	.042	.064	.856	.036	.001	.000	.420	-.218	-.183	.420	-.307
633859	2959	FT	.690	.046	.093	.690	.172	.000	.000	.415	-.180	-.151	.415	-.294
633860	2994	FT	.921	.025	.921	.017	.036	.000	.000	.347	-.184	.347	-.146	-.238
633861	2965	FT	.882	.034	.027	.057	.882	.000	.000	.390	-.246	-.205	-.201	.390
633862	11709	FT	.800	.066	.069	.800	.062	.002	.000	.374	-.213	-.204	.374	-.172
633863	3151	FT	.680	.084	.069	.166	.680	.001	.000	.411	-.259	-.126	-.233	.411
633864	2966	FT	.615	.241	.051	.093	.615	.001	.000	.327	-.125	-.231	-.180	.327
633865	3024	FT	.802	.802	.117	.052	.029	.000	.000	.408	.408	-.325	-.112	-.197
633866	2939	FT	.239	.192	.239	.528	.040	.001	.000	.294	-.012	.294	-.125	-.284
633867	3014	FT	.420	.420	.346	.171	.063	.000	.000	.299	.299	-.082	-.156	-.206
633868	2908	FT	.794	.079	.072	.794	.055	.000	.000	.487	-.241	-.208	.487	-.344

General	Counts	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
633869	2976	FT	.694	.081	.204	.694	.020	.000	.000	.437	-.204	-.305	.437	-.159
633870	3018	FT	.632	.036	.143	.632	.190	.000	.000	.471	-.276	-.255	.471	-.221
633871	2933	FT	.649	.649	.186	.084	.080	.001	.000	.453	.453	-.203	-.207	-.293
633872	3013	FT	.702	.029	.119	.702	.149	.000	.000	.361	-.140	-.189	.361	-.224
633873	11741	FT	.776	.076	.037	.776	.110	.001	.001	.429	-.405	-.209	.429	-.096
633874	3023	FT	.822	.066	.013	.099	.822	.000	.000	.474	-.289	-.145	-.311	.474
633875	2960	FT	.734	.192	.033	.041	.734	.000	.000	.529	-.364	-.253	-.225	.529
633876	2992	FT	.844	.090	.040	.844	.026	.000	.000	.357	-.273	-.136	.357	-.150
633877	11701	FT	.779	.152	.779	.036	.031	.002	.001	.492	-.354	.492	-.208	-.201
633878	2969	FT	.796	.035	.115	.053	.796	.000	.000	.484	-.147	-.354	-.241	.484
633879	11768	FT	.720	.029	.137	.720	.111	.002	.001	.283	-.151	-.082	.283	-.224
633880	3013	FT	.537	.341	.094	.537	.028	.000	.000	.165	-.104	-.067	.165	-.081
633881	2989	FT	.952	.005	.006	.952	.037	.000	.000	.088	-.050	-.046	.088	-.056
633882	2926	FT	.904	.041	.036	.018	.904	.000	.000	.409	-.287	-.232	-.148	.409
633883	11693	FT	.862	.047	.862	.041	.048	.002	.000	.390	-.192	.390	-.206	-.231
633884	3021	FT	.445	.024	.517	.445	.015	.000	.000	.284	-.185	-.212	.284	-.059
633885	2948	FT	.564	.307	.564	.059	.070	.000	.000	.223	-.096	.223	-.114	-.153
633886	2959	FT	.427	.228	.427	.240	.105	.000	.000	.273	-.039	.273	-.205	-.101
633887	11752	FT	.757	.082	.012	.757	.148	.002	.000	.170	.021	-.103	.170	-.183
633888	2969	FT	.374	.212	.374	.181	.233	.000	.000	.294	-.130	.294	-.109	-.111
633889	2975	FT	.766	.144	.766	.056	.034	.000	.000	.469	-.370	.469	-.172	-.161
633890	11753	FT	.720	.172	.720	.066	.041	.002	.000	.357	-.076	.357	-.293	-.279
633891	2959	FT	.608	.608	.120	.168	.103	.001	.000	.451	.451	-.169	-.274	-.198
633892	3019	FT	.891	.891	.029	.014	.066	.000	.000	.349	.349	-.209	-.172	-.213
633893	2955	FT	.819	.819	.118	.041	.022	.000	.000	.357	.357	-.247	-.164	-.174
633894	3012	FT	.878	.041	.878	.046	.034	.001	.000	.298	-.205	.298	-.167	-.115
633895	11761	FT	.921	.921	.024	.035	.019	.001	.000	.371	.371	-.222	-.227	-.163
633896	3055	FT	.665	.155	.665	.100	.079	.000	.000	.367	-.236	.367	-.160	-.147
633897	2970	FT	.804	.804	.048	.097	.049	.000	.000	.412	.412	-.252	-.224	-.196
633898	11737	FT	.701	.701	.106	.154	.038	.002	.000	.479	.479	-.124	-.350	-.274
633899	3008	FT	.519	.519	.161	.117	.202	.000	.000	.577	.577	-.221	-.255	-.311
633900	3046	FT	.469	.104	.027	.400	.469	.000	.000	.223	-.166	-.125	-.082	.223

Grade 4

General	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
599868	21571	OP	.815	.116	.045	.815	.024	.001	.000	.529	-.399	-.269	.529	-.132
603918	21571	OP	.783	.058	.075	.083	.783	.001	.000	.476	-.289	-.284	-.187	.476
603923	21571	OP	.910	.045	.910	.020	.024	.001	.000	.282	-.077	.282	-.222	-.209
603925	21571	OP	.889	.889	.071	.023	.015	.001	.000	.308	.308	-.157	-.188	-.208
603927	21571	OP	.779	.118	.069	.032	.779	.001	.000	.461	-.301	-.253	-.156	.461
603933	21571	OP	.889	.012	.027	.071	.889	.001	.000	.335	-.165	-.196	-.210	.335
603934	21571	OP	.749	.090	.113	.749	.048	.001	.000	.476	-.276	-.327	.476	-.110
603938	21571	OP	.913	.039	.913	.031	.015	.001	.000	.310	-.182	.310	-.185	-.142
603939	21571	OP	.915	.057	.013	.014	.915	.001	.001	.358	-.240	-.179	-.186	.358
603942	21571	OP	.904	.040	.904	.035	.021	.001	.000	.356	-.196	.356	-.212	-.186
603947	21571	OP	.547	.041	.215	.195	.547	.001	.000	.343	-.159	-.135	-.206	.343
603954	21571	OP	.493	.297	.203	.493	.006	.001	.000	.353	-.279	-.103	.353	-.073
603958	21571	OP	.522	.250	.522	.161	.065	.001	.000	.332	-.092	.332	-.193	-.218
603962	21571	OP	.754	.754	.173	.054	.016	.002	.000	.343	.343	-.280	-.107	-.119
603965	21571	OP	.862	.862	.043	.054	.041	.001	.000	.398	.398	-.211	-.219	-.220
603969	21571	OP	.753	.753	.186	.038	.022	.001	.000	.365	.365	-.249	-.175	-.169
603974	21571	OP	.467	.239	.467	.209	.084	.001	.000	.342	-.126	.342	-.146	-.198
603982	21571	OP	.629	.194	.629	.096	.079	.001	.000	.430	-.180	.430	-.213	-.264
603984	21571	OP	.859	.082	.022	.036	.859	.002	.000	.375	-.236	-.194	-.192	.375
603989	21571	OP	.726	.726	.085	.106	.081	.001	.001	.361	.361	-.207	-.215	-.124
604003	21571	OP	.547	.547	.083	.322	.046	.001	.000	.388	.388	-.150	-.221	-.217
604004	21571	OP	.780	.094	.054	.780	.072	.000	.000	.386	-.189	-.206	.386	-.223
604008	21571	OP	.863	.059	.863	.060	.017	.001	.000	.309	-.165	.309	-.181	-.171
604015	21571	OP	.687	.090	.687	.086	.136	.001	.000	.442	-.247	.442	-.259	-.172
604020	21571	OP	.723	.723	.051	.070	.156	.001	.000	.342	.342	-.202	-.176	-.172
604022	21571	OP	.677	.087	.056	.677	.179	.000	.000	.419	-.193	-.227	.419	-.230
604032	21571	OP	.785	.043	.056	.115	.785	.001	.000	.470	-.254	-.208	-.285	.470
604044	21571	OP	.767	.048	.118	.064	.767	.001	.001	.333	-.266	-.068	-.243	.333
604045	21571	OP	.516	.119	.171	.193	.516	.001	.000	.431	-.251	-.192	-.154	.431
604055	21571	OP	.669	.057	.143	.669	.130	.001	.000	.440	-.251	-.280	.440	-.148
604057	21571	OP	.790	.790	.064	.099	.046	.001	.000	.496	.496	-.273	-.293	-.221

General	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
604058	21571	OP	.794	.059	.794	.052	.094	.001	.000	.416	-.253	.416	-.268	-.162
604064	21571	OP	.620	.620	.187	.128	.065	.000	.000	.468	.468	-.265	-.189	-.245
604072	21571	OP	.882	.065	.882	.011	.041	.000	.000	.248	-.122	.248	-.128	-.181
604075	21571	OP	.881	.053	.058	.007	.881	.001	.000	.351	-.248	-.203	-.108	.351
604080	21571	OP	.771	.771	.156	.039	.033	.001	.001	.314	.314	-.162	-.172	-.215
604082	21571	OP	.865	.029	.074	.865	.032	.000	.000	.324	-.219	-.175	.324	-.158
604090	21571	OP	.733	.025	.078	.733	.163	.001	.000	.341	-.175	-.211	.341	-.175
604094	21571	OP	.740	.037	.138	.740	.084	.000	.000	.446	-.273	-.326	.446	-.111
604103	21571	OP	.701	.107	.701	.044	.148	.001	.000	.426	-.095	.426	-.221	-.336
604105	21571	OP	.836	.018	.836	.074	.072	.001	.000	.265	-.139	.265	-.116	-.185
604106	21571	OP	.731	.731	.188	.018	.062	.001	.000	.483	.483	-.333	-.144	-.265
604108	21571	OP	.841	.841	.067	.031	.059	.001	.000	.357	.357	-.214	-.170	-.189
604112	21571	OP	.863	.015	.863	.091	.030	.001	.000	.339	-.088	.339	-.224	-.228
604116	21571	OP	.453	.444	.041	.061	.453	.001	.000	.493	-.407	-.163	-.039	.493
604121	21571	OP	.803	.803	.067	.114	.015	.001	.000	.456	.456	-.196	-.358	-.141
604125	21571	OP	.736	.027	.154	.081	.736	.001	.001	.397	-.185	-.248	-.196	.397
604128	21571	OP	.584	.132	.047	.236	.584	.001	.000	.420	-.400	-.206	-.063	.420
604132	21571	OP	.899	.014	.030	.056	.899	.000	.000	.282	-.175	-.161	-.156	.282
604134	21571	OP	.669	.669	.142	.144	.044	.001	.000	.442	.442	-.130	-.352	-.178
604136	21571	OP	.799	.071	.102	.799	.028	.001	.000	.433	-.299	-.239	.433	-.140
604143	21571	OP	.534	.028	.267	.170	.534	.001	.000	.351	-.152	-.311	-.027	.351
604146	21571	OP	.872	.060	.024	.872	.043	.001	.000	.384	-.267	-.240	.384	-.131
604151	21571	OP	.531	.114	.109	.531	.244	.001	.000	.265	-.311	-.088	.265	-.007
604152	21571	OP	.684	.208	.684	.068	.039	.001	.000	.499	-.326	.499	-.258	-.168
634166	11119	FT	.686	.123	.686	.018	.171	.001	.000	.463	-.156	.463	-.129	-.384
634167	2659	FT	.505	.097	.310	.505	.088	.000	.000	.252	-.147	-.102	.252	-.120
634168	2616	FT	.438	.258	.438	.222	.082	.000	.000	.390	-.202	.390	-.129	-.189
634169	2580	FT	.499	.141	.085	.499	.274	.000	.000	.425	-.175	-.193	.425	-.215
634171	2558	FT	.766	.013	.210	.011	.766	.000	.000	.059	-.126	.010	-.144	.059
634172	2632	FT	.987	.005	.987	.005	.002	.001	.000	.123	-.097	.123	-.048	-.033
634173	2620	FT	.694	.037	.694	.178	.091	.000	.000	.523	-.078	.523	-.376	-.283
634174	11087	FT	.904	.904	.031	.035	.028	.002	.000	.388	.388	-.219	-.252	-.160

General	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634175	11174	FT	.645	.069	.062	.645	.223	.001	.001	.570	-.167	-.148	.570	-.464
634176	2677	FT	.610	.171	.038	.610	.180	.000	.000	.520	-.392	-.163	.520	-.194
634177	2668	FT	.693	.216	.693	.036	.055	.000	.000	.334	-.216	.334	-.100	-.204
634178	2663	FT	.794	.050	.052	.794	.104	.001	.000	.341	-.200	-.219	.341	-.141
634179	2647	FT	.924	.039	.924	.020	.017	.000	.000	.313	-.208	.313	-.194	-.120
634180	2612	FT	.482	.158	.482	.185	.175	.000	.000	.315	-.112	.315	-.086	-.219
634181	2606	FT	.276	.447	.064	.276	.212	.001	.000	.131	.101	-.279	.131	-.096
634182	11093	FT	.930	.930	.031	.020	.018	.001	.000	.358	.358	-.254	-.199	-.120
634184	11131	FT	.892	.027	.046	.892	.033	.002	.000	.276	-.220	-.115	.276	-.134
634185	2568	FT	.808	.808	.068	.039	.084	.001	.000	.422	.422	-.172	-.232	-.269
634186	2568	FT	.741	.741	.023	.142	.093	.000	.000	.552	.552	-.110	-.310	-.402
634187	2629	FT	.574	.243	.078	.105	.574	.000	.000	.560	-.485	-.146	-.093	.560
634189	2619	FT	.709	.097	.120	.709	.073	.000	.000	.391	-.269	-.207	.391	-.115
634190	2591	FT	.761	.016	.183	.761	.039	.000	.000	.417	-.142	-.367	.417	-.091
634191	2688	FT	.574	.019	.054	.353	.574	.000	.000	.367	-.129	-.236	-.231	.367
634192	2622	FT	.667	.076	.201	.667	.056	.000	.000	.433	-.314	-.226	.433	-.132
634193	2580	FT	.406	.040	.406	.405	.148	.000	.000	.297	-.024	.297	-.036	-.349
634194	2632	FT	.410	.052	.410	.219	.318	.000	.000	.378	-.095	.378	-.101	-.262
634195	2678	FT	.904	.904	.032	.045	.019	.000	.000	.374	.374	-.155	-.272	-.191
634196	2621	FT	.643	.196	.113	.643	.047	.001	.000	.463	-.379	-.183	.463	-.054
634197	2587	FT	.664	.080	.106	.151	.664	.000	.000	.465	-.391	-.214	-.133	.465
634198	2613	FT	.811	.811	.048	.085	.056	.000	.000	.418	.418	-.157	-.292	-.207
634199	11079	FT	.844	.066	.040	.048	.844	.001	.001	.424	-.224	-.234	-.233	.424
634200	2627	FT	.521	.156	.100	.222	.521	.000	.000	.303	-.161	-.095	-.156	.303
634201	2527	FT	.814	.084	.044	.814	.057	.000	.000	.454	-.277	-.236	.454	-.221
634202	2653	FT	.711	.168	.031	.711	.090	.000	.000	.449	-.421	-.168	.449	-.058
634203	2617	FT	.800	.053	.800	.074	.071	.001	.000	.335	-.104	.335	-.229	-.188
634204	2557	FT	.928	.928	.022	.018	.032	.000	.000	.326	.326	-.192	-.189	-.176
634206	2646	FT	.725	.013	.725	.011	.251	.000	.000	.457	-.145	.457	-.180	-.389
634207	11128	FT	.954	.954	.012	.016	.016	.002	.000	.311	.311	-.160	-.165	-.184
634208	2561	FT	.954	.009	.026	.954	.011	.000	.000	.324	-.171	-.181	.324	-.223
634209	2610	FT	.829	.136	.009	.025	.829	.000	.000	.370	-.270	-.173	-.183	.370

General	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634210	11051	FT	.899	.899	.017	.047	.036	.001	.001	.330	.330	-.161	-.222	-.161
634211	2618	FT	.756	.091	.756	.108	.043	.001	.000	.387	-.194	.387	-.227	-.189
634212	2647	FT	.817	.817	.042	.066	.074	.001	.000	.512	.512	-.206	-.270	-.335
634213	11029	FT	.913	.026	.030	.029	.913	.002	.001	.400	-.227	-.204	-.223	.400
634214	2642	FT	.536	.173	.204	.087	.536	.000	.000	.399	-.290	-.018	-.291	.399
634215	2630	FT	.643	.210	.041	.643	.106	.000	.000	.454	-.185	-.319	.454	-.256
634216	2604	FT	.730	.023	.204	.043	.730	.000	.000	.407	-.222	-.264	-.201	.407
634217	2649	FT	.495	.270	.155	.495	.081	.000	.000	.448	-.200	-.306	.448	-.085
634218	2622	FT	.771	.069	.771	.093	.068	.000	.000	.337	-.238	.337	-.140	-.163
634219	11075	FT	.381	.468	.061	.381	.089	.001	.000	.178	-.052	-.068	.178	-.143

Grade 5

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
603388	21361	OP	.775	.147	.775	.040	.037	.001	.000	.424	-.271	.424	-.205	-.202
603397	21361	OP	.831	.831	.039	.050	.080	.001	.000	.492	.492	-.234	-.276	-.285
603399	21361	OP	.780	.085	.065	.068	.780	.001	.000	.484	-.230	-.291	-.246	.484
603401	21361	OP	.700	.027	.188	.084	.700	.001	.000	.277	-.173	-.079	-.240	.277
603409	21361	OP	.750	.084	.750	.097	.069	.001	.000	.450	-.153	.450	-.252	-.298
603414	21361	OP	.791	.080	.098	.030	.791	.001	.000	.440	-.234	-.261	-.212	.440
603424	21361	OP	.806	.098	.041	.055	.806	.001	.000	.371	-.229	-.140	-.218	.371
603428	21361	OP	.698	.106	.055	.140	.698	.001	.001	.455	-.262	-.199	-.232	.455
603433	21361	OP	.837	.068	.837	.051	.043	.001	.000	.291	-.161	.291	-.175	-.131
603436	21361	OP	.675	.059	.119	.675	.146	.001	.000	.330	-.191	-.126	.330	-.190
603437	21361	OP	.899	.030	.031	.039	.899	.001	.000	.388	-.229	-.210	-.204	.388
603442	21361	OP	.764	.090	.114	.030	.764	.001	.000	.404	-.222	-.252	-.150	.404
603446	21361	OP	.710	.710	.080	.143	.066	.001	.000	.486	.486	-.265	-.224	-.272
603449	21361	OP	.813	.813	.046	.032	.108	.001	.000	.407	.407	-.169	-.162	-.299
603458	21361	OP	.875	.875	.043	.063	.017	.001	.000	.319	.319	-.201	-.204	-.101
603459	21361	OP	.575	.253	.126	.044	.575	.001	.000	.384	-.268	-.069	-.232	.384
603460	21361	OP	.829	.014	.022	.134	.829	.001	.000	.230	-.186	-.187	-.103	.230

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
603473	21361	OP	.865	.067	.022	.046	.865	.000	.000	.328	-.183	-.190	-.178	.328
603476	21361	OP	.664	.143	.174	.019	.664	.001	.000	.521	-.164	-.435	-.155	.521
603482	21361	OP	.606	.606	.297	.065	.031	.001	.000	.384	.384	-.287	-.161	-.085
603486	21361	OP	.846	.022	.101	.846	.030	.001	.000	.375	-.168	-.232	.375	-.227
603488	21361	OP	.590	.590	.202	.147	.059	.001	.000	.465	.465	-.186	-.299	-.195
603499	21361	OP	.559	.056	.279	.106	.559	.001	.000	.424	-.225	-.229	-.177	.424
603500	21361	OP	.623	.623	.108	.177	.090	.001	.000	.434	.434	-.288	-.147	-.217
603505	21361	OP	.821	.122	.821	.029	.027	.001	.000	.343	-.230	.343	-.182	-.146
603508	21361	OP	.522	.522	.293	.114	.070	.001	.000	.529	.529	-.184	-.434	-.160
603513	21361	OP	.752	.023	.067	.157	.752	.001	.000	.332	-.175	-.158	-.208	.332
603519	21361	OP	.884	.884	.030	.032	.052	.001	.000	.493	.493	-.242	-.285	-.286
603520	21361	OP	.733	.032	.163	.733	.070	.001	.000	.389	-.203	-.274	.389	-.130
603529	21361	OP	.680	.077	.680	.058	.183	.001	.000	.374	-.307	.374	-.217	-.101
603534	21361	OP	.434	.296	.434	.089	.179	.001	.000	.347	-.231	.347	-.219	-.005
603535	21361	OP	.715	.038	.130	.715	.115	.001	.000	.469	-.168	-.219	.469	-.322
603542	21361	OP	.846	.033	.062	.846	.058	.001	.000	.423	-.222	-.193	.423	-.276
603544	21361	OP	.886	.886	.027	.063	.023	.001	.000	.406	.406	-.206	-.265	-.200
603552	21361	OP	.826	.037	.826	.101	.035	.001	.000	.337	-.184	.337	-.191	-.184
603554	21361	OP	.802	.080	.072	.802	.045	.001	.000	.505	-.293	-.308	.505	-.195
603556	21361	OP	.500	.247	.104	.500	.148	.001	.000	.350	-.243	-.219	.350	-.004
603558	21361	OP	.910	.040	.910	.037	.012	.001	.000	.329	-.262	.329	-.159	-.101
603563	21361	OP	.863	.059	.041	.863	.036	.001	.000	.409	-.250	-.267	.409	-.144
603566	21361	OP	.808	.171	.808	.013	.006	.001	.000	.235	-.187	.235	-.113	-.089
603576	21361	OP	.598	.028	.343	.030	.598	.001	.000	.486	-.190	-.366	-.179	.486
603579	21361	OP	.642	.642	.048	.125	.184	.001	.000	.467	.467	-.239	-.126	-.332
603610	21361	OP	.874	.099	.874	.005	.022	.000	.000	.406	-.292	.406	-.116	-.259
603616	21361	OP	.559	.183	.148	.559	.109	.001	.000	.438	-.237	-.184	.438	-.187
603623	21361	OP	.736	.115	.736	.104	.043	.001	.000	.463	-.208	.463	-.316	-.194
603627	21361	OP	.553	.257	.155	.553	.034	.001	.000	.465	-.245	-.294	.465	-.084
603631	21361	OP	.761	.069	.131	.761	.039	.001	.000	.498	-.264	-.325	.498	-.179
603653	21361	OP	.767	.031	.134	.767	.067	.001	.000	.396	-.103	-.326	.396	-.146
603666	21361	OP	.788	.042	.788	.076	.092	.001	.000	.453	-.147	.453	-.296	-.259
603678	21361	OP	.631	.053	.631	.275	.040	.001	.000	.397	-.223	.397	-.267	-.109

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
603679	21361	OP	.681	.095	.209	.681	.014	.001	.000	.577	-.245	-.445	.577	-.123
603687	21361	OP	.855	.855	.049	.046	.049	.001	.000	.491	.491	-.182	-.278	-.339
603689	21361	OP	.711	.112	.030	.711	.146	.001	.000	.423	-.383	-.215	.423	-.093
603697	21361	OP	.748	.028	.066	.158	.748	.001	.000	.435	-.181	-.131	-.342	.435
603703	21361	OP	.664	.055	.151	.664	.128	.001	.000	.476	-.257	-.250	.476	-.223
634223	11122	FT	.721	.063	.106	.721	.108	.002	.000	.462	-.222	-.258	.462	-.228
634224	2626	FT	.460	.375	.460	.083	.081	.000	.000	.417	-.204	.417	-.285	-.105
634225	2590	FT	.776	.019	.084	.119	.776	.001	.000	.299	-.187	-.213	-.118	.299
634227	2581	FT	.641	.641	.034	.080	.243	.001	.000	.325	.325	-.175	-.058	-.246
634228	2552	FT	.418	.083	.425	.418	.074	.000	.000	.434	.059	-.464	.434	.004
634230	2592	FT	.568	.024	.026	.382	.568	.000	.000	.504	-.076	-.211	-.418	.504
634231	2524	FT	.813	.087	.813	.077	.022	.000	.000	.360	-.154	.360	-.247	-.201
634232	11104	FT	.739	.051	.047	.739	.162	.001	.000	.507	-.259	-.196	.507	-.332
634233	2554	FT	.604	.037	.338	.604	.020	.001	.000	.527	-.120	-.458	.527	-.118
634234	2514	FT	.602	.101	.213	.084	.602	.000	.000	.481	-.221	-.184	-.334	.481
634236	2557	FT	.678	.678	.113	.109	.100	.000	.000	.410	.410	-.223	-.204	-.188
634237	2596	FT	.717	.163	.717	.080	.040	.000	.000	.466	-.344	.466	-.177	-.177
634238	2521	FT	.589	.337	.589	.034	.040	.001	.000	.049	.031	.049	-.061	-.129
634239	2629	FT	.811	.107	.047	.811	.036	.000	.000	.303	-.141	-.225	.303	-.142
634241	11038	FT	.735	.735	.075	.111	.076	.002	.001	.464	.464	-.248	-.238	-.226
634242	2569	FT	.411	.213	.293	.083	.411	.000	.000	.346	-.092	-.142	-.241	.346
634243	2582	FT	.353	.339	.231	.353	.076	.001	.000	.047	.061	-.072	.047	-.069
634244	10996	FT	.795	.063	.795	.106	.034	.001	.000	.534	-.332	.534	-.274	-.261
634246	2498	FT	.609	.014	.018	.359	.609	.000	.000	.268	-.083	-.192	-.197	.268
634248	2627	FT	.650	.060	.061	.228	.650	.000	.000	.446	-.355	-.298	-.133	.446
634249	2594	FT	.810	.079	.810	.040	.070	.000	.000	.416	-.321	.416	-.243	-.109
634250	2648	FT	.773	.049	.114	.773	.062	.001	.000	.323	-.148	-.223	.323	-.118
634251	2571	FT	.434	.407	.434	.057	.102	.000	.000	.257	-.189	.257	-.152	.001
634254	2576	FT	.649	.065	.649	.267	.019	.000	.000	.303	-.164	.303	-.185	-.154
634255	2617	FT	.796	.796	.058	.020	.126	.000	.000	.454	.454	-.182	-.259	-.313
634256	2561	FT	.750	.107	.051	.750	.092	.000	.000	.308	-.150	-.112	.308	-.211
634258	11068	FT	.662	.074	.136	.662	.126	.002	.000	.434	-.192	-.229	.434	-.223
634260	2595	FT	.671	.068	.224	.038	.671	.000	.000	.359	-.318	-.144	-.152	.359

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634261	11009	FT	.494	.239	.103	.494	.163	.001	.000	.303	-.245	-.168	.303	.017
634262	11006	FT	.585	.110	.585	.149	.154	.001	.000	.277	-.242	.277	-.017	-.143
634264	2612	FT	.202	.268	.331	.198	.202	.000	.000	.258	.025	-.305	.072	.258
634265	2633	FT	.633	.633	.081	.184	.101	.000	.000	.259	.259	-.173	-.097	-.129
634266	2665	FT	.672	.672	.086	.190	.052	.000	.000	.336	.336	-.213	-.141	-.193
634267	2551	FT	.590	.590	.089	.097	.223	.001	.000	.337	.337	-.175	-.177	-.149
634268	2603	FT	.804	.156	.804	.029	.011	.000	.000	.360	-.280	.360	-.203	-.054
634270	2548	FT	.811	.811	.135	.040	.013	.000	.000	.231	.231	-.092	-.220	-.126
634271	2633	FT	.576	.233	.576	.093	.098	.000	.000	.374	-.140	.374	-.299	-.131
634272	10920	FT	.746	.746	.076	.099	.078	.001	.001	.553	.553	-.274	-.332	-.251
634274	10992	FT	.974	.009	.007	.007	.974	.001	.000	.211	-.133	-.105	-.102	.211
634275	2573	FT	.717	.051	.069	.717	.162	.001	.000	.262	-.130	-.084	.262	-.177
634276	2584	FT	.842	.026	.036	.096	.842	.001	.000	.277	-.139	-.087	-.203	.277
634277	2593	FT	.944	.944	.024	.015	.017	.000	.000	.393	.393	-.244	-.221	-.202
634278	2556	FT	.828	.828	.080	.068	.023	.002	.000	.420	.420	-.242	-.249	-.173
634279	2649	FT	.753	.048	.159	.040	.753	.000	.000	.427	-.218	-.235	-.263	.427
634280	2562	FT	.902	.004	.089	.902	.003	.001	.000	.319	-.124	-.281	.319	-.052
634281	2633	FT	.680	.054	.680	.189	.076	.001	.000	.135	-.119	.135	-.039	-.069
634283	2547	FT	.860	.027	.091	.021	.860	.000	.000	.395	-.178	-.298	-.152	.395
634284	10944	FT	.756	.057	.086	.756	.100	.001	.000	.477	-.286	-.260	.477	-.212
634285	2654	FT	.598	.214	.147	.040	.598	.001	.000	.477	-.236	-.312	-.123	.477
634286	2541	FT	.570	.056	.159	.570	.215	.000	.000	.247	-.164	-.181	.247	-.044

Grade 6

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
598846	20821	OP	.621	.083	.621	.109	.185	.001	.000	.340	-.128	.340	-.203	-.165
603159	20821	OP	.840	.840	.050	.053	.056	.001	.000	.461	.461	-.244	-.305	-.197
603171	20821	OP	.846	.072	.031	.049	.846	.001	.001	.454	-.241	-.212	-.289	.454
603172	20821	OP	.825	.040	.035	.100	.825	.001	.000	.246	-.198	-.160	-.080	.246
603174	20821	OP	.678	.064	.678	.144	.112	.001	.000	.483	-.148	.483	-.234	-.331
603181	20821	OP	.898	.056	.029	.898	.017	.001	.000	.301	-.231	-.136	.301	-.108

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
603182	20821	OP	.766	.766	.192	.020	.021	.001	.000	.355	.355	-.249	-.184	-.175
603184	20821	OP	.641	.159	.123	.641	.076	.001	.000	.313	-.189	-.126	.313	-.144
603185	20821	OP	.791	.088	.065	.791	.056	.001	.000	.366	-.202	-.179	.366	-.197
603197	20821	OP	.752	.033	.063	.151	.752	.001	.000	.478	-.204	-.319	-.253	.478
603203	20821	OP	.857	.080	.038	.025	.857	.001	.000	.437	-.275	-.270	-.159	.437
603206	20821	OP	.604	.604	.242	.090	.062	.001	.000	.283	.283	-.053	-.246	-.179
603212	20821	OP	.700	.179	.095	.024	.700	.001	.000	.568	-.386	-.278	-.188	.568
603214	20821	OP	.674	.674	.201	.083	.041	.001	.000	.464	.464	-.255	-.272	-.192
603215	20821	OP	.846	.075	.846	.031	.047	.001	.000	.286	-.112	.286	-.189	-.187
603224	20821	OP	.797	.066	.090	.797	.046	.001	.000	.352	-.164	-.217	.352	-.177
603234	20821	OP	.921	.007	.015	.057	.921	.001	.000	.268	-.095	-.115	-.211	.268
603237	20821	OP	.585	.253	.092	.068	.585	.001	.000	.488	-.320	-.242	-.116	.488
603242	20821	OP	.774	.774	.061	.061	.103	.001	.000	.499	.499	-.231	-.253	-.299
603243	20821	OP	.835	.067	.039	.058	.835	.001	.000	.412	-.375	-.121	-.143	.412
603247	20821	OP	.759	.759	.049	.068	.123	.001	.000	.528	.528	-.214	-.252	-.349
603248	20821	OP	.742	.103	.082	.073	.742	.001	.000	.485	-.272	-.268	-.210	.485
603250	20821	OP	.817	.058	.073	.050	.817	.001	.000	.489	-.308	-.264	-.209	.489
603260	20821	OP	.895	.060	.007	.037	.895	.001	.000	.411	-.316	-.166	-.186	.411
603267	20821	OP	.566	.079	.055	.566	.300	.001	.000	.476	-.180	-.324	.476	-.245
603270	20821	OP	.642	.642	.209	.126	.022	.001	.000	.541	.541	-.371	-.245	-.171
603276	20821	OP	.755	.755	.108	.093	.043	.001	.000	.423	.423	-.274	-.238	-.129
603283	20821	OP	.547	.122	.122	.209	.547	.001	.000	.461	-.363	-.169	-.133	.461
603285	20821	OP	.720	.152	.041	.720	.085	.001	.000	.403	-.201	-.247	.403	-.205
603294	20821	OP	.814	.113	.031	.814	.041	.001	.000	.374	-.218	-.194	.374	-.205
603297	20821	OP	.499	.213	.144	.144	.499	.001	.000	.339	-.098	-.137	-.228	.339
603303	20821	OP	.844	.113	.844	.016	.027	.000	.000	.392	-.268	.392	-.171	-.213
603306	20821	OP	.712	.034	.712	.231	.022	.001	.000	.407	-.222	.407	-.296	-.117
603308	20821	OP	.740	.195	.021	.740	.043	.001	.000	.363	-.245	-.173	.363	-.173
603309	20821	OP	.665	.035	.042	.665	.258	.001	.000	.404	-.160	-.261	.404	-.246
603312	20821	OP	.768	.139	.768	.027	.066	.000	.000	.335	-.135	.335	-.217	-.236
603315	20821	OP	.675	.140	.118	.066	.675	.001	.000	.353	-.117	-.237	-.188	.353
603320	20821	OP	.618	.168	.618	.124	.089	.001	.000	.520	-.300	.520	-.292	-.147
603327	20821	OP	.924	.025	.023	.924	.028	.000	.000	.322	-.199	-.186	.322	-.157

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
603328	20821	OP	.830	.092	.830	.028	.049	.001	.000	.411	-.309	.411	-.185	-.149
603331	20821	OP	.678	.152	.107	.062	.678	.001	.000	.461	-.355	-.140	-.178	.461
603345	20821	OP	.784	.064	.124	.784	.027	.001	.000	.469	-.264	-.329	.469	-.116
603348	20821	OP	.618	.055	.246	.080	.618	.001	.000	.480	-.200	-.296	-.216	.480
603353	20821	OP	.880	.054	.880	.033	.031	.001	.000	.413	-.296	.413	-.172	-.193
603355	20821	OP	.853	.853	.131	.006	.009	.000	.000	.445	.445	-.406	-.135	-.089
603358	20821	OP	.473	.222	.094	.210	.473	.001	.000	.394	-.323	-.093	-.082	.394
603361	20821	OP	.549	.226	.129	.549	.095	.001	.000	.501	-.413	-.118	.501	-.119
603363	20821	OP	.681	.125	.681	.151	.041	.001	.000	.482	-.263	.482	-.285	-.169
603366	20821	OP	.550	.045	.352	.053	.550	.001	.000	.326	-.191	-.159	-.203	.326
603368	20821	OP	.870	.050	.870	.035	.043	.001	.000	.420	-.226	.420	-.231	-.231
603375	20821	OP	.813	.091	.042	.813	.053	.001	.000	.464	-.303	-.285	.464	-.158
603377	20821	OP	.820	.073	.820	.039	.068	.001	.000	.464	-.309	.464	-.211	-.223
603379	20821	OP	.858	.858	.023	.026	.092	.001	.000	.412	.412	-.208	-.266	-.236
603381	20821	OP	.867	.053	.016	.867	.064	.001	.000	.322	-.217	-.164	.322	-.158
603383	20821	OP	.775	.106	.775	.037	.081	.001	.000	.431	-.256	.431	-.281	-.168
603713	20821	OP	.800	.063	.056	.080	.800	.001	.000	.463	-.360	-.204	-.180	.463
603714	20821	OP	.860	.073	.044	.860	.022	.001	.000	.411	-.247	-.287	.411	-.121
603715	20821	OP	.691	.156	.691	.061	.090	.001	.000	.443	-.282	.443	-.240	-.149
634350	11289	FT	.851	.851	.062	.062	.024	.001	.000	.469	.469	-.351	-.219	-.174
634352	2419	FT	.837	.837	.050	.059	.055	.000	.000	.451	.451	-.228	-.258	-.248
634355	2342	FT	.520	.211	.520	.238	.030	.001	.000	.377	-.308	.377	-.052	-.232
634358	2378	FT	.749	.019	.196	.749	.034	.001	.000	.539	-.278	-.436	.539	-.110
634359	2411	FT	.537	.156	.537	.100	.207	.000	.000	.346	-.141	.346	-.092	-.232
634361	2381	FT	.887	.028	.043	.041	.887	.000	.000	.332	-.173	-.130	-.247	.332
634364	2396	FT	.809	.093	.809	.053	.044	.000	.000	.521	-.339	.521	-.310	-.179
634365	11294	FT	.669	.088	.142	.099	.669	.002	.000	.473	-.237	-.243	-.224	.473
634371	2399	FT	.734	.034	.111	.121	.734	.000	.000	.436	-.198	-.218	-.271	.436
634372	2391	FT	.743	.055	.743	.136	.066	.000	.000	.455	-.199	.455	-.348	-.137
634374	2354	FT	.635	.331	.017	.635	.017	.000	.000	.531	-.472	-.155	.531	-.107
634376	2316	FT	.539	.214	.539	.211	.035	.000	.000	.401	-.226	.401	-.201	-.130
634377	11318	FT	.656	.200	.656	.118	.024	.002	.000	.441	-.298	.441	-.185	-.183
634378	2449	FT	.901	.036	.901	.041	.022	.000	.000	.312	-.201	.312	-.236	-.054

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634379	2413	FT	.782	.782	.017	.098	.102	.000	.000	.239	.239	-.086	-.185	-.106
634382	2366	FT	.447	.028	.511	.447	.014	.000	.000	.263	-.179	-.160	.263	-.176
634384	2304	FT	.689	.211	.082	.689	.018	.000	.000	.571	-.382	-.303	.571	-.189
634385	2376	FT	.819	.819	.013	.155	.013	.001	.000	.330	.330	-.144	-.239	-.205
634387	11297	FT	.794	.007	.794	.012	.186	.001	.001	.410	-.109	.410	-.179	-.346
634388	11350	FT	.869	.021	.869	.095	.014	.001	.000	.272	-.223	.272	-.149	-.115
634389	2381	FT	.679	.044	.679	.010	.267	.000	.000	.200	-.069	.200	-.103	-.156
634390	2362	FT	.570	.076	.165	.570	.189	.000	.000	.288	-.144	-.225	.288	-.052
634391	2376	FT	.925	.027	.029	.019	.925	.000	.000	.382	-.236	-.199	-.205	.382
634392	2393	FT	.090	.015	.855	.090	.038	.001	.000	.110	-.128	.016	.110	-.097
634395	2342	FT	.752	.053	.183	.752	.011	.001	.000	.387	-.255	-.262	.387	-.061
634396	2344	FT	.792	.049	.026	.132	.792	.000	.000	.442	-.323	-.204	-.227	.442
634397	2343	FT	.778	.108	.044	.070	.778	.000	.000	.556	-.407	-.231	-.224	.556
634398	2455	FT	.731	.086	.116	.066	.731	.001	.000	.510	-.386	-.281	-.106	.510
634399	11347	FT	.664	.664	.280	.021	.033	.001	.000	.436	.436	-.299	-.191	-.231
634401	2369	FT	.634	.101	.033	.634	.231	.000	.000	.420	-.356	-.236	.420	-.125
634402	2319	FT	.927	.927	.028	.023	.023	.000	.000	.425	.425	-.242	-.257	-.219
634405	2363	FT	.719	.152	.091	.038	.719	.000	.000	.467	-.350	-.152	-.212	.467
634406	2443	FT	.554	.554	.086	.313	.047	.000	.000	.227	.227	-.027	-.158	-.150
634408	11312	FT	.586	.158	.041	.586	.213	.002	.000	.319	-.261	-.228	.319	-.032
634409	2388	FT	.591	.164	.591	.119	.126	.000	.000	.411	-.216	.411	-.224	-.150
634411	2387	FT	.712	.712	.074	.146	.068	.000	.000	.481	.481	-.158	-.268	-.319
634412	2344	FT	.837	.090	.028	.044	.837	.000	.000	.500	-.382	-.224	-.186	.500
634413	2391	FT	.927	.927	.020	.037	.016	.000	.000	.427	.427	-.244	-.295	-.170
634416	2372	FT	.705	.272	.014	.705	.008	.000	.000	.487	-.422	-.166	.487	-.161
634417	11369	FT	.902	.035	.902	.043	.019	.001	.000	.426	-.257	.426	-.222	-.237
634418	2356	FT	.762	.127	.762	.047	.064	.000	.000	.478	-.306	.478	-.293	-.161
634420	2342	FT	.659	.070	.088	.659	.181	.000	.000	.428	-.187	-.248	.428	-.216
634422	11413	FT	.949	.031	.949	.009	.009	.001	.000	.189	-.109	.189	-.109	-.098
634423	2400	FT	.909	.011	.008	.071	.909	.001	.000	.134	-.091	-.157	-.050	.134
634426	2347	FT	.675	.058	.117	.675	.150	.000	.000	.396	-.212	-.049	.396	-.336
634427	2293	FT	.589	.044	.130	.589	.236	.001	.000	.388	-.138	.035	.388	-.405
634428	2392	FT	.946	.006	.946	.027	.020	.000	.000	.354	-.135	.354	-.222	-.229

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634430	11300	FT	.849	.109	.849	.020	.021	.001	.000	.284	-.140	.284	-.191	-.197
634432	2417	FT	.887	.018	.045	.050	.887	.000	.000	.373	-.192	-.257	-.180	.373
634433	2307	FT	.482	.170	.298	.482	.048	.001	.000	.453	-.281	-.173	.453	-.184

Grade 7

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
599917	20667	OP	.472	.168	.217	.142	.472	.002	.000	.342	-.085	-.170	-.189	.342
599927	20667	OP	.678	.111	.060	.678	.149	.001	.000	.453	-.256	-.212	.453	-.217
599928	20667	OP	.672	.672	.111	.146	.070	.001	.000	.459	.459	-.285	-.268	-.116
599932	20667	OP	.437	.437	.378	.135	.048	.002	.000	.276	.276	-.055	-.181	-.212
599933	20667	OP	.397	.136	.443	.397	.023	.002	.000	.375	.025	-.321	.375	-.195
599936	20667	OP	.766	.092	.766	.088	.052	.001	.000	.403	-.219	.403	-.208	-.203
599943	20667	OP	.855	.095	.855	.042	.007	.001	.000	.357	-.200	.357	-.258	-.151
599948	20667	OP	.540	.213	.149	.540	.096	.001	.000	.468	-.343	-.135	.468	-.144
599949	20667	OP	.731	.131	.731	.103	.033	.002	.000	.441	-.302	.441	-.208	-.148
599953	20667	OP	.789	.144	.020	.789	.046	.001	.000	.520	-.388	-.207	.520	-.216
599958	20667	OP	.772	.059	.087	.079	.772	.002	.000	.504	-.276	-.285	-.229	.504
599969	20667	OP	.461	.293	.115	.461	.129	.002	.000	.517	-.446	-.023	.517	-.133
599979	20667	OP	.833	.058	.833	.056	.050	.002	.000	.421	-.193	.421	-.270	-.209
599980	20667	OP	.584	.309	.043	.063	.584	.001	.000	.567	-.406	-.185	-.216	.567
599986	20667	OP	.674	.034	.114	.674	.178	.001	.000	.449	-.232	-.229	.449	-.246
599990	20667	OP	.763	.067	.135	.033	.763	.001	.000	.449	-.187	-.325	-.172	.449
599996	20667	OP	.727	.072	.727	.135	.065	.001	.000	.489	-.272	.489	-.342	-.118
599997	20667	OP	.744	.054	.083	.744	.117	.001	.000	.481	-.264	-.288	.481	-.211
600004	20667	OP	.913	.022	.026	.038	.913	.001	.000	.366	-.193	-.209	-.209	.366
600019	20667	OP	.537	.537	.145	.142	.174	.002	.000	.472	.472	-.146	-.180	-.313
600020	20667	OP	.558	.194	.558	.185	.061	.001	.000	.343	-.205	.343	-.175	-.079
600027	20667	OP	.708	.708	.129	.112	.049	.001	.000	.400	.400	-.169	-.254	-.194
600028	20667	OP	.821	.062	.821	.105	.011	.001	.000	.344	-.184	.344	-.219	-.167
600029	20667	OP	.838	.838	.087	.048	.026	.001	.000	.464	.464	-.313	-.255	-.167

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600035	20667	OP	.852	.042	.074	.852	.031	.001	.000	.474	-.253	-.293	.474	-.223
600036	20667	OP	.738	.068	.127	.065	.738	.001	.000	.562	-.238	-.332	-.298	.562
600040	20667	OP	.628	.628	.034	.320	.017	.001	.000	.471	.471	-.237	-.341	-.176
600043	20667	OP	.569	.226	.569	.104	.100	.001	.000	.340	-.024	.340	-.214	-.302
600048	20667	OP	.589	.589	.214	.136	.059	.001	.000	.383	.383	-.201	-.185	-.172
600052	20667	OP	.906	.906	.023	.029	.041	.002	.000	.288	.288	-.176	-.178	-.125
600056	20667	OP	.861	.036	.059	.861	.043	.002	.000	.245	-.162	-.107	.245	-.137
600058	20667	OP	.729	.121	.729	.076	.073	.002	.000	.444	-.260	.444	-.232	-.187
600061	20667	OP	.583	.583	.121	.178	.115	.002	.000	.476	.476	-.300	-.171	-.214
600063	20667	OP	.873	.042	.873	.033	.051	.002	.000	.430	-.163	.430	-.217	-.311
600074	20667	OP	.496	.496	.311	.073	.118	.002	.000	.389	.389	-.237	-.248	-.053
600080	20667	OP	.625	.625	.070	.257	.047	.001	.000	.333	.333	-.181	-.163	-.193
600081	20667	OP	.857	.857	.054	.037	.050	.002	.000	.447	.447	-.296	-.253	-.176
600084	20667	OP	.770	.116	.770	.028	.085	.001	.000	.364	-.370	.364	-.216	.010
600090	20667	OP	.725	.725	.241	.018	.015	.001	.000	.274	.274	-.172	-.209	-.158
600092	20667	OP	.725	.114	.074	.725	.087	.001	.000	.399	-.234	-.206	.399	-.169
600093	20667	OP	.562	.562	.306	.094	.037	.002	.000	.286	.286	-.139	-.163	-.141
600096	20667	OP	.844	.101	.844	.035	.019	.001	.000	.340	-.201	.340	-.201	-.176
600098	20667	OP	.689	.123	.689	.093	.094	.001	.000	.402	-.315	.402	-.175	-.101
600102	20667	OP	.720	.720	.138	.076	.064	.001	.000	.448	.448	-.209	-.253	-.241
600109	20667	OP	.594	.084	.221	.100	.594	.001	.000	.406	-.234	-.132	-.260	.406
600119	20667	OP	.750	.085	.056	.107	.750	.002	.000	.466	-.213	-.279	-.243	.466
600120	20667	OP	.617	.617	.176	.139	.066	.001	.000	.408	.408	-.174	-.241	-.188
600122	20667	OP	.515	.119	.253	.515	.109	.002	.000	.327	-.155	-.233	.327	-.023
600479	20667	OP	.794	.049	.062	.093	.794	.002	.000	.545	-.263	-.250	-.344	.545
600480	20667	OP	.764	.057	.764	.046	.130	.001	.001	.407	-.267	.407	-.215	-.185
600481	20667	OP	.721	.112	.109	.721	.057	.001	.000	.528	-.222	-.354	.528	-.232
600485	20667	OP	.819	.027	.077	.819	.076	.001	.000	.407	-.225	-.240	.407	-.205
600493	20667	OP	.775	.037	.118	.775	.068	.001	.000	.416	-.211	-.241	.416	-.209
600495	20667	OP	.824	.824	.024	.094	.056	.001	.000	.439	.439	-.233	-.259	-.226
600499	20667	OP	.768	.768	.091	.088	.052	.002	.000	.437	.437	-.323	-.230	-.104
600879	20667	OP	.859	.042	.068	.030	.859	.001	.000	.406	-.208	-.273	-.166	.406

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600880	20667	OP	.462	.462	.126	.375	.035	.002	.000	.321	.321	-.053	-.213	-.196
600883	20667	OP	.774	.774	.079	.060	.086	.001	.000	.348	.348	-.183	-.163	-.196
634514	11008	FT	.762	.035	.090	.762	.111	.001	.000	.593	-.163	-.318	.593	-.411
634515	2427	FT	.652	.103	.652	.200	.045	.000	.000	.529	-.135	.529	-.461	-.127
634517	2417	FT	.633	.036	.633	.250	.080	.001	.000	.520	-.120	.520	-.375	-.235
634519	2429	FT	.653	.144	.653	.102	.101	.000	.000	.583	-.300	.583	-.338	-.229
634520	2380	FT	.683	.123	.075	.118	.683	.001	.000	.536	-.290	-.077	-.406	.536
634521	2413	FT	.363	.128	.363	.271	.237	.001	.000	.357	.096	.357	-.122	-.346
634524	2388	FT	.634	.067	.634	.099	.200	.001	.000	.491	-.190	.491	-.243	-.288
634525	2491	FT	.873	.020	.041	.065	.873	.000	.000	.303	-.202	-.220	-.114	.303
634526	2461	FT	.677	.677	.063	.080	.179	.001	.000	.348	.348	-.180	-.113	-.224
634528	11051	FT	.761	.761	.030	.040	.167	.002	.000	.415	.415	-.199	-.256	-.238
634529	2428	FT	.671	.044	.210	.671	.075	.000	.000	.378	-.205	-.262	.378	-.111
634530	2429	FT	.920	.038	.023	.920	.018	.002	.000	.341	-.160	-.221	.341	-.199
634531	2390	FT	.772	.160	.026	.772	.043	.000	.000	.520	-.374	-.225	.520	-.226
634532	2430	FT	.825	.825	.062	.073	.039	.001	.000	.509	.509	-.278	-.261	-.289
634534	2433	FT	.483	.130	.483	.067	.319	.000	.000	.368	-.017	.368	-.123	-.314
634535	2405	FT	.731	.062	.160	.045	.731	.001	.000	.486	-.196	-.353	-.175	.486
634536	11022	FT	.745	.052	.119	.083	.745	.001	.000	.451	-.308	-.274	-.135	.451
634538	2358	FT	.664	.023	.034	.664	.279	.000	.000	.299	-.180	-.169	.299	-.187
634539	11000	FT	.869	.869	.017	.103	.010	.001	.000	.450	.450	-.182	-.369	-.142
634541	2371	FT	.929	.014	.013	.044	.929	.000	.000	.290	-.026	-.166	-.256	.290
634543	2441	FT	.876	.876	.054	.034	.035	.000	.000	.402	.402	-.187	-.295	-.197
634544	11019	FT	.735	.112	.088	.062	.735	.002	.000	.420	-.215	-.201	-.230	.420
634546	2418	FT	.536	.060	.221	.181	.536	.001	.000	.397	-.249	-.241	-.091	.397
634547	2425	FT	.619	.083	.094	.204	.619	.000	.000	.354	-.147	-.172	-.198	.354
634548	2395	FT	.556	.070	.312	.556	.062	.000	.000	.460	-.308	-.302	.460	-.043
634551	2422	FT	.341	.155	.443	.341	.059	.002	.000	.221	-.178	-.061	.221	-.029
634552	11036	FT	.613	.040	.061	.285	.613	.001	.000	.433	-.241	-.213	-.243	.433
634555	2356	FT	.655	.267	.655	.014	.063	.001	.000	.418	-.262	.418	-.172	-.249
634557	2426	FT	.491	.106	.124	.278	.491	.001	.000	.483	-.205	-.322	-.156	.483
634559	11019	FT	.706	.706	.120	.069	.104	.002	.000	.480	.480	-.295	-.283	-.155

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634561	2422	FT	.791	.055	.045	.791	.107	.001	.000	.480	-.299	-.282	.480	-.216
634563	2430	FT	.845	.025	.845	.056	.074	.000	.000	.511	-.141	.511	-.322	-.337
634564	2439	FT	.734	.093	.078	.734	.093	.001	.000	.461	-.254	-.208	.461	-.244
634566	2487	FT	.878	.878	.051	.051	.019	.001	.000	.496	.496	-.287	-.308	-.210
634568	2433	FT	.646	.143	.646	.155	.055	.001	.000	.501	-.096	.501	-.398	-.262
634570	10911	FT	.367	.212	.219	.367	.199	.003	.001	.176	-.032	-.216	.176	.057
634572	2421	FT	.252	.252	.423	.131	.194	.000	.000	.143	.143	.054	-.187	-.063
634574	11009	FT	.660	.092	.660	.121	.125	.002	.000	.383	-.196	.383	-.206	-.164
634575	2423	FT	.891	.891	.041	.040	.027	.000	.000	.417	.417	-.184	-.277	-.236
634576	2433	FT	.716	.149	.058	.716	.077	.001	.000	.459	-.390	-.112	.459	-.152
634577	2375	FT	.818	.818	.122	.030	.030	.000	.000	.290	.290	-.177	-.152	-.155
634579	2390	FT	.651	.115	.089	.651	.145	.000	.000	.440	-.227	-.212	.440	-.216
634580	2458	FT	.739	.103	.739	.085	.072	.001	.000	.389	-.249	.389	-.096	-.255
634581	2356	FT	.671	.166	.671	.037	.125	.001	.000	.082	-.122	.082	-.186	.133
634582	2303	FT	.326	.326	.135	.085	.453	.001	.000	.339	.339	-.235	-.153	-.070
634583	11013	FT	.269	.104	.242	.269	.383	.002	.000	.000	.082	.009	.000	-.051
634584	2354	FT	.376	.376	.324	.266	.034	.000	.000	.391	.391	-.247	-.105	-.147
634585	2430	FT	.491	.491	.252	.141	.114	.002	.000	.353	.353	-.196	-.199	-.059
634586	2481	FT	.530	.072	.064	.333	.530	.002	.000	.325	-.195	-.169	-.141	.325
634587	2414	FT	.579	.273	.115	.579	.032	.000	.000	.472	-.217	-.299	.472	-.225

Grade 8

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600134	20510	OP	.745	.071	.122	.745	.060	.002	.000	.455	-.250	-.270	.455	-.175
600140	20510	OP	.664	.095	.664	.074	.165	.001	.000	.376	-.186	.376	-.234	-.158
600144	20510	OP	.649	.216	.091	.649	.043	.001	.000	.301	-.095	-.194	.301	-.233
600151	20510	OP	.504	.237	.181	.504	.076	.002	.000	.543	-.329	-.222	.543	-.166
600152	20510	OP	.778	.047	.063	.112	.778	.001	.000	.516	-.221	-.275	-.316	.516
600153	20510	OP	.820	.820	.095	.034	.050	.001	.000	.448	.448	-.302	-.225	-.189
600156	20510	OP	.615	.178	.115	.615	.092	.001	.000	.424	-.144	-.245	.424	-.244

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600158	20510	OP	.677	.049	.091	.677	.182	.001	.000	.420	-.211	-.291	.420	-.169
600163	20510	OP	.651	.116	.651	.084	.147	.001	.000	.317	-.245	.317	-.169	-.064
600166	20510	OP	.696	.084	.175	.696	.043	.001	.000	.469	-.299	-.237	.469	-.197
600178	20510	OP	.793	.793	.086	.048	.071	.001	.000	.422	.422	-.300	-.272	-.101
600187	20510	OP	.588	.588	.053	.311	.047	.001	.000	.458	.458	-.246	-.250	-.241
600194	20510	OP	.732	.051	.110	.105	.732	.002	.000	.496	-.283	-.248	-.250	.496
600215	20510	OP	.720	.108	.077	.094	.720	.001	.000	.314	-.140	-.182	-.162	.314
600218	20510	OP	.817	.043	.059	.079	.817	.002	.000	.484	-.245	-.263	-.268	.484
600221	20510	OP	.698	.698	.112	.145	.044	.001	.000	.423	.423	-.250	-.177	-.250
600225	20510	OP	.709	.709	.068	.194	.027	.000	.000	.398	.398	-.200	-.252	-.181
600230	20510	OP	.638	.243	.096	.638	.022	.001	.000	.315	-.062	-.318	.315	-.194
600233	20510	OP	.867	.867	.076	.039	.016	.002	.000	.512	.512	-.366	-.263	-.180
600235	20510	OP	.759	.104	.759	.090	.045	.002	.000	.489	-.211	.489	-.359	-.185
600238	20510	OP	.742	.742	.147	.079	.030	.001	.000	.473	.473	-.192	-.368	-.211
600242	20510	OP	.767	.083	.767	.098	.050	.001	.000	.479	-.209	.479	-.307	-.231
600243	20510	OP	.714	.714	.083	.139	.061	.001	.000	.500	.500	-.320	-.234	-.223
600246	20510	OP	.672	.059	.672	.116	.151	.001	.000	.472	-.159	.472	-.247	-.288
600248	20510	OP	.687	.687	.088	.162	.062	.001	.000	.544	.544	-.216	-.320	-.292
600250	20510	OP	.559	.122	.094	.559	.223	.002	.000	.389	-.245	-.121	.389	-.179
600258	20510	OP	.749	.035	.113	.749	.101	.001	.000	.398	-.199	-.161	.398	-.274
600261	20510	OP	.621	.106	.210	.062	.621	.001	.000	.510	-.400	-.152	-.253	.510
600268	20510	OP	.852	.033	.088	.852	.026	.001	.000	.406	-.180	-.267	.406	-.213
600281	20510	OP	.795	.795	.130	.038	.035	.001	.000	.425	.425	-.210	-.254	-.268
600301	20510	OP	.694	.073	.073	.158	.694	.002	.000	.444	-.235	-.226	-.222	.444
600303	20510	OP	.797	.050	.123	.797	.029	.001	.000	.438	-.227	-.288	.438	-.181
600305	20510	OP	.796	.089	.796	.096	.018	.001	.000	.482	-.237	.482	-.356	-.151
600306	20510	OP	.676	.053	.250	.676	.019	.002	.000	.477	-.224	-.333	.477	-.183
600312	20510	OP	.500	.500	.108	.289	.101	.001	.000	.335	.335	-.312	-.063	-.128
600318	20510	OP	.838	.031	.838	.097	.032	.001	.000	.449	-.219	.449	-.298	-.206
600319	20510	OP	.685	.685	.137	.085	.091	.002	.000	.483	.483	-.237	-.271	-.220
600320	20510	OP	.740	.109	.081	.740	.069	.001	.000	.447	-.255	-.282	.447	-.150
600332	20510	OP	.635	.080	.635	.258	.026	.002	.000	.459	-.181	.459	-.341	-.125
600333	20510	OP	.533	.095	.533	.243	.128	.001	.000	.448	-.186	.448	-.369	-.027

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600337	20510	OP	.745	.089	.044	.120	.745	.002	.000	.457	-.207	-.264	-.253	.457
600346	20510	OP	.892	.054	.020	.892	.033	.001	.000	.385	-.228	-.236	.385	-.187
600350	20510	OP	.662	.097	.109	.131	.662	.001	.000	.482	-.246	-.249	-.222	.482
600353	20510	OP	.669	.043	.246	.669	.040	.001	.000	.348	-.211	-.183	.348	-.203
600355	20510	OP	.525	.525	.066	.048	.360	.001	.000	.244	.244	-.328	-.245	.028
600360	20510	OP	.648	.192	.648	.081	.077	.001	.000	.409	-.165	.409	-.300	-.173
600363	20510	OP	.621	.112	.131	.135	.621	.002	.000	.516	-.302	-.266	-.183	.516
600368	20510	OP	.564	.202	.564	.141	.091	.002	.000	.300	-.112	.300	-.144	-.174
600384	20510	OP	.796	.010	.796	.043	.150	.001	.000	.467	-.140	.467	-.153	-.396
600388	20510	OP	.871	.043	.067	.871	.018	.001	.000	.489	-.306	-.299	.489	-.191
600394	20510	OP	.542	.542	.160	.250	.046	.001	.000	.413	.413	-.084	-.308	-.184
600507	20510	OP	.665	.665	.162	.065	.108	.001	.000	.428	.428	-.313	-.200	-.115
600510	20510	OP	.687	.149	.072	.090	.687	.002	.000	.556	-.261	-.291	-.301	.556
600514	20510	OP	.784	.041	.099	.784	.075	.001	.000	.468	-.248	-.236	.468	-.267
600517	20510	OP	.697	.079	.152	.697	.070	.002	.000	.399	-.185	-.205	.399	-.222
600519	20510	OP	.876	.876	.035	.046	.042	.001	.000	.488	.488	-.248	-.288	-.266
600522	20510	OP	.706	.066	.706	.120	.107	.000	.000	.352	-.171	.352	-.130	-.240
600526	20510	OP	.897	.021	.027	.897	.054	.001	.000	.426	-.194	-.215	.426	-.288
603724	20510	OP	.760	.760	.129	.064	.045	.001	.000	.480	.480	-.213	-.290	-.288
603726	20510	OP	.758	.074	.758	.099	.069	.001	.000	.441	-.306	.441	-.207	-.180
634588	10856	FT	.577	.046	.062	.314	.577	.002	.000	.513	-.195	-.236	-.331	.513
634590	2392	FT	.881	.016	.069	.032	.881	.001	.000	.439	-.229	-.302	-.189	.439
634592	2373	FT	.756	.060	.082	.756	.102	.000	.000	.457	-.286	-.250	.457	-.197
634595	2456	FT	.748	.748	.098	.076	.077	.001	.000	.475	.475	-.269	-.280	-.186
634596	2406	FT	.376	.081	.388	.154	.376	.000	.000	.112	-.048	.009	-.122	.112
634597	2296	FT	.651	.134	.117	.097	.651	.001	.000	.399	-.274	-.103	-.204	.399
634599	2461	FT	.567	.567	.269	.097	.067	.000	.000	.355	.355	-.204	-.160	-.149
634603	10965	FT	.677	.173	.677	.084	.063	.001	.000	.424	-.186	.424	-.240	-.235
634604	2379	FT	.736	.195	.034	.034	.736	.001	.000	.428	-.291	-.212	-.177	.428
634608	2455	FT	.453	.253	.453	.214	.081	.000	.000	.300	-.042	.300	-.170	-.225
634609	2413	FT	.959	.014	.959	.016	.010	.000	.000	.350	-.232	.350	-.225	-.135
634610	2410	FT	.241	.085	.241	.241	.430	.002	.000	.105	-.306	-.133	.105	.208
634612	2415	FT	.852	.048	.026	.073	.852	.000	.000	.304	-.022	-.212	-.262	.304

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634613	2463	FT	.541	.541	.247	.127	.083	.001	.000	.224	.224	-.119	-.015	-.187
634615	2437	FT	.844	.059	.844	.040	.057	.000	.000	.468	-.296	.468	-.226	-.241
634616	2368	FT	.733	.071	.733	.113	.082	.001	.000	.532	-.275	.532	-.280	-.267
634619	2433	FT	.446	.177	.236	.446	.141	.000	.000	.165	.025	-.106	.165	-.134
634620	2495	FT	.598	.598	.206	.094	.101	.001	.000	.308	.308	-.144	-.135	-.170
634624	2387	FT	.421	.421	.108	.424	.046	.000	.000	.241	.241	-.330	.058	-.217
634625	2360	FT	.781	.067	.114	.781	.037	.001	.000	.416	-.248	-.220	.416	-.198
634628	2352	FT	.839	.040	.839	.053	.067	.001	.000	.517	-.269	.517	-.214	-.347
634630	2406	FT	.620	.111	.201	.620	.067	.001	.000	.535	-.325	-.294	.535	-.150
634633	2446	FT	.799	.052	.799	.091	.057	.001	.000	.464	-.144	.464	-.348	-.224
634634	10851	FT	.652	.090	.652	.128	.128	.002	.000	.503	-.131	.503	-.359	-.235
634636	10837	FT	.663	.086	.663	.152	.097	.002	.000	.342	-.172	.342	-.138	-.208
634637	2390	FT	.569	.208	.569	.174	.048	.001	.000	.336	-.101	.336	-.299	-.044
634638	10908	FT	.585	.116	.585	.121	.176	.002	.000	.490	-.291	.490	-.257	-.163
634641	2412	FT	.812	.016	.123	.812	.047	.002	.000	.413	-.184	-.223	.413	-.284
634643	10880	FT	.572	.572	.044	.034	.348	.001	.000	.480	.480	-.250	-.249	-.291
634644	2465	FT	.665	.665	.128	.057	.149	.001	.000	.333	.333	-.151	-.274	-.114
634646	2337	FT	.536	.208	.127	.128	.536	.001	.000	.547	-.194	-.302	-.271	.547
634648	10895	FT	.485	.097	.485	.353	.063	.002	.000	.337	-.217	.337	-.117	-.189
634650	2452	FT	.666	.069	.229	.037	.666	.000	.000	.372	-.392	-.087	-.207	.372
634653	2452	FT	.633	.059	.094	.212	.633	.001	.000	.452	-.113	-.332	-.222	.452
634654	2409	FT	.669	.149	.042	.140	.669	.000	.000	.481	-.331	-.180	-.205	.481
634655	10918	FT	.634	.634	.175	.151	.036	.003	.000	.418	.418	-.220	-.207	-.211
634656	2387	FT	.823	.052	.060	.064	.823	.001	.000	.508	-.287	-.270	-.264	.508
634657	2344	FT	.473	.155	.282	.473	.088	.002	.000	.400	-.184	-.246	.400	-.064
634660	2396	FT	.417	.216	.213	.417	.153	.000	.000	.344	-.100	-.272	.344	-.044
634661	2349	FT	.448	.448	.272	.160	.119	.001	.000	.410	.410	-.150	-.211	-.180
634662	10891	FT	.580	.580	.167	.171	.080	.001	.000	.406	.406	-.165	-.236	-.172
634663	2291	FT	.531	.164	.168	.531	.134	.002	.000	.339	-.179	-.214	.339	-.049
634667	2452	FT	.407	.407	.135	.115	.341	.001	.000	.265	.265	-.272	-.205	.062
634670	2412	FT	.386	.277	.386	.076	.258	.002	.000	.089	.017	.089	-.184	.003
634673	2433	FT	.860	.027	.056	.860	.056	.001	.000	.400	-.193	-.218	.400	-.244
634674	10861	FT	.788	.065	.077	.788	.068	.002	.000	.410	-.169	-.317	.410	-.153

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634675	2425	FT	.901	.024	.043	.031	.901	.000	.000	.481	-.240	-.286	-.273	.481
634678	2379	FT	.738	.160	.738	.080	.021	.000	.000	.405	-.248	.405	-.221	-.184
634679	2385	FT	.369	.145	.194	.369	.291	.000	.000	.352	-.095	-.364	.352	.019
634682	2465	FT	.464	.020	.464	.249	.266	.001	.000	.408	-.115	.408	-.230	-.191

Grade 11

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600397	20831	OP	.621	.621	.182	.095	.100	.003	.000	.527	.527	-.308	-.288	-.161
600406	20831	OP	.610	.069	.610	.210	.106	.005	.000	.503	-.210	.503	-.264	-.249
600410	20831	OP	.664	.098	.664	.154	.080	.004	.000	.390	-.148	.390	-.263	-.142
600419	20831	OP	.547	.145	.151	.547	.153	.004	.000	.442	-.145	-.252	.442	-.199
600421	20831	OP	.448	.241	.144	.164	.448	.004	.000	.457	-.072	-.260	-.266	.457
600422	20831	OP	.531	.112	.240	.531	.112	.004	.000	.341	-.153	-.197	.341	-.099
600536	20831	OP	.552	.194	.124	.552	.127	.003	.000	.408	-.048	-.335	.408	-.201
600540	20831	OP	.578	.186	.132	.578	.100	.003	.000	.483	-.242	-.297	.483	-.130
600543	20831	OP	.587	.176	.587	.072	.163	.003	.000	.298	-.073	.298	-.246	-.139
600552	20831	OP	.656	.028	.285	.656	.029	.002	.000	.428	-.125	-.359	.428	-.103
600558	20831	OP	.922	.022	.031	.922	.023	.002	.000	.322	-.173	-.220	.322	-.132
600561	20831	OP	.661	.126	.661	.062	.147	.004	.000	.449	-.226	.449	-.282	-.181
600562	20831	OP	.793	.037	.087	.793	.080	.004	.000	.427	-.204	-.282	.427	-.179
600576	20831	OP	.708	.708	.096	.121	.072	.003	.000	.489	.489	-.279	-.238	-.219
600577	20831	OP	.445	.445	.272	.180	.099	.003	.000	.439	.439	-.081	-.306	-.203
600583	20831	OP	.645	.190	.117	.645	.045	.003	.000	.425	-.169	-.297	.425	-.180
600590	20831	OP	.664	.085	.664	.121	.125	.004	.000	.506	-.220	.506	-.332	-.187
600594	20831	OP	.681	.134	.098	.681	.084	.003	.000	.466	-.187	-.293	.466	-.223
600598	20831	OP	.754	.103	.060	.754	.079	.003	.000	.495	-.305	-.275	.495	-.180
600599	20831	OP	.646	.080	.646	.063	.209	.002	.000	.422	-.209	.422	-.285	-.177
600617	20831	OP	.564	.564	.220	.077	.137	.003	.000	.437	.437	-.262	-.252	-.107
600619	20831	OP	.735	.084	.100	.079	.735	.002	.000	.324	-.083	-.211	-.199	.324
600627	20831	OP	.712	.081	.068	.712	.135	.004	.000	.464	-.239	-.243	.464	-.224
600629	20831	OP	.663	.086	.143	.104	.663	.003	.000	.499	-.192	-.290	-.247	.499

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600633	20831	OP	.661	.138	.661	.129	.068	.003	.000	.526	-.226	.526	-.327	-.218
600638	20831	OP	.604	.162	.068	.163	.604	.003	.000	.501	-.235	-.273	-.226	.501
600641	20831	OP	.657	.068	.085	.657	.188	.002	.000	.460	-.161	-.201	.460	-.301
600648	20831	OP	.706	.096	.706	.119	.074	.004	.000	.483	-.233	.483	-.280	-.204
600653	20831	OP	.578	.204	.148	.578	.068	.003	.000	.457	-.265	-.231	.457	-.133
600656	20831	OP	.630	.163	.125	.630	.078	.004	.000	.397	-.282	-.120	.397	-.153
600660	20831	OP	.630	.130	.183	.054	.630	.003	.001	.583	-.371	-.257	-.225	.583
600677	20831	OP	.680	.680	.161	.093	.062	.003	.000	.473	.473	-.119	-.348	-.286
600680	20831	OP	.721	.045	.039	.721	.194	.002	.000	.441	-.106	-.176	.441	-.350
600689	20831	OP	.812	.812	.078	.076	.031	.003	.000	.473	.473	-.264	-.280	-.206
600694	20831	OP	.672	.672	.071	.196	.057	.003	.000	.560	.560	-.293	-.334	-.215
600695	20831	OP	.640	.123	.073	.640	.161	.003	.000	.358	-.244	-.270	.358	-.041
600709	20831	OP	.641	.128	.151	.641	.078	.003	.000	.520	-.251	-.334	.520	-.154
600718	20831	OP	.459	.459	.204	.171	.163	.003	.000	.462	.462	-.307	-.188	-.081
600724	20831	OP	.645	.107	.152	.645	.091	.003	.000	.460	-.197	-.284	.460	-.181
600725	20831	OP	.558	.228	.558	.108	.103	.003	.000	.375	-.135	.375	-.286	-.113
600726	20831	OP	.612	.105	.612	.223	.057	.003	.000	.472	-.144	.472	-.337	-.170
600728	20831	OP	.595	.595	.076	.246	.080	.003	.000	.443	.443	-.267	-.172	-.245
600731	20831	OP	.694	.106	.087	.694	.110	.003	.000	.450	-.263	-.302	.450	-.116
600732	20831	OP	.578	.121	.578	.198	.099	.003	.000	.413	-.117	.413	-.265	-.187
600735	20831	OP	.747	.049	.117	.747	.084	.003	.000	.437	-.234	-.314	.437	-.120
600736	20831	OP	.814	.086	.061	.814	.037	.003	.000	.424	-.153	-.314	.424	-.227
600748	20831	OP	.644	.148	.644	.162	.042	.003	.000	.462	-.142	.462	-.323	-.224
600751	20831	OP	.722	.722	.135	.085	.054	.004	.000	.493	.493	-.309	-.210	-.219
600754	20831	OP	.583	.117	.583	.214	.082	.003	.000	.490	-.069	.490	-.367	-.229
600759	20831	OP	.472	.304	.472	.119	.102	.003	.000	.461	-.205	.461	-.202	-.217
600765	20831	OP	.701	.096	.056	.701	.142	.004	.000	.387	-.236	-.267	.387	-.112
600769	20831	OP	.613	.123	.102	.159	.613	.003	.000	.280	-.164	-.112	-.123	.280
600771	20831	OP	.597	.113	.144	.143	.597	.003	.000	.443	-.161	-.262	-.196	.443
600774	20831	OP	.810	.079	.054	.055	.810	.002	.000	.447	-.251	-.235	-.223	.447
600775	20831	OP	.718	.115	.083	.082	.718	.002	.000	.522	-.385	-.212	-.181	.522
600781	20831	OP	.600	.213	.600	.105	.079	.003	.000	.259	-.129	.259	-.238	.011
600782	20831	OP	.533	.349	.072	.533	.043	.003	.000	.581	-.388	-.316	.581	-.095

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
600795	20831	OP	.576	.094	.576	.247	.079	.004	.000	.445	-.150	.445	-.316	-.123
600798	20831	OP	.506	.137	.259	.506	.095	.003	.000	.304	-.163	-.109	.304	-.147
600819	20831	OP	.547	.071	.180	.198	.547	.003	.000	.449	-.198	-.185	-.240	.449
600402	11981	FT	.372	.105	.379	.372	.139	.004	.000	.395	-.187	-.271	.395	.010
600587	2201	FT	.498	.083	.114	.303	.498	.001	.000	.409	-.219	-.264	-.124	.409
600615	2214	FT	.237	.159	.131	.472	.237	.001	.000	.247	-.195	-.279	.126	.247
600645	11932	FT	.592	.112	.592	.136	.155	.004	.001	.211	-.152	.211	-.081	-.056
600684	2134	FT	.419	.111	.419	.166	.301	.003	.000	.387	-.022	.387	-.201	-.225
600739	2201	FT	.635	.105	.231	.635	.027	.002	.000	.468	-.173	-.329	.468	-.183
600756	2220	FT	.746	.746	.089	.123	.040	.003	.000	.372	.372	-.177	-.250	-.121
600768	2217	FT	.611	.143	.611	.124	.120	.002	.000	.354	-.106	.354	-.272	-.131
600770	2171	FT	.683	.130	.683	.146	.038	.003	.000	.437	-.181	.437	-.330	-.107
600832	11914	FT	.843	.078	.843	.058	.018	.003	.000	.413	-.273	.413	-.219	-.164
634442	11929	FT	.704	.076	.075	.704	.141	.003	.000	.458	-.164	-.248	.458	-.272
634443	2286	FT	.263	.140	.543	.263	.053	.001	.000	.302	-.321	.009	.302	-.104
634444	2340	FT	.300	.071	.555	.300	.071	.003	.000	.273	-.196	-.045	.273	-.187
634445	2225	FT	.531	.314	.531	.102	.050	.003	.000	.420	-.246	.420	-.238	-.086
634446	2213	FT	.690	.690	.114	.111	.084	.002	.000	.483	.483	-.250	-.352	-.108
634447	2208	FT	.605	.067	.239	.605	.087	.001	.000	.267	-.129	-.254	.267	.049
634448	2272	FT	.545	.107	.545	.242	.104	.002	.000	.278	-.115	.278	-.065	-.235
634449	11915	FT	.648	.072	.157	.118	.648	.004	.001	.540	-.237	-.272	-.279	.540
634450	2223	FT	.857	.056	.069	.857	.016	.001	.000	.439	-.232	-.301	.439	-.166
634451	11920	FT	.598	.162	.120	.598	.116	.003	.000	.492	-.221	-.271	.492	-.206
634452	2280	FT	.257	.257	.229	.215	.297	.002	.000	.072	.072	.066	-.137	.003
634453	2235	FT	.429	.101	.429	.343	.126	.001	.000	.101	-.213	.101	-.053	.128
634454	2257	FT	.368	.376	.368	.076	.178	.002	.000	.427	-.150	.427	-.079	-.283
634455	2174	FT	.339	.354	.133	.170	.339	.003	.000	.247	-.045	-.144	-.108	.247
634456	2195	FT	.410	.162	.410	.313	.113	.002	.000	.138	-.221	.138	.009	.041
634457	11935	FT	.355	.294	.355	.220	.125	.005	.000	.306	.013	.306	-.201	-.186
634458	2276	FT	.399	.162	.288	.399	.149	.003	.000	.076	-.009	-.144	.076	.102
634459	2197	FT	.268	.268	.220	.307	.203	.002	.000	.252	.252	-.133	-.168	.059
634460	2293	FT	.337	.337	.241	.339	.080	.003	.000	.190	.190	-.190	.053	-.104
634461	2156	FT	.378	.092	.378	.322	.206	.002	.000	.344	-.030	.344	-.203	-.147

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634462	2275	FT	.339	.248	.247	.339	.163	.002	.000	.166	.042	-.107	.166	-.123
634463	2232	FT	.230	.158	.274	.333	.230	.005	.000	.248	-.025	.054	-.230	.248
634464	2202	FT	.446	.446	.188	.150	.214	.001	.000	.533	.533	-.180	-.243	-.256
634465	2203	FT	.367	.101	.312	.219	.367	.002	.000	.448	-.155	-.159	-.225	.448
634466	2276	FT	.462	.239	.250	.462	.048	.001	.000	.107	-.016	-.072	.107	-.072
634467	2196	FT	.263	.196	.263	.372	.167	.002	.000	.010	.070	.010	-.038	-.027
634468	2267	FT	.417	.050	.128	.402	.417	.003	.000	.285	-.099	-.030	-.214	.285
634469	2240	FT	.826	.051	.069	.826	.051	.002	.000	.469	-.267	-.296	.469	-.173
634470	2215	FT	.861	.861	.037	.056	.044	.002	.000	.384	.384	-.259	-.152	-.226
634471	11961	FT	.276	.260	.297	.163	.276	.004	.000	.335	-.091	-.094	-.162	.335
634472	11886	FT	.356	.164	.148	.356	.327	.004	.001	.006	-.040	-.050	.006	.073
634473	2221	FT	.357	.077	.332	.233	.357	.001	.000	.076	-.162	.149	-.143	.076
634474	2192	FT	.471	.154	.203	.169	.471	.003	.000	.406	-.187	-.105	-.234	.406
634475	2216	FT	.455	.455	.182	.301	.060	.001	.000	-.052	-.052	.078	.061	-.124
634476	2187	FT	.614	.149	.105	.130	.614	.002	.000	.555	-.272	-.222	-.297	.555
634477	2246	FT	.444	.444	.185	.091	.276	.003	.000	.488	.488	-.132	-.175	-.300
634478	2204	FT	.348	.348	.202	.213	.236	.001	.000	.364	.364	.017	-.210	-.219
634479	11937	FT	.379	.379	.255	.219	.142	.005	.001	.324	.324	-.017	-.187	-.187
634480	2269	FT	.197	.110	.511	.181	.197	.002	.000	.328	-.238	.056	-.209	.328
634481	2171	FT	.206	.215	.242	.334	.206	.002	.000	-.039	-.084	-.017	.134	-.039

Appendix I: Science Key Verification and Foil Analysis

Grade 5

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634836	7154	FT	.733	.733	.076	.118	.062	.011	.000	.425	.425	-.212	-.208	-.162
634837	5072	FT	.902	.033	.031	.020	.902	.015	.000	.418	-.197	-.207	-.173	.418
634838	5072	FT	.542	.232	.145	.070	.542	.011	.000	.330	-.136	-.106	-.196	.330
634839	7154	FT	.571	.571	.119	.133	.161	.016	.000	.432	.432	-.193	-.210	-.135
634840	7154	FT	.828	.011	.016	.128	.828	.016	.000	.398	-.153	-.137	-.257	.398
634841	5072	FT	.896	.896	.013	.062	.014	.015	.000	.250	.250	-.145	-.068	-.116
634842	5060	FT	.768	.035	.028	.768	.161	.008	.000	.315	-.170	-.204	.315	-.147
634843	5072	FT	.502	.502	.032	.351	.105	.011	.000	.161	.161	-.098	-.028	-.100
634844	7154	FT	.842	.033	.063	.051	.842	.012	.000	.458	-.183	-.231	-.242	.458
634845	7154	FT	.766	.092	.054	.766	.071	.016	.000	.453	-.226	-.198	.453	-.197
634846	5072	FT	.914	.018	.914	.043	.014	.011	.000	.324	-.105	.324	-.204	-.131
634847	5060	FT	.567	.045	.257	.114	.567	.017	.000	.405	-.200	-.161	-.182	.405
634848	7154	FT	.842	.036	.029	.842	.077	.016	.000	.342	-.135	-.143	.342	-.169
634849	7154	FT	.679	.095	.090	.679	.123	.012	.000	.440	-.213	-.136	.440	-.239
634850	5072	FT	.806	.089	.056	.806	.035	.015	.000	.345	-.158	-.147	.345	-.152
634851	5060	FT	.729	.049	.146	.060	.729	.017	.000	.329	-.130	-.162	-.127	.329
634852	5060	FT	.700	.056	.700	.169	.058	.017	.000	.310	-.115	.310	-.100	-.206
634853	5072	FT	.315	.315	.251	.204	.219	.011	.000	.255	.255	-.025	-.151	-.066
634854	7154	FT	.487	.178	.487	.103	.216	.016	.000	.366	-.211	.366	-.160	-.055
634855	7154	FT	.409	.135	.409	.210	.235	.011	.000	.228	-.067	.228	-.097	-.065
634856	5072	FT	.464	.087	.464	.289	.149	.011	.000	.300	-.072	.300	-.159	-.106
634857	5060	FT	.724	.060	.086	.112	.724	.018	.000	.381	-.159	-.191	-.150	.381
634858	5060	FT	.775	.775	.054	.111	.052	.008	.000	.351	.351	-.170	-.196	-.148
634859	5072	FT	.673	.099	.089	.673	.124	.015	.000	.256	-.142	-.092	.256	-.068
634860	5060	FT	.924	.924	.010	.045	.005	.017	.000	.284	.284	-.096	-.145	-.083
634861	7154	FT	.788	.053	.788	.094	.053	.012	.000	.459	-.173	.459	-.260	-.213
634862	7154	FT	.578	.195	.096	.115	.578	.016	.000	.343	-.064	-.180	-.188	.343
634863	5072	FT	.579	.054	.163	.192	.579	.011	.000	.415	-.192	-.202	-.169	.415
634864	5060	FT	.619	.053	.258	.053	.619	.018	.000	.449	-.098	-.294	-.161	.449
634865	5060	FT	.630	.040	.104	.219	.630	.008	.000	.348	-.141	-.184	-.172	.348

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634866	5072	FT	.909	.016	.030	.909	.030	.015	.000	.430	-.173	-.218	.430	-.207
634867	7154	FT	.247	.261	.035	.440	.247	.016	.000	.332	-.150	-.089	-.060	.332
634868	7154	FT	.459	.152	.034	.344	.459	.011	.000	.394	-.262	-.143	-.108	.394
634869	5072	FT	.722	.061	.722	.054	.152	.010	.000	.340	-.123	.340	-.205	-.159
634870	5060	FT	.192	.059	.192	.704	.037	.008	.000	.170	-.075	.170	-.008	-.172
634871	5060	FT	.561	.135	.561	.142	.145	.017	.000	.387	-.116	.387	-.212	-.135
634872	5072	FT	.936	.024	.012	.013	.936	.015	.000	.406	-.197	-.186	-.167	.406
634873	7154	FT	.709	.135	.065	.075	.709	.016	.001	.406	-.192	-.171	-.174	.406
634874	7154	FT	.563	.563	.229	.086	.109	.013	.000	.429	.429	-.151	-.234	-.186
634875	5072	FT	.880	.880	.020	.033	.056	.011	.000	.411	.411	-.196	-.209	-.213
634876	5060	FT	.769	.046	.769	.009	.158	.017	.000	.339	-.078	.339	-.107	-.234
634877	5060	FT	.627	.627	.051	.278	.037	.008	.000	.283	.283	-.157	-.138	-.143
634878	5072	FT	.698	.112	.079	.100	.698	.011	.000	.341	-.132	-.191	-.145	.341
634879	7154	FT	.807	.807	.079	.051	.051	.012	.000	.375	.375	-.193	-.197	-.123
634880	5072	FT	.741	.088	.741	.114	.043	.015	.000	.429	-.194	.429	-.224	-.163
634881	5060	FT	.692	.028	.053	.209	.692	.017	.000	.238	-.127	-.119	-.078	.238
634882	5060	FT	.292	.202	.116	.382	.292	.008	.000	.279	-.158	-.027	-.085	.279
634883	5060	FT	.871	.078	.871	.013	.030	.008	.000	.260	-.106	.260	-.176	-.146
634884	5060	FT	.801	.801	.072	.029	.080	.017	.000	.327	.327	-.132	-.161	-.141
634885	5072	FT	.862	.020	.021	.862	.081	.015	.000	.360	-.177	-.168	.360	-.168
634886	7154	FT	.493	.148	.493	.112	.231	.016	.000	.316	-.119	.316	-.131	-.104
634887	7154	FT	.782	.095	.782	.075	.037	.011	.000	.188	-.044	.188	-.092	-.086
634888	5072	FT	.590	.590	.140	.188	.067	.015	.000	.215	.215	-.032	-.111	-.085
634889	5060	FT	.423	.245	.154	.160	.423	.018	.000	.207	-.071	-.075	-.036	.207
634890	5060	FT	.168	.168	.400	.343	.081	.008	.000	.194	.194	.049	-.084	-.158
634891	5072	FT	.751	.751	.106	.011	.121	.011	.000	.288	.288	-.135	-.095	-.165
634892	5060	FT	.315	.186	.281	.210	.315	.008	.000	.106	-.016	-.029	-.039	.106
634893	7154	FT	.759	.159	.036	.035	.759	.011	.000	.440	-.277	-.169	-.169	.440
634894	7154	FT	.701	.114	.094	.076	.701	.016	.000	.399	-.164	-.206	-.155	.399
634895	5072	FT	.690	.690	.042	.224	.029	.015	.000	.403	.403	-.146	-.269	-.096
634896	5060	FT	.811	.070	.021	.811	.082	.017	.000	.291	-.096	-.161	.291	-.130
634897	5060	FT	.325	.148	.325	.250	.268	.008	.000	.276	-.134	.276	-.050	-.104
634898	5072	FT	.966	.006	.966	.010	.007	.011	.000	.276	-.133	.276	-.096	-.123

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634899	5072	FT	.763	.028	.043	.151	.763	.015	.000	.454	-.206	-.187	-.256	.454
634900	7154	FT	.670	.047	.670	.099	.168	.016	.000	.295	-.136	.295	-.189	-.062
634901	7154	FT	.338	.338	.078	.471	.096	.016	.000	.352	.352	-.167	-.069	-.190
634902	5072	FT	.378	.402	.140	.065	.378	.016	.000	.265	.038	-.246	-.122	.265
634903	5060	FT	.762	.085	.762	.075	.061	.017	.000	.474	-.271	.474	-.246	-.128
634904	10132	FT	.670	.149	.670	.052	.118	.012	.000	.432	-.195	.432	-.142	-.250
634905	12226	FT	.508	.108	.189	.508	.184	.011	.000	.330	-.175	-.044	.330	-.181
634906	12214	FT	.535	.111	.211	.535	.126	.017	.000	.462	-.211	-.208	.462	-.146
634907	12226	FT	.780	.780	.072	.059	.077	.011	.000	.393	.393	-.213	-.180	-.158
634908	10132	FT	.366	.143	.366	.326	.157	.009	.000	.444	-.102	.444	-.212	-.174
634909	12214	FT	.579	.046	.065	.579	.296	.013	.000	.261	-.164	-.185	.261	-.055
634910	5060	FT	.595	.327	.032	.029	.595	.017	.000	.276	-.141	-.113	-.119	.276
634911	5072	FT	.621	.621	.154	.114	.096	.015	.000	.408	.408	-.169	-.228	-.119
634912	7154	FT	.849	.017	.849	.091	.032	.011	.000	.322	-.119	.322	-.181	-.135
634913	7154	FT	.398	.025	.149	.398	.416	.011	.000	.145	-.110	-.123	.145	.030
634914	5072	FT	.900	.007	.074	.008	.900	.011	.000	.245	-.114	-.131	-.114	.245
634915	5060	FT	.416	.036	.185	.416	.355	.008	.000	.203	-.116	-.044	.203	-.100
634916	5060	FT	.632	.151	.022	.177	.632	.017	.000	.352	-.195	-.138	-.129	.352
634917	5072	FT	.559	.559	.227	.096	.108	.010	.000	.314	.314	-.132	-.150	-.119
634918	7154	FT	.559	.559	.080	.327	.024	.010	.000	.343	.343	-.135	-.198	-.144
634919	7154	FT	.726	.120	.726	.083	.059	.012	.000	.393	-.160	.393	-.216	-.162
634920	5072	FT	.896	.018	.038	.033	.896	.015	.000	.381	-.183	-.168	-.172	.381
634921	5060	FT	.617	.148	.119	.100	.617	.017	.000	.375	-.183	-.138	-.141	.375
634922	5060	FT	.652	.156	.091	.084	.652	.017	.000	.422	-.201	-.154	-.191	.422
634923	5072	FT	.767	.767	.050	.044	.124	.015	.000	.388	.388	-.116	-.183	-.218
634924	7154	FT	.466	.466	.167	.172	.178	.016	.000	.357	.357	-.203	-.032	-.155
634925	7154	FT	.531	.159	.195	.103	.531	.011	.000	.412	-.167	-.155	-.197	.412
634926	5072	FT	.601	.190	.083	.601	.115	.011	.000	.385	-.175	-.176	.385	-.163
634927	5060	FT	.686	.686	.125	.097	.084	.008	.000	.333	.333	-.145	-.165	-.159
634928	5060	FT	.724	.086	.030	.152	.724	.008	.000	.328	-.216	-.136	-.137	.328
634929	5072	FT	.604	.080	.167	.134	.604	.015	.000	.474	-.181	-.221	-.207	.474
634930	7154	FT	.450	.160	.450	.130	.244	.016	.000	.330	-.187	.330	-.119	-.058
634931	7154	FT	.802	.058	.092	.802	.036	.012	.000	.394	-.184	-.195	.394	-.181

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634932	5072	FT	.778	.091	.043	.078	.778	.010	.000	.313	-.079	-.196	-.185	.313
634933	5060	FT	.476	.188	.153	.476	.175	.008	.000	.342	-.086	-.231	.342	-.106
634934	5060	FT	.615	.615	.100	.101	.167	.017	.000	.463	.463	-.264	-.140	-.195
634935	5072	FT	.782	.054	.093	.782	.058	.014	.000	.336	-.118	-.154	.336	-.165
634936	7154	FT	.729	.027	.200	.028	.729	.016	.000	.439	-.163	-.271	-.177	.439
634937	7154	FT	.809	.809	.084	.059	.037	.011	.000	.440	.440	-.240	-.212	-.166
634938	5072	FT	.454	.144	.174	.213	.454	.015	.000	.227	-.039	-.050	-.126	.227
634939	5060	FT	.754	.036	.754	.185	.018	.008	.000	.234	-.115	.234	-.119	-.148
634940	5060	FT	.392	.202	.187	.202	.392	.017	.000	.246	-.106	-.085	-.034	.246
634941	12226	FT	.781	.022	.781	.148	.035	.014	.000	.430	-.130	.430	-.281	-.181
634942	7154	FT	.925	.011	.041	.925	.012	.011	.000	.258	-.100	-.135	.258	-.069
634943	5072	FT	.492	.256	.492	.167	.071	.015	.000	.318	-.049	.318	-.202	-.129
634944	5060	FT	.529	.529	.231	.107	.115	.018	.000	.330	.330	-.122	-.114	-.145
634945	5060	FT	.454	.330	.095	.454	.113	.008	.000	.333	-.130	-.226	.333	-.077
634946	5072	FT	.637	.119	.163	.066	.637	.015	.000	.273	-.061	-.089	-.199	.273
634947	7154	FT	.791	.791	.033	.119	.046	.011	.000	.421	.421	-.182	-.232	-.191
634948	7154	FT	.436	.165	.436	.197	.186	.016	.000	.225	-.027	.225	-.123	-.059
634949	5060	FT	.536	.139	.284	.024	.536	.017	.000	.400	-.181	-.175	-.177	.400
634950	5072	FT	.455	.115	.217	.455	.199	.015	.000	.364	-.134	-.012	.364	-.261
634951	5060	FT	.286	.198	.286	.365	.143	.008	.000	.183	-.038	.183	-.020	-.127
634952	5072	FT	.558	.100	.266	.061	.558	.015	.000	.343	-.179	-.099	-.179	.343
634953	7154	FT	.411	.150	.411	.142	.281	.016	.000	.299	-.041	.299	-.276	-.011
634954	7154	FT	.304	.304	.116	.175	.389	.016	.000	.157	.157	-.094	-.054	.020
634955	5072	FT	.533	.208	.112	.137	.533	.011	.000	.398	-.092	-.199	-.230	.398
634956	5060	FT	.724	.724	.059	.172	.028	.018	.000	.432	.432	-.228	-.219	-.153
634957	12214	FT	.742	.022	.121	.742	.103	.012	.000	.303	-.086	-.079	.303	-.234
634958	5072	FT	.721	.721	.151	.085	.032	.011	.000	.324	.324	-.200	-.161	-.052
634960	7154	FT	.271	.349	.197	.171	.271	.012	.000	.244	.052	-.167	-.111	.244
634961	5072	FT	.387	.233	.121	.387	.249	.010	.000	.253	-.136	-.154	.253	.010
634962	5060	FT	.661	.085	.661	.075	.171	.008	.000	.213	-.220	.213	-.036	-.044
634963	5060	FT	.570	.127	.570	.106	.180	.017	.000	.466	-.213	.466	-.204	-.172
634964	5072	FT	.546	.148	.184	.106	.546	.015	.000	.232	-.039	-.054	-.167	.232
634965	7154	FT	.493	.084	.320	.493	.091	.011	.000	.390	-.233	-.168	.390	-.095

GENERAL	COUNTS	ITEM	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
634966	7154	FT	.494	.494	.099	.223	.168	.016	.000	.326	.326	-.246	-.067	-.079
634967	5072	FT	.499	.499	.048	.058	.385	.010	.000	.151	.151	-.125	-.137	.006
634968	5060	FT	.639	.639	.144	.097	.103	.017	.000	.396	.396	-.196	-.128	-.175
634969	5060	FT	.608	.113	.150	.120	.608	.008	.000	.386	-.233	-.142	-.154	.386
634970	5060	FT	.434	.199	.434	.152	.207	.008	.000	.281	-.104	.281	-.143	-.082
634974	5060	FT	.467	.467	.238	.084	.204	.008	.000	.250	.250	-.048	-.172	-.107
634976	5072	FT	.144	.317	.400	.128	.144	.011	.000	.087	-.097	.165	-.138	.087
634977	7154	FT	.664	.099	.664	.142	.077	.017	.000	.411	-.159	.411	-.212	-.151
634978	7154	FT	.292	.167	.274	.253	.292	.012	.000	.242	-.066	-.082	-.055	.242
634979	5072	FT	.516	.069	.153	.248	.516	.015	.000	.295	-.067	-.252	-.025	.295
635044	7154	FT	.642	.017	.642	.204	.121	.016	.000	.364	-.158	.364	-.177	-.159
636068	12226	FT	.407	.049	.476	.407	.056	.011	.000	.159	-.079	-.011	.159	-.141

Grade 8

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635003	7028	FT	.541	.278	.060	.541	.104	.018	.000	.297	-.128	-.155	.297	-.070
635004	5136	FT	.652	.094	.139	.072	.652	.043	.000	.438	-.208	-.090	-.185	.438
635005	7028	FT	.415	.415	.147	.234	.181	.023	.000	.341	.341	-.121	-.184	-.019
635006	5153	FT	.309	.086	.192	.309	.394	.020	.000	.066	-.139	-.036	.066	.107
635007	5153	FT	.569	.128	.569	.125	.138	.040	.000	.367	-.197	.367	-.038	-.116
635008	5136	FT	.467	.267	.066	.467	.176	.024	.000	.207	.009	-.131	.207	-.105
635009	7028	FT	.413	.098	.024	.413	.447	.017	.000	.282	-.131	-.114	.282	-.101
635010	7028	FT	.842	.046	.842	.058	.030	.023	.000	.367	-.180	.367	-.133	-.142
635011	5136	FT	.601	.183	.127	.601	.065	.025	.000	.362	-.133	-.176	.362	-.132
635012	5153	FT	.468	.093	.468	.192	.207	.040	.000	.386	-.108	.386	-.139	-.106
635013	12181	FT	.634	.084	.091	.163	.634	.029	.000	.400	-.054	-.146	-.241	.400
635014	10289	FT	.385	.096	.365	.124	.385	.031	.000	.326	-.170	.022	-.213	.326
635015	12164	FT	.447	.145	.115	.447	.270	.023	.000	.206	-.127	-.178	.206	.082
635016	5136	FT	.434	.163	.434	.048	.312	.043	.000	.149	-.197	.149	-.176	.226
635017	5153	FT	.563	.049	.085	.264	.563	.040	.000	.440	-.160	-.203	-.145	.440
635018	5153	FT	.546	.128	.546	.171	.136	.020	.000	.259	-.060	.259	-.163	-.050

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635019	5136	FT	.511	.115	.511	.206	.143	.024	.000	.401	-.149	.401	-.207	-.098
635020	7028	FT	.429	.186	.193	.169	.429	.023	.000	.389	-.134	-.095	-.166	.389
635021	12164	FT	.141	.505	.141	.239	.093	.023	.000	.235	.056	.235	-.097	-.108
635022	10289	FT	.684	.684	.087	.119	.068	.042	.000	.445	.445	-.180	-.186	-.118
635023	5153	FT	.428	.050	.235	.268	.428	.020	.000	.324	-.141	-.129	-.101	.324
635024	5153	FT	.446	.028	.446	.419	.088	.019	.000	.353	-.105	.353	-.193	-.119
635025	5153	FT	.664	.017	.664	.012	.267	.040	.000	.369	-.138	.369	-.117	-.181
635026	7028	FT	.483	.334	.054	.483	.105	.023	.000	.350	-.114	-.158	.350	-.144
635027	7028	FT	.344	.344	.184	.209	.244	.018	.000	.228	.228	-.115	-.009	-.064
635028	5136	FT	.505	.505	.260	.070	.121	.043	.000	.407	.407	-.121	-.149	-.135
635029	5153	FT	.513	.032	.151	.285	.513	.019	.000	.203	-.113	-.216	.053	.203
635030	5153	FT	.646	.112	.115	.646	.087	.040	.000	.209	-.026	-.040	.209	-.055
635031	5136	FT	.593	.593	.155	.063	.165	.024	.000	.285	.285	-.088	-.139	-.108
635032	7028	FT	.291	.291	.195	.044	.447	.023	.000	.198	.198	.094	-.138	-.117
635033	7028	FT	.403	.337	.084	.153	.403	.023	.000	.211	-.009	-.136	-.058	.211
635034	5136	FT	.333	.044	.333	.063	.517	.043	.000	.370	-.131	.370	-.182	-.070
635035	5153	FT	.441	.361	.097	.441	.061	.040	.000	.301	-.031	-.136	.301	-.130
635036	5153	FT	.307	.193	.351	.307	.109	.040	.000	.259	-.090	.047	.259	-.136
635037	5136	FT	.575	.103	.575	.226	.053	.043	.000	.334	-.059	.334	-.118	-.132
635038	7028	FT	.337	.273	.337	.206	.147	.037	.000	.276	.011	.276	-.070	-.128
635039	7028	FT	.471	.150	.057	.471	.299	.022	.000	.347	-.104	-.167	.347	-.124
635040	5136	FT	.697	.094	.035	.697	.151	.024	.000	.180	-.126	-.177	.180	.057
635041	5153	FT	.476	.053	.427	.025	.476	.020	.000	.288	-.114	-.129	-.154	.288
635042	5153	FT	.361	.227	.224	.149	.361	.040	.000	.440	-.055	-.187	-.133	.440
635043	5136	FT	.651	.074	.113	.137	.651	.024	.000	.416	-.110	-.188	-.220	.416
635045	7028	FT	.818	.818	.028	.097	.034	.023	.000	.432	.432	-.162	-.238	-.159
635046	12164	FT	.647	.647	.041	.244	.047	.020	.000	.207	.207	-.106	-.058	-.095
635047	10289	FT	.382	.159	.100	.382	.326	.032	.000	.321	-.167	-.102	.321	-.034
635048	12164	FT	.369	.369	.432	.067	.093	.039	.000	.349	.349	-.164	-.085	-.008
635049	5153	FT	.326	.189	.326	.307	.159	.018	.000	.248	-.117	.248	-.119	.034
635050	5136	FT	.386	.105	.304	.162	.386	.043	.000	.335	-.108	-.038	-.118	.335
635051	7028	FT	.448	.204	.448	.092	.239	.017	.000	.330	-.129	.330	-.128	-.102
635052	7028	FT	.195	.142	.074	.195	.566	.022	.000	.244	-.061	-.112	.244	-.012

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635053	7028	FT	.615	.189	.099	.615	.080	.017	.000	.362	-.186	-.125	.362	-.128
635054	5136	FT	.214	.284	.326	.151	.214	.024	.000	.239	.088	-.108	-.149	.239
635055	5153	FT	.670	.122	.090	.078	.670	.040	.000	.465	-.142	-.197	-.198	.465
635056	5153	FT	.781	.017	.138	.781	.024	.040	.000	.261	-.141	-.036	.261	-.092
635057	5136	FT	.470	.216	.470	.178	.093	.043	.000	.478	-.215	.478	-.108	-.136
635058	7028	FT	.748	.748	.041	.151	.042	.018	.000	.356	.356	-.166	-.186	-.111
635059	7028	FT	.634	.204	.634	.108	.030	.023	.000	.420	-.225	.420	-.168	-.111
635060	5136	FT	.541	.541	.199	.153	.083	.024	.000	.295	.295	-.008	-.173	-.168
635062	5153	FT	.345	.336	.345	.187	.113	.019	.000	.277	-.110	.277	-.118	-.012
635063	5153	FT	.673	.035	.175	.673	.077	.040	.000	.478	-.142	-.248	.478	-.156
635064	5136	FT	.641	.019	.086	.231	.641	.023	.000	.362	-.145	-.177	-.168	.362
635065	7028	FT	.489	.156	.103	.489	.234	.018	.000	.270	-.041	-.176	.270	-.082
635066	7028	FT	.844	.058	.059	.016	.844	.023	.000	.361	-.218	-.089	-.146	.361
635067	5136	FT	.718	.040	.718	.114	.085	.043	.000	.407	-.134	.407	-.150	-.145
635068	5153	FT	.426	.426	.093	.053	.409	.020	.000	.270	.270	-.042	-.110	-.141
635069	7028	FT	.551	.255	.070	.101	.551	.022	.000	.365	-.150	-.193	-.088	.365
635070	7028	FT	.644	.159	.644	.053	.126	.018	.000	.359	-.141	.359	-.174	-.150
635071	5136	FT	.755	.083	.047	.072	.755	.043	.000	.506	-.200	-.174	-.221	.506
635072	5153	FT	.496	.096	.235	.496	.153	.020	.000	.155	-.038	-.075	.155	-.012
635073	5153	FT	.311	.311	.473	.057	.119	.040	.000	.309	.309	-.103	-.150	.022
635074	5136	FT	.638	.273	.028	.638	.018	.043	.000	.243	-.052	-.109	.243	-.052
635075	7028	FT	.592	.592	.132	.226	.032	.017	.000	.357	.357	-.078	-.242	-.089
635076	7028	FT	.627	.031	.065	.627	.254	.022	.000	.333	-.143	-.127	.333	-.148
635077	5136	FT	.405	.246	.272	.053	.405	.024	.000	.273	-.106	-.028	-.187	.273
635078	5153	FT	.529	.098	.069	.285	.529	.019	.000	.347	-.199	-.194	-.078	.347
635079	5153	FT	.617	.205	.094	.044	.617	.041	.000	.329	-.070	-.154	-.113	.329
635080	5136	FT	.372	.372	.506	.031	.048	.043	.000	.322	.322	-.053	-.184	-.133
635081	7028	FT	.301	.291	.277	.301	.112	.018	.000	.084	.075	-.068	.084	-.028
635082	12164	FT	.700	.700	.060	.152	.059	.028	.000	.356	.356	-.191	-.096	-.149
635083	10289	FT	.714	.102	.058	.085	.714	.041	.000	.502	-.150	-.205	-.245	.502
635084	12181	FT	.298	.298	.281	.282	.107	.032	.000	.330	.330	-.181	.037	-.118
635085	5153	FT	.618	.618	.076	.054	.213	.040	.000	.455	.455	-.222	-.169	-.148
635086	5136	FT	.583	.119	.187	.583	.087	.024	.000	.437	-.180	-.220	.437	-.132

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635087	7028	FT	.774	.059	.774	.056	.094	.018	.000	.392	-.185	.392	-.255	-.102
635088	7028	FT	.410	.410	.130	.225	.198	.036	.000	.297	.297	-.065	-.052	-.103
635089	5136	FT	.207	.599	.057	.094	.207	.043	.000	.247	.016	-.050	-.096	.247
635090	5153	FT	.361	.127	.422	.361	.070	.020	.000	.305	-.057	-.133	.305	-.128
635091	5153	FT	.650	.152	.650	.144	.035	.019	.000	.358	-.194	.358	-.158	-.084
635092	5136	FT	.327	.147	.367	.136	.327	.024	.000	.224	-.142	.031	-.105	.224
635093	7028	FT	.330	.169	.330	.213	.246	.042	.000	.190	-.032	.190	-.079	.055
635094	7028	FT	.400	.400	.133	.215	.215	.037	.000	.429	.429	-.167	-.095	-.130
635095	5136	FT	.892	.026	.892	.020	.039	.023	.000	.318	-.120	.318	-.134	-.144
635096	5153	FT	.718	.718	.048	.085	.110	.040	.000	.499	.499	-.179	-.213	-.207
635097	5153	FT	.267	.150	.267	.247	.318	.019	.000	.098	-.102	.098	.062	-.008
635098	5136	FT	.827	.044	.039	.827	.047	.042	.000	.476	-.198	-.143	.476	-.201
635099	7028	FT	.726	.101	.726	.041	.090	.042	.000	.347	-.098	.347	-.118	-.115
635100	12164	FT	.767	.044	.049	.767	.108	.031	.000	.264	-.083	-.040	.264	-.119
635101	12181	FT	.693	.693	.161	.067	.037	.041	.000	.395	.395	-.125	-.113	-.218
635102	5153	FT	.696	.067	.140	.079	.696	.019	.000	.427	-.195	-.168	-.222	.427
635103	5136	FT	.733	.021	.733	.040	.163	.043	.000	.433	-.159	.433	-.185	-.174
635104	7028	FT	.340	.030	.028	.340	.559	.043	.000	.004	-.139	-.150	.004	.233
635105	7028	FT	.434	.148	.194	.434	.186	.038	.000	.216	-.031	-.038	.216	-.050
635106	5136	FT	.492	.087	.492	.054	.324	.043	.000	.396	-.226	.396	-.106	-.088
635107	5153	FT	.715	.082	.057	.715	.106	.040	.000	.435	-.224	-.177	.435	-.101
635108	5153	FT	.559	.114	.559	.071	.237	.019	.000	.280	-.177	.280	-.139	-.040
635109	5136	FT	.457	.184	.457	.139	.198	.023	.000	.297	-.109	.297	-.152	-.046
635110	7028	FT	.592	.058	.592	.157	.156	.036	.000	.432	-.144	.432	-.130	-.193
635111	7028	FT	.609	.080	.609	.186	.085	.041	.000	.431	-.098	.431	-.182	-.161
635112	7028	FT	.227	.164	.227	.254	.318	.036	.000	.236	-.185	.236	-.112	.170
635113	5136	FT	.317	.249	.317	.378	.033	.024	.000	.326	-.093	.326	-.140	-.052
635114	5153	FT	.778	.778	.050	.076	.057	.039	.000	.442	.442	-.176	-.183	-.148
635115	12181	FT	.435	.061	.096	.379	.435	.029	.000	.334	-.116	-.216	-.056	.334
635116	10289	FT	.633	.166	.633	.112	.067	.022	.000	.411	-.182	.411	-.194	-.148
635117	12164	FT	.681	.090	.114	.681	.073	.043	.000	.460	-.146	-.223	.460	-.126
635118	7028	FT	.323	.231	.037	.368	.323	.042	.000	.240	-.189	-.159	.138	.240
635119	5136	FT	.360	.167	.110	.320	.360	.043	.000	.354	-.094	-.101	-.074	.354

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635120	5153	FT	.749	.122	.749	.072	.038	.019	.000	.373	-.147	.373	-.199	-.166
635121	5153	FT	.530	.111	.264	.530	.076	.019	.000	.422	-.200	-.193	.422	-.128
635122	5136	FT	.626	.195	.626	.096	.058	.025	.000	.461	-.260	.461	-.139	-.191
635123	7028	FT	.649	.649	.091	.097	.122	.041	.000	.440	.440	-.234	-.081	-.151
635124	5153	FT	.522	.254	.066	.522	.117	.041	.000	.232	.112	-.190	.232	-.168
635125	5136	FT	.429	.081	.171	.429	.276	.043	.000	.313	-.080	-.094	.313	-.064
635126	7028	FT	.862	.045	.862	.030	.027	.036	.000	.464	-.226	.464	-.155	-.163
635127	7028	FT	.250	.163	.044	.507	.250	.035	.000	.155	-.077	-.203	.125	.155
635128	5136	FT	.385	.151	.385	.293	.128	.043	.000	.392	-.191	.392	-.003	-.159
635129	5153	FT	.429	.057	.401	.429	.073	.040	.000	.177	-.061	.044	.177	-.122
635130	5136	FT	.226	.357	.231	.163	.226	.023	.000	.157	.124	-.154	-.074	.157
635132	5136	FT	.640	.038	.640	.193	.086	.042	.000	.457	-.177	.457	-.207	-.125
635133	7028	FT	.158	.381	.105	.314	.158	.042	.000	.081	.150	-.089	-.014	.081
635134	5153	FT	.600	.106	.137	.600	.137	.020	.000	.355	-.100	-.187	.355	-.142
635135	5153	FT	.428	.428	.335	.149	.048	.041	.000	.159	.159	.122	-.150	-.091
635136	5136	FT	.292	.292	.423	.199	.043	.043	.000	.116	.116	-.057	.190	-.159
635137	7028	FT	.827	.041	.827	.060	.032	.040	.000	.451	-.149	.451	-.194	-.153
635138	7028	FT	.382	.134	.382	.320	.122	.042	.000	.255	-.157	.255	.002	-.007
635139	5136	FT	.452	.304	.153	.452	.067	.024	.000	.332	-.072	-.159	.332	-.164
635140	5153	FT	.536	.195	.080	.536	.170	.019	.000	.334	-.193	-.090	.334	-.095
635141	5153	FT	.479	.212	.479	.098	.170	.040	.000	.304	-.051	.304	-.024	-.162
635142	5136	FT	.406	.094	.406	.137	.339	.024	.000	.284	-.070	.284	-.191	-.041
635143	7028	FT	.221	.126	.513	.103	.221	.036	.000	.335	-.043	-.049	-.130	.335
635144	7028	FT	.514	.514	.241	.076	.127	.042	.000	.338	.338	-.087	-.187	-.037
635145	5153	FT	.722	.172	.722	.028	.059	.019	.000	.379	-.219	.379	-.109	-.167
635146	10289	FT	.470	.470	.287	.141	.070	.032	.000	.379	.379	-.182	-.083	-.114
635147	5136	FT	.881	.036	.026	.881	.034	.023	.000	.370	-.202	-.157	.370	-.136
635148	7028	FT	.676	.033	.222	.676	.032	.036	.000	.345	-.142	-.119	.345	-.145
635149	5136	FT	.263	.115	.212	.263	.385	.024	.000	.269	-.109	-.136	.269	.014
635150	5153	FT	.232	.495	.145	.088	.232	.040	.000	.309	-.063	-.018	-.101	.309
635151	5153	FT	.305	.492	.305	.123	.061	.019	.000	.363	-.145	.363	-.142	-.078
635152	5136	FT	.261	.261	.427	.144	.143	.024	.000	.076	.076	.064	-.044	-.041
635153	7028	FT	.727	.727	.084	.066	.087	.036	.000	.468	.468	-.176	-.170	-.204

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635154	7028	FT	.589	.052	.124	.589	.194	.041	.000	.314	-.090	-.104	.314	-.078
635155	5136	FT	.728	.030	.728	.074	.125	.043	.000	.387	-.140	.387	-.241	-.051
635156	5153	FT	.602	.026	.243	.088	.602	.041	.000	.508	-.164	-.223	-.222	.508
635157	5153	FT	.786	.149	.029	.016	.786	.020	.000	.357	-.220	-.121	-.138	.357
635158	5136	FT	.323	.323	.033	.567	.035	.042	.000	.297	.297	-.135	-.035	-.159
635159	5153	FT	.739	.108	.098	.739	.036	.019	.000	.444	-.178	-.279	.444	-.143
635160	5136	FT	.782	.126	.782	.016	.035	.042	.000	.368	-.126	.368	-.137	-.137
635161	7028	FT	.431	.431	.360	.113	.060	.036	.000	.281	.281	-.031	-.168	-.044
635162	5153	FT	.571	.157	.571	.181	.051	.040	.000	.376	-.050	.376	-.233	-.066
635163	7028	FT	.196	.196	.137	.353	.291	.022	.000	.126	.126	-.167	.085	.016
635228	5136	FT	.448	.046	.100	.448	.381	.024	.000	.262	-.141	-.191	.262	-.019
635230	5153	FT	.448	.322	.448	.118	.094	.019	.000	.253	-.002	.253	-.184	-.122
635233	7028	FT	.664	.664	.092	.180	.046	.018	.000	.275	.275	-.166	-.085	-.077
635236	5153	FT	.454	.124	.454	.062	.320	.040	.000	.305	-.142	.305	-.167	-.003
635240	5136	FT	.439	.067	.098	.354	.439	.043	.000	.313	-.176	-.112	-.019	.313

Grade 11

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635171	5800	FT	.353	.231	.234	.155	.353	.026	.000	.470	-.139	-.183	-.129	.470
635172	2930	FT	.629	.075	.169	.113	.629	.014	.000	.392	-.141	-.195	-.173	.392
635174	2908	FT	.601	.601	.293	.038	.055	.013	.000	.304	.304	-.141	-.201	-.103
635176	2916	FT	.469	.083	.469	.247	.157	.045	.000	.369	-.118	.369	-.049	-.159
635178	2916	FT	.654	.654	.273	.028	.032	.012	.000	.301	.301	-.172	-.152	-.120
635179	2908	FT	.449	.234	.138	.131	.449	.047	.000	.333	.031	-.141	-.140	.333
635180	2930	FT	.574	.169	.105	.111	.574	.041	.000	.431	-.119	-.204	-.122	.431
635181	5800	FT	.603	.214	.603	.142	.022	.018	.000	.485	-.292	.485	-.193	-.138
635182	5800	FT	.695	.149	.040	.090	.695	.025	.000	.477	-.224	-.193	-.209	.477
635183	2930	FT	.680	.171	.073	.680	.063	.014	.000	.420	-.233	-.195	.420	-.139
635184	2908	FT	.933	.010	.012	.933	.032	.013	.000	.337	-.121	-.129	.337	-.198
635185	2916	FT	.857	.023	.051	.857	.057	.012	.000	.306	-.113	-.126	.306	-.181
635186	2916	FT	.474	.303	.474	.094	.084	.045	.000	.362	-.112	.362	-.088	-.110

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635187	2908	FT	.692	.692	.072	.128	.061	.047	.000	.409	.409	-.105	-.166	-.094
635188	2930	FT	.310	.216	.221	.310	.239	.014	.000	.210	-.089	-.162	.210	.073
635189	5800	FT	.605	.071	.210	.089	.605	.026	.000	.362	-.180	-.112	-.149	.362
635190	5800	FT	.431	.431	.358	.128	.057	.026	.000	.388	.388	-.111	-.176	-.162
635191	2930	FT	.617	.209	.079	.617	.081	.014	.000	.286	-.100	-.179	.286	-.094
635192	2908	FT	.629	.205	.042	.111	.629	.013	.000	.430	-.197	-.125	-.255	.430
635193	2916	FT	.722	.102	.722	.063	.102	.011	.000	.162	-.126	.162	-.116	.046
635194	2916	FT	.535	.097	.257	.066	.535	.045	.000	.314	-.039	-.052	-.202	.314
635195	2908	FT	.475	.122	.213	.144	.475	.047	.000	.436	-.033	-.169	-.154	.436
635196	2930	FT	.634	.634	.132	.093	.100	.041	.000	.451	.451	-.200	-.194	-.087
635197	5800	FT	.671	.130	.671	.087	.095	.017	.000	.400	-.112	.400	-.243	-.184
635198	5800	FT	.334	.357	.334	.196	.088	.026	.000	.163	.160	.163	-.212	-.095
635199	2916	FT	.646	.646	.245	.037	.026	.045	.000	.418	.418	-.200	-.130	-.105
635200	2908	FT	.631	.073	.150	.099	.631	.047	.000	.455	-.167	-.185	-.090	.455
635201	2916	FT	.577	.103	.243	.577	.033	.045	.000	.418	-.117	-.182	.418	-.115
635203	2916	FT	.362	.254	.362	.253	.086	.045	.000	.219	-.063	.219	.056	-.105
635204	2908	FT	.583	.312	.047	.045	.583	.013	.000	.341	-.228	-.065	-.124	.341
635205	2930	FT	.527	.228	.119	.527	.085	.041	.000	.297	-.036	-.145	.297	-.066
635206	5800	FT	.427	.098	.150	.427	.300	.025	.000	.168	-.053	.022	.168	-.071
635207	5800	FT	.333	.171	.333	.348	.129	.018	.001	.207	-.096	.207	-.006	-.084
635208	2930	FT	.939	.026	.008	.012	.939	.014	.000	.331	-.155	-.140	-.158	.331
635209	2908	FT	.555	.015	.555	.257	.127	.047	.000	.287	-.106	.287	-.020	-.112
635210	2916	FT	.434	.434	.074	.453	.027	.012	.000	.398	.398	-.046	-.308	-.067
635211	2916	FT	.682	.682	.074	.114	.086	.045	.000	.373	.373	-.047	-.159	-.136
635212	2908	FT	.595	.124	.148	.595	.120	.013	.000	.336	.021	-.202	.336	-.235
635213	2930	FT	.652	.148	.652	.153	.033	.014	.000	.420	-.153	.420	-.277	-.122
635214	5800	FT	.335	.206	.291	.335	.149	.018	.000	.148	.021	.010	.148	-.147
635216	5800	FT	.645	.073	.192	.645	.064	.025	.000	.269	-.116	-.092	.269	-.080
635217	2930	FT	.547	.044	.172	.547	.196	.041	.000	.340	-.062	-.116	.340	-.111
635218	2908	FT	.592	.169	.072	.592	.120	.047	.000	.329	-.047	-.213	.329	-.021
635219	2916	FT	.507	.507	.059	.349	.074	.011	.000	.205	.205	-.190	.036	-.209
635220	2916	FT	.549	.257	.078	.549	.072	.045	.000	.424	-.157	-.212	.424	-.051
635221	2908	FT	.502	.149	.502	.089	.213	.047	.000	.236	-.019	.236	-.106	.005

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635222	2930	FT	.142	.142	.466	.132	.220	.041	.000	.138	.138	.300	-.174	-.171
635223	5800	FT	.176	.403	.217	.186	.176	.018	.000	.085	-.041	.155	-.120	.085
635224	5800	FT	.282	.402	.177	.282	.121	.018	.000	.135	.118	-.163	.135	-.079
635225	2930	FT	.487	.089	.175	.487	.208	.041	.000	.077	-.077	-.088	.077	.208
635226	2908	FT	.247	.247	.079	.171	.489	.013	.000	.171	.171	-.125	-.249	.154
635227	2916	FT	.471	.060	.471	.141	.317	.012	.000	.207	-.116	.207	-.186	.020
635229	5846	FT	.305	.305	.260	.273	.132	.030	.000	.404	.404	-.090	-.165	-.073
635231	2908	FT	.778	.778	.085	.074	.051	.013	.000	.448	.448	-.264	-.234	-.130
635232	2916	FT	.376	.277	.082	.254	.376	.011	.000	.373	.002	-.169	-.265	.373
635234	2908	FT	.592	.089	.159	.592	.112	.047	.000	.285	-.044	-.022	.285	-.113
635235	5846	FT	.567	.567	.199	.039	.169	.026	.000	.304	.304	-.075	-.175	-.115
635237	5800	FT	.548	.096	.166	.172	.548	.018	.000	.361	-.136	-.090	-.204	.361
635238	5800	FT	.429	.093	.429	.185	.267	.025	.000	.313	-.129	.313	-.131	-.059
635239	2930	FT	.499	.214	.499	.110	.137	.041	.000	.346	-.036	.346	-.187	-.094
635241	2908	FT	.725	.725	.011	.237	.014	.013	.000	.392	.392	-.136	-.310	-.052
635242	2930	FT	.628	.074	.628	.167	.117	.014	.000	.287	-.165	.287	-.186	-.003
635243	2916	FT	.593	.092	.191	.113	.593	.011	.000	.422	-.194	-.168	-.207	.422
635244	2930	FT	.559	.559	.055	.219	.152	.014	.000	.299	.299	-.196	-.104	-.102
635245	5800	FT	.551	.085	.551	.142	.205	.017	.000	.320	-.146	.320	-.171	-.074
635246	5800	FT	.576	.210	.117	.576	.071	.025	.000	.381	-.081	-.250	.381	-.128
635247	8716	FT	.586	.586	.327	.037	.035	.016	.000	.378	.378	-.255	-.141	-.076
635248	2930	FT	.192	.118	.192	.339	.337	.014	.000	.152	-.082	.152	-.058	.039
635249	2908	FT	.380	.380	.188	.130	.254	.047	.000	.401	.401	-.095	-.187	-.025
635250	5846	FT	.783	.783	.108	.041	.055	.013	.000	.328	.328	-.160	-.137	-.159
635251	8708	FT	.441	.441	.089	.295	.130	.043	.000	.394	.394	-.132	-.151	-.050
635252	5846	FT	.459	.172	.145	.182	.459	.043	.000	.445	-.072	-.128	-.206	.445
635253	2908	FT	.322	.369	.160	.136	.322	.013	.000	.154	.000	-.035	-.105	.154
635254	8708	FT	.359	.165	.359	.229	.214	.033	.000	.193	-.076	.193	-.065	.045
635255	5846	FT	.213	.136	.270	.213	.339	.043	.000	.090	.006	-.029	.090	.093
635256	8730	FT	.333	.202	.196	.241	.333	.028	.000	.315	-.074	-.136	-.046	.315
635257	2908	FT	.551	.551	.186	.073	.177	.014	.000	.245	.245	-.111	-.085	-.085
635258	5846	FT	.364	.364	.324	.214	.055	.043	.000	.241	.241	-.020	-.035	-.098
635259	8708	FT	.562	.562	.209	.086	.100	.044	.000	.430	.430	-.191	-.102	-.116

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635260	5846	FT	.346	.482	.346	.079	.081	.013	.000	.136	-.006	.136	-.031	-.114
635261	8708	FT	.498	.144	.498	.200	.137	.021	.000	.356	-.156	.356	-.163	-.068
635262	5800	FT	.527	.206	.527	.191	.057	.018	.000	.226	-.135	.226	-.004	-.115
635263	2930	FT	.726	.726	.097	.066	.071	.041	.000	.369	.369	-.114	-.128	-.119
635264	2908	FT	.475	.128	.219	.475	.131	.047	.000	.352	-.073	-.057	.352	-.132
635265	2916	FT	.706	.706	.087	.107	.087	.011	.000	.405	.405	-.149	-.197	-.218
635266	2916	FT	.718	.718	.083	.059	.095	.045	.000	.486	.486	-.226	-.208	-.120
635267	2908	FT	.567	.227	.100	.567	.092	.013	.000	.336	-.175	-.134	.336	-.103
635268	2930	FT	.404	.188	.404	.292	.075	.040	.000	.297	-.125	.297	.026	-.154
635269	5800	FT	.450	.222	.178	.125	.450	.025	.000	.369	-.114	-.101	-.170	.369
635270	5800	FT	.381	.183	.381	.187	.223	.026	.000	.286	.006	.286	-.184	-.066
635271	2930	FT	.642	.642	.138	.165	.041	.015	.000	.319	.319	-.067	-.228	-.101
635272	2908	FT	.301	.301	.362	.091	.199	.047	.000	.108	.108	.052	.000	.023
635273	2916	FT	.329	.329	.129	.240	.257	.045	.000	.203	.203	-.095	-.036	.055
635274	2916	FT	.607	.183	.607	.043	.121	.045	.000	.409	-.116	.409	-.165	-.151
635275	2908	FT	.609	.311	.609	.035	.032	.013	.000	.362	-.238	.362	-.125	-.111
635276	2930	FT	.792	.133	.036	.792	.024	.015	.000	.359	-.179	-.181	.359	-.177
635277	5800	FT	.629	.154	.155	.629	.044	.017	.000	.387	-.189	-.146	.387	-.175
635278	2916	FT	.806	.092	.047	.806	.044	.011	.000	.356	-.193	-.180	.356	-.132
635279	5800	FT	.694	.694	.150	.093	.036	.026	.000	.476	.476	-.223	-.227	-.164
635280	2930	FT	.450	.233	.099	.178	.450	.041	.000	.407	-.023	-.130	-.224	.407
635281	2908	FT	.847	.017	.847	.019	.070	.047	.000	.439	-.122	.439	-.143	-.152
635282	2916	FT	.875	.026	.028	.875	.060	.011	.000	.323	-.135	-.146	.323	-.175
635283	2916	FT	.383	.462	.029	.383	.082	.045	.000	.145	.094	-.138	.145	-.078
635284	2908	FT	.381	.163	.316	.381	.094	.047	.000	.202	-.010	-.018	.202	-.010
635285	2930	FT	.515	.159	.099	.213	.515	.014	.000	.247	-.005	-.166	-.117	.247
635286	5800	FT	.258	.342	.338	.258	.043	.018	.000	.099	.077	-.056	.099	-.111
635287	5800	FT	.755	.057	.109	.755	.037	.042	.000	.503	-.168	-.246	.503	-.172
635288	2930	FT	.646	.059	.108	.646	.145	.041	.000	.381	-.112	-.210	.381	-.065
635289	2908	FT	.784	.100	.784	.055	.047	.013	.000	.428	-.254	.428	-.192	-.153
635290	2916	FT	.708	.083	.081	.084	.708	.045	.000	.504	-.175	-.204	-.191	.504
635291	2908	FT	.445	.038	.140	.331	.445	.047	.000	.515	-.008	-.191	-.222	.515
635292	2930	FT	.753	.118	.051	.753	.038	.041	.000	.349	-.003	-.216	.349	-.177

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635293	5800	FT	.677	.056	.139	.677	.093	.034	.000	.390	-.128	-.175	.390	-.124
635294	5800	FT	.713	.028	.713	.207	.026	.025	.000	.402	-.159	.402	-.218	-.159
635295	2930	FT	.580	.580	.234	.146	.025	.014	.000	.424	.424	-.250	-.189	-.076
635296	2908	FT	.756	.103	.082	.756	.013	.047	.000	.465	-.154	-.206	.465	-.116
635297	2916	FT	.533	.129	.265	.062	.533	.011	.000	.443	-.149	-.275	-.123	.443
635488	5800	FT	.262	.182	.302	.212	.262	.042	.000	.278	-.129	.095	-.114	.278
635489	2908	FT	.630	.196	.067	.630	.059	.047	.000	.449	-.109	-.238	.449	-.128
635490	2916	FT	.813	.112	.013	.813	.016	.045	.000	.419	-.185	-.127	.419	-.139
635491	2916	FT	.924	.007	.014	.044	.924	.011	.000	.337	-.117	-.173	-.192	.337
635492	2908	FT	.479	.173	.164	.479	.137	.047	.000	.317	.053	-.191	.317	-.070
635493	2930	FT	.675	.116	.112	.675	.057	.040	.000	.393	-.118	-.179	.393	-.098
635494	5800	FT	.612	.072	.165	.133	.612	.018	.000	.420	-.174	-.180	-.184	.420
635495	8708	FT	.611	.099	.123	.145	.611	.021	.000	.419	-.175	-.172	-.169	.419
635496	5846	FT	.536	.154	.228	.536	.056	.026	.000	.310	-.015	-.207	.310	-.080
635497	8708	FT	.474	.474	.131	.252	.103	.040	.000	.438	.438	-.148	-.145	-.129
635498	2916	FT	.562	.100	.146	.148	.562	.044	.000	.441	-.097	-.140	-.193	.441
635499	2908	FT	.814	.068	.074	.814	.030	.013	.000	.409	-.243	-.166	.409	-.179
635501	2930	FT	.693	.068	.066	.133	.693	.041	.000	.460	-.181	-.221	-.129	.460
635502	2930	FT	.743	.030	.151	.743	.062	.015	.000	.399	-.159	-.234	.399	-.162
635503	5800	FT	.666	.081	.125	.666	.111	.018	.000	.460	-.206	-.230	.460	-.177
635504	2930	FT	.534	.047	.334	.534	.043	.042	.000	.326	-.127	-.094	.326	-.116
635505	2908	FT	.687	.687	.047	.210	.044	.013	.000	.309	.309	-.149	-.205	-.026
635506	2916	FT	.620	.068	.620	.239	.061	.012	.000	.373	-.183	.373	-.184	-.151
635507	2916	FT	.520	.014	.520	.414	.007	.045	.000	.417	-.147	.417	-.227	-.079
635508	2908	FT	.334	.225	.346	.082	.334	.013	.000	.202	-.042	-.051	-.113	.202
635509	2930	FT	.284	.067	.086	.548	.284	.014	.000	.138	-.176	-.184	.116	.138
635510	5800	FT	.426	.236	.254	.426	.048	.036	.000	.167	.086	-.082	.167	-.120
635511	5800	FT	.360	.374	.149	.073	.360	.043	.001	.262	.017	-.089	-.117	.262
635512	2930	FT	.186	.134	.400	.265	.186	.015	.000	.213	-.035	-.112	.018	.213
635513	2908	FT	.232	.257	.173	.232	.325	.013	.000	.045	.037	-.058	.045	.020
635514	2916	FT	.335	.335	.139	.295	.187	.044	.000	.250	.250	-.113	.031	-.053
635515	2916	FT	.301	.495	.033	.160	.301	.011	.000	.123	-.006	.062	-.121	.123
635516	2908	FT	.637	.183	.637	.021	.112	.047	.000	.287	-.047	.287	-.086	-.076

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635517	2930	FT	.343	.343	.201	.201	.241	.014	.000	.308	.308	-.131	-.113	-.056
635518	5800	FT	.268	.214	.268	.265	.212	.042	.000	.176	-.144	.176	.003	.119
635519	5800	FT	.265	.279	.231	.265	.183	.042	.000	.214	-.020	-.012	.214	-.031
635520	2930	FT	.590	.037	.590	.118	.240	.014	.000	.347	-.096	.347	-.243	-.115
635521	2908	FT	.437	.439	.437	.058	.019	.046	.000	-.135	.421	-.135	-.182	-.114
635522	2916	FT	.076	.530	.076	.307	.076	.011	.000	.123	.061	-.145	-.010	.123
635523	2916	FT	.373	.373	.176	.311	.128	.012	.000	.098	.098	.050	-.070	-.041
635524	2908	FT	.231	.309	.231	.144	.303	.013	.000	.198	-.018	.198	-.105	-.033
635525	2930	FT	.387	.517	.036	.387	.019	.040	.000	.400	-.169	-.147	.400	-.114
635526	5800	FT	.254	.269	.271	.254	.165	.042	.000	.148	.115	-.072	.148	-.042
635527	5800	FT	.441	.140	.134	.441	.249	.036	.000	.269	-.060	-.196	.269	.027
635528	2930	FT	.643	.087	.643	.185	.045	.041	.000	.409	-.101	.409	-.198	-.110
635529	2908	FT	.198	.071	.672	.046	.198	.013	.000	.227	-.228	.048	-.152	.227
635530	2916	FT	.705	.052	.705	.168	.030	.045	.000	.407	-.098	.407	-.177	-.147
635531	2916	FT	.564	.322	.029	.073	.564	.011	.000	.177	-.012	-.161	-.133	.177
635532	2908	FT	.785	.036	.091	.785	.041	.047	.000	.469	-.129	-.245	.469	-.073
635533	2930	FT	.154	.381	.294	.154	.157	.014	.000	-.027	.326	-.105	-.027	-.209
635534	5800	FT	.879	.022	.032	.025	.879	.042	.000	.459	-.162	-.190	-.149	.459
635535	5800	FT	.692	.185	.692	.039	.049	.035	.000	.419	-.171	.419	-.207	-.142
635536	2930	FT	.627	.124	.195	.041	.627	.014	.000	.167	-.077	-.063	-.033	.167
635537	2916	FT	.460	.255	.120	.460	.120	.045	.000	.354	-.072	-.120	.354	-.103
635539	2916	FT	.330	.330	.180	.280	.165	.045	.000	.278	.278	-.083	.006	-.077
635540	2916	FT	.436	.113	.207	.232	.436	.011	.000	.394	-.138	-.077	-.238	.394
635541	2908	FT	.356	.477	.064	.090	.356	.013	.000	.353	-.143	-.142	-.139	.353
635542	2930	FT	.314	.163	.314	.210	.272	.041	.000	.267	-.085	.267	-.080	.019
635543	5800	FT	.589	.148	.142	.589	.078	.042	.000	.489	-.206	-.182	.489	-.129
635544	5800	FT	.634	.108	.085	.634	.138	.035	.000	.479	-.162	-.210	.479	-.189
635545	2930	FT	.225	.293	.158	.284	.225	.040	.000	.359	-.134	-.072	.010	.359
635547	2908	FT	.334	.251	.334	.224	.144	.047	.000	.162	.052	.162	-.025	-.014
635548	2916	FT	.913	.040	.013	.023	.913	.011	.000	.261	-.092	-.119	-.149	.261
635549	2908	FT	.844	.074	.013	.022	.844	.047	.000	.422	-.125	-.126	-.152	.422
635550	2930	FT	.706	.706	.082	.100	.072	.041	.000	.474	.474	-.207	-.200	-.122
635551	2908	FT	.261	.360	.181	.261	.151	.047	.000	.243	.086	-.070	.243	-.101

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
635552	2930	FT	.750	.054	.750	.138	.044	.014	.000	.371	-.173	.371	-.162	-.201
635553	5800	FT	.859	.022	.073	.859	.013	.034	.000	.327	-.105	-.133	.327	-.075
635554	5800	FT	.259	.418	.259	.204	.084	.035	.000	.210	-.034	.210	-.010	-.050
635555	2930	FT	.753	.029	.141	.753	.062	.014	.000	.413	-.141	-.215	.413	-.229
635556	2908	FT	.342	.109	.432	.342	.071	.046	.000	.355	-.067	-.155	.355	.049
635557	2916	FT	.555	.091	.205	.555	.105	.045	.000	.406	-.091	-.113	.406	-.187
635558	2916	FT	.589	.048	.181	.589	.138	.045	.000	.469	-.135	-.209	.469	-.142
635559	2908	FT	.325	.051	.325	.333	.279	.013	.000	.312	-.103	.312	-.128	-.094
635560	2930	FT	.402	.306	.101	.402	.150	.041	.000	.220	-.029	-.163	.220	.063
635562	5800	FT	.587	.587	.156	.138	.077	.042	.000	.411	.411	-.166	-.122	-.116
635563	2908	FT	.403	.124	.383	.403	.076	.013	.000	.044	.040	-.026	.044	.003
635564	2916	FT	.222	.209	.254	.304	.222	.011	.000	.248	.011	-.090	-.105	.248
635565	5846	FT	.577	.577	.199	.066	.115	.043	.000	.510	.510	-.230	-.169	-.152
635566	8708	FT	.325	.325	.100	.453	.083	.039	.000	.343	.343	.061	-.190	-.070
636026	2916	FT	.753	.753	.074	.127	.035	.011	.000	.472	.472	-.232	-.296	-.134
636027	2908	FT	.728	.080	.050	.728	.128	.013	.000	.314	-.172	-.212	.314	-.071
636028	5846	FT	.407	.407	.118	.052	.392	.030	.000	.447	.447	-.188	-.163	-.152
636029	8708	FT	.445	.445	.155	.117	.239	.044	.000	.356	.356	-.154	-.186	.029
636030	8708	FT	.426	.426	.275	.188	.083	.027	.000	.357	.357	-.261	-.004	-.046
636031	5846	FT	.253	.253	.196	.315	.210	.026	.000	.178	.178	-.021	-.058	.004
636032	8708	FT	.542	.118	.188	.542	.125	.028	.000	.461	-.163	-.287	.461	-.058
636033	5846	FT	.852	.041	.852	.035	.029	.043	.000	.443	-.133	.443	-.166	-.178
636034	5846	FT	.773	.076	.091	.773	.047	.013	.000	.424	-.213	-.252	.424	-.127
636036	8708	FT	.659	.659	.080	.182	.052	.027	.000	.371	.371	-.177	-.139	-.130
636037	2930	FT	.356	.100	.254	.356	.250	.040	.000	.242	.020	-.170	.242	.045
636038	5800	FT	.172	.131	.172	.571	.084	.042	.000	.060	-.125	.060	.258	-.145
636039	5800	FT	.813	.045	.078	.813	.029	.035	.000	.423	-.113	-.208	.423	-.173
636040	2930	FT	.478	.478	.102	.139	.267	.014	.000	.316	.316	-.250	-.191	.018
636041	2908	FT	.706	.147	.706	.065	.067	.014	.000	.388	-.230	.388	-.196	-.098
636042	2916	FT	.455	.282	.455	.070	.180	.012	.000	.358	-.164	.358	-.240	-.059
636043	2916	FT	.556	.181	.556	.113	.106	.045	.000	.298	.017	.298	-.147	-.119
636044	8708	FT	.702	.028	.201	.035	.702	.034	.000	.424	-.155	-.211	-.161	.424
636045	2930	FT	.828	.052	.078	.027	.828	.015	.000	.377	-.175	-.192	-.171	.377

GENERAL	COUNTS	Item	PROPORTIONS							CORRELATIONS				
Item ID	N.	Type	PValue	A	B	C	D	-	*	Total	A	B	C	D
636046	5800	FT	.679	.044	.103	.138	.679	.036	.001	.368	-.098	-.105	-.183	.368
636047	5800	FT	.562	.156	.562	.121	.126	.035	.000	.411	-.162	.411	-.201	-.067

Appendix J: Reading FT Differential Item Functioning

***AM=American Indian, AS=Asian, BL=African American/Black, HI= Hispanic, MU=Multiple Ethnicities, WH=White**

Grade 3

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632654	3573	FT	1722	A+	203	C+	539	A-	54		59		119	
632655	3573	FT	1722	A+	203	A-	539	A+	54		59		119	
632660	3573	FT	1722	A+	203	A-	539	A-	54		59		119	
632661	3573	FT	1722	A-	203	A-	539	A-	54		59		119	
632663	3573	FT	1722	A-	203	A-	539	A-	54		59		119	
632665	3573	FT	1722	A+	203	A+	539	A-	54		59		119	
632667	3573	FT	1722	A+	203	C-	539	A-	54		59		119	
632668	3573	FT	1722	A+	203	A+	539	A+	54		59		119	
632669	3573	FT	1722	A+	203	A-	539	A-	54		59		119	
632670	3573	FT	1722	A+	203	A+	539	A-	54		59		119	
632682	3450	FT	1719	A+	200	A-	516	A-	47		67		108	
632684	3450	FT	1719	A+	200	A+	516	A-	47		67		108	
632685	3450	FT	1719	A+	200	A-	516	A+	47		67		108	
632686	3450	FT	1719	A+	200	A+	516	A-	47		67		108	
632687	3450	FT	1719	A+	200	A-	516	A+	47		67		108	
632688	3450	FT	1719	A-	200	A-	516	A+	47		67		108	
632690	3450	FT	1719	A+	200	A-	516	A+	47		67		108	
632691	3450	FT	1719	A+	200	A-	516	A+	47		67		108	
632694	3450	FT	1719	A+	200	A-	516	A+	47		67		108	
632695	3450	FT	1719	A-	200	A-	516	A-	47		67		108	
632701	3419	FT	1711	A+	208	A-	506	A-	46		56		103	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632702	3419	FT	1711	A+	208	A-	506	A-	46		56		103	
632704	3419	FT	1711	A+	208	A-	506	A-	46		56		103	
632705	3419	FT	1711	A+	208	A+	506	A+	46		56		103	
632706	3419	FT	1711	A+	208	A-	506	C-	46		56		103	
632707	3419	FT	1711	A+	208	A-	506	A-	46		56		103	
632708	3419	FT	1711	A+	208	A+	506	A+	46		56		103	
632710	3419	FT	1711	A+	208	B-	506	A-	46		56		103	
632712	3419	FT	1711	A+	208	A-	506	A-	46		56		103	
632713	3419	FT	1711	A+	208	A-	506	A-	46		56		103	
632716	7870	FT	3850	A+	566	A-	1696	A-	130		163		230	A+
632719	7870	FT	3850	A-	566	A-	1696	A-	130		163		230	A-
632720	7870	FT	3850	A+	566	A-	1696	A-	130		163		230	A-
632721	7870	FT	3850	A-	566	A-	1696	A-	130		163		230	A+
632722	7870	FT	3850	A+	566	A-	1696	A-	130		163		230	A-
632723	7870	FT	3850	A-	566	A-	1696	A-	130		163		230	A-
632724	7870	FT	3850	A-	566	A-	1696	A-	130		163		230	A-
632725	7870	FT	3850	A+	566	A-	1696	A+	130		163		230	A+
632726	7870	FT	3850	A-	566	A-	1696	A+	130		163		230	A-
632727	7870	FT	3850	A-	566	A-	1696	B-	130		163		230	A-
632950	3541	FT	1780	A-	239	A-	543	A-	48		76		105	
632953	3541	FT	1780	A+	239	A-	543	A-	48		76		105	
632954	3541	FT	1780	A+	239	A+	543	A-	48		76		105	
632955	3541	FT	1780	A+	239	A-	543	A+	48		76		105	
632956	3541	FT	1780	A+	239	A+	543	A-	48		76		105	
632959	3541	FT	1780	A+	239	A-	543	A-	48		76		105	
632960	3541	FT	1780	A+	239	A-	543	A-	48		76		105	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632961	3541	FT	1780	A-	239	A-	543	A-	48		76		105	
632962	3541	FT	1780	A+	239	A-	543	A-	48		76		105	
632963	3541	FT	1780	A-	239	A-	543	A+	48		76		105	

Grade 4

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633012	7592	FT	3628	A+	553	A-	1566	A-	151		168		219	A-
633013	7592	FT	3628	A+	553	A+	1566	A+	151		168		219	A-
633014	7592	FT	3628	A-	553	A+	1566	A-	151		168		219	A+
633016	7592	FT	3628	A+	553	A+	1566	A+	151		168		219	A+
633017	7592	FT	3628	A+	553	A-	1566	A-	151		168		219	A+
633019	7592	FT	3628	A+	553	A+	1566	A+	151		168		219	A+
633021	7592	FT	3628	A+	553	A-	1566	A-	151		168		219	A+
633024	7592	FT	3628	A+	553	A+	1566	A-	151		168		219	A-
633025	7592	FT	3628	A+	553	A+	1566	A+	151		168		219	A-
633026	7592	FT	3628	A-	553	A+	1566	A-	151		168		219	A+
633033	3525	FT	1709	A+	234	A+	503	A+	59		70		95	
633035	3525	FT	1709	A+	234	C-	503	B-	59		70		95	
633039	3525	FT	1709	A-	234	B-	503	A-	59		70		95	
633043	3525	FT	1709	A+	234	A-	503	A-	59		70		95	
633044	3525	FT	1709	A+	234	A-	503	A+	59		70		95	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633046	3525	FT	1709	A-	234	A-	503	A-	59		70		95	
633047	3525	FT	1709	A-	234	A+	503	A+	59		70		95	
633048	3525	FT	1709	A-	234	B-	503	A-	59		70		95	
633049	3525	FT	1709	A-	234	B+	503	A+	59		70		95	
633053	3525	FT	1709	A-	234	A-	503	A-	59		70		95	
633054	3441	FT	1753	A+	231	A+	491	A+	55		66		95	
633056	3441	FT	1753	A-	231	A+	491	A+	55		66		95	
633059	3441	FT	1753	A+	231	A+	491	A+	55		66		95	
633060	3441	FT	1753	A+	231	A-	491	A-	55		66		95	
633062	3441	FT	1753	A-	231	B-	491	A+	55		66		95	
633063	3441	FT	1753	A-	231	A-	491	A+	55		66		95	
633066	3441	FT	1753	A+	231	A+	491	A+	55		66		95	
633068	3441	FT	1753	A+	231	A+	491	A+	55		66		95	
633072	3441	FT	1753	A+	231	A-	491	A+	55		66		95	
633073	3441	FT	1753	A-	231	A-	491	A-	55		66		95	
633074	3463	FT	1728	A+	229	A-	497	A-	42		68		110	
633075	3463	FT	1728	A-	229	A+	497	A-	42		68		110	
633077	3463	FT	1728	A-	229	A-	497	A-	42		68		110	
633081	3463	FT	1728	A+	229	A+	497	A-	42		68		110	
633085	3463	FT	1728	A+	229	A+	497	A+	42		68		110	
633086	3463	FT	1728	A+	229	A+	497	A+	42		68		110	
633087	3463	FT	1728	A+	229	A+	497	A+	42		68		110	
633088	3463	FT	1728	A-	229	A-	497	A+	42		68		110	
633090	3463	FT	1728	A+	229	A+	497	A+	42		68		110	
633093	3463	FT	1728	A+	229	A+	497	A+	42		68		110	
633098	3526	FT	1754	A+	235	A-	501	A+	46		68		109	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633099	3526	FT	1754	A-	235	A-	501	A-	46		68		109	
633101	3526	FT	1754	A-	235	A+	501	B+	46		68		109	
633102	3526	FT	1754	A-	235	B-	501	A-	46		68		109	
633105	3526	FT	1754	A+	235	A+	501	A+	46		68		109	
633106	3526	FT	1754	B-	235	A-	501	A-	46		68		109	
633107	3526	FT	1754	A-	235	A+	501	A+	46		68		109	
633111	3526	FT	1754	A+	235	A+	501	A+	46		68		109	
633114	3526	FT	1754	A-	235	A-	501	A+	46		68		109	
633118	3526	FT	1754	A+	235	A-	501	A+	46		68		109	

Grade 5

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633217	3444	FT	1679	A+	225	A-	521	A+	57		67		110	
633218	3444	FT	1679	A-	225	A-	521	A+	57		67		110	
633219	3444	FT	1679	A+	225	A+	521	A-	57		67		110	
633220	3444	FT	1679	A-	225	A-	521	A-	57		67		110	
633222	3444	FT	1679	A+	225	A-	521	A+	57		67		110	
633223	3444	FT	1679	A+	225	A+	521	A-	57		67		110	
633225	3444	FT	1679	B+	225	A-	521	A+	57		67		110	
633226	3444	FT	1679	B+	225	A-	521	A-	57		67		110	
633227	3444	FT	1679	A+	225	A-	521	A-	57		67		110	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633228	3444	FT	1679	A+	225	A-	521	A-	57		67		110	
633233	3451	FT	1727	A+	189		494	A+	45		68		94	
633234	3451	FT	1727	A+	189		494	A-	45		68		94	
633235	3451	FT	1727	A-	189		494	A-	45		68		94	
633236	3451	FT	1727	A-	189		494	A-	45		68		94	
633237	3451	FT	1727	A-	189		494	A+	45		68		94	
633238	3451	FT	1727	A-	189		494	A-	45		68		94	
633240	3451	FT	1727	A+	189		494	A+	45		68		94	
633241	3451	FT	1727	A+	189		494	A+	45		68		94	
633243	3451	FT	1727	A+	189		494	A-	45		68		94	
633244	3451	FT	1727	A+	189		494	A-	45		68		94	
633267	3492	FT	1680	A+	222	A-	517	A-	45		59		99	
633268	3492	FT	1680	A-	222	A-	517	A-	45		59		99	
633269	3492	FT	1680	A+	222	A-	517	A-	45		59		99	
633270	3492	FT	1680	A+	222	B-	517	A-	45		59		99	
633271	3492	FT	1680	A+	222	A-	517	A+	45		59		99	
633272	3492	FT	1680	A+	222	A-	517	A-	45		59		99	
633273	3492	FT	1680	A+	222	A-	517	A+	45		59		99	
633274	3492	FT	1680	A-	222	A-	517	A-	45		59		99	
633275	3492	FT	1680	A+	222	A-	517	A-	45		59		99	
633278	3492	FT	1680	A+	222	A-	517	A-	45		59		99	
633279	7411	FT	3582	A+	575	A-	1436	A+	136		136		208	A-
633281	7411	FT	3582	A+	575	A-	1436	A-	136		136		208	A+
633282	7411	FT	3582	A-	575	A-	1436	B-	136		136		208	A+
633283	7411	FT	3582	A+	575	A-	1436	A-	136		136		208	A-
633284	7411	FT	3582	A+	575	A+	1436	A-	136		136		208	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633285	7411	FT	3582	A-	575	A+	1436	A+	136		136		208	A+
633287	7411	FT	3582	A+	575	A-	1436	A+	136		136		208	A-
633290	7411	FT	3582	A+	575	A-	1436	A-	136		136		208	A-
633291	7411	FT	3582	A+	575	A-	1436	A-	136		136		208	A-
633293	7411	FT	3582	A+	575	A-	1436	A-	136		136		208	A+
633294	3534	FT	1712	A-	236	A-	509	A+	59		61		114	
633296	3534	FT	1712	A+	236	A+	509	A+	59		61		114	
633297	3534	FT	1712	A+	236	A-	509	A+	59		61		114	
633298	3534	FT	1712	A-	236	B-	509	C-	59		61		114	
633299	3534	FT	1712	A+	236	A+	509	A+	59		61		114	
633301	3534	FT	1712	A-	236	A+	509	A-	59		61		114	
633302	3534	FT	1712	A+	236	A+	509	A+	59		61		114	
633303	3534	FT	1712	A-	236	A-	509	A-	59		61		114	
633305	3534	FT	1712	A+	236	A+	509	A+	59		61		114	
633306	3534	FT	1712	A+	236	A-	509	A-	59		61		114	

Grade 6

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NRef	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632728	7631	FT	3967	A+	513	A-	1387	A-	123		172		219	A-
632729	7631	FT	3967	A+	513	A+	1387	A+	123		172		219	A-
632730	7631	FT	3967	A+	513	A+	1387	A+	123		172		219	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NRef	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632731	7631	FT	3967	A+	513	A+	1387	A-	123		172		219	A+
632732	7631	FT	3967	A-	513	A+	1387	A-	123		172		219	A-
632734	7631	FT	3967	A+	513	A-	1387	A+	123		172		219	A+
632737	7631	FT	3967	A+	513	A-	1387	A-	123		172		219	A-
632738	7631	FT	3967	A+	513	A-	1387	A-	123		172		219	A+
632740	7631	FT	3967	B+	513	A+	1387	A-	123		172		219	A-
632741	7631	FT	3967	A+	513	A-	1387	A-	123		172		219	A-
632742	3322	FT	1679	A+	203	B-	487	A+	41		81		102	
632744	3322	FT	1679	A-	203	A+	487	A-	41		81		102	
632745	3322	FT	1679	A+	203	A-	487	A+	41		81		102	
632746	3322	FT	1679	A+	203	A-	487	A+	41		81		102	
632747	3322	FT	1679	A-	203	A-	487	A-	41		81		102	
632750	3322	FT	1679	A-	203	A-	487	A-	41		81		102	
632752	3322	FT	1679	A-	203	A-	487	A+	41		81		102	
632753	3322	FT	1679	A-	203	B-	487	A-	41		81		102	
632754	3322	FT	1679	A+	203	A-	487	B-	41		81		102	
632756	3322	FT	1679	A+	203	A-	487	A+	41		81		102	
632758	3197	FT	1592	B-	178		446	A-	45		64		99	
632759	3197	FT	1592	A-	178		446	A-	45		64		99	
632761	3197	FT	1592	A+	178		446	A-	45		64		99	
632763	3197	FT	1592	A-	178		446	A-	45		64		99	
632764	3197	FT	1592	A+	178		446	A+	45		64		99	
632765	3197	FT	1592	A+	178		446	A+	45		64		99	
632767	3197	FT	1592	A-	178		446	A+	45		64		99	
632768	3197	FT	1592	A-	178		446	A-	45		64		99	
632770	3197	FT	1592	A+	178		446	A-	45		64		99	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NRef	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632771	3197	FT	1592	A-	178		446	A-	45		64		99	
632772	3317	FT	1690	A-	226	A-	464	A+	47		56		101	
632773	3317	FT	1690	B-	226	B-	464	C-	47		56		101	
632774	3317	FT	1690	A-	226	A-	464	A-	47		56		101	
632775	3317	FT	1690	A-	226	A-	464	A-	47		56		101	
632776	3317	FT	1690	A+	226	A-	464	A-	47		56		101	
632777	3317	FT	1690	A+	226	A-	464	A+	47		56		101	
632778	3317	FT	1690	A-	226	A-	464	A+	47		56		101	
632780	3317	FT	1690	A+	226	A+	464	A+	47		56		101	
632781	3317	FT	1690	A-	226	A-	464	A-	47		56		101	
632782	3317	FT	1690	A-	226	A+	464	A+	47		56		101	
632784	3339	FT	1710	A+	214	C-	470	B-	43		50		110	
632785	3339	FT	1710	A+	214	A-	470	C-	43		50		110	
632786	3339	FT	1710	A+	214	A-	470	A-	43		50		110	
632787	3339	FT	1710	A+	214	A-	470	A-	43		50		110	
632788	3339	FT	1710	A-	214	A-	470	A-	43		50		110	
632789	3339	FT	1710	A+	214	A+	470	A-	43		50		110	
632791	3339	FT	1710	A+	214	A-	470	A-	43		50		110	
632792	3339	FT	1710	A+	214	A-	470	B-	43		50		110	
632796	3339	FT	1710	A+	214	A-	470	A-	43		50		110	
632797	3339	FT	1710	C+	214	A-	470	B-	43		50		110	

Grade 7

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633138	3306	1	1615	A-	232	A-	432	A+	41		64		72	
633139	3306	1	1615	A+	232	B-	432	A-	41		64		72	
633140	3306	1	1615	A-	232	A-	432	A+	41		64		72	
633141	3306	1	1615	A+	232	A+	432	A+	41		64		72	
633142	3306	1	1615	A+	232	A-	432	A-	41		64		72	
633144	3306	1	1615	A+	232	A-	432	A-	41		64		72	
633145	3306	1	1615	A+	232	A+	432	A-	41		64		72	
633149	3306	1	1615	A+	232	A+	432	A-	41		64		72	
633150	3306	1	1615	B+	232	A+	432	C+	41		64		72	
633151	3306	1	1615	A+	232	A-	432	A-	41		64		72	
633152	7366	1	3520	C-	431	B-	1353	A-	118		148		208	B-
633154	7366	1	3520	A-	431	A-	1353	A-	118		148		208	A-
633155	7366	1	3520	A+	431	A+	1353	A-	118		148		208	A+
633156	7366	1	3520	A+	431	A-	1353	A-	118		148		208	A+
633157	7366	1	3520	A+	431	A+	1353	A+	118		148		208	A+
633159	7366	1	3520	A+	431	A-	1353	A-	118		148		208	A-
633160	7366	1	3520	A-	431	A-	1353	A-	118		148		208	A+
633161	7366	1	3520	A-	431	A-	1353	A-	118		148		208	A-
633165	7366	1	3520	A-	431	A-	1353	A-	118		148		208	A-
633166	7366	1	3520	A+	431	A-	1353	A+	118		148		208	A+
633171	3259	1	1573	A-	224	A+	465	A-	37		43		82	
633172	3259	1	1573	A-	224	B-	465	A-	37		43		82	
633173	3259	1	1573	B-	224	A+	465	A-	37		43		82	
633174	3259	1	1573	A-	224	B-	465	B-	37		43		82	
633175	3259	1	1573	A-	224	C-	465	B-	37		43		82	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633176	3259	1	1573	A-	224	A+	465	A-	37		43		82	
633177	3259	1	1573	A-	224	A-	465	A-	37		43		82	
633178	3259	1	1573	A-	224	A+	465	A+	37		43		82	
633182	3259	1	1573	A+	224	A-	465	A-	37		43		82	
633183	3259	1	1573	A-	224	A-	465	A-	37		43		82	
633188	3359	1	1654	A-	212	A-	453	B-	40		65		98	
633190	3359	1	1654	A+	212	A+	453	A+	40		65		98	
633191	3359	1	1654	A-	212	A-	453	B-	40		65		98	
633192	3359	1	1654	A-	212	A-	453	A-	40		65		98	
633193	3359	1	1654	A-	212	A-	453	A+	40		65		98	
633194	3359	1	1654	A-	212	B-	453	A-	40		65		98	
633196	3359	1	1654	A+	212	A+	453	A+	40		65		98	
633197	3359	1	1654	A+	212	B-	453	A-	40		65		98	
633198	3359	1	1654	A-	212	A-	453	A-	40		65		98	
633199	3359	1	1654	A-	212	A-	453	A-	40		65		98	
633203	3364	1	1662	A+	224	B-	444	B-	34		50		88	
633204	3364	1	1662	A-	224	A-	444	A-	34		50		88	
633205	3364	1	1662	A+	224	A-	444	A-	34		50		88	
633206	3364	1	1662	B+	224	A-	444	A+	34		50		88	
633208	3364	1	1662	A+	224	A-	444	A-	34		50		88	
633209	3364	1	1662	A-	224	A+	444	A-	34		50		88	
633211	3364	1	1662	A+	224	A-	444	A+	34		50		88	
633213	3364	1	1662	A+	224	A-	444	A-	34		50		88	
633214	3364	1	1662	A-	224	A-	444	A-	34		50		88	
633215	3364	1	1662	A+	224	A-	444	A-	34		50		88	

Grade 8

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633314	7246	FT	3402	A+	422	A-	1405	A-	136		141		206	A-
633316	7246	FT	3402	A+	422	A-	1405	A-	136		141		206	A-
633317	7246	FT	3402	A+	422	C-	1405	A-	136		141		206	A-
633319	7246	FT	3402	A+	422	A-	1405	A-	136		141		206	A-
633320	7246	FT	3402	A+	422	A-	1405	A-	136		141		206	A-
633322	7246	FT	3402	A+	422	B-	1405	A-	136		141		206	A-
633323	7246	FT	3402	B+	422	A-	1405	A-	136		141		206	A-
633324	7246	FT	3402	A-	422	A-	1405	A-	136		141		206	B-
633325	7246	FT	3402	A-	422	A-	1405	A-	136		141		206	A-
633327	7246	FT	3402	A+	422	A-	1405	A-	136		141		206	A-
633328	3337	FT	1633	B-	184		425	A-	29		69		94	
633329	3337	FT	1633	B-	184		425	A+	29		69		94	
633332	3337	FT	1633	A+	184		425	A+	29		69		94	
633334	3337	FT	1633	A-	184		425	A+	29		69		94	
633335	3337	FT	1633	A-	184		425	A+	29		69		94	
633336	3337	FT	1633	A-	184		425	A-	29		69		94	
633337	3337	FT	1633	A+	184		425	A-	29		69		94	
633338	3337	FT	1633	A-	184		425	A+	29		69		94	
633339	3337	FT	1633	A+	184		425	A-	29		69		94	
633340	3337	FT	1633	B-	184		425	A-	29		69		94	
633342	3257	FT	1644	A+	204		410	B-	43		68		99	
633343	3257	FT	1644	A+	204		410	A+	43		68		99	
633345	3257	FT	1644	A-	204		410	A+	43		68		99	
633346	3257	FT	1644	A+	204		410	A-	43		68		99	
633347	3257	FT	1644	A-	204		410	A+	43		68		99	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633348	3257	FT	1644	B+	204		410	A+	43		68		99	
633349	3257	FT	1644	A-	204		410	A-	43		68		99	
633351	3257	FT	1644	A+	204		410	A-	43		68		99	
633353	3257	FT	1644	A-	204		410	A-	43		68		99	
633355	3257	FT	1644	A+	204		410	A-	43		68		99	
633356	3333	FT	1636	B-	234	B-	437	A-	38		48		80	
633357	3333	FT	1636	A-	234	C-	437	C-	38		48		80	
633360	3333	FT	1636	B+	234	A-	437	B-	38		48		80	
633361	3333	FT	1636	A+	234	A-	437	A+	38		48		80	
633362	3333	FT	1636	A+	234	B-	437	A+	38		48		80	
633364	3333	FT	1636	A-	234	A-	437	A+	38		48		80	
633365	3333	FT	1636	A+	234	A-	437	A+	38		48		80	
633366	3333	FT	1636	A-	234	A+	437	A+	38		48		80	
633367	3333	FT	1636	A+	234	A-	437	A+	38		48		80	
633370	3333	FT	1636	A+	234	A-	437	A+	38		48		80	
633371	3345	FT	1678	A-	240	A+	446	A-	51		69		89	
633372	3345	FT	1678	C+	240	A+	446	A-	51		69		89	
633374	3345	FT	1678	A+	240	A+	446	A+	51		69		89	
633376	3345	FT	1678	A-	240	A-	446	A-	51		69		89	
633377	3345	FT	1678	A+	240	C-	446	A-	51		69		89	
633378	3345	FT	1678	A-	240	A-	446	A-	51		69		89	
633380	3345	FT	1678	A+	240	A+	446	A+	51		69		89	
633382	3345	FT	1678	A+	240	A-	446	A-	51		69		89	
633383	3345	FT	1678	A-	240	A-	446	A+	51		69		89	
633384	3345	FT	1678	A+	240	A-	446	A+	51		69		89	

Grade 11

GENERAL	COUNTS	Item	Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632799	3436	FT	1656	A+	222	A-	347	A-	49		71		95	
632800	3436	FT	1656	B+	222	A-	347	B-	49		71		95	
632801	3436	FT	1656	B+	222	A-	347	A-	49		71		95	
632803	3436	FT	1656	A-	222	B-	347	A-	49		71		95	
632804	3436	FT	1656	A-	222	A+	347	A+	49		71		95	
632807	3436	FT	1656	A+	222	A-	347	A+	49		71		95	
632808	3436	FT	1656	A+	222	A-	347	A-	49		71		95	
632809	3436	FT	1656	A+	222	A-	347	A+	49		71		95	
632810	3436	FT	1656	A+	222	A+	347	A-	49		71		95	
632811	3436	FT	1656	B+	222	A-	347	A-	49		71		95	
632812	6862	FT	3351	A-	381	B-	1156	A-	125		145		160	
632813	6862	FT	3351	B-	381	C-	1156	B-	125		145		160	
632814	6862	FT	3351	A-	381	A-	1156	A-	125		145		160	
632815	6862	FT	3351	A+	381	A-	1156	A+	125		145		160	
632818	6862	FT	3351	A-	381	C-	1156	A-	125		145		160	
632819	6862	FT	3351	A+	381	C-	1156	A-	125		145		160	
632821	6862	FT	3351	A-	381	A-	1156	A-	125		145		160	
632823	6862	FT	3351	A-	381	C-	1156	C-	125		145		160	
632824	6862	FT	3351	A+	381	A-	1156	A-	125		145		160	
632826	6862	FT	3351	A-	381	B-	1156	B-	125		145		160	
632827	3443	FT	1717	B+	200	A-	356	A-	42		69		84	
632828	3443	FT	1717	B+	200	A+	356	A+	42		69		84	
632830	3443	FT	1717	A-	200	B-	356	A-	42		69		84	
632831	3443	FT	1717	A+	200	A-	356	A+	42		69		84	
632832	3443	FT	1717	A+	200	A-	356	A-	42		69		84	
632833	3443	FT	1717	A+	200	A-	356	A-	42		69		84	

GENERAL	COUNTS	Item	Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
632835	3443	FT	1717	A+	200	A-	356	A+	42		69		84	
632837	3443	FT	1717	A+	200	A-	356	A+	42		69		84	
632838	3443	FT	1717	A+	200	A-	356	A-	42		69		84	
632839	3443	FT	1717	B+	200	B-	356	B-	42		69		84	
632840	3589	FT	1762	A-	249	A-	385	A-	54		63		100	
632842	3589	FT	1762	A-	249	A-	385	A+	54		63		100	
632844	3589	FT	1762	A+	249	A-	385	A-	54		63		100	
632845	3589	FT	1762	A+	249	A-	385	A+	54		63		100	
632846	3589	FT	1762	A+	249	A-	385	A-	54		63		100	
632847	3589	FT	1762	A+	249	C-	385	A-	54		63		100	
632849	3589	FT	1762	A-	249	C-	385	A-	54		63		100	
632850	3589	FT	1762	A-	249	A-	385	A-	54		63		100	
632851	3589	FT	1762	A-	249	A-	385	A-	54		63		100	
632852	3589	FT	1762	A-	249	A-	385	A-	54		63		100	
632853	3573	FT	1748	A-	241	A-	381	A+	49		77		106	
632856	3573	FT	1748	A+	241	A+	381	A-	49		77		106	
632857	3573	FT	1748	A+	241	B-	381	A-	49		77		106	
632858	3573	FT	1748	A+	241	A-	381	A+	49		77		106	
632859	3573	FT	1748	A+	241	A-	381	A+	49		77		106	
632860	3573	FT	1748	A+	241	A+	381	A+	49		77		106	
632861	3573	FT	1748	A+	241	A+	381	A+	49		77		106	
632862	3573	FT	1748	A+	241	A-	381	A+	49		77		106	
632868	3573	FT	1748	B+	241	A-	381	A-	49		77		106	
632870	3573	FT	1748	A+	241	A-	381	A-	49		77		106	

Appendix K: Math Differential Item Functioning

***AM=American Indian, AS=Asian, BL=African American/Black, HI= Hispanic, MU=Multiple Ethnicities, WH=White**

Grade 3

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
598840	21899	OP	10807	A+	1420	A+	3819	A+	325	A+	445	A-	662	A+
599739	21899	OP	10807	A-	1420	A+	3819	A+	325	A+	445	A+	662	A-
599740	21899	OP	10807	A-	1420	A-	3819	A+	325	A-	445	A-	662	A-
599742	21899	OP	10807	A-	1420	A-	3819	A+	325	A+	445	A+	662	A-
599758	21899	OP	10807	A-	1420	A-	3819	A-	325	A+	445	A-	662	A-
599760	21899	OP	10807	A-	1420	A+	3819	A+	325	A-	445	A-	662	A+
599771	21899	OP	10807	A+	1420	A+	3819	A+	325	A-	445	A+	662	A+
599775	21899	OP	10807	A+	1420	A+	3819	A+	325	A+	445	A-	662	A+
599777	21899	OP	10807	A-	1420	A+	3819	A+	325	A-	445	A+	662	A+
599780	21899	OP	10807	A+	1420	A+	3819	A-	325	A-	445	B-	662	A+
599781	21899	OP	10807	A-	1420	A-	3819	A-	325	A-	445	A-	662	A-
599790	21899	OP	10807	A+	1420	A-	3819	A-	325	B-	445	B-	662	A-
599791	21899	OP	10807	A-	1420	B-	3819	A-	325	A-	445	A-	662	A-
599797	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	A-	662	A-
599800	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	A-	662	A-
599802	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	A-	662	A-
599804	21899	OP	10807	A+	1420	A-	3819	A+	325	A+	445	A-	662	A+
599809	21899	OP	10807	A+	1420	A+	3819	A+	325	A+	445	B+	662	A+
599811	21899	OP	10807	A+	1420	A+	3819	A-	325	A-	445	A+	662	A+
599813	21899	OP	10807	A+	1420	A+	3819	A+	325	A-	445	A+	662	A+
599814	21899	OP	10807	A+	1420	A+	3819	B+	325	B-	445	A-	662	A+
599816	21899	OP	10807	A+	1420	A+	3819	A+	325	A-	445	A+	662	A+
599824	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	B-	662	A+
599838	21899	OP	10807	A+	1420	A+	3819	A+	325	A-	445	A+	662	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
599842	21899	OP	10807	A+	1420	A-	3819	A+	325	A-	445	A-	662	A+
599845	21899	OP	10807	A-	1420	A-	3819	A-	325	B-	445	A-	662	A-
599850	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	A+	662	A-
599855	21899	OP	10807	A-	1420	A+	3819	A-	325	A-	445	A-	662	A+
599880	21899	OP	10807	A-	1420	A+	3819	A-	325	B-	445	B-	662	A-
599882	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	C-	662	A-
599888	21899	OP	10807	A-	1420	B-	3819	A-	325	A-	445	A-	662	A-
599894	21899	OP	10807	A-	1420	A-	3819	A-	325	A+	445	A-	662	A+
599904	21899	OP	10807	A+	1420	A-	3819	A+	325	A-	445	B+	662	A-
599907	21899	OP	10807	A-	1420	A-	3819	A-	325	B-	445	A-	662	A-
599909	21899	OP	10807	A+	1420	A-	3819	A-	325	B-	445	B-	662	A-
599911	21899	OP	10807	A+	1420	A-	3819	A-	325	B-	445	A-	662	A-
600456	21899	OP	10807	A+	1420	A+	3819	A-	325	A-	445	A+	662	A-
600457	21899	OP	10807	A-	1420	A+	3819	A-	325	A+	445	A-	662	A-
600460	21899	OP	10807	A-	1420	A-	3819	A+	325	A+	445	A+	662	A+
600464	21899	OP	10807	A-	1420	A+	3819	A+	325	A+	445	A+	662	A+
600468	21899	OP	10807	A-	1420	A-	3819	A-	325	A-	445	A+	662	A-
600469	21899	OP	10807	A-	1420	A-	3819	A+	325	A-	445	A-	662	A+
600470	21899	OP	10807	A+	1420	A+	3819	A+	325	A-	445	A+	662	A+
600816	21899	OP	10807	A+	1420	A+	3819	A+	325	A-	445	A+	662	A+
603145	21899	OP	10807	A+	1420	A+	3819	A+	325	A-	445	A+	662	A+
603147	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	A+	662	A-
603149	21899	OP	10807	A+	1420	A+	3819	A-	325	A+	445	A+	662	A+
603152	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	A-	662	A+
603156	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	B-	662	A+
603157	21899	OP	10807	A+	1420	A-	3819	A-	325	A-	445	A-	662	A+
633857	11747	FT	5777	A+	773	A+	2258	B+	183		272	B+	411	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633858	3072	FT	1507	A-	200	B-	470	A-	49		56		74	
633859	2959	FT	1489	C-	208	B-	430	B-	44		57		81	
633860	2994	FT	1465	A+	187		459	A-	43		58		70	
633861	2963	FT	1476	A-	193		448	A+	36		56		70	
633862	11703	FT	5774	A-	777	A-	2261	A-	176		274	A-	402	A-
633863	3151	FT	1552	A+	209	A-	516	A+	41		45		86	
633864	2964	FT	1493	A-	161		477	A+	41		53		65	
633865	3024	FT	1438	A-	205	B-	465	A-	36		56		80	
633866	2938	FT	1461	A-	163		493	B-	39		52		67	
633867	3014	FT	1518	A+	193		473	A-	48		43		79	
633868	2908	FT	1429	A+	191		416	B-	46		54		88	
633869	2975	FT	1482	A-	173		468	A+	41		38		77	
633870	3018	FT	1517	A-	179		468	A+	43		54		77	
633871	2933	FT	1458	A-	183		437	A+	37		47		85	
633872	3012	FT	1495	A-	196		510	A-	39		42		78	
633873	11735	FT	5801	A-	758	A-	2264	A-	188		273	A-	409	A-
633874	3022	FT	1476	A-	190		445	A-	36		62		89	
633875	2959	FT	1504	A-	193		460	A-	40		45		59	
633876	2992	FT	1505	A+	179		445	A+	45		58		66	
633877	11695	FT	5711	A-	769	A+	2240	A-	174		259	A-	419	A-
633878	2969	FT	1468	A+	203	A-	448	A-	41		51		81	
633879	11762	FT	5761	A+	763	A+	2254	A+	182		273	A+	408	A+
633880	3012	FT	1500	A+	213	A+	466	A+	44		54		72	
633881	2988	FT	1499	A+	186		479	A+	36		50		70	
633882	2926	FT	1479	A+	192		429	A-	41		46		66	
633883	11686	FT	5770	A+	776	A-	2216	A+	185		264	A-	405	A-
633884	3021	FT	1498	A+	202	A+	455	A+	49		62		75	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
633885	2948	FT	1423	A+	181		449	A-	46		60		67	
633886	2959	FT	1499	A+	181		429	A-	48		47		75	
633887	11745	FT	5777	A-	793	A-	2263	A-	175		266	A+	417	A+
633888	2969	FT	1471	A-	202	A+	463	A+	37		35		69	
633889	2975	FT	1469	A-	185		448	A-	43		53		67	
633890	11746	FT	5718	A-	774	A+	2260	A+	175		262	A+	400	A+
633891	2958	FT	1452	A+	181		470	A-	45		52		76	
633892	3018	FT	1499	A-	192		456	A-	51		55		76	
633893	2955	FT	1471	A+	181		444	A-	37		49		65	
633894	3012	FT	1447	A-	204	A-	477	A-	45		55		79	
633895	11755	FT	5776	A+	775	A-	2237	A+	191		269	A-	406	A+
633896	3054	FT	1539	A+	198		465	A+	45		62		77	
633897	2970	FT	1442	A+	195		466	A+	46		45		72	
633898	11730	FT	5782	A+	774	A-	2249	A-	185		267	A-	415	A-
633899	3008	FT	1471	A-	178		471	A-	38		75		78	
633900	3046	FT	1531	A+	191		493	A+	40		44		72	

Grade 4

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
599868	21565	OP	10572	A+	1486	B-	3551	A-	351	B-	462	B-	627	A-
603918	21565	OP	10572	A-	1486	A-	3551	A+	351	A-	462	A+	627	A+
603923	21565	OP	10572	A+	1486	A+	3551	A+	351	B-	462	A+	627	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
603925	21565	OP	10572	A+	1486	A+	3551	A+	351	A-	462	A+	627	A-
603927	21565	OP	10572	A-	1486	A+	3551	A+	351	A-	462	A+	627	A+
603933	21565	OP	10572	A-	1486	A-	3551	A+	351	A-	462	A+	627	A+
603934	21565	OP	10572	A-	1486	A-	3551	A-	351	A-	462	A+	627	A+
603938	21565	OP	10572	A+	1486	A+	3551	B+	351	B-	462	A+	627	A-
603939	21565	OP	10572	A+	1486	A+	3551	A+	351	A-	462	A-	627	A-
603942	21565	OP	10572	A+	1486	A-	3551	A+	351	A-	462	A-	627	A-
603947	21565	OP	10572	A+	1486	A+	3551	A-	351	A-	462	A+	627	A+
603954	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	A-	627	A-
603958	21565	OP	10572	A-	1486	A+	3551	A+	351	A+	462	A+	627	A+
603962	21565	OP	10572	A+	1486	A+	3551	A-	351	A-	462	A-	627	A+
603965	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	B-	627	A-
603969	21565	OP	10572	A-	1486	A+	3551	A+	351	A-	462	A-	627	A+
603974	21565	OP	10572	A-	1486	A-	3551	A-	351	A+	462	A-	627	A+
603982	21565	OP	10572	A-	1486	A-	3551	A-	351	A-	462	A-	627	A+
603984	21565	OP	10572	A+	1486	A-	3551	A+	351	A-	462	A-	627	A-
603989	21565	OP	10572	A+	1486	A-	3551	A-	351	A+	462	C-	627	A-
604003	21565	OP	10572	A-	1486	A-	3551	A-	351	A-	462	A+	627	A-
604004	21565	OP	10572	A-	1486	A-	3551	A+	351	A-	462	A+	627	A+
604008	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	A-	627	A-
604015	21565	OP	10572	A+	1486	A+	3551	A-	351	A-	462	A+	627	A-
604020	21565	OP	10572	A-	1486	A-	3551	A-	351	A-	462	A-	627	A-
604022	21565	OP	10572	A-	1486	A+	3551	A+	351	A-	462	A+	627	A+
604032	21565	OP	10572	A+	1486	A+	3551	A+	351	A+	462	A+	627	A+
604044	21565	OP	10572	A-	1486	A+	3551	A-	351	A-	462	A-	627	A+
604045	21565	OP	10572	A-	1486	A-	3551	A-	351	A-	462	A-	627	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
604055	21565	OP	10572	A+	1486	A+	3551	A+	351	A-	462	A+	627	A-
604057	21565	OP	10572	A-	1486	A-	3551	A+	351	A-	462	A+	627	A+
604058	21565	OP	10572	A-	1486	A+	3551	A+	351	A-	462	A+	627	A+
604064	21565	OP	10572	A+	1486	A-	3551	A+	351	A-	462	A+	627	A+
604072	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	B-	627	A-
604075	21565	OP	10572	A+	1486	A-	3551	A+	351	A-	462	A+	627	A-
604080	21565	OP	10572	A+	1486	A-	3551	A+	351	A-	462	A-	627	A+
604082	21565	OP	10572	A-	1486	A-	3551	A-	351	A+	462	A+	627	A-
604090	21565	OP	10572	A-	1486	A-	3551	A+	351	A-	462	A-	627	A-
604094	21565	OP	10572	A-	1486	A-	3551	A+	351	A+	462	A+	627	A+
604103	21565	OP	10572	A+	1486	A-	3551	A+	351	A-	462	A-	627	A+
604105	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	A-	627	A-
604106	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	A-	627	A-
604108	21565	OP	10572	A-	1486	A+	3551	A-	351	A-	462	A-	627	A-
604112	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	B-	627	A-
604116	21565	OP	10572	A-	1486	A-	3551	B-	351	A-	462	B-	627	A-
604121	21565	OP	10572	A-	1486	B-	3551	B-	351	B-	462	C-	627	A-
604125	21565	OP	10572	A+	1486	A-	3551	A-	351	B-	462	A-	627	A-
604128	21565	OP	10572	A-	1486	A+	3551	A+	351	A+	462	A+	627	A+
604132	21565	OP	10572	A+	1486	A+	3551	A+	351	A-	462	A+	627	A+
604134	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	A+	627	A-
604136	21565	OP	10572	A+	1486	A+	3551	A+	351	A+	462	A+	627	A+
604143	21565	OP	10572	A-	1486	A-	3551	A+	351	A+	462	A+	627	A-
604146	21565	OP	10572	A+	1486	A-	3551	A+	351	A-	462	A-	627	A-
604151	21565	OP	10572	A+	1486	A+	3551	A+	351	A+	462	A-	627	A+
604152	21565	OP	10572	A+	1486	A-	3551	A-	351	A-	462	B-	627	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634166	11115	FT	5371	A+	776	A-	2022	A+	199		294	A-	360	A+
634167	2659	FT	1293	A-	165		399	A-	40		35		69	
634168	2616	FT	1334	A-	168		396	A+	30		34		70	
634169	2580	FT	1264	A-	174		373	A+	36		48		67	
634171	2558	FT	1280	A+	171		362	A-	37		45		59	
634172	2632	FT	1307	A+	170		381	A-	35		44		55	
634173	2620	FT	1389	A+	153		385	A-	44		56		67	
634174	11083	FT	5380	A+	783	B-	2019	A-	205	C-	279	A-	370	A-
634175	11169	FT	5380	A-	792	B-	2024	B-	200	B-	271	C-	376	A-
634176	2677	FT	1328	A-	183		376	A-	37		45		68	
634177	2667	FT	1326	A-	169		395	A-	38		37		70	
634178	2662	FT	1324	A-	176		393	A-	48		51		65	
634179	2647	FT	1294	A-	176		384	A-	37		54		58	
634180	2612	FT	1287	A-	190		393	A-	37		49		69	
634181	2605	FT	1263	A-	172		367	A+	35		47		66	
634182	11087	FT	5394	A+	787	A-	2049	A-	198		279	C-	360	A-
634184	11127	FT	5388	A+	793	A+	2010	A+	195		295	A+	363	A-
634185	2567	FT	1235	A+	169		394	A+	45		40		71	
634186	2567	FT	1249	A-	178		388	A-	42		52		67	
634187	2629	FT	1341	A-	170		395	A-	35		46		60	
634189	2619	FT	1335	A+	173		389	A+	42		44		57	
634190	2591	FT	1302	A-	182		369	A-	38		36		63	
634191	2688	FT	1289	A+	160		371	A+	45		45		75	
634192	2622	FT	1304	A-	163		371	A-	31		40		73	
634193	2580	FT	1305	A-	179		367	A+	37		37		72	
634194	2631	FT	1327	A-	193		358	A-	37		40		54	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634195	2678	FT	1319	A+	181		414	A+	40		45		73	
634196	2621	FT	1287	A-	185		392	A-	34		46		73	
634197	2587	FT	1279	A-	166		375	A+	37		41		50	
634198	2613	FT	1278	A-	177		390	A+	34		40		72	
634199	11075	FT	5318	A-	792	A-	2018	A+	204	A-	277	A+	373	A+
634200	2627	FT	1324	A-	184		364	A+	37		42		73	
634201	2527	FT	1281	A-	159		388	A+	29		42		69	
634202	2653	FT	1311	A-	180		383	B-	39		45		66	
634203	2615	FT	1313	A-	164		394	A+	27		49		70	
634204	2557	FT	1319	A-	172		350	A+	37		44		54	
634206	2646	FT	1355	A-	157		392	A+	36		41		63	
634207	11123	FT	5344	A-	783	A-	2053	A+	210	B-	284	A+	371	A-
634208	2561	FT	1258	A+	193		368	A-	41		46		64	
634209	2609	FT	1244	B-	176		363	A+	32		55		60	
634210	11045	FT	5345	A-	817	A-	2030	A+	204	A-	274	A+	371	A+
634211	2617	FT	1344	A+	186		378	A+	35		48		60	
634212	2646	FT	1309	A-	180		372	A+	42		50		68	
634213	11024	FT	5334	A-	789	A-	2007	B+	198		284	A+	370	A-
634214	2642	FT	1317	A-	189		380	A-	42		43		53	
634215	2630	FT	1321	A-	156		392	A-	51		55		70	
634216	2603	FT	1260	A+	191		365	A-	41		49		61	
634217	2648	FT	1328	A+	153		394	A-	30		39		64	
634218	2622	FT	1303	A+	181		399	A-	31		42		60	
634219	11071	FT	5340	A+	784	B+	2019	A+	196		296	A+	358	A+

Grade 5

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
603388	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	A-	624	A-
603397	21355	OP	10390	A+	1447	A-	3479	A+	344	A-	412	A+	624	A-
603399	21355	OP	10390	A+	1447	A-	3479	A+	344	A-	412	A+	624	A-
603401	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	B-	624	A-
603409	21355	OP	10390	A+	1447	A-	3479	A+	344	A-	412	A+	624	A-
603414	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	A+	624	A+
603424	21355	OP	10390	A+	1447	A+	3479	A+	344	A+	412	A+	624	A+
603428	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	A-	624	A-
603433	21355	OP	10390	A+	1447	A+	3479	A-	344	A+	412	A-	624	A+
603436	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	A-	624	A-
603437	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	A-	624	A-
603442	21355	OP	10390	A+	1447	A-	3479	A+	344	A+	412	A-	624	A+
603446	21355	OP	10390	A-	1447	A-	3479	A+	344	A+	412	A+	624	A+
603449	21355	OP	10390	A-	1447	A-	3479	A+	344	A-	412	A-	624	A+
603458	21355	OP	10390	A+	1447	A-	3479	A-	344	B-	412	B-	624	A-
603459	21355	OP	10390	A-	1447	A-	3479	A-	344	A-	412	A-	624	A-
603460	21355	OP	10390	A-	1447	A-	3479	A-	344	A-	412	C-	624	A-
603473	21355	OP	10390	A+	1447	A+	3479	A+	344	A-	412	A-	624	A-
603476	21355	OP	10390	A-	1447	A-	3479	A-	344	A-	412	A-	624	A-
603482	21355	OP	10390	B-	1447	A+	3479	A-	344	A-	412	A-	624	A+
603486	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	A-	624	A-
603488	21355	OP	10390	A+	1447	A+	3479	A-	344	A-	412	A-	624	A-
603499	21355	OP	10390	A-	1447	A+	3479	A+	344	A+	412	A+	624	A+
603500	21355	OP	10390	A+	1447	A+	3479	A+	344	A+	412	B+	624	A+
603505	21355	OP	10390	A-	1447	A-	3479	A+	344	A+	412	A-	624	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
603508	21355	OP	10390	A-	1447	A-	3479	A-	344	B-	412	A-	624	A-
603513	21355	OP	10390	B+	1447	A+	3479	A+	344	A-	412	C+	624	A+
603519	21355	OP	10390	A-	1447	B-	3479	A-	344	A-	412	B-	624	A-
603520	21355	OP	10390	A-	1447	A-	3479	A+	344	A+	412	A+	624	A-
603529	21355	OP	10390	A-	1447	A-	3479	A-	344	A-	412	A-	624	A+
603534	21355	OP	10390	A+	1447	A-	3479	A-	344	A+	412	A+	624	A-
603535	21355	OP	10390	A+	1447	A+	3479	A+	344	A+	412	A+	624	A+
603542	21355	OP	10390	A+	1447	A+	3479	A+	344	A-	412	A+	624	A+
603544	21355	OP	10390	A+	1447	A-	3479	A+	344	B-	412	A+	624	A+
603552	21355	OP	10390	A+	1447	A+	3479	A-	344	A-	412	A-	624	A-
603554	21355	OP	10390	A+	1447	B-	3479	A-	344	B-	412	B-	624	A-
603556	21355	OP	10390	A+	1447	A-	3479	A-	344	A-	412	B-	624	A-
603558	21355	OP	10390	A+	1447	A-	3479	A+	344	A+	412	A-	624	B+
603563	21355	OP	10390	A-	1447	A-	3479	A-	344	A-	412	B-	624	A+
603566	21355	OP	10390	A+	1447	A-	3479	A+	344	A-	412	A+	624	A+
603576	21355	OP	10390	A+	1447	A+	3479	A+	344	A-	412	A+	624	A-
603579	21355	OP	10390	A+	1447	A+	3479	A+	344	A+	412	A+	624	A-
603610	21355	OP	10390	A+	1447	A-	3479	A+	344	A-	412	A-	624	A+
603616	21355	OP	10390	A+	1447	A-	3479	A-	344	A+	412	A+	624	A-
603623	21355	OP	10390	A-	1447	A+	3479	A+	344	A-	412	A+	624	A+
603627	21355	OP	10390	A+	1447	A+	3479	A+	344	A+	412	B+	624	A+
603631	21355	OP	10390	A-	1447	A+	3479	A-	344	A-	412	B+	624	A-
603653	21355	OP	10390	A-	1447	A-	3479	A-	344	A+	412	A-	624	A-
603666	21355	OP	10390	A+	1447	A+	3479	A+	344	A-	412	A-	624	A+
603678	21355	OP	10390	A+	1447	A+	3479	A+	344	A-	412	B+	624	A+
603679	21355	OP	10390	A+	1447	B-	3479	A-	344	A-	412	A-	624	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
603687	21355	OP	10390	A-	1447	A+	3479	A+	344	A-	412	A-	624	A+
603689	21355	OP	10390	A-	1447	A+	3479	A-	344	A-	412	A-	624	A-
603697	21355	OP	10390	A+	1447	A+	3479	A+	344	A-	412	A-	624	A-
603703	21355	OP	10390	A-	1447	A-	3479	A-	344	A+	412	A-	624	A-
634223	11120	FT	5438	A+	784	A-	2002	A-	182		239	A+	364	A-
634224	2625	FT	1297	A-	171		388	A+	47		43		64	
634225	2590	FT	1268	A-	180		376	A-	36		36		73	
634227	2580	FT	1271	A-	177		374	A-	46		46		71	
634228	2551	FT	1232	A-	171		339	A-	41		43		66	
634230	2591	FT	1272	A-	179		390	A-	36		33		68	
634231	2523	FT	1230	A+	164		356	A+	37		31		64	
634232	11103	FT	5343	B-	786	A-	2022	A-	173		250	A-	369	A-
634233	2552	FT	1286	A-	166		396	A+	41		41		54	
634234	2513	FT	1234	A-	149		363	A+	41		30		75	
634236	2557	FT	1240	A-	164		415	A-	43		43		66	
634237	2596	FT	1299	A-	172		369	A-	42		36		59	
634238	2519	FT	1226	A+	159		370	A+	40		36		55	
634239	2627	FT	1275	A-	186		393	A+	38		46		65	
634241	11035	FT	5396	A+	789	A+	1976	A+	179		262	B+	365	A-
634242	2568	FT	1244	A+	140		377	B+	39		53		77	
634243	2580	FT	1228	A+	159		386	A+	37		34		72	
634244	10992	FT	5322	A+	770	A-	1953	A-	183		246	A-	368	A-
634246	2497	FT	1187	B+	141		354	B+	31		39		60	
634248	2626	FT	1274	A-	167		389	A-	46		39		66	
634249	2594	FT	1241	A+	168		355	A-	41		46		63	
634250	2646	FT	1234	A+	173		376	A+	42		45		66	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634251	2571	FT	1237	A-	160		375	A+	34		44		64	
634254	2575	FT	1227	A-	156		362	A+	35		46		69	
634255	2617	FT	1257	A-	168		377	A-	48		35		81	
634256	2561	FT	1249	A-	165		388	A+	46		37		67	
634258	11067	FT	5388	A-	761	A-	1975	A-	176		252	A-	374	A-
634260	2595	FT	1253	A-	165		396	A-	30		41		64	
634261	11007	FT	5344	A-	796	A-	1951	A-	186		255	A+	366	A-
634262	11003	FT	5339	A+	792	A+	1958	A+	179		247	A+	357	A+
634264	2612	FT	1259	A+	174		419	A+	36		38		63	
634265	2632	FT	1331	A+	173		379	A-	45		43		78	
634266	2664	FT	1338	A-	169		392	A-	46		45		63	
634267	2550	FT	1246	A+	155		380	A-	40		47		61	
634268	2603	FT	1248	A+	161		374	A-	46		41		71	
634270	2547	FT	1252	A-	168		375	A+	40		37		61	
634271	2633	FT	1317	A+	193		417	A-	48		38		48	
634272	10918	FT	5282	A-	795	A-	1949	A-	180		240	A+	360	A+
634274	10990	FT	5349	A+	791	A-	1947	A+	180		243	A-	350	A-
634275	2572	FT	1278	A-	165		348	A-	39		37		71	
634276	2582	FT	1253	A+	162		353	A-	38		52		64	
634277	2593	FT	1272	B+	174		355	A+	42		46		48	
634278	2553	FT	1193	A+	151		376	A+	48		43		74	
634279	2649	FT	1287	A+	169		379	A+	50		42		62	
634280	2560	FT	1234	B-	155		389	A-	35		43		75	
634281	2630	FT	1282	A+	155		403	A-	51		43		70	
634283	2546	FT	1239	A-	153		369	A-	45		32		63	
634284	10942	FT	5354	A-	787	A-	1936	A-	166		246	A-	353	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634285	2652	FT	1322	A-	196		356	A-	46		49		62	
634286	2541	FT	1233	A+	146		393	A+	44		41		51	

Grade 6

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
598846	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603159	20819	OP	10173	A+	1342	A-	3237	A-	302	B-	437	A-	631	A-
603171	20819	OP	10173	A-	1342	A-	3237	A-	302	B-	437	A-	631	A-
603172	20819	OP	10173	A+	1342	A+	3237	A-	302	A-	437	A-	631	A+
603174	20819	OP	10173	A+	1342	B+	3237	A+	302	A-	437	A+	631	A+
603181	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A-	631	A+
603182	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603184	20819	OP	10173	A-	1342	A-	3237	A-	302	A+	437	A+	631	A+
603185	20819	OP	10173	A-	1342	A-	3237	A-	302	A+	437	A-	631	A+
603197	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603203	20819	OP	10173	A+	1342	A+	3237	A-	302	A-	437	A-	631	A-
603206	20819	OP	10173	A-	1342	A-	3237	A+	302	A-	437	A-	631	A-
603212	20819	OP	10173	A-	1342	A+	3237	A+	302	A+	437	B+	631	A+
603214	20819	OP	10173	A+	1342	A-	3237	A+	302	A-	437	A+	631	A-
603215	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603224	20819	OP	10173	A+	1342	A+	3237	A+	302	A+	437	A+	631	A+
603234	20819	OP	10173	A-	1342	A-	3237	A+	302	A-	437	A-	631	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
603237	20819	OP	10173	A-	1342	A-	3237	A-	302	A-	437	A-	631	A-
603242	20819	OP	10173	A+	1342	A-	3237	A-	302	A-	437	A+	631	A+
603243	20819	OP	10173	A+	1342	A+	3237	A+	302	B-	437	A+	631	A+
603247	20819	OP	10173	A+	1342	A-	3237	A-	302	A+	437	A-	631	A-
603248	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603250	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	B+	631	A+
603260	20819	OP	10173	A+	1342	A+	3237	A+	302	B-	437	A+	631	A+
603267	20819	OP	10173	A-	1342	B-	3237	A-	302	A-	437	A-	631	A-
603270	20819	OP	10173	A+	1342	A-	3237	A-	302	A-	437	A+	631	A+
603276	20819	OP	10173	A+	1342	A-	3237	A-	302	A-	437	A-	631	A+
603283	20819	OP	10173	A-	1342	A-	3237	A-	302	A+	437	A-	631	A-
603285	20819	OP	10173	A-	1342	A-	3237	A-	302	A-	437	A-	631	A-
603294	20819	OP	10173	A-	1342	A+	3237	A+	302	A+	437	A-	631	A+
603297	20819	OP	10173	A+	1342	A+	3237	A+	302	A+	437	A+	631	A+
603303	20819	OP	10173	A+	1342	A-	3237	A+	302	B-	437	A-	631	A+
603306	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603308	20819	OP	10173	A+	1342	A-	3237	A-	302	A-	437	A-	631	A-
603309	20819	OP	10173	A-	1342	A-	3237	A-	302	A-	437	A+	631	A+
603312	20819	OP	10173	A-	1342	A-	3237	A-	302	A-	437	A-	631	A-
603315	20819	OP	10173	A-	1342	A-	3237	A-	302	A+	437	A-	631	A-
603320	20819	OP	10173	A-	1342	A-	3237	A-	302	A-	437	A+	631	A-
603327	20819	OP	10173	A+	1342	A-	3237	A-	302	A-	437	A-	631	A-
603328	20819	OP	10173	A+	1342	A-	3237	A-	302	A-	437	A-	631	A-
603331	20819	OP	10173	A-	1342	A-	3237	A-	302	A-	437	B-	631	A-
603345	20819	OP	10173	A-	1342	A+	3237	A+	302	A-	437	A+	631	A+
603348	20819	OP	10173	A-	1342	A-	3237	A-	302	A+	437	A+	631	A-
603353	20819	OP	10173	B-	1342	B-	3237	A-	302	A-	437	A+	631	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
603355	20819	OP	10173	B-	1342	B-	3237	A-	302	A-	437	A-	631	A-
603358	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603361	20819	OP	10173	A-	1342	A-	3237	A-	302	A-	437	A-	631	A+
603363	20819	OP	10173	A+	1342	A-	3237	A-	302	B-	437	A-	631	A-
603366	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A+	631	A+
603368	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A-	631	A-
603375	20819	OP	10173	A-	1342	A-	3237	A+	302	A-	437	A+	631	A-
603377	20819	OP	10173	A-	1342	A-	3237	A-	302	B-	437	A-	631	A-
603379	20819	OP	10173	A-	1342	A-	3237	A+	302	A+	437	A-	631	A-
603381	20819	OP	10173	A+	1342	A+	3237	A+	302	A-	437	A-	631	A-
603383	20819	OP	10173	A+	1342	A+	3237	A+	302	A+	437	A+	631	A+
603713	20819	OP	10173	A+	1342	A-	3237	A-	302	B-	437	A-	631	A-
603714	20819	OP	10173	A+	1342	A+	3237	A-	302	A-	437	A-	631	A+
603715	20819	OP	10173	A+	1342	A-	3237	A-	302	A-	437	A-	631	A-
634350	11288	FT	5532	A-	713	B-	1827	A-	179		278	A-	391	A-
634352	2419	FT	1171	B-	139		330	A+	39		45		60	
634355	2341	FT	1145	A-	156		361	C+	24		44		69	
634358	2378	FT	1150	A+	170		365	A+	30		37		65	
634359	2411	FT	1170	A+	161		328	A+	29		37		64	
634361	2381	FT	1181	A+	162		358	A-	34		43		59	
634364	2396	FT	1149	A+	174		345	A+	23		39		61	
634365	11293	FT	5512	A+	719	A+	1825	A+	176		278	B+	387	A+
634371	2399	FT	1167	A-	151		371	A-	29		44		58	
634372	2391	FT	1179	A+	157		364	A-	30		53		67	
634374	2354	FT	1152	C-	162		376	B-	31		40		64	
634376	2316	FT	1120	A-	167		346	A-	35		36		56	
634377	11316	FT	5528	A+	711	A+	1862	A-	170		266	A+	383	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634378	2449	FT	1197	A+	164		355	A+	37		33		77	
634379	2413	FT	1155	A+	144		373	A+	48		50		60	
634382	2366	FT	1136	A+	157		383	A-	30		41		60	
634384	2304	FT	1084	A-	153		321	B-	35		45		64	
634385	2376	FT	1182	A+	150		343	A+	31		50		60	
634387	11296	FT	5518	A+	704	A-	1804	A+	179		273	A+	387	A+
634388	11348	FT	5573	A+	715	A-	1838	A+	164		274	A-	380	A-
634389	2381	FT	1172	A-	163		329	A+	25		29		51	
634390	2362	FT	1172	A+	155		367	A+	38		46		59	
634391	2375	FT	1172	A-	158		315	A+	32		39		70	
634392	2392	FT	1180	A-	177		349	A+	26		38		65	
634395	2342	FT	1171	A+	148		352	A+	30		37		67	
634396	2344	FT	1141	A+	175		372	A+	29		29		65	
634397	2343	FT	1130	A+	165		370	A+	29		31		61	
634398	2455	FT	1200	A+	166		357	B+	30		37		62	
634399	11346	FT	5550	A+	687	A-	1844	B-	185		273	A-	386	A-
634401	2369	FT	1159	A-	150		339	A-	29		34		45	
634402	2319	FT	1147	A+	158		335	A-	34		42		40	
634405	2363	FT	1101	A-	139		324	A+	36		43		57	
634406	2443	FT	1195	B-	146		329	A-	34		54		66	
634408	11311	FT	5521	A+	706	A+	1830	A+	174		267	A+	381	A+
634409	2388	FT	1144	A-	168		373	A+	30		41		55	
634411	2386	FT	1193	A+	154		371	A+	33		49		71	
634412	2344	FT	1205	A+	157		340	A+	33		41		61	
634413	2391	FT	1127	A+	167		365	A-	32		47		59	
634416	2372	FT	1170	B-	154		365	A+	32		33		66	
634417	11368	FT	5542	A+	719	A+	1847	A+	174		274	A+	380	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634418	2356	FT	1140	A+	142		345	A+	36		43		60	
634420	2341	FT	1156	A+	147		362	A-	28		39		60	
634422	11411	FT	5565	A+	717	A-	1860	A-	176		280	A-	382	A-
634423	2399	FT	1189	A+	169		372	A-	27		39		55	
634426	2347	FT	1165	B+	164		348	A+	32		46		63	
634427	2293	FT	1139	A+	141		298	A+	37		43		75	
634428	2391	FT	1173	A-	164		358	A+	24		40		62	
634430	11299	FT	5517	A+	727	A+	1808	A-	181		275	A-	389	A+
634432	2417	FT	1196	A+	163		334	A-	32		48		66	
634433	2307	FT	1097	A-	145		337	B-	29		27		59	

Grade 7

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
599917	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A+	547	A+
599927	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A+	547	A-
599928	20662	OP	10026	A+	1323	A-	3140	A-	268	A+	389	A+	547	A+
599932	20662	OP	10026	A-	1323	A-	3140	A+	268	A+	389	A-	547	A+
599933	20662	OP	10026	A-	1323	A+	3140	A+	268	A-	389	A-	547	A+
599936	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
599943	20662	OP	10026	A-	1323	A-	3140	A+	268	B-	389	A-	547	A-
599948	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A+	547	A+
599949	20662	OP	10026	A+	1323	A+	3140	A-	268	A-	389	A+	547	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
599953	20662	OP	10026	A+	1323	A+	3140	A-	268	A-	389	A-	547	A+
599958	20662	OP	10026	B+	1323	A+	3140	A+	268	A-	389	A+	547	A+
599969	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A+
599979	20662	OP	10026	A+	1323	A-	3140	A-	268	A-	389	A-	547	A-
599980	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A+
599986	20662	OP	10026	A+	1323	A-	3140	A+	268	A-	389	A+	547	A-
599990	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
599996	20662	OP	10026	A+	1323	A+	3140	A-	268	A+	389	A-	547	A-
599997	20662	OP	10026	B-	1323	A-	3140	A-	268	A+	389	A-	547	A-
600004	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A+	547	B-
600019	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A+	547	A-
600020	20662	OP	10026	A+	1323	A-	3140	A+	268	A-	389	A+	547	A-
600027	20662	OP	10026	A+	1323	A+	3140	A+	268	A+	389	A-	547	A+
600028	20662	OP	10026	A-	1323	A+	3140	A-	268	A-	389	A-	547	A+
600029	20662	OP	10026	A+	1323	A+	3140	A-	268	A-	389	A-	547	A-
600035	20662	OP	10026	A+	1323	A+	3140	A-	268	A-	389	A-	547	A+
600036	20662	OP	10026	A+	1323	A+	3140	A+	268	A+	389	A+	547	A+
600040	20662	OP	10026	A-	1323	A-	3140	A+	268	A-	389	A+	547	A-
600043	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A+	547	A+
600048	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
600052	20662	OP	10026	A+	1323	A-	3140	A-	268	A-	389	A+	547	A+
600056	20662	OP	10026	A+	1323	A-	3140	A+	268	A-	389	A+	547	A+
600058	20662	OP	10026	A-	1323	A+	3140	A+	268	A-	389	A+	547	A+
600061	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A+	547	A-
600063	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
600074	20662	OP	10026	A-	1323	A+	3140	A+	268	A+	389	A+	547	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
600080	20662	OP	10026	A-	1323	A-	3140	A-	268	A+	389	A-	547	A-
600081	20662	OP	10026	A-	1323	A-	3140	A-	268	A+	389	A-	547	A+
600084	20662	OP	10026	A+	1323	A-	3140	A-	268	A-	389	A-	547	A-
600090	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A+	547	A-
600092	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
600093	20662	OP	10026	A+	1323	A-	3140	A-	268	A+	389	A-	547	A-
600096	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A-	547	A+
600098	20662	OP	10026	A+	1323	A-	3140	A+	268	A+	389	A-	547	A-
600102	20662	OP	10026	B+	1323	A+	3140	A+	268	A+	389	A-	547	A-
600109	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A-	547	A+
600119	20662	OP	10026	A+	1323	A+	3140	A-	268	A-	389	A+	547	A+
600120	20662	OP	10026	A+	1323	A+	3140	A-	268	A+	389	A+	547	A+
600122	20662	OP	10026	A-	1323	A-	3140	A-	268	A+	389	A+	547	A-
600479	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	B-	547	A-
600480	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
600481	20662	OP	10026	A-	1323	A+	3140	A+	268	A+	389	A+	547	A+
600485	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
600493	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
600495	20662	OP	10026	A-	1323	B-	3140	A-	268	A+	389	A-	547	B-
600499	20662	OP	10026	A+	1323	A-	3140	A-	268	A-	389	A+	547	A-
600879	20662	OP	10026	A+	1323	A-	3140	A-	268	A-	389	A-	547	A-
600880	20662	OP	10026	A-	1323	A-	3140	A-	268	A-	389	A-	547	A-
600883	20662	OP	10026	A+	1323	A+	3140	A+	268	A-	389	A+	547	A+
634514	11003	FT	5309	A+	689	A-	1739	A-	150		220	A-	342	A-
634515	2427	FT	1196	A-	143		343	A-	31		44		48	
634517	2417	FT	1174	A+	150		375	A-	33		41		53	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634519	2429	FT	1141	B-	155		371	A-	24		37		54	
634520	2380	FT	1159	B-	163		348	B-	31		27		39	
634521	2413	FT	1211	A-	150		354	A-	26		49		47	
634524	2388	FT	1128	A+	174		345	A+	32		42		42	
634525	2491	FT	1190	B+	165		347	A+	27		46		52	
634526	2461	FT	1219	A-	158		361	A-	30		42		46	
634528	11046	FT	5311	A-	701	A-	1736	A-	154		230	A+	349	A-
634529	2428	FT	1153	A-	152		369	A+	23		49		50	
634530	2429	FT	1201	A+	163		351	A-	33		37		44	
634531	2390	FT	1187	A+	165		313	B-	34		36		66	
634532	2430	FT	1185	A-	146		340	A-	21		39		51	
634534	2433	FT	1151	B-	134		350	A-	34		36		50	
634535	2405	FT	1199	A+	162		334	A-	30		38		50	
634536	11017	FT	5318	A+	700	A-	1726	A+	153		231	A-	343	A-
634538	2358	FT	1110	A+	160		337	A+	36		43		45	
634539	10995	FT	5360	A+	712	B-	1725	A-	150		231	A+	343	B-
634541	2371	FT	1161	A-	146		358	B-	16		34		47	
634543	2441	FT	1136	A-	144		347	A-	25		50		50	
634544	11014	FT	5337	A+	677	A-	1749	A-	149		230	A-	342	A-
634546	2418	FT	1199	A-	163		348	A-	29		42		52	
634547	2425	FT	1151	A+	157		354	A+	35		34		54	
634548	2395	FT	1155	A+	173		348	A+	32		37		52	
634551	2422	FT	1201	A+	152		349	A+	40		46		45	
634552	11031	FT	5340	A+	682	A+	1742	A-	147		227	A-	349	A+
634555	2356	FT	1152	A+	165		332	A-	30		37		42	
634557	2426	FT	1163	A+	156		343	A-	28		38		53	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634559	11014	FT	5309	A+	689	A-	1720	A+	155		228	A+	347	A-
634561	2422	FT	1203	A+	162		350	A-	28		37		46	
634563	2430	FT	1175	A+	149		347	A-	25		33		64	
634564	2439	FT	1169	A+	149		335	A-	27		44		54	
634566	2487	FT	1214	A+	179		352	A-	33		51		55	
634568	2433	FT	1196	A-	173		341	A-	27		32		55	
634570	10906	FT	5285	A+	685	A+	1747	A-	145		223	A+	343	A-
634572	2421	FT	1210	A+	162		354	A-	28		35		46	
634574	11004	FT	5310	A+	702	A-	1744	A-	151		236	A+	345	A+
634575	2423	FT	1234	B+	141		384	A-	20		41		54	
634576	2433	FT	1173	B+	162		360	A+	27		40		54	
634577	2375	FT	1210	B+	180		344	A+	36		31		50	
634579	2390	FT	1106	A+	172		369	A-	30		39		48	
634580	2458	FT	1213	B+	156		374	A+	33		43		48	
634581	2356	FT	1173	B-	153		333	A-	31		46		51	
634582	2303	FT	1137	A+	135		315	A-	30		46		52	
634583	11008	FT	5305	A-	700	A+	1748	A-	143		225	A-	343	A-
634584	2354	FT	1141	A-	173		358	A+	31		43		47	
634585	2430	FT	1166	A+	147		366	A-	34		39		58	
634586	2481	FT	1215	A+	151		381	A-	32		38		57	
634587	2414	FT	1219	A-	153		344	A-	31		47		53	

Grade 8

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
600134	20503	OP	9995	A+	1287	A+	3105	A-	295	A+	408	A-	570	A-
600140	20503	OP	9995	A-	1287	A-	3105	A+	295	A+	408	A-	570	A-
600144	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	A-	570	A-
600151	20503	OP	9995	A-	1287	A-	3105	A-	295	A+	408	A+	570	A-
600152	20503	OP	9995	A-	1287	B-	3105	A-	295	A-	408	A-	570	A-
600153	20503	OP	9995	A+	1287	A+	3105	A-	295	A-	408	B+	570	A-
600156	20503	OP	9995	A-	1287	A+	3105	A-	295	A-	408	A+	570	A-
600158	20503	OP	9995	A+	1287	A-	3105	A-	295	A+	408	A-	570	A-
600163	20503	OP	9995	A+	1287	A+	3105	A+	295	A-	408	A-	570	A-
600166	20503	OP	9995	A+	1287	A+	3105	A+	295	A+	408	A+	570	A-
600178	20503	OP	9995	B-	1287	A-	3105	A-	295	A-	408	C-	570	A-
600187	20503	OP	9995	A-	1287	A-	3105	A+	295	A+	408	A-	570	A-
600194	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	A-	570	A+
600215	20503	OP	9995	A+	1287	A-	3105	A-	295	A+	408	A+	570	A-
600218	20503	OP	9995	A-	1287	A-	3105	A-	295	A+	408	A-	570	A-
600221	20503	OP	9995	A-	1287	A+	3105	A+	295	A+	408	A-	570	A+
600225	20503	OP	9995	A+	1287	A-	3105	A-	295	A+	408	A+	570	A-
600230	20503	OP	9995	A-	1287	A+	3105	A-	295	A-	408	A-	570	A-
600233	20503	OP	9995	A+	1287	A-	3105	A-	295	B-	408	A+	570	A-
600235	20503	OP	9995	A+	1287	A+	3105	A+	295	A-	408	A+	570	A+
600238	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	A+	570	A-
600242	20503	OP	9995	A+	1287	A+	3105	A+	295	A-	408	C+	570	A+
600243	20503	OP	9995	A+	1287	A+	3105	A-	295	A-	408	B+	570	A+
600246	20503	OP	9995	A-	1287	A-	3105	A-	295	A+	408	B-	570	A-
600248	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	B+	570	A-
600250	20503	OP	9995	A-	1287	A+	3105	A-	295	A+	408	A-	570	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	**N**	**Type**	**NFoc**	**Code**	**NFoc**	**Code**	**NFoc**	**Code**	**NFoc**	**Code**	**NFoc**	**Code**	**NFoc**	**Code**
600258	20503	OP	9995	A+	1287	A+	3105	A+	295	A-	408	A+	570	A+
600261	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	A-	570	A+
600268	20503	OP	9995	A-	1287	A-	3105	A-	295	A-	408	C-	570	A-
600281	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	A-	570	A-
600301	20503	OP	9995	A-	1287	A+	3105	A+	295	A+	408	A+	570	A+
600303	20503	OP	9995	A-	1287	A-	3105	A-	295	A-	408	A-	570	A-
600305	20503	OP	9995	A-	1287	A-	3105	A-	295	A-	408	A-	570	A+
600306	20503	OP	9995	A-	1287	A-	3105	A-	295	A+	408	A-	570	A-
600312	20503	OP	9995	A-	1287	A-	3105	A-	295	A-	408	A+	570	A+
600318	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	A+	570	A-
600319	20503	OP	9995	A+	1287	A-	3105	A-	295	A-	408	A-	570	A-
600320	20503	OP	9995	A-	1287	A-	3105	A+	295	A+	408	A+	570	A-
600332	20503	OP	9995	A+	1287	A-	3105	A-	295	A-	408	A+	570	A-
600333	20503	OP	9995	A-	1287	A+	3105	A+	295	A+	408	A-	570	A-
600337	20503	OP	9995	A-	1287	A-	3105	A-	295	A+	408	A+	570	A-
600346	20503	OP	9995	A+	1287	A-	3105	A+	295	A-	408	A+	570	A+
600350	20503	OP	9995	A+	1287	A+	3105	A-	295	A-	408	A-	570	A+
600353	20503	OP	9995	A-	1287	A+	3105	A+	295	A+	408	A+	570	A+
600355	20503	OP	9995	A+	1287	A+	3105	A+	295	A+	408	A+	570	A+
600360	20503	OP	9995	A+	1287	A+	3105	A+	295	A+	408	A+	570	A+
600363	20503	OP	9995	A+	1287	A+	3105	A-	295	A-	408	A+	570	A-
600368	20503	OP	9995	A+	1287	A+	3105	A+	295	A+	408	A+	570	A+
600384	20503	OP	9995	A-	1287	A-	3105	A-	295	B-	408	B-	570	A-
600388	20503	OP	9995	A-	1287	A-	3105	A-	295	A-	408	B-	570	A+
600394	20503	OP	9995	A-	1287	A-	3105	A-	295	A-	408	A-	570	A-
600507	20503	OP	9995	A+	1287	A-	3105	A-	295	B-	408	B-	570	A-
600510	20503	OP	9995	A+	1287	A+	3105	A+	295	A+	408	A+	570	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
600514	20503	OP	9995	A+	1287	A+	3105	A+	295	A+	408	A-	570	A+
600517	20503	OP	9995	A+	1287	A+	3105	A+	295	A-	408	A-	570	A+
600519	20503	OP	9995	A+	1287	A-	3105	A-	295	A+	408	A+	570	A-
600522	20503	OP	9995	A-	1287	A-	3105	A+	295	A-	408	A-	570	A+
600526	20503	OP	9995	A+	1287	A-	3105	A-	295	A-	408	B-	570	A-
603724	20503	OP	9995	A+	1287	A-	3105	A-	295	A-	408	A-	570	A-
603726	20503	OP	9995	A-	1287	A-	3105	A-	295	A-	408	A-	570	A-
634588	10853	FT	5195	A-	654	A-	1747	A-	177		234	A+	343	A-
634590	2391	FT	1159	A-	147		331	A-	39		32		52	
634592	2373	FT	1143	A+	165		330	A-	27		49		45	
634595	2456	FT	1194	A+	157		347	A-	25		44		63	
634596	2406	FT	1219	A+	160		316	A+	26		40		69	
634597	2295	FT	1123	A+	137		345	A+	37		46		57	
634599	2460	FT	1220	A+	157		329	A+	29		53		66	
634603	10961	FT	5258	A+	658	A+	1750	A+	170		226	A+	343	A+
634604	2379	FT	1166	A+	177		351	A+	33		40		58	
634608	2455	FT	1235	A-	155		346	A-	33		46		60	
634609	2413	FT	1189	A+	150		328	A+	30		44		53	
634610	2409	FT	1203	C-	162		366	A+	26		54		54	
634612	2413	FT	1169	A-	166		346	A+	29		43		58	
634613	2463	FT	1207	A-	169		312	A-	32		51		51	
634615	2437	FT	1227	A-	156		305	A-	28		43		62	
634616	2368	FT	1164	A-	151		327	A-	38		44		65	
634619	2431	FT	1198	A+	152		338	A+	28		50		55	
634620	2494	FT	1280	A+	160		350	A-	39		34		58	
634624	2387	FT	1166	A+	159		343	A-	37		39		51	
634625	2359	FT	1172	A-	158		315	A-	40		42		57	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634628	2350	FT	1150	A-	148		341	A-	23		35		58	
634630	2406	FT	1207	A-	162		362	A-	31		39		61	
634633	2445	FT	1210	A+	149		340	A-	35		35		63	
634634	10848	FT	5256	A+	679	B-	1732	A-	168		237	A-	331	A+
634636	10833	FT	5264	A-	674	A-	1711	A+	167		241	A+	348	A+
634637	2389	FT	1190	A-	160		309	A+	35		46		61	
634638	10904	FT	5253	A-	652	A-	1767	A-	169		241	A-	344	A-
634641	2411	FT	1190	A-	156		342	A-	27		47		56	
634643	10876	FT	5189	A+	678	A+	1726	A-	175		240	A-	337	A-
634644	2464	FT	1171	A-	155		360	A+	32		39		54	
634646	2336	FT	1166	A+	151		369	A-	43		47		49	
634648	10892	FT	5243	A-	653	A+	1737	A-	173		232	A+	329	A+
634650	2452	FT	1211	A-	156		338	A+	26		44		64	
634653	2451	FT	1211	A+	172		366	A+	26		47		68	
634654	2409	FT	1157	A+	162		356	A-	31		26		65	
634655	10914	FT	5242	A-	662	A-	1736	A-	163		237	B+	338	A-
634656	2384	FT	1168	A+	168		359	A-	29		43		54	
634657	2342	FT	1163	A+	140		344	A-	30		41		68	
634660	2394	FT	1230	A+	134		334	A+	32		39		55	
634661	2349	FT	1179	A+	151		339	A-	28		35		53	
634662	10888	FT	5265	A+	650	A-	1741	A-	171		230	A-	337	A+
634663	2290	FT	1119	A+	163		306	A-	25		51		58	
634667	2451	FT	1242	A-	155		341	A-	33		56		50	
634670	2411	FT	1187	A-	168		348	A-	33		45		56	
634673	2433	FT	1164	A+	146		360	A+	31		35		60	
634674	10857	FT	5211	A+	656	A-	1729	A-	167		239	B-	342	A+
634675	2424	FT	1214	B-	151		371	A+	34		50		58	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634678	2376	FT	1179	A-	146		367	A-	30		36		61	
634679	2384	FT	1200	A-	165		338	A+	32		43		48	
634682	2464	FT	1232	A-	158		359	A+	28		50		54	

Grade 11

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
600397	20800	OP	10196	A+	1279	A+	2592	A-	317	A-	427	A+	542	A+
600406	20800	OP	10196	A+	1279	A-	2592	A+	317	A+	427	B-	542	A-
600410	20800	OP	10196	A-	1279	A+	2592	A-	317	A+	427	A+	542	A-
600419	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A+	542	A+
600421	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	A+	542	A+
600422	20800	OP	10196	A+	1279	A-	2592	A-	317	A-	427	A+	542	A-
600536	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A+	542	A+
600540	20800	OP	10196	A-	1279	A-	2592	A-	317	A+	427	A-	542	A-
600543	20800	OP	10196	A+	1279	A-	2592	A-	317	A-	427	A-	542	A-
600552	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A+	542	A-
600558	20800	OP	10196	A-	1279	A-	2592	A+	317	A-	427	A-	542	A+
600561	20800	OP	10196	A-	1279	A+	2592	A-	317	A-	427	A-	542	A-
600562	20800	OP	10196	A-	1279	A+	2592	A-	317	A+	427	A+	542	A+
600576	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A-	542	A+
600577	20800	OP	10196	A-	1279	A+	2592	A+	317	A-	427	A+	542	A+
600583	20800	OP	10196	A-	1279	A+	2592	A-	317	A+	427	A+	542	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
600590	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A+	542	A+
600594	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A+	542	A+
600598	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	B+	542	A+
600599	20800	OP	10196	A-	1279	A-	2592	A+	317	A-	427	A+	542	A+
600617	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A+	542	A+
600619	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A+	542	A+
600627	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A-	542	A-
600629	20800	OP	10196	A-	1279	A+	2592	A-	317	A+	427	A+	542	A-
600633	20800	OP	10196	A-	1279	A+	2592	A+	317	A+	427	A+	542	A+
600638	20800	OP	10196	B+	1279	A+	2592	A+	317	A+	427	A+	542	A-
600641	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A+	542	A+
600648	20800	OP	10196	A+	1279	A-	2592	A+	317	A-	427	A-	542	A+
600653	20800	OP	10196	A-	1279	A-	2592	A-	317	A+	427	A-	542	A-
600656	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	B-	542	A-
600660	20800	OP	10196	A-	1279	A-	2592	A-	317	A+	427	A-	542	A+
600677	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	B-	542	A-
600680	20800	OP	10196	C-	1279	B-	2592	A-	317	A-	427	A-	542	A-
600689	20800	OP	10196	B+	1279	A-	2592	A-	317	A-	427	A-	542	A-
600694	20800	OP	10196	A+	1279	A-	2592	A-	317	A+	427	A-	542	A+
600695	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	A+	542	A+
600709	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	C+	542	A-
600718	20800	OP	10196	A-	1279	A+	2592	A-	317	A-	427	B-	542	A-
600724	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A-	542	A-
600725	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	A+	542	A-
600726	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A+	542	A+
600728	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	A+	542	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
600731	20800	OP	10196	A-	1279	A-	2592	A-	317	A+	427	A-	542	A+
600732	20800	OP	10196	A-	1279	A-	2592	A-	317	A-	427	A-	542	A-
600735	20800	OP	10196	A-	1279	A-	2592	A-	317	A+	427	A-	542	A-
600736	20800	OP	10196	A-	1279	B-	2592	A-	317	A-	427	A-	542	A-
600748	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A-	542	A+
600751	20800	OP	10196	A+	1279	A+	2592	A-	317	A-	427	A+	542	A-
600754	20800	OP	10196	A-	1279	A-	2592	A+	317	A+	427	A+	542	A+
600759	20800	OP	10196	A-	1279	A-	2592	A+	317	A+	427	A+	542	A+
600765	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A+	542	A-
600769	20800	OP	10196	A+	1279	A-	2592	A-	317	A-	427	A-	542	A-
600771	20800	OP	10196	A+	1279	A-	2592	A-	317	A-	427	A-	542	A-
600774	20800	OP	10196	A+	1279	A-	2592	A-	317	A-	427	C-	542	A+
600775	20800	OP	10196	A-	1279	A-	2592	A-	317	B-	427	A-	542	A-
600781	20800	OP	10196	A+	1279	A+	2592	A+	317	A+	427	A+	542	A+
600782	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	B+	542	B+
600795	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	A+	542	A+
600798	20800	OP	10196	A+	1279	A+	2592	A+	317	A-	427	A+	542	A-
600819	20800	OP	10196	A+	1279	A-	2592	A+	317	A-	427	A-	542	A+
600402	11964	FT	5862	A+	824	A+	1730	A+	188		278	A+	372	A-
600587	2199	FT	1116	A+	107		196		32		45		37	
600615	2211	FT	1060	A-	110		218	A-	28		41		51	
600645	11918	FT	5863	A+	833	A-	1720	A-	192		267	A+	368	A-
600684	2132	FT	1074	A+	120		194		23		30		38	
600739	2197	FT	1050	B-	112		209	A-	31		38		43	
600756	2217	FT	1126	A+	117		225	A-	25		43		47	
600768	2214	FT	1087	A+	116		226	B-	30		39		43	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
600770	2166	FT	1073	A-	107		199		41		43		46	
600832	11902	FT	5815	A-	835	A-	1700	A-	191		271	A-	356	A+
634442	11912	FT	5833	A+	817	A+	1714	A-	186		274	B+	362	A-
634443	2285	FT	1130	A-	124		219	A-	36		42		32	
634444	2334	FT	1164	A+	141		247	A+	37		46		44	
634445	2219	FT	1073	A+	104		232	A+	40		27		43	
634446	2210	FT	1069	A+	133		243	A-	34		36		41	
634447	2204	FT	1100	A+	134		213	A-	22		38		46	
634448	2267	FT	1082	A-	118		208	A+	50		38		46	
634449	11901	FT	5808	A+	805	A-	1713	A-	197		272	A-	362	A-
634450	2220	FT	1112	A-	120		228	A-	24		32		49	
634451	11906	FT	5851	A-	808	B-	1718	A-	189		280	A-	358	A+
634452	2276	FT	1146	A-	116		212	A-	27		39		49	
634453	2232	FT	1101	A+	116		239	A+	30		36		53	
634454	2254	FT	1116	A+	108		221	A-	31		29		33	
634455	2167	FT	1041	A-	117		195		37		33		36	
634456	2189	FT	1062	A-	103		216	A+	33		31		60	
634457	11920	FT	5815	A-	816	A-	1733	A+	192		274	A-	361	A+
634458	2272	FT	1132	A-	105		210	A+	32		32		41	
634459	2193	FT	1079	A-	107		201	A-	30		38		50	
634460	2289	FT	1138	A+	125		223	A-	27		37		45	
634461	2150	FT	1061	A-	122		201	A-	29		41		46	
634462	2273	FT	1095	A-	116		222	A-	40		47		52	
634463	2227	FT	1099	A+	107		228	A-	28		47		51	
634464	2199	FT	1038	A+	105		226	A+	28		40		48	
634465	2200	FT	1085	A+	114		209	A-	30		51		57	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634466	2273	FT	1105	A-	120		240	A+	31		37		51	
634467	2192	FT	1095	A-	115		223	A-	27		29		42	
634468	2260	FT	1096	A+	111		230	A-	33		33		37	
634469	2235	FT	1092	A+	139		221	A-	37		46		51	
634470	2211	FT	1087	A+	111		213	A-	31		35		41	
634471	11944	FT	5872	A-	826	A-	1734	A-	191		284	A+	359	A+
634472	11872	FT	5822	A-	819	A-	1718	A-	190		271	A-	360	A-
634473	2215	FT	1081	A+	114		251	A-	33		41		41	
634474	2187	FT	1076	A+	114		213	B-	32		39		48	
634475	2213	FT	1059	A-	107		210	A-	37		45		43	
634476	2180	FT	1049	A-	100		203	A-	30		34		44	
634477	2244	FT	1111	A-	101		214	A-	37		34		51	
634478	2202	FT	1096	B-	128		225	B-	24		39		38	
634479	11923	FT	5827	A-	805	A+	1724	A-	186		276	A-	358	A+
634480	2263	FT	1093	A+	111		218	A+	30		39		49	
634481	2167	FT	1043	A-	107		195		31		33		41	

Appendix L: Science Differential Item Functioning

***AM=American Indian, AS=Asian, BL=African American/Black, HI= Hispanic, MU=Multiple Ethnicities, WH=White**

Grade 5

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634836	7151	FT	3488	A-	462	A-	1368	A+	115		101		205	A-
634837	5072	FT	2456	A+	342	A-	803	A+	68		97		174	
634838	5072	FT	2456	A+	342	A-	803	A-	68		97		174	
634839	7151	FT	3488	A+	462	A+	1368	A-	115		101		205	A+
634840	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A+
634841	5072	FT	2456	A+	342	A-	803	A+	68		97		174	
634842	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634843	5072	FT	2456	A-	342	A+	803	A-	68		97		174	
634844	7151	FT	3488	A+	462	A-	1368	A-	115		101		205	A-
634845	7151	FT	3488	A+	462	A-	1368	A-	115		101		205	A-
634846	5072	FT	2456	A+	342	B-	803	A-	68		97		174	
634847	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634848	7151	FT	3488	A+	462	A+	1368	A+	115		101		205	A+
634849	7151	FT	3488	A+	462	A-	1368	A-	115		101		205	A+
634850	5072	FT	2456	A+	342	A+	803	B+	68		97		174	
634851	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634852	5060	FT	2498	A-	337	A+	794	A-	73		79		139	
634853	5072	FT	2456	A-	342	A+	803	A+	68		97		174	
634854	7151	FT	3488	A+	462	A-	1368	A-	115		101		205	A-
634855	7151	FT	3488	A+	462	A+	1368	A+	115		101		205	A+
634856	5072	FT	2456	A-	342	A+	803	A+	68		97		174	
634857	5060	FT	2498	A-	337	A-	794	A+	73		79		139	
634858	5060	FT	2498	A+	337	A-	794	A+	73		79		139	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634859	5072	FT	2456	A-	342	A-	803	A+	68		97		174	
634860	5060	FT	2498	A+	337	A-	794	A+	73		79		139	
634861	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A+
634862	7151	FT	3488	A+	462	A-	1368	A-	115		101		205	A-
634863	5072	FT	2456	A-	342	A-	803	A-	68		97		174	
634864	5060	FT	2498	B-	337	A-	794	A+	73		79		139	
634865	5060	FT	2498	A-	337	A+	794	A+	73		79		139	
634866	5072	FT	2456	A+	342	B-	803	A-	68		97		174	
634867	7151	FT	3488	A+	462	A+	1368	A-	115		101		205	B-
634868	7151	FT	3488	A-	462	A-	1368	A-	115		101		205	A-
634869	5072	FT	2456	A-	342	A-	803	A-	68		97		174	
634870	5060	FT	2498	A-	337	A+	794	A-	73		79		139	
634871	5060	FT	2498	B-	337	A-	794	A-	73		79		139	
634872	5072	FT	2456	A+	342	B-	803	A-	68		97		174	
634873	7151	FT	3488	A-	462	A-	1368	A+	115		101		205	A-
634874	7151	FT	3488	A-	462	A+	1368	A-	115		101		205	A+
634875	5072	FT	2456	A-	342	A-	803	A+	68		97		174	
634876	5060	FT	2498	A+	337	A-	794	A+	73		79		139	
634877	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634878	5072	FT	2456	A+	342	A+	803	A+	68		97		174	
634879	7151	FT	3488	A+	462	A+	1368	A+	115		101		205	A+
634880	5072	FT	2456	B-	342	A-	803	A+	68		97		174	
634881	5060	FT	2498	A-	337	A-	794	A-	73		79		139	
634882	5060	FT	2498	A-	337	A+	794	A+	73		79		139	
634883	5060	FT	2498	A-	337	A-	794	A-	73		79		139	
634884	5060	FT	2498	A-	337	A+	794	A+	73		79		139	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634885	5072	FT	2456	A-	342	A-	803	A-	68		97		174	
634886	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A-
634887	7151	FT	3488	A+	462	B+	1368	A+	115		101		205	B+
634888	5072	FT	2456	A+	342	A+	803	A+	68		97		174	
634889	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634890	5060	FT	2498	A-	337	A+	794	A+	73		79		139	
634891	5072	FT	2456	A-	342	B-	803	A+	68		97		174	
634892	5060	FT	2498	A-	337	A+	794	A-	73		79		139	
634893	7151	FT	3488	A-	462	A-	1368	A-	115		101		205	A-
634894	7151	FT	3488	A+	462	A-	1368	A+	115		101		205	A-
634895	5072	FT	2456	A-	342	A+	803	A+	68		97		174	
634896	5060	FT	2498	A-	337	A+	794	A+	73		79		139	
634897	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634898	5072	FT	2456	A+	342	A-	803	A-	68		97		174	
634899	5072	FT	2456	A+	342	A-	803	A-	68		97		174	
634900	7151	FT	3488	A+	462	A-	1368	A+	115		101		205	A-
634901	7151	FT	3488	A-	462	A-	1368	A+	115		101		205	A-
634902	5072	FT	2456	A-	342	A-	803	A+	68		97		174	
634903	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634904	10132	FT	4954	A+	679	A-	1597	A-	141		176		313	A-
634905	12223	FT	5944	B+	804	A-	2171	A-	183		198		379	A-
634906	12211	FT	5986	A+	799	A-	2162	B-	188		180		344	A-
634907	12223	FT	5944	A+	804	A+	2171	A-	183		198		379	A+
634908	10132	FT	4954	A+	679	A-	1597	A-	141		176		313	A+
634909	12211	FT	5986	A+	799	A+	2162	A-	188		180		344	A-
634910	5060	FT	2498	A+	337	A-	794	A+	73		79		139	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634911	5072	FT	2456	A+	342	A+	803	A+	68		97		174	
634912	7151	FT	3488	A+	462	A-	1368	A-	115		101		205	A-
634913	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A+
634914	5072	FT	2456	A+	342	A-	803	A+	68		97		174	
634915	5060	FT	2498	A+	337	B+	794	A+	73		79		139	
634916	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634917	5072	FT	2456	A-	342	A+	803	A+	68		97		174	
634918	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A-
634919	7151	FT	3488	A+	462	A+	1368	A-	115		101		205	A+
634920	5072	FT	2456	A+	342	A+	803	A+	68		97		174	
634921	5060	FT	2498	A+	337	A+	794	A+	73		79		139	
634922	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634923	5072	FT	2456	A-	342	A+	803	A+	68		97		174	
634924	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A+
634925	7151	FT	3488	A-	462	A-	1368	A-	115		101		205	A-
634926	5072	FT	2456	A+	342	A-	803	A-	68		97		174	
634927	5060	FT	2498	A-	337	B+	794	A+	73		79		139	
634928	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634929	5072	FT	2456	A-	342	A-	803	A-	68		97		174	
634930	7151	FT	3488	A-	462	A-	1368	A-	115		101		205	A+
634931	7151	FT	3488	A-	462	A-	1368	A+	115		101		205	A+
634932	5072	FT	2456	A+	342	A-	803	A-	68		97		174	
634933	5060	FT	2498	A+	337	A+	794	A-	73		79		139	
634934	5060	FT	2498	A-	337	A-	794	A-	73		79		139	
634935	5072	FT	2456	A+	342	A+	803	A-	68		97		174	
634936	7151	FT	3488	A-	462	A-	1368	A-	115		101		205	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634937	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A-
634938	5072	FT	2456	A-	342	A-	803	A+	68		97		174	
634939	5060	FT	2498	A-	337	A+	794	A-	73		79		139	
634940	5060	FT	2498	A-	337	A-	794	A-	73		79		139	
634941	12223	FT	5944	A-	804	C-	2171	C-	183		198		379	B-
634942	7151	FT	3488	A-	462	B+	1368	A+	115		101		205	A+
634943	5072	FT	2456	A-	342	A-	803	A-	68		97		174	
634944	5060	FT	2498	A-	337	A-	794	A-	73		79		139	
634945	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634946	5072	FT	2456	A+	342	A+	803	A+	68		97		174	
634947	7151	FT	3488	A-	462	B-	1368	A-	115		101		205	A+
634948	7151	FT	3488	A+	462	A+	1368	A+	115		101		205	A+
634949	5060	FT	2498	A-	337	B-	794	A-	73		79		139	
634950	5072	FT	2456	A-	342	A-	803	A-	68		97		174	
634951	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634952	5072	FT	2456	A-	342	A-	803	A-	68		97		174	
634953	7151	FT	3488	A-	462	A-	1368	A-	115		101		205	A-
634954	7151	FT	3488	A-	462	A+	1368	A+	115		101		205	A+
634955	5072	FT	2456	A-	342	C-	803	A-	68		97		174	
634956	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634957	12211	FT	5986	A+	799	A-	2162	A-	188		180		344	A-
634958	5072	FT	2456	A-	342	A-	803	A+	68		97		174	
634960	7151	FT	3488	A+	462	A-	1368	A-	115		101		205	A-
634961	5072	FT	2456	A+	342	A-	803	A-	68		97		174	
634962	5060	FT	2498	B+	337	A-	794	A+	73		79		139	
634963	5060	FT	2498	A-	337	B-	794	A-	73		79		139	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
634964	5072	FT	2456	A-	342	A+	803	A+	68		97		174	
634965	7151	FT	3488	A-	462	A-	1368	A-	115		101		205	A-
634966	7151	FT	3488	A-	462	A+	1368	A-	115		101		205	A-
634967	5072	FT	2456	A-	342	A+	803	A+	68		97		174	
634968	5060	FT	2498	A-	337	B-	794	A-	73		79		139	
634969	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634970	5060	FT	2498	A-	337	A+	794	A-	73		79		139	
634974	5060	FT	2498	A+	337	A-	794	A-	73		79		139	
634976	5072	FT	2456	A+	342	A+	803	A+	68		97		174	
634977	7151	FT	3488	A+	462	A+	1368	B+	115		101		205	A+
634978	7151	FT	3488	A+	462	A+	1368	A+	115		101		205	A+
634979	5072	FT	2456	A+	342	A-	803	A+	68		97		174	
635044	7151	FT	3488	A-	462	B+	1368	A+	115		101		205	A+
636068	12223	FT	5944	A-	804	A+	2171	A+	183		198		379	A-

Grade 8

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635003	7027	FT	3418	A+	392	A-	1217	A-	95		119		176	
635004	5136	FT	2513	B+	329	A-	717	A+	70		112		159	
635005	7027	FT	3418	A+	392	A-	1217	A-	95		119		176	
635006	5153	FT	2528	A-	350	A+	701	A+	61		95		154	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635007	5153	FT	2528	A+	350	A-	701	A+	61		95		154	
635008	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635009	7027	FT	3418	A-	392	A-	1217	A-	95		119		176	
635010	7027	FT	3418	A+	392	C-	1217	A-	95		119		176	
635011	5136	FT	2513	A+	329	A-	717	A-	70		112		159	
635012	5153	FT	2528	A+	350	A-	701	A-	61		95		154	
635013	12180	FT	5946	A+	742	A-	1918	A-	156		214	A-	330	A+
635014	10289	FT	5041	A+	679	A+	1418	A+	131		207	A+	313	A+
635015	12163	FT	5931	A+	721	A+	1934	A+	165		231	A+	335	A-
635016	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635017	5153	FT	2528	A+	350	A+	701	A+	61		95		154	
635018	5153	FT	2528	A+	350	A-	701	A-	61		95		154	
635019	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635020	7027	FT	3418	A-	392	A-	1217	A+	95		119		176	
635021	12163	FT	5931	A-	721	A+	1934	A+	165		231	A+	335	A-
635022	10289	FT	5041	A+	679	A-	1418	A-	131		207	A+	313	A+
635023	5153	FT	2528	A+	350	A+	701	A-	61		95		154	
635024	5153	FT	2528	A-	350	A+	701	A+	61		95		154	
635025	5153	FT	2528	A+	350	A+	701	A+	61		95		154	
635026	7027	FT	3418	A+	392	B+	1217	A+	95		119		176	
635027	7027	FT	3418	A-	392	A-	1217	A+	95		119		176	
635028	5136	FT	2513	A+	329	A-	717	A+	70		112		159	
635029	5153	FT	2528	A-	350	A+	701	A+	61		95		154	
635030	5153	FT	2528	A+	350	A+	701	A+	61		95		154	
635031	5136	FT	2513	A+	329	A+	717	A-	70		112		159	
635032	7027	FT	3418	A-	392	A+	1217	A-	95		119		176	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635033	7027	FT	3418	A-	392	A+	1217	A+	95		119		176	
635034	5136	FT	2513	A-	329	A-	717	A+	70		112		159	
635035	5153	FT	2528	A+	350	A+	701	A+	61		95		154	
635036	5153	FT	2528	A+	350	A+	701	A+	61		95		154	
635037	5136	FT	2513	B-	329	A-	717	A+	70		112		159	
635038	7027	FT	3418	A-	392	A+	1217	A-	95		119		176	
635039	7027	FT	3418	A-	392	A+	1217	A-	95		119		176	
635040	5136	FT	2513	A-	329	A-	717	A-	70		112		159	
635041	5153	FT	2528	A-	350	A+	701	A+	61		95		154	
635042	5153	FT	2528	A-	350	A+	701	A-	61		95		154	
635043	5136	FT	2513	A+	329	A-	717	A-	70		112		159	
635045	7027	FT	3418	A-	392	C-	1217	B-	95		119		176	
635046	12163	FT	5931	A-	721	A-	1934	A+	165		231	A+	335	A-
635047	10289	FT	5041	A+	679	A+	1418	A+	131		207	B+	313	A+
635048	12163	FT	5931	A-	721	A+	1934	A-	165		231	A+	335	A+
635049	5153	FT	2528	A-	350	A+	701	A-	61		95		154	
635050	5136	FT	2513	A+	329	A-	717	A+	70		112		159	
635051	7027	FT	3418	A-	392	A-	1217	A-	95		119		176	
635052	7027	FT	3418	A-	392	A+	1217	A-	95		119		176	
635053	7027	FT	3418	B-	392	A-	1217	A-	95		119		176	
635054	5136	FT	2513	A+	329	A-	717	A-	70		112		159	
635055	5153	FT	2528	A+	350	A-	701	A+	61		95		154	
635056	5153	FT	2528	A-	350	A-	701	A+	61		95		154	
635057	5136	FT	2513	A+	329	A+	717	A-	70		112		159	
635058	7027	FT	3418	A-	392	A-	1217	A-	95		119		176	
635059	7027	FT	3418	A+	392	A-	1217	A-	95		119		176	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635060	5136	FT	2513	A-	329	A-	717	A-	70		112		159	
635062	5153	FT	2528	A+	350	A+	701	A-	61		95		154	
635063	5153	FT	2528	A+	350	A+	701	A+	61		95		154	
635064	5136	FT	2513	A+	329	A-	717	A-	70		112		159	
635065	7027	FT	3418	A-	392	A+	1217	A+	95		119		176	
635066	7027	FT	3418	A-	392	A-	1217	B-	95		119		176	
635067	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635068	5153	FT	2528	A-	350	A-	701	A-	61		95		154	
635069	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635070	7027	FT	3418	A-	392	A-	1217	A+	95		119		176	
635071	5136	FT	2513	C+	329	A-	717	A-	70		112		159	
635072	5153	FT	2528	B+	350	A+	701	A+	61		95		154	
635073	5153	FT	2528	A-	350	A+	701	A+	61		95		154	
635074	5136	FT	2513	A-	329	A+	717	A+	70		112		159	
635075	7027	FT	3418	A+	392	A+	1217	A-	95		119		176	
635076	7027	FT	3418	A+	392	A-	1217	A-	95		119		176	
635077	5136	FT	2513	A+	329	A-	717	A-	70		112		159	
635078	5153	FT	2528	A+	350	A+	701	A-	61		95		154	
635079	5153	FT	2528	A+	350	A-	701	A+	61		95		154	
635080	5136	FT	2513	A-	329	A-	717	A+	70		112		159	
635081	7027	FT	3418	A-	392	A+	1217	A+	95		119		176	
635082	12163	FT	5931	A+	721	A-	1934	A-	165		231	A-	335	A-
635083	10289	FT	5041	B+	679	A-	1418	A-	131		207	A+	313	A-
635084	12180	FT	5946	A-	742	A+	1918	A-	156		214	A-	330	A-
635085	5153	FT	2528	A-	350	A-	701	A+	61		95		154	
635086	5136	FT	2513	A-	329	A-	717	A-	70		112		159	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635087	7027	FT	3418	A+	392	B-	1217	B-	95		119		176	
635088	7027	FT	3418	A+	392	A-	1217	A-	95		119		176	
635089	5136	FT	2513	A-	329	A+	717	A+	70		112		159	
635090	5153	FT	2528	A-	350	A+	701	A-	61		95		154	
635091	5153	FT	2528	A-	350	B-	701	A-	61		95		154	
635092	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635093	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635094	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635095	5136	FT	2513	A+	329	A-	717	A-	70		112		159	
635096	5153	FT	2528	A+	350	A-	701	A-	61		95		154	
635097	5153	FT	2528	A+	350	A+	701	A+	61		95		154	
635098	5136	FT	2513	A-	329	A-	717	A-	70		112		159	
635099	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635100	12163	FT	5931	A-	721	A-	1934	A+	165		231	A-	335	A-
635101	12180	FT	5946	A+	742	A-	1918	A-	156		214	A-	330	A+
635102	5153	FT	2528	A+	350	A-	701	A-	61		95		154	
635103	5136	FT	2513	A-	329	A-	717	A+	70		112		159	
635104	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635105	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635106	5136	FT	2513	A-	329	A-	717	A+	70		112		159	
635107	5153	FT	2528	A-	350	A-	701	A+	61		95		154	
635108	5153	FT	2528	A+	350	A-	701	A+	61		95		154	
635109	5136	FT	2513	A-	329	A+	717	A+	70		112		159	
635110	7027	FT	3418	A-	392	A-	1217	A+	95		119		176	
635111	7027	FT	3418	A-	392	A-	1217	A-	95		119		176	
635112	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635113	5136	FT	2513	A-	329	A-	717	A-	70		112		159	
635114	5153	FT	2528	A-	350	A-	701	A-	61		95		154	
635115	12180	FT	5946	A-	742	B-	1918	A-	156		214	A-	330	A-
635116	10289	FT	5041	A-	679	A-	1418	A-	131		207	A-	313	A-
635117	12163	FT	5931	A-	721	A-	1934	A-	165		231	A-	335	A+
635118	7027	FT	3418	A-	392	A+	1217	A+	95		119		176	
635119	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635120	5153	FT	2528	B-	350	A-	701	A+	61		95		154	
635121	5153	FT	2528	B-	350	B-	701	A-	61		95		154	
635122	5136	FT	2513	A-	329	C-	717	B-	70		112		159	
635123	7027	FT	3418	A+	392	A-	1217	A-	95		119		176	
635124	5153	FT	2528	A+	350	A+	701	A-	61		95		154	
635125	5136	FT	2513	A-	329	A+	717	A+	70		112		159	
635126	7027	FT	3418	A+	392	A-	1217	A+	95		119		176	
635127	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635128	5136	FT	2513	A+	329	A+	717	A-	70		112		159	
635129	5153	FT	2528	A+	350	A-	701	A+	61		95		154	
635130	5136	FT	2513	A-	329	A-	717	A-	70		112		159	
635132	5136	FT	2513	A-	329	A-	717	A-	70		112		159	
635133	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635134	5153	FT	2528	A+	350	A-	701	A+	61		95		154	
635135	5153	FT	2528	A+	350	A+	701	A-	61		95		154	
635136	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635137	7027	FT	3418	A+	392	A-	1217	A+	95		119		176	
635138	7027	FT	3418	A+	392	A-	1217	A+	95		119		176	
635139	5136	FT	2513	A-	329	A+	717	A-	70		112		159	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635140	5153	FT	2528	B-	350	A+	701	A-	61		95		154	
635141	5153	FT	2528	A-	350	A-	701	A-	61		95		154	
635142	5136	FT	2513	A-	329	A+	717	A-	70		112		159	
635143	7027	FT	3418	A-	392	A+	1217	A-	95		119		176	
635144	7027	FT	3418	A-	392	A-	1217	A-	95		119		176	
635145	5153	FT	2528	A+	350	C-	701	B-	61		95		154	
635146	10289	FT	5041	A+	679	A-	1418	A-	131		207	A-	313	A-
635147	5136	FT	2513	A-	329	C-	717	C-	70		112		159	
635148	7027	FT	3418	A-	392	A-	1217	A+	95		119		176	
635149	5136	FT	2513	A-	329	A-	717	A+	70		112		159	
635150	5153	FT	2528	A-	350	A+	701	A+	61		95		154	
635151	5153	FT	2528	A-	350	A-	701	A-	61		95		154	
635152	5136	FT	2513	A-	329	A-	717	B+	70		112		159	
635153	7027	FT	3418	A+	392	A-	1217	A-	95		119		176	
635154	7027	FT	3418	A+	392	A+	1217	A+	95		119		176	
635155	5136	FT	2513	A+	329	A+	717	A+	70		112		159	
635156	5153	FT	2528	A-	350	A-	701	B-	61		95		154	
635157	5153	FT	2528	A-	350	A+	701	A-	61		95		154	
635158	5136	FT	2513	A-	329	A+	717	A+	70		112		159	
635159	5153	FT	2528	A+	350	B-	701	B-	61		95		154	
635160	5136	FT	2513	A-	329	A+	717	B+	70		112		159	
635161	7027	FT	3418	A+	392	A+	1217	A-	95		119		176	
635162	5153	FT	2528	A-	350	A+	701	A+	61		95		154	
635163	7027	FT	3418	A-	392	A+	1217	A+	95		119		176	
635228	5136	FT	2513	A+	329	A+	717	A-	70		112		159	
635230	5153	FT	2528	A+	350	A+	701	A-	61		95		154	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635233	7027	FT	3418	A+	392	A-	1217	A+	95		119		176	
635236	5153	FT	2528	A-	350	A-	701	A-	61		95		154	
635240	5136	FT	2513	A-	329	A+	717	A+	70		112		159	

Grade 11

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635171	5793	FT	2864	A-	431	A-	1012	A-	76		85		200	A-
635172	2930	FT	1487	A+	118		219	A-	32		47		54	
635174	2908	FT	1414	A+	123		244	A-	37		57		57	
635176	2916	FT	1414	A-	112		247	A-	33		68		47	
635178	2916	FT	1414	A-	112		247	A-	33		68		47	
635179	2908	FT	1414	A-	123		244	A+	37		57		57	
635180	2930	FT	1487	A+	118		219	A-	32		47		54	
635181	5793	FT	2864	A-	431	A-	1012	A-	76		85		200	A+
635182	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A+
635183	2930	FT	1487	A+	118		219	A-	32		47		54	
635184	2908	FT	1414	A+	123		244	A-	37		57		57	
635185	2916	FT	1414	A+	112		247	A-	33		68		47	
635186	2916	FT	1414	A+	112		247	A+	33		68		47	
635187	2908	FT	1414	A-	123		244	A+	37		57		57	
635188	2930	FT	1487	A-	118		219	A-	32		47		54	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635189	5793	FT	2864	A+	431	A-	1012	A+	76		85		200	A-
635190	5793	FT	2864	A+	431	A-	1012	A+	76		85		200	A+
635191	2930	FT	1487	A+	118		219	A+	32		47		54	
635192	2908	FT	1414	A+	123		244	A-	37		57		57	
635193	2916	FT	1414	A+	112		247	A+	33		68		47	
635194	2916	FT	1414	A+	112		247	A+	33		68		47	
635195	2908	FT	1414	C-	123		244	A-	37		57		57	
635196	2930	FT	1487	B-	118		219	A-	32		47		54	
635197	5793	FT	2864	A-	431	A-	1012	A-	76		85		200	A-
635198	5793	FT	2864	A+	431	B+	1012	A+	76		85		200	B+
635199	2916	FT	1414	A-	112		247	A-	33		68		47	
635200	2908	FT	1414	B-	123		244	A-	37		57		57	
635201	2916	FT	1414	A-	112		247	A-	33		68		47	
635203	2916	FT	1414	A-	112		247	A+	33		68		47	
635204	2908	FT	1414	A-	123		244	A-	37		57		57	
635205	2930	FT	1487	A+	118		219	A-	32		47		54	
635206	5793	FT	2864	A-	431	A+	1012	A+	76		85		200	A+
635207	5793	FT	2864	A-	431	A-	1012	A+	76		85		200	A+
635208	2930	FT	1487	A+	118		219	A-	32		47		54	
635209	2908	FT	1414	A+	123		244	A+	37		57		57	
635210	2916	FT	1414	A+	112		247	A-	33		68		47	
635211	2916	FT	1414	A-	112		247	A+	33		68		47	
635212	2908	FT	1414	A-	123		244	A+	37		57		57	
635213	2930	FT	1487	A-	118		219	B-	32		47		54	
635214	5793	FT	2864	A-	431	A-	1012	A+	76		85		200	A+
635216	5793	FT	2864	A-	431	A-	1012	A+	76		85		200	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635217	2930	FT	1487	A-	118		219	A+	32		47		54	
635218	2908	FT	1414	A-	123		244	A+	37		57		57	
635219	2916	FT	1414	A-	112		247	A-	33		68		47	
635220	2916	FT	1414	A-	112		247	A-	33		68		47	
635221	2908	FT	1414	A+	123		244	A+	37		57		57	
635222	2930	FT	1487	A-	118		219	A+	32		47		54	
635223	5793	FT	2864	A-	431	A+	1012	A+	76		85		200	A+
635224	5793	FT	2864	A-	431	A+	1012	A-	76		85		200	A-
635225	2930	FT	1487	B+	118		219	A+	32		47		54	
635226	2908	FT	1414	A+	123		244	A-	37		57		57	
635227	2916	FT	1414	A+	112		247	A-	33		68		47	
635229	5846	FT	2901	A-	230	A-	466	A+	65		115		101	
635231	2908	FT	1414	A-	123		244	A-	37		57		57	
635232	2916	FT	1414	A-	112		247	A-	33		68		47	
635234	2908	FT	1414	A+	123		244	A+	37		57		57	
635235	5846	FT	2901	A+	230	A-	466	A-	65		115		101	
635237	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A-
635238	5793	FT	2864	A-	431	A-	1012	A-	76		85		200	A-
635239	2930	FT	1487	A-	118		219	A+	32		47		54	
635241	2908	FT	1414	A-	123		244	A-	37		57		57	
635242	2930	FT	1487	A+	118		219	A-	32		47		54	
635243	2916	FT	1414	A+	112		247	A-	33		68		47	
635244	2930	FT	1487	A-	118		219	A-	32		47		54	
635245	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A-
635246	5793	FT	2864	B-	431	B-	1012	A-	76		85		200	A-
635247	8709	FT	4278	A+	543	A+	1259	A-	109		153		247	A+

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635248	2930	FT	1487	A-	118		219	A+	32		47		54	
635249	2908	FT	1414	A-	123		244	A-	37		57		57	
635250	5846	FT	2901	A-	230	A-	466	A-	65		115		101	
635251	8701	FT	4278	A-	554	B+	1256	A-	113		142		257	A+
635252	5846	FT	2901	C-	230	A-	466	A-	65		115		101	
635253	2908	FT	1414	A+	123		244	A+	37		57		57	
635254	8701	FT	4278	A+	554	A+	1256	A+	113		142		257	A-
635255	5846	FT	2901	A-	230	A+	466	A+	65		115		101	
635256	8723	FT	4351	A+	549	A-	1231	A-	108		132		254	A-
635257	2908	FT	1414	A+	123		244	A+	37		57		57	
635258	5846	FT	2901	A+	230	A+	466	A+	65		115		101	
635259	8701	FT	4278	A+	554	A+	1256	A+	113		142		257	A+
635260	5846	FT	2901	A+	230	A-	466	A+	65		115		101	
635261	8701	FT	4278	A-	554	A+	1256	A+	113		142		257	A+
635262	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A+
635263	2930	FT	1487	A+	118		219	A-	32		47		54	
635264	2908	FT	1414	A-	123		244	A+	37		57		57	
635265	2916	FT	1414	A+	112		247	A+	33		68		47	
635266	2916	FT	1414	A+	112		247	A+	33		68		47	
635267	2908	FT	1414	A-	123		244	A-	37		57		57	
635268	2930	FT	1487	A+	118		219	A-	32		47		54	
635269	5793	FT	2864	A-	431	A-	1012	A+	76		85		200	A-
635270	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A-
635271	2930	FT	1487	A-	118		219	A+	32		47		54	
635272	2908	FT	1414	A+	123		244	A+	37		57		57	
635273	2916	FT	1414	A-	112		247	A+	33		68		47	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635274	2916	FT	1414	A+	112		247	A+	33		68		47	
635275	2908	FT	1414	A+	123		244	A-	37		57		57	
635276	2930	FT	1487	A-	118		219	A-	32		47		54	
635277	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A-
635278	2916	FT	1414	A-	112		247	A-	33		68		47	
635279	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A-
635280	2930	FT	1487	A+	118		219	A-	32		47		54	
635281	2908	FT	1414	A+	123		244	A-	37		57		57	
635282	2916	FT	1414	C+	112		247	A-	33		68		47	
635283	2916	FT	1414	A+	112		247	A+	33		68		47	
635284	2908	FT	1414	A+	123		244	A-	37		57		57	
635285	2930	FT	1487	A+	118		219	A+	32		47		54	
635286	5793	FT	2864	A+	431	A+	1012	A+	76		85		200	A+
635287	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A+
635288	2930	FT	1487	A+	118		219	A+	32		47		54	
635289	2908	FT	1414	A+	123		244	A+	37		57		57	
635290	2916	FT	1414	B+	112		247	A+	33		68		47	
635291	2908	FT	1414	A+	123		244	A+	37		57		57	
635292	2930	FT	1487	A+	118		219	C+	32		47		54	
635293	5793	FT	2864	A+	431	A+	1012	A+	76		85		200	A+
635294	5793	FT	2864	A+	431	A+	1012	A-	76		85		200	A-
635295	2930	FT	1487	A+	118		219	A-	32		47		54	
635296	2908	FT	1414	A+	123		244	A+	37		57		57	
635297	2916	FT	1414	B+	112		247	A-	33		68		47	
635488	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A+
635489	2908	FT	1414	A+	123		244	A+	37		57		57	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635490	2916	FT	1414	B+	112		247	A+	33		68		47	
635491	2916	FT	1414	A+	112		247	B-	33		68		47	
635492	2908	FT	1414	A+	123		244	A-	37		57		57	
635493	2930	FT	1487	A-	118		219	A-	32		47		54	
635494	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A-
635495	8701	FT	4278	A+	554	A-	1256	A-	113		142		257	A+
635496	5846	FT	2901	A+	230	A-	466	A-	65		115		101	
635497	8701	FT	4278	A+	554	A-	1256	A-	113		142		257	A+
635498	2916	FT	1414	B+	112		247	A-	33		68		47	
635499	2908	FT	1414	A-	123		244	A+	37		57		57	
635501	2930	FT	1487	B+	118		219	B+	32		47		54	
635502	2930	FT	1487	A+	118		219	A-	32		47		54	
635503	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	A-
635504	2930	FT	1487	A-	118		219	A+	32		47		54	
635505	2908	FT	1414	A+	123		244	A+	37		57		57	
635506	2916	FT	1414	B-	112		247	A+	33		68		47	
635507	2916	FT	1414	C-	112		247	A+	33		68		47	
635508	2908	FT	1414	A-	123		244	A-	37		57		57	
635509	2930	FT	1487	A+	118		219	A+	32		47		54	
635510	5793	FT	2864	A-	431	A+	1012	A+	76		85		200	A+
635511	5793	FT	2864	A-	431	B+	1012	A+	76		85		200	B+
635512	2930	FT	1487	A-	118		219	A-	32		47		54	
635513	2908	FT	1414	A-	123		244	A+	37		57		57	
635514	2916	FT	1414	A+	112		247	A-	33		68		47	
635515	2916	FT	1414	A-	112		247	A+	33		68		47	
635516	2908	FT	1414	A+	123		244	A+	37		57		57	

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635517	2930	FT	1487	A-	118		219	A+	32		47		54	
635518	5793	FT	2864	A-	431	A+	1012	A+	76		85		200	A+
635519	5793	FT	2864	A-	431	A+	1012	A+	76		85		200	A-
635520	2930	FT	1487	B-	118		219	A-	32		47		54	
635521	2908	FT	1414	A+	123		244	A-	37		57		57	
635522	2916	FT	1414	A-	112		247	A+	33		68		47	
635523	2916	FT	1414	B-	112		247	A-	33		68		47	
635524	2908	FT	1414	A-	123		244	A-	37		57		57	
635525	2930	FT	1487	A-	118		219	A+	32		47		54	
635526	5793	FT	2864	A-	431	C+	1012	A+	76		85		200	B+
635527	5793	FT	2864	A-	431	A+	1012	A-	76		85		200	A+
635528	2930	FT	1487	A-	118		219	A-	32		47		54	
635529	2908	FT	1414	A-	123		244	A+	37		57		57	
635530	2916	FT	1414	A-	112		247	A+	33		68		47	
635531	2916	FT	1414	A+	112		247	A-	33		68		47	
635532	2908	FT	1414	A-	123		244	A-	37		57		57	
635533	2930	FT	1487	A+	118		219	A+	32		47		54	
635534	5793	FT	2864	B+	431	A-	1012	A+	76		85		200	A+
635535	5793	FT	2864	A-	431	A+	1012	A+	76		85		200	A+
635536	2930	FT	1487	A+	118		219	A+	32		47		54	
635537	2916	FT	1414	A+	112		247	A-	33		68		47	
635539	2916	FT	1414	A+	112		247	A-	33		68		47	
635540	2916	FT	1414	A-	112		247	A+	33		68		47	
635541	2908	FT	1414	A-	123		244	B-	37		57		57	
635542	2930	FT	1487	A-	118		219	A+	32		47		54	
635543	5793	FT	2864	C-	431	A-	1012	A-	76		85		200	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
635544	5793	FT	2864	B-	431	B-	1012	A+	76		85		200	A+
635545	2930	FT	1487	B-	118		219	A-	32		47		54	
635547	2908	FT	1414	A-	123		244	B+	37		57		57	
635548	2916	FT	1414	A+	112		247	A-	33		68		47	
635549	2908	FT	1414	A-	123		244	A-	37		57		57	
635550	2930	FT	1487	B+	118		219	A-	32		47		54	
635551	2908	FT	1414	A+	123		244	A+	37		57		57	
635552	2930	FT	1487	A+	118		219	A-	32		47		54	
635553	5793	FT	2864	A+	431	A-	1012	A+	76		85		200	A+
635554	5793	FT	2864	A-	431	A+	1012	A-	76		85		200	A+
635555	2930	FT	1487	A-	118		219	A-	32		47		54	
635556	2908	FT	1414	A-	123		244	A-	37		57		57	
635557	2916	FT	1414	A+	112		247	A-	33		68		47	
635558	2916	FT	1414	A+	112		247	A+	33		68		47	
635559	2908	FT	1414	A-	123		244	A-	37		57		57	
635560	2930	FT	1487	A+	118		219	A+	32		47		54	
635562	5793	FT	2864	A-	431	A+	1012	A+	76		85		200	A+
635563	2908	FT	1414	A+	123		244	A-	37		57		57	
635564	2916	FT	1414	B-	112		247	A+	33		68		47	
635565	5846	FT	2901	A-	230	A-	466	A-	65		115		101	
635566	8701	FT	4278	A-	554	A-	1256	A-	113		142		257	A-
636026	2916	FT	1414	A+	112		247	A-	33		68		47	
636027	2908	FT	1414	A+	123		244	A-	37		57		57	
636028	5846	FT	2901	A+	230	A+	466	A+	65		115		101	
636029	8701	FT	4278	B+	554	A+	1256	A+	113		142		257	A+
636030	8701	FT	4278	A-	554	A+	1256	A-	113		142		257	A-

			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AM)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=MU)	
Item ID	N	Type	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
636031	5846	FT	2901	A-	230	A+	466	A+	65		115		101	
636032	8701	FT	4278	A-	554	A-	1256	A+	113		142		257	A-
636033	5846	FT	2901	A+	230	B-	466	A+	65		115		101	
636034	5846	FT	2901	A+	230	A-	466	A-	65		115		101	
636036	8701	FT	4278	A-	554	C-	1256	A-	113		142		257	B-
636037	2930	FT	1487	A+	118		219	A+	32		47		54	
636038	5793	FT	2864	A-	431	B+	1012	A+	76		85		200	A+
636039	5793	FT	2864	A+	431	A-	1012	A-	76		85		200	B-
636040	2930	FT	1487	A+	118		219	A-	32		47		54	
636041	2908	FT	1414	A+	123		244	A-	37		57		57	
636042	2916	FT	1414	A+	112		247	A-	33		68		47	
636043	2916	FT	1414	A-	112		247	A+	33		68		47	
636044	8701	FT	4278	A+	554	A-	1256	A-	113		142		257	A-
636045	2930	FT	1487	A+	118		219	A-	32		47		54	
636046	5793	FT	2864	A-	431	A-	1012	A-	76		85		200	A-
636047	5793	FT	2864	A+	431	A+	1012	A-	76		85		200	A-

Appendix M: Reading and Mathematics Operational Form Calibration Summaries

Winsteps Table 3.1 Interpretation Guide

Tables in this Appendix are taken directly from the Winsteps output file and summarize calibration run of each form for each grade.

Grade 3

Number of students

Number of Items

Items are dichotomous

```
TABLE 3.1 NESA Grade 3 Reading FT 2009    ZOU508WS.TXT Jun 12 12:53 2009
INPUT: 12420 STUDENTS  210 Readings  MEASURED: 2134 STUDENTS  42 Readings  2 CATS
-------------------------------------------------------------------------------

     SUMMARY OF 2130 MEASURED (NON-EXTREME) STUDENTS
-------------------------------------------------------------------------------
|           RAW                            MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    ERROR      MNSQ   ZSTD    MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      27.6      42.0         .93      .41       .99     .1     .99     .1 |
| S.D.       7.9        .0        1.18      .10       .17     .9     .45    1.1 |
| MAX.      41.0      42.0        4.33     1.04      1.65    4.0    9.13    5.0 |
| MIN.       4.0      42.0       -2.65      .34       .58   -2.6     .10   -1.9 |
|-----------------------------------------------------------------------------|
| REAL RMSE     .43  ADJ.SD    1.09  SEPARATION  2.53  STUDEN RELIABILITY  .86 |
|MODEL RMSE     .42  ADJ.SD    1.10  SEPARATION  2.61  STUDEN RELIABILITY  .87 |
| S.E.  OF STUDENT MEAN = .03                                                 |
```

Student mean logit relative to the form

Fit "Z" should have mean = 0 and SD = 1

Form Reliability*

*Form Reliability run in Winsteps is run on an anchored file

Reading

Grade 3

```
TABLE 3.1 NESA Grade 3  S11gr3 R-jkA_final file check_OUT.txt  Jul 24 10:41 2011
INPUT: 22298 STUDENT  45 Reading  REPORTED: 21853 STUDENT  45 Reading  2 CATS WINSTEPS
3.71.0.1
-------------------------------------------------------------------------------------------
     SUMMARY OF 21769 MEASURED (NON-EXTREME) STUDENT
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      30.8      45.0        1.03      .39      1.00     .1    .97     .0 |
| S.D.       8.1        .0        1.08      .11       .11     .8    .23     .9 |
| MAX.      44.0      45.0        4.06     1.02      1.49    4.3   3.49    4.3 |
| MIN.       1.0      45.0       -4.02      .32       .67   -3.3    .24   -3.0 |
|---------------------------------------------------------------------------------|
| REAL RMSE    .41 TRUE SD    1.00  SEPARATION  2.41  STUDEN RELIABILITY  .85 |
|MODEL RMSE    .41 TRUE SD    1.00  SEPARATION  2.46  STUDEN RELIABILITY  .86 |
| S.E. OF STUDENT MEAN = .01                                                      |
```

Grade 4

```
TABLE 3.1 NESA Grade 4  S11gr4 R-jkA_final file check_OUT.txt  Jul 24 19:26 2011
INPUT: 22043 STUDENT  45 Reading  REPORTED: 21547 STUDENT  45 Reading  2 CATS WINSTEPS
3.71.0.1
-------------------------------------------------------------------------------------------
     SUMMARY OF 21519 MEASURED (NON-EXTREME) STUDENT
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      30.5      45.0         .00      .38      1.00     .1    .99     .0 |
| S.D.       7.5        .0         .97      .09       .11     .7    .20     .8 |
| MAX.      44.0      45.0        3.11     1.02      1.41    3.6   3.17    4.2 |
| MIN.       3.0      45.0       -3.80      .32       .69   -3.0    .19   -2.8 |
|---------------------------------------------------------------------------------|
| REAL RMSE    .40 TRUE SD     .89  SEPARATION  2.24  STUDEN RELIABILITY  .83 |
|MODEL RMSE    .39 TRUE SD     .89  SEPARATION  2.29  STUDEN RELIABILITY  .84 |
| S.E. OF STUDENT MEAN = .01                                                      |
```

Grade 5

```
TABLE 3.1 NESA Grade 5  S11gr5 R-jkA_Final file check_OUT.txt  Jul 25  7:38 2011
INPUT: 21785 STUDENT  48 Reading  REPORTED: 21332 STUDENT  48 Reading  2 CATS WINSTEPS
3.71.0.1
-------------------------------------------------------------------------------------------
----

     SUMMARY OF 21296 MEASURED (NON-EXTREME) STUDENT
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      32.5      48.0         .00      .37      1.00     .1    .97     .0 |
| S.D.       8.6        .0        1.06      .10       .11     .8    .24     .9 |
| MAX.      47.0      48.0        3.15     1.02      1.49    3.8   7.06    4.1 |
| MIN.       2.0      48.0       -4.40      .31       .67   -3.4    .32   -3.2 |
|---------------------------------------------------------------------------------|
| REAL RMSE    .39 TRUE SD     .98  SEPARATION  2.50  STUDEN RELIABILITY  .86 |
|MODEL RMSE    .39 TRUE SD     .99  SEPARATION  2.55  STUDEN RELIABILITY  .87 |
| S.E. OF STUDENT MEAN = .01                                                      |
-----------------------------------------------------------------------------------
```

Grade 6

TABLE 3.1 NESA Grade 6 S11gr6 R-jkA_final file check_OUT.txt Jul 25 9:43 2011
INPUT: 21225 STUDENT 48 Reading REPORTED: 20806 STUDENT 48 Reading 2 CATS WINSTEPS 3.71.0.1

SUMMARY OF 20787 MEASURED (NON-EXTREME) STUDENT

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	33.2	48.0	.00	.38	1.00	.1	.96	.0
S.D.	8.1	.0	1.02	.09	.12	.8	.26	.9
MAX.	47.0	48.0	3.13	1.02	1.54	4.2	7.60	4.6
MIN.	5.0	48.0	-3.51	.31	.67	-2.8	.20	-2.5

REAL RMSE .40 TRUE SD .94 SEPARATION 2.38 STUDEN RELIABILITY .85
MODEL RMSE .39 TRUE SD .95 SEPARATION 2.43 STUDEN RELIABILITY .86
S.E. OF STUDENT MEAN = .01

Grade 7

TABLE 3.1 NESA Grade 7 S10gr7 R-jkA_final file check_OUT.txt Jul 25 9:45 2011
INPUT: 21093 STUDENT 48 Reading REPORTED: 20654 STUDENT 48 Reading 2 CATS WINSTEPS 3.71.0.1

SUMMARY OF 20604 MEASURED (NON-EXTREME) STUDENT

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	32.8	48.0	.00	.38	1.00	.1	.97	.0
S.D.	8.9	.0	1.10	.10	.10	.8	.22	.9
MAX.	47.0	48.0	3.09	1.02	1.56	4.0	3.33	4.1
MIN.	1.0	48.0	-5.14	.31	.65	-3.2	.30	-3.1

REAL RMSE .40 TRUE SD 1.02 SEPARATION 2.55 STUDEN RELIABILITY .87
MODEL RMSE .39 TRUE SD 1.02 SEPARATION 2.60 STUDEN RELIABILITY .87
S.E. OF STUDENT MEAN = .01

Grade 8

ABLE 3.1 NESA Grade 8 S11gr8 R-jkA_final file check_OUT.txt Jul 25 9:48 2011
INPUT: 20952 STUDENT 50 Reading REPORTED: 20518 STUDENT 50 Reading 2 CATS WINSTEPS 3.71.0.1

SUMMARY OF 20473 MEASURED (NON-EXTREME) STUDENT

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	33.4	50.0	.00	.36	1.00	.1	.98	.0
S.D.	9.3	.0	1.05	.09	.08	.7	.19	.8
MAX.	49.0	50.0	3.16	1.01	1.46	3.9	5.46	3.9
MIN.	2.0	50.0	-4.33	.30	.75	-3.2	.43	-2.9

REAL RMSE .38 TRUE SD .98 SEPARATION 2.61 STUDEN RELIABILITY .87
MODEL RMSE .37 TRUE SD .99 SEPARATION 2.65 STUDEN RELIABILITY .88
S.E. OF STUDENT MEAN = .01

Grade 11

```
TABLE 3.1 NESA Grade 1 S11gr11 R-jkA_final file check_OUT.txt  Jul 25  9:50 2011
INPUT: 21724 STUDENT  50 Reading  REPORTED: 20903 STUDENT  50 Reading  2 CATS WINSTEPS
3.71.0.1
-------------------------------------------------------------------------------------------
----

     SUMMARY OF 20885 MEASURED (NON-EXTREME) STUDENT
-------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE   ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      33.0      50.0         .00     .36      1.00     .1    .98     .0 |
| S.D.       9.3        .0        1.07     .08       .11     .8    .22     .9 |
| MAX.      49.0      50.0        3.30    1.02      1.50    4.3   3.38    4.3 |
| MIN.       1.0      50.0       -5.04     .30       .68   -3.7    .23   -3.4 |
|-----------------------------------------------------------------------------|
| REAL RMSE    .38 TRUE SD    1.00  SEPARATION  2.65  STUDEN RELIABILITY  .88 |
|MODEL RMSE    .37 TRUE SD    1.00  SEPARATION  2.71  STUDEN RELIABILITY  .88 |
| S.E. OF STUDENT MEAN = .01                                                  |
-------------------------------------------------------------------------------
```

Mathematics

Grade 3

```
TABLE 3.1 NESA Grade 3  S11gr3 M-jk2_final file check_OUT.txt  Sep  9  9:16 2011
INPUT: 22298 STUDENT  50 Math  REPORTED: 21921 STUDENT  50 Math  2 CATS WINSTEPS 3.71.0.1
-------------------------------------------------------------------------------------

     SUMMARY OF 21613 MEASURED (NON-EXTREME) STUDENT
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT         OUTFIT     |
|          SCORE      COUNT     MEASURE   ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      36.4       50.0         .00     .41      1.00     .1    .99     .1 |
| S.D.       9.2         .0        1.21     .15       .10     .7    .29     .8 |
| MAX.      49.0       50.0        2.82    1.02      1.44    4.1   9.90    4.5 |
| MIN.       4.0       50.0       -4.04     .30       .69   -3.2    .21   -2.9 |
|---------------------------------------------------------------------------------|
| REAL RMSE    .44 TRUE SD    1.12  SEPARATION  2.54  STUDEN RELIABILITY  .87 |
|MODEL RMSE    .43 TRUE SD    1.12  SEPARATION  2.59  STUDEN RELIABILITY  .87 |
| S.E. OF STUDENT MEAN = .01                                                      |
-----------------------------------------------------------------------------------
```

Grade 4

```
TABLE 3.1 NESA Grade 4 M-jk2_rescore_Final File Check_OUT.txt  Sep  9 14:17 2011
INPUT: 22043 STUDENT  55 Mathematics  REPORTED: 21598 STUDENT  55 Mathematics  2 CATS
WINSTEPS 3.71.0.1
-------------------------------------------------------------------------------------
------------

     SUMMARY OF 21274 MEASURED (NON-EXTREME) STUDENT
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT         OUTFIT     |
|          SCORE      COUNT     MEASURE   ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      40.6       55.0         .00     .40      1.00     .1   1.01     .1 |
| S.D.       9.5         .0        1.21     .15       .11     .7    .40     .9 |
| MAX.      54.0       55.0        2.90    1.02      1.53    4.0   9.90    3.9 |
| MIN.       2.0       55.0       -5.10     .29       .66   -3.1    .27   -3.0 |
|---------------------------------------------------------------------------------|
| REAL RMSE    .43 TRUE SD    1.13  SEPARATION  2.60  STUDEN RELIABILITY  .87 |
|MODEL RMSE    .43 TRUE SD    1.13  SEPARATION  2.65  STUDEN RELIABILITY  .88 |
| S.E. OF STUDENT MEAN = .01                                                      |
-----------------------------------------------------------------------------------
```

Grade 5

```
TABLE 3.1 NESA Grade 5  S11gr5 M-jk2_final file check_OUT.txt  Sep 11 10:07 2011
INPUT: 21785 STUDENT  55 Math  REPORTED: 21385 STUDENT  55 Math  2 CATS WINSTEPS 3.71.0.1
-------------------------------------------------------------------------------------

     SUMMARY OF 21033 MEASURED (NON-EXTREME) STUDENT
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT         OUTFIT     |
|          SCORE      COUNT     MEASURE   ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      40.2       55.0         .00     .40      1.00     .1   1.00     .1 |
| S.D.      10.3         .0        1.26     .16       .09     .7    .29     .8 |
| MAX.      54.0       55.0        2.88    1.01      1.46    4.4   5.70    4.2 |
| MIN.       2.0       55.0       -4.92     .29       .67   -3.4    .24   -3.3 |
|---------------------------------------------------------------------------------|
| REAL RMSE    .44 TRUE SD    1.18  SEPARATION  2.72  STUDEN RELIABILITY  .88 |
|MODEL RMSE    .43 TRUE SD    1.18  SEPARATION  2.76  STUDEN RELIABILITY  .88 |
| S.E. OF STUDENT MEAN = .01                                                      |
-----------------------------------------------------------------------------------
```

Grade 6

```
ABLE 3.1 NESA Grade 6  S11gr6 M-jk2_final file check_OUT.txt  Sep 11 10:15 2011
INPUT: 21225 STUDENT  58 Math  REPORTED: 20857 STUDENT  58 Math  2 CATS WINSTEPS 3.71.0.1
-----------------------------------------------------------------------------------------

     SUMMARY OF 20507 MEASURED (NON-EXTREME) STUDENT
-------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE   ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      42.9      58.0         .00     .40      1.00     .1   1.00     .1 |
| S.D.      10.8        .0        1.28     .16       .09     .7    .33     .8 |
| MAX.      57.0      58.0        2.86    1.01      1.49    4.5   6.55    4.6 |
| MIN.       2.0      58.0       -5.07     .28       .67   -3.6    .27   -3.4 |
|-----------------------------------------------------------------------------|
| REAL RMSE    .44 TRUE SD    1.20  SEPARATION  2.76  STUDEN RELIABILITY  .88 |
|MODEL RMSE    .43 TRUE SD    1.20  SEPARATION  2.80  STUDEN RELIABILITY  .89 |
| S.E. OF STUDENT MEAN = .01                                                  |
-------------------------------------------------------------------------------
```

Grade 7

```
TABLE 3.1 NESA Grade 7 M-jk2_rescore_final file check_OUT.txt  Sep 11 10:21 2011
INPUT: 21093 STUDENT  58 Math  REPORTED: 20689 STUDENT  58 Math  2 CATS WINSTEPS 3.71.0.1
-----------------------------------------------------------------------------------------

     SUMMARY OF 20473 MEASURED (NON-EXTREME) STUDENT
-------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE   ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      40.5      58.0         .00     .37      1.00     .1    .99     .1 |
| S.D.      11.2        .0        1.27     .14       .11     .8    .32     .9 |
| MAX.      57.0      58.0        3.17    1.02      1.49    4.1   6.82    4.3 |
| MIN.       4.0      58.0       -4.09     .28       .64   -3.4    .25   -3.1 |
|-----------------------------------------------------------------------------|
| REAL RMSE    .41 TRUE SD    1.20  SEPARATION  2.96  STUDEN RELIABILITY  .90 |
|MODEL RMSE    .40 TRUE SD    1.21  SEPARATION  3.02  STUDEN RELIABILITY  .90 |
| S.E. OF STUDENT MEAN = .01                                                  |
-------------------------------------------------------------------------------
```

Grade 8

```
TABLE 3.1 NESA Grade 8 M-jk2_rescore_final file check_OUT.txt  Sep 11 10:26 2011
INPUT: 20952 STUDENT  60 Math  REPORTED: 20545 STUDENT  60 Math  2 CATS WINSTEPS 3.71.0.1
-----------------------------------------------------------------------------------------

     SUMMARY OF 20207 MEASURED (NON-EXTREME) STUDENT
-------------------------------------------------------------------------------
|          TOTAL                          MODEL          INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE   ERROR      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      42.8      60.0         .00     .38      1.00     .1    .96     .0 |
| S.D.      12.0        .0        1.30     .16       .07     .6    .28     .6 |
| MAX.      59.0      60.0        3.00    1.01      1.61    3.9   9.90    9.9 |
| MIN.       4.0      60.0       -4.35     .27       .77   -3.3    .34   -1.6 |
|-----------------------------------------------------------------------------|
| REAL RMSE    .41 TRUE SD    1.23  SEPARATION  2.97  STUDEN RELIABILITY  .90 |
|MODEL RMSE    .41 TRUE SD    1.23  SEPARATION  3.00  STUDEN RELIABILITY  .90 |
| S.E. OF STUDENT MEAN = .01                                                  |
-------------------------------------------------------------------------------
```

Grade 11

TABLE 3.1 NESA Grade 1 S11gr11 M-jk2_final file check_OUT.txt Sep 11 10:32 2011
INPUT: 21724 STUDENT 60 Math REPORTED: 20823 STUDENT 60 Math 2 CATS WINSTEPS 3.71.0.1

SUMMARY OF 20677 MEASURED (NON-EXTREME) STUDENT

	TOTAL SCORE	COUNT	MEASURE	MODEL ERROR	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD
MEAN	38.2	60.0	.00	.34	1.00	.1	.99	.0
S.D.	13.2	.0	1.29	.13	.07	.7	.18	.8
MAX.	59.0	60.0	3.40	1.02	1.34	3.6	9.90	3.7
MIN.	1.0	60.0	-5.08	.27	.79	-3.2	.14	-2.8

REAL RMSE	.37	TRUE SD	1.23	SEPARATION	3.32	STUDEN RELIABILITY	.92
MODEL RMSE	.37	TRUE SD	1.24	SEPARATION	3.35	STUDEN RELIABILITY	.92

S.E. OF STUDENT MEAN = .01

Appendix N: Mathematics Performance Level Descriptors

The Performance Level Descriptors provide meaning to the scale score metric and give a qualitative description of the numeric scores. The attached Performance Level Descriptors were used by the panelists during both the Bookmark Standard Setting and the Contrasting Groups study. The labels used for the levels were *Below the Standards, Meets the Standards,* and *Exceeds the Standards.*

Nebraska State Accountability-Mathematics (NeSA-M) Performance Level Descriptor
Grade 3

Below the Standards	Meets the Standards	Exceeds the Standards
Overall student performance in mathematics reflects *unsatisfactory* performance on the standards and *insufficient* understanding of the content at third grade. A student scoring at the Below the Standards level *inconsistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. *A* student at this level ***inconsistently***: • Demonstrates equivalent representations of numbers up to 10,000. • Compares and orders whole numbers through the thousands. • Identifies fractions (fourths, thirds, halves) as parts of a whole and/or parts of a set. • Rounds numbers to the hundreds. • Recognizes multiplication as repeated addition and an array. • Identifies the attributes of two-dimensional shapes (e.g., sides, angles, vertices). • Identifies congruent two-dimensional figures. • Determines the distance between two points on a number line. • Identifies appropriate customary measurement units (length). • Compares and orders metric length (meters). • Identifies and extends numeric patterns. • Identifies models that represent situations involving addition and subtraction. • Solves one-step equations involving addition and subtraction. • Interprets data using pictographs and bar graphs.	Overall student performance in mathematics reflects *satisfactory* performance on the standards and *sufficient* understanding of the content at third grade. A student scoring at the Meets the Standards level *generally* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***generally***: • Demonstrates equivalent representations of numbers up to 10,000. • Compares and orders whole numbers through the thousands. • Identifies fractions (fourths, thirds, halves) as parts of a whole and/or parts of a set. • Rounds numbers to the thousands. • Recognizes multiplication as repeated addition and an array. • Identifies the attributes of two-dimensional shapes (e.g., sides, angles, vertices). • Identifies congruent two-dimensional figures. • Determines the distance between two points on a number line. • Identifies appropriate customary measurement units (length, weight, capacity/volume). • Compares and orders metric length (centimeters, meters). • Identifies, describes, and extends numeric patterns. • Identifies models that represent situations involving addition and subtraction. • Solves one-step equations involving addition and subtraction. • Interprets data using bar graphs.	Overall student performance in mathematics reflects *high academic* performance on the standards and a *thorough* understanding of the content at or above third grade. A student scoring at the Exceeds the Standards level *consistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***consistently***: • Demonstrates equivalent representations of numbers up to 10,000. • Compares and orders whole numbers through the thousands. • Identifies fractions as parts of a whole and/or parts of a set. • Rounds numbers to the thousands. • Recognizes multiplication as repeated addition and an array. • Identifies the attributes of two-dimensional shapes (e.g., sides, angles, vertices). • Identifies congruent two-dimensional figures. • Determines the distance between two points on a number line. • Identifies appropriate customary measurement units (length, weight, capacity/volume). • Compares and orders metric length. • Identifies, describes, and extends numeric patterns. • Identifies models that represent situations involving addition and subtraction. • Solves one-step equations involving addition and subtraction. • Interprets data using double bar graphs.

Nebraska State Accountability-Mathematics (NeSA-M) Performance Level Descriptor
Grade 4

Below the Standards	Meets the Standards	Exceeds the Standards
Overall student performance in mathematics reflects *unsatisfactory* performance on the standards and *insufficient* understanding of the content at fourth grade. A student scoring at the Below the Standards level *inconsistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. *A* student at this level ***inconsistently***: • Demonstrates equivalent representations of decimals through the hundredths place. • Compares and orders whole numbers and decimals through the hundredths place. • Identifies fractions as parts of a whole and/or parts of a set. • Identifies equivalent forms of fractions using models. • Locates fractions on a number line. • Recognizes division as repeated subtraction or equal sharing. • Adds and subtracts decimals to the hundredths place. • Multiplies two-digit whole number by a whole number. • Solves multiplication and division problems involving powers of ten. • Selects appropriate methods of computation when problem solving. • Identifies the attributes of two-dimensional shapes and three-dimensional objects (e.g., sides: perpendicular, parallel, intersecting; angles: acute, obtuse, right). • Identifies the location of an ordered pair in the first quadrant. • Solves problems involving elapsed time to the hour. • Identifies appropriate metric measurement unit (length, weight, capacity/volume). • Computes simple unit conversions for length. • Selects appropriate symbolic notations including ≥ and ≤. • Identifies symbolic representations of the commutative property. • Solves simple one-step whole number equations. • Compares the same set of data in different formats (tables, pictographs, bar graphs, line graphs). • Interprets dot/line plots.	Overall student performance in mathematics reflects *satisfactory* performance on the standards and *sufficient* understanding of the content at fourth grade. A student scoring at the Meets the Standards level *generally* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***generally***: • Demonstrates equivalent representations of decimals through the hundredths place. • Compares and orders whole numbers and decimals through the hundredths place. • Identifies fractions as parts of a whole and/or parts of a set. • Identifies equivalent forms of fractions. • Locates fractions on a number line. • Recognizes division as repeated subtraction or equal sharing. • Adds and subtracts decimals to the hundredths place. • Multiplies two-digit whole numbers. • Solves multiplication and division problems involving powers of ten. • Selects and applies appropriate methods of computation when problem solving. • Identifies the attributes of two-dimensional shapes and three-dimensional objects (e.g., sides: perpendicular, parallel, intersecting; angles: acute, obtuse, right). • Identifies the location of an ordered pair in the first quadrant. • Solves problems involving elapsed time. • Identifies appropriate metric measurement unit (length, weight, capacity/volume). • Computes simple unit conversions for length. • Selects appropriate symbolic notations including ≥ and ≤. • Identifies symbolic representations of the commutative property. • Solves simple one-step whole number equations. • Compares and makes predictions from the same set of data in different formats (tables, pictographs, bar graphs, line graphs). • Interprets dot/line plots.	Overall student performance in mathematics reflects *high academic* performance on the standards and a *thorough* understanding of the content at or above fourth grade. A student scoring at the Exceeds the Standards level *consistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***consistently***: • Demonstrates equivalent representations of decimals through the hundredths place. • Compares and orders whole numbers and decimals through the hundredths place. • Identifies fractions as parts of a whole and/or parts of a set. • Identifies equivalent forms of fractions. • Locates fractions on a number line. • Recognizes division as repeated subtraction or equal sharing. • Adds and subtracts decimals to the hundredths place. • Multiplies two-digit whole numbers. • Solves multiplication and division problems involving powers of ten. • Selects and applies appropriate methods of computation when solving multiple-step problems. • Identifies the attributes of two-dimensional shapes and three-dimensional objects (e.g., sides: perpendicular, parallel, intersecting; angles: acute, obtuse, right). • Identifies the location of an ordered pair in the first quadrant. • Solves problems involving elapsed time between AM and PM. • Identifies appropriate metric measurement unit (length, weight, capacity/volume). • Computes unit conversions for length. • Selects appropriate symbolic notations including ≥ and ≤. • Identifies symbolic representations of the commutative property. • Solves one-step whole number equations. • Compares and makes predictions from the same set of data in different formats (tables, pictographs, bar graphs, line graphs). • Interprets dot/line plots.

Nebraska State Accountability-Mathematics (NeSA-M) Performance Level Descriptor
Grade 5

Below the Standards	Meets the Standards	Exceeds the Standards
Overall student performance in mathematics reflects *unsatisfactory* performance on the standards and *insufficient* understanding of the content at fifth grade. A student scoring at the Below the Standards level *inconsistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***inconsistently***: • Demonstrates equivalent representations of decimals through the thousandths place. • Compares and orders fractions with like denominators. • Compares and orders decimals through the thousandths place. • Identifies fractions in simplest form. • Finds common denominators. • Identifies equivalent forms of common fractions, decimals, and percents. • Identifies prime and composite numbers. • Identifies factors and multiples of a whole number. • Identifies the distributive property of multiplication. • Adds and subtracts positive rational numbers (e.g., decimals). • Selects appropriate methods of computation when solving multiple-step problems. • Multiplies decimals. • Divides a decimal by a whole number. • Estimates the sums and differences of whole numbers. • Identifies the attributes of triangular and rectangular prisms (e.g., edges, faces, vertices). • Identifies the degrees on a circle. • Plots the location of an ordered pair in the first quadrant. • Identifies correct unit (customary or metric) to the measurement situation. • Determines the area of rectangles and squares. • Identifies models that represent addition, subtraction, and multiplication (e.g., words, graphs, tables). • Identifies symbolic representations of the associative property. • Evaluates numerical expressions using order of operations. • Evaluates simple algebraic expressions (addition, subtraction). • Solves one-step addition and subtraction equations. • Draws conclusions on the same set of data in different formats (tables, pictographs, bar graphs, line graphs). • Identifies a list of possible outcomes for a simple event. • Describes the likelihood of a possible event.	Overall student performance in mathematics reflects *satisfactory* performance on the standards and *sufficient* understanding of the content at fifth grade. A student scoring at the Meets the Standards level *generally* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***generally***: • Demonstrates equivalent representations of decimals through the thousandths place. • Compares and orders fractions. • Compares and orders decimals through the thousandths place. • Identifies fractions in simplest form. • Finds common denominators. • Identifies equivalent forms of common fractions, decimals, and percents. • Identifies prime and composite numbers. • Identifies factors and multiples of a whole number. • Identifies the distributive property of multiplication. • Adds and subtracts positive rational numbers (e.g., fractions, decimals). • Selects and applies appropriate methods of computation when solving multiple-step problems. • Multiplies decimals. • Divides a decimal by a whole number. • Estimates the sums and differences of positive rational numbers. • Identifies the attributes of triangular and rectangular prisms (e.g., edges, faces, vertices). • Identifies the degrees on a circle. • Plots the location of an ordered pair in the first quadrant. • Identifies correct unit (customary or metric) to the measurement situation. • Determines the area of rectangles and squares. • Identifies models that represent addition, subtraction, and multiplication (e.g., words, graphs, tables). • Identifies symbolic representations of the associative property. • Evaluates numerical expressions using order of operations. • Evaluates simple algebraic expressions (addition, subtraction). • Solves one-step addition and subtraction equations. • Draws conclusions on the same set of data in different formats (tables, pictographs, bar graphs, line graphs). • Identifies a list of possible outcomes for a simple event. • Describes the likelihood of a possible event.	Overall student performance in mathematics reflects *high academic* performance on the standards and a *thorough* understanding of the content at or above fifth grade. A student scoring at the Exceeds the Standards level *consistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***consistently***: • Demonstrates equivalent representations of decimals through the thousandths place. • Compares and orders fractions. • Compares and orders decimals through the thousandths place. • Identifies fractions and mixed numbers in simplest form. • Finds common denominators. • Identifies equivalent forms of fractions, decimals, and percents (e.g., mixed numbers). • Identifies prime and composite numbers. • Identifies factors and multiples of a whole number. • Identifies the distributive property of multiplication. • Adds and subtracts positive rational numbers (e.g., fractions, decimals). • Selects and applies appropriate methods of computation when solving multiple-step problems. • Multiplies and divides decimals. • Estimates the sums and differences of positive rational numbers and analyzes the reasonableness. • Identifies the attributes of triangular and rectangular prisms (e.g., edges, faces, vertices). • Identifies the degrees on a circle. • Plots the location of an ordered pair in the first quadrant. • Identifies correct unit (customary or metric) to the measurement situation. • Determines the area of complex shapes composed of rectangles and squares (e.g., area of a room and closet). • Identifies models that represent two operations (e.g., words, graphs, tables). • Identifies symbolic representations of the associative property. • Evaluates numerical expressions using order of operations. • Evaluates simple algebraic expressions (addition, subtraction, multiplication). • Solves one-step multiplication equations. • Draws conclusions on the same set of data in different formats (tables, pictographs, bar graphs, line graphs). • Identifies a list of possible outcomes for a simple event. • Describes the likelihood of a possible event.

Nebraska State Accountability-Mathematics (NeSA-M) Performance Level Descriptor

Grade 6

Below the Standards

Overall student performance in mathematics reflects *unsatisfactory* performance on the standards and *insufficient* understanding of the content at sixth grade. A student scoring at the Below the Standards level *inconsistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems.

A student at this level ***inconsistently***:

- Compares integers.
- Represents numbers using limited notation (factor trees, expanded form with exponents).
- Identifies representations of addition and subtraction of fractions and decimals (e.g., word, symbols).
- Multiplies and divides positive rational numbers.
- Selects appropriate computation when problem solving.
- Estimates problems involving whole numbers.
- Determines area of parallelograms.
- Identifies two-dimensional drawings of three-dimensional objects (e.g., prism, cone, sphere).
- Identifies transformed shapes (e.g., translation).
- Describes situations using algebraic expressions and equations (e.g., words).
- Evaluates numerical expressions using order of operations with two operations.
- Evaluates simple algebraic expressions (e.g., multiplication, division).
- Solves one-step equations with addition and subtraction.
- Compares and interprets data sets (frequency distribution).
- Finds and compares measures of central tendency from two data sets (e.g., mean, median).
- Computes theoretical probabilities for independent events.
- Finds experimental probabilities for independent events.

Meets the Standards

Overall student performance in mathematics reflects *satisfactory* performance on the standards and *sufficient* understanding of the content at sixth grade. A student scoring at the Meets the Standards level *generally* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems.

A student at this level ***generally***:

- Compares and orders integers.
- Represents numbers using a variety of notations (e.g., exponential, prime factorization).
- Identifies representations of addition and subtraction of fractions and decimals (e.g., word, symbols).
- Multiplies and divides positive rational numbers.
- Selects and applies appropriate computation when problem solving.
- Estimates problems involving positive rational numbers.
- Determines area of parallelograms and triangles.
- Identifies two-dimensional drawings of three-dimensional objects.
- Identifies transformed shapes (e.g., translation).
- Describes situations using algebraic expressions and equations (e.g., words).
- Evaluates numerical expressions using order of operations.
- Evaluates simple algebraic expressions (e.g., multiplication, division).
- Solves one-step equations.
- Compares and interprets data sets (e.g., stem and leaf plots, frequency distribution).
- Finds and compares measures of central tendency from two data sets (e.g., mean, median).
- Computes theoretical probabilities for independent events.
- Finds experimental probabilities for independent events.

Exceeds the Standards

Overall student performance in mathematics reflects *high academic* performance on the standards and a *thorough* understanding of the content at or above sixth grade. A student scoring at the Exceeds the Standards level *consistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems.

A student at this level ***consistently***:

- Compares and orders integers.
- Represents numbers as prime factorization with exponents.
- Identifies representations for addition and subtraction of fractions and decimals (e.g., pictures).
- Multiplies and divides positive rational numbers (e.g., mixed numbers).
- Selects and applies appropriate computation when solving multiple-step problems.
- Estimates problems involving positive rational numbers and analyzes the reasonableness.
- Determines area of special parallelograms and triangles (e.g., rhombus, right triangles, obtuse triangles).
- Identifies two-dimensional drawings of three-dimensional objects (e.g., nets).
- Identifies transformed shapes (e.g., reflection, rotation).
- Describes situations using algebraic expressions and equations (e.g., tables).
- Evaluates numerical expressions using order of operations (e.g., exponents, parentheses).
- Evaluates simple algebraic expressions involving multiple operations.
- Identifies steps in solving one-step equations.
- Compares and interprets data sets (e.g., stem and leaf plots).
- Determines appropriate measure of central tendency when comparing two data sets.
- Compares theoretical and experimental probabilities for independent events.
-

Nebraska State Accountability-Mathematics (NeSA-M) Performance Level Descriptor
Grade 7

Below the Standards	Meets the Standards	Exceeds the Standards
Overall student performance in mathematics reflects *unsatisfactory* performance on the standards and *insufficient* understanding of the content at seventh grade. A student scoring at the Below the Standards level *inconsistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***inconsistently***: • Compares and orders rational numbers (decimals). • Represents large numbers using scientific notation. • Computes with integers (single operation). • Selects and applies appropriate methods of computation when problem solving (integers). • Estimates solutions to problems involving integers. • Finds horizontal and vertical distances between ordered pairs given a graph. • Identifies positions and orientations of transformed shapes (e.g., translation). • Determines the area and circumference of circles. • Describes situations using algebraic expressions and equations (e.g., words). • Uses a variable to describe a situation with an inequality. • Models contextualized problems using expressions. • Evaluates algebraic expressions with two operations. • Solves two-step equations involving integers. • Solves one-step inequalities using whole numbers. • Analyzes data sets and interprets their graphical representations. • Finds and interprets measures of central tendency from two data sets (e.g., mean, median). • Finds the probability of independent compound events. • Compares and contrasts theoretical and experimental probabilities.	Overall student performance in mathematics reflects *satisfactory* performance on the standards and *sufficient* understanding of the content at seventh grade. A student scoring at the Meets the Standards level *generally* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***generally***: • Compares and orders rational numbers (e.g., fractions, decimals, percents). • Represents large numbers using scientific notation. • Computes with integers (single operation). • Selects and applies appropriate methods of computation when problem solving (e.g., integers and positive rational numbers). • Estimates solutions to problems involving integers and positive rational numbers. • Finds horizontal and vertical distances between ordered pairs given a graph. • Identifies positions and orientations of transformed shapes (e.g., translation). • Determines the area of trapezoids and circles and circumference of circles. • Describes situations using algebraic expressions and equations (e.g., words). • Uses a variable to describe a situation with an inequality. • Models contextualized problems using expressions and equations. • Evaluates algebraic expressions using the order of operations, given a value for a variable. • Solves two-step equations involving integers and positive rational numbers. • Solves one step inequalities using positive rational numbers. • Analyzes data sets and interprets their graphical representations. • Finds and interprets measures of central tendency from two data sets (e.g., mean, median). • Finds the probability of independent compound events. • Compares and contrasts theoretical and experimental probabilities.	Overall student performance in mathematics reflects *high academic* performance on the standards and a *thorough* understanding of the content at or above seventh grade. A student scoring at the Exceeds the Standards level *consistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***consistently***: • Compares and orders rational numbers with combinations of fractions, decimals and percents. • Represents large numbers using scientific notation. • Computes with integers (multiple operations). • Selects and applies appropriate methods of computation when solving multi-step problems (e.g., integers and positive rational numbers). • Estimates solutions to problems involving integers and positive rational numbers and analyzes the reasonableness. • Finds horizontal and vertical distances between ordered pairs given the ordered pairs. • Identifies positions and orientations of transformed shapes (e.g., reflection, rotation). • Determines the area of trapezoids and circles and circumference of circles. • Describes situations using algebraic expressions and equations (e.g., tables, graphs). • Uses a variable to describe a situation with an inequality (e.g., using “at least”, “at most”). • Models contextualized problems using expressions and equations. • Evaluates algebraic expressions using the order of operations (e.g., exponents and parentheses), given a value for a variable. • Solves two-step equations involving integers and positive rational numbers. • Solves one-step inequalities using positive rational numbers. • Analyzes data sets and interprets their graphical representations. • Determines appropriate measures of central tendency when comparing two data sets. • Finds the probability of independent compound events. • Compares and contrasts theoretical and experimental probabilities.

Nebraska State Accountability-Mathematics (NeSA-Mathematics) Performance Level Descriptor
Grade 8

Below the Standards	Meets the Standards	Exceeds the Standards
Overall student performance in mathematics reflects *unsatisfactory* performance on the standards and *insufficient* understanding of the content at eighth grade. A student scoring at the Below the Standards level *inconsistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***inconsistently***: • Compares and orders rational numbers (fractions). • Classifies real numbers as natural, whole, integer, and rational. • Represents small numbers using scientific notation. • Computes with rational numbers (like denominators). • Evaluates absolute value of integers. • Selects the method of computation when problem solving using rational numbers. • Identifies the ratios and proportions used in solving problems • Estimates solutions to problems involving rational numbers (like denominators). • Represents and examines properties of squares using coordinate geometry. • Identifies properties of parallel lines cut by a transversal (e.g., angle relationships). • Identifies pairs of vertical angles. • Determines missing interior angle measures within triangles when given two interior angles. • Identifies right triangles using Pythagorean Theorem. • Identifies similar shapes when given lengths. • Describes situations using algebraic expressions and equations. • Models contextualized problems using equations. • Evaluates numerical expressions containing whole number exponents. • Solves two-step equations involving rational numbers. • Solves one-step inequalities involving rational numbers. • Compares data characteristics (median, mode, range). • Selects the most appropriate measure of central tendency. • Identifies misrepresentation of circle graphs. • Finds the probability of complementary events. • Computes probabilities for independent compound events.	Overall student performance in mathematics reflects *satisfactory* performance on the standards and *sufficient* understanding of the content at eighth grade. A student scoring at the Meets the Standards level *generally* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***generally***: • Compares and orders real numbers. • Classifies real numbers as natural, whole, integer, rational, irrational. • Represents small numbers using scientific notation. • Computes with rational numbers (single operation). • Evaluates expressions involving absolute value of integers (single operation). • Selects the method of computation when problem solving using rational numbers. • Solves problems involving ratios and proportions. • Estimates solutions to problems involving rational numbers. • Represents and examines properties of rectangles and squares using coordinate geometry. • Identifies properties of parallel lines cut by a transversal (e.g., angle relationships). • Identifies pairs of angles (e.g., vertical, supplementary, adjacent, complementary). • Determines missing angle measures within triangles. • Finds missing lengths in right triangles using the Pythagorean Theorem. • Finds missing lengths in similar shapes. • Describes situations using algebraic expressions, equations, and inequalities. • Models contextualized problems using equations and inequalities. • Evaluates numerical expressions containing whole number exponents. • Solves multi-step equations involving rational numbers. • Solves two-step inequalities involving rational numbers. • Compares data characteristics (mean, median, mode, range). • Selects the most appropriate measure of central tendency. • Identifies misrepresentation of circle graphs and box plots. • Finds the probability of complementary events. • Computes probabilities for independent compound events.	Overall student performance in mathematics reflects *high academic* performance on the standards and a *thorough* understanding of the content at or above eighth grade. A student scoring at the Exceeds the Standards level *consistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***consistently***: • Compares and orders combinations of various types of real numbers. • Classifies real numbers as natural, whole, integer, rational, irrational. • Represents small numbers using scientific notation. • Computes with rational numbers (multiple operations). • Evaluates expressions involving absolute value of integers (multiple operations). • Selects and applies appropriate methods of computation when solving multi-step problems using rational numbers. • Solves problems involving ratios and proportions. • Estimates solutions to problems involving rational numbers and analyzes the reasonableness. • Represents and examines properties of rectangles and squares using coordinate geometry. • Identifies properties of parallel lines cut by a transversal (more than three lines). • Identifies pairs of angles (e.g., vertical, supplementary, adjacent, complementary with three or more lines). • Determines missing angle measures within special types of triangles. • Finds missing lengths in right triangles using the Pythagorean Theorem. • Finds missing lengths in similar shapes. • Describes situations using algebraic expressions, equations, and inequalities. • Models contextualized problems using equations and inequalities. • Evaluates rational numerical expressions containing whole number exponents. • Solves multi-step equations involving rational numbers. • Solves two-step inequalities involving rational numbers. • Analyzes data characteristics (mean, median, mode, range). • Selects the most appropriate measure of central tendency. • Identifies misinterpretation of circle graphs and box plots. • Finds the probability of complementary events. • Computes probabilities for independent compound events.

Nebraska State Accountability-Mathematics (NeSA-M) Performance Level Descriptor
Grade 11

Below the Standards	Meets the Standards	Exceeds the Standards
Overall student performance in mathematics reflects *unsatisfactory* performance on the standards and *insufficient* understanding of the content at eleventh grade. A student scoring at the Below the Standards level *inconsistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***inconsistently***: • Computes rational numbers. • Simplifies exponential expressions without denominators. • Estimates solutions to problems involving rational numbers. • Identifies and applies right triangle properties (e.g., Pythagorean Theorem). • Applies the distance formula (given the graph). • Uses coordinate geometry to analyze geometric situations. • Proves special types of triangles and quadrilaterals (given a graph). • Applies geometric properties and models to solve problems. • Converts equivalent rates (single conversions). • Identifies characteristics of linear functions. • Converts among representations of functions (e.g., graphs, tables, equations). • Identifies the slope and intercepts of a linear relationship from a graph. • Identifies equivalent forms of linear equations. • Models a situation involving a one-variable inequality. • Simplifies algebraic expressions involving exponents. • Adds and subtracts polynomials. • Multiplies polynomials. • Determines the outliers of a data set. • Identifies independent and dependent events. • Calculates probability of independent events. • Uses the appropriate counting techniques to determine the probability of an event. • Analyzes events to determine if they are mutually exclusive.	Overall student performance in mathematics reflects *satisfactory* performance on the standards and *sufficient* understanding of the content at eleventh grade. A student scoring at the Meets the Standards level *generally* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***generally***: • Computes real numbers. • Simplifies exponential expressions. • Estimates solutions to problems involving real numbers. • Identifies and applies right triangle properties (e.g., Pythagorean Theorem). • Applies the distance formula (given the graph). • Uses coordinate geometry to analyze geometric situations. • Proves special types of triangles and quadrilaterals (given a graph). • Applies geometric properties and models to solve problems. • Converts equivalent rates (single conversions). • Identifies characteristics of linear and non-linear functions. • Converts among representations of functions (e.g., graphs, tables, equations). • Identifies the slope (rate of change) and intercepts of a linear relationship from a graph. • Identifies equivalent forms of linear equations. • Models a situation involving a one-variable inequality. • Simplifies algebraic expressions involving exponents. • Adds and subtracts polynomials. • Multiplies and divides polynomials (dividing by monomials). • Determines the spread (variance, standard deviation) and outliers of a data set. • Identifies independent and dependent events. • Calculates probability of independent events. • Uses the appropriate counting techniques to determine the probability of an event. • Analyzes events to determine if they are mutually exclusive.	Overall student performance in mathematics reflects *high academic* performance on the standards and a *thorough* understanding of the content at or above eleventh grade. A student scoring at the Exceeds the Standards level *consistently* draws on a broad range of mathematical knowledge and utilizes a variety of mathematics skills and strategies to solve real-world mathematical problems. A student at this level ***consistently***: • Computes real numbers. • Simplifies exponential expressions. • Estimates solutions to problems involving real numbers and analyzes the reasonableness. • Identifies and applies right triangle properties (e.g., sine, cosine, tangent). • Applies the distance formula (given ordered pairs). • Uses coordinate geometry to analyze geometric situations. • Proves special types of triangles and quadrilaterals (given an ordered pair). • Applies geometric properties and models to solve problems. • Converts equivalent rates (multiple conversions). • Identifies characteristics of linear and non-linear functions. • Converts among representations of functions (e.g., graphs, tables, equations). • Identifies the slope (rate of change) and intercepts of a linear relationship from an equation, ordered pairs, or tables. • Identifies equivalent forms of linear equations. • Models a situation involving a one-variable inequality (e.g., $x > -5$ and $x < 1$). • Simplifies algebraic expressions involving exponents. • Adds and subtracts polynomials. • Multiplies and divides polynomials (dividing by binomial). • Determines the shape (normal/skewness) of a data set. • Identifies independent and dependent events. • Calculates probability of dependent events. • Uses the appropriate counting techniques to determine the probability of an event. • Analyzes events to determine if they are mutually exclusive.

Appendix O-r: Reading Raw-to-Scale Conversion Tables and Distribution of Ability

The charts are simple displays of Scale Score, Raw Score, and percentile rank. The raw score (blue diamonds) and percentile rank (red dots) for any Scale Score can be read directly from chart.

The horizontal dotted lines mark the locations of the proformance levels. *Meets Standards* begins at a Scale Score of 85 and *Exceeds Standards* begins at 135. *Below Standards* is a Scale Score of 84 and below.

The *Box and Whiskers* diagram in the center shows the distribution of scores for the state. The horizontal lines in the diagram are placed at the 10th, 25th, 50th, 75th, and 90th percentiles respectively from the bottom.

The green (sideways) mountain is the student ability distribution in the scale score metric. While it is derived from the count of students at each raw score, it uses the scale score distance between raw scores so is more descriptive of the actual ability distribution than the simple frequencies. This correcting for unequal intervals between raw scores and a statistician might call these *densities* rather than frequencies.

The following page is a more traditional table that was used to create the chart. This table would be used to retrieve the Scale Score or percentile rank for a given raw score. It also includes counts and percentages at each score. This format is more convenient for some purposes but does not visually convey true relationships in the interval scale metric as well as the figure.

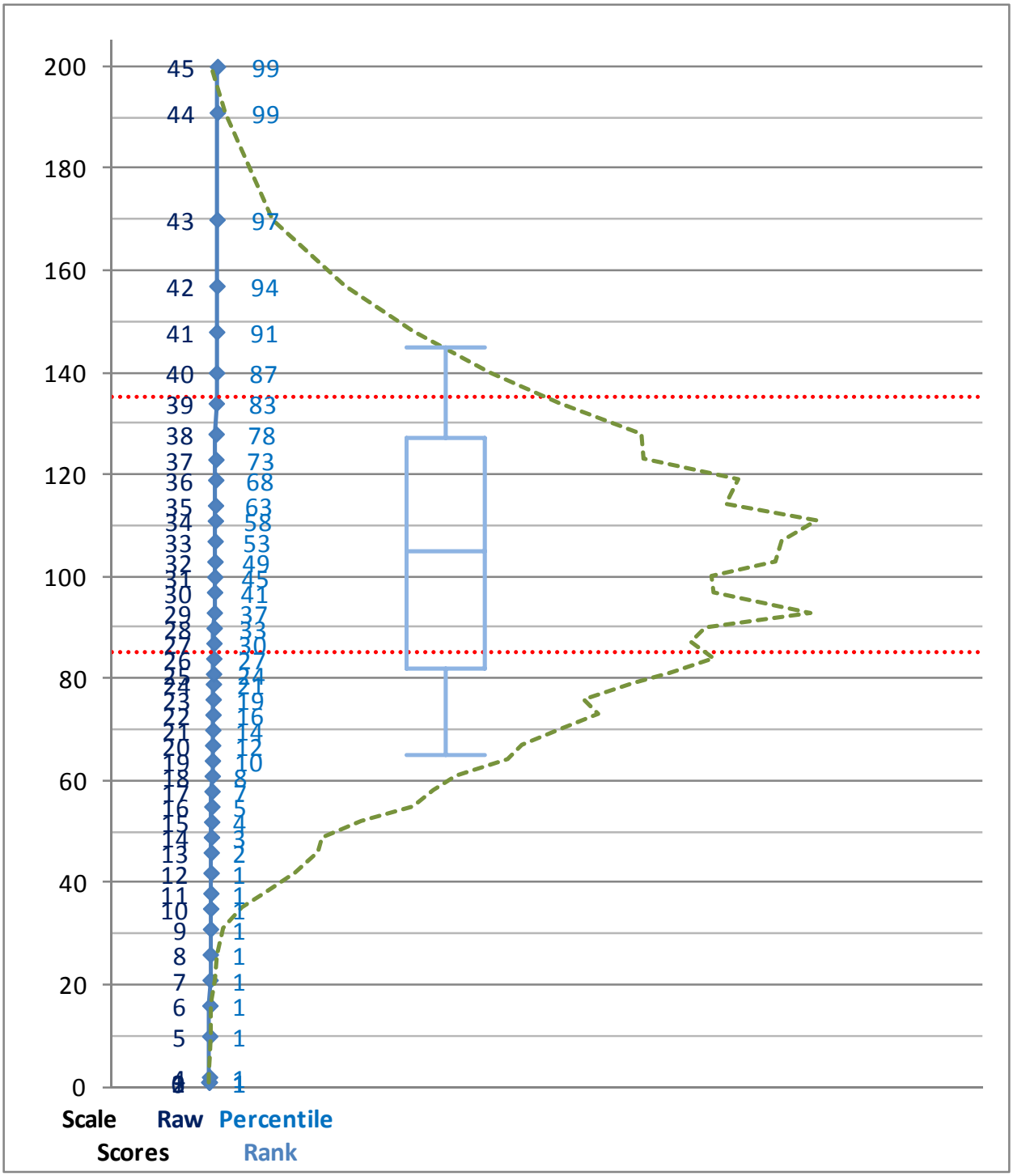


FIGURE 1: GRADE 3 READING RAW SCORE AND PERCENTILE BY SCALE SCORE

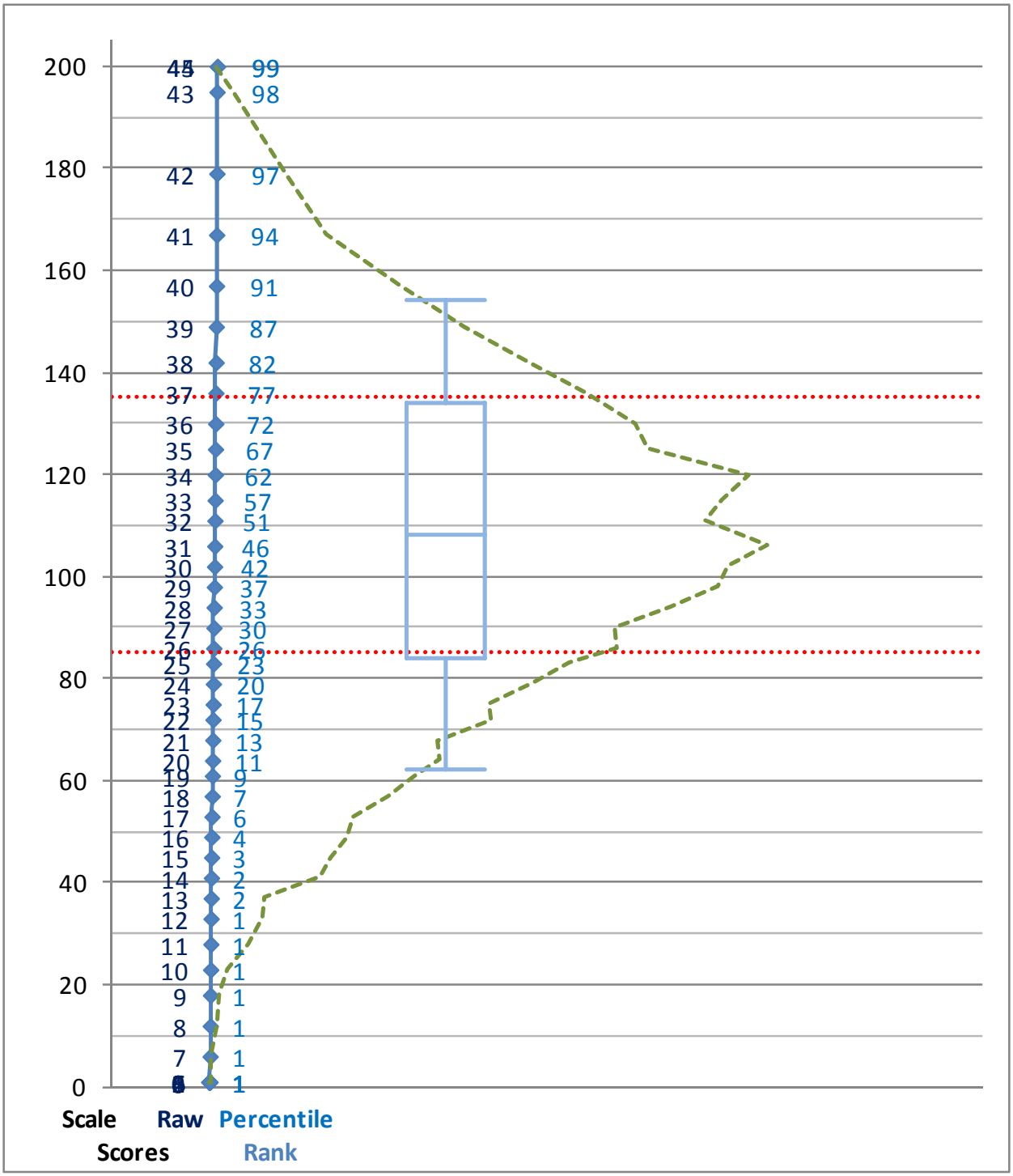


FIGURE 2: GRADE 4 READING RAW SCORE AND PERCENTILE BY SCALE SCORE

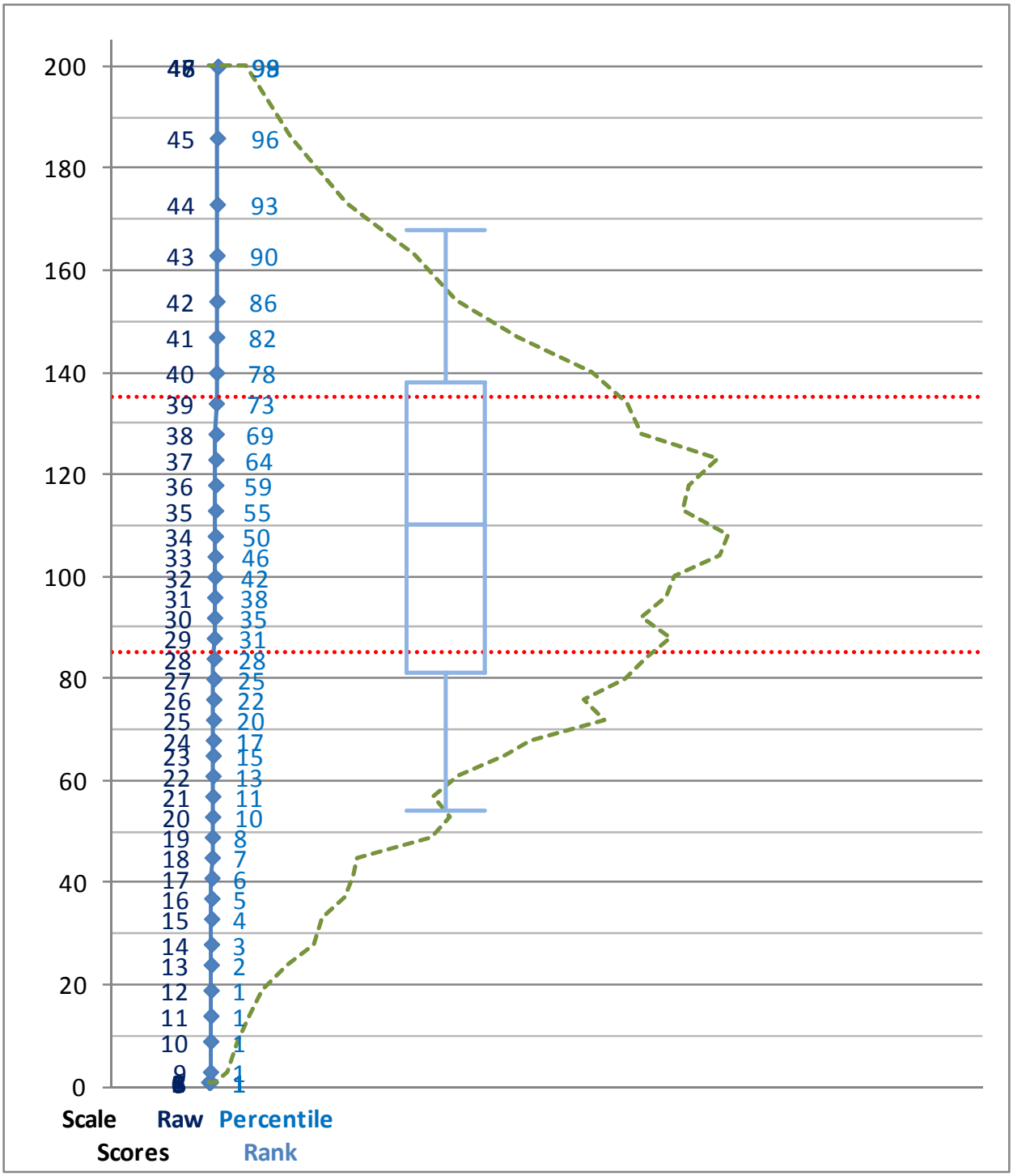


FIGURE 3: GRADE 5 READING RAW SCORE AND PERCENTILE BY SCALE SCORE

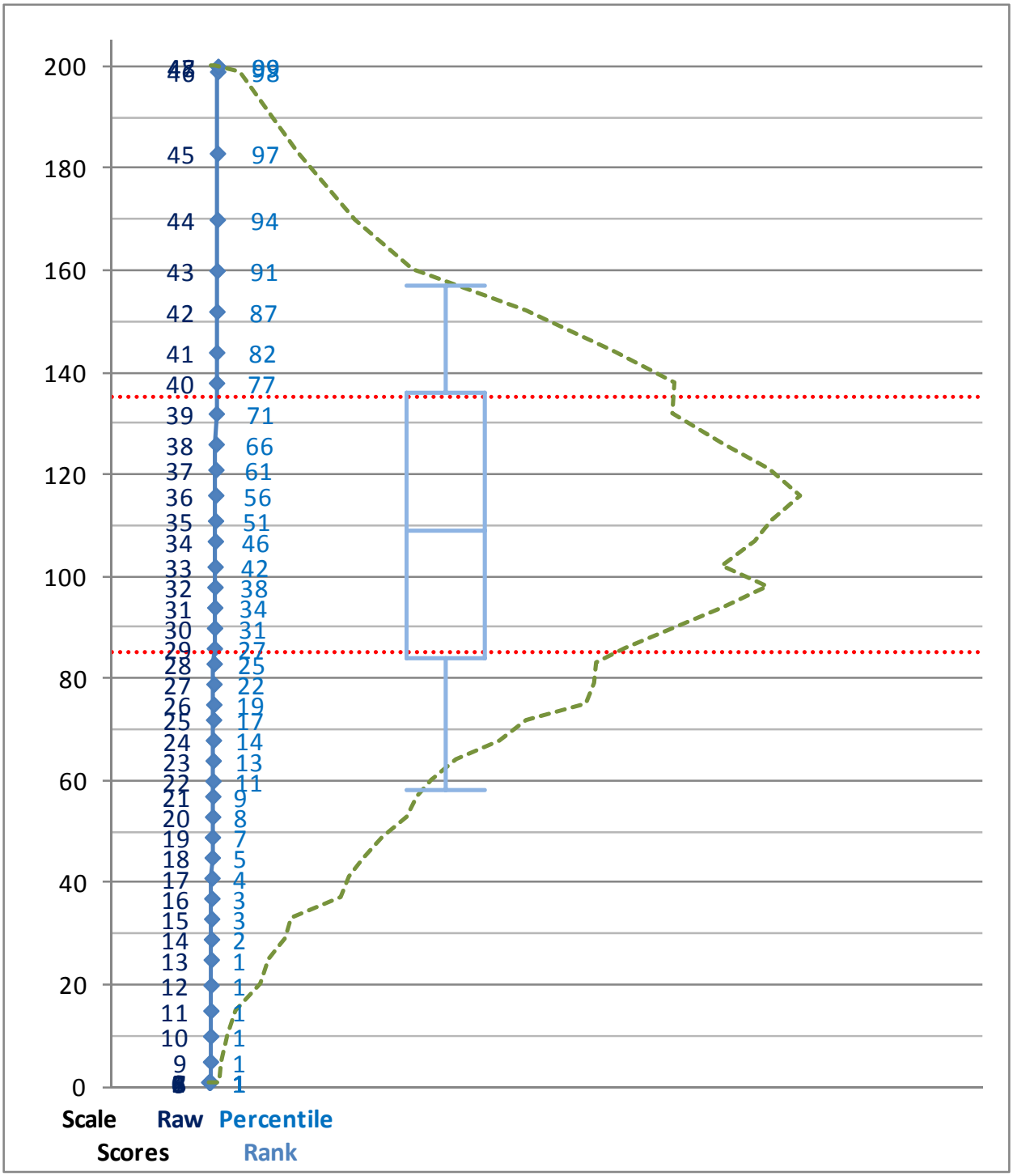


FIGURE 4: GRADE 6 READING RAW SCORE AND PERCENTILE BY SCALE SCORE

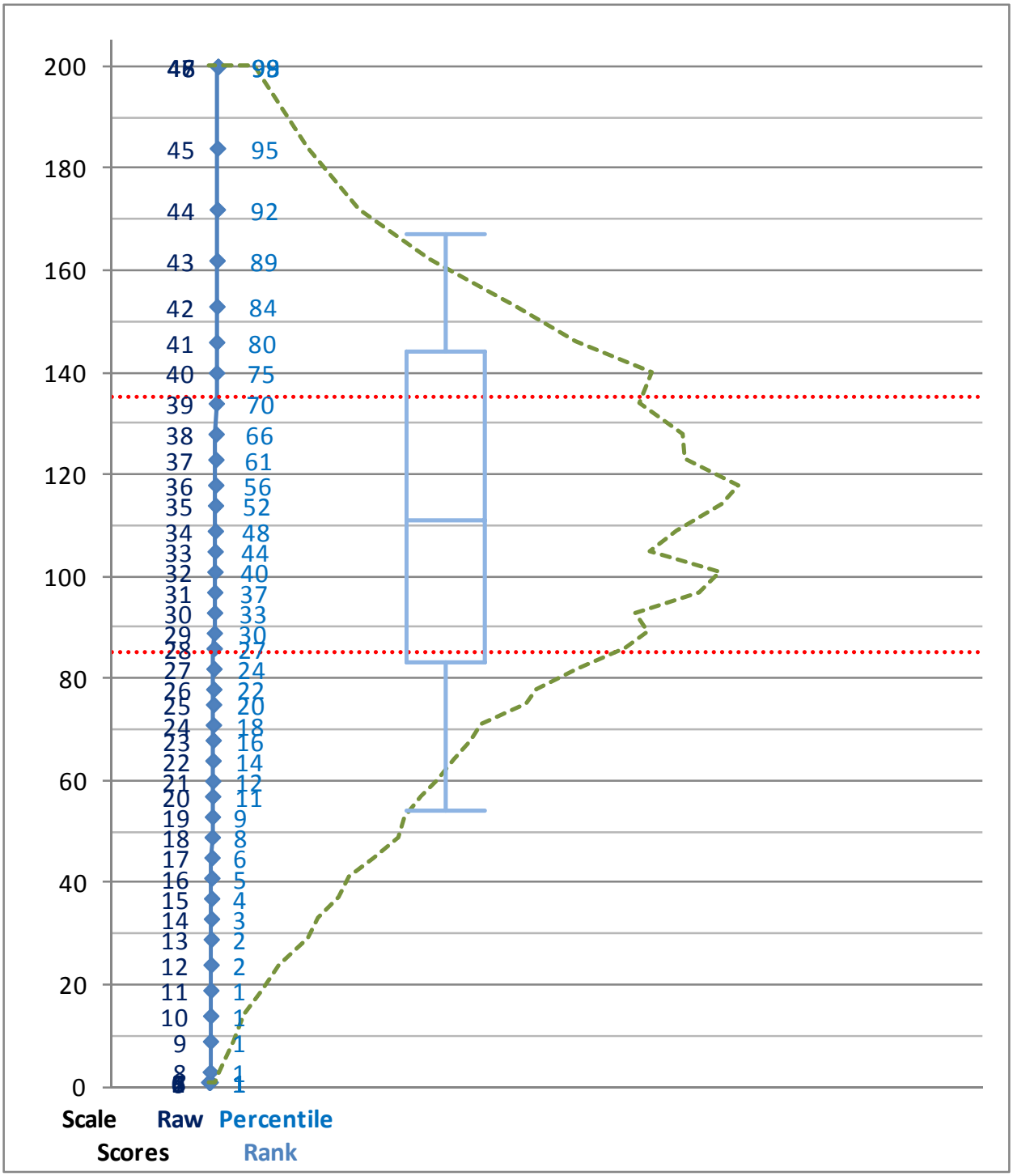


FIGURE 5: GRADE 7 READING RAW SCORE AND PERCENTILE BY SCALE SCORE

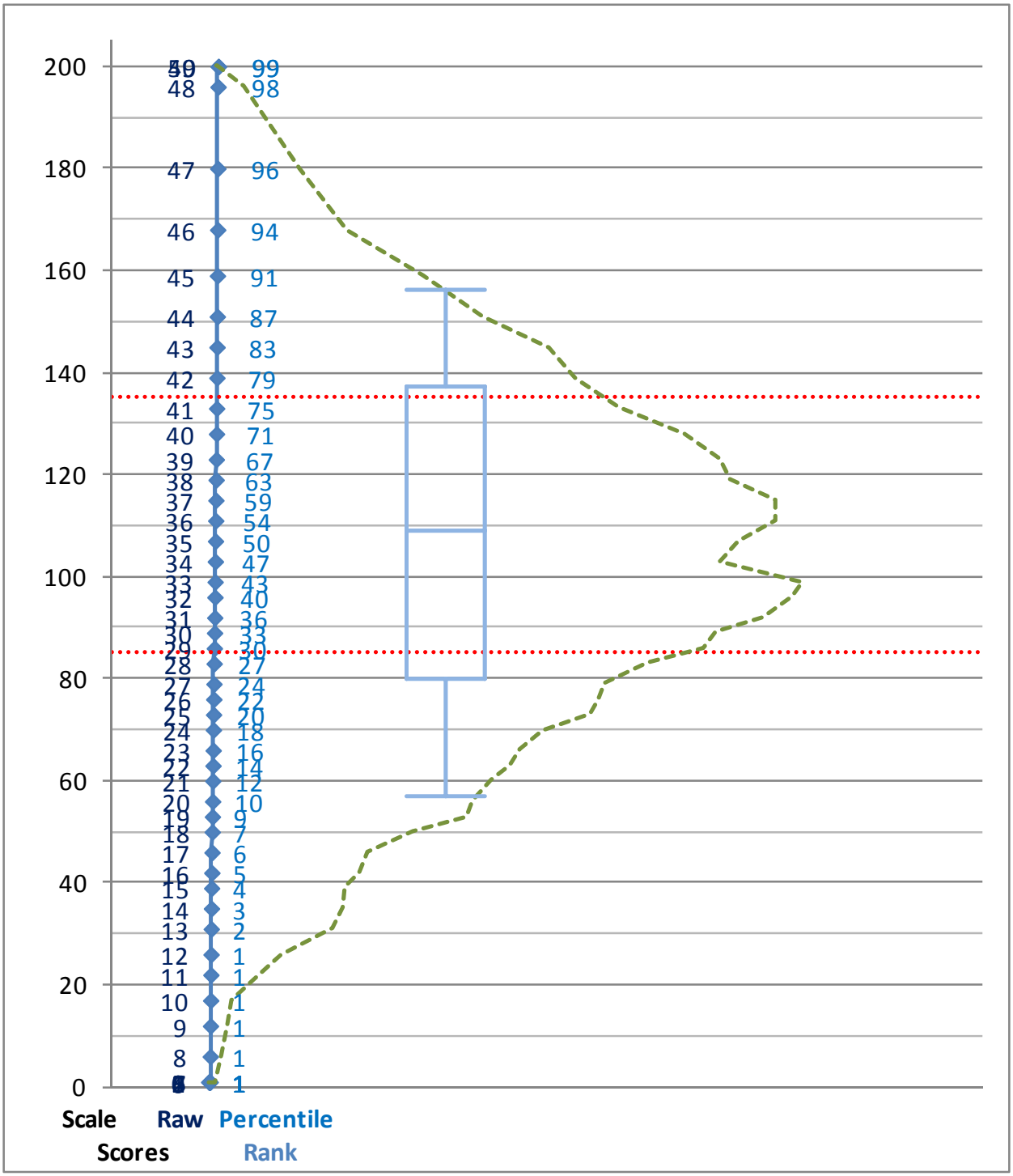


FIGURE 6: GRADE 8 READING RAW SCORE AND PERCENTILE BY SCALE SCORE

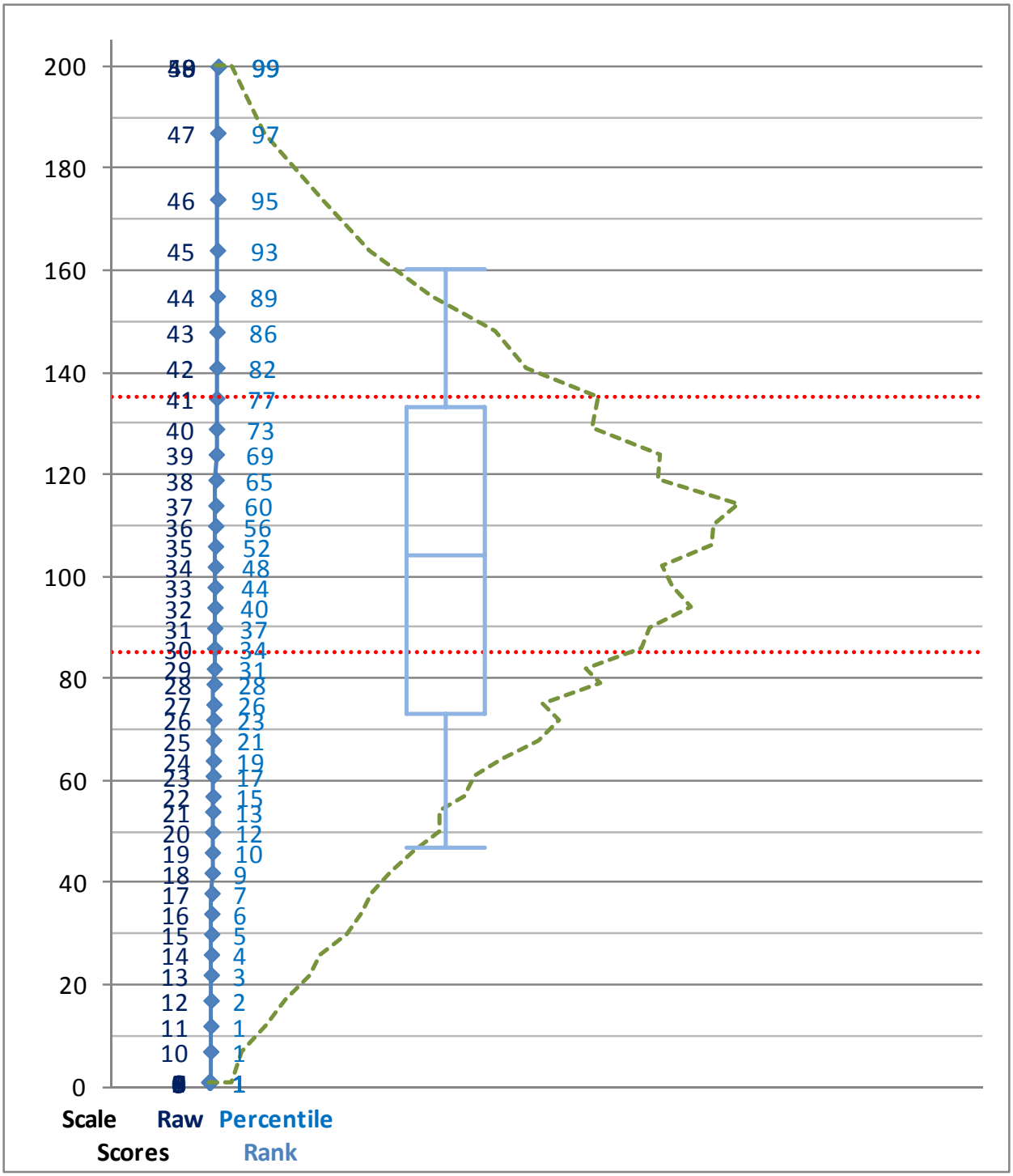


FIGURE 7: GRADE 11 READING RAW SCORE AND PERCENTILE BY SCALE SCORE

TABLEO-R.1: READING RAW SCORE TO SCALE SCORE CONVERSION TABLES

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	%-tile	Scale	SE
Spr2011	3	Read	0	3	0.0	3	0.0	1	1	52
Spr2011	3	Read	1	2	0.0	5	0.0	1	1	29
Spr2011	3	Read	2	-	0.0	5	0.0	1	1	21
Spr2011	3	Read	3	1	0.0	6	0.0	1	1	17
Spr2011	3	Read	4	1	0.0	7	0.0	1	2	15
Spr2011	3	Read	5	5	0.0	12	0.1	1	10	14
Spr2011	3	Read	6	7	0.0	19	0.1	1	16	13
Spr2011	3	Read	7	15	0.1	34	0.2	1	21	12
Spr2011	3	Read	8	22	0.1	56	0.3	1	26	12
Spr2011	3	Read	9	32	0.1	88	0.4	1	31	11
Spr2011	3	Read	10	69	0.3	157	0.7	1	35	11
Spr2011	3	Read	11	97	0.4	254	1.2	1	38	10
Spr2011	3	Read	12	151	0.7	405	1.9	1	42	10
Spr2011	3	Read	13	188	0.9	593	2.7	2	46	10
Spr2011	3	Read	14	196	0.9	789	3.6	3	49	10
Spr2011	3	Read	15	264	1.2	1,053	4.8	4	52	10
Spr2011	3	Read	16	286	1.3	1,339	6.1	5	55	9
Spr2011	3	Read	17	314	1.4	1,653	7.6	7	58	9
Spr2011	3	Read	18	344	1.6	1,997	9.1	8	61	9
Spr2011	3	Read	19	417	1.9	2,414	11.0	10	64	9
Spr2011	3	Read	20	436	2.0	2,850	13.0	12	67	9
Spr2011	3	Read	21	486	2.2	3,336	15.3	14	70	9
Spr2011	3	Read	22	543	2.5	3,879	17.8	16	73	9
Spr2011	3	Read	23	524	2.4	4,403	20.1	19	76	9
Spr2011	3	Read	24	591	2.7	4,994	22.9	21	79	9
Spr2011	3	Read	25	643	2.9	5,637	25.8	24	81	9
Spr2011	3	Read	26	704	3.2	6,341	29.0	27	84	9
Spr2011	3	Read	27	673	3.1	7,014	32.1	30	87	9
Spr2011	3	Read	28	693	3.2	7,707	35.3	33	90	9
Spr2011	3	Read	29	839	3.8	8,546	39.1	37	93	9
Spr2011	3	Read	30	869	4.0	9,415	43.1	41	97	10
Spr2011	3	Read	31	866	4.0	10,281	47.0	45	100	10
Spr2011	3	Read	32	976	4.5	11,257	51.5	49	103	10
Spr2011	3	Read	33	986	4.5	12,243	56.0	53	107	10
Spr2011	3	Read	34	1,046	4.8	13,289	60.8	58	111	10
Spr2011	3	Read	35	1,078	4.9	14,367	65.7	63	114	11
Spr2011	3	Read	36	1,105	5.1	15,472	70.8	68	119	11
Spr2011	3	Read	37	1,080	4.9	16,552	75.7	73	123	12
Spr2011	3	Read	38	1,074	4.9	17,626	80.7	78	128	12
Spr2011	3	Read	39	1,020	4.7	18,646	85.3	83	134	13
Spr2011	3	Read	40	943	4.3	19,589	89.6	87	140	14
Spr2011	3	Read	41	788	3.6	20,377	93.2	91	148	15
Spr2011	3	Read	42	677	3.1	21,054	96.3	94	157	17
Spr2011	3	Read	43	480	2.2	21,534	98.5	97	170	21
Spr2011	3	Read	44	238	1.1	21,772	99.6	99	191	29
Spr2011	3	Read	45	81	0.4	21,853	100.0	99	200	52

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	%-tile	Scale	SE
Spr2011	4	Read	0	1	0.0	1	0.0	1	1	67
Spr2011	4	Read	1	-	0.0	1	0.0	1	1	37
Spr2011	4	Read	2	-	0.0	1	0.0	1	1	27
Spr2011	4	Read	3	1	0.0	2	0.0	1	1	22
Spr2011	4	Read	4	2	0.0	4	0.0	1	1	19
Spr2011	4	Read	5	1	0.0	5	0.0	1	1	18
Spr2011	4	Read	6	5	0.0	10	0.0	1	1	16
Spr2011	4	Read	7	9	0.0	19	0.1	1	6	15
Spr2011	4	Read	8	23	0.1	42	0.2	1	12	15
Spr2011	4	Read	9	26	0.1	68	0.3	1	18	14
Spr2011	4	Read	10	49	0.2	117	0.5	1	23	14
Spr2011	4	Read	11	84	0.4	201	0.9	1	28	13
Spr2011	4	Read	12	119	0.6	320	1.5	1	33	13
Spr2011	4	Read	13	123	0.6	443	2.1	2	37	13
Spr2011	4	Read	14	207	1.0	650	3.0	2	41	12
Spr2011	4	Read	15	227	1.1	877	4.1	3	45	12
Spr2011	4	Read	16	257	1.2	1,134	5.3	4	49	12
Spr2011	4	Read	17	267	1.2	1,401	6.5	6	53	12
Spr2011	4	Read	18	335	1.6	1,736	8.1	7	57	12
Spr2011	4	Read	19	384	1.8	2,120	9.8	9	61	12
Spr2011	4	Read	20	428	2.0	2,548	11.8	11	64	12
Spr2011	4	Read	21	426	2.0	2,974	13.8	13	68	12
Spr2011	4	Read	22	525	2.4	3,499	16.2	15	72	12
Spr2011	4	Read	23	522	2.4	4,021	18.7	17	75	12
Spr2011	4	Read	24	600	2.8	4,621	21.4	20	79	12
Spr2011	4	Read	25	669	3.1	5,290	24.6	23	83	12
Spr2011	4	Read	26	758	3.5	6,048	28.1	26	86	12
Spr2011	4	Read	27	755	3.5	6,803	31.6	30	90	12
Spr2011	4	Read	28	858	4.0	7,661	35.6	33	94	12
Spr2011	4	Read	29	947	4.4	8,608	39.9	37	98	12
Spr2011	4	Read	30	965	4.5	9,573	44.4	42	102	12
Spr2011	4	Read	31	1,039	4.8	10,612	49.3	46	106	12
Spr2011	4	Read	32	1,083	5.0	11,695	54.3	51	111	13
Spr2011	4	Read	33	1,122	5.2	12,817	59.5	57	115	13
Spr2011	4	Read	34	1,177	5.5	13,994	64.9	62	120	13
Spr2011	4	Read	35	1,110	5.2	15,104	70.1	67	125	14
Spr2011	4	Read	36	1,082	5.0	16,186	75.1	72	130	14
Spr2011	4	Read	37	1,095	5.1	17,281	80.2	77	136	15
Spr2011	4	Read	38	1,056	4.9	18,337	85.1	82	142	16
Spr2011	4	Read	39	953	4.4	19,290	89.5	87	149	17
Spr2011	4	Read	40	805	3.7	20,095	93.3	91	157	18
Spr2011	4	Read	41	603	2.8	20,698	96.1	94	167	20
Spr2011	4	Read	42	476	2.2	21,174	98.3	97	179	22
Spr2011	4	Read	43	234	1.1	21,408	99.4	98	195	27
Spr2011	4	Read	44	112	0.5	21,520	99.9	99	200	37
Spr2011	4	Read	45	27	0.1	21,547	100.0	99	200	67

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	%-tile	Scale	SE
Spr2011	5	Read	0	-	0.0	-	0.0	1	1	72
Spr2011	5	Read	1	-	0.0	-	0.0	1	1	40
Spr2011	5	Read	2	1	0.0	1	0.0	1	1	29
Spr2011	5	Read	3	1	0.0	2	0.0	1	1	24
Spr2011	5	Read	4	1	0.0	3	0.0	1	1	21
Spr2011	5	Read	5	3	0.0	6	0.0	1	1	19
Spr2011	5	Read	6	6	0.0	12	0.1	1	1	18
Spr2011	5	Read	7	22	0.1	34	0.2	1	1	17
Spr2011	5	Read	8	19	0.1	53	0.2	1	1	16
Spr2011	5	Read	9	45	0.2	98	0.5	1	3	15
Spr2011	5	Read	10	68	0.3	166	0.8	1	9	15
Spr2011	5	Read	11	82	0.4	248	1.2	1	14	14
Spr2011	5	Read	12	110	0.5	358	1.7	1	19	14
Spr2011	5	Read	13	159	0.7	517	2.4	2	24	14
Spr2011	5	Read	14	184	0.9	701	3.3	3	28	13
Spr2011	5	Read	15	198	0.9	899	4.2	4	33	13
Spr2011	5	Read	16	237	1.1	1,136	5.3	5	37	13
Spr2011	5	Read	17	252	1.2	1,388	6.5	6	41	13
Spr2011	5	Read	18	258	1.2	1,646	7.7	7	45	13
Spr2011	5	Read	19	330	1.5	1,976	9.3	8	49	12
Spr2011	5	Read	20	358	1.7	2,334	10.9	10	53	12
Spr2011	5	Read	21	334	1.6	2,668	12.5	11	57	12
Spr2011	5	Read	22	372	1.7	3,040	14.3	13	61	12
Spr2011	5	Read	23	443	2.1	3,483	16.3	15	65	12
Spr2011	5	Read	24	479	2.2	3,962	18.6	17	68	12
Spr2011	5	Read	25	588	2.8	4,550	21.3	20	72	12
Spr2011	5	Read	26	559	2.6	5,109	23.9	22	76	12
Spr2011	5	Read	27	619	2.9	5,728	26.9	25	80	12
Spr2011	5	Read	28	650	3.0	6,378	29.9	28	84	12
Spr2011	5	Read	29	688	3.2	7,066	33.1	31	88	12
Spr2011	5	Read	30	757	3.5	7,823	36.7	35	92	13
Spr2011	5	Read	31	798	3.7	8,621	40.4	38	96	13
Spr2011	5	Read	32	814	3.8	9,435	44.2	42	100	13
Spr2011	5	Read	33	894	4.2	10,329	48.4	46	104	13
Spr2011	5	Read	34	905	4.2	11,234	52.7	50	108	13
Spr2011	5	Read	35	959	4.5	12,193	57.2	55	113	14
Spr2011	5	Read	36	973	4.6	13,166	61.7	59	118	14
Spr2011	5	Read	37	1,029	4.8	14,195	66.5	64	123	14
Spr2011	5	Read	38	1,006	4.7	15,201	71.3	69	128	15
Spr2011	5	Read	39	973	4.6	16,174	75.8	73	134	15
Spr2011	5	Read	40	1,012	4.7	17,186	80.6	78	140	16
Spr2011	5	Read	41	922	4.3	18,108	84.9	82	147	17
Spr2011	5	Read	42	828	3.9	18,936	88.8	86	154	18
Spr2011	5	Read	43	770	3.6	19,706	92.4	90	163	19
Spr2011	5	Read	44	627	2.9	20,333	95.3	93	173	21
Spr2011	5	Read	45	486	2.3	20,819	97.6	96	186	24
Spr2011	5	Read	46	327	1.5	21,146	99.1	98	200	29
Spr2011	5	Read	47	150	0.7	21,296	99.8	99	200	40
Spr2011	5	Read	48	36	0.2	21,332	100.0	99	200	72

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	%-tile	Scale	SE
Spr2011	6	Read	0	-	0.0	-	0.0	1	1	69
Spr2011	6	Read	1	-	0.0	-	0.0	1	1	38
Spr2011	6	Read	2	-	0.0	-	0.0	1	1	28
Spr2011	6	Read	3	-	0.0	-	0.0	1	1	23
Spr2011	6	Read	4	-	0.0	-	0.0	1	1	20
Spr2011	6	Read	5	3	0.0	3	0.0	1	1	18
Spr2011	6	Read	6	9	0.0	12	0.1	1	1	17
Spr2011	6	Read	7	7	0.0	19	0.1	1	1	16
Spr2011	6	Read	8	24	0.1	43	0.2	1	1	15
Spr2011	6	Read	9	31	0.1	74	0.4	1	5	15
Spr2011	6	Read	10	40	0.2	114	0.5	1	10	14
Spr2011	6	Read	11	54	0.3	168	0.8	1	15	14
Spr2011	6	Read	12	90	0.4	258	1.2	1	20	13
Spr2011	6	Read	13	105	0.5	363	1.7	1	25	13
Spr2011	6	Read	14	134	0.6	497	2.4	2	29	13
Spr2011	6	Read	15	144	0.7	641	3.1	3	33	13
Spr2011	6	Read	16	197	0.9	838	4.0	3	37	12
Spr2011	6	Read	17	208	1.0	1,046	5.0	4	41	12
Spr2011	6	Read	18	229	1.1	1,275	6.1	5	45	12
Spr2011	6	Read	19	257	1.2	1,532	7.4	7	49	12
Spr2011	6	Read	20	296	1.4	1,828	8.8	8	53	12
Spr2011	6	Read	21	310	1.5	2,138	10.3	9	57	12
Spr2011	6	Read	22	332	1.6	2,470	11.9	11	60	12
Spr2011	6	Read	23	369	1.8	2,839	13.6	13	64	12
Spr2011	6	Read	24	431	2.1	3,270	15.7	14	68	12
Spr2011	6	Read	25	472	2.3	3,742	18.0	17	72	12
Spr2011	6	Read	26	562	2.7	4,304	20.7	19	75	12
Spr2011	6	Read	27	572	2.7	4,876	23.4	22	79	12
Spr2011	6	Read	28	576	2.8	5,452	26.2	25	83	12
Spr2011	6	Read	29	620	3.0	6,072	29.2	27	86	12
Spr2011	6	Read	30	694	3.3	6,766	32.5	31	90	12
Spr2011	6	Read	31	765	3.7	7,531	36.2	34	94	12
Spr2011	6	Read	32	831	4.0	8,362	40.2	38	98	12
Spr2011	6	Read	33	896	4.3	9,258	44.5	42	102	13
Spr2011	6	Read	34	952	4.6	10,210	49.1	46	107	13
Spr2011	6	Read	35	983	4.7	11,193	53.8	51	111	13
Spr2011	6	Read	36	1,031	5.0	12,224	58.8	56	116	13
Spr2011	6	Read	37	1,135	5.5	13,359	64.2	61	121	14
Spr2011	6	Read	38	1,042	5.0	14,401	69.2	66	126	14
Spr2011	6	Read	39	1,079	5.2	15,480	74.4	71	132	15
Spr2011	6	Read	40	1,084	5.2	16,564	79.6	77	138	15
Spr2011	6	Read	41	1,074	5.2	17,638	84.8	82	144	16
Spr2011	6	Read	42	947	4.6	18,585	89.3	87	152	17
Spr2011	6	Read	43	760	3.7	19,345	93.0	91	160	19
Spr2011	6	Read	44	603	2.9	19,948	95.9	94	170	20
Spr2011	6	Read	45	486	2.3	20,434	98.2	97	183	23
Spr2011	6	Read	46	245	1.2	20,679	99.4	98	199	28
Spr2011	6	Read	47	108	0.5	20,787	99.9	99	200	39
Spr2011	6	Read	48	19	0.1	20,806	100.0	99	200	69

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	%-tile	Scale	SE
Spr2011	7	Read	0	-	0.0	-	0.0	1	1	71
Spr2011	7	Read	1	1	0.0	1	0.0	1	1	39
Spr2011	7	Read	2	-	0.0	1	0.0	1	1	28
Spr2011	7	Read	3	-	0.0	1	0.0	1	1	23
Spr2011	7	Read	4	5	0.0	6	0.0	1	1	21
Spr2011	7	Read	5	4	0.0	10	0.0	1	1	19
Spr2011	7	Read	6	8	0.0	18	0.1	1	1	17
Spr2011	7	Read	7	15	0.1	33	0.2	1	1	16
Spr2011	7	Read	8	24	0.1	57	0.3	1	3	15
Spr2011	7	Read	9	57	0.3	114	0.6	1	9	15
Spr2011	7	Read	10	70	0.3	184	0.9	1	14	14
Spr2011	7	Read	11	107	0.5	291	1.4	1	19	14
Spr2011	7	Read	12	124	0.6	415	2.0	2	24	13
Spr2011	7	Read	13	172	0.8	587	2.8	2	29	13
Spr2011	7	Read	14	191	0.9	778	3.8	3	33	13
Spr2011	7	Read	15	227	1.1	1,005	4.9	4	37	13
Spr2011	7	Read	16	209	1.0	1,214	5.9	5	41	12
Spr2011	7	Read	17	247	1.2	1,461	7.1	6	45	12
Spr2011	7	Read	18	281	1.4	1,742	8.4	8	49	12
Spr2011	7	Read	19	293	1.4	2,035	9.9	9	53	12
Spr2011	7	Read	20	316	1.5	2,351	11.4	11	57	12
Spr2011	7	Read	21	342	1.7	2,693	13.0	12	60	12
Spr2011	7	Read	22	366	1.8	3,059	14.8	14	64	12
Spr2011	7	Read	23	390	1.9	3,449	16.7	16	68	12
Spr2011	7	Read	24	405	2.0	3,854	18.7	18	71	12
Spr2011	7	Read	25	472	2.3	4,326	20.9	20	75	12
Spr2011	7	Read	26	488	2.4	4,814	23.3	22	78	12
Spr2011	7	Read	27	548	2.7	5,362	26.0	24	82	12
Spr2011	7	Read	28	618	3.0	5,980	29.0	27	86	12
Spr2011	7	Read	29	652	3.2	6,632	32.1	30	89	12
Spr2011	7	Read	30	634	3.1	7,266	35.2	33	93	12
Spr2011	7	Read	31	731	3.5	7,997	38.7	37	97	12
Spr2011	7	Read	32	760	3.7	8,757	42.4	40	101	12
Spr2011	7	Read	33	771	3.7	9,528	46.1	44	105	13
Spr2011	7	Read	34	816	4.0	10,344	50.1	48	109	13
Spr2011	7	Read	35	896	4.3	11,240	54.4	52	114	13
Spr2011	7	Read	36	923	4.5	12,163	58.9	56	118	13
Spr2011	7	Read	37	963	4.7	13,126	63.6	61	123	14
Spr2011	7	Read	38	959	4.6	14,085	68.2	66	128	14
Spr2011	7	Read	39	1,000	4.8	15,085	73.0	70	134	15
Spr2011	7	Read	40	1,029	5.0	16,114	78.0	75	140	15
Spr2011	7	Read	41	968	4.7	17,082	82.7	80	146	16
Spr2011	7	Read	42	917	4.4	17,999	87.1	84	153	17
Spr2011	7	Read	43	823	4.0	18,822	91.1	89	162	19
Spr2011	7	Read	44	689	3.3	19,511	94.5	92	172	21
Spr2011	7	Read	45	542	2.6	20,053	97.1	95	184	23
Spr2011	7	Read	46	377	1.8	20,430	98.9	98	200	28
Spr2011	7	Read	47	174	0.8	20,604	99.8	99	200	39
Spr2011	7	Read	48	50	0.2	20,654	100.0	99	200	71

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	%-tile	Scale	SE
Spr2011	8	Read	0	1	0.0	1	0.0	1	1	68
Spr2011	8	Read	1	-	0.0	1	0.0	1	1	38
Spr2011	8	Read	2	2	0.0	3	0.0	1	1	27
Spr2011	8	Read	3	1	0.0	4	0.0	1	1	22
Spr2011	8	Read	4	4	0.0	8	0.0	1	1	20
Spr2011	8	Read	5	2	0.0	10	0.0	1	1	18
Spr2011	8	Read	6	3	0.0	13	0.1	1	1	16
Spr2011	8	Read	7	16	0.1	29	0.1	1	1	15
Spr2011	8	Read	8	30	0.1	59	0.3	1	6	15
Spr2011	8	Read	9	37	0.2	96	0.5	1	12	14
Spr2011	8	Read	10	47	0.2	143	0.7	1	17	14
Spr2011	8	Read	11	88	0.4	231	1.1	1	22	13
Spr2011	8	Read	12	126	0.6	357	1.7	1	26	13
Spr2011	8	Read	13	183	0.9	540	2.6	2	31	12
Spr2011	8	Read	14	201	1.0	741	3.6	3	35	12
Spr2011	8	Read	15	203	1.0	944	4.6	4	39	12
Spr2011	8	Read	16	225	1.1	1,169	5.7	5	42	12
Spr2011	8	Read	17	236	1.2	1,405	6.8	6	46	12
Spr2011	8	Read	18	256	1.2	1,661	8.1	7	50	11
Spr2011	8	Read	19	321	1.6	1,982	9.7	9	53	11
Spr2011	8	Read	20	331	1.6	2,313	11.3	10	56	11
Spr2011	8	Read	21	352	1.7	2,665	13.0	12	60	11
Spr2011	8	Read	22	377	1.8	3,042	14.8	14	63	11
Spr2011	8	Read	23	388	1.9	3,430	16.7	16	66	11
Spr2011	8	Read	24	417	2.0	3,847	18.7	18	70	11
Spr2011	8	Read	25	476	2.3	4,323	21.1	20	73	11
Spr2011	8	Read	26	488	2.4	4,811	23.4	22	76	11
Spr2011	8	Read	27	495	2.4	5,306	25.9	24	79	11
Spr2011	8	Read	28	550	2.7	5,856	28.5	27	83	11
Spr2011	8	Read	29	618	3.0	6,474	31.6	30	86	11
Spr2011	8	Read	30	635	3.1	7,109	34.6	33	89	11
Spr2011	8	Read	31	692	3.4	7,801	38.0	36	92	11
Spr2011	8	Read	32	728	3.5	8,529	41.6	40	96	11
Spr2011	8	Read	33	741	3.6	9,270	45.2	43	99	11
Spr2011	8	Read	34	760	3.7	10,030	48.9	47	103	12
Spr2011	8	Read	35	788	3.8	10,818	52.7	50	107	12
Spr2011	8	Read	36	843	4.1	11,661	56.8	54	111	12
Spr2011	8	Read	37	842	4.1	12,503	60.9	59	115	12
Spr2011	8	Read	38	909	4.4	13,412	65.4	63	119	13
Spr2011	8	Read	39	893	4.4	14,305	69.7	67	123	13
Spr2011	8	Read	40	832	4.1	15,137	73.8	71	128	13
Spr2011	8	Read	41	831	4.1	15,968	77.8	75	133	14
Spr2011	8	Read	42	851	4.1	16,819	82.0	79	139	15
Spr2011	8	Read	43	791	3.9	17,610	85.8	83	145	15
Spr2011	8	Read	44	724	3.5	18,334	89.4	87	151	16
Spr2011	8	Read	45	717	3.5	19,051	92.9	91	159	18
Spr2011	8	Read	46	575	2.8	19,626	95.7	94	168	20
Spr2011	8	Read	47	450	2.2	20,076	97.8	96	180	22
Spr2011	8	Read	48	272	1.3	20,348	99.2	98	196	27
Spr2011	8	Read	49	126	0.6	20,474	99.8	99	200	37
Spr2011	8	Read	50	44	0.2	20,518	100.0	99	200	68

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	%-tile	Scale	SE
Spr2011	11	Read	0	2	0.0	2	0.0	1	1	73
Spr2011	11	Read	1	1	0.0	3	0.0	1	1	40
Spr2011	11	Read	2	3	0.0	6	0.0	1	1	29
Spr2011	11	Read	3	1	0.0	7	0.0	1	1	24
Spr2011	11	Read	4	5	0.0	12	0.1	1	1	21
Spr2011	11	Read	5	8	0.0	20	0.1	1	1	19
Spr2011	11	Read	6	20	0.1	40	0.2	1	1	18
Spr2011	11	Read	7	25	0.1	65	0.3	1	1	17
Spr2011	11	Read	8	26	0.1	91	0.4	1	1	16
Spr2011	11	Read	9	52	0.2	143	0.7	1	1	15
Spr2011	11	Read	10	78	0.4	221	1.1	1	7	15
Spr2011	11	Read	11	119	0.6	340	1.6	1	12	14
Spr2011	11	Read	12	154	0.7	494	2.4	2	17	14
Spr2011	11	Read	13	175	0.8	669	3.2	3	22	13
Spr2011	11	Read	14	196	0.9	865	4.1	4	26	13
Spr2011	11	Read	15	240	1.1	1,105	5.3	5	30	13
Spr2011	11	Read	16	265	1.3	1,370	6.6	6	34	13
Spr2011	11	Read	17	283	1.4	1,653	7.9	7	38	13
Spr2011	11	Read	18	271	1.3	1,924	9.2	9	42	12
Spr2011	11	Read	19	304	1.5	2,228	10.7	10	46	12
Spr2011	11	Read	20	343	1.6	2,571	12.3	12	50	12
Spr2011	11	Read	21	344	1.6	2,915	13.9	13	54	12
Spr2011	11	Read	22	381	1.8	3,296	15.8	15	57	12
Spr2011	11	Read	23	396	1.9	3,692	17.7	17	61	12
Spr2011	11	Read	24	436	2.1	4,128	19.7	19	64	12
Spr2011	11	Read	25	492	2.4	4,620	22.1	21	68	12
Spr2011	11	Read	26	522	2.5	5,142	24.6	23	72	12
Spr2011	11	Read	27	496	2.4	5,638	27.0	26	75	12
Spr2011	11	Read	28	584	2.8	6,222	29.8	28	79	12
Spr2011	11	Read	29	562	2.7	6,784	32.5	31	82	12
Spr2011	11	Read	30	644	3.1	7,428	35.5	34	86	12
Spr2011	11	Read	31	657	3.1	8,085	38.7	37	90	12
Spr2011	11	Read	32	718	3.4	8,803	42.1	40	94	12
Spr2011	11	Read	33	810	3.9	9,613	46.0	44	98	13
Spr2011	11	Read	34	792	3.8	10,405	49.8	48	102	13
Spr2011	11	Read	35	879	4.2	11,284	54.0	52	106	13
Spr2011	11	Read	36	882	4.2	12,166	58.2	56	110	13
Spr2011	11	Read	37	926	4.4	13,092	62.6	60	114	13
Spr2011	11	Read	38	911	4.4	14,003	67.0	65	119	14
Spr2011	11	Read	39	916	4.4	14,919	71.4	69	124	14
Spr2011	11	Read	40	892	4.3	15,811	75.6	73	129	15
Spr2011	11	Read	41	905	4.3	16,716	80.0	77	135	15
Spr2011	11	Read	42	840	4.0	17,556	84.0	82	141	16
Spr2011	11	Read	43	858	4.1	18,414	88.1	86	148	17
Spr2011	11	Read	44	748	3.6	19,162	91.7	89	155	18
Spr2011	11	Read	45	600	2.9	19,762	94.5	93	164	19
Spr2011	11	Read	46	521	2.5	20,283	97.0	95	174	21
Spr2011	11	Read	47	331	1.6	20,614	98.6	97	187	24
Spr2011	11	Read	48	204	1.0	20,818	99.6	99	200	29
Spr2011	11	Read	49	69	0.3	20,887	99.9	99	200	40
Spr2011	11	Read	50	16	0.1	20,903	100.0	99	200	73

Appendix O-m: Mathematics Raw-to-Scale Conversion Tables and Ability Distribution

The charts are simple displays of Scale Score, Raw Score, and percentile rank. The raw score and percentile rank for any Scale Score can be read directly from chart.

The horizontal dotted lines mark the locations of the proformance levels. *Meets Standards* begins at a Scale Score of 85 and *Exceeds Standards* begins at 135. *Below Standards* is a Scale Score of 84 and below.

The *Box and Whiskers* diagram in the center shows the distribution of scores for the state. The horizontal lines in the diagram are placed at the 10th, 25th, 50th, 75th, and 90th percentiles respectively from the bottom.

The green (sideways) mountain is the student ability distribution in the scale score metric. While it is derived from the count of students at each raw score, it uses the scale score distance between raw scores so is more descriptive of the actual ability distribution than the simple frequencies. This corrects for unequal intervals between raw scores and a statistician might call these *densities* rather than frequencies.

The table following the chars is a more traditional table that was used to create the chart. This table would be used to retrieve the Scale Score or percentile rank for a given raw score. It also includes counts and percentages at each score. This format is more convenient for some purposes but does not visually convey true relationships in the interval scale metric as well as the figure.

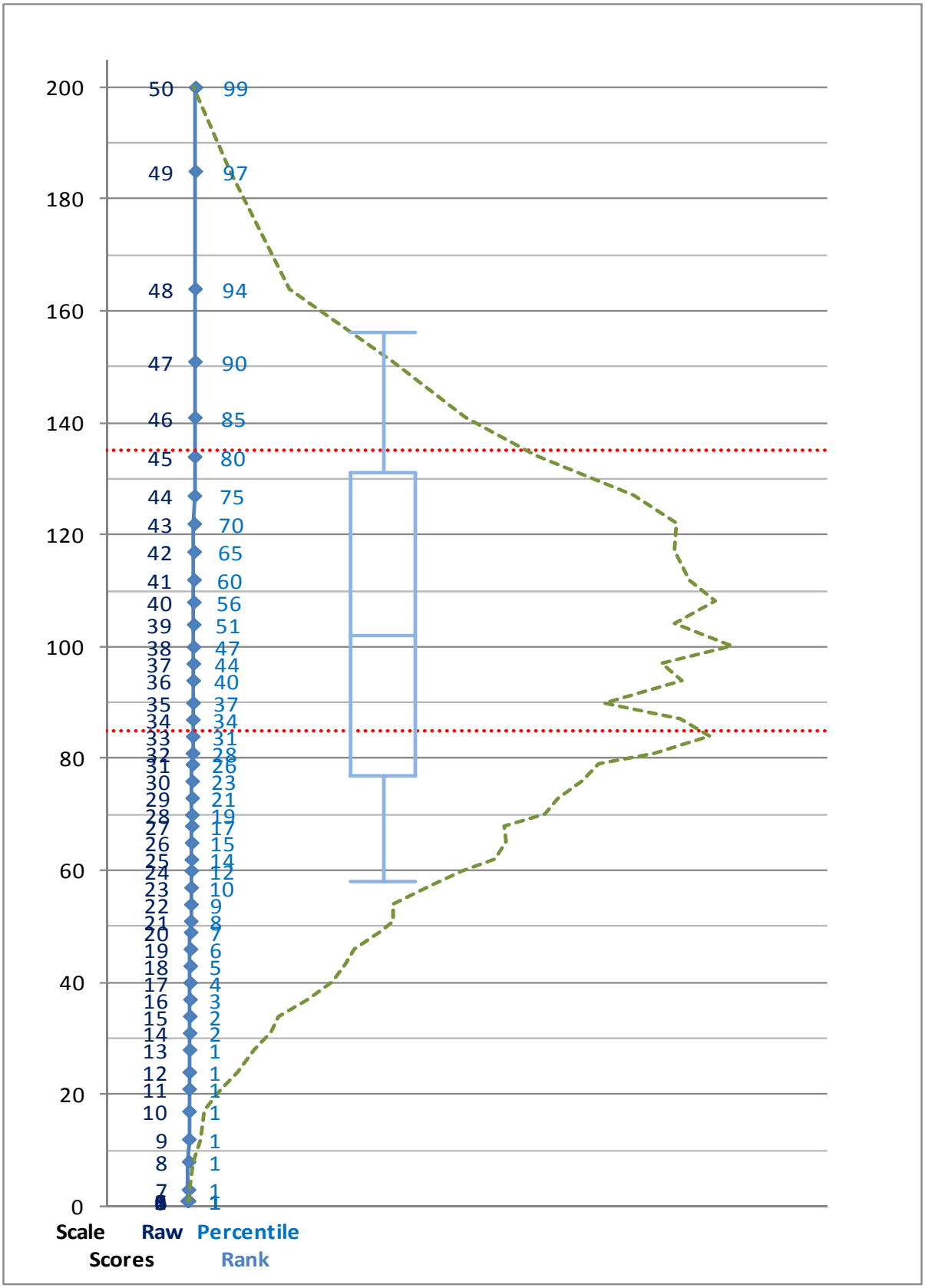


FIGURE 2: GRADE 3 MATHEMATICS RAW SCORE AND PERCENTILE BY SCALE SCORE

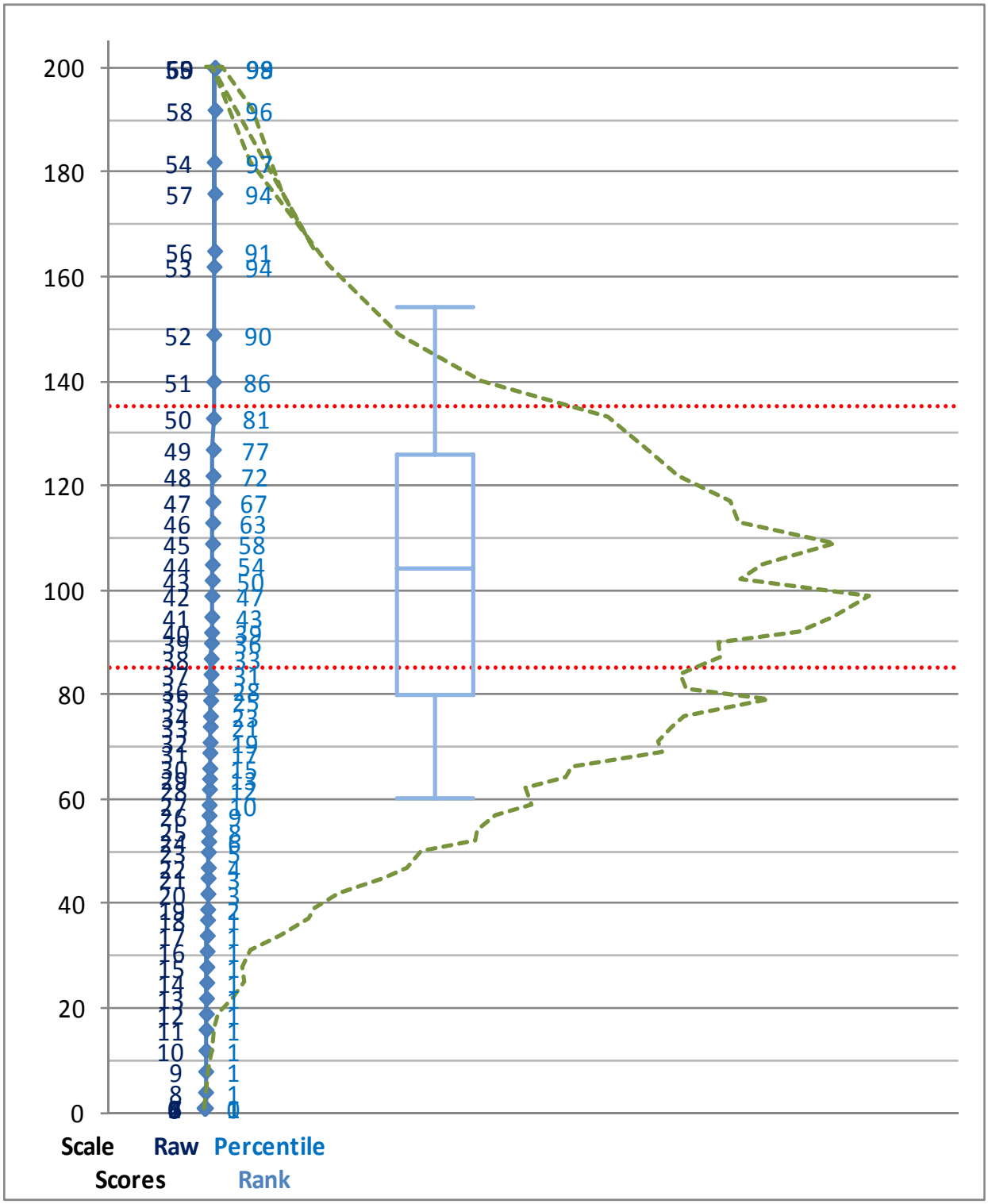


FIGURE 2: GRADE 4 MATHEMATICS RAW SCORE AND PERCENTILE BY SCALE SCORE

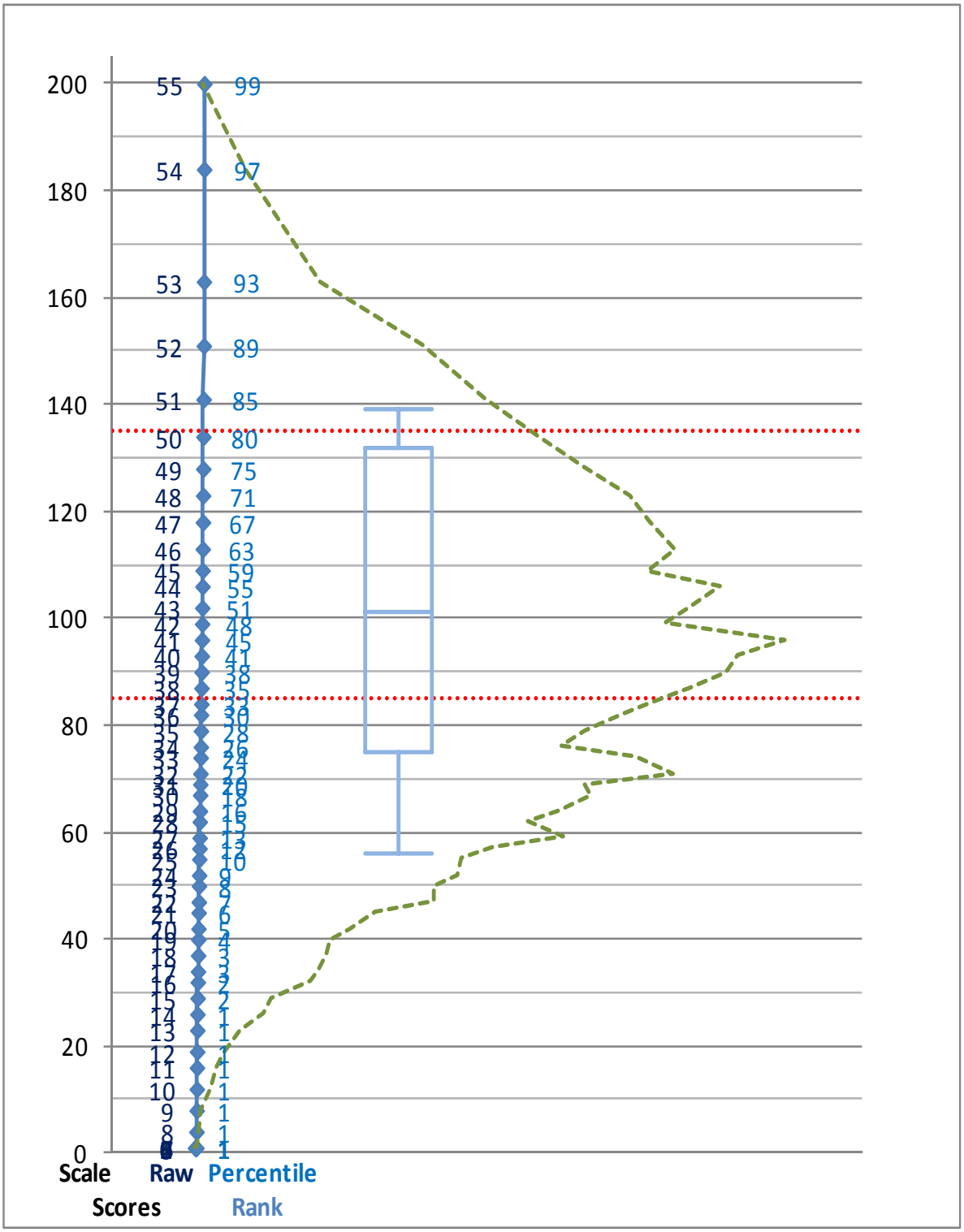


FIGURE 3: GRADE 5 MATHEMATAICS RAW SCORE AND PERCENTILE BY SCALE SCORE

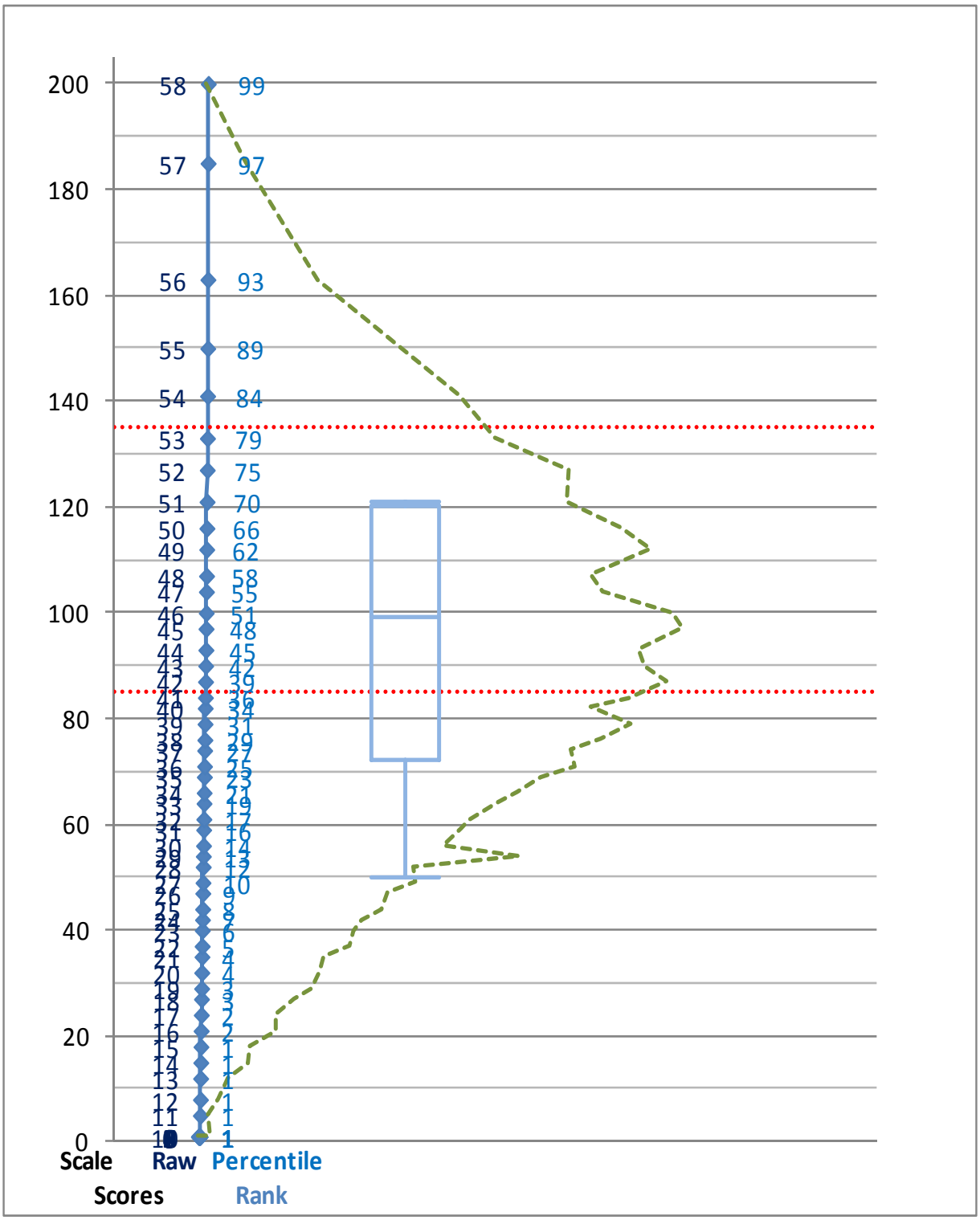


FIGURE 4: GRADE 6 MATHEMATICS RAW SCORE AND PERCENTILE BY SCALE SCORE

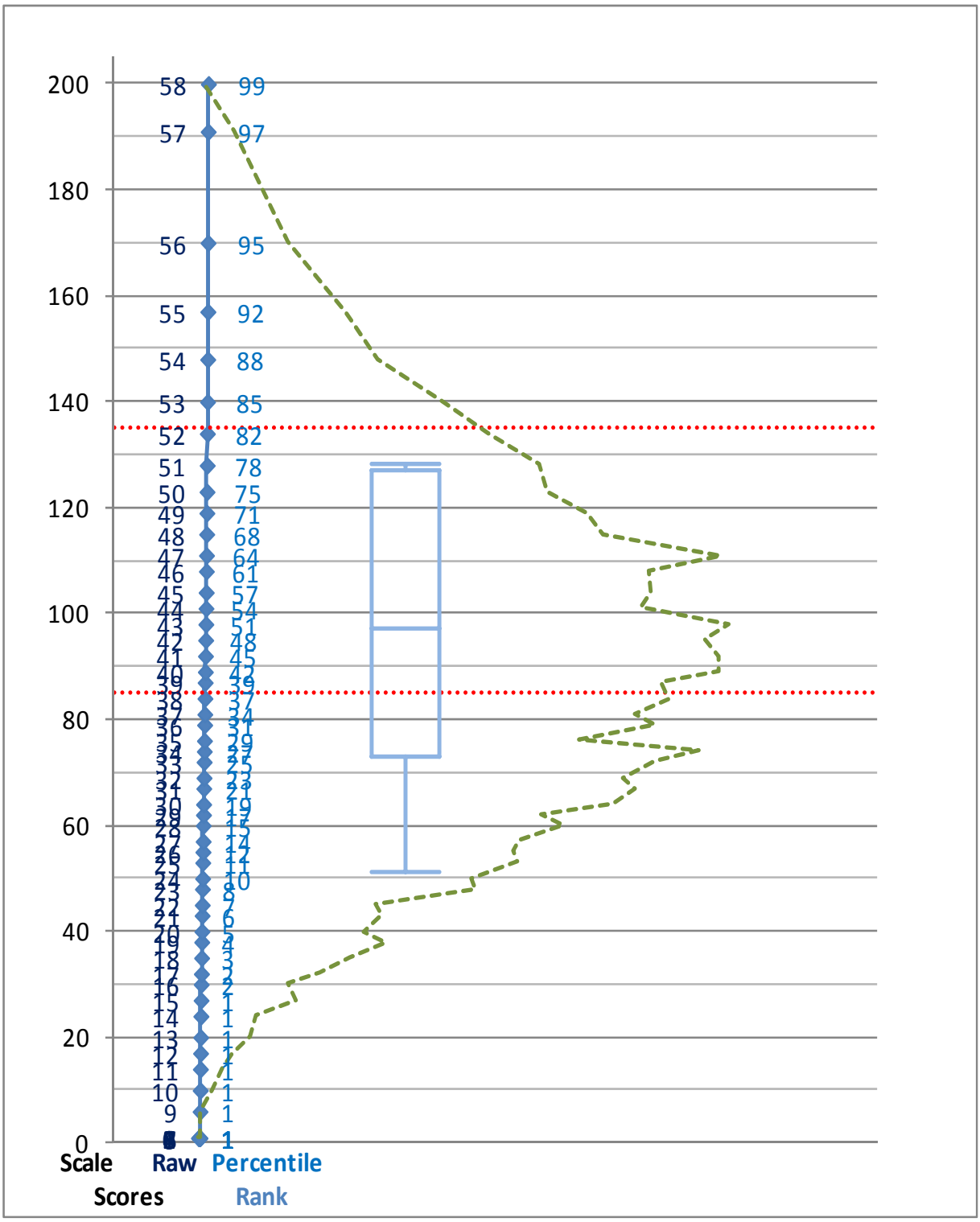


FIGURE 5: GRADE 7 MATHEMATICSS RAW SCORE AND PERCENTILE BY SCALE SCORE

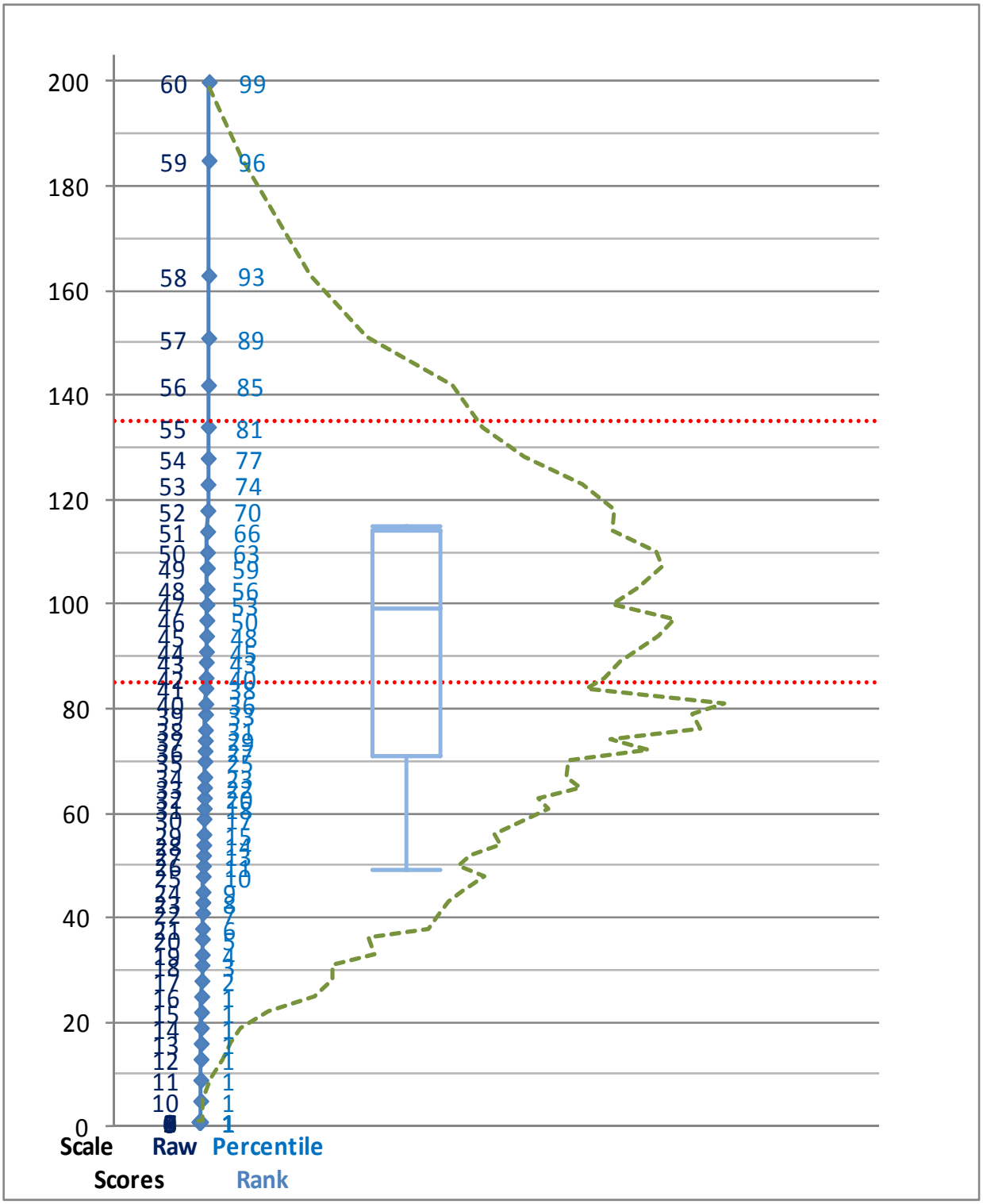


FIGURE 6: GRADE 8 MATHEMATICS RAW SCORE AND PERCENTILE BY SCALE SCORE

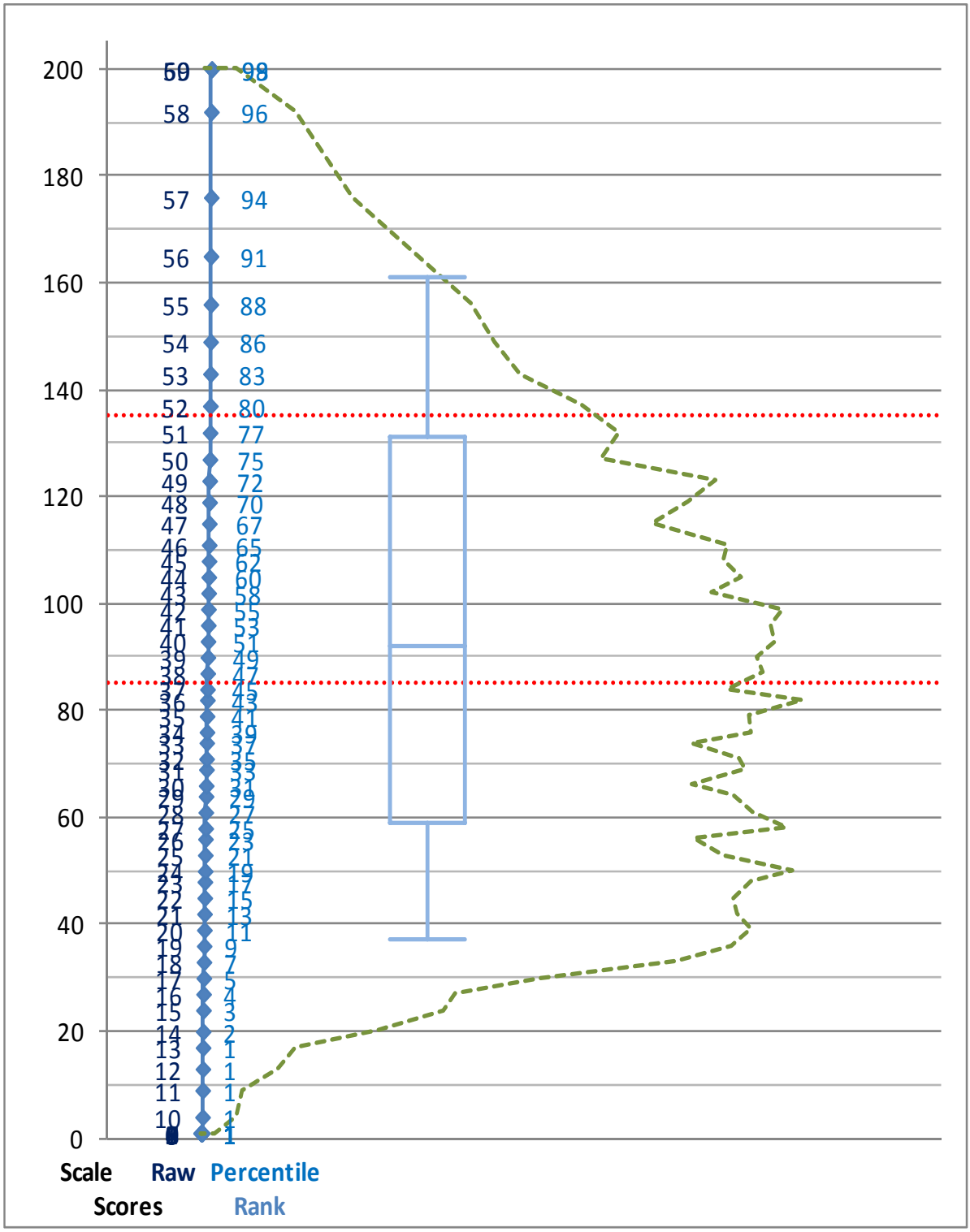


FIGURE 7: GRADE 11 MATHEMATICS RAW SCORE AND PERCENTILE BY SCALE SCORE

TABLE O.M.1: MATHEMATICS RAW SCORE TO SCALE SCORE CONVERSION TABLES

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	3	Math	0	2	0.0	2	0.0	1	1	54
Spr 2011	3	Math	1	-	0.0	2	0.0	1	1	30
Spr 2011	3	Math	2	-	0.0	2	0.0	1	1	22
Spr 2011	3	Math	3	-	0.0	2	0.0	1	1	18
Spr 2011	3	Math	4	1	0.0	3	0.0	1	1	16
Spr 2011	3	Math	5	5	0.0	8	0.0	1	1	14
Spr 2011	3	Math	6	4	0.0	12	0.1	1	1	13
Spr 2011	3	Math	7	6	0.0	18	0.1	1	3	12
Spr 2011	3	Math	8	12	0.1	30	0.1	1	8	12
Spr 2011	3	Math	9	25	0.1	55	0.3	1	12	11
Spr 2011	3	Math	10	33	0.2	88	0.4	1	17	11
Spr 2011	3	Math	11	64	0.3	152	0.7	1	21	11
Spr 2011	3	Math	12	80	0.4	232	1.1	1	24	10
Spr 2011	3	Math	13	104	0.5	336	1.5	1	28	10
Spr 2011	3	Math	14	131	0.6	467	2.1	2	31	10
Spr 2011	3	Math	15	143	0.7	610	2.8	2	34	10
Spr 2011	3	Math	16	152	0.7	762	3.5	3	37	9
Spr 2011	3	Math	17	184	0.8	946	4.3	4	40	9
Spr 2011	3	Math	18	200	0.9	1,146	5.2	5	43	9
Spr 2011	3	Math	19	210	1.0	1,356	6.2	6	46	9
Spr 2011	3	Math	20	243	1.1	1,599	7.3	7	49	9
Spr 2011	3	Math	21	260	1.2	1,859	8.5	8	51	9
Spr 2011	3	Math	22	260	1.2	2,119	9.7	9	54	9
Spr 2011	3	Math	23	304	1.4	2,423	11.1	10	57	9
Spr 2011	3	Math	24	346	1.6	2,769	12.6	12	60	9
Spr 2011	3	Math	25	388	1.8	3,157	14.4	14	62	9
Spr 2011	3	Math	26	404	1.8	3,561	16.2	15	65	9
Spr 2011	3	Math	27	400	1.8	3,961	18.1	17	68	9
Spr 2011	3	Math	28	453	2.1	4,414	20.1	19	70	9
Spr 2011	3	Math	29	468	2.1	4,882	22.3	21	73	9
Spr 2011	3	Math	30	499	2.3	5,381	24.5	23	76	9
Spr 2011	3	Math	31	520	2.4	5,901	26.9	26	79	9
Spr 2011	3	Math	32	591	2.7	6,492	29.6	28	81	9
Spr 2011	3	Math	33	661	3.0	7,153	32.6	31	84	9
Spr 2011	3	Math	34	623	2.8	7,776	35.5	34	87	9
Spr 2011	3	Math	35	651	3.0	8,427	38.4	37	90	10
Spr 2011	3	Math	36	773	3.5	9,200	42.0	40	94	10
Spr 2011	3	Math	37	739	3.4	9,939	45.3	44	97	10
Spr 2011	3	Math	38	851	3.9	10,790	49.2	47	100	10
Spr 2011	3	Math	39	919	4.2	11,709	53.4	51	104	11
Spr 2011	3	Math	40	996	4.5	12,705	58.0	56	108	11
Spr 2011	3	Math	41	949	4.3	13,654	62.3	60	112	11
Spr 2011	3	Math	42	1,095	5.0	14,749	67.3	65	117	12
Spr 2011	3	Math	43	1,101	5.0	15,850	72.3	70	122	12
Spr 2011	3	Math	44	1,179	5.4	17,029	77.7	75	127	13
Spr 2011	3	Math	45	1,064	4.9	18,093	82.5	80	134	14
Spr 2011	3	Math	46	1,110	5.1	19,203	87.6	85	141	16
Spr 2011	3	Math	47	1,044	4.8	20,247	92.4	90	151	18
Spr 2011	3	Math	48	769	3.5	21,016	95.9	94	164	22
Spr 2011	3	Math	49	599	2.7	21,615	98.6	97	185	30
Spr 2011	3	Math	50	306	1.4	21,921	100.0	99	200	54

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	4	Math	0	-	0.0	-	0.0	0	1	51
Spr 2011	4	Math	1	-	0.0	-	0.0	1	1	28
Spr 2011	4	Math	2	1	0.0	1	0.0	1	1	20
Spr 2011	4	Math	3	-	0.0	1	0.0	1	1	17
Spr 2011	4	Math	4	1	0.0	2	0.0	1	1	15
Spr 2011	4	Math	5	-	0.0	2	0.0	1	1	13
Spr 2011	4	Math	6	2	0.0	4	0.0	1	1	12
Spr 2011	4	Math	7	1	0.0	5	0.0	1	1	12
Spr 2011	4	Math	8	3	0.0	8	0.0	1	4	11
Spr 2011	4	Math	9	9	0.0	17	0.1	1	8	11
Spr 2011	4	Math	10	14	0.1	31	0.1	1	12	10
Spr 2011	4	Math	11	17	0.1	48	0.2	1	16	10
Spr 2011	4	Math	12	23	0.1	71	0.3	1	19	10
Spr 2011	4	Math	13	36	0.2	107	0.5	1	22	9
Spr 2011	4	Math	14	49	0.2	156	0.7	1	25	9
Spr 2011	4	Math	15	47	0.2	203	0.9	1	28	9
Spr 2011	4	Math	16	58	0.3	261	1.2	1	31	9
Spr 2011	4	Math	17	94	0.4	355	1.6	1	34	9
Spr 2011	4	Math	18	128	0.6	483	2.2	1	37	9
Spr 2011	4	Math	19	135	0.6	618	2.9	2	39	9
Spr 2011	4	Math	20	130	0.6	748	3.5	3	42	8
Spr 2011	4	Math	21	173	0.8	921	4.3	3	45	8
Spr 2011	4	Math	22	197	0.9	1,118	5.2	4	47	8
Spr 2011	4	Math	23	210	1.0	1,328	6.1	5	50	8
Spr 2011	4	Math	24	263	1.2	1,591	7.4	6	52	8
Spr 2011	4	Math	25	265	1.2	1,856	8.6	8	54	8
Spr 2011	4	Math	26	283	1.3	2,139	9.9	9	57	8
Spr 2011	4	Math	27	318	1.5	2,457	11.4	10	59	8
Spr 2011	4	Math	28	312	1.4	2,769	12.8	12	62	8
Spr 2011	4	Math	29	351	1.6	3,120	14.4	13	64	8
Spr 2011	4	Math	30	357	1.7	3,477	16.1	15	66	8
Spr 2011	4	Math	31	444	2.1	3,921	18.2	17	69	8
Spr 2011	4	Math	32	439	2.0	4,360	20.2	19	71	8
Spr 2011	4	Math	33	454	2.1	4,814	22.3	21	74	8
Spr 2011	4	Math	34	466	2.2	5,280	24.4	23	76	8
Spr 2011	4	Math	35	547	2.5	5,827	27.0	25	79	8
Spr 2011	4	Math	36	591	2.7	6,418	29.7	28	81	9
Spr 2011	4	Math	37	585	2.7	7,003	32.4	31	84	9
Spr 2011	4	Math	38	632	2.9	7,635	35.4	33	87	9
Spr 2011	4	Math	39	630	2.9	8,265	38.3	36	90	9
Spr 2011	4	Math	40	729	3.4	8,994	41.6	39	92	9
Spr 2011	4	Math	41	771	3.6	9,765	45.2	43	95	9
Spr 2011	4	Math	42	815	3.8	10,580	49.0	47	99	9
Spr 2011	4	Math	43	811	3.8	11,391	52.7	50	102	10
Spr 2011	4	Math	44	845	3.9	12,236	56.7	54	105	10
Spr 2011	4	Math	45	955	4.4	13,191	61.1	58	109	10
Spr 2011	4	Math	46	979	4.5	14,170	65.6	63	113	11
Spr 2011	4	Math	47	965	4.5	15,135	70.1	67	117	11
Spr 2011	4	Math	48	1,035	4.8	16,170	74.9	72	122	12
Spr 2011	4	Math	49	965	4.5	17,135	79.3	77	127	12
Spr 2011	4	Math	50	1,033	4.8	18,168	84.1	81	133	13
Spr 2011	4	Math	51	948	4.4	19,116	88.5	86	140	15
Spr 2011	4	Math	52	850	3.9	19,966	92.4	90	149	17

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	4	Math	53	752	3.5	20,718	95.9	94	162	20
Spr 2011	4	Math	54	556	2.6	21,274	98.5	97	182	28
Spr 2011	4	Math	55	324	1.5	21,598	100.0	99	200	51

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	5	Math	0	-	0.0	-	0.0	1	1	53
Spr 2011	5	Math	1	-	0.0	-	0.0	1	1	29
Spr 2011	5	Math	2	1	0.0	1	0.0	1	1	21
Spr 2011	5	Math	3	1	0.0	2	0.0	1	1	17
Spr 2011	5	Math	4	-	0.0	2	0.0	1	1	15
Spr 2011	5	Math	5	1	0.0	3	0.0	1	1	14
Spr 2011	5	Math	6	-	0.0	3	0.0	1	1	13
Spr 2011	5	Math	7	4	0.0	7	0.0	1	1	12
Spr 2011	5	Math	8	8	0.0	15	0.1	1	4	11
Spr 2011	5	Math	9	12	0.1	27	0.1	1	8	11
Spr 2011	5	Math	10	22	0.1	49	0.2	1	12	10
Spr 2011	5	Math	11	32	0.1	81	0.4	1	16	10
Spr 2011	5	Math	12	44	0.2	125	0.6	1	19	10
Spr 2011	5	Math	13	68	0.3	193	0.9	1	23	10
Spr 2011	5	Math	14	82	0.4	275	1.3	1	26	9
Spr 2011	5	Math	15	92	0.4	367	1.7	2	29	9
Spr 2011	5	Math	16	140	0.7	507	2.4	2	32	9
Spr 2011	5	Math	17	150	0.7	657	3.1	3	34	9
Spr 2011	5	Math	18	159	0.7	816	3.8	3	37	9
Spr 2011	5	Math	19	164	0.8	980	4.6	4	40	9
Spr 2011	5	Math	20	188	0.9	1,168	5.5	5	42	9
Spr 2011	5	Math	21	219	1.0	1,387	6.5	6	45	9
Spr 2011	5	Math	22	230	1.1	1,617	7.6	7	47	8
Spr 2011	5	Math	23	230	1.1	1,847	8.6	8	50	8
Spr 2011	5	Math	24	251	1.2	2,098	9.8	9	52	8
Spr 2011	5	Math	25	255	1.2	2,353	11.0	10	55	8
Spr 2011	5	Math	26	285	1.3	2,638	12.3	12	57	8
Spr 2011	5	Math	27	353	1.7	2,991	14.0	13	59	8
Spr 2011	5	Math	28	320	1.5	3,311	15.5	15	62	8
Spr 2011	5	Math	29	350	1.6	3,661	17.1	16	64	8
Spr 2011	5	Math	30	379	1.8	4,040	18.9	18	67	8
Spr 2011	5	Math	31	374	1.7	4,414	20.6	20	69	8
Spr 2011	5	Math	32	458	2.1	4,872	22.8	22	71	8
Spr 2011	5	Math	33	422	2.0	5,294	24.8	24	74	8
Spr 2011	5	Math	34	445	2.1	5,739	26.8	26	76	9
Spr 2011	5	Math	35	474	2.2	6,213	29.1	28	79	9
Spr 2011	5	Math	36	520	2.4	6,733	31.5	30	82	9
Spr 2011	5	Math	37	547	2.6	7,280	34.0	33	84	9
Spr 2011	5	Math	38	602	2.8	7,882	36.9	35	87	9
Spr 2011	5	Math	39	645	3.0	8,527	39.9	38	90	9
Spr 2011	5	Math	40	660	3.1	9,187	43.0	41	93	9
Spr 2011	5	Math	41	717	3.4	9,904	46.3	45	96	9
Spr 2011	5	Math	42	705	3.3	10,609	49.6	48	99	10
Spr 2011	5	Math	43	739	3.5	11,348	53.1	51	102	10

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	5	Math	44	787	3.7	12,135	56.7	55	106	10
Spr 2011	5	Math	45	820	3.8	12,955	60.6	59	109	11
Spr 2011	5	Math	46	870	4.1	13,825	64.6	63	113	11
Spr 2011	5	Math	47	826	3.9	14,651	68.5	67	118	11
Spr 2011	5	Math	48	939	4.4	15,590	72.9	71	123	12
Spr 2011	5	Math	49	986	4.6	16,576	77.5	75	128	13
Spr 2011	5	Math	50	1,015	4.7	17,591	82.3	80	134	14
Spr 2011	5	Math	51	979	4.6	18,570	86.8	85	141	15
Spr 2011	5	Math	52	983	4.6	19,553	91.4	89	151	17
Spr 2011	5	Math	53	833	3.9	20,386	95.3	93	163	21
Spr 2011	5	Math	54	647	3.0	21,033	98.4	97	184	29
Spr 2011	5	Math	55	352	1.6	21,385	100.0	99	200	53

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	6	Math	0	1	0.0	1	0.0	1	1	55
Spr 2011	6	Math	1	-	0.0	1	0.0	1	1	31
Spr 2011	6	Math	2	1	0.0	2	0.0	1	1	22
Spr 2011	6	Math	3	-	0.0	2	0.0	1	1	18
Spr 2011	6	Math	4	2	0.0	4	0.0	1	1	16
Spr 2011	6	Math	5	-	0.0	4	0.0	1	1	14
Spr 2011	6	Math	6	3	0.0	7	0.0	1	1	13
Spr 2011	6	Math	7	3	0.0	10	0.0	1	1	13
Spr 2011	6	Math	8	5	0.0	15	0.1	1	1	12
Spr 2011	6	Math	9	6	0.0	21	0.1	1	1	11
Spr 2011	6	Math	10	20	0.1	41	0.2	1	1	11
Spr 2011	6	Math	11	16	0.1	57	0.3	1	5	11
Spr 2011	6	Math	12	28	0.1	85	0.4	1	8	10
Spr 2011	6	Math	13	45	0.2	130	0.6	1	12	10
Spr 2011	6	Math	14	72	0.3	202	1.0	1	15	10
Spr 2011	6	Math	15	77	0.4	279	1.3	1	18	10
Spr 2011	6	Math	16	92	0.4	371	1.8	2	21	9
Spr 2011	6	Math	17	92	0.4	463	2.2	2	24	9
Spr 2011	6	Math	18	114	0.5	577	2.8	3	27	9
Spr 2011	6	Math	19	135	0.6	712	3.4	3	29	9
Spr 2011	6	Math	20	145	0.7	857	4.1	4	32	9
Spr 2011	6	Math	21	149	0.7	1,006	4.8	4	35	9
Spr 2011	6	Math	22	180	0.9	1,186	5.7	5	37	9
Spr 2011	6	Math	23	185	0.9	1,371	6.6	6	40	9
Spr 2011	6	Math	24	194	0.9	1,565	7.5	7	42	9
Spr 2011	6	Math	25	219	1.1	1,784	8.6	8	44	9
Spr 2011	6	Math	26	227	1.1	2,011	9.6	9	47	9
Spr 2011	6	Math	27	260	1.2	2,271	10.9	10	49	9
Spr 2011	6	Math	28	257	1.2	2,528	12.1	12	52	9
Spr 2011	6	Math	29	302	1.4	2,830	13.6	13	54	8
Spr 2011	6	Math	30	292	1.4	3,122	15.0	14	56	9
Spr 2011	6	Math	31	315	1.5	3,437	16.5	16	59	9
Spr 2011	6	Math	32	323	1.5	3,760	18.0	17	61	9
Spr 2011	6	Math	33	356	1.7	4,116	19.7	19	64	9
Spr 2011	6	Math	34	380	1.8	4,496	21.6	21	66	9

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	6	Math	35	410	2.0	4,906	23.5	23	69	9
Spr 2011	6	Math	36	450	2.2	5,356	25.7	25	71	9
Spr 2011	6	Math	37	444	2.1	5,800	27.8	27	74	9
Spr 2011	6	Math	38	481	2.3	6,281	30.1	29	76	9
Spr 2011	6	Math	39	517	2.5	6,798	32.6	31	79	9
Spr 2011	6	Math	40	469	2.2	7,267	34.8	34	82	9
Spr 2011	6	Math	41	514	2.5	7,781	37.3	36	84	9
Spr 2011	6	Math	42	559	2.7	8,340	40.0	39	87	9
Spr 2011	6	Math	43	657	3.2	8,997	43.1	42	90	10
Spr 2011	6	Math	44	650	3.1	9,647	46.3	45	93	10
Spr 2011	6	Math	45	715	3.4	10,362	49.7	48	97	10
Spr 2011	6	Math	46	698	3.3	11,060	53.0	51	100	10
Spr 2011	6	Math	47	722	3.5	11,782	56.5	55	104	11
Spr 2011	6	Math	48	701	3.4	12,483	59.9	58	107	11
Spr 2011	6	Math	49	807	3.9	13,290	63.7	62	112	11
Spr 2011	6	Math	50	895	4.3	14,185	68.0	66	116	12
Spr 2011	6	Math	51	918	4.4	15,103	72.4	70	121	13
Spr 2011	6	Math	52	925	4.4	16,028	76.8	75	127	13
Spr 2011	6	Math	53	986	4.7	17,014	81.6	79	133	15
Spr 2011	6	Math	54	985	4.7	17,999	86.3	84	141	16
Spr 2011	6	Math	55	972	4.7	18,971	91.0	89	150	18
Spr 2011	6	Math	56	855	4.1	19,826	95.1	93	163	22
Spr 2011	6	Math	57	682	3.3	20,508	98.3	97	185	31
Spr 2011	6	Math	58	349	1.7	20,857	100.0	99	200	56

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	7	Math	0	1	0.0	1	0.0	1	1	54
Spr 2011	7	Math	1	-	0.0	1	0.0	1	1	30
Spr 2011	7	Math	2	-	0.0	1	0.0	1	1	21
Spr 2011	7	Math	3	-	0.0	1	0.0	1	1	18
Spr 2011	7	Math	4	2	0.0	3	0.0	1	1	16
Spr 2011	7	Math	5	-	0.0	3	0.0	1	1	14
Spr 2011	7	Math	6	4	0.0	7	0.0	1	1	13
Spr 2011	7	Math	7	2	0.0	9	0.0	1	1	12
Spr 2011	7	Math	8	4	0.0	13	0.1	1	1	12
Spr 2011	7	Math	9	5	0.0	18	0.1	1	6	11
Spr 2011	7	Math	10	23	0.1	41	0.2	1	10	11
Spr 2011	7	Math	11	35	0.2	76	0.4	1	14	10
Spr 2011	7	Math	12	49	0.2	125	0.6	1	17	10
Spr 2011	7	Math	13	77	0.4	202	1.0	1	20	10
Spr 2011	7	Math	14	85	0.4	287	1.4	1	24	10
Spr 2011	7	Math	15	116	0.6	403	1.9	1	27	9
Spr 2011	7	Math	16	107	0.5	510	2.5	2	30	9
Spr 2011	7	Math	17	144	0.7	654	3.2	2	32	9
Spr 2011	7	Math	18	181	0.9	835	4.0	3	35	9
Spr 2011	7	Math	19	224	1.1	1,059	5.1	4	38	9
Spr 2011	7	Math	20	197	1.0	1,256	6.1	5	40	9
Spr 2011	7	Math	21	218	1.1	1,474	7.1	6	43	9
Spr 2011	7	Math	22	212	1.0	1,686	8.1	7	45	9

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	7	Math	23	261	1.3	1,947	9.4	8	48	8
Spr 2011	7	Math	24	257	1.2	2,204	10.7	10	50	8
Spr 2011	7	Math	25	301	1.5	2,505	12.1	11	53	8
Spr 2011	7	Math	26	296	1.4	2,801	13.5	12	55	8
Spr 2011	7	Math	27	302	1.5	3,103	15.0	14	57	8
Spr 2011	7	Math	28	344	1.7	3,447	16.7	15	60	8
Spr 2011	7	Math	29	323	1.6	3,770	18.2	17	62	8
Spr 2011	7	Math	30	390	1.9	4,160	20.1	19	64	8
Spr 2011	7	Math	31	411	2.0	4,571	22.1	21	67	8
Spr 2011	7	Math	32	401	1.9	4,972	24.0	23	69	8
Spr 2011	7	Math	33	430	2.1	5,402	26.1	25	72	8
Spr 2011	7	Math	34	472	2.3	5,874	28.4	27	74	8
Spr 2011	7	Math	35	455	2.2	6,329	30.6	29	76	9
Spr 2011	7	Math	36	545	2.6	6,874	33.2	31	79	9
Spr 2011	7	Math	37	522	2.5	7,396	35.7	34	81	9
Spr 2011	7	Math	38	562	2.7	7,958	38.5	37	84	9
Spr 2011	7	Math	39	553	2.7	8,511	41.1	39	87	9
Spr 2011	7	Math	40	621	3.0	9,132	44.1	42	89	9
Spr 2011	7	Math	41	621	3.0	9,753	47.1	45	92	9
Spr 2011	7	Math	42	605	2.9	10,358	50.1	48	95	9
Spr 2011	7	Math	43	632	3.1	10,990	53.1	51	98	9
Spr 2011	7	Math	44	652	3.2	11,642	56.3	54	101	10
Spr 2011	7	Math	45	667	3.2	12,309	59.5	57	104	10
Spr 2011	7	Math	46	665	3.2	12,974	62.7	61	108	10
Spr 2011	7	Math	47	770	3.7	13,744	66.4	64	111	10
Spr 2011	7	Math	48	722	3.5	14,466	69.9	68	115	11
Spr 2011	7	Math	49	694	3.4	15,160	73.3	71	119	11
Spr 2011	7	Math	50	738	3.6	15,898	76.8	75	123	12
Spr 2011	7	Math	51	723	3.5	16,621	80.3	78	128	12
Spr 2011	7	Math	52	722	3.5	17,343	83.8	82	134	13
Spr 2011	7	Math	53	707	3.4	18,050	87.2	85	140	14
Spr 2011	7	Math	54	675	3.3	18,725	90.5	88	148	16
Spr 2011	7	Math	55	704	3.4	19,429	93.9	92	157	18
Spr 2011	7	Math	56	579	2.8	20,008	96.7	95	170	21
Spr 2011	7	Math	57	466	2.3	20,474	99.0	97	191	30
Spr 2011	7	Math	58	215	1.0	20,689	100.0	99	200	54

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	8	Math	0	-	0.0	-	0.0	1	1	61
Spr 2011	8	Math	1	-	0.0	-	0.0	1	1	41
Spr 2011	8	Math	2	-	0.0	-	0.0	1	1	27
Spr 2011	8	Math	3	-	0.0	-	0.0	1	1	21
Spr 2011	8	Math	4	1	0.0	1	0.0	1	1	17
Spr 2011	8	Math	5	1	0.0	2	0.0	1	1	15
Spr 2011	8	Math	6	1	0.0	3	0.0	1	1	14
Spr 2011	8	Math	7	1	0.0	4	0.0	1	1	13

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	8	Math	8	2	0.0	6	0.0	1	1	12
Spr 2011	8	Math	9	8	0.0	14	0.1	1	1	11
Spr 2011	8	Math	10	8	0.0	22	0.1	1	5	11
Spr 2011	8	Math	11	20	0.1	42	0.2	1	9	11
Spr 2011	8	Math	12	36	0.2	78	0.4	1	13	10
Spr 2011	8	Math	13	47	0.2	125	0.6	1	16	10
Spr 2011	8	Math	14	60	0.3	185	0.9	1	19	10
Spr 2011	8	Math	15	83	0.4	268	1.3	1	22	9
Spr 2011	8	Math	16	137	0.7	405	2.0	1	25	9
Spr 2011	8	Math	17	159	0.8	564	2.7	2	28	9
Spr 2011	8	Math	18	160	0.8	724	3.5	3	31	9
Spr 2011	8	Math	19	210	1.0	934	4.5	4	33	9
Spr 2011	8	Math	20	203	1.0	1,137	5.5	5	36	9
Spr 2011	8	Math	21	216	1.1	1,353	6.6	6	38	8
Spr 2011	8	Math	22	228	1.1	1,581	7.7	7	41	8
Spr 2011	8	Math	23	234	1.1	1,815	8.8	8	43	8
Spr 2011	8	Math	24	248	1.2	2,063	10.0	9	45	8
Spr 2011	8	Math	25	269	1.3	2,332	11.4	10	48	8
Spr 2011	8	Math	26	245	1.2	2,577	12.5	11	50	8
Spr 2011	8	Math	27	255	1.2	2,832	13.8	13	52	8
Spr 2011	8	Math	28	284	1.4	3,116	15.2	14	54	8
Spr 2011	8	Math	29	278	1.4	3,394	16.5	15	56	8
Spr 2011	8	Math	30	312	1.5	3,706	18.0	17	59	8
Spr 2011	8	Math	31	328	1.6	4,034	19.6	18	61	8
Spr 2011	8	Math	32	319	1.6	4,353	21.2	20	63	8
Spr 2011	8	Math	33	359	1.7	4,712	22.9	22	65	8
Spr 2011	8	Math	34	345	1.7	5,057	24.6	23	67	8
Spr 2011	8	Math	35	347	1.7	5,404	26.3	25	70	8
Spr 2011	8	Math	36	422	2.1	5,826	28.4	27	72	8
Spr 2011	8	Math	37	387	1.9	6,213	30.2	29	74	8
Spr 2011	8	Math	38	472	2.3	6,685	32.5	31	76	8
Spr 2011	8	Math	39	464	2.3	7,149	34.8	33	79	8
Spr 2011	8	Math	40	494	2.4	7,643	37.2	36	81	8
Spr 2011	8	Math	41	461	2.2	8,104	39.4	38	84	9
Spr 2011	8	Math	42	484	2.4	8,588	41.8	40	86	9
Spr 2011	8	Math	43	503	2.4	9,091	44.2	43	89	9
Spr 2011	8	Math	44	520	2.5	9,611	46.8	45	91	9
Spr 2011	8	Math	45	546	2.7	10,157	49.4	48	94	9
Spr 2011	8	Math	46	567	2.8	10,724	52.2	50	97	9
Spr 2011	8	Math	47	607	3.0	11,331	55.2	53	100	10
Spr 2011	8	Math	48	645	3.1	11,976	58.3	56	103	10
Spr 2011	8	Math	49	680	3.3	12,656	61.6	59	107	10
Spr 2011	8	Math	50	673	3.3	13,329	64.9	63	110	10
Spr 2011	8	Math	51	737	3.6	14,066	68.5	66	114	11
Spr 2011	8	Math	52	738	3.6	14,804	72.1	70	118	11
Spr 2011	8	Math	53	812	4.0	15,616	76.0	74	123	12
Spr 2011	8	Math	54	811	3.9	16,427	80.0	77	128	13
Spr 2011	8	Math	55	820	4.0	17,247	83.9	81	134	14
Spr 2011	8	Math	56	839	4.1	18,086	88.0	85	142	15
Spr 2011	8	Math	57	803	3.9	18,889	91.9	89	151	18
Spr 2011	8	Math	58	730	3.6	19,619	95.5	93	163	21
Spr 2011	8	Math	59	588	2.9	20,207	98.4	96	185	30
Spr 2011	8	Math	60	338	1.6	20,545	100.0	99	200	54

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	11	Math	0	-	0.0	-	0.0	1	1	66
Spr 2011	11	Math	1	1	0.0	1	0.0	1	1	37
Spr 2011	11	Math	2	-	0.0	1	0.0	1	1	26
Spr 2011	11	Math	3	1	0.0	2	0.0	1	1	22
Spr 2011	11	Math	4	2	0.0	4	0.0	1	1	19
Spr 2011	11	Math	5	3	0.0	7	0.0	1	1	17
Spr 2011	11	Math	6	2	0.0	9	0.0	1	1	16
Spr 2011	11	Math	7	6	0.0	15	0.1	1	1	15
Spr 2011	11	Math	8	16	0.1	31	0.1	1	1	14
Spr 2011	11	Math	9	19	0.1	50	0.2	1	1	13
Spr 2011	11	Math	10	46	0.2	96	0.5	1	4	13
Spr 2011	11	Math	11	46	0.2	142	0.7	1	9	12
Spr 2011	11	Math	12	85	0.4	227	1.1	1	13	12
Spr 2011	11	Math	13	106	0.5	333	1.6	1	17	12
Spr 2011	11	Math	14	166	0.8	499	2.4	2	20	11
Spr 2011	11	Math	15	227	1.1	726	3.5	3	24	11
Spr 2011	11	Math	16	237	1.1	963	4.6	4	27	11
Spr 2011	11	Math	17	317	1.5	1,280	6.1	5	30	11
Spr 2011	11	Math	18	366	1.8	1,646	7.9	7	33	10
Spr 2011	11	Math	19	409	2.0	2,055	9.9	9	36	10
Spr 2011	11	Math	20	425	2.0	2,480	11.9	11	39	10
Spr 2011	11	Math	21	414	2.0	2,894	13.9	13	42	10
Spr 2011	11	Math	22	410	2.0	3,304	15.9	15	45	10
Spr 2011	11	Math	23	424	2.0	3,728	17.9	17	48	10
Spr 2011	11	Math	24	456	2.2	4,184	20.1	19	50	10
Spr 2011	11	Math	25	403	1.9	4,587	22.0	21	53	10
Spr 2011	11	Math	26	380	1.8	4,967	23.9	23	56	10
Spr 2011	11	Math	27	452	2.2	5,419	26.0	25	58	10
Spr 2011	11	Math	28	426	2.0	5,845	28.1	27	61	10
Spr 2011	11	Math	29	410	2.0	6,255	30.0	29	64	10
Spr 2011	11	Math	30	379	1.8	6,634	31.9	31	66	10
Spr 2011	11	Math	31	420	2.0	7,054	33.9	33	69	10
Spr 2011	11	Math	32	415	2.0	7,469	35.9	35	71	10
Spr 2011	11	Math	33	379	1.8	7,848	37.7	37	74	10
Spr 2011	11	Math	34	424	2.0	8,272	39.7	39	76	10
Spr 2011	11	Math	35	422	2.0	8,694	41.8	41	79	10
Spr 2011	11	Math	36	464	2.2	9,158	44.0	43	82	10
Spr 2011	11	Math	37	406	1.9	9,564	45.9	45	84	10
Spr 2011	11	Math	38	434	2.1	9,998	48.0	47	87	10
Spr 2011	11	Math	39	429	2.1	10,427	50.1	49	90	10
Spr 2011	11	Math	40	442	2.1	10,869	52.2	51	93	10
Spr 2011	11	Math	41	440	2.1	11,309	54.3	53	96	10
Spr 2011	11	Math	42	449	2.2	11,758	56.5	55	99	10
Spr 2011	11	Math	43	477	2.3	12,235	58.8	58	102	11
Spr 2011	11	Math	44	504	2.4	12,739	61.2	60	105	11
Spr 2011	11	Math	45	487	2.3	13,226	63.5	62	108	11
Spr 2011	11	Math	46	491	2.4	13,717	65.9	65	111	11
Spr 2011	11	Math	47	501	2.4	14,218	68.3	67	115	12
Spr 2011	11	Math	48	540	2.6	14,758	70.9	70	119	12
Spr 2011	11	Math	49	571	2.7	15,329	73.6	72	123	12
Spr 2011	11	Math	50	523	2.5	15,852	76.1	75	127	13

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum Count	Cum Percent	Percen-tile	Scale Score	Std Error
Spr 2011	11	Math	51	544	2.6	16,396	78.7	77	132	13
Spr 2011	11	Math	52	574	2.8	16,970	81.5	80	137	14
Spr 2011	11	Math	53	553	2.7	17,523	84.2	83	143	15
Spr 2011	11	Math	54	581	2.8	18,104	86.9	86	149	16
Spr 2011	11	Math	55	602	2.9	18,706	89.8	88	156	17
Spr 2011	11	Math	56	602	2.9	19,308	92.7	91	165	19
Spr 2011	11	Math	57	518	2.5	19,826	95.2	94	176	21
Spr 2011	11	Math	58	499	2.4	20,325	97.6	96	192	26
Spr 2011	11	Math	59	352	1.7	20,677	99.3	98	200	36
Spr 2011	11	Math	60	146	0.7	20,823	100.0	99	200	66

Appendix P: NeSA Reading Bank Item Difficulties

Grade 3

ENTRY NUMBER	TOTAL SCORE	COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
1	18450	21915	-1.7673A	.0192	.89	-9.9	.75	-9.9	.40	.35	85.1	83.7	-.0913	562871
2	17872	21915	-1.8998A	.0199	1.19	9.9	1.29	9.9	.32	.34	82.3	85.1	.2631	562872
3	13771	21915	-.4606A	.0153	1.07	9.9	1.08	7.1	.36	.42	67.4	70.7	-.0384	562874
4	18295	21915	-1.9178A	.0200	.98	-1.7	.85	-6.4	.42	.33	84.5	85.3	.1245	562882
5	17982	21915	-1.8164A	.0195	1.02	2.1	.92	-3.6	.40	.34	83.0	84.2	.1387	562886
6	17175	21915	-1.4643A	.0179	1.02	2.0	1.00	.1	.38	.37	80.0	80.4	.0551	562888
7	17766	21915	-1.8209A	.0195	1.06	5.3	1.02	.9	.41	.34	82.2	84.3	.2204	563108
8	11203	21915	.0523A	.0149	1.14	9.9	1.23	9.9	.31	.43	62.8	68.7	.0375	563115
9	14274	21915	-.6238A	.0155	1.10	9.9	1.15	9.9	.34	.42	68.0	71.9	.0040	563118
10	18402	21915	-1.8691A	.0198	.96	-3.0	.90	-4.2	.39	.34	85.0	84.8	.0327	563119
11	16338	21915	-1.2483A	.0171	.97	-3.8	.91	-5.7	.45	.38	78.2	78.0	.0902	563122
12	14733	21915	-.8227A	.0159	1.00	.3	.97	-2.4	.44	.41	72.5	73.6	.0908	563127
13	16055	21915	-1.0898A	.0166	.95	-6.3	.91	-6.0	.44	.39	77.6	76.3	.0097	563142
14	14468	21915	-.7012A	.0157	1.07	9.5	1.14	9.9	.36	.41	70.9	72.5	.0342	563143
15	17213	21915	-1.2257A	.0170	.80	-9.9	.70	-9.9	.48	.38	82.6	77.7	-.2020	565092
16	15507	21915	-1.0110A	.0164	.99	-1.2	.94	-4.5	.44	.40	75.0	75.4	.0802	565093
17	13679	21915	-.6155A	.0155	1.13	9.9	1.20	9.9	.34	.42	67.1	71.8	.1397	565109
18	16313	21915	-1.1699A	.0168	.82	-9.9	.68	-9.9	.55	.39	80.9	77.1	.0176	565111
19	18782	21915	-1.9763A	.0204	.88	-9.7	.69	-9.9	.43	.33	86.7	85.9	-.0152	565112
20	12581	21915	-.2251A	.0150	1.11	9.9	1.16	9.9	.34	.43	65.0	69.5	.0035	602276
21	15894	21915	-1.0894A	.0166	.95	-5.8	.89	-7.8	.45	.39	77.5	76.3	.0544	602277
22	12002	21915	.1317A	.0149	1.07	9.9	1.11	9.9	.37	.43	66.8	68.6	-.2207	602278
23	14647	21915	-.6025A	.0155	.97	-4.3	.93	-6.0	.42	.42	72.1	71.7	-.1106	602279
24	16381	21915	-1.0056A	.0164	.83	-9.9	.75	-9.9	.49	.40	80.4	75.4	-.1702	602281
25	15965	21915	-.7417A	.0158	.98	-3.4	.98	-1.9	.35	.41	73.8	72.9	-.3198	602289
26	19375	21915	-1.9786A	.0204	.76	-9.9	.57	-9.9	.40	.33	89.1	85.9	-.2948	602290
27	16695	21915	-1.2812A	.0172	.94	-6.7	.86	-8.8	.44	.38	79.4	78.3	.0178	602291
28	8964	21915	.6078A	.0151	1.04	5.9	1.11	9.9	.39	.43	69.5	69.9	-.0102	602296
29	11065	21915	.0838A	.0149	1.10	9.9	1.12	9.9	.35	.43	64.4	68.7	.0370	602297
30	7819	21915	.7719A	.0153	1.09	9.9	1.19	9.9	.32	.43	68.9	70.9	.0950	602299
31	16583	21915	-1.4175A	.0177	1.10	9.9	1.12	6.6	.37	.37	77.8	79.8	.1904	602302
32	8800	21915	.6381A	.0152	1.13	9.9	1.21	9.9	.32	.43	65.1	70.0	-.0025	602304
33	18863	21915	-1.8633A	.0197	.85	-9.9	.71	-9.9	.39	.34	87.0	84.7	-.1677	602325
34	15073	21915	-1.0430A	.0165	1.11	9.9	1.14	9.4	.39	.39	72.6	75.8	.2268	602326
35	13274	21915	-.3321A	.0151	.90	-9.9	.86	-9.9	.50	.43	73.7	70.0	-.0498	602330
36	15047	21915	-.7963A	.0159	1.06	8.6	1.14	9.9	.34	.41	72.1	73.4	-.0164	602331
37	14965	21915	-.7979A	.0159	.94	-9.0	.87	-9.9	.47	.41	74.9	73.4	.0063	602332
38	10528	21915	.3751A	.0150	1.11	9.9	1.17	9.9	.34	.43	64.5	68.9	-.1321	602333
39	15660	21915	-.7806A	.0158	.88	-9.9	.80	-9.9	.47	.41	76.8	73.2	-.1955	602337
40	11695	21915	.0518A	.0149	.98	-2.8	.98	-2.4	.44	.43	69.4	68.7	-.0722	602339
41	15423	21915	-.9998A	.0163	1.16	9.9	1.24	9.9	.29	.40	70.4	75.3	.0913	602341
42	15309	21915	-1.0165A	.0164	1.05	6.6	1.06	4.2	.40	.40	73.5	75.5	.1384	602343
43	12378	21915	-.3910A	.0152	1.00	.7	.98	-1.6	.46	.42	70.2	70.3	.2164	602348
44	14049	21915	-.3186A	.0151	1.10	9.9	1.13	9.9	.31	.43	65.5	69.9	-.2486	602349
45	17213	21915	-1.4552A	.0178	.93	-7.8	.81	-9.9	.45	.37	81.2	80.3	.0336	602354
46	3211	3575	-2.2900	.0574	.92	-2.1	.74	-3.8	.36	.27	90.2	89.9	.0006	632654
47	2470	3575	-.7326	.0391	1.11	6.0	1.16	5.0	.29	.39	70.1	73.3	.0006	632655
48	2703	3575	-1.1150	.0417	.90	-5.1	.77	-6.4	.47	.37	78.9	77.5	.0005	632660
49	2754	3575	-1.2063	.0425	.97	-1.5	.90	-2.6	.40	.36	78.7	78.5	.0005	632661
50	1916	3575	.0551	.0366	1.03	2.3	1.03	1.5	.39	.42	66.5	67.9	.0007	632663
51	2218	3575	-.3611	.0375	1.12	7.5	1.16	6.3	.30	.41	65.4	70.0	.0007	632665
52	3244	3575	-2.4043	.0597	.88	-2.8	.62	-5.6	.39	.26	91.0	90.8	.0005	632667
53	1766	3575	.2572	.0365	1.26	9.9	1.34	9.9	.18	.42	56.4	67.7	.0008	632668
54	3036	3575	-1.7954	.0492	.97	-.9	1.03	.5	.33	.31	85.5	85.2	.0005	632669
55	868	3575	1.5842	.0420	1.20	8.6	1.56	9.9	.17	.38	74.4	77.9	.0009	632670
56	2777	3452	-1.4539	.0458	.98	-.8	.99	-.2	.37	.35	81.6	81.3	-.0004	632682
57	1880	3452	.0161	.0375	1.14	9.1	1.17	7.7	.31	.43	62.2	68.6	-.0002	632684
58	2793	3452	-1.4881	.0462	1.04	1.4	1.18	3.6	.30	.35	82.1	81.7	-.0004	632685
59	2137	3452	-.3559	.0383	.97	-1.7	.93	-3.0	.44	.42	70.4	70.5	-.0003	632686
60	2607	3452	-1.1198	.0426	.98	-.8	.96	-.9	.39	.37	77.1	77.5	-.0004	632687
61	2762	3452	-1.4224	.0454	1.06	2.2	1.17	3.5	.29	.35	80.3	80.9	-.0004	632688
62	2734	3452	-1.3646	.0448	.90	-4.3	.81	-4.6	.45	.36	82.0	80.3	-.0004	632690
63	3038	3452	-2.1066	.0548	.90	-2.7	.70	-4.9	.39	.29	88.5	88.1	-.0005	632691
64	3049	3452	-2.1405	.0554	.96	-1.0	.92	-1.2	.32	.29	88.3	88.4	-.0005	632694

ENTRY NUMBER	TOTAL SCORE	COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
65	1738	3452	.2170	.0374	1.26	9.9	1.34	9.9	.20	.43	57.0	68.2	-.0002	632695
66	2808	3420	-1.5914	.0475	.80	-7.7	.62	-8.3	.51	.34	84.6	82.6	-.0003	632701
67	2430	3420	-.8602	.0410	1.18	9.0	1.34	8.9	.23	.39	70.0	74.7	-.0003	632702
68	2252	3420	-.5704	.0394	.97	-1.8	.97	-1.1	.44	.41	72.7	72.1	-.0002	632704
69	1185	3420	1.0126	.0395	.97	-1.6	1.00	.0	.45	.43	73.3	72.2	.0000	632705
70	3168	3420	-2.7046	.0673	.90	-2.0	.56	-5.4	.35	.24	92.6	92.6	-.0001	632706
71	2195	3420	-.4816	.0391	.96	-2.7	.90	-3.7	.46	.42	72.0	71.4	-.0002	632707
72	2657	3420	-1.2729	.0441	1.05	2.0	1.18	3.8	.31	.36	79.1	79.0	-.0003	632708
73	2970	3420	-2.0018	.0531	.91	-2.8	.73	-4.3	.39	.30	87.3	86.9	-.0004	632710
74	2356	3420	-.7370	.0402	.97	-1.8	.94	-2.0	.43	.40	74.9	73.5	-.0002	632712
75	2431	3420	-.8619	.0410	1.01	.5	.99	-.3	.39	.39	73.7	74.7	-.0003	632713
76	4296	7927	-.2280	.0249	1.17	9.9	1.26	9.9	.29	.43	62.7	69.1	-.0005	632716
77	6365	7927	-1.7261	.0305	.89	-6.4	.77	-7.4	.47	.38	83.0	81.5	-.0007	632719
78	4739	7927	-.5097	.0253	.96	-4.0	.97	-1.7	.46	.43	72.2	70.2	-.0005	632720
79	4999	7927	-.6799	.0256	.99	-.5	.98	-.8	.43	.42	71.1	71.2	-.0005	632721
80	3926	7927	.0036	.0249	.99	-.6	1.00	.1	.44	.43	69.5	68.9	-.0005	632722
81	4046	7927	-.0714	.0249	1.02	2.6	1.06	4.1	.41	.43	67.9	68.9	-.0004	632723
82	5571	7927	-1.0765	.0269	1.13	9.9	1.19	7.8	.31	.41	70.7	74.5	-.0006	632724
83	6713	7927	-2.0827	.0334	.89	-5.7	.76	-6.5	.45	.36	86.0	85.4	-.0006	632725
84	5646	7927	-1.1318	.0271	.95	-4.0	.88	-5.2	.45	.41	75.5	75.0	-.0006	632726
85	4530	7927	-.3759	.0251	.94	-6.3	.90	-6.7	.48	.43	71.8	69.6	-.0005	632727
86	3261	3541	-2.6110	.0643	.98	-.5	.88	-1.3	.27	.25	92.2	92.1	.0004	632950
87	3225	3541	-2.4681	.0611	.89	-2.5	.72	-3.6	.36	.26	91.2	91.1	.0004	632953
88	1878	3541	.1043	.0372	1.10	6.4	1.13	5.8	.36	.44	64.5	68.9	.0005	632954
89	2190	3541	-.3395	.0380	.94	-4.2	.91	-3.7	.48	.43	73.4	70.7	.0004	632955
90	2843	3541	-1.4381	.0452	.91	-3.5	.80	-4.3	.44	.36	82.1	81.2	.0003	632956
91	2815	3541	-1.3810	.0446	.88	-5.2	.70	-7.0	.48	.36	81.9	80.6	.0003	632959
92	2725	3541	-1.2065	.0430	.97	-1.5	.86	-3.5	.42	.37	77.7	78.7	.0003	632960
93	1397	3541	.7833	.0380	1.13	7.9	1.22	8.5	.33	.44	66.1	70.5	.0005	632961
94	1871	3541	.1141	.0372	1.05	3.5	1.06	2.8	.40	.44	66.2	68.9	.0005	632962
95	2873	3541	-1.5010	.0459	.92	-3.2	.81	-4.0	.42	.35	83.0	81.9	.0003	632963
MEAN	8679.9	12688	-.9057	.0297	1.00	.6	.98	.0			75.7	76.5		
S.D.	6352.3	8847.8	.8622	.0144	.10	6.6	.20	6.9			8.3	6.7		

Grade 4

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
1	15852	21610	-.9602A	.0162	.91	-9.9	.86	-9.9	.43	.37	77.4	74.7	-.0909	563203
2	17573	21610	-1.5606A	.0184	.89	-9.9	.83	-9.7	.43	.33	83.5	81.8	-.0139	563204
3	10139	21610	.2878A	.0148	1.06	9.9	1.10	9.9	.34	.40	65.5	67.1	.0002	563217
4	17010	21610	-1.5096A	.0182	1.05	4.8	1.02	1.2	.36	.34	79.9	81.2	.1230	563222
5	17125	21610	-1.4584A	.0179	.96	-4.3	.89	-6.8	.41	.34	81.0	80.6	.0336	563283
6	17215	21610	-1.4091A	.0177	.84	-9.9	.70	-9.9	.49	.35	82.4	80.0	-.0464	563293
7	17850	21610	-1.7562A	.0194	1.00	.2	.90	-5.1	.38	.32	83.3	84.1	.0858	563297
8	16707	21610	-1.3791A	.0176	1.01	.6	.92	-4.7	.40	.35	78.4	79.7	.0852	563299
9	16708	21610	-1.3881A	.0177	.94	-6.0	.86	-8.5	.45	.35	80.4	79.8	.0940	563359
10	16287	21610	-1.1306A	.0167	.91	-9.9	.87	-9.3	.43	.36	79.6	76.7	-.0419	563360
11	16829	21610	-1.1604A	.0168	.95	-5.8	.94	-4.4	.33	.36	79.0	77.1	-.1757	563361
12	18215	21610	-1.8979A	.0202	1.03	2.2	1.02	.8	.34	.31	85.0	85.6	.0903	563362
13	15038	21610	-.9852A	.0163	1.16	9.9	1.26	9.9	.28	.37	71.0	75.0	.1520	563370
14	11443	21610	-.0553A	.0148	1.00	-.2	1.00	.4	.40	.40	67.6	67.3	.0565	563374
15	15579	21610	-1.1353A	.0167	1.04	4.7	.96	-2.5	.41	.36	74.3	76.8	.1615	563377
16	10325	21610	.2067A	.0147	1.11	9.9	1.17	9.9	.29	.40	61.6	67.0	.0400	565123
17	18444	21610	-1.9510A	.0205	.96	-3.4	.79	-9.7	.40	.31	85.8	86.2	.0505	565174
18	14986	21610	-.7734A	.0157	.97	-4.2	.95	-4.4	.40	.38	73.4	72.6	-.0488	602361
19	17181	21610	-1.4769A	.0180	1.08	7.8	1.24	9.9	.26	.34	80.1	80.8	.0342	602363
20	14207	21610	-.6410A	.0155	.99	-.9	.99	-1.3	.40	.39	71.8	71.3	.0121	602367
21	15960	21610	-.9138A	.0161	.94	-8.8	.93	-5.5	.37	.37	76.9	74.2	-.1682	602369
22	13379	21610	-.2715A	.0149	.97	-5.7	.96	-4.5	.41	.40	69.6	68.3	-.1625	602370
23	11021	21610	.1180A	.0147	1.11	9.9	1.15	9.9	.29	.40	61.7	67.0	-.0237	602375
24	14973	21610	-.8232A	.0159	1.13	9.9	1.27	9.9	.24	.38	69.8	73.2	.0049	602393
25	11871	21610	.0658A	.0147	1.08	9.9	1.13	9.9	.32	.40	63.3	67.0	-.1582	602395
26	16880	21610	-1.2377A	.0171	1.02	2.1	1.12	7.4	.27	.36	79.0	78.0	-.1127	602396

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
27	18808	21610	-1.9911A	.0208	.95	-3.7	.87	-5.6	.32	.30	87.2	86.6	-.0696	602399
28	11807	21610	.1193A	.0147	1.01	2.3	1.02	1.9	.39	.40	66.1	67.0	-.1971	602400
29	12227	21610	.4090A	.0148	1.09	9.9	1.19	9.9	.37	.40	64.2	67.5	-.5742	602401
30	6330	21610	.9393A	.0155	.98	-3.4	1.01	.7	.33	.38	72.9	71.3	.2369	602407
31	7530	21610	.5950A	.0150	.97	-5.0	1.00	-.4	.37	.40	70.3	68.4	.2832	602408
32	17774	21610	-1.6303A	.0187	1.01	.9	1.06	3.3	.31	.33	82.8	82.6	-.0150	602429
33	14629	21610	-.7838A	.0158	.95	-7.8	.90	-9.1	.45	.38	74.1	72.7	.0523	602432
34	12018	21610	-.6004A	.0154	1.37	9.9	1.58	9.9	.17	.39	58.0	70.9	.4757	602434
35	15627	21610	-1.0184A	.0164	1.05	6.2	1.10	7.1	.33	.37	74.3	75.4	.0300	602435
36	12127	21610	-.0346A	.0148	.94	-9.9	.93	-8.9	.45	.40	70.4	67.3	-.1150	602436
37	12990	21610	-.1452A	.0148	.99	-2.5	.98	-3.0	.39	.40	68.1	67.7	-.1990	602442
38	15664	21610	-1.5307A	.0183	1.23	9.9	1.16	8.6	.46	.34	74.7	81.5	.5366	602443
39	14662	21610	-.7300A	.0156	1.09	9.9	1.15	9.9	.29	.38	70.1	72.2	-.0104	602446
40	13173	21610	-.4902A	.0152	.94	-9.7	.90	-9.9	.47	.39	71.4	69.9	.1045	602447
41	12771	21610	-.2215A	.0149	.96	-7.7	.93	-8.7	.43	.40	69.6	68.0	-.0729	602449
42	17698	21610	-1.6294A	.0187	.88	-9.9	.71	-9.9	.47	.33	83.4	82.6	.0118	602450
43	15447	21610	-.8004A	.0158	.97	-3.9	.95	-4.3	.36	.38	74.2	72.9	-.1423	602455
44	15819	21610	-1.1581A	.0168	1.01	.9	.96	-2.9	.41	.36	75.9	77.0	.1191	602456
45	12944	21610	-.1812A	.0149	1.00	-.4	.99	-1.2	.39	.40	68.0	67.8	-.1525	602460
46	4375	7655	-.3741	.0251	1.00	-.5	.98	-1.6	.41	.40	67.8	68.1	.0001	633012
47	4011	7655	-.1450	.0249	1.04	4.4	1.12	8.3	.36	.41	65.8	67.4	.0001	633013
48	5053	7655	-.8201	.0261	.99	-.5	1.00	.0	.40	.39	71.8	71.4	.0000	633014
49	2963	7655	.5172	.0254	1.11	9.9	1.20	9.9	.28	.40	66.1	69.4	.0003	633016
50	5106	7655	-.8567	.0262	.91	-7.9	.89	-6.3	.47	.39	75.1	71.8	.0000	633017
51	6640	7655	-2.2214	.0356	.92	-3.3	.79	-5.4	.40	.32	87.3	87.3	-.0001	633019
52	2509	7655	.8231	.0263	1.05	4.1	1.08	4.0	.34	.38	70.0	72.0	.0003	633021
53	5921	7655	-1.4801	.0292	.94	-3.9	.89	-4.1	.42	.36	80.2	78.9	-.0001	633024
54	3568	7655	.1316	.0249	1.11	9.9	1.15	9.8	.30	.40	63.1	67.4	.0002	633025
55	5421	7655	-1.0823	.0271	.94	-5.1	.89	-5.6	.44	.38	75.5	74.2	.0000	633026
56	3040	3525	-1.8904	.0511	.96	-1.3	.82	-3.2	.35	.29	86.6	86.4	-.0005	633033
57	3282	3525	-2.7194	.0680	.87	-2.5	.50	-6.7	.38	.22	93.1	93.1	-.0004	633035
58	2542	3525	-.8880	.0402	.94	-3.2	.86	-4.6	.44	.37	75.6	74.9	-.0005	633039
59	2862	3525	-1.4743	.0455	.85	-6.0	.67	-8.0	.49	.33	83.1	81.8	-.0006	633043
60	2703	3525	-1.1649	.0424	.98	-.8	.94	-1.5	.38	.35	78.1	78.1	-.0005	633044
61	2439	3525	-.7240	.0392	1.04	2.0	1.07	2.3	.34	.38	71.8	73.1	-.0005	633046
62	2254	3525	-.4472	.0379	.98	-1.5	.99	-.4	.41	.39	71.9	70.3	-.0005	633047
63	1890	3525	.0592	.0366	1.02	1.4	1.03	1.6	.38	.40	67.0	67.3	-.0004	633048
64	2156	3525	-.3072	.0374	1.07	4.8	1.09	3.9	.33	.40	65.9	69.1	-.0004	633049
65	3053	3525	-1.9252	.0516	.89	-3.4	.69	-5.7	.42	.29	87.2	86.7	-.0005	633053
66	1660	3441	.2942	.0367	1.08	5.8	1.11	6.3	.31	.39	62.9	66.3	.0011	633054
67	2724	3441	-1.3286	.0443	.92	-3.5	.83	-4.3	.42	.33	81.4	80.0	.0008	633056
68	2280	3441	-.5748	.0386	1.12	7.0	1.17	6.4	.25	.37	66.2	71.1	.0009	633059
69	2966	3441	-1.8801	.0514	.89	-3.4	.70	-5.9	.42	.29	86.6	86.3	.0007	633060
70	3124	3441	-2.3734	.0606	.91	-2.0	.66	-5.2	.36	.25	90.8	90.8	.0008	633062
71	2562	3441	-1.0285	.0415	.98	-1.1	.99	-.3	.37	.35	77.5	76.3	.0008	633063
72	1220	3441	.9102	.0382	1.16	9.8	1.28	9.9	.20	.38	65.2	69.9	.0012	633066
73	1350	3441	.7226	.0375	1.15	9.9	1.23	9.9	.22	.38	63.1	68.2	.0012	633068
74	2979	3441	-1.9152	.0520	.91	-2.7	.74	-5.0	.39	.28	86.7	86.6	.0007	633072
75	1891	3441	-.0206	.0369	.93	-5.5	.91	-4.9	.46	.39	70.8	66.8	.0010	633073
76	2692	3463	-1.2131	.0432	.92	-3.3	.85	-4.3	.42	.34	79.9	78.8	.0004	633074
77	1944	3463	-.0558	.0368	1.06	4.5	1.08	4.0	.33	.39	64.5	67.2	.0006	633075
78	2352	3463	-.6413	.0389	.97	-2.0	.96	-1.7	.40	.37	72.7	71.9	.0005	633077
79	2334	3463	-.6138	.0388	1.02	1.1	.98	-.7	.36	.37	69.6	71.6	.0005	633081
80	2968	3463	-1.8152	.0506	.91	-2.7	.78	-4.4	.39	.29	86.2	85.8	.0004	633085
81	2611	3463	-1.0653	.0419	.91	-4.5	.85	-4.7	.44	.35	79.0	76.9	.0004	633086
82	2109	3463	-.2851	.0374	1.02	1.3	1.01	.4	.37	.38	67.0	68.6	.0005	633087
83	2083	3463	-.2485	.0373	1.02	1.2	1.00	.2	.37	.38	67.3	68.3	.0005	633088
84	2363	3463	-.6582	.0390	1.13	7.3	1.24	8.4	.23	.37	68.3	72.1	.0005	633090
85	1836	3463	.0914	.0366	1.03	2.5	1.04	2.3	.36	.39	64.6	66.6	.0006	633093
86	2977	3526	-1.6883	.0486	.98	-.6	.89	-2.2	.33	.30	84.6	84.6	.0001	633098
87	1935	3526	.0289	.0365	1.08	5.8	1.09	4.6	.32	.40	63.5	67.2	.0003	633099
88	3012	3526	-1.7739	.0498	.94	-1.8	.86	-2.6	.35	.29	86.3	85.6	.0001	633101
89	3092	3526	-1.9879	.0532	.92	-2.1	.83	-2.8	.35	.28	87.9	87.7	.0002	633102
90	2055	3526	-.1342	.0368	1.09	6.6	1.12	5.9	.30	.39	63.7	68.0	.0003	633105
91	2633	3526	-1.0025	.0412	.94	-2.7	.93	-2.2	.41	.35	77.8	76.5	.0002	633106
92	2885	3526	-1.4811	.0459	.98	-.7	.96	-.9	.34	.32	82.7	82.2	.0001	633107
93	1850	3526	.1432	.0364	1.05	3.8	1.06	3.1	.35	.40	64.3	66.9	.0004	633111
94	1702	3526	.3415	.0364	1.02	1.6	1.04	2.1	.37	.40	66.4	66.9	.0004	633114

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
95	2876	3526	-1.4620	.0457	.95	-1.8	.84	-3.6	.38	.32	82.1	82.0	.0002	633118
MEAN	8438.9	12511	-.7977	.0288	1.00	.1	.98	-.4			74.4	75.0		
S.D.	6256.0	8716.3	.8186	.0134	.09	5.9	.16	6.2			8.1	7.0		

Grade 5

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
1	16032	21401	-1.4951A	.0183	1.12	9.9	1.12	6.2	.43	.36	77.8	81.1	.3412	563480
2	15237	21401	-1.1427A	.0170	1.12	9.9	1.22	9.9	.36	.38	74.1	77.1	.2100	563501
3	12530	21401	-.5271A	.0155	1.06	9.1	1.07	7.0	.42	.41	68.3	71.0	.2624	563503
4	15317	21401	-.9623A	.0164	1.04	5.6	1.07	5.6	.35	.39	74.4	75.2	.0055	563563
5	17468	21401	-1.5345A	.0184	.81	-9.9	.65	-9.9	.50	.36	84.7	81.5	-.0877	563566
6	17935	21401	-1.5424A	.0185	.84	-9.9	.76	-9.9	.39	.36	85.0	81.6	-.2601	563568
7	16163	21401	-1.5465A	.0185	1.35	9.9	1.69	9.9	.22	.36	75.9	81.7	.3543	563569
8	13568	21401	-.6391A	.0157	1.10	9.9	1.13	9.9	.35	.41	67.9	71.9	.1292	563571
9	15425	21401	-.8477A	.0161	.96	-5.2	.93	-5.9	.39	.40	75.0	74.0	-.1406	563573
10	12447	21401	-.2960A	.0152	1.02	3.7	1.02	2.3	.41	.42	67.6	69.3	.0500	563574
11	8616	21401	.5935A	.0152	.97	-4.5	1.02	1.8	.42	.41	71.2	68.9	.0327	563575
12	16143	21401	-.9659A	.0164	.89	-9.9	.83	-9.9	.43	.39	78.5	75.2	-.2290	563577
13	18632	21401	-2.3223A	.0231	1.09	5.4	1.01	.4	.38	.30	87.6	89.4	.2337	563632
14	13457	21401	-.4969A	.0154	1.04	6.8	1.04	3.7	.38	.41	68.4	70.7	.0130	563636
15	17335	21401	-1.7298A	.0194	.99	-1.2	.92	-4.1	.45	.34	82.8	83.7	.1597	563641
16	12814	21401	-.3818A	.0153	1.06	9.0	1.07	7.5	.37	.41	67.3	69.9	.0504	563647
17	19330	21401	-2.8217A	.0276	1.21	9.1	.93	-2.0	.40	.26	90.6	93.0	.3695	565199
18	17085	21401	-1.9237A	.0204	1.15	9.9	.93	-2.9	.50	.33	81.2	85.7	.4421	565201
19	10805	21401	.0059A	.0150	1.05	9.4	1.08	9.6	.37	.42	65.8	68.0	.1214	565341
20	10174	21401	.0622A	.0150	1.10	9.9	1.13	9.9	.34	.42	63.3	67.9	.2068	602462
21	8902	21401	.6489A	.0152	1.02	2.9	1.06	6.1	.40	.41	69.4	69.2	-.0869	602464
22	11468	21401	.0877A	.0150	1.01	1.4	1.01	1.3	.41	.42	67.6	67.9	-.1088	602465
23	10310	21401	.3858A	.0150	1.11	9.9	1.18	9.9	.32	.41	64.0	68.1	-.1441	602467
24	14137	21401	-.3420A	.0152	.96	-6.7	.94	-6.8	.41	.41	71.0	69.6	-.3096	602468
25	15392	21401	-1.0407A	.0166	1.01	1.8	1.01	1.0	.40	.39	75.7	76.0	.0642	602469
26	14195	21401	-.8232A	.0161	1.09	9.9	1.12	9.2	.37	.40	70.7	73.7	.1596	602470
27	16774	21401	-1.3205A	.0176	.96	-4.6	.93	-4.1	.38	.37	80.2	79.1	-.0661	602473
28	13354	21401	-.5507A	.0155	.98	-2.6	.93	-6.6	.45	.41	70.8	71.2	.0918	602474
29	16257	21401	-1.1130A	.0169	.88	-9.9	.81	-9.9	.45	.38	79.5	76.8	-.1138	602475
30	16939	21401	-1.4107A	.0179	.84	-9.9	.68	-9.9	.51	.37	82.3	80.2	-.0287	602476
31	11428	21401	.1870A	.0149	.99	-1.0	1.02	1.8	.42	.42	69.2	67.8	-.1980	602477
32	14232	21401	-.7458A	.0159	.91	-9.9	.85	-9.9	.50	.40	75.2	72.9	.0722	602478
33	14461	21401	-.6124A	.0156	1.03	4.8	1.03	2.7	.35	.41	70.5	71.7	-.1204	602479
34	16837	21401	-1.1855A	.0171	.75	-9.9	.64	-9.9	.52	.38	83.7	77.6	-.2247	602481
35	16114	21401	-1.1237A	.0169	.86	-9.9	.74	-9.9	.50	.38	79.6	76.9	-.0596	602483
36	12827	21401	-.2709A	.0152	1.06	9.9	1.09	9.8	.35	.42	66.2	69.2	-.0636	602495
37	16887	21401	-1.4210A	.0180	.91	-9.1	.79	-9.9	.46	.37	81.4	80.3	-.0006	602496
38	18150	21401	-1.7879A	.0197	.86	-9.9	.75	-9.9	.42	.34	86.0	84.3	-.0964	602497
39	9056	21401	.6248A	.0152	1.02	3.5	1.10	9.9	.40	.41	69.9	69.1	-.0982	602498
40	8963	21401	.6160A	.0152	1.24	9.9	1.36	9.9	.20	.41	59.4	69.0	-.0685	602499
41	13772	21401	-.7984A	.0160	1.12	9.9	1.14	9.9	.37	.40	69.0	73.5	.2396	602500
42	12353	21401	.1428A	.0149	1.01	1.6	1.02	2.7	.41	.42	67.7	67.8	-.3640	602501
43	17725	21401	-1.5213A	.0184	.88	-9.9	.84	-9.4	.38	.36	84.3	81.4	-.1982	602507
44	15771	21401	-1.1015A	.0168	.99	-1.0	.95	-3.7	.41	.39	76.4	76.7	.0186	602509
45	11084	21401	.1651A	.0149	1.19	9.9	1.26	9.9	.24	.42	59.1	67.8	-.0993	602510
46	17358	21401	-1.6572A	.0190	.96	-3.8	.90	-4.9	.43	.35	83.1	82.9	.0776	602511
47	19125	21401	-2.2383A	.0225	.82	-9.9	.69	-9.9	.41	.31	90.0	88.7	-.1060	602512
48	14434	21401	-.7099A	.0158	.96	-5.4	.92	-7.3	.44	.40	73.2	72.6	-.0153	602513
49	2569	3445	-1.0175	.0418	.96	-2.1	.88	-3.6	.42	.36	76.8	76.6	.0011	633217
50	1431	3445	.6552	.0374	1.12	7.9	1.21	9.4	.28	.40	63.2	68.3	.0013	633218
51	1163	3445	1.0474	.0388	1.05	3.0	1.18	6.6	.32	.39	71.6	71.3	.0013	633219
52	2036	3445	-.1880	.0375	1.19	9.9	1.27	9.9	.21	.40	60.5	68.6	.0012	633220
53	3288	3445	-3.1698	.0830	.89	-1.6	.50	-5.3	.33	.19	95.4	95.4	.0013	633222
54	1693	3445	.2900	.0370	1.13	9.3	1.19	9.4	.28	.41	61.3	67.2	.0012	633223
55	3248	3445	-2.9194	.0749	.89	-1.8	.62	-4.3	.33	.21	94.4	94.3	.0012	633225
56	2715	3445	-1.2902	.0443	.89	-4.6	.81	-5.0	.46	.35	81.6	79.9	.0011	633226

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
57	2838	3445	-1.5494	.0472	.98	-.6	.92	-1.6	.35	.33	83.2	82.9	.0010	633227
58	950	3445	1.3879	.0409	1.29	9.9	1.65	9.9	.06	.37	69.1	75.1	.0013	633228
59	1817	3451	.0812	.0369	1.13	9.2	1.17	8.7	.27	.40	61.4	67.0	.0024	633233
60	1799	3451	.1060	.0369	1.25	9.9	1.34	9.9	.15	.40	54.8	66.9	.0024	633234
61	1459	3451	.5744	.0372	1.06	4.5	1.10	4.6	.33	.40	65.4	67.7	.0025	633235
62	1021	3451	1.2247	.0399	1.21	9.9	1.38	9.9	.15	.37	67.8	73.6	.0027	633236
63	873	3451	1.4737	.0417	1.08	3.8	1.39	9.9	.24	.36	76.7	76.6	.0027	633237
64	2464	3451	-.8675	.0404	1.05	2.5	1.08	2.5	.32	.37	73.6	74.4	.0021	633238
65	2084	3451	-.2911	.0376	.96	-2.8	.94	-2.6	.43	.39	71.0	68.8	.0023	633240
66	1216	3451	.9236	.0383	1.07	4.4	1.18	7.1	.30	.39	68.7	70.4	.0026	633241
67	2113	3451	-.3325	.0377	1.06	3.9	1.05	2.4	.34	.39	66.2	69.1	.0022	633243
68	2902	3451	-1.7206	.0489	.86	-4.7	.67	-7.0	.46	.31	85.2	84.4	.0019	633244
69	2737	3492	-1.2925	.0439	.90	-4.4	.74	-6.8	.47	.36	80.6	79.7	.0006	633267
70	1422	3492	.6813	.0375	1.18	9.9	1.28	9.9	.24	.41	61.7	68.8	.0010	633268
71	2830	3492	-1.4813	.0459	.92	-3.3	.80	-4.7	.43	.34	82.4	81.8	.0005	633269
72	2267	3492	-.5051	.0385	.90	-6.3	.86	-5.9	.50	.40	74.5	71.2	.0007	633270
73	1035	3492	1.2610	.0399	1.02	1.2	1.12	3.8	.35	.39	73.6	73.9	.0011	633271
74	2542	3492	-.9401	.0409	.97	-1.3	.96	-1.1	.40	.38	76.6	75.6	.0007	633272
75	1115	3492	1.1344	.0392	1.04	2.5	1.17	5.8	.34	.39	72.2	72.5	.0011	633273
76	2330	3492	-.6003	.0389	.96	-2.5	.90	-4.0	.44	.40	72.8	72.0	.0007	633274
77	1746	3492	.2314	.0369	1.21	9.9	1.27	9.9	.22	.42	57.5	67.7	.0009	633275
78	2647	3492	-1.1238	.0424	.99	-.4	.91	-2.4	.39	.37	76.8	77.7	.0006	633278
79	2637	7479	.7216	.0265	1.14	9.9	1.26	9.9	.28	.41	67.3	71.4	-.0001	633279
80	3961	7479	-.1654	.0255	.99	-1.3	.98	-1.4	.44	.43	69.2	68.8	-.0003	633281
81	6000	7479	-1.7172	.0314	.89	-6.6	.74	-8.9	.49	.38	82.6	81.6	-.0008	633282
82	5664	7479	-1.4057	.0293	.86	-9.8	.71	-9.9	.53	.40	80.7	78.2	-.0006	633283
83	4426	7479	-.4757	.0259	1.06	5.7	1.06	3.3	.38	.43	66.9	70.0	-.0003	633284
84	2116	7479	1.1080	.0279	1.25	9.9	1.56	9.9	.15	.39	69.4	75.1	-.0001	633285
85	5190	7479	-1.0213	.0275	.92	-6.5	.85	-7.4	.49	.42	76.1	74.3	-.0006	633287
86	2334	7479	.9414	.0272	1.42	9.9	1.81	9.9	.01	.40	62.8	73.4	-.0001	633290
87	6105	7479	-1.8243	.0322	.92	-4.6	.86	-4.2	.44	.37	84.0	82.7	-.0008	633291
88	4797	7479	-.7327	.0265	.92	-6.9	.87	-7.2	.49	.42	74.3	71.8	-.0005	633293
89	3233	3534	-2.4640	.0623	.88	-2.6	.60	-5.8	.39	.26	91.7	91.5	.0006	633294
90	2264	3534	-.4199	.0380	1.20	9.9	1.31	9.9	.21	.40	63.8	70.8	.0008	633296
91	2317	3534	-.4981	.0384	1.05	2.8	1.02	1.0	.36	.40	68.3	71.5	.0008	633297
92	3216	3534	-2.3989	.0609	.90	-2.2	.67	-4.7	.37	.26	91.2	91.0	.0006	633298
93	1951	3534	.0207	.0368	1.02	1.4	1.00	-.1	.40	.41	66.2	68.0	.0009	633299
94	988	3534	1.3935	.0403	1.04	1.9	1.21	6.1	.32	.38	74.9	74.8	.0010	633301
95	3012	3534	-1.7804	.0499	.94	-2.0	.74	-5.1	.40	.32	85.7	85.5	.0006	633302
96	2783	3534	-1.2774	.0439	.87	-5.6	.73	-7.2	.49	.36	81.5	80.0	.0007	633303
97	1684	3534	.3836	.0367	1.10	7.3	1.17	8.5	.31	.41	64.4	67.6	.0010	633305
98	1384	3534	.7972	.0374	1.29	9.9	1.41	9.9	.13	.40	56.7	69.2	.0010	633306
MEAN	8379.9	12665	-.5966	.0288	1.02	1.4	1.02	.8			73.8	75.3		
S.D.	6369.6	8634.6	1.0516	.0141	.13	7.0	.24	7.3			8.9	6.9		

Grade 6

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
1	17039	20874	-1.5344A	.0189	.89	-9.9	.79	-9.9	.44	.36	83.4	82.2	-.0408	563804
2	16931	20874	-1.5667A	.0191	.93	-6.2	.81	-9.9	.44	.36	82.8	82.5	.0323	563809
3	15898	20874	-1.1755A	.0175	1.06	6.4	1.09	5.5	.32	.38	77.1	78.2	-.0149	563812
4	17510	20874	-1.7914A	.0202	.90	-8.3	.73	-9.9	.46	.34	85.4	84.9	.0356	563815
5	16643	20874	-1.4586A	.0186	.99	-.7	.97	-1.7	.38	.36	81.7	81.3	.0257	563818
6	14647	20874	-.8313A	.0164	1.05	6.0	1.04	3.0	.36	.40	72.3	74.4	.0035	563821
7	14293	20874	-.6942A	.0161	.99	-1.5	.96	-3.8	.41	.40	72.9	73.0	-.0389	563827
8	14726	20874	-.9023A	.0166	1.06	8.0	1.07	5.3	.36	.39	72.9	75.1	.0533	563828
9	16912	20874	-1.5654A	.0191	.99	-1.0	1.09	4.4	.37	.36	82.8	82.5	.0380	563832
10	17441	20874	-1.7463A	.0200	.89	-9.4	.73	-9.9	.46	.34	85.2	84.4	.0180	563834
11	15892	20874	-1.5244A	.0189	1.25	9.9	1.38	9.9	.32	.36	77.1	82.1	.3403	563838
12	13065	20874	-.3038A	.0154	1.04	6.7	1.08	8.7	.35	.41	68.4	69.7	-.1165	563868

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
13	11303	20874	-.0790A	.0152	1.02	3.6	1.04	4.2	.40	.42	68.0	68.4	.0784	563869
14	13307	20874	-.6402A	.0160	1.12	9.9	1.16	9.9	.34	.41	68.1	72.5	.1610	563874
15	14807	20874	-.8196A	.0164	.96	-5.3	.92	-6.4	.42	.40	74.9	74.3	-.0528	563878
16	15648	20874	-.8092A	.0164	.84	-9.9	.76	-9.9	.46	.40	79.0	74.1	-.3092	563879
17	13991	20874	-.4213A	.0156	1.03	5.2	1.04	4.3	.34	.41	68.9	70.6	-.2336	565900
18	14288	20874	-.5786A	.0159	.97	-4.8	.97	-3.1	.40	.41	72.8	71.9	-.1541	565903
19	19062	20874	-2.4410A	.0248	.81	-9.9	.67	-9.9	.39	.29	91.8	90.7	-.1094	602529
20	19024	20874	-2.5612A	.0258	.98	-1.2	.95	-1.6	.33	.28	91.5	91.6	.0396	602531
21	12744	20874	-.4061A	.0156	1.02	3.8	1.02	2.3	.40	.41	69.6	70.5	.0645	602532
22	14931	20874	-1.2859A	.0179	1.01	.9	.85	-9.2	.56	.37	76.4	79.4	.3834	602533
23	11605	20874	.3048A	.0151	1.06	9.8	1.08	8.6	.38	.42	65.3	67.8	-.3712	602534
24	15588	20874	-1.2012A	.0176	.96	-4.4	.88	-8.0	.47	.38	78.2	78.5	.1069	602535
25	18540	20874	-2.3573A	.0241	.96	-2.1	.69	-9.9	.43	.30	89.3	90.1	.1246	602536
26	7563	20874	.7691A	.0155	1.06	9.4	1.14	9.9	.32	.40	68.4	69.6	.1086	602537
27	18777	20874	-2.3232A	.0238	.89	-6.5	.85	-5.0	.36	.30	90.5	89.8	-.0469	602539
28	16149	20874	-1.2167A	.0176	.86	-9.9	.74	-9.9	.49	.38	81.2	78.6	-.0535	602543
29	6431	20874	1.3112A	.0166	1.07	8.2	1.22	9.9	.36	.38	73.3	74.8	-.1388	602545
30	13001	20874	-.5047A	.0157	1.01	1.8	1.00	.0	.42	.41	70.4	71.2	.1005	602546
31	15891	20874	-1.4605A	.0186	1.19	9.9	1.26	9.9	.34	.36	77.4	81.3	.2762	602548
32	14836	20874	-.6366A	.0160	.93	-9.9	.89	-9.8	.41	.41	75.3	72.4	-.2458	602549
33	16022	20874	-1.4264A	.0184	1.04	4.2	.99	-.5	.43	.37	79.2	81.0	.2005	602550
34	15259	20874	-.9851A	.0169	.96	-4.8	.91	-6.7	.43	.39	76.8	76.0	-.0144	602552
35	14463	20874	-.8952A	.0166	1.11	9.9	1.15	9.9	.34	.39	71.8	75.1	.1182	602553
36	18406	20874	-2.0944A	.0221	.85	-9.9	.63	-9.9	.43	.32	88.8	87.8	-.0719	602554
37	10935	20874	.1416A	.0151	1.17	9.9	1.28	9.9	.26	.42	60.3	67.8	-.0559	602557
38	11567	20874	-.1375A	.0153	1.20	9.9	1.27	9.9	.25	.42	60.3	68.7	.0753	602558
39	8251	20874	.4352A	.0152	1.10	9.9	1.17	9.9	.30	.41	64.3	68.0	.2740	602559
40	9075	20874	.6303A	.0153	1.24	9.9	1.35	9.9	.20	.41	59.0	68.8	-.1115	602561
41	12425	20874	-.5166A	.0158	1.10	9.9	1.12	9.9	.38	.41	67.2	71.4	.2523	602562
42	12441	20874	-.2852A	.0154	1.09	9.9	1.11	9.9	.34	.41	65.8	69.6	.0165	602563
43	13691	20874	-.6943A	.0161	1.03	4.0	1.02	1.4	.41	.40	71.7	73.0	.1184	602564
44	18141	20874	-1.9826A	.0214	.84	-9.9	.69	-9.9	.45	.33	88.0	86.8	-.0517	602565
45	13520	20874	-.3513A	.0155	1.00	.0	.99	-1.3	.39	.41	69.8	70.0	-.1826	602568
46	12790	20874	-.2604A	.0154	.96	-6.5	.93	-7.7	.44	.41	70.5	69.4	-.0926	602569
47	16783	20874	-1.3039A	.0179	.82	-9.9	.69	-9.9	.47	.37	83.0	79.6	-.1820	602570
48	10021	20874	.4892A	.0152	1.04	6.5	1.10	9.9	.39	.41	67.5	68.1	-.1895	602573
49	3638	7698	.1932	.0251	1.24	9.9	1.32	9.9	.22	.42	58.3	68.3	-.0007	632728
50	5928	7698	-1.4105	.0295	1.01	.9	.99	-.5	.39	.40	79.0	79.3	-.0011	632729
51	6978	7698	-2.6517	.0416	.91	-3.1	.94	-1.1	.38	.32	91.5	91.1	-.0010	632730
52	5364	7698	-.9569	.0272	.92	-6.5	.90	-4.7	.48	.42	77.1	74.6	-.0009	632731
53	4477	7698	-.3438	.0254	1.26	9.9	1.41	9.9	.20	.43	58.4	69.7	-.0007	632732
54	5660	7698	-1.1858	.0282	.88	-9.1	.79	-9.1	.51	.41	79.7	77.0	-.0010	632734
55	5600	7698	-1.1380	.0280	.90	-7.7	.83	-7.5	.50	.41	78.8	76.5	-.0009	632737
56	2188	7698	1.1726	.0273	1.09	6.7	1.29	9.9	.29	.38	72.8	74.8	-.0005	632738
57	6215	7698	-1.6773	.0313	.92	-4.7	.78	-7.2	.46	.38	82.7	82.2	-.0011	632740
58	6546	7698	-2.0354	.0343	.98	-.8	1.00	.1	.37	.36	86.2	85.9	-.0011	632741
59	2492	3322	-1.0248	.0430	1.07	3.0	1.15	3.8	.30	.37	76.0	77.2	.0000	632742
60	1041	3322	1.2174	.0404	1.11	5.8	1.37	9.9	.26	.39	72.2	72.9	.0004	632744
61	2536	3322	-1.1085	.0438	.94	-2.7	.84	-4.3	.43	.37	78.7	78.1	.0000	632745
62	2793	3322	-1.6722	.0501	.87	-4.4	.71	-5.9	.46	.32	85.3	84.5	.0000	632746
63	1714	3322	.2050	.0378	.89	-8.1	.86	-7.1	.52	.42	73.5	67.6	.0002	632747
64	2308	3322	-.7001	.0407	1.03	1.7	1.00	.2	.37	.39	72.1	73.6	.0000	632750
65	1599	3322	.3713	.0378	1.08	5.4	1.12	6.0	.34	.41	65.0	67.6	.0002	632752
66	2839	3322	-1.7929	.0518	.90	-3.2	.77	-4.1	.42	.31	86.2	85.8	-.0001	632753
67	2634	3322	-1.3062	.0457	.85	-6.1	.69	-7.8	.50	.35	81.9	80.4	-.0001	632754
68	2860	3322	-1.8508	.0527	.88	-3.6	.69	-5.6	.43	.31	87.1	86.3	-.0001	632756
69	1722	3197	.1081	.0384	1.00	-.3	.99	-.3	.40	.40	67.2	67.2	.0016	632758
70	1622	3197	.2564	.0383	1.06	4.3	1.09	4.7	.34	.40	64.7	66.9	.0017	632759
71	1603	3197	.2845	.0383	1.15	9.9	1.20	9.8	.25	.40	60.0	66.9	.0017	632761
72	1969	3197	-.2663	.0392	.98	-1.4	.95	-2.1	.42	.39	69.5	69.2	.0016	632763
73	2370	3197	-.9427	.0431	1.08	3.7	1.12	3.3	.28	.36	74.8	76.2	.0016	632764
74	1902	3197	-.1630	.0389	.94	-4.0	.93	-3.5	.45	.39	71.5	68.5	.0016	632765
75	2740	3197	-1.7758	.0529	.88	-3.7	.74	-4.8	.43	.30	86.6	85.9	.0015	632767
76	1769	3197	.0380	.0385	.95	-3.8	.93	-3.4	.45	.40	70.7	67.4	.0016	632768
77	1946	3197	-.2306	.0391	1.20	9.9	1.30	9.9	.19	.39	61.9	68.9	.0016	632770
78	2294	3197	-.8036	.0421	.94	-2.9	.90	-3.0	.42	.37	76.4	74.5	.0015	632771
79	1342	3318	.7354	.0383	1.04	2.9	1.12	5.2	.35	.40	67.8	68.6	.0010	632772
80	2630	3318	-1.2947	.0455	.94	-2.5	.82	-4.3	.41	.34	80.9	80.3	.0007	632773

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
81	2306	3318	-.6974	.0406	.94	-3.1	.88	-4.1	.44	.38	74.3	73.3	.0008	632774
82	2294	3318	-.6775	.0404	.97	-1.9	.89	-3.9	.42	.38	72.3	73.0	.0008	632775
83	2832	3318	-1.7693	.0515	.97	-1.0	1.07	1.2	.32	.30	86.1	85.6	.0007	632776
84	2728	3318	-1.5103	.0480	.89	-4.0	.71	-6.4	.45	.33	83.6	82.8	.0007	632777
85	1746	3318	.1511	.0377	.98	-1.5	.98	-1.1	.42	.40	68.3	67.2	.0009	632778
86	1732	3318	.1713	.0377	1.06	4.3	1.08	3.8	.35	.40	65.4	67.2	.0009	632780
87	2698	3318	-1.4418	.0471	1.10	3.6	1.36	6.9	.22	.33	81.2	82.0	.0007	632781
88	1435	3318	.5988	.0380	1.13	8.9	1.20	9.3	.27	.40	62.5	67.8	.0010	632782
89	2799	3339	-1.6748	.0499	.84	-5.4	.63	-7.7	.49	.34	85.2	84.3	.0003	632784
90	1623	3339	.3425	.0379	.97	-2.1	.99	-.7	.44	.42	69.8	67.9	.0007	632785
91	2969	3339	-2.1647	.0577	.85	-3.9	.56	-7.2	.45	.29	89.0	89.0	.0002	632786
92	1805	3339	.0784	.0380	1.11	7.5	1.15	7.0	.32	.42	63.9	68.3	.0006	632787
93	1161	3339	1.0315	.0395	1.07	4.2	1.20	7.1	.32	.40	70.5	71.1	.0008	632788
94	2591	3339	-1.2106	.0446	.85	-6.7	.69	-8.2	.52	.37	81.3	79.3	.0003	632789
95	2743	3339	-1.5391	.0481	.96	-1.4	.86	-3.0	.39	.35	83.0	82.8	.0003	632791
96	2511	3339	-1.0549	.0432	.85	-7.0	.78	-6.2	.51	.38	80.9	77.5	.0003	632792
97	1483	3339	.5462	.0381	1.05	3.7	1.09	4.3	.37	.42	66.9	68.2	.0007	632796
98	2939	3339	-2.0670	.0559	.83	-4.8	.57	-7.3	.47	.30	88.8	88.1	.0002	632797
MEAN	8489.7	12353	-.7788	.0293	1.00	.3	.98	-.2			75.4	76.1		
S.D.	6265.0	8442.2	.9276	.0129	.11	6.5	.20	7.1			8.6	7.1		

Grade 7

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
1	11909	20749	-.3855A	.0157	1.08	9.9	1.09	8.5	.40	.43	66.9	70.6	.1668	563893
2	15461	20749	-1.2280A	.0176	.96	-4.4	.90	-6.1	.46	.40	78.9	78.1	.0666	563896
3	10666	20749	.1343A	.0153	1.03	4.3	1.08	8.3	.41	.44	68.5	68.7	-.0547	563897
4	17302	20749	-1.7479A	.0197	.93	-5.9	.86	-6.7	.40	.36	84.6	83.6	-.0538	563900
5	15213	20749	-1.5025A	.0186	1.20	9.9	1.21	9.9	.42	.38	76.2	81.1	.4193	563904
6	17855	20749	-2.0426A	.0214	.92	-5.9	.77	-9.6	.42	.34	86.9	86.6	.0043	563907
7	12781	20749	-.5144A	.0158	1.10	9.9	1.16	9.9	.36	.43	67.2	71.5	.0815	563909
8	16424	20749	-1.2820A	.0178	.91	-9.7	.89	-6.6	.39	.39	81.1	78.7	-.1958	563953
9	9921	20749	-.0594A	.0154	1.05	7.7	1.07	6.9	.42	.44	67.3	69.0	.3140	563954
10	13284	20749	-.7529A	.0163	1.11	9.9	1.13	9.9	.38	.42	69.4	73.4	.1937	563957
11	11645	20749	-.4078A	.0157	.99	-1.1	.96	-3.8	.48	.43	70.4	70.7	.2529	563959
12	17138	20749	-1.9833A	.0210	1.10	7.0	1.06	2.2	.41	.34	84.0	86.0	.2528	563960
13	14580	20749	-.9550A	.0168	1.02	2.3	.98	-1.2	.42	.41	74.0	75.3	.0497	563964
14	13514	20749	-.4112A	.0157	1.00	.0	.99	-.9	.40	.43	70.7	70.7	-.2093	564023
15	15485	20749	-1.3364A	.0179	1.01	.7	.96	-2.4	.46	.39	78.7	79.3	.1693	564024
16	11815	20749	-.3949A	.0157	1.09	9.9	1.10	9.7	.39	.43	67.2	70.6	.1989	564025
17	14644	20749	-.8477A	.0165	1.08	9.7	1.18	9.9	.32	.42	72.7	74.3	-.0771	565519
18	12362	20749	-.5038A	.0158	1.03	4.1	1.01	1.0	.44	.43	69.9	71.4	.1749	602574
19	10705	20749	.0533A	.0153	1.08	9.9	1.10	9.9	.37	.44	65.3	68.8	.0164	602575
20	16838	20749	-1.5638A	.0189	.88	-9.9	.75	-9.9	.46	.37	83.4	81.7	-.0586	602578
21	16882	20749	-1.9337A	.0207	1.19	9.9	1.45	9.9	.34	.35	82.5	85.5	.3013	602580
22	18402	20749	-2.1822A	.0223	.79	-9.9	.57	-9.9	.44	.33	89.5	87.8	-.1331	602582
23	8385	20749	.7232A	.0157	1.15	9.9	1.25	9.9	.31	.43	65.2	70.4	-.0958	602583
24	13707	20749	-.4789A	.0158	.90	-9.9	.85	-9.9	.48	.43	74.6	71.2	-.1921	602587
25	11166	20749	-.2013A	.0155	1.19	9.9	1.28	9.9	.29	.43	62.0	69.6	.1609	602588
26	15042	20749	-.9655A	.0168	1.00	.0	.99	-.9	.39	.41	75.8	75.4	-.0732	602589
27	17434	20749	-1.5953A	.0190	.84	-9.9	.75	-9.9	.39	.37	85.5	82.0	-.2668	602590
28	10477	20749	.3321A	.0154	1.17	9.9	1.26	9.9	.30	.43	61.8	68.8	-.2053	602591
29	11237	20749	-.1272A	.0154	1.15	9.9	1.20	9.9	.32	.44	62.9	69.3	.0700	602592
30	14771	20749	-.4832A	.0158	.93	-9.9	.90	-9.2	.41	.43	74.4	71.2	-.4811	602593
31	16444	20749	-1.2186A	.0175	.81	-9.9	.69	-9.9	.47	.40	82.4	78.1	-.2680	602597
32	10808	20749	-.0152A	.0154	.98	-3.7	.97	-3.6	.46	.44	70.0	68.9	.0602	602617
33	16877	20749	-1.4208A	.0183	.83	-9.9	.72	-9.9	.45	.38	84.2	80.2	-.2205	602618
34	13997	20749	-.6655A	.0161	.85	-9.9	.78	-9.9	.53	.42	77.8	72.7	-.0819	602619
35	15805	20749	-.9952A	.0169	.86	-9.9	.82	-9.9	.44	.41	80.2	75.7	-.2789	602620
36	17744	20749	-1.8892A	.0205	.83	-9.9	.68	-9.9	.45	.35	87.2	85.0	-.1017	602622
37	16515	20749	-1.4358A	.0183	.98	-2.2	1.01	.5	.37	.38	81.4	80.3	-.0708	602623
38	15610	20749	-1.1135A	.0172	.90	-9.9	.80	-9.9	.47	.40	79.1	77.0	-.0961	602624

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
39	14408	20749	-.8499A	.0165	1.10	9.9	1.15	9.9	.33	.42	71.3	74.3	-.0083	602625
40	9828	20749	.3717A	.0154	.95	-8.0	.94	-6.0	.48	.43	71.0	68.9	-.0922	602626
41	12563	20749	-.4415A	.0157	1.05	7.8	1.05	4.7	.40	.43	68.5	70.9	.0626	602630
42	17726	20749	-1.8387A	.0202	.76	-9.9	.54	-9.9	.50	.35	87.5	84.5	-.1452	602631
43	16926	20749	-1.3928A	.0182	.70	-9.9	.56	-9.9	.54	.39	86.2	79.9	-.2680	602632
44	9143	20749	.2673A	.0153	.97	-4.9	1.00	-.4	.45	.44	70.9	68.7	.1728	602633
45	13302	20749	-.7468A	.0163	1.10	9.9	1.13	9.9	.39	.42	70.1	73.4	.1829	602634
46	16133	20749	-1.3409A	.0180	.90	-9.9	.77	-9.9	.47	.39	80.5	79.3	-.0350	602635
47	15329	20749	-1.0724A	.0171	1.05	5.5	1.09	5.8	.34	.40	75.8	76.5	-.0508	602636
48	13012	20749	-.5446A	.0159	1.09	9.9	1.17	9.9	.36	.43	68.9	71.7	.0536	602640
49	160	3308	3.5957	.0828	1.10	1.4	2.57	9.4	.01	.20	95.1	95.2	-.0012	633138
50	2053	3308	-.3701	.0389	1.01	.8	1.01	.3	.40	.41	69.0	70.0	-.0011	633139
51	1319	3308	.7100	.0386	1.21	9.9	1.34	9.9	.20	.41	61.3	68.9	-.0010	633140
52	1837	3308	-.0473	.0381	1.20	9.9	1.27	9.9	.23	.41	58.8	68.0	-.0011	633141
53	2954	3308	-2.2458	.0586	.88	-3.0	.66	-5.2	.41	.28	89.7	89.4	-.0011	633142
54	1350	3308	.6636	.0384	1.10	6.3	1.16	7.0	.31	.41	65.4	68.7	-.0010	633144
55	2598	3308	-1.3168	.0453	.96	-1.7	.93	-1.5	.40	.36	81.3	79.9	-.0012	633145
56	1422	3308	.5569	.0382	1.11	7.2	1.18	8.0	.30	.41	64.4	68.1	-.0010	633149
57	1564	3308	.3494	.0379	.98	-1.2	1.02	.9	.42	.41	69.6	67.5	-.0010	633150
58	2759	3308	-1.6799	.0495	.89	-3.8	.73	-5.6	.45	.33	84.7	83.9	-.0011	633151
59	4765	7452	-.7192	.0268	1.01	.6	.98	-1.2	.44	.44	71.6	72.4	-.0013	633152
60	4998	7452	-.8918	.0273	.95	-4.1	.90	-4.5	.48	.44	75.3	73.7	-.0014	633154
61	3350	7452	.2560	.0260	1.06	5.5	1.10	5.6	.40	.45	68.2	69.9	-.0011	633155
62	4627	7452	-.6198	.0266	1.14	9.9	1.18	8.8	.34	.45	66.7	71.8	-.0012	633156
63	3929	7452	-.1363	.0259	1.04	3.9	1.06	3.4	.42	.45	67.5	69.8	-.0013	633157
64	5685	7452	-1.4546	.0299	.95	-3.0	.92	-2.7	.44	.41	80.3	78.9	-.0014	633159
65	5124	7452	-.9882	.0277	.93	-5.6	.91	-3.9	.49	.43	77.1	74.5	-.0014	633160
66	4934	7452	-.8438	.0272	.91	-7.8	.82	-8.7	.52	.44	75.2	73.3	-.0013	633161
67	4059	7452	-.2248	.0260	.93	-6.4	.92	-4.5	.50	.45	72.8	70.0	-.0012	633165
68	6508	7452	-2.3612	.0374	.85	-6.4	.61	-9.0	.47	.35	88.6	88.0	-.0013	633166
69	1456	3261	.4993	.0389	1.26	9.9	1.39	9.9	.21	.44	58.8	69.1	.0008	633171
70	2738	3261	-1.7539	.0508	.85	-5.0	.65	-6.6	.48	.34	85.9	84.4	.0004	633172
71	1118	3261	1.0334	.0405	.97	-1.9	1.09	3.1	.43	.42	75.2	72.2	.0009	633173
72	2466	3261	-1.1433	.0442	.89	-5.1	.85	-3.7	.48	.39	80.3	78.0	.0005	633174
73	2804	3261	-1.9348	.0534	.84	-4.9	.63	-6.5	.47	.32	87.5	86.3	.0004	633175
74	1987	3261	-.3125	.0395	1.02	1.0	1.04	1.5	.41	.43	70.0	70.6	.0006	633176
75	1771	3261	.0214	.0388	.91	-6.2	.89	-5.0	.51	.44	74.1	69.1	.0007	633177
76	1150	3261	.9806	.0403	1.10	5.6	1.25	8.1	.33	.43	69.1	71.8	.0009	633178
77	2273	3261	-.7856	.0417	.86	-7.6	.75	-8.0	.54	.41	77.9	74.3	.0005	633182
78	1887	3261	-.1564	.0391	1.04	2.5	1.04	1.8	.40	.44	68.4	69.8	.0006	633183
79	1252	3362	.8444	.0385	1.09	5.6	1.14	5.7	.31	.39	66.2	69.5	.0023	633188
80	2896	3362	-1.9085	.0525	.81	-5.9	.57	-8.4	.51	.31	87.5	86.4	.0014	633190
81	1182	3362	.9505	.0389	1.11	6.8	1.29	9.9	.26	.39	67.7	70.3	.0023	633191
82	661	3362	1.8676	.0459	1.06	2.3	1.55	9.9	.22	.33	81.2	81.1	.0025	633192
83	1532	3362	.4368	.0376	1.19	9.9	1.29	9.9	.21	.41	59.0	67.4	.0021	633193
84	2534	3362	-1.0998	.0430	.90	-4.8	.81	-5.4	.48	.37	79.8	77.5	.0016	633194
85	1037	3362	1.1789	.0401	1.15	8.0	1.33	9.9	.21	.38	69.6	72.7	.0024	633196
86	2724	3362	-1.4840	.0468	.91	-3.3	.79	-4.8	.44	.35	82.6	82.0	.0015	633197
87	2233	3362	-.5871	.0395	1.01	.9	1.01	.3	.39	.40	71.4	72.0	.0017	633198
88	1792	3362	.0673	.0376	1.03	2.1	1.05	2.7	.38	.41	66.3	67.6	.0020	633199
89	2482	3366	-1.0228	.0426	.95	-2.4	.92	-2.1	.44	.40	78.2	76.8	-.0013	633203
90	1758	3366	.1254	.0381	.98	-1.7	.98	-.7	.45	.44	70.4	68.6	-.0012	633204
91	2920	3366	-2.0102	.0539	.84	-4.9	.69	-5.1	.47	.32	88.1	87.1	-.0014	633205
92	3018	3366	-2.3265	.0594	.84	-4.1	.58	-6.0	.44	.30	90.2	89.8	-.0014	633206
93	2216	3366	-.5688	.0399	1.04	2.3	1.04	1.5	.39	.42	71.5	72.4	-.0013	633208
94	1997	3366	-.2289	.0386	1.12	7.6	1.15	5.9	.33	.43	64.8	69.9	-.0012	633209
95	2896	3366	-1.9412	.0528	.86	-4.2	.70	-5.0	.45	.33	87.3	86.4	-.0014	633211
96	2604	3366	-1.2565	.0446	.90	-4.4	.76	-5.9	.48	.38	80.8	79.4	-.0013	633213
97	2473	3366	-1.0064	.0425	1.03	1.2	.98	-.4	.38	.40	76.0	76.7	-.0013	633214
98	2669	3366	-1.3907	.0459	.89	-4.4	.83	-3.7	.46	.37	82.5	80.8	-.0013	633215
MEAN	8242.2	12280	-.6497	.0294	.99	.1	.99	.1			75.1	75.6		
S.D.	6154.0	8381.3	.9984	.0140	.12	7.0	.27	7.3			8.4	6.5		

Grade 8

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
1	11484	20599	-.3453A	.0155	1.18	9.9	1.32	9.9	.27	.42	63.1	69.4	.1469	564127
2	17271	20599	-1.7609A	.0196	.84	-9.9	.69	-9.9	.45	.35	85.4	83.2	-.1215	564129
3	15012	20599	-1.4246A	.0181	1.13	9.9	1.17	9.2	.41	.37	76.1	79.5	.3181	564131
4	12806	20599	-.4305A	.0156	1.00	-.1	1.00	.2	.40	.42	69.9	69.9	-.0902	564133
5	13260	20599	-.5062A	.0157	.93	-9.9	.88	-9.9	.46	.42	72.7	70.4	-.1295	564136
6	15231	20599	-1.2056A	.0173	1.05	5.8	1.05	3.2	.36	.39	75.7	77.1	.0313	564138
7	11888	20599	.1606A	.0153	1.00	-.8	1.02	2.5	.44	.42	68.8	68.1	-.4516	564228
8	14558	20599	-.9222A	.0165	.91	-9.9	.86	-9.9	.47	.40	76.4	74.1	-.0592	564229
9	14692	20599	-.8996A	.0164	.94	-7.9	.91	-7.6	.42	.40	75.7	73.9	-.1204	564232
10	16684	20599	-1.5332A	.0185	.88	-9.9	.77	-9.9	.43	.37	82.9	80.7	-.1214	564233
11	14574	20599	-.4900A	.0157	1.06	8.9	1.11	9.9	.28	.42	68.6	70.3	-.5000	564235
12	10212	20599	.0903A	.0153	1.14	9.9	1.19	9.9	.30	.42	61.8	68.0	.0128	564240
13	10734	20599	-.1723A	.0154	.98	-3.0	1.00	-.2	.45	.42	69.9	68.6	.1517	564242
14	12434	20599	-.5216A	.0157	1.11	9.9	1.14	9.9	.34	.42	66.2	70.5	.0936	564271
15	12016	20599	-.7888A	.0162	1.26	9.9	1.36	9.9	.32	.41	63.3	72.8	.4640	564272
16	14032	20599	-1.1592A	.0171	1.11	9.9	1.11	7.3	.42	.39	72.4	76.6	.3254	564273
17	14257	20599	-1.2427A	.0174	1.13	9.9	1.14	8.6	.42	.39	73.2	77.5	.3484	564278
18	13573	20599	-1.0057A	.0167	1.05	6.6	1.04	3.1	.45	.40	72.8	75.0	.2924	564280
19	11647	20599	-.4675A	.0156	1.13	9.9	1.19	9.9	.35	.42	65.4	70.1	.2304	564281
20	12700	20599	-.3570A	.0155	1.00	.4	.99	-1.2	.40	.42	69.2	69.4	-.1372	602740
21	9721	20599	.3075A	.0153	1.14	9.9	1.22	9.9	.30	.42	63.1	68.3	-.0872	602742
22	15576	20599	-1.1560A	.0171	1.00	-.4	.99	-.7	.35	.39	76.7	76.5	-.1261	602744
23	17902	20599	-1.8667A	.0201	.76	-9.9	.59	-9.9	.43	.34	87.9	84.3	-.3020	602745
24	18033	20599	-1.7229A	.0194	.66	-9.9	.54	-9.9	.44	.35	89.5	82.8	-.5192	602746
25	16398	20599	-1.2821A	.0175	.88	-9.9	.85	-9.9	.39	.38	81.7	77.9	-.2741	602748
26	18754	20599	-2.1980A	.0221	.65	-9.9	.53	-9.9	.40	.32	91.8	87.6	-.4542	602749
27	11546	20599	-.4534A	.0156	1.06	9.3	1.10	9.3	.41	.42	68.0	70.0	.2404	602752
28	15527	20599	-1.1360A	.0171	.90	-9.9	.86	-9.9	.43	.39	79.3	76.3	-.1312	602753
29	16557	20599	-1.6011A	.0188	.99	-.6	.98	-1.2	.37	.36	81.9	81.5	-.0050	602754
30	13234	20599	-.6009A	.0158	.99	-.9	1.01	.9	.41	.41	71.9	71.1	-.0276	602755
31	18211	20599	-2.3299A	.0231	.90	-6.5	.80	-7.2	.41	.31	89.0	88.8	.0142	602757
32	12749	20599	-.5052A	.0157	.96	-6.7	.93	-7.2	.46	.42	72.0	70.4	-.0010	602759
33	13815	20599	-.7619A	.0161	.97	-3.8	.96	-3.4	.43	.41	73.4	72.6	-.0172	602762
34	15299	20599	-1.4180A	.0180	1.00	.0	.91	-5.6	.48	.37	78.4	79.4	.2258	602763
35	10182	20599	.0901A	.0153	1.04	6.8	1.07	7.5	.39	.42	66.9	68.0	.0200	602765
36	13072	20599	-.6454A	.0159	.99	-.9	.98	-1.7	.43	.41	71.6	71.5	.0585	602766
37	11309	20599	-.1802A	.0154	1.13	9.9	1.16	9.9	.31	.42	62.4	68.6	.0236	602767
38	15513	20599	-1.4753A	.0183	1.05	5.0	1.08	4.4	.42	.37	78.4	80.1	.2180	602769
39	14113	20599	-.9752A	.0166	.93	-8.9	.87	-9.9	.50	.40	75.9	74.6	.1179	602771
40	15309	20599	-1.1497A	.0171	.93	-8.5	.92	-5.3	.43	.39	79.0	76.5	-.0495	602775
41	10274	20599	.1370A	.0153	.99	-2.5	1.00	.0	.43	.42	69.5	68.0	-.0480	602776
42	15589	20599	-1.2314A	.0174	.87	-9.9	.77	-9.9	.48	.39	79.8	77.4	-.0535	602779
43	12175	20599	-.2523A	.0154	1.06	9.2	1.05	5.8	.36	.42	65.9	68.9	-.1125	602780
44	13331	20599	-.6195A	.0159	1.02	2.4	1.06	5.4	.39	.41	71.4	71.3	-.0338	602783
45	12396	20599	-.3246A	.0155	1.00	-.4	.98	-2.6	.41	.42	68.8	69.3	-.0944	602785
46	11610	20599	-.3602A	.0155	.93	-9.9	.89	-9.9	.50	.42	72.0	69.5	.1317	602786
47	14095	20599	-1.0234A	.0168	1.15	9.9	1.23	9.9	.33	.40	71.1	75.1	.1714	602787
48	11901	20599	-.3194A	.0155	.98	-2.5	.96	-3.9	.44	.42	69.2	69.2	.0209	602788
49	12101	20599	-.2612A	.0154	1.02	4.0	1.02	2.4	.39	.42	67.9	68.9	-.0857	602789
50	10626	20599	.0650A	.0153	1.00	-.8	1.00	-.2	.43	.42	68.6	68.0	-.0591	602790
51	6243	7321	-2.1844	.0355	.84	-7.4	.65	-9.3	.49	.36	86.9	86.1	-.0010	633314
52	4975	7321	-.9815	.0276	1.04	2.8	1.06	2.6	.39	.42	73.1	73.7	-.0009	633316
53	5101	7321	-1.0795	.0279	.94	-4.7	.87	-5.8	.47	.42	76.1	74.6	-.0009	633317
54	6050	7321	-1.9540	.0333	.90	-5.2	.77	-6.5	.46	.38	84.8	83.7	-.0010	633319
55	5857	7321	-1.7481	.0317	.94	-3.5	.95	-1.6	.43	.39	82.9	81.5	-.0011	633320
56	5573	7321	-1.4764	.0299	.86	-9.3	.81	-7.0	.51	.40	81.6	78.6	-.0010	633322
57	2553	7321	.7152	.0269	1.08	6.7	1.20	8.6	.34	.41	70.0	71.9	-.0007	633323
58	5121	7321	-1.0953	.0280	1.03	2.0	1.07	3.1	.39	.42	74.6	74.7	-.0010	633324
59	6112	7321	-2.0250	.0340	.93	-3.6	.95	-1.3	.42	.37	85.3	84.4	-.0010	633325
60	3048	7321	.3637	.0262	1.13	9.9	1.24	9.9	.32	.43	64.9	69.6	-.0008	633327
61	3052	3339	-2.5425	.0636	.86	-3.1	.56	-6.4	.41	.25	91.4	91.4	.0001	633328
62	1618	3339	.2299	.0375	.99	-.6	1.01	.4	.41	.40	68.0	67.0	.0003	633329
63	2437	3339	-1.0125	.0418	1.01	.6	.99	-.3	.36	.37	75.0	75.6	.0001	633332
64	2450	3339	-1.0355	.0419	1.20	9.3	1.48	9.9	.14	.37	72.3	75.8	.0001	633334
65	1481	3339	.4252	.0377	1.18	9.9	1.27	9.9	.21	.40	59.8	67.4	.0004	633335
66	855	3339	1.4048	.0422	1.14	6.6	1.38	9.8	.19	.36	73.5	76.2	.0005	633336
67	2645	3339	-1.4079	.0453	1.01	.2	1.08	1.9	.33	.34	80.5	80.2	.0000	633337

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
68	498	3339	2.1649	.0508	1.24	6.9	2.62	9.9	-.07	.30	84.0	85.3	.0005	633338
69	2773	3339	-1.6920	.0486	.90	-3.4	.77	-4.9	.43	.32	84.4	83.5	.0000	633339
70	2550	3339	-1.2193	.0435	.94	-2.8	.86	-3.8	.43	.36	79.2	78.0	.0001	633340
71	2727	3258	-1.7754	.0499	.90	-3.3	.85	-3.0	.41	.31	84.9	84.0	.0006	633342
72	1900	3258	-.2750	.0385	.99	-.9	.97	-1.6	.41	.40	68.5	68.1	.0006	633343
73	1404	3258	.4533	.0383	1.29	9.9	1.41	9.9	.11	.40	55.1	67.9	.0007	633345
74	1601	3258	.1641	.0380	1.07	5.3	1.11	5.7	.33	.40	64.8	67.1	.0007	633346
75	2211	3258	-.7593	.0404	1.04	2.1	1.03	1.0	.35	.38	70.0	72.2	.0006	633347
76	2303	3258	-.9139	.0413	1.04	2.1	1.09	2.8	.33	.37	73.1	73.9	.0006	633348
77	1345	3258	.5413	.0385	1.11	6.9	1.20	8.9	.29	.40	65.0	68.4	.0007	633349
78	2197	3258	-.7363	.0402	.95	-3.1	.89	-3.9	.44	.38	73.0	71.9	.0006	633351
79	2330	3258	-.9607	.0416	.87	-7.0	.78	-7.4	.50	.37	77.1	74.5	.0006	633353
80	2098	3258	-.5777	.0395	1.10	6.2	1.20	7.6	.28	.39	66.6	70.3	.0006	633355
81	1542	3334	.3673	.0381	1.06	4.4	1.10	4.5	.37	.43	65.7	68.3	.0000	633356
82	2839	3334	-1.8873	.0516	.89	-3.5	.69	-5.7	.44	.32	86.3	85.4	-.0001	633357
83	2773	3334	-1.7181	.0492	.83	-6.2	.63	-7.7	.50	.34	85.4	83.7	-.0001	633360
84	2213	3334	-.6401	.0400	.88	-7.3	.82	-6.8	.52	.41	76.4	72.4	-.0001	633361
85	2945	3334	-2.1986	.0566	.99	-.1	1.28	3.5	.27	.30	88.4	88.4	-.0001	633362
86	2710	3334	-1.5696	.0474	.95	-1.8	.89	-2.3	.40	.35	83.1	82.1	-.0001	633364
87	2060	3334	-.3994	.0390	.97	-1.9	.94	-2.6	.45	.42	71.2	70.4	.0000	633365
88	1690	3334	.1508	.0380	1.18	9.9	1.26	9.9	.27	.43	60.9	68.1	.0000	633366
89	2229	3334	-.6660	.0401	.94	-3.8	.94	-1.9	.46	.41	75.8	72.6	-.0001	633367
90	2321	3334	-.8186	.0409	.97	-1.5	.95	-1.4	.43	.40	74.9	74.0	-.0001	633370
91	2681	3347	-1.5034	.0463	.92	-3.2	.76	-5.4	.44	.35	81.7	81.1	-.0008	633371
92	2850	3347	-1.9071	.0514	.96	-1.2	.94	-1.0	.35	.32	85.8	85.4	-.0008	633372
93	1891	3347	-.1591	.0382	1.03	2.3	1.05	2.1	.39	.42	66.9	68.7	-.0007	633374
94	2437	3347	-1.0272	.0420	.93	-3.6	.88	-3.4	.45	.39	77.7	75.9	-.0007	633376
95	2784	3347	-1.7392	.0491	.90	-3.4	.79	-4.0	.43	.33	84.6	83.7	-.0008	633377
96	2216	3347	-.6552	.0398	.90	-6.1	.83	-6.5	.50	.41	74.8	72.1	-.0007	633378
97	1940	3347	-.2316	.0383	1.10	6.8	1.14	5.8	.33	.42	64.6	69.1	-.0007	633380
98	2549	3347	-1.2346	.0437	.91	-4.1	.85	-3.8	.46	.37	80.0	78.1	-.0008	633382
99	2493	3347	-1.1289	.0428	.97	-1.4	1.08	2.2	.39	.38	79.1	77.0	-.0008	633383
100	2995	3347	-2.3464	.0588	.83	-4.5	.60	-6.1	.45	.28	89.8	89.5	-.0008	633384
MEAN	8252.5	12359	-.8253	.0289	.99	.0	1.00	.0			74.7	75.2		
S.D.	5781.9	8317.0	.8305	.0134	.11	6.6	.25	6.7			8.0	6.3		

Grade 11

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
1	9352	21055	.3031A	.0153	1.04	7.0	1.15	9.9	.38	.42	68.5	68.8	.0013	564301
2	12623	21055	-.4665A	.0155	1.01	.9	.98	-1.6	.43	.43	69.6	70.5	-.0026	564302
3	17772	21055	-1.8318A	.0195	.86	-9.9	.82	-8.8	.41	.38	86.1	83.4	-.1980	564304
4	18141	21055	-1.9095A	.0199	.77	-9.9	.59	-9.9	.46	.38	87.7	84.2	-.2874	564305
5	12326	21055	-.2984A	.0154	1.14	9.9	1.24	9.9	.30	.43	64.5	69.5	-.0982	564310
6	18318	21055	-1.9400A	.0200	.82	-9.9	.84	-7.3	.37	.38	88.5	84.5	-.3435	564311
7	12878	21055	-.5512A	.0156	1.15	9.9	1.17	9.9	.32	.43	64.8	71.0	.0195	564345
8	13075	21055	-.5866A	.0157	.93	-9.9	.89	-9.9	.49	.43	73.8	71.3	.0061	564346
9	10988	21055	-.0436A	.0152	1.10	9.9	1.13	9.9	.35	.43	64.2	68.7	-.0354	564347
10	13650	21055	-.8126A	.0161	1.04	5.3	1.03	2.4	.42	.43	71.7	73.1	.0874	564351
11	10761	21055	-.1239A	.0153	1.21	9.9	1.30	9.9	.26	.43	60.1	68.9	.0970	564360
12	17794	21055	-2.0198A	.0205	.87	-9.9	.69	-9.9	.48	.37	86.4	85.3	-.0146	564366
13	12321	21055	-.4507A	.0155	1.16	9.9	1.23	9.9	.31	.43	64.1	70.4	.0546	564371
14	10621	21055	-.0666A	.0152	1.18	9.9	1.22	9.9	.29	.43	60.2	68.7	.0727	564374
15	15342	21055	-1.2367A	.0172	1.02	2.5	1.00	.2	.42	.41	76.3	77.3	.0516	564385
16	15785	21055	-1.4719A	.0180	1.10	9.8	1.12	6.5	.39	.40	77.0	79.7	.1559	564388
17	14087	21055	-.8016A	.0161	.95	-6.8	.92	-7.2	.46	.43	74.5	73.0	-.0375	564389
18	16857	21055	-1.5615A	.0183	.86	-9.9	.78	-9.9	.47	.40	83.8	80.6	-.1114	565549
19	15040	21055	-1.2108A	.0171	1.01	1.4	.96	-2.7	.45	.41	75.8	77.0	.1131	565551
20	17702	21055	-1.3523A	.0175	.69	-9.9	.58	-9.9	.48	.41	86.8	78.5	-.6622	565552
21	12219	21055	-.7665A	.0160	1.25	9.9	1.35	9.9	.32	.43	64.0	72.7	.3956	602805
22	12793	21055	-.3896A	.0155	1.12	9.9	1.13	9.9	.33	.43	64.5	70.0	-.1209	602808

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
23	13588	21055	-.3700A	.0154	.85	-9.9	.80	-9.9	.53	.43	76.5	69.9	-.3391	602810
24	11635	21055	-.2182A	.0153	.99	-1.2	1.01	1.3	.44	.43	70.1	69.2	-.0135	602811
25	15996	21055	-.9128A	.0163	.99	-1.8	1.11	8.5	.31	.42	76.3	74.1	-.4775	602813
26	10544	21055	-.0748A	.0152	1.01	1.8	1.04	3.7	.42	.43	68.6	68.7	.0987	602814
27	10957	21055	.1252A	.0152	.98	-3.4	1.04	3.6	.45	.43	70.3	68.5	-.1945	602818
28	11807	21055	-.1655A	.0153	1.18	9.9	1.28	9.9	.28	.43	61.6	69.0	-.1064	602819
29	12519	21055	-.6086A	.0157	1.02	3.7	1.01	.5	.45	.43	69.6	71.5	.1647	602820
30	10759	21055	-.4317A	.0155	1.06	9.7	1.07	7.0	.44	.43	66.8	70.3	.4049	602824
31	6782	21055	1.0103A	.0162	1.08	9.9	1.25	9.9	.34	.39	71.6	73.5	-.0722	602825
32	16850	21055	-2.1499A	.0212	1.29	9.9	1.17	6.4	.43	.36	81.4	86.5	.4875	602826
33	15605	21055	-1.0778A	.0167	.94	-7.4	.92	-5.9	.42	.42	77.1	75.7	-.1882	602830
34	16382	21055	-1.5300A	.0182	1.01	1.4	1.06	3.5	.39	.40	80.9	80.3	.0225	602833
35	12416	21055	-.4842A	.0156	.98	-3.6	.96	-4.1	.46	.43	71.5	70.6	.0652	602835
36	15890	21055	-1.5424A	.0182	1.04	4.1	1.00	.2	.45	.40	79.1	80.4	.1945	602839
37	15050	21055	-.4857A	.0156	.88	-9.9	.83	-9.9	.47	.43	75.3	70.6	-.6187	602840
38	13526	21055	-.8178A	.0161	1.00	-.5	1.00	.1	.46	.43	73.3	73.2	.1244	602841
39	12359	21055	-.3427A	.0154	.93	-9.9	.90	-9.9	.48	.43	72.5	69.8	-.0621	602842
40	10225	21055	.0661A	.0152	1.03	5.0	1.05	5.2	.40	.43	67.6	68.5	.0330	602843
41	15403	21055	-1.1774A	.0170	.93	-8.5	.82	-9.9	.48	.42	77.2	76.7	-.0265	602844
42	16664	21055	-1.8466A	.0196	.98	-1.6	.80	-9.9	.52	.38	81.8	83.5	.2473	602845
43	15326	21055	-1.1956A	.0170	.89	-9.9	.80	-9.9	.51	.41	79.2	76.8	.0147	602860
44	16259	21055	-1.6338A	.0186	.99	-1.1	.99	-.7	.47	.39	80.8	81.4	.1687	602861
45	6616	21055	.7429A	.0157	1.02	3.8	1.08	6.2	.33	.41	70.5	71.1	.2328	602867
46	14772	21055	-1.1097A	.0168	.94	-7.3	.87	-9.7	.50	.42	76.9	76.0	.0869	602868
47	16166	21055	-1.5972A	.0184	.95	-4.5	.82	-9.9	.51	.40	80.5	81.0	.1621	602869
48	17872	21055	-2.1423A	.0212	.88	-8.9	.73	-9.9	.50	.36	86.7	86.4	.0762	602870
49	15457	21055	-1.2752A	.0173	.94	-6.6	.88	-8.3	.48	.41	78.5	77.7	.0564	602871
50	11811	21055	-.3612A	.0154	1.18	9.9	1.25	9.9	.29	.43	62.8	69.9	.0872	602872
51	3003	3440	-2.1942	.0538	.88	-3.6	.68	-5.8	.44	.31	87.9	87.5	.0012	632799
52	3232	3440	-3.0822	.0735	.85	-2.7	.51	-5.9	.40	.23	94.0	94.0	.0012	632800
53	2870	3440	-1.8444	.0486	.88	-4.1	.75	-5.2	.45	.34	85.1	84.0	.0012	632801
54	2866	3440	-1.8348	.0485	.92	-2.8	.82	-3.7	.42	.34	84.9	83.9	.0011	632803
55	896	3440	1.2863	.0415	1.15	7.1	1.50	9.9	.18	.36	73.6	76.0	.0014	632804
56	1807	3440	-.0646	.0371	1.00	.1	1.00	.1	.41	.41	67.5	67.5	.0014	632807
57	1478	3440	.3941	.0374	1.15	9.9	1.24	9.9	.26	.41	61.7	67.9	.0014	632808
58	1738	3440	.0314	.0371	1.27	9.9	1.38	9.9	.15	.41	55.9	67.3	.0014	632809
59	1729	3440	.0439	.0371	.99	-.4	1.02	.9	.41	.41	69.1	67.3	.0014	632810
60	3185	3440	-2.8484	.0672	.84	-3.2	.48	-7.2	.42	.25	92.7	92.6	.0011	632811
61	5028	7004	-1.2860	.0298	1.00	-.1	.94	-2.4	.46	.45	76.2	77.1	-.0010	632812
62	4635	7004	-.9505	.0284	.88	-9.8	.81	-8.9	.54	.46	77.6	74.2	-.0009	632813
63	5324	7004	-1.5647	.0313	.88	-7.6	.77	-7.7	.53	.45	82.1	79.7	-.0011	632814
64	4175	7004	-.5892	.0274	1.12	9.8	1.15	7.0	.38	.46	66.5	71.7	-.0009	632815
65	5949	7004	-2.2887	.0371	.90	-4.3	.81	-4.2	.49	.42	87.1	86.5	-.0012	632818
66	6082	7004	-2.4842	.0392	.78	-9.1	.46	-9.9	.57	.42	88.9	88.2	-.0011	632819
67	4700	7004	-1.0038	.0286	.91	-6.8	.86	-6.1	.52	.46	77.1	74.7	-.0011	632821
68	5333	7004	-1.5736	.0314	.92	-5.1	.82	-6.0	.51	.45	81.1	79.8	-.0012	632823
69	4248	7004	-.6449	.0276	1.00	.3	1.01	.3	.46	.46	70.8	72.1	-.0009	632824
70	5830	7004	-2.1299	.0356	.82	-8.8	.66	-8.8	.55	.43	86.8	85.0	-.0011	632826
71	2818	3445	-1.6921	.0474	.99	-.4	1.04	.7	.36	.36	82.9	82.8	-.0007	632827
72	3132	3445	-2.5978	.0619	.85	-3.5	.57	-6.1	.43	.28	91.3	91.0	-.0008	632828
73	2581	3445	-1.2115	.0427	1.04	1.6	1.08	2.2	.36	.39	77.4	77.7	-.0007	632830
74	3114	3445	-2.5297	.0605	.88	-2.9	.61	-5.6	.41	.29	90.5	90.4	-.0008	632831
75	2963	3445	-2.0523	.0521	.96	-1.2	.94	-1.0	.36	.33	86.8	86.3	-.0008	632832
76	2779	3445	-1.6056	.0464	.90	-3.7	.79	-4.7	.46	.37	83.2	81.9	-.0007	632833
77	2102	3445	-.4318	.0384	1.04	2.6	1.05	1.9	.39	.43	68.8	70.4	-.0005	632835
78	2804	3445	-1.6606	.0470	.85	-5.9	.67	-7.6	.51	.36	84.6	82.4	-.0007	632837
79	2168	3445	-.5308	.0387	.94	-3.7	.89	-4.4	.48	.42	72.7	71.2	-.0005	632838
80	3136	3445	-2.6134	.0622	.84	-3.8	.52	-7.0	.44	.28	91.5	91.1	-.0008	632839
81	1918	3592	-.0937	.0366	.96	-2.9	.96	-2.1	.46	.42	69.6	68.2	.0014	632840
82	834	3592	1.4945	.0423	1.02	.9	1.33	7.6	.31	.36	79.2	78.3	.0017	632842
83	2370	3592	-.7279	.0384	.88	-7.3	.81	-7.7	.52	.41	74.8	72.0	.0012	632844
84	1887	3592	-.0518	.0366	1.00	-.3	.98	-1.0	.43	.42	67.3	68.1	.0014	632845
85	2434	3592	-.8240	.0388	1.25	9.9	1.40	9.9	.17	.40	64.4	72.9	.0012	632846
86	2601	3592	-1.0879	.0404	.87	-7.0	.78	-7.3	.52	.39	78.3	75.7	.0011	632847
87	2876	3592	-1.5853	.0447	.88	-4.9	.74	-6.5	.48	.36	82.5	81.2	.0011	632849
88	1973	3592	-.1683	.0367	.98	-1.1	.98	-1.1	.44	.42	69.0	68.4	.0014	632850
89	1159	3592	.9613	.0387	1.24	9.9	1.46	9.9	.16	.40	65.4	72.5	.0016	632851
90	2782	3592	-1.4037	.0429	.92	-3.3	.81	-5.1	.45	.37	80.1	79.2	.0011	632852
91	3232	3574	-2.5400	.0594	1.00	.1	.99	-.2	.28	.28	90.5	90.5	-.0012	632853
92	696	3574	1.7895	.0451	1.05	1.9	1.49	9.1	.27	.35	81.2	81.5	-.0005	632856

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	Reading
93	2984	3574	-1.8369	.0480	1.01	.3	1.24	4.2	.31	.35	84.5	84.1	-.0012	632857
94	3115	3574	-2.1712	.0528	.86	-4.2	.82	-3.0	.43	.32	88.0	87.3	-.0013	632858
95	3075	3574	-2.0623	.0511	.86	-4.3	.70	-5.6	.45	.33	86.7	86.3	-.0012	632859
96	2979	3574	-1.8253	.0479	.94	-2.2	.94	-1.2	.39	.35	84.9	83.9	-.0012	632860
97	2503	3574	-.9296	.0398	.95	-2.8	.90	-3.5	.45	.41	75.8	74.5	-.0010	632861
98	2985	3574	-1.8393	.0481	.89	-3.9	.72	-5.7	.45	.35	85.4	84.1	-.0012	632862
99	3269	3574	-2.6782	.0623	.90	-2.3	.66	-4.5	.38	.27	91.5	91.5	-.0012	632868
100	2992	3574	-1.8556	.0483	.89	-3.8	.74	-5.3	.45	.34	84.7	84.3	-.0012	632870
MEAN	8400.5	12633	-1.0219	.0303	.98	-.8	.95	-1.1			76.8	77.2		
S.D.	5818.8	8479.8	.9897	.0155	.12	6.6	.23	7.0			8.9	7.2		

Appendix Q: NeSA Mathematics Bank Item Difficulties

Grade 3

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
1	18432	21921	-2.0315A	.0199	.98	-1.5	.99	-.3	.36	.35	85.1	84.6	598840
2	15280	21921	-1.0279A	.0163	1.03	3.3	1.07	4.8	.41	.43	74.8	75.0	599739
3	18447	21921	-2.0378A	.0199	.97	-2.9	.93	-2.8	.38	.35	85.2	84.7	599740
4	17281	21921	-1.6175A	.0181	1.00	-.3	1.05	2.5	.39	.39	80.7	80.5	599742
5	14062	21921	-.7125A	.0158	1.02	3.5	1.03	2.5	.43	.45	71.8	72.7	599758
6	12734	21921	-.3882A	.0154	1.02	2.6	1.02	2.1	.45	.46	70.4	71.0	599760
7	8768	21921	.5535A	.0155	1.09	9.9	1.21	9.9	.40	.47	69.6	71.6	599771
8	17245	21921	-1.6057A	.0180	1.06	6.4	1.12	5.8	.34	.39	79.5	80.4	599775
9	14269	21921	-.7648A	.0158	1.05	7.6	1.07	5.2	.41	.45	71.2	73.0	599777
10	16416	21921	-1.3480A	.0172	.96	-4.8	.90	-5.6	.44	.41	78.8	77.9	599780
11	13880	21921	-.6671A	.0157	1.06	8.5	1.12	9.6	.41	.45	70.5	72.4	599781
12	12907	21921	-.4297A	.0154	1.01	1.3	1.00	.1	.46	.46	70.8	71.2	599790
13	14443	21921	-.8089A	.0159	.94	-8.7	.90	-7.8	.49	.44	75.3	73.3	599791
14	17605	21921	-1.7266A	.0185	1.00	.0	1.02	1.0	.38	.38	81.6	81.6	599797
15	15463	21921	-1.0775A	.0164	.91	-9.9	.82	-9.9	.50	.43	77.5	75.4	599800
16	12645	21921	-.3669A	.0154	1.09	9.9	1.10	9.5	.40	.46	67.5	70.9	599802
17	19076	21921	-2.3071A	.0214	.92	-6.3	.80	-7.3	.39	.33	87.8	87.2	599804
18	18568	21921	-2.0866A	.0202	.97	-2.6	.89	-4.4	.38	.35	85.3	85.1	599809
19	11632	21921	-.1271A	.0153	1.04	6.3	1.05	5.1	.44	.47	68.4	70.3	599811
20	15128	21921	-.9872A	.0162	1.08	9.9	1.15	9.9	.38	.43	72.5	74.7	599813
21	19694	21921	-2.6200A	.0235	.93	-4.6	.81	-5.7	.35	.30	90.0	89.8	599814
22	17010	21921	-1.5301A	.0177	1.09	9.8	1.31	9.9	.31	.40	78.8	79.7	599816
23	18435	21921	-2.0327A	.0199	.88	-9.9	.77	-9.6	.44	.35	85.8	84.6	599824
24	13183	21921	-.4963A	.0155	1.00	.0	.98	-1.6	.46	.46	71.4	71.5	599838
25	15981	21921	-1.2216A	.0168	1.22	9.9	1.45	9.9	.25	.42	71.3	76.7	599842
26	15128	21921	-.9872A	.0162	.96	-6.0	.90	-7.1	.47	.43	75.6	74.7	599845
27	17229	21921	-1.6005A	.0180	.94	-6.3	.88	-6.4	.44	.39	81.8	80.4	599850
28	15154	21921	-.9944A	.0163	.91	-9.9	.81	-9.9	.51	.43	76.8	74.7	599855
29	19173	21921	-2.3527A	.0217	1.04	2.8	1.13	3.9	.29	.32	87.5	87.6	599880
30	19106	21921	-2.3213A	.0215	1.04	2.6	1.12	3.8	.29	.33	87.4	87.3	599882
31	14417	21921	-.8023A	.0159	.92	-9.9	.87	-9.9	.51	.45	76.1	73.3	599888
32	17931	21921	-1.8415A	.0190	.93	-6.4	.86	-6.2	.42	.37	83.8	82.8	599894
33	18085	21921	-1.8982A	.0192	1.00	-.1	.99	-.6	.37	.37	83.5	83.3	599904
34	14124	21921	-.7281A	.0158	.90	-9.9	.86	-9.9	.52	.45	76.4	72.8	599907
35	17908	21921	-1.8332A	.0189	.91	-8.4	.80	-9.3	.44	.37	83.9	82.7	599909
36	17682	21921	-1.7532A	.0186	1.02	2.2	1.02	.8	.36	.38	81.4	81.9	599911
37	18200	21921	-1.9413A	.0194	1.01	1.2	1.11	4.2	.34	.36	83.9	83.7	600456
38	18022	21921	-1.8749A	.0191	1.02	1.6	.89	-4.9	.37	.37	82.1	83.1	600457
39	14362	21921	-.7883A	.0159	1.09	9.9	1.15	9.9	.38	.45	70.7	73.2	600460
40	15147	21921	-.9924A	.0163	.93	-9.0	.89	-7.9	.48	.43	76.8	74.7	600464
41	14752	21921	-.8885A	.0161	1.01	1.9	1.00	.3	.43	.44	73.4	73.9	600468
42	20763	21921	-3.3912A	.0310	.91	-3.6	.75	-5.5	.29	.23	94.7	94.6	600469
43	16590	21921	-1.4001A	.0173	1.06	6.7	1.04	2.0	.37	.41	76.7	78.4	600470
44	17177	21921	-1.5837A	.0179	.89	-9.9	.79	-9.9	.47	.39	82.4	80.2	600816
45	17097	21921	-1.5580A	.0178	.96	-4.3	.93	-3.4	.42	.40	80.8	80.0	603145
46	10511	21921	.1364A	.0153	.94	-9.8	.93	-7.9	.52	.47	72.8	70.2	603147
47	11702	21921	-.1435A	.0153	1.16	9.9	1.24	9.9	.35	.47	63.9	70.3	603149
48	16952	21921	-1.5118A	.0177	.93	-7.8	.83	-9.5	.46	.40	80.6	79.5	603152
49	17759	21921	-1.7801A	.0187	.92	-7.8	.82	-8.4	.44	.38	83.3	82.2	603156
50	18593	21921	-2.0969A	.0202	.89	-9.1	.75	-9.9	.43	.35	86.3	85.2	603157
51	8414	11769	-1.1907	.0227	1.02	1.7	1.02	.9	.42	.43	76.0	76.1	633857
52	2630	3072	-2.1063	.0551	.92	-2.3	.84	-2.2	.39	.34	86.4	86.0	633858
53	2041	2959	-.9489	.0441	1.00	.0	.98	-.4	.43	.43	73.8	74.5	633859
54	2757	2994	-2.8556	.0706	.93	-1.4	.85	-1.4	.32	.27	92.2	92.0	633860
55	2615	2963	-2.3749	.0606	.94	-1.6	.77	-2.7	.37	.31	89.0	88.3	633861
56	9377	11725	-1.7513	.0252	1.01	.8	1.00	.1	.38	.39	81.0	81.4	633862
57	2142	3151	-.8951	.0425	1.01	.3	1.02	.6	.43	.43	74.3	74.1	633863
58	1823	2964	-.4880	.0421	1.10	5.6	1.16	5.0	.37	.45	67.9	71.5	633864
59	2425	3024	-1.6341	.0495	.97	-.9	.97	-.4	.40	.38	82.5	81.5	633865
60	702	2938	1.5588	.0480	.99	-.5	1.28	5.3	.41	.43	80.6	79.5	633866
61	1267	3014	.4579	.0413	1.10	5.8	1.20	7.0	.38	.46	67.4	70.6	633867
62	2310	2908	-1.5960	.0499	.89	-4.2	.77	-4.3	.47	.38	82.9	80.8	633868
63	2065	2975	-.9685	.0441	.98	-1.1	.92	-2.1	.45	.43	74.2	74.7	633869
64	1906	3018	-.5834	.0422	.94	-3.2	.89	-3.6	.49	.45	74.5	72.2	633870

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
65	1904	2933	-.7125	.0431	.96	-2.2	.90	-2.9	.47	.44	73.7	72.6	633871
66	2116	3012	-1.0359	.0441	1.05	2.5	.98	-.5	.40	.43	72.4	75.1	633872
67	9121	11757	-1.5758	.0243	.96	-3.1	1.03	1.0	.42	.40	81.1	79.8	633873
68	2483	3022	-1.8275	.0513	.89	-3.9	.72	-4.9	.45	.36	84.7	83.0	633874
69	2171	2959	-1.1734	.0458	.87	-6.2	.73	-6.9	.52	.41	79.2	76.8	633875
70	2525	2992	-1.9723	.0540	.99	-.3	.94	-.9	.35	.34	85.1	84.7	633876
71	9126	11717	-1.6040	.0244	.90	-7.8	.76	-9.6	.48	.40	81.1	80.0	633877
72	2363	2969	-1.6248	.0497	.90	-3.8	.74	-5.0	.47	.39	82.2	81.1	633878
73	8484	11784	-1.2057	.0228	1.16	9.9	1.24	9.9	.32	.43	72.0	76.4	633879
74	1618	3012	-.1431	.0410	1.31	9.9	1.47	9.9	.23	.46	58.4	70.0	633880
75	2846	2988	-3.4489	.0880	1.08	1.1	2.06	6.0	.09	.21	95.2	95.2	633881
76	2646	2926	-2.6467	.0660	.91	-2.1	.63	-4.2	.37	.29	90.6	90.4	633882
77	10086	11708	-2.2686	.0287	.95	-2.6	.88	-3.0	.37	.34	87.0	86.4	633883
78	1344	3021	.3531	.0410	1.14	8.0	1.23	8.1	.35	.46	64.9	70.2	633884
79	1664	2948	-.2816	.0417	1.24	9.9	1.40	9.9	.28	.46	61.2	70.4	633885
80	1263	2959	.4790	.0418	1.16	8.8	1.27	9.2	.35	.47	64.3	70.7	633886
81	8917	11767	-1.4449	.0237	1.26	9.9	1.55	9.9	.22	.41	72.7	78.6	633887
82	1110	2969	.7051	.0424	1.10	5.4	1.18	5.5	.37	.46	68.8	71.9	633888
83	2279	2975	-1.4074	.0473	.91	-3.7	.79	-4.6	.47	.39	80.4	78.8	633889
84	8468	11768	-1.2068	.0228	1.06	5.5	1.14	6.3	.38	.43	75.1	76.3	633890
85	1798	2958	-.4492	.0422	.96	-2.2	.93	-2.4	.49	.46	72.9	71.6	633891
86	2690	3018	-2.4818	.0617	.96	-1.0	.92	-.9	.33	.30	89.4	89.1	633892
87	2419	2955	-1.7759	.0515	1.00	-.1	1.03	.5	.36	.36	82.6	82.7	633893
88	2646	3012	-2.3443	.0590	1.02	.4	.96	-.5	.30	.31	87.7	87.8	633894
89	10837	11777	-2.9713	.0356	.91	-3.4	.71	-5.9	.34	.28	92.2	92.0	633895
90	2031	3054	-.7982	.0427	1.06	2.9	1.07	2.1	.40	.44	71.4	73.6	633896
91	2389	2970	-1.6944	.0501	.96	-1.5	.89	-1.9	.41	.37	81.8	81.5	633897
92	8229	11752	-1.0938	.0224	.94	-6.2	.90	-4.8	.48	.44	77.0	75.3	633898
93	1561	3008	.0001	.0410	.81	-9.9	.77	-9.7	.60	.47	78.2	70.0	633899
94	1428	3046	.2135	.0407	1.21	9.9	1.33	9.9	.30	.46	62.4	70.0	633900
MEAN	10246.6	13992	-1.2682	.0300	1.00	-.2	1.00	-.4			78.2	78.6	
S.D.	6772.0	8817.7	.9126	.0161	.09	6.1	.21	6.3			7.7	6.4	

Grade 4

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
1	17581	21598	-1.8110A	.0190	.84	-9.9	.68	-9.9	.49	.37	84.2	82.4	599868
2	16903	21598	-1.5790A	.0181	.91	-9.9	.85	-7.4	.46	.39	82.0	80.1	603918
3	19653	21598	-2.7649A	.0249	.97	-1.5	1.33	7.7	.27	.28	91.2	90.9	603923
4	19199	21598	-2.5054A	.0229	.99	-.9	1.12	3.3	.30	.31	89.2	88.9	603925
5	16820	21598	-1.5515A	.0180	.93	-7.8	.82	-9.4	.45	.39	80.8	79.8	603927
6	19189	21598	-2.5004A	.0228	.97	-2.1	1.00	.1	.32	.31	89.2	88.8	603933
7	16158	21598	-1.3463A	.0173	.92	-9.3	.86	-8.3	.47	.41	79.4	77.8	603934
8	19715	21598	-2.8039A	.0252	.96	-2.4	1.09	2.2	.29	.28	91.4	91.2	603938
9	19751	21598	-2.8273A	.0254	.92	-4.6	.82	-4.9	.33	.28	91.6	91.3	603939
10	19508	21598	-2.6775A	.0241	.93	-4.1	.86	-3.9	.33	.29	90.4	90.2	603942
11	11819	21598	-.2179A	.0154	1.09	9.9	1.14	9.9	.40	.47	67.5	70.6	603947
12	10637	21598	.0647A	.0154	1.09	9.9	1.13	9.9	.41	.48	67.0	70.4	603954
13	11273	21598	-.0872A	.0154	1.11	9.9	1.16	9.9	.40	.47	66.4	70.4	603958
14	16285	21598	-1.3841A	.0174	1.07	7.4	1.10	5.1	.36	.41	76.2	78.2	603962
15	18596	21598	-2.2151A	.0210	.94	-4.9	.90	-3.7	.38	.34	86.9	86.3	603965
16	16254	21598	-1.3750A	.0174	1.05	5.1	1.01	.7	.38	.41	76.6	78.1	603969
17	10086	21598	.1969A	.0154	1.09	9.9	1.15	9.9	.41	.48	67.7	70.5	603974
18	13577	21598	-.6474A	.0158	.99	-.8	.98	-1.4	.46	.45	72.5	72.3	603982
19	18541	21598	-2.1908A	.0209	.97	-2.5	.90	-3.7	.36	.34	86.3	86.1	603984
20	15676	21598	-1.2052A	.0169	1.06	7.0	1.11	6.6	.38	.42	75.3	76.5	603989
21	11820	21598	-.2182A	.0154	1.05	7.2	1.06	5.6	.44	.47	68.6	70.6	604003
22	16830	21598	-1.5548A	.0180	1.00	.1	1.01	.4	.39	.39	79.9	79.8	604004
23	18631	21598	-2.2307A	.0211	1.02	1.6	1.15	4.9	.31	.33	86.6	86.4	604008
24	14824	21598	-.9697A	.0163	.97	-3.4	.90	-7.2	.46	.44	74.3	74.5	604015
25	15610	21598	-1.1862A	.0168	1.08	9.2	1.06	3.4	.37	.42	73.6	76.3	604020
26	14611	21598	-.9130A	.0162	1.00	.6	1.00	-.1	.44	.44	73.7	74.0	604022
27	16954	21598	-1.5952A	.0181	.91	-9.3	.81	-9.8	.46	.39	81.8	80.2	604032

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
28	16563	21598	-1.4699A	.0177	1.06	6.4	1.36	9.9	.33	.40	79.0	79.0	604044
29	11141	21598	-.0557A	.0154	.99	-1.9	1.00	.1	.48	.47	71.0	70.4	604045
30	14435	21598	-.8670A	.0161	.98	-2.5	.96	-2.7	.46	.44	74.2	73.7	604055
31	17062	21598	-1.6310A	.0182	.89	-9.9	.71	-9.9	.48	.39	81.6	80.6	604057
32	17148	21598	-1.6596A	.0184	.97	-3.0	.88	-5.9	.41	.39	80.9	80.9	604058
33	13377	21598	-.5974A	.0157	.95	-6.8	.93	-5.8	.49	.46	73.9	72.0	604064
34	19043	21598	-2.4255A	.0223	1.06	4.0	1.26	7.3	.26	.32	88.1	88.2	604072
35	19025	21598	-2.4166A	.0223	.97	-2.1	.88	-3.7	.34	.32	88.2	88.1	604075
36	16647	21598	-1.4967A	.0178	1.09	9.0	1.20	9.4	.33	.40	77.8	79.2	604080
37	18666	21598	-2.2464A	.0212	1.00	.1	1.09	3.0	.32	.33	86.8	86.6	604082
38	15832	21598	-1.2498A	.0170	1.08	9.1	1.09	5.3	.37	.42	74.5	76.9	604090
39	15984	21598	-1.2945A	.0171	.96	-5.1	.93	-4.2	.45	.41	78.2	77.3	604094
40	15134	21598	-1.0536A	.0165	.99	-1.7	.94	-4.2	.45	.43	74.9	75.2	604103
41	18047	21598	-1.9860A	.0198	1.09	7.6	1.27	9.8	.28	.36	83.3	84.1	604105
42	15788	21598	-1.2373A	.0170	.92	-9.9	.81	-9.9	.48	.42	78.8	76.8	604106
43	18166	21598	-2.0332A	.0200	1.00	-.3	.98	-.8	.35	.35	84.7	84.6	604108
44	20602	21598	-3.5370A	.0330	.96	-1.6	.89	-2.2	.23	.21	95.4	95.3	604112
45	9773	21598	.2724A	.0155	.88	-9.9	.90	-9.9	.55	.48	76.2	70.7	604116
46	17331	21598	-1.7224A	.0186	.92	-7.7	.76	-9.9	.45	.38	82.3	81.5	604121
47	15896	21598	-1.2687A	.0171	1.01	1.4	1.01	.7	.41	.42	76.7	77.1	604125
48	12613	21598	-.4095A	.0156	1.02	2.5	1.04	4.1	.45	.46	70.8	71.1	604128
49	19419	21598	-2.6253A	.0237	1.00	.3	1.09	2.4	.28	.30	90.0	89.8	604132
50	14438	21598	-.8677A	.0162	.98	-3.0	.94	-4.3	.46	.44	74.1	73.7	604134
51	17246	21598	-1.6933A	.0185	.94	-5.5	.86	-6.7	.42	.38	82.1	81.2	604136
52	11526	21598	-.1477A	.0154	1.09	9.9	1.14	9.9	.40	.47	67.0	70.4	604143
53	18833	21598	-2.3236A	.0217	.94	-4.3	.86	-4.6	.37	.33	87.7	87.3	604146
54	11461	21598	-.1322A	.0154	1.19	9.9	1.26	9.9	.34	.47	62.8	70.4	604151
55	14764	21598	-.9538A	.0163	.91	-9.9	.89	-7.8	.50	.44	77.6	74.3	604152
56	7638	11148	-.9824	.0228	.96	-3.4	.92	-3.9	.47	.44	75.2	74.6	634166
57	1343	2659	.0463	.0438	1.20	9.9	1.29	9.6	.32	.47	62.4	70.2	634167
58	1145	2616	.3682	.0443	1.00	-.1	1.04	1.4	.46	.46	70.9	70.3	634168
59	1287	2580	.0540	.0443	.98	-.9	.98	-.7	.48	.47	70.5	70.0	634169
60	1959	2558	-1.4097	.0510	1.34	9.9	1.85	9.9	.11	.39	73.1	78.7	634171
61	2599	2632	-4.9031	.1755	.99	.0	1.07	.4	.11	.11	98.7	98.7	634172
62	1817	2620	-.9644	.0470	.88	-5.6	.82	-4.8	.51	.43	78.1	74.5	634173
63	10045	11116	-2.7266	.0339	.92	-3.6	.79	-4.3	.36	.30	90.5	90.4	634174
64	7210	11202	-.7392	.0222	.84	-9.9	.75	-9.9	.57	.46	78.2	73.0	634175
65	1634	2677	-.5403	.0445	.89	-5.8	.82	-6.0	.53	.46	75.4	71.5	634176
66	1848	2667	-.9076	.0465	1.07	3.3	1.02	.5	.38	.42	70.0	74.5	634177
67	2114	2662	-1.6536	.0524	1.06	2.0	.98	-.4	.36	.39	79.3	80.9	634178
68	2446	2647	-2.9020	.0763	.97	-.5	.81	-1.7	.29	.26	92.4	92.4	634179
69	1260	2612	.1072	.0440	1.09	4.9	1.15	5.3	.39	.46	66.8	69.9	634180
70	720	2605	1.2159	.0487	1.26	9.9	1.72	9.9	.21	.44	71.6	77.0	634181
71	10346	11120	-3.1251	.0389	.93	-2.6	.68	-5.9	.32	.26	93.0	93.0	634182
72	9955	11160	-2.5776	.0324	1.03	1.5	1.21	4.0	.28	.31	89.2	89.3	634184
73	2076	2567	-1.7412	.0545	.95	-1.5	.88	-1.8	.41	.37	82.6	82.0	634185
74	1904	2567	-1.3062	.0499	.84	-6.7	.71	-6.2	.53	.42	81.5	77.4	634186
75	1508	2629	-.3513	.0444	.84	-9.5	.80	-6.9	.58	.46	78.0	70.8	634187
76	1856	2619	-1.0906	.0474	1.01	.5	1.02	.5	.41	.41	74.8	75.1	634189
77	1973	2591	-1.4065	.0507	.98	-.8	.91	-1.6	.42	.40	78.8	78.5	634190
78	1542	2688	-.3689	.0437	1.06	3.2	1.11	3.6	.41	.45	69.2	70.4	634191
79	1749	2622	-.8364	.0460	.98	-1.1	.98	-.5	.45	.43	74.5	73.3	634192
80	1048	2580	.5485	.0451	1.12	5.9	1.22	6.8	.37	.47	67.5	71.2	634193
81	1080	2631	.5402	.0444	1.01	.4	1.04	1.4	.45	.46	70.8	70.9	634194
82	2420	2678	-2.6628	.0687	.94	-1.2	.68	-3.5	.35	.28	90.3	90.3	634195
83	1686	2621	-.7555	.0457	.96	-2.2	.92	-2.3	.48	.45	74.2	72.8	634196
84	1717	2587	-.8031	.0464	.95	-2.6	.93	-1.8	.48	.44	74.2	73.3	634197
85	2118	2613	-1.7620	.0539	.95	-1.7	.92	-1.3	.40	.36	82.5	82.0	634198
86	9368	11108	-2.0997	.0282	.93	-4.3	.90	-2.8	.40	.36	85.9	84.9	634199
87	1369	2627	-.0559	.0437	1.14	7.6	1.24	8.3	.35	.46	64.2	69.6	634200
88	2058	2527	-1.7906	.0552	.91	-3.0	.76	-3.8	.44	.36	83.2	82.2	634201
89	1885	2653	-1.0847	.0473	.95	-2.3	.89	-2.5	.46	.42	76.8	75.3	634202
90	2093	2615	-1.6932	.0530	1.03	1.1	1.07	1.1	.34	.37	80.7	81.1	634203
91	2374	2557	-3.0171	.0796	.95	-.8	.71	-2.6	.30	.25	92.8	92.8	634204
92	1919	2646	-1.1699	.0479	.94	-2.6	.87	-3.0	.46	.41	77.1	76.0	634206
93	10635	11156	-3.5817	.0462	.92	-2.2	.78	-3.2	.28	.22	95.3	95.3	634207
94	2442	2561	-3.5591	.0964	.92	-1.1	.63	-2.8	.29	.22	95.3	95.3	634208
95	2163	2609	-1.9040	.0561	.99	-.3	1.06	.8	.36	.36	83.4	83.6	634209

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
96	9953	11078	-2.6713	.0333	.97	-1.1	1.00	.0	.32	.30	90.0	89.9	634210
97	1980	2617	-1.4005	.0499	1.01	.3	.98	-.3	.39	.40	78.7	78.1	634211
98	2163	2646	-1.8123	.0543	.85	-5.1	.71	-4.8	.47	.36	84.8	82.5	634212
99	10089	11057	-2.8419	.0354	.89	-4.5	.73	-5.3	.37	.28	91.5	91.2	634213
100	1415	2642	-.1524	.0438	1.02	1.1	1.06	2.2	.44	.46	70.1	70.0	634214
101	1691	2630	-.6945	.0453	.96	-2.1	.99	-.4	.46	.44	75.0	72.3	634215
102	1900	2603	-1.2129	.0485	.99	-.4	1.04	.8	.41	.41	77.3	76.4	634216
103	1310	2648	.1022	.0437	.96	-2.3	.96	-1.5	.49	.47	71.9	69.9	634217
104	2021	2622	-1.4771	.0505	1.04	1.4	1.18	3.1	.34	.38	79.3	79.0	634218
105	4222	11104	.6605	.0222	1.33	9.9	1.54	9.9	.24	.48	62.1	72.8	634219
MEAN	9938.6	13370	-1.3744	.0335	.99	-.4	.99	-.3			79.2	79.4	
S.D.	7037.6	8943.2	1.0811	.0219	.09	5.6	.20	5.7			8.4	7.6	

Grade 5

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
1	16570	21385	-1.5505A	.0180	.98	-2.0	1.03	1.2	.41	.40	80.1	79.7	603388
2	17766	21385	-1.9786A	.0198	.88	-9.9	.68	-9.9	.46	.37	84.9	83.8	603397
3	16684	21385	-1.5879A	.0182	.91	-9.7	.89	-5.6	.46	.40	82.2	80.0	603399
4	14972	21385	-1.0675A	.0167	1.18	9.9	1.52	9.9	.29	.44	71.7	75.4	603401
5	16028	21385	-1.3781A	.0175	.96	-4.5	.98	-1.2	.44	.42	79.6	78.1	603409
6	16913	21385	-1.6654A	.0185	.96	-4.4	.84	-7.8	.43	.39	80.8	80.8	603414
7	17223	21385	-1.7741A	.0189	1.02	1.7	1.06	2.6	.37	.38	81.8	81.8	603424
8	14919	21385	-1.0523A	.0167	.97	-3.5	.92	-5.5	.47	.44	75.6	75.3	603428
9	17900	21385	-2.0322A	.0200	1.08	6.7	1.23	7.9	.30	.36	83.4	84.3	603433
10	14433	21385	-.9183A	.0164	1.13	9.9	1.18	9.9	.36	.45	70.3	74.3	603436
11	19217	21385	-2.6603A	.0239	.93	-4.6	.79	-6.1	.36	.30	90.1	89.8	603437
12	16346	21385	-1.4779A	.0178	1.02	1.7	.96	-2.1	.41	.41	78.4	79.0	603442
13	15167	21385	-1.1228A	.0168	.94	-7.6	.87	-8.5	.48	.44	77.1	75.9	603446
14	17373	21385	-1.8288A	.0191	.98	-2.2	.98	-1.0	.39	.38	83.1	82.3	603449
15	18722	21385	-2.3978A	.0221	1.01	1.0	1.07	2.0	.31	.33	87.9	87.7	603458
16	12298	21385	-.3656A	.0157	1.08	9.9	1.12	9.9	.42	.48	68.7	71.4	603459
17	17711	21385	-1.9569A	.0197	1.14	9.9	1.67	9.9	.24	.37	83.0	83.6	603460
18	18504	21385	-2.2933A	.0215	1.01	.8	1.10	3.0	.32	.34	87.2	86.7	603473
19	14189	21385	-.8526A	.0163	.90	-9.9	.82	-9.9	.53	.45	76.7	73.9	603476
20	12951	21385	-.5302A	.0159	1.06	9.1	1.06	4.9	.43	.47	69.3	72.1	603482
21	18094	21385	-2.1122A	.0205	1.00	-.3	.89	-4.0	.37	.35	84.9	85.1	603486
22	12616	21385	-.4453A	.0158	.98	-3.7	.97	-3.0	.49	.47	73.1	71.7	603488
23	11947	21385	-.2781A	.0157	1.01	1.5	1.00	.0	.47	.48	71.0	71.2	603499
24	13325	21385	-.6259A	.0160	1.01	.8	.99	-.9	.46	.47	72.1	72.5	603500
25	17557	21385	-1.8973A	.0194	1.04	3.5	1.04	1.6	.35	.37	82.4	83.0	603505
26	11160	21385	-.0834A	.0156	.88	-9.9	.85	-9.9	.57	.49	76.6	71.0	603508
27	16083	21385	-1.3952A	.0175	1.09	9.9	1.23	9.9	.34	.42	77.0	78.2	603513
28	18912	21385	-2.4933A	.0227	.84	-9.9	.56	-9.9	.44	.32	89.1	88.5	603519
29	15680	21385	-1.2725A	.0172	1.04	4.4	1.07	4.1	.40	.43	76.4	77.2	603520
30	14539	21385	-.9473A	.0165	1.07	9.7	1.10	6.5	.40	.45	72.0	74.5	603529
31	9273	21385	.3853A	.0158	1.09	9.9	1.20	9.9	.42	.49	69.6	71.7	603534
32	15295	21385	-1.1596A	.0169	.95	-5.9	.85	-9.2	.47	.43	76.6	76.2	603535
33	18090	21385	-2.1104A	.0204	.93	-5.7	.97	-.9	.39	.35	85.9	85.0	603542
34	18946	21385	-2.5110A	.0229	.92	-5.4	.80	-6.2	.37	.32	89.0	88.6	603544
35	17658	21385	-1.9364A	.0196	1.04	3.2	1.18	6.5	.34	.37	83.2	83.4	603552
36	17155	21385	-1.7502A	.0188	.88	-9.9	.77	-9.9	.47	.39	83.4	81.6	603554
37	10699	21385	.0302A	.0156	1.12	9.9	1.19	9.9	.40	.49	67.0	71.0	603556
38	19468	21385	-2.8128A	.0252	.97	-2.0	1.01	.4	.30	.29	91.1	91.0	603558
39	18455	21385	-2.2705A	.0213	.94	-4.7	.81	-6.5	.39	.34	87.0	86.5	603563
40	17291	21385	-1.7992A	.0190	1.16	9.9	1.44	9.9	.26	.38	80.0	82.1	603566
41	12780	21385	-.4869A	.0158	.95	-7.2	.92	-7.1	.51	.47	73.4	71.9	603576
42	13713	21385	-.7265A	.0161	.97	-4.0	.94	-4.9	.48	.46	73.8	73.1	603579
43	18694	21385	-2.3835A	.0220	.94	-4.4	.75	-8.3	.38	.33	87.8	87.5	603610
44	11955	21385	-.2802A	.0157	1.00	.4	1.01	.9	.48	.48	71.3	71.2	603616
45	15739	21385	-1.2900A	.0172	.95	-5.6	.86	-8.1	.46	.42	78.0	77.3	603623
46	11823	21385	-.2474A	.0156	.97	-4.5	.95	-4.5	.50	.48	72.0	71.2	603627
47	16270	21385	-1.4535A	.0177	.91	-9.9	.82	-9.6	.48	.41	80.8	78.8	603631
48	16402	21385	-1.4957A	.0179	1.02	2.2	.96	-1.9	.40	.41	78.3	79.2	603653

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
49	16844	21385	-1.6419A	.0184	.94	-5.9	.90	-4.8	.44	.40	81.9	80.6	603666
50	13503	21385	-.6719A	.0160	1.05	7.6	1.04	3.1	.43	.46	70.7	72.8	603678
51	14554	21385	-.9513A	.0165	.83	-9.9	.73	-9.9	.56	.45	79.7	74.6	603679
52	18296	21385	-2.1991A	.0209	.86	-9.9	.73	-9.9	.44	.35	87.0	85.9	603687
53	15204	21385	-1.1332A	.0168	1.01	.9	1.06	3.6	.43	.44	76.2	76.0	603689
54	15983	21385	-1.3641A	.0175	.98	-2.1	.99	-.6	.43	.42	78.6	78.0	603697
55	14198	21385	-.8551A	.0163	.95	-6.6	.90	-7.1	.49	.45	75.1	73.9	603703
56	8031	11150	-1.2056	.0237	.98	-2.1	.94	-2.3	.46	.44	77.5	76.8	634223
57	1207	2625	.2427	.0442	1.01	.4	1.01	.5	.47	.47	70.2	70.4	634224
58	2011	2590	-1.5138	.0516	1.09	3.4	1.11	1.8	.33	.40	77.2	79.6	634225
59	1655	2580	-.7197	.0460	1.12	6.0	1.26	6.5	.36	.45	68.4	72.7	634227
60	1066	2551	.4469	.0453	.95	-2.7	.94	-2.0	.51	.47	74.1	71.2	634228
61	1473	2591	-.3250	.0448	.91	-5.2	.86	-4.8	.54	.47	74.9	71.0	634230
62	2052	2523	-1.8422	.0555	1.02	.7	.98	-.2	.36	.37	82.0	82.5	634231
63	8223	11133	-1.3220	.0241	.92	-7.3	.80	-8.2	.50	.44	79.5	77.7	634232
64	1543	2552	-.4872	.0457	.89	-6.0	.82	-5.6	.54	.47	76.4	71.8	634233
65	1512	2513	-.4894	.0459	.94	-3.2	.89	-3.2	.51	.46	73.9	71.6	634234
66	1734	2557	-.9472	.0475	1.03	1.2	1.00	.1	.44	.45	72.9	74.5	634236
67	1861	2596	-1.1316	.0482	.94	-2.5	.87	-2.9	.47	.42	77.1	75.9	634237
68	1484	2519	-.4467	.0452	1.42	9.9	1.63	9.9	.12	.45	54.6	70.6	634238
69	2130	2627	-1.7905	.0538	1.06	1.9	1.07	1.1	.32	.36	80.6	81.9	634239
70	8123	11065	-1.2898	.0241	.97	-2.6	.86	-5.8	.47	.44	77.3	77.5	634241
71	1055	2568	.4653	.0453	1.07	3.4	1.14	4.5	.42	.47	69.6	71.5	634242
72	912	2580	.7573	.0459	1.42	9.9	1.78	9.9	.10	.45	59.8	72.8	634243
73	8757	11022	-1.7158	.0260	.86	-9.9	.69	-9.9	.50	.40	83.5	81.1	634244
74	1522	2497	-.4984	.0461	1.21	9.8	1.28	7.6	.31	.46	64.0	71.8	634246
75	1708	2626	-.7369	.0459	.99	-.4	1.04	1.0	.45	.45	74.3	73.1	634248
76	2102	2594	-1.8024	.0547	.97	-1.0	.92	-1.2	.40	.38	83.3	82.3	634249
77	2048	2646	-1.5268	.0509	1.08	2.8	1.09	1.7	.34	.40	77.7	79.5	634250
78	1116	2571	.3714	.0448	1.17	8.6	1.29	9.0	.34	.47	65.6	70.9	634251
79	1671	2575	-.7107	.0458	1.12	6.1	1.19	5.1	.34	.43	67.0	72.3	634254
80	2082	2617	-1.6728	.0528	.92	-2.7	.93	-1.2	.43	.38	82.5	81.0	634255
81	1920	2561	-1.3747	.0500	1.09	3.7	1.10	1.9	.34	.40	75.0	77.8	634256
82	7346	11097	-.8555	.0228	1.02	2.3	1.04	1.9	.45	.47	73.3	74.3	634258
83	1741	2595	-.8798	.0464	1.07	3.1	1.11	2.9	.38	.44	72.2	73.6	634260
84	5446	11037	.0623	.0219	1.20	9.9	1.28	9.9	.37	.50	64.4	71.5	634261
85	6453	11033	-.4260	.0221	1.24	9.9	1.40	9.9	.32	.49	64.0	72.2	634262
86	528	2612	1.7687	.0543	1.11	3.5	1.31	4.7	.34	.43	81.1	82.4	634264
87	1667	2632	-.6735	.0453	1.20	9.8	1.38	9.6	.29	.45	65.5	72.3	634265
88	1790	2664	-.8656	.0458	1.08	3.8	1.08	2.1	.37	.43	71.1	73.4	634266
89	1506	2550	-.4286	.0450	1.10	5.1	1.12	3.8	.38	.45	66.4	70.6	634267
90	2092	2603	-1.7436	.0535	1.02	.7	.97	-.5	.37	.37	80.8	81.6	634268
91	2066	2547	-1.8572	.0548	1.13	4.0	1.52	6.7	.25	.37	81.5	82.0	634270
92	1517	2633	-.4011	.0442	1.06	3.4	1.11	3.4	.41	.46	68.6	70.5	634271
93	8164	10948	-1.3684	.0245	.86	-9.9	.72	-9.9	.53	.43	81.0	78.1	634272
94	10740	11020	-4.2727	.0614	.97	-.6	.95	-.6	.19	.17	97.4	97.4	634274
95	1846	2572	-1.1443	.0484	1.16	6.7	1.42	8.1	.28	.42	71.8	75.8	634275
96	2177	2582	-2.0409	.0580	1.08	2.2	1.13	1.7	.29	.34	83.9	84.7	634276
97	2447	2593	-3.3379	.0878	.87	-2.0	.58	-3.5	.34	.23	94.3	94.3	634277
98	2115	2553	-1.9045	.0567	.94	-1.7	.96	-.6	.40	.36	84.7	83.6	634278
99	1996	2649	-1.3779	.0497	.98	-.9	.98	-.4	.43	.41	79.0	78.2	634279
100	2312	2560	-2.6692	.0702	.97	-.5	1.00	.1	.30	.29	90.5	90.3	634280
101	1790	2630	-.9398	.0467	1.34	9.9	1.64	9.9	.18	.44	64.5	74.3	634281
102	2190	2546	-2.1987	.0609	.95	-1.4	.83	-2.1	.38	.33	86.7	86.2	634283
103	8284	10972	-1.4360	.0248	.94	-4.7	.87	-4.8	.47	.43	79.9	78.6	634284
104	1587	2652	-.5252	.0445	.94	-3.0	.89	-3.6	.50	.46	73.3	71.4	634285
105	1449	2541	-.3478	.0449	1.18	9.5	1.20	6.2	.33	.46	62.7	70.4	634286
MEAN	9641.3	13238	-1.2027	.0313	1.02	.3	1.03	.0			77.2	78.0	
S.D.	6843.9	8858.0	.9016	.0164	.11	6.2	.23	6.2			7.7	6.1	

Grade 6

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
1	12957	20857	-.6190A	.0162	1.14	9.9	1.18	9.9	.38	.47	67.1	72.7	598846
2	17506	20857	-2.0674A	.0205	.91	-7.6	.82	-6.9	.43	.37	85.7	84.5	603159
3	17636	20857	-2.1235A	.0208	.92	-6.7	.77	-8.4	.42	.36	85.9	85.1	603171
4	17201	20857	-1.9424A	.0199	1.15	9.9	1.52	9.9	.26	.38	81.8	83.4	603172
5	14131	20857	-.9399A	.0167	.95	-6.4	.91	-6.3	.49	.46	76.3	74.6	603174
6	18718	20857	-2.6660A	.0242	1.01	.3	1.24	5.8	.29	.31	89.8	89.7	603181
7	15968	20857	-1.4972A	.0181	1.06	6.6	1.09	4.0	.38	.42	77.7	79.2	603182
8	13365	20857	-.7284A	.0164	1.17	9.9	1.25	9.9	.36	.47	67.7	73.3	603184
9	16496	20857	-1.6780A	.0188	1.05	4.6	1.08	3.5	.37	.40	79.9	80.9	603185
10	15671	20857	-1.4004A	.0178	.93	-7.5	.89	-5.8	.47	.42	80.3	78.3	603197
11	17867	20857	-2.2263A	.0213	.93	-5.4	.78	-7.7	.40	.35	86.5	86.0	603203
12	12605	20857	-.5260A	.0161	1.22	9.9	1.32	9.9	.33	.48	64.2	72.3	603206
13	14594	20857	-1.0725A	.0170	.85	-9.9	.74	-9.9	.55	.45	79.6	75.6	603212
14	14053	20857	-.9179A	.0167	.98	-2.6	.96	-3.0	.47	.46	74.8	74.5	603214
15	17643	20857	-2.1265A	.0208	1.08	6.6	1.23	7.4	.29	.36	84.7	85.1	603215
16	16616	20857	-1.7209A	.0189	1.05	5.1	1.14	5.6	.36	.40	80.9	81.3	603224
17	19196	20857	-2.9779A	.0268	1.01	.3	1.34	7.1	.25	.28	92.1	92.0	603234
18	12196	20857	-.4192A	.0160	.95	-7.2	.91	-7.6	.52	.48	73.7	71.9	603237
19	16136	20857	-1.5535A	.0183	.91	-9.6	.79	-9.9	.48	.41	81.1	79.7	603242
20	17410	20857	-2.0273A	.0203	.96	-3.8	.97	-1.2	.39	.37	85.2	84.2	603243
21	15819	20857	-1.4480A	.0180	.88	-9.9	.76	-9.9	.50	.42	80.9	78.8	603247
22	15463	20857	-1.3344A	.0176	.94	-7.4	.87	-7.3	.47	.43	79.1	77.8	603248
23	17036	20857	-1.8779A	.0196	.89	-9.9	.73	-9.9	.46	.38	84.6	82.8	603250
24	18650	20857	-2.6259A	.0239	.91	-5.9	.74	-7.3	.38	.31	89.9	89.4	603260
25	11799	20857	-.3165A	.0160	.97	-4.6	.97	-2.6	.51	.49	73.1	71.6	603267
26	13367	20857	-.7289A	.0164	.88	-9.9	.81	-9.9	.55	.47	76.9	73.3	603270
27	15736	20857	-1.4214A	.0179	1.00	.4	.97	-1.7	.42	.42	77.9	78.5	603276
28	11401	20857	-.2143A	.0159	1.00	-.1	1.02	2.2	.49	.49	72.0	71.4	603283
29	15012	20857	-1.1958A	.0173	1.04	4.9	1.10	5.3	.41	.44	75.7	76.6	603285
30	16968	20857	-1.8516A	.0195	1.03	2.6	.96	-1.5	.37	.39	81.8	82.5	603294
31	10398	20857	.0420A	.0159	1.13	9.9	1.20	9.9	.41	.50	66.9	71.4	603297
32	17583	20857	-2.1003A	.0207	.98	-1.9	.94	-2.2	.38	.36	85.5	84.9	603303
33	14840	20857	-1.1444A	.0172	1.04	4.4	1.06	3.2	.42	.44	75.3	76.2	603306
34	15422	20857	-1.3216A	.0176	1.08	8.8	1.03	1.8	.39	.43	75.2	77.6	603308
35	13865	20857	-.8655A	.0166	1.06	7.5	1.06	4.2	.43	.46	72.1	74.1	603309
36	16017	20857	-1.5134A	.0182	1.10	9.9	1.35	9.9	.34	.42	77.9	79.4	603312
37	14069	20857	-.9223A	.0167	1.12	9.9	1.17	9.9	.38	.46	70.7	74.5	603315
38	12877	20857	-.5979A	.0162	.91	-9.9	.93	-5.3	.53	.48	77.0	72.6	603320
39	19259	20857	-3.0243A	.0272	.96	-2.0	1.01	.1	.29	.27	92.4	92.3	603327
40	17310	20857	-1.9863A	.0201	.97	-2.4	1.01	.3	.39	.37	84.3	83.8	603328
41	14131	20857	-.9399A	.0167	.98	-2.7	.99	-.8	.47	.46	75.2	74.6	603331
42	16353	20857	-1.6279A	.0186	.94	-6.3	.81	-9.0	.45	.41	81.2	80.4	603345
43	12885	20857	-.5998A	.0162	.96	-5.9	.95	-4.3	.50	.48	74.2	72.6	603348
44	18339	20857	-2.4562A	.0227	.92	-5.4	.79	-6.4	.38	.33	88.5	88.0	603353
45	17779	20857	-2.1861A	.0211	.91	-7.1	.84	-5.7	.41	.35	86.7	85.6	603355
46	9858	20857	.1801A	.0159	1.05	7.7	1.10	9.4	.46	.50	69.9	71.6	603358
47	11437	20857	-.2235A	.0159	.93	-9.9	.92	-7.8	.54	.49	75.0	71.5	603361
48	14191	20857	-.9568A	.0168	.95	-6.5	.88	-8.5	.49	.46	75.7	74.7	603363
49	11460	20857	-.2293A	.0159	1.16	9.9	1.24	9.9	.38	.49	65.7	71.5	603366
50	18136	20857	-2.3537A	.0221	.92	-5.7	.94	-1.8	.38	.34	88.0	87.1	603368
51	16942	20857	-1.8420A	.0194	.92	-7.2	.91	-3.7	.43	.39	84.0	82.4	603375
52	17078	20857	-1.8942A	.0197	.92	-7.3	.87	-5.4	.43	.38	84.5	82.9	603377
53	17889	20857	-2.2362A	.0214	.95	-3.8	.88	-4.1	.38	.35	86.6	86.1	603379
54	18075	20857	-2.3241A	.0219	1.03	2.2	1.13	3.9	.31	.34	86.8	86.9	603381
55	16169	20857	-1.5648A	.0184	.99	-1.3	.98	-.8	.42	.41	79.9	79.8	603383
56	16678	20857	-1.7436A	.0190	.93	-6.6	.89	-5.0	.44	.40	83.1	81.5	603713
57	17929	20857	-2.2544A	.0215	.95	-4.1	.85	-5.2	.39	.35	86.6	86.3	603714
58	14413	20857	-1.0201A	.0169	1.00	-.6	.97	-1.7	.46	.45	74.9	75.2	603715
59	9621	11326	-2.1864	.0286	.90	-6.0	.79	-5.5	.43	.36	86.7	85.4	634350
60	2024	2419	-1.9995	.0597	.92	-2.2	.77	-3.0	.43	.37	85.8	84.4	634352
61	1217	2341	-.0189	.0471	1.08	4.2	1.11	3.4	.43	.48	67.9	70.9	634355
62	1781	2378	-1.3602	.0526	.87	-5.2	.73	-5.3	.52	.43	81.1	78.2	634358
63	1295	2411	-.1399	.0465	1.09	4.4	1.13	3.9	.42	.48	67.5	71.0	634359
64	2112	2381	-2.5305	.0690	.99	-.2	1.01	.1	.32	.32	89.3	88.8	634361
65	1939	2396	-1.8012	.0568	.86	-4.7	.74	-3.9	.48	.38	84.2	82.2	634364
66	7566	11331	-.9026	.0227	.98	-2.1	.91	-4.5	.49	.47	74.5	74.5	634365

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
67	1762	2399	-1.2489	.0511	.98	-.9	.91	-1.7	.44	.42	77.0	76.9	634371
68	1777	2391	-1.2988	.0516	.94	-2.3	.86	-2.8	.46	.41	77.9	77.2	634372
69	1495	2354	-.7069	.0487	.90	-5.0	.82	-4.6	.54	.47	77.2	73.2	634374
70	1248	2316	-.1730	.0476	1.04	1.8	1.05	1.7	.46	.49	69.7	71.2	634376
71	7436	11354	-.8301	.0225	1.02	1.9	1.04	2.0	.46	.47	73.4	74.0	634377
72	2207	2449	-2.6786	.0715	.99	-.1	1.17	1.5	.29	.30	90.4	90.1	634378
73	1888	2413	-1.5833	.0541	1.17	5.5	1.38	5.5	.27	.40	77.8	80.1	634379
74	1058	2366	.2903	.0469	1.21	9.9	1.34	9.9	.32	.48	63.6	71.1	634382
75	1587	2304	-.9520	.0505	.84	-7.2	.72	-6.8	.56	.45	78.9	74.8	634384
76	1945	2376	-1.8415	.0581	1.06	1.8	1.05	.6	.34	.38	81.7	82.9	634385
77	8984	11334	-1.7165	.0257	1.01	.6	.95	-1.5	.41	.41	81.1	81.1	634387
78	9889	11386	-2.3835	.0299	1.09	4.5	1.29	5.9	.28	.34	86.6	87.1	634388
79	1616	2381	-.9222	.0490	1.26	9.9	1.42	8.5	.26	.44	65.6	74.0	634389
80	1346	2362	-.3311	.0470	1.18	8.8	1.31	8.6	.34	.47	65.4	71.1	634390
81	2198	2375	-3.0446	.0813	.90	-1.7	.62	-3.3	.33	.26	92.7	92.5	634391
82	216	2392	2.9244	.0771	1.17	3.0	2.39	8.5	.18	.34	90.8	91.5	634392
83	1761	2342	-1.3870	.0528	1.02	.9	.99	-.2	.40	.41	77.0	78.1	634395
84	1857	2344	-1.6392	.0558	.94	-1.9	.87	-2.0	.43	.39	82.4	80.8	634396
85	1823	2343	-1.5774	.0546	.83	-6.3	.66	-6.1	.52	.40	83.2	79.7	634397
86	1795	2455	-1.2177	.0506	.90	-4.3	.84	-3.3	.50	.43	79.4	77.0	634398
87	7548	11384	-.8829	.0225	1.02	2.2	.99	-.6	.46	.47	72.8	74.2	634399
88	1503	2369	-.6806	.0482	1.03	1.4	1.01	.2	.45	.46	70.9	72.9	634401
89	2149	2319	-3.0549	.0834	.87	-2.2	.57	-3.7	.37	.27	92.9	92.7	634402
90	1699	2363	-1.1357	.0512	.96	-1.5	.96	-.8	.46	.44	78.1	76.4	634405
91	1353	2443	-.2279	.0463	1.24	9.9	1.36	9.9	.31	.48	63.0	71.0	634406
92	6649	11349	-.4370	.0219	1.18	9.9	1.24	9.9	.38	.49	65.2	72.3	634408
93	1412	2388	-.4329	.0472	1.03	1.5	1.04	1.3	.45	.47	71.1	71.7	634409
94	1699	2386	-1.1018	.0504	.94	-2.6	.88	-2.5	.48	.43	77.5	75.9	634411
95	1963	2344	-2.0055	.0607	.87	-3.8	.83	-2.2	.45	.36	86.4	84.4	634412
96	2216	2391	-3.0315	.0818	.86	-2.4	.54	-4.1	.37	.26	92.8	92.6	634413
97	1673	2372	-1.0318	.0502	.93	-3.1	.91	-1.9	.48	.43	77.7	75.3	634416
98	10282	11406	-2.7544	.0334	.89	-5.0	.84	-2.9	.37	.31	90.4	90.1	634417
99	1795	2356	-1.4064	.0537	.93	-2.4	.93	-1.2	.46	.42	81.6	79.1	634418
100	1544	2341	-.8253	.0489	1.00	.0	1.00	.1	.45	.45	73.1	73.5	634420
101	10867	11449	-3.5529	.0440	1.03	.9	1.65	7.4	.18	.23	94.9	94.9	634422
102	2182	2399	-2.7748	.0749	1.13	2.4	2.24	7.8	.14	.29	90.9	91.0	634423
103	1584	2347	-.9055	.0495	1.05	2.3	1.09	2.0	.41	.45	72.9	74.2	634426
104	1350	2293	-.4140	.0483	1.08	3.9	1.14	3.7	.42	.48	69.6	71.9	634427
105	2262	2391	-3.4023	.0932	.91	-1.2	.57	-3.3	.30	.22	94.6	94.6	634428
106	9619	11337	-2.1867	.0285	1.10	5.4	1.41	8.8	.29	.36	84.8	85.3	634430
107	2144	2417	-2.5031	.0684	.95	-1.0	.98	-.1	.34	.32	89.1	88.8	634432
108	1113	2307	.1562	.0476	.97	-1.4	.99	-.3	.51	.49	73.0	71.2	634433
MEAN	9783.8	13132	-1.4055	.0338	1.00	-.5	1.01	-.2			79.5	79.7	
S.D.	6726.8	8672.5	.9621	.0197	.10	5.8	.27	5.8			7.8	6.7	

Grade 7

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
1	9755	20689	.1529A	.0159	1.13	9.9	1.18	9.9	.39	.49	66.2	71.1	599917
2	14024	20689	-.9576A	.0166	.98	-3.0	.99	-.9	.46	.44	75.6	74.3	599927
3	13892	20689	-.9208A	.0166	.97	-3.6	.92	-5.6	.47	.45	74.6	74.0	599928
4	9037	20689	.3376A	.0160	1.20	9.9	1.31	9.9	.34	.49	65.2	71.6	599932
5	8204	20689	.5565A	.0162	1.04	5.3	1.14	9.9	.45	.49	72.6	72.6	599933
6	15840	20689	-1.5035A	.0181	1.00	-.1	1.04	2.1	.40	.40	79.2	79.0	599936
7	17677	20689	-2.1992A	.0211	.97	-2.3	1.13	4.2	.34	.34	86.4	85.7	599943
8	11167	20689	-.2057A	.0158	.96	-5.8	.95	-5.2	.51	.48	72.3	70.9	599948
9	15109	20689	-1.2729A	.0174	.98	-2.7	.90	-5.8	.45	.42	76.9	76.9	599949
10	16322	20689	-1.6667A	.0186	.86	-9.9	.68	-9.9	.50	.39	82.4	80.5	599953
11	15974	20689	-1.5479A	.0182	.88	-9.9	.87	-6.5	.48	.40	82.8	79.4	599958
12	9524	20689	.2120A	.0159	.89	-9.9	.88	-9.9	.56	.49	76.1	71.3	599969
13	17224	20689	-2.0057A	.0201	.94	-5.2	.87	-5.1	.40	.36	84.5	83.9	599979
14	12080	20689	-.4389A	.0160	.85	-9.9	.78	-9.9	.58	.47	77.5	71.5	599980

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
15	13930	20689	-.9313A	.0166	.98	-3.1	.91	-6.1	.47	.45	74.0	74.1	599986
16	15776	20689	-1.4828A	.0180	.95	-5.8	.91	-4.3	.44	.41	80.0	78.8	599990
17	15037	20689	-1.2511A	.0173	.92	-9.8	.87	-7.5	.48	.42	78.6	76.7	599996
18	15396	20689	-1.3614A	.0176	.93	-8.5	.83	-9.2	.47	.42	78.8	77.6	599997
19	18882	20689	-2.8496A	.0257	.91	-5.0	.79	-5.6	.34	.28	91.3	91.2	600004
20	11104	20689	-.1898A	.0158	.96	-6.4	.93	-6.9	.51	.48	72.2	70.9	600019
21	11545	20689	-.3019A	.0159	1.12	9.9	1.16	9.9	.39	.48	66.7	71.1	600020
22	14649	20689	-1.1360A	.0170	1.03	3.9	1.02	.9	.41	.43	74.2	75.7	600027
23	16976	20689	-1.9072A	.0196	1.02	2.0	1.23	8.4	.34	.37	83.0	82.9	600028
24	17334	20689	-2.0510A	.0203	.89	-9.6	.75	-9.6	.44	.35	85.6	84.3	600029
25	17616	20689	-2.1719A	.0210	.87	-9.9	.70	-9.9	.44	.34	86.2	85.5	600035
26	15275	20689	-1.3238A	.0175	.83	-9.9	.73	-9.9	.54	.42	81.8	77.3	600036
27	12980	20689	-.6738A	.0162	.96	-5.4	.91	-7.2	.49	.46	73.4	72.5	600040
28	11761	20689	-.3571A	.0159	1.13	9.9	1.14	9.9	.39	.47	65.9	71.2	600043
29	12175	20689	-.4635A	.0160	1.07	9.9	1.08	6.5	.42	.47	68.4	71.6	600048
30	18735	20689	-2.7551A	.0249	.99	-.5	1.19	4.6	.28	.29	90.6	90.5	600052
31	17801	20689	-2.2559A	.0215	1.09	6.2	1.30	8.6	.26	.33	86.0	86.3	600056
32	15073	20689	-1.2622A	.0173	.97	-3.4	.88	-6.8	.45	.42	76.8	76.8	600058
33	12064	20689	-.4348A	.0160	.95	-7.0	.91	-7.8	.51	.47	73.2	71.5	600061
34	18057	20689	-2.3783A	.0222	.89	-7.8	.79	-6.8	.40	.32	87.9	87.4	600063
35	10259	20689	.0246A	.0158	1.07	9.7	1.10	9.6	.44	.48	68.8	70.9	600074
36	12921	20689	-.6582A	.0162	1.14	9.9	1.22	9.9	.36	.46	67.8	72.4	600080
37	17730	20689	-2.2230A	.0213	.90	-8.2	.70	-9.9	.42	.34	86.8	85.9	600081
38	17703	20689	-2.2107A	.0212	.90	-7.7	.70	-9.9	.42	.34	86.1	85.8	600084
39	15008	20689	-1.2425A	.0173	1.16	9.9	1.37	9.9	.30	.42	72.6	76.6	600090
40	14991	20689	-1.2373A	.0173	1.02	2.9	1.04	2.2	.41	.42	76.1	76.5	600092
41	11620	20689	-.3210A	.0159	1.20	9.9	1.32	9.9	.33	.48	64.1	71.1	600093
42	17456	20689	-2.1025A	.0206	1.01	.7	1.13	4.2	.34	.35	84.9	84.8	600096
43	14252	20689	-1.0217A	.0168	1.04	4.7	1.03	1.9	.42	.44	73.3	74.8	600098
44	14890	20689	-1.2071A	.0172	.97	-4.0	.95	-2.7	.45	.43	77.3	76.3	600102
45	12291	20689	-.4935A	.0160	1.05	6.7	1.05	3.8	.44	.47	69.9	71.7	600109
46	15505	20689	-1.3957A	.0177	.94	-7.5	.90	-5.0	.46	.41	79.8	78.0	600119
47	12762	20689	-.6163A	.0161	1.04	5.5	1.01	1.2	.44	.46	70.2	72.2	600120
48	10658	20689	-.0766A	.0158	1.13	9.9	1.20	9.9	.39	.48	66.1	70.9	600122
49	16433	20689	-1.7057A	.0188	.83	-9.9	.70	-9.9	.51	.39	83.8	80.9	600479
50	15805	20689	-1.4920A	.0180	1.00	.3	.91	-4.7	.41	.40	78.2	78.9	600480
51	14915	20689	-1.2146A	.0172	.88	-9.9	.77	-9.9	.52	.43	79.2	76.4	600481
52	16941	20689	-1.8938A	.0196	.97	-3.0	.91	-3.4	.40	.37	83.3	82.8	600485
53	16024	20689	-1.5646A	.0183	.98	-1.7	.95	-2.2	.41	.40	80.0	79.6	600493
54	17047	20689	-1.9349A	.0198	.93	-6.7	.83	-6.9	.42	.37	84.4	83.2	600495
55	15875	20689	-1.5152A	.0181	.96	-3.9	.91	-4.2	.43	.40	79.7	79.1	600499
56	17753	20689	-2.2336A	.0213	.93	-5.8	.90	-3.4	.38	.34	87.0	86.0	600879
57	9554	20689	.2044A	.0159	1.13	9.9	1.22	9.9	.39	.49	66.9	71.2	600880
58	16009	20689	-1.5595A	.0182	1.05	4.9	1.12	5.5	.36	.40	79.0	79.5	600883
59	8399	11030	-1.5307	.0246	.79	-9.9	.62	-9.9	.56	.41	82.9	78.8	634514
60	1583	2427	-.7209	.0476	.88	-5.9	.84	-4.1	.53	.45	77.0	73.0	634515
61	1531	2417	-.6438	.0476	.91	-4.7	.84	-4.4	.53	.46	75.8	72.7	634517
62	1585	2429	-.7412	.0478	.83	-8.9	.75	-6.7	.57	.45	80.2	73.0	634519
63	1625	2380	-.9280	.0492	.88	-5.8	.88	-2.9	.52	.44	79.5	74.3	634520
64	876	2413	.8166	.0484	1.08	3.5	1.25	6.2	.42	.49	72.1	74.0	634521
65	1513	2388	-.6595	.0476	.93	-3.6	.85	-4.0	.50	.45	74.4	72.2	634524
66	2175	2491	-2.2842	.0640	1.01	.2	1.08	.8	.30	.32	87.7	87.4	634525
67	1665	2461	-.8603	.0482	1.09	4.2	1.08	1.8	.38	.44	69.9	73.9	634526
68	8420	11073	-1.5162	.0245	1.00	-.4	.90	-3.7	.42	.41	78.1	78.6	634528
69	1629	2428	-.8231	.0484	1.07	3.1	1.06	1.4	.40	.45	70.3	73.9	634529
70	2234	2429	-2.9018	.0779	.93	-1.3	1.08	.7	.30	.26	92.1	91.9	634530
71	1844	2390	-1.5326	.0536	.88	-4.7	.69	-5.4	.49	.40	81.0	79.3	634531
72	2004	2430	-1.8664	.0579	.86	-4.3	.69	-4.5	.47	.36	84.9	83.3	634532
73	1176	2433	.1396	.0460	1.09	4.5	1.14	4.6	.41	.48	67.4	70.6	634534
74	1759	2405	-1.2204	.0509	.92	-3.4	.96	-.7	.47	.42	79.9	76.8	634535
75	8216	11044	-1.4104	.0241	.95	-4.2	1.00	-.1	.44	.42	79.7	77.7	634536
76	1565	2358	-.7865	.0490	1.17	7.4	1.29	6.1	.33	.46	68.8	74.0	634538
77	9578	11022	-2.3974	.0301	.88	-6.4	.66	-8.6	.42	.33	87.7	87.1	634539
78	2202	2371	-3.0058	.0828	.96	-.6	1.04	.4	.27	.25	92.8	92.9	634541
79	2139	2441	-2.3330	.0650	.91	-2.1	.83	-1.7	.37	.31	88.1	87.6	634543
80	8120	11041	-1.3525	.0239	1.00	-.2	1.00	-.1	.42	.42	77.6	77.2	634544
81	1297	2418	-.1026	.0463	1.05	2.7	1.06	2.0	.44	.48	68.7	70.7	634546
82	1501	2425	-.6491	.0468	1.08	4.0	1.05	1.3	.40	.45	67.5	71.6	634547

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
83	1332	2395	-.2530	.0466	.97	-1.4	1.00	-.1	.49	.47	72.0	70.9	634548
84	826	2422	.8900	.0487	1.20	8.5	1.53	9.9	.31	.48	70.5	74.6	634551
85	6776	11058	-.6476	.0220	1.01	1.4	1.00	-.2	.46	.47	71.4	72.2	634552
86	1543	2356	-.8082	.0488	1.04	1.8	1.03	.7	.43	.46	71.9	73.5	634555
87	1192	2426	.0984	.0462	.95	-2.6	.93	-2.4	.52	.48	72.4	71.0	634557
88	7791	11041	-1.1720	.0233	.94	-5.5	.88	-5.5	.48	.44	76.9	75.6	634559
89	1916	2422	-1.6382	.0546	.90	-3.6	.81	-3.0	.46	.39	82.9	80.7	634561
90	2053	2430	-2.0457	.0603	.84	-4.7	.63	-5.0	.47	.35	86.1	84.9	634563
91	1790	2439	-1.1974	.0507	.95	-1.9	.84	-3.2	.46	.42	77.5	76.9	634564
92	2184	2487	-2.3602	.0652	.83	-4.3	.59	-4.8	.44	.32	88.5	87.9	634566
93	1572	2433	-.7070	.0476	.92	-3.7	.88	-3.1	.51	.45	75.6	73.0	634568
94	4011	10933	.6608	.0226	1.28	9.9	1.63	9.9	.26	.48	66.5	73.5	634570
95	611	2421	1.4674	.0527	1.27	8.9	1.80	9.9	.23	.46	74.3	79.1	634572
96	7270	11031	-.9038	.0226	1.07	6.6	1.07	3.4	.41	.45	71.5	73.7	634574
97	2159	2423	-2.4807	.0687	.89	-2.5	.94	-.6	.37	.30	89.4	89.1	634575
98	1741	2433	-1.1045	.0502	.97	-1.5	1.05	1.1	.45	.44	78.4	76.2	634576
99	1942	2375	-1.8031	.0575	1.09	2.5	1.14	1.9	.30	.37	81.5	82.7	634577
100	1557	2390	-.7541	.0482	1.00	-.1	1.00	.0	.45	.45	73.1	73.2	634579
101	1817	2458	-1.2899	.0509	1.02	.8	1.08	1.4	.40	.42	77.2	77.3	634580
102	1580	2356	-.8680	.0490	1.41	9.9	1.74	9.9	.14	.44	61.5	73.7	634581
103	750	2303	1.0570	.0508	1.06	2.4	1.25	5.3	.43	.49	75.3	75.6	634582
104	2973	11035	1.2373	.0241	1.53	9.9	2.30	9.9	.04	.46	66.3	78.0	634583
105	886	2354	.7588	.0487	1.02	.7	1.13	3.6	.47	.49	73.4	73.5	634584
106	1194	2430	.0664	.0460	1.11	5.4	1.14	4.4	.40	.48	66.7	70.9	634585
107	1315	2481	-.0664	.0456	1.15	7.6	1.19	6.0	.37	.48	65.4	70.6	634586
108	1398	2414	-.3802	.0467	.95	-2.6	.92	-2.3	.51	.47	72.8	71.3	634587
MEAN	9048.3	13026	-1.0393	.0314	1.00	-.6	1.01	-.5			77.0	77.4	
S.D.	6442.5	8579.6	.9514	.0173	.12	6.2	.25	6.3			7.3	5.8	

Grade 8

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
1	15298	20545	-1.3710A	.0178	.97	-3.3	.92	-3.9	.45	.42	78.1	77.8	600134
2	13650	20545	-.8773A	.0167	1.09	9.9	1.15	9.3	.40	.46	70.8	74.1	600140
3	13332	20545	-.7880A	.0166	1.19	9.9	1.37	9.9	.33	.46	68.0	73.6	600144
4	10344	20545	.0079A	.0160	.86	-9.9	.83	-9.9	.58	.50	77.7	71.6	600151
5	15964	20545	-1.5930A	.0185	.88	-9.9	.76	-9.9	.49	.40	82.2	79.7	600152
6	16834	20545	-1.9136A	.0198	.94	-5.5	.80	-8.2	.42	.37	83.3	82.7	600153
7	12616	20545	-.5918A	.0163	1.03	3.7	.99	-.7	.46	.48	71.2	72.6	600156
8	13890	20545	-.9456A	.0168	1.03	4.5	1.00	.1	.44	.45	72.6	74.5	600158
9	13362	20545	-.7964A	.0166	1.17	9.9	1.24	9.9	.35	.46	67.7	73.6	600163
10	14296	20545	-1.0638A	.0170	.97	-3.9	.93	-4.0	.47	.45	76.1	75.3	600166
11	16281	20545	-1.7048A	.0189	.98	-2.1	.92	-3.6	.41	.39	81.1	80.7	600178
12	12067	20545	-.4447A	.0162	1.01	1.5	1.05	4.3	.47	.48	72.5	72.1	600187
13	15035	20545	-1.2878A	.0176	.92	-9.1	.96	-2.0	.47	.43	80.1	77.1	600194
14	14769	20545	-1.2056A	.0174	1.14	9.9	1.27	9.9	.33	.44	72.6	76.4	600215
15	16786	20545	-1.8949A	.0197	.90	-9.7	.74	-9.9	.45	.37	84.1	82.5	600218
16	14332	20545	-1.0744A	.0171	1.02	2.7	1.01	.7	.43	.44	74.5	75.4	600221
17	14572	20545	-1.1459A	.0172	1.05	6.5	1.08	4.7	.41	.44	74.3	76.0	600225
18	13106	20545	-.7255A	.0165	1.18	9.9	1.28	9.9	.35	.47	66.7	73.2	600230
19	17799	20545	-2.3346A	.0220	.84	-9.9	.61	-9.9	.45	.33	87.5	86.7	600233
20	15580	20545	-1.4630A	.0181	.92	-8.8	.87	-6.3	.47	.41	80.4	78.5	600235
21	15227	20545	-1.3485A	.0177	.95	-6.1	.95	-2.7	.45	.42	79.8	77.6	600238
22	15747	20545	-1.5188A	.0183	.93	-7.5	.86	-6.9	.46	.41	80.3	79.0	600242
23	14656	20545	-1.1712A	.0173	.93	-8.6	.86	-8.1	.49	.44	78.0	76.1	600243
24	13803	20545	-.9207A	.0168	.97	-3.9	.92	-5.0	.48	.46	75.1	74.4	600246
25	14092	20545	-1.0040A	.0169	.88	-9.9	.80	-9.9	.53	.45	78.6	74.9	600248
26	11491	20545	-.2924A	.0161	1.09	9.9	1.11	9.3	.43	.49	68.2	71.8	600250
27	15384	20545	-1.3988A	.0179	1.03	2.9	1.11	5.1	.40	.42	77.9	78.0	600258
28	12746	20545	-.6270A	.0164	.93	-9.4	.91	-6.9	.52	.47	75.2	72.8	600261
29	17488	20545	-2.1888A	.0211	.94	-4.7	.96	-1.4	.38	.35	86.2	85.4	600268
30	16332	20545	-1.7235A	.0190	.97	-2.6	.98	-.8	.41	.39	81.7	80.9	600281
31	14252	20545	-1.0507A	.0170	1.00	.3	.97	-2.0	.45	.45	74.8	75.3	600301

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
32	16363	20545	-1.7350A	.0190	.96	-3.8	.85	-6.7	.42	.39	81.4	81.0	600303
33	16357	20545	-1.7327A	.0190	.91	-8.9	.76	-9.9	.46	.39	82.2	81.0	600305
34	13879	20545	-.9425A	.0168	.97	-4.5	.93	-4.7	.48	.45	75.6	74.5	600306
35	10263	20545	.0291A	.0160	1.17	9.9	1.25	9.9	.38	.50	65.5	71.6	600312
36	17209	20545	-2.0669A	.0205	.92	-6.9	.80	-7.5	.42	.36	84.9	84.2	600318
37	14056	20545	-.9936A	.0169	.96	-5.6	.93	-4.6	.48	.45	76.3	74.9	600319
38	15195	20545	-1.3382A	.0177	.98	-2.3	.95	-2.5	.44	.42	77.8	77.5	600320
39	13020	20545	-.7018A	.0164	.99	-1.1	.97	-2.5	.48	.47	73.3	73.1	600332
40	10933	20545	-.1461A	.0160	1.00	.3	.99	-1.2	.49	.49	71.5	71.6	600333
41	15300	20545	-1.3717A	.0178	.97	-3.7	.93	-3.8	.44	.42	78.8	77.8	600337
42	18316	20545	-2.6060A	.0238	.94	-4.1	.86	-3.8	.35	.30	89.3	89.1	600346
43	16294	20545	-1.7098A	.0189	1.04	3.5	.99	-.5	.38	.39	79.6	80.8	600350
44	13738	20545	-.9023A	.0167	1.13	9.9	1.12	7.8	.38	.46	68.9	74.3	600353
45	20524	20545	-7.4282A	.2088	.93	-.3	.75	-4.1	.04	.03	99.9	99.9	600355
46	13311	20545	-.7821A	.0166	1.05	7.3	1.02	1.4	.44	.46	70.8	73.5	600360
47	12743	20545	-.6262A	.0164	.93	-9.9	.88	-9.6	.52	.47	75.2	72.8	600363
48	11591	20545	-.3187A	.0161	1.21	9.9	1.27	9.9	.35	.49	64.2	71.8	600368
49	16355	20545	-1.7319A	.0190	.93	-7.4	.86	-6.1	.44	.39	82.5	81.0	600384
50	17880	20545	-2.3744A	.0222	.85	-9.9	.63	-9.9	.44	.33	87.6	87.1	600388
51	11124	20545	-.1961A	.0161	1.05	6.9	1.04	3.9	.46	.49	69.4	71.6	600394
52	13648	20545	-.8767A	.0167	1.03	3.9	1.08	5.4	.43	.46	73.5	74.1	600507
53	14118	20545	-1.0115A	.0169	.87	-9.9	.78	-9.9	.54	.45	78.5	75.0	600510
54	16090	20545	-1.6367A	.0187	.94	-6.6	.84	-7.1	.45	.40	81.1	80.1	600514
55	14311	20545	-1.0681A	.0171	1.06	6.9	1.12	7.1	.41	.45	74.2	75.4	600517
56	17984	20545	-2.4266A	.0226	.85	-9.9	.56	-9.9	.43	.32	88.0	87.6	600519
57	14502	20545	-1.1249A	.0172	1.11	9.9	1.24	9.9	.36	.44	73.4	75.8	600522
58	18422	20545	-2.6673A	.0242	.90	-6.6	.61	-9.9	.38	.30	89.7	89.6	600526
59	15603	20545	-1.4707A	.0181	.93	-7.9	.97	-1.6	.45	.41	81.0	78.6	603724
60	15553	20545	-1.4539A	.0180	.98	-2.5	.97	-1.4	.43	.41	79.2	78.5	603726
61	6272	10895	-.4380	.0222	.94	-6.9	.90	-6.5	.53	.49	74.2	72.1	634588
62	2108	2391	-2.4066	.0677	.88	-2.7	.93	-.7	.39	.33	89.1	88.2	634590
63	1794	2373	-1.3608	.0531	.97	-1.3	.88	-2.1	.45	.42	79.3	78.6	634592
64	1838	2456	-1.3169	.0514	.93	-2.6	.84	-3.0	.46	.41	78.9	77.7	634595
65	904	2406	.7589	.0480	1.42	9.9	1.73	9.9	.18	.48	59.9	73.1	634596
66	1494	2295	-.7227	.0495	1.07	3.2	1.15	3.4	.41	.46	71.8	73.6	634597
67	1395	2460	-.2468	.0464	1.12	5.7	1.15	4.4	.40	.48	67.3	71.5	634599
68	7443	11003	-1.0075	.0230	1.03	3.2	.98	-1.0	.44	.45	72.6	74.6	634603
69	1750	2379	-1.2721	.0518	1.01	.2	.93	-1.3	.43	.43	76.5	77.3	634604
70	1111	2455	.3070	.0467	1.19	8.8	1.30	8.5	.37	.50	66.0	72.1	634608
71	2315	2413	-3.6800	.1056	.89	-1.2	.46	-3.9	.30	.21	95.9	95.9	634609
72	582	2409	1.6091	.0540	1.24	7.6	2.26	9.9	.24	.47	78.0	80.0	634610
73	2058	2413	-2.1343	.0619	1.05	1.2	1.46	4.5	.29	.35	85.8	85.5	634612
74	1333	2463	-.1466	.0459	1.28	9.9	1.40	9.9	.28	.48	60.8	70.9	634613
75	2056	2437	-2.0189	.0602	.90	-3.0	.82	-2.2	.43	.35	85.6	84.8	634615
76	1736	2368	-1.1929	.0519	.89	-4.5	.77	-4.6	.51	.43	79.6	77.3	634616
77	1085	2431	.4008	.0467	1.37	9.9	1.56	9.9	.23	.49	58.6	71.8	634619
78	1491	2494	-.4331	.0465	1.19	8.9	1.30	7.8	.34	.48	66.2	72.1	634620
79	1006	2387	.4927	.0474	1.22	9.9	1.44	9.9	.33	.49	65.0	72.0	634624
80	1843	2359	-1.5576	.0550	.99	-.2	1.00	.1	.41	.40	80.6	80.2	634625
81	1972	2350	-2.0078	.0606	.85	-4.5	.63	-5.1	.47	.36	86.0	84.3	634628
82	1492	2406	-.5660	.0477	.89	-5.4	.84	-4.6	.54	.47	77.2	72.7	634630
83	1953	2445	-1.7050	.0552	.93	-2.4	.84	-2.3	.44	.39	82.4	81.2	634633
84	7093	10890	-.8651	.0228	.94	-5.6	.93	-3.4	.50	.46	76.1	73.7	634634
85	7200	10875	-.9305	.0229	1.14	9.9	1.17	7.6	.37	.46	69.3	74.0	634636
86	1361	2389	-.2193	.0474	1.15	7.1	1.17	4.7	.40	.49	66.0	72.1	634637
87	6391	10946	-.4943	.0222	.96	-4.2	.93	-4.2	.51	.48	73.8	72.1	634638
88	1959	2411	-1.7697	.0570	.98	-.6	.97	-.4	.39	.38	82.5	82.2	634641
89	6237	10918	-.4218	.0222	.98	-1.8	.97	-1.5	.50	.49	72.8	72.1	634643
90	1638	2464	-.8149	.0480	1.13	5.8	1.25	5.6	.36	.45	71.2	73.8	634644
91	1252	2336	-.1306	.0474	.88	-6.4	.82	-5.9	.57	.49	76.1	71.3	634646
92	5300	10934	.0419	.0221	1.14	9.9	1.21	9.9	.41	.50	67.0	71.8	634648
93	1632	2452	-.7668	.0482	1.09	4.1	1.29	6.5	.38	.46	73.2	74.1	634650
94	1553	2451	-.6578	.0476	1.02	.9	1.09	2.1	.45	.47	73.0	73.1	634653
95	1612	2409	-.8481	.0489	.97	-1.6	.90	-2.4	.48	.46	75.2	74.3	634654
96	6947	10956	-.7613	.0226	1.05	5.0	1.05	2.6	.44	.47	70.4	73.2	634655
97	1965	2384	-1.8817	.0587	.88	-3.6	.67	-4.9	.47	.38	84.2	83.2	634656
98	1109	2342	.2319	.0472	1.01	.7	1.06	2.0	.47	.49	72.3	71.2	634657
99	1000	2394	.5621	.0475	1.08	3.9	1.21	5.9	.43	.50	71.7	72.3	634660
100	1052	2349	.3426	.0476	1.05	2.3	1.09	2.7	.46	.49	70.1	71.7	634661
101	6345	10930	-.4704	.0222	1.08	8.1	1.12	7.1	.43	.48	69.1	72.1	634662

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
102	1215	2290	-.0557	.0478	1.11	5.2	1.15	4.5	.41	.48	68.1	70.9	634663
103	999	2451	.5778	.0472	1.26	9.9	1.41	9.9	.32	.50	63.7	72.6	634667
104	931	2411	.6541	.0479	1.47	9.9	1.91	9.9	.15	.49	60.3	73.3	634670
105	2093	2433	-2.2046	.0628	.94	-1.7	1.04	.5	.37	.34	86.9	86.2	634673
106	8594	10899	-1.7371	.0258	.99	-.5	1.07	2.1	.39	.39	81.0	80.3	634674
107	2186	2424	-2.6627	.0719	.83	-3.6	.59	-4.3	.41	.29	90.2	90.1	634675
108	1755	2376	-1.2308	.0520	1.03	1.1	1.06	1.2	.40	.42	77.1	77.4	634678
109	881	2384	.8010	.0486	1.07	3.2	1.20	5.1	.44	.49	72.2	73.7	634679
110	1144	2464	.2778	.0464	1.03	1.4	1.08	2.5	.47	.50	71.3	71.8	634682
MEAN	9220.8	13074	-1.0541	.0329	1.02	.1	1.02	.0			76.1	77.1	
S.D.	6433.7	8500.4	1.0689	.0245	.12	6.5	.26	6.3			7.6	5.7	

Grade 11

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
1	12929	20823	-.6710A	.0160	.90	-9.9	.84	-9.9	.53	.45	75.6	71.9	600397
2	12703	20823	-.6119A	.0159	.93	-9.9	.91	-7.4	.51	.46	74.7	71.7	600406
3	13837	20823	-.9130A	.0163	1.04	5.9	1.07	4.8	.40	.43	71.5	73.0	600410
4	11386	20823	-.2739A	.0157	1.01	.9	.98	-2.1	.47	.47	70.4	71.0	600419
5	9323	20823	.2537A	.0159	.99	-.9	1.00	-.4	.49	.49	72.3	71.8	600421
6	11068	20823	-.1930A	.0157	1.13	9.9	1.12	9.9	.39	.48	65.4	71.0	600422
7	11497	20823	-.3021A	.0157	1.05	7.6	1.08	7.3	.43	.47	69.4	71.0	600536
8	12036	20823	-.4399A	.0158	.96	-6.6	.93	-6.4	.50	.46	73.1	71.2	600540
9	12225	20823	-.4884A	.0158	1.18	9.9	1.35	9.9	.32	.46	65.2	71.3	600543
10	13668	20823	-.8673A	.0162	1.00	.4	.95	-3.5	.44	.44	72.3	72.7	600552
11	19214	20823	-2.9919A	.0269	.94	-2.9	.76	-6.2	.30	.24	92.3	92.4	600558
12	13783	20823	-.8983A	.0163	.98	-3.0	.91	-6.2	.46	.44	72.7	72.9	600561
13	16521	20823	-1.7214A	.0185	.94	-6.5	.86	-6.3	.42	.36	80.8	80.1	600562
14	14733	20823	-1.1630A	.0168	.91	-9.9	.82	-9.9	.49	.42	77.0	74.7	600576
15	9282	20823	.2644A	.0159	1.01	1.1	1.02	1.5	.48	.49	72.1	71.8	600577
16	13433	20823	-.8043A	.0162	1.01	1.5	.98	-1.4	.44	.44	71.5	72.4	600583
17	13831	20823	-.9115A	.0163	.91	-9.9	.84	-9.9	.50	.44	75.6	73.0	600590
18	14200	20823	-1.0127A	.0165	.95	-6.5	.88	-8.0	.47	.43	74.4	73.6	600594
19	15713	20823	-1.4565A	.0176	.89	-9.9	.76	-9.9	.48	.39	79.5	77.3	600598
20	13453	20823	-.8096A	.0162	1.01	2.1	.98	-1.6	.44	.44	71.2	72.5	600599
21	11743	20823	-.3649A	.0158	1.01	2.2	1.02	1.5	.46	.47	70.6	71.1	600617
22	15320	20823	-1.3358A	.0172	1.07	8.4	1.33	9.9	.33	.40	75.7	76.1	600619
23	14828	20823	-1.1904A	.0169	.94	-7.8	.89	-6.6	.46	.41	76.5	74.9	600627
24	13821	20823	-.9087A	.0163	.92	-9.9	.85	-9.9	.50	.44	74.7	73.0	600629
25	13763	20823	-.8929A	.0163	.89	-9.9	.82	-9.9	.52	.44	76.5	72.9	600633
26	12586	20823	-.5816A	.0159	.93	-9.9	.89	-9.1	.51	.46	74.0	71.6	600638
27	13690	20823	-.8732A	.0163	.97	-5.0	.94	-3.9	.46	.44	74.0	72.8	600641
28	14705	20823	-1.1550A	.0168	.92	-9.9	.84	-9.9	.48	.42	76.7	74.6	600648
29	12045	20823	-.4421A	.0158	.98	-2.5	.93	-5.9	.48	.46	71.3	71.2	600653
30	13126	20823	-.7227A	.0161	1.04	6.4	1.17	9.9	.40	.45	71.5	72.1	600656
31	13106	20823	-.7176A	.0160	.83	-9.9	.75	-9.9	.57	.45	78.7	72.0	600660
32	14143	20823	-.9968A	.0165	.94	-8.8	.93	-4.3	.47	.43	76.8	73.5	600677
33	15015	20823	-1.2450A	.0170	.96	-5.0	.90	-5.6	.44	.41	76.5	75.3	600680
34	16917	20823	-1.8625A	.0191	.89	-9.9	.69	-9.9	.45	.35	82.5	81.7	600689
35	14009	20823	-.9601A	.0164	.85	-9.9	.74	-9.9	.55	.43	78.0	73.3	600694
36	13319	20823	-.7739A	.0161	1.09	9.9	1.11	7.8	.38	.44	68.9	72.3	600695
37	13345	20823	-.7808A	.0161	.90	-9.9	.82	-9.9	.52	.44	75.0	72.3	600709
38	9552	20823	.1944A	.0158	.98	-2.5	.98	-1.6	.50	.49	72.6	71.6	600718
39	13444	20823	-.8072A	.0162	.97	-4.9	.92	-5.8	.47	.44	73.5	72.4	600724
40	11618	20823	-.3330A	.0158	1.09	9.9	1.07	6.5	.41	.47	67.4	71.1	600725
41	12736	20823	-.6206A	.0159	.96	-5.7	.92	-6.4	.49	.45	72.8	71.7	600726
42	12391	20823	-.5311A	.0159	1.00	.4	1.01	.6	.46	.46	71.7	71.4	600728
43	14461	20823	-1.0857A	.0166	.96	-5.5	.94	-3.5	.45	.42	76.2	74.1	600731
44	12044	20823	-.4419A	.0158	1.04	6.0	1.04	3.4	.44	.46	69.5	71.2	600732
45	15548	20823	-1.4052A	.0174	.95	-6.1	.89	-5.7	.44	.39	78.2	76.8	600735

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Math
46	16960	20823	-1.8786A	.0191	.92	-7.8	.94	-2.5	.41	.35	82.6	81.9	600736
47	13423	20823	-.8015A	.0162	.97	-4.5	.92	-5.6	.47	.44	73.1	72.4	600748
48	15029	20823	-1.2490A	.0170	.90	-9.9	.83	-9.9	.48	.41	78.1	75.4	600751
49	12138	20823	-.4660A	.0158	.95	-8.0	.91	-7.5	.50	.46	73.2	71.3	600754
50	9836	20823	.1213A	.0158	.98	-3.3	.98	-2.2	.50	.48	72.7	71.4	600759
51	14602	20823	-1.1256A	.0167	1.02	3.2	1.07	4.0	.40	.42	74.6	74.4	600765
52	12780	20823	-.6321A	.0160	1.19	9.9	1.50	9.9	.29	.45	66.3	71.7	600769
53	12432	20823	-.5416A	.0159	1.00	.2	.99	-.8	.46	.46	71.3	71.5	600771
54	16867	20823	-1.8442A	.0190	.91	-9.2	.81	-8.3	.43	.35	82.4	81.5	600774
55	14956	20823	-1.2279A	.0169	.87	-9.9	.78	-9.9	.51	.41	79.6	75.2	600775
56	12499	20823	-.5590A	.0159	1.22	9.9	1.29	9.9	.30	.46	62.8	71.5	600781
57	11099	20823	-.2008A	.0157	.84	-9.9	.78	-9.9	.59	.48	77.9	71.0	600782
58	12000	20823	-.4307A	.0158	1.00	.2	.98	-1.5	.47	.47	71.1	71.2	600795
59	10547	20823	-.0605A	.0157	1.18	9.9	1.20	9.9	.36	.48	63.8	71.1	600798
60	11389	20823	-.2746A	.0157	1.00	.6	1.01	.6	.47	.47	70.9	71.0	600819
61	4462	11987	.5534	.0216	1.03	2.7	1.16	9.9	.46	.50	76.1	74.1	600402
62	1097	2199	.0815	.0480	1.04	1.9	1.04	1.4	.44	.47	68.7	70.5	600587
63	524	2211	1.5994	.0558	1.12	3.8	1.46	7.4	.33	.44	78.4	79.7	600615
64	7075	11941	-.6332	.0210	1.29	9.9	1.39	9.9	.26	.46	60.3	71.4	600645
65	895	2132	.4818	.0495	1.03	1.4	1.09	2.7	.44	.47	72.7	71.8	600684
66	1394	2197	-.6021	.0493	.96	-2.1	.92	-1.9	.48	.44	74.1	72.1	600739
67	1655	2217	-1.2615	.0531	1.02	.8	.94	-1.0	.38	.39	76.7	76.7	600756
68	1352	2214	-.4786	.0486	1.08	3.9	1.10	2.8	.39	.45	67.8	71.3	600768
69	1482	2166	-.8589	.0510	.98	-1.1	.98	-.5	.44	.42	75.6	73.7	600770
70	10056	11925	-2.2110	.0267	.90	-6.6	.75	-7.1	.40	.32	84.9	84.4	600832
71	8405	11935	-1.2441	.0221	.95	-4.8	.89	-5.1	.45	.42	75.5	74.3	634442
72	601	2285	1.4386	.0531	1.07	2.5	1.27	5.2	.38	.45	77.3	78.0	634443
73	703	2334	1.2002	.0507	1.10	4.0	1.39	8.4	.36	.46	75.2	76.1	634444
74	1181	2219	-.1060	.0478	1.01	.6	.99	-.2	.46	.47	70.2	70.6	634445
75	1526	2210	-.9287	.0508	.93	-3.3	.92	-1.8	.48	.42	76.8	74.0	634446
76	1334	2204	-.4223	.0486	1.18	8.6	1.21	5.3	.31	.45	62.3	71.2	634447
77	1237	2267	-.0941	.0478	1.22	9.9	1.29	8.3	.32	.48	63.3	71.1	634448
78	7730	11924	-.9255	.0214	.88	-9.9	.83	-9.2	.53	.44	77.6	72.5	634449
79	1905	2220	-2.0922	.0641	.88	-3.0	.67	-4.2	.41	.31	85.9	85.9	634450
80	7136	11929	-.6490	.0210	.95	-5.5	.92	-5.1	.50	.46	73.4	71.6	634451
81	585	2276	1.4056	.0533	1.27	8.9	1.86	9.9	.17	.44	75.3	78.3	634452
82	959	2232	.4287	.0481	1.38	9.9	1.58	9.9	.16	.47	57.8	71.0	634453
83	830	2254	.7759	.0494	.98	-1.0	1.03	.8	.49	.48	74.6	73.3	634454
84	738	2167	.9344	.0509	1.20	7.9	1.34	8.2	.31	.46	68.7	74.1	634455
85	897	2189	.5755	.0490	1.34	9.9	1.49	9.9	.21	.47	60.3	71.6	634456
86	4242	11943	.6397	.0219	1.17	9.9	1.30	9.9	.37	.49	70.5	74.7	634457
87	908	2272	.6074	.0482	1.44	9.9	1.66	9.9	.12	.47	57.9	71.9	634458
88	589	2193	1.3474	.0538	1.11	3.9	1.45	8.5	.33	.45	77.2	77.7	634459
89	770	2289	1.0020	.0498	1.27	9.9	1.47	9.9	.25	.47	67.2	74.3	634460
90	813	2150	.7238	.0504	1.11	4.6	1.21	5.6	.39	.48	70.3	73.0	634461
91	772	2273	.9450	.0498	1.26	9.9	1.50	9.9	.25	.47	66.8	74.1	634462
92	513	2227	1.6494	.0560	1.12	4.0	1.41	6.5	.32	.44	79.1	80.1	634463
93	983	2199	.3960	.0487	.87	-6.4	.86	-4.7	.57	.48	77.4	71.6	634464
94	808	2200	.8010	.0501	.96	-1.7	.99	-.2	.50	.48	75.1	73.5	634465
95	1050	2273	.2857	.0474	1.38	9.9	1.52	9.9	.18	.47	56.7	70.6	634466
96	578	2192	1.3940	.0540	1.48	9.9	1.94	9.9	.05	.45	68.2	77.9	634467
97	945	2260	.5301	.0480	1.17	7.6	1.24	7.3	.34	.47	65.5	71.5	634468
98	1850	2235	-1.8075	.0599	.88	-3.7	.71	-3.9	.44	.34	84.0	83.0	634469
99	1907	2211	-2.1459	.0650	.92	-2.0	.79	-2.5	.37	.30	86.6	86.3	634470
100	3305	11967	1.1302	.0233	1.09	7.4	1.27	9.9	.40	.48	77.4	78.2	634471
101	4233	11895	.6308	.0219	1.60	9.9	1.94	9.9	.06	.49	57.8	74.6	634472
102	789	2215	.8796	.0498	1.49	9.9	1.70	9.9	.08	.46	57.0	73.2	634473
103	1030	2187	.2444	.0483	1.03	1.6	1.02	.8	.45	.47	69.6	70.6	634474
104	1009	2213	.3382	.0477	1.54	9.9	1.74	9.9	.02	.46	48.9	70.0	634475
105	1339	2180	-.4895	.0491	.86	-7.2	.79	-5.9	.55	.45	77.7	71.4	634476
106	998	2244	.3905	.0480	.93	-3.5	.93	-2.4	.52	.48	74.4	71.1	634477
107	768	2202	.9342	.0505	1.03	1.5	1.12	3.1	.44	.47	73.9	74.0	634478
108	4535	11946	.5119	.0216	1.16	9.9	1.27	9.9	.38	.50	69.2	73.9	634479
109	446	2263	1.8923	.0586	1.02	.6	1.10	1.6	.41	.43	83.0	82.6	634480
110	447	2167	1.8224	.0584	1.44	9.9	2.40	9.9	.01	.42	75.6	81.3	634481
MEAN	8182.3	13250	-.3309	.0298	1.04	.1	1.08	.3			72.8	74.1	
S.D.	5998.7	8698.9	.9646	.0168	.16	7.1	.30	7.1			6.8	4.0	

Appendix R: NeSA Science Bank Item Difficulties

Grade 5

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
1	5256	7183	-1.1876	.0285	.92	-6.2	.87	-6.0	.45	.36	77.1	75.4	634836
2	4585	5088	-2.4441	.0488	.84	-4.8	.56	-9.0	.45	.27	90.4	90.2	634837
3	2757	5088	-.1249	.0303	1.01	1.0	1.01	.7	.37	.38	65.6	66.4	634838
4	4093	7183	-.3455	.0257	.94	-6.1	.92	-5.9	.44	.39	70.0	67.4	634839
5	5944	7183	-1.8305	.0330	.92	-4.1	.80	-6.3	.41	.32	83.7	83.3	634840
6	4556	5088	-2.3761	.0477	.97	-1.0	1.17	2.9	.27	.27	89.8	89.7	634841
7	3900	5087	-1.4138	.0351	.99	-.4	.98	-.5	.34	.33	77.8	77.7	634842
8	2553	5088	.0630	.0302	1.19	9.9	1.27	9.9	.18	.38	56.0	66.0	634843
9	6043	7183	-1.9424	.0340	.85	-7.3	.68	-9.9	.48	.31	85.6	84.6	634844
10	5500	7183	-1.3951	.0297	.88	-8.1	.81	-8.1	.47	.35	80.4	78.0	634845
11	4649	5088	-2.6069	.0517	.92	-2.2	.70	-5.2	.36	.25	91.5	91.5	634846
12	2882	5087	-.3571	.0304	.94	-5.8	.92	-5.3	.44	.38	70.1	66.8	634847
13	6040	7183	-1.9389	.0340	.95	-2.3	.96	-1.0	.36	.31	85.0	84.5	634848
14	4875	7183	-.8916	.0272	.92	-6.8	.89	-6.5	.45	.37	74.7	71.9	634849
15	4097	5088	-1.5680	.0375	.96	-1.8	.92	-2.2	.37	.33	81.8	81.4	634850
16	3705	5087	-1.1838	.0335	.97	-1.8	1.02	1.0	.36	.34	77.0	74.7	634851
17	3550	5087	-1.0140	.0325	1.00	.1	1.04	1.8	.35	.35	72.8	72.6	634852
18	1600	5088	.9765	.0323	1.07	4.6	1.18	7.5	.28	.36	70.6	72.0	634853
19	3491	7183	.0510	.0255	1.00	.4	1.01	.9	.38	.39	66.9	66.5	634854
20	2940	7183	.4162	.0259	1.14	9.9	1.19	9.9	.24	.38	62.5	67.8	634855
21	2357	5088	.2433	.0303	1.05	4.5	1.08	5.3	.33	.38	65.4	66.3	634856
22	3682	5087	-1.1580	.0333	.93	-4.8	.90	-4.0	.42	.35	76.8	74.4	634857
23	3932	5087	-1.4537	.0354	.96	-2.4	.89	-3.8	.38	.33	78.7	78.2	634858
24	3425	5088	-.7708	.0320	1.09	6.7	1.11	5.2	.27	.37	68.4	71.6	634859
25	4698	5087	-2.8333	.0541	.92	-2.0	.80	-3.2	.31	.22	92.5	92.4	634860
26	5656	7183	-1.5380	.0306	.87	-8.0	.72	-9.9	.48	.34	80.8	79.8	634861
27	4145	7183	-.3803	.0258	1.03	3.3	1.03	2.1	.36	.39	65.7	67.6	634862
28	2943	5088	-.2983	.0306	.93	-6.8	.91	-5.8	.46	.38	70.6	67.3	634863
29	3141	5087	-.6018	.0309	.89	-9.9	.86	-8.4	.49	.37	73.9	68.4	634864
30	3202	5087	-.6608	.0311	.99	-.9	.98	-1.1	.38	.37	69.8	68.9	634865
31	4622	5088	-2.5358	.0504	.84	-4.5	.53	-9.5	.45	.26	91.1	90.9	634866
32	1773	7183	1.2836	.0291	.99	-1.0	1.08	3.0	.35	.34	77.7	76.9	634867
33	3292	7183	.1818	.0256	.98	-2.7	.97	-2.5	.41	.39	68.1	66.7	634868
34	3673	5088	-1.0378	.0334	.98	-1.0	.96	-1.5	.38	.36	74.5	74.8	634869
35	975	5087	1.6081	.0375	1.10	4.3	1.37	9.5	.19	.32	80.6	81.4	634870
36	2847	5087	-.3246	.0303	.94	-5.3	.92	-5.6	.44	.38	68.8	66.6	634871
37	4753	5088	-2.9212	.0582	.83	-3.7	.46	-9.2	.43	.23	93.6	93.5	634872
38	5085	7183	-1.0512	.0278	.95	-4.0	.91	-4.5	.42	.37	75.3	73.8	634873
39	4041	7183	-.3109	.0257	.94	-6.1	.92	-6.1	.45	.39	69.9	67.2	634874
40	4469	5088	-2.1891	.0448	.87	-4.3	.62	-8.6	.44	.29	88.3	88.0	634875
41	3909	5087	-1.4249	.0351	.96	-2.4	.95	-1.8	.37	.33	79.1	77.8	634876
42	3186	5087	-.6453	.0311	1.06	5.1	1.07	3.9	.31	.37	66.5	68.8	634877
43	3550	5088	-.9025	.0327	.98	-1.2	.99	-.2	.38	.36	73.7	73.1	634878
44	5791	7183	-1.6698	.0316	.94	-3.2	.89	-3.7	.39	.33	82.5	81.4	634879
45	3768	5088	-1.1468	.0341	.88	-7.3	.78	-8.7	.48	.35	78.5	76.1	634880
46	3523	5087	-.9853	.0324	1.08	5.4	1.14	6.0	.27	.35	70.3	72.2	634881
47	1486	5087	.9804	.0329	1.02	1.3	1.13	5.4	.32	.36	74.2	73.5	634882
48	4422	5087	-2.1934	.0432	.98	-.6	.96	-.9	.29	.27	87.1	87.1	634883
49	4071	5087	-1.6360	.0369	.96	-2.0	.96	-1.2	.35	.31	81.4	80.6	634884
50	4383	5088	-2.0241	.0425	.91	-3.3	.79	-4.8	.40	.30	86.9	86.4	634885
51	3537	7183	.0209	.0255	1.06	6.3	1.08	5.9	.33	.39	64.0	66.5	634886
52	5618	7183	-1.5023	.0304	1.13	7.6	1.27	9.3	.20	.34	77.8	79.4	634887
53	3001	5088	-.3531	.0307	1.14	9.9	1.17	9.8	.24	.38	60.5	67.6	634888
54	2148	5087	.3197	.0305	1.13	9.9	1.16	9.9	.24	.38	60.9	67.2	634889
55	854	5087	1.7881	.0394	1.06	2.6	1.28	6.8	.21	.31	83.3	83.6	634890
56	3820	5088	-1.2085	.0345	1.03	1.9	1.05	1.8	.32	.35	76.1	76.9	634891
57	1604	5087	.8544	.0322	1.21	9.9	1.42	9.9	.12	.36	66.7	72.0	634892
58	5445	7183	-1.3468	.0294	.90	-6.9	.80	-8.5	.46	.35	78.9	77.4	634893
59	5025	7183	-1.0048	.0276	.96	-3.5	.91	-4.6	.42	.37	74.0	73.2	634894
60	3508	5088	-.8577	.0325	.93	-4.8	.87	-6.2	.44	.37	73.7	72.6	634895
61	4121	5087	-1.7058	.0376	.99	-.3	1.02	.5	.31	.31	82.0	81.5	634896
62	1650	5087	.8065	.0320	1.03	2.0	1.14	6.4	.32	.36	72.1	71.5	634897
63	4911	5088	-3.6303	.0780	.92	-1.2	.57	-4.8	.29	.18	96.6	96.6	634898
64	3874	5088	-1.2742	.0350	.87	-7.3	.76	-8.9	.49	.35	80.0	77.7	634899

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
65	4806	7183	-.8407	.0270	1.06	5.4	1.11	6.1	.31	.38	70.3	71.4	634900
66	2425	7183	.7747	.0268	.99	-1.1	1.04	2.4	.37	.37	72.8	70.8	634901
67	1919	5088	.6557	.0310	1.07	5.7	1.13	6.7	.29	.37	67.0	68.7	634902
68	3870	5087	-1.3770	.0348	.84	-9.2	.73	-9.9	.51	.33	80.5	77.2	634903
69	6802	10175	-.8031	.0225	.91	-9.9	.85	-9.9	.47	.37	73.6	71.1	634904
70	6223	12271	-.0125	.0195	1.03	4.8	1.05	5.4	.35	.39	65.2	66.3	634905
71	6554	12270	-.1879	.0195	.89	-9.9	.87	-9.9	.49	.39	72.3	66.5	634906
72	9558	12271	-1.4423	.0231	.94	-4.7	.83	-8.7	.42	.34	79.5	79.1	634907
73	3717	10175	.6561	.0221	.88	-9.9	.88	-9.2	.49	.37	74.8	69.3	634908
74	7102	12270	-.3999	.0197	1.09	9.9	1.13	9.9	.28	.38	63.2	67.4	634909
75	3026	5087	-.4921	.0306	1.07	6.3	1.10	5.7	.30	.37	63.9	67.6	634910
76	3155	5088	-.5007	.0311	.93	-6.1	.92	-4.8	.45	.38	71.9	68.8	634911
77	6096	7183	-2.0054	.0346	.97	-1.6	.91	-2.5	.35	.31	85.4	85.2	634912
78	2857	7183	.4725	.0260	1.22	9.9	1.32	9.9	.16	.38	59.0	68.2	634913
79	4576	5088	-2.4226	.0484	.98	-.6	1.09	1.6	.27	.27	90.1	90.1	634914
80	2115	5087	.3507	.0306	1.13	9.9	1.19	9.9	.23	.38	61.9	67.4	634915
81	3212	5087	-.6706	.0311	.99	-.9	.97	-1.7	.38	.37	68.8	69.0	634916
82	2842	5088	-.2038	.0304	1.03	3.1	1.04	2.4	.35	.38	64.7	66.7	634917
83	4012	7183	-.2916	.0257	1.03	3.4	1.07	4.8	.36	.39	65.3	67.1	634918
84	5205	7183	-1.1462	.0283	.95	-3.6	.89	-5.1	.42	.36	75.7	74.9	634919
85	4556	5088	-2.3761	.0477	.88	-3.6	.67	-6.8	.41	.27	89.9	89.7	634920
86	3129	5087	-.5903	.0309	.96	-3.8	.93	-4.4	.42	.37	69.4	68.3	634921
87	3310	5087	-.7671	.0315	.91	-7.7	.85	-8.0	.47	.36	73.8	69.9	634922
88	3904	5088	-1.3116	.0353	.95	-2.8	.88	-4.2	.40	.34	78.9	78.2	634923
89	3341	7183	.1495	.0256	1.01	1.6	1.02	1.6	.37	.39	66.2	66.7	634924
90	3812	7183	-.1595	.0256	.95	-5.1	.95	-3.9	.43	.39	69.9	66.7	634925
91	3051	5088	-.4006	.0308	.96	-3.6	.94	-3.4	.42	.38	69.5	68.0	634926
92	3482	5087	-.9423	.0322	1.00	.0	.99	-.2	.36	.36	72.0	71.8	634927
93	3682	5087	-1.1580	.0333	.99	-.5	.97	-1.1	.36	.35	74.3	74.4	634928
94	3069	5088	-.4178	.0308	.87	-9.9	.83	-9.9	.52	.38	74.1	68.1	634929
95	3230	7183	.2227	.0256	1.04	4.0	1.06	4.7	.35	.39	65.3	66.9	634930
96	5751	7183	-1.6298	.0313	.93	-4.2	.84	-5.8	.42	.33	81.9	80.9	634931
97	3951	5088	-1.3713	.0357	.99	-.4	.99	-.5	.35	.34	79.0	78.9	634932
98	2418	5087	.0696	.0302	1.00	-.1	1.01	.8	.38	.38	67.5	66.1	634933
99	3123	5087	-.5845	.0309	.87	-9.9	.82	-9.9	.51	.37	73.9	68.3	634934
100	3972	5088	-1.3985	.0360	.97	-1.3	.99	-.4	.36	.34	79.9	79.3	634935
101	5233	7183	-1.1689	.0284	.91	-6.6	.85	-7.1	.45	.36	77.5	75.2	634936
102	5811	7183	-1.6900	.0318	.89	-6.3	.75	-9.1	.45	.33	82.9	81.7	634937
103	2311	5088	.2857	.0303	1.12	9.9	1.17	9.9	.25	.38	61.3	66.4	634938
104	3829	5087	-1.3276	.0344	1.08	4.3	1.13	4.4	.25	.34	75.1	76.6	634939
105	1992	5087	.4674	.0308	1.09	7.1	1.11	6.3	.29	.38	64.2	68.2	634940
106	9580	12271	-1.4543	.0232	.90	-8.0	.79	-9.9	.45	.34	79.9	79.3	634941
107	6640	7183	-2.8604	.0462	.97	-.8	1.04	.6	.26	.25	92.6	92.6	634942
108	2501	5088	.1108	.0302	1.03	2.4	1.03	2.3	.36	.38	64.7	66.0	634943
109	2685	5087	-.1752	.0302	1.03	2.8	1.02	1.7	.35	.38	64.5	66.1	634944
110	2307	5087	.1718	.0303	1.01	1.1	1.04	2.5	.36	.38	66.4	66.4	634945
111	3238	5088	-.5820	.0313	1.09	6.8	1.13	6.8	.28	.38	66.9	69.6	634946
112	5680	7183	-1.5608	.0308	.91	-5.3	.79	-7.8	.44	.34	81.2	80.1	634947
113	3137	7183	.2844	.0257	1.15	9.9	1.22	9.9	.23	.39	60.2	67.1	634948
114	2723	5087	-.2101	.0302	.94	-5.9	.92	-5.6	.44	.38	68.9	66.2	634949
115	2311	5088	.2857	.0303	.97	-2.8	.99	-.8	.41	.38	69.2	66.4	634950
116	1452	5087	1.0176	.0331	1.13	8.2	1.27	9.9	.20	.36	71.9	73.9	634951
117	2840	5088	-.2019	.0304	1.01	1.1	1.01	.6	.37	.38	65.7	66.7	634952
118	2943	7183	.4142	.0259	1.07	7.2	1.10	6.8	.31	.38	64.6	67.8	634953
119	2182	7183	.9548	.0275	1.18	9.9	1.36	9.9	.17	.36	68.6	72.8	634954
120	2710	5088	-.0815	.0303	.96	-4.3	.95	-3.4	.43	.38	68.5	66.3	634955
121	3669	5087	-1.1435	.0332	.88	-7.8	.84	-7.1	.47	.35	78.3	74.2	634956
122	9089	12270	-1.2474	.0219	1.02	2.3	1.08	4.6	.32	.35	75.9	75.9	634957
123	3662	5088	-1.0254	.0334	1.00	-.1	.97	-1.0	.36	.36	74.3	74.6	634958
124	1947	7183	1.1390	.0283	1.09	6.6	1.21	8.9	.25	.35	73.5	75.1	634960
125	1966	5088	.6103	.0309	1.07	6.3	1.18	9.5	.28	.37	66.7	68.3	634961
126	3353	5087	-.8102	.0316	1.12	9.0	1.21	9.8	.23	.36	66.7	70.3	634962
127	2892	5087	-.3664	.0304	.88	-9.9	.84	-9.9	.51	.38	72.9	66.8	634963
128	2779	5088	-.1453	.0303	1.13	9.9	1.17	9.9	.25	.38	59.6	66.5	634964
129	3534	7183	.0229	.0255	.98	-2.3	.99	-1.0	.41	.39	67.8	66.5	634965
130	3545	7183	.0156	.0255	1.05	5.3	1.06	4.6	.34	.39	63.8	66.5	634966
131	2534	5088	.0804	.0302	1.21	9.9	1.28	9.9	.16	.38	55.4	66.0	634967
132	3244	5087	-.7019	.0312	.93	-5.6	.90	-5.4	.44	.37	72.8	69.3	634968

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
133	3093	5087	-.5558	.0308	.94	-5.1	.91	-5.5	.44	.37	70.1	68.1	634969
134	2201	5087	.2701	.0304	1.05	4.5	1.09	5.5	.32	.38	65.9	66.9	634970
135	2376	5087	.1082	.0302	1.08	7.9	1.15	9.9	.29	.38	61.9	66.2	634974
136	731	5088	2.1083	.0418	1.14	4.8	1.63	9.9	.10	.29	85.5	85.9	634976
137	4773	7183	-.8166	.0269	.96	-3.3	.91	-5.4	.42	.38	71.4	71.2	634977
138	2098	7183	1.0194	.0278	1.09	7.2	1.21	9.5	.25	.36	71.4	73.6	634978
139	2623	5088	-.0014	.0302	1.05	5.2	1.07	4.6	.33	.38	63.6	66.1	634979
140	4604	7183	-.6954	.0265	1.00	-.3	1.00	-.2	.38	.38	70.4	69.9	635044
141	4995	12271	.4617	.0198	1.20	9.9	1.30	9.9	.17	.38	59.6	67.7	636068
MEAN	3777.3	6155.3	-.6394	.0321	.99	-.2	.99	-.1			73.5	73.7	
S.D.	1534.7	1768.5	1.0316	.0076	.09	5.8	.18	6.5			8.6	7.6	

Grade 8

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
1	3807	7051	-.2123	.0254	1.03	3.4	1.04	3.7	.31	.35	63.7	64.7	635003
2	3359	5154	-.7104	.0311	.89	-8.9	.87	-7.4	.47	.35	74.2	69.5	635004
3	2924	7051	.3597	.0256	.98	-2.2	.99	-.9	.36	.34	67.4	65.9	635005
4	1594	5168	.9559	.0320	1.23	9.9	1.43	9.9	.07	.35	66.3	72.0	635006
5	2937	5168	-.2862	.0300	.98	-1.9	.97	-2.3	.39	.37	67.0	66.3	635007
6	2403	5154	.1634	.0299	1.13	9.9	1.17	9.9	.22	.37	58.9	65.4	635008
7	2904	7051	.3730	.0257	1.03	3.3	1.06	4.7	.30	.34	65.1	66.0	635009
8	5929	7051	-1.8940	.0339	.92	-4.0	.84	-5.1	.39	.28	84.7	84.4	635010
9	3099	5154	-.4639	.0304	.98	-1.6	.97	-2.0	.38	.36	68.2	67.2	635011
10	2417	5168	.1793	.0298	.96	-3.8	.95	-3.5	.41	.37	68.3	65.6	635012
11	7732	12219	-.6253	.0199	.94	-8.6	.92	-8.0	.42	.35	71.3	68.3	635013
12	3969	10322	.5598	.0216	1.02	2.1	1.01	1.3	.34	.36	66.8	67.9	635014
13	5454	12205	.2287	.0194	1.12	9.9	1.16	9.9	.22	.35	59.7	65.3	635015
14	2240	5154	.3103	.0300	1.18	9.9	1.23	9.9	.16	.37	56.1	66.1	635016
15	2903	5168	-.2554	.0300	.92	-8.3	.90	-7.6	.46	.37	70.4	66.1	635017
16	2814	5168	-.1753	.0299	1.08	7.7	1.09	6.8	.28	.37	61.5	65.8	635018
17	2633	5154	-.0422	.0298	.95	-4.7	.94	-4.6	.42	.37	67.5	65.2	635019
18	3023	7051	.2946	.0255	.95	-6.5	.94	-5.4	.41	.34	69.0	65.4	635020
19	1729	12205	2.0033	.0269	.98	-1.2	1.22	7.7	.25	.27	86.4	86.0	635021
20	7054	10322	-.8620	.0225	.89	-9.9	.85	-9.9	.47	.35	76.1	71.4	635022
21	2210	5168	.3658	.0301	1.03	2.5	1.04	2.8	.33	.37	65.4	66.5	635023
22	2306	5168	.2790	.0299	.99	-.5	1.00	-.1	.37	.37	67.1	66.0	635024
23	3423	5168	-.7427	.0313	.96	-2.9	.93	-3.8	.40	.35	71.2	70.1	635025
24	3405	7051	.0468	.0253	.98	-2.0	.99	-1.0	.36	.35	65.7	64.4	635026
25	2427	7051	.6981	.0265	1.07	6.2	1.17	9.9	.24	.33	68.8	69.3	635027
26	2605	5154	-.0172	.0298	.94	-6.0	.93	-5.3	.43	.37	68.4	65.2	635028
27	2653	5168	-.0313	.0298	1.13	9.9	1.15	9.9	.22	.37	57.5	65.4	635029
28	3337	5168	-.6588	.0310	1.11	8.9	1.16	8.8	.22	.35	65.4	69.2	635030
29	3054	5154	-.4224	.0303	1.04	4.0	1.08	5.0	.30	.36	66.2	66.9	635031
30	2053	7051	.9727	.0276	1.08	6.5	1.21	9.9	.20	.32	71.5	72.9	635032
31	2838	7051	.4168	.0257	1.10	9.9	1.14	9.9	.22	.34	62.1	66.3	635033
32	1715	5154	.8062	.0315	.97	-2.5	.96	-2.0	.39	.35	72.6	70.7	635034
33	2277	5168	.3051	.0300	1.05	4.4	1.05	3.5	.32	.37	63.3	66.1	635035
34	1587	5168	.9631	.0320	1.06	4.1	1.09	4.4	.28	.35	70.8	72.1	635036
35	2965	5154	-.3409	.0301	1.01	1.4	1.01	.6	.35	.36	64.5	66.3	635037
36	2371	7051	.7379	.0266	1.03	2.3	1.06	3.6	.30	.33	69.2	69.8	635038
37	3317	7051	.1036	.0253	.98	-3.0	.98	-2.0	.37	.35	66.2	64.5	635039
38	3593	5154	-.9453	.0322	1.11	7.7	1.27	9.9	.19	.34	69.6	72.3	635040
39	2458	5168	.1426	.0298	1.06	5.6	1.07	5.5	.30	.37	62.1	65.5	635041
40	1862	5168	.6899	.0309	.90	-8.7	.89	-6.6	.46	.36	75.3	69.0	635042
41	3354	5154	-.7055	.0311	.93	-5.9	.89	-6.2	.43	.35	72.2	69.4	635043
42	5763	7051	-1.7117	.0322	.87	-6.8	.74	-9.9	.45	.29	83.2	82.2	635045
43	7897	12205	-.7045	.0201	1.10	9.9	1.14	9.9	.23	.34	65.2	69.1	635046
44	3944	10322	.5716	.0216	1.01	.7	1.05	4.0	.34	.36	69.7	68.0	635047
45	4504	12205	.5963	.0199	.97	-3.6	.99	-.7	.37	.35	71.0	68.2	635048
46	1686	5168	.8624	.0316	1.06	4.5	1.14	6.7	.27	.35	70.1	70.9	635049
47	1989	5154	.5416	.0305	1.00	.4	1.00	.1	.36	.36	68.2	67.9	635050

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
48	3150	7051	.2117	.0254	.99	-.8	1.01	.7	.35	.35	65.9	65.0	635051
49	1375	7051	1.5568	.0314	1.00	.1	1.23	7.7	.25	.29	81.8	80.9	635052
50	4333	7051	-.5594	.0259	.97	-3.2	.95	-3.9	.38	.34	67.7	67.2	635053
51	1102	5154	1.4913	.0358	1.03	1.7	1.20	6.2	.25	.32	80.1	79.5	635054
52	3460	5168	-.7793	.0314	.89	-9.1	.83	-9.3	.48	.35	74.4	70.5	635055
53	4037	5168	-1.4168	.0354	1.01	.4	1.15	4.8	.28	.31	79.8	78.8	635056
54	2421	5154	.1472	.0298	.88	-9.9	.86	-9.9	.50	.37	73.1	65.4	635057
55	5267	7051	-1.2517	.0288	.95	-3.4	.89	-5.3	.39	.32	76.3	76.0	635058
56	4465	7051	-.6495	.0262	.92	-8.5	.88	-8.9	.44	.34	71.5	68.2	635059
57	2785	5154	-.1783	.0299	1.04	4.1	1.07	4.7	.31	.36	64.0	65.5	635060
58	1777	5168	.7723	.0312	1.04	3.1	1.11	5.7	.30	.35	69.5	69.9	635062
59	3476	5168	-.7953	.0315	.87	-9.9	.80	-9.9	.50	.35	74.8	70.7	635063
60	3306	5154	-.6591	.0309	.97	-2.2	.96	-2.1	.38	.35	70.3	68.9	635064
61	3444	7051	.0217	.0253	1.05	6.7	1.07	6.4	.28	.35	61.8	64.4	635065
62	5944	7051	-1.9115	.0341	.92	-3.9	.85	-4.7	.38	.28	85.2	84.6	635066
63	3698	5154	-1.0565	.0328	.92	-5.3	.87	-5.7	.43	.33	75.5	73.8	635067
64	2197	5168	.3777	.0301	1.07	6.7	1.11	7.2	.28	.37	63.4	66.5	635068
65	3882	7051	-.2609	.0254	.97	-3.2	.96	-3.4	.38	.35	66.2	65.0	635069
66	4533	7051	-.6967	.0263	.98	-2.4	.94	-3.9	.37	.34	68.9	68.7	635070
67	3887	5154	-1.2686	.0341	.82	-9.9	.71	-9.9	.53	.32	79.2	76.6	635071
68	2561	5168	.0507	.0298	1.17	9.9	1.24	9.9	.17	.37	57.0	65.4	635072
69	1603	5168	.9466	.0320	1.01	.6	1.04	2.1	.33	.35	72.3	71.9	635073
70	3286	5154	-.6399	.0309	1.08	6.8	1.11	6.2	.26	.35	65.5	68.7	635074
71	4169	7051	-.4494	.0257	.97	-3.4	.95	-3.8	.38	.35	67.2	66.2	635075
72	4420	7051	-.6186	.0261	1.00	-.5	.98	-1.2	.35	.34	67.9	67.9	635076
73	2081	5154	.4559	.0303	1.06	5.5	1.08	5.1	.29	.36	63.8	67.1	635077
74	2727	5168	-.0974	.0298	1.01	.9	1.00	.2	.36	.37	64.5	65.6	635078
75	3187	5168	-.5163	.0305	1.02	1.6	1.00	.2	.34	.36	66.6	67.9	635079
76	1918	5154	.6087	.0307	1.02	1.4	1.06	3.3	.33	.36	69.9	68.5	635080
77	2119	7051	.9226	.0274	1.18	9.9	1.31	9.9	.10	.32	67.1	72.2	635081
78	8537	12205	-.9741	.0209	.95	-5.1	.99	-.4	.38	.33	74.8	72.4	635082
79	7362	10322	-1.0224	.0231	.83	-9.9	.76	-9.9	.52	.34	77.9	73.4	635083
80	3644	12219	.9669	.0209	.98	-2.0	1.03	2.5	.34	.33	74.0	72.5	635084
81	3188	5168	-.5172	.0305	.89	-9.9	.85	-9.9	.48	.36	72.6	67.9	635085
82	2996	5154	-.3692	.0301	.92	-8.0	.89	-7.7	.45	.36	70.5	66.5	635086
83	5447	7051	-1.4073	.0298	.91	-5.5	.86	-6.2	.42	.31	78.9	78.2	635087
84	2885	7051	.3856	.0257	1.02	2.3	1.03	2.6	.32	.34	65.6	66.1	635088
85	1063	5154	1.5422	.0362	1.04	1.9	1.13	4.0	.26	.32	80.0	80.1	635089
86	1864	5168	.6880	.0309	1.03	2.3	1.07	3.9	.32	.36	68.5	69.0	635090
87	3351	5168	-.6724	.0310	.98	-1.6	.97	-1.9	.38	.35	69.7	69.3	635091
88	1685	5154	.8362	.0316	1.10	7.5	1.17	8.4	.23	.35	68.4	71.0	635092
89	2326	7051	.7701	.0268	1.10	8.7	1.16	9.2	.21	.33	67.9	70.2	635093
90	2825	7051	.4255	.0258	.90	-9.9	.89	-8.8	.45	.34	72.6	66.4	635094
91	4590	5154	-2.3371	.0461	.93	-2.2	.77	-4.8	.35	.25	89.3	89.1	635095
92	3704	5168	-1.0312	.0327	.85	-9.9	.76	-9.9	.52	.34	77.0	73.6	635096
93	1379	5168	1.1859	.0333	1.19	9.9	1.35	9.9	.11	.33	70.6	75.0	635097
94	4261	5154	-1.7581	.0385	.82	-8.0	.64	-9.9	.50	.29	84.1	83.0	635098
95	5117	7051	-1.1294	.0281	.96	-3.2	.94	-2.9	.37	.32	75.9	74.3	635099
96	9360	12205	-1.3615	.0225	1.02	1.5	1.07	4.0	.29	.31	77.6	77.7	635100
97	8461	12219	-.9279	.0207	.92	-9.0	.89	-8.5	.43	.34	75.0	71.9	635101
98	3593	5168	-.9142	.0321	.92	-6.1	.88	-6.0	.44	.34	74.0	72.1	635102
99	3775	5154	-1.1409	.0333	.89	-7.4	.82	-7.9	.46	.33	77.9	74.9	635103
100	2395	7051	.7208	.0266	1.28	9.9	1.37	9.9	.01	.33	58.9	69.6	635104
101	3061	7051	.2697	.0255	1.09	9.9	1.12	9.7	.24	.34	60.1	65.3	635105
102	2534	5154	.0462	.0298	.96	-4.6	.94	-4.4	.42	.37	68.3	65.2	635106
103	3693	5168	-1.0194	.0326	.90	-7.2	.85	-7.2	.46	.34	76.9	73.4	635107
104	2886	5168	-.2401	.0300	1.06	5.4	1.08	5.8	.30	.37	63.2	66.1	635108
105	2352	5154	.2092	.0299	1.05	5.0	1.07	4.9	.31	.37	63.3	65.6	635109
106	4172	7051	-.4514	.0257	.91	-9.9	.87	-9.9	.46	.35	70.0	66.3	635110
107	4287	7051	-.5283	.0259	.91	-9.9	.88	-9.7	.45	.34	71.5	66.9	635111
108	1600	7051	1.3458	.0298	1.03	2.1	1.12	4.9	.25	.30	77.7	78.1	635112
109	1631	5154	.8909	.0319	1.00	-.1	1.02	.8	.35	.35	72.1	71.7	635113
110	4017	5168	-1.3917	.0352	.87	-7.1	.77	-8.7	.47	.32	80.2	78.4	635114
111	5309	12219	.2956	.0194	1.00	-.2	1.00	-.1	.36	.35	65.8	65.7	635115
112	6526	10322	-.6030	.0218	.94	-8.0	.89	-9.1	.43	.36	70.5	68.5	635116
113	8305	12205	-.8739	.0206	.88	-9.9	.82	-9.9	.48	.34	74.5	71.1	635117
114	2276	7051	.8063	.0269	1.05	4.7	1.10	6.0	.26	.33	69.4	70.6	635118
115	1859	5154	.6652	.0309	.99	-.7	.99	-.8	.37	.36	70.4	69.1	635119

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
116	3864	5168	-1.2090	.0338	.95	-3.0	.90	-4.0	.39	.33	76.4	76.0	635120
117	2736	5168	-.1054	.0298	.93	-7.6	.91	-6.7	.45	.37	69.6	65.6	635121
118	3224	5154	-.5809	.0307	.89	-9.5	.85	-9.5	.48	.36	71.4	68.2	635122
119	4570	7051	-.7226	.0264	.90	-9.9	.85	-9.9	.46	.34	73.1	69.0	635123
120	2694	5168	-.0679	.0298	1.10	9.9	1.15	9.9	.25	.37	60.9	65.5	635124
121	2207	5154	.3403	.0301	1.03	3.2	1.04	2.4	.33	.36	64.9	66.3	635125
122	6067	7051	-2.0618	.0357	.84	-7.3	.62	-9.9	.49	.27	86.8	86.2	635126
123	1763	7051	1.2049	.0289	1.11	7.6	1.20	8.7	.17	.31	73.6	76.1	635127
124	1981	5154	.5492	.0306	.96	-3.9	.94	-3.5	.41	.36	70.5	67.9	635128
125	2219	5168	.3576	.0301	1.17	9.9	1.20	9.9	.18	.37	58.1	66.4	635129
126	1163	5154	1.4141	.0351	1.12	6.1	1.35	9.9	.16	.32	77.0	78.4	635130
127	3296	5154	-.6495	.0309	.89	-9.8	.84	-9.7	.48	.35	72.8	68.8	635132
128	1113	7051	1.8362	.0339	1.12	5.4	1.42	9.9	.08	.27	84.3	84.4	635133
129	3095	5168	-.4307	.0303	.99	-.8	1.00	-.2	.37	.36	67.3	67.2	635134
130	2210	5168	.3658	.0301	1.18	9.9	1.21	9.9	.17	.37	56.6	66.5	635135
131	1508	5154	1.0191	.0325	1.18	9.9	1.35	9.9	.12	.34	69.9	73.3	635136
132	5818	7051	-1.7702	.0327	.85	-7.8	.70	-9.9	.48	.29	83.9	82.9	635137
133	2691	7051	.5156	.0260	1.06	5.9	1.08	5.7	.27	.34	64.8	67.3	635138
134	2327	5154	.2317	.0299	1.01	.5	1.02	1.8	.36	.37	66.9	65.7	635139
135	2767	5168	-.1332	.0298	1.01	1.5	1.02	1.2	.35	.37	64.9	65.7	635140
136	2471	5168	.1310	.0298	1.04	4.3	1.04	3.0	.32	.37	62.8	65.5	635141
137	2091	5154	.4467	.0303	1.06	5.1	1.10	6.4	.29	.36	65.8	67.1	635142
138	1553	7051	1.3881	.0301	.94	-3.5	.97	-1.1	.35	.30	80.3	78.7	635143
139	3623	7051	-.0935	.0253	.99	-.9	.99	-1.0	.36	.35	64.6	64.4	635144
140	3726	5168	-1.0549	.0328	.95	-3.6	.91	-4.0	.40	.34	75.1	73.9	635145
141	4842	10322	.1615	.0211	.97	-4.6	.97	-3.3	.40	.37	67.7	65.5	635146
142	4535	5154	-2.2242	.0443	.91	-3.2	.68	-7.3	.39	.25	88.3	88.1	635147
143	4763	7051	-.8604	.0269	.97	-2.6	.96	-2.4	.37	.34	72.0	70.7	635148
144	1354	5154	1.1878	.0335	1.02	1.1	1.17	6.6	.28	.34	77.2	75.5	635149
145	1198	5168	1.3963	.0348	.98	-1.1	1.05	1.8	.33	.32	79.2	77.8	635150
146	1575	5168	.9755	.0321	.96	-3.0	.98	-1.0	.38	.35	74.5	72.3	635151
147	1346	5154	1.1969	.0336	1.20	9.9	1.42	9.9	.08	.34	72.1	75.6	635152
148	5117	7051	-1.1294	.0281	.86	-9.9	.79	-9.9	.49	.32	77.0	74.3	635153
149	4154	7051	-.4394	.0257	1.01	.6	1.00	-.1	.34	.35	65.5	66.2	635154
150	3749	5154	-1.1121	.0331	.92	-5.1	.93	-2.9	.41	.33	77.1	74.5	635155
151	3107	5168	-.4418	.0303	.85	-9.9	.81	-9.9	.53	.36	74.6	67.3	635156
152	4063	5168	-1.4498	.0356	.96	-2.2	.86	-4.8	.37	.31	79.5	79.2	635157
153	1664	5154	.8574	.0317	1.02	1.4	1.06	3.0	.32	.35	72.6	71.3	635158
154	3809	5168	-1.1465	.0334	.89	-7.3	.82	-7.6	.46	.33	76.5	75.1	635159
155	4028	5154	-1.4400	.0355	.93	-3.5	.86	-4.7	.39	.31	80.1	78.9	635160
156	3033	7051	.2881	.0255	1.04	4.8	1.05	4.1	.30	.34	62.9	65.4	635161
157	2950	5168	-.2980	.0300	.97	-3.4	.95	-3.3	.40	.36	68.0	66.4	635162
158	1386	7051	1.5459	.0313	1.10	5.2	1.32	9.9	.14	.29	80.6	80.8	635163
159	2306	5154	.2506	.0300	1.07	7.1	1.11	7.7	.28	.37	63.3	65.8	635228
160	2313	5168	.2727	.0299	1.09	8.9	1.13	8.9	.26	.37	61.5	66.0	635230
161	4676	7051	-.7976	.0267	1.04	3.6	1.06	3.6	.29	.34	68.5	69.9	635233
162	2341	5168	.2475	.0299	1.04	3.9	1.05	3.5	.32	.37	63.3	65.9	635236
163	2262	5154	.2904	.0300	1.03	3.1	1.04	2.6	.33	.37	64.1	66.0	635240
MEAN	3305.5	6395.0	-.0852	.0294	1.00	-.3	1.01	.2			70.6	70.5	
S.D.	1594.3	1971.0	.8849	.0042	.09	6.2	.15	6.6			6.8	5.6	

Grade 11

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
1	2055	5816	.6133	.0292	.88	-9.9	.88	-7.5	.48	.35	76.3	69.1	635171
2	1843	2930	-.5888	.0406	.95	-3.6	.93	-3.4	.41	.34	71.1	68.0	635172
3	1750	2913	-.3947	.0402	1.03	1.8	1.03	1.6	.32	.35	64.7	66.7	635174
4	1369	2919	.2111	.0397	.99	-1.1	.97	-1.4	.38	.36	65.0	65.3	635176
5	1909	2919	-.6620	.0415	1.04	2.3	1.02	1.0	.31	.35	68.6	69.8	635178
6	1309	2913	.2997	.0396	1.01	.4	.99	-.5	.34	.35	63.7	64.9	635179
7	1683	2930	-.3298	.0398	.92	-6.3	.91	-5.0	.44	.35	70.1	65.8	635180
8	3508	5816	-.5546	.0285	.88	-9.9	.83	-9.9	.49	.35	71.9	66.9	635181
9	4043	5816	-1.0141	.0301	.87	-9.9	.81	-9.9	.49	.33	75.2	71.9	635182

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
1991	2930	-.8415	.0419	.92	-4.7	.85	-6.0	.44	.33	71.7	71.0	635183	10
11	2715	2913	-2.8140	.0754	.93	-1.2	.63	-4.8	.34	.20	93.2	93.3	635184
12	2502	2919	-1.9510	.0551	.97	-.7	.89	-1.9	.31	.27	86.0	85.8	635185
13	1382	2919	.1906	.0397	1.00	.4	.99	-.3	.36	.36	63.9	65.3	635186
14	2016	2913	-.8476	.0425	.93	-3.7	.88	-4.6	.42	.33	74.0	71.8	635187
15	907	2930	.9221	.0423	1.08	4.4	1.21	7.5	.21	.33	71.6	71.7	635188
16	3513	5816	-.5586	.0285	.98	-1.8	.98	-1.1	.37	.35	68.8	67.0	635189
17	2504	5816	.2433	.0282	.97	-3.6	.97	-2.5	.39	.36	68.6	65.9	635190
18	1808	2930	-.5312	.0404	1.05	3.1	1.05	2.3	.29	.35	64.9	67.4	635191
19	1830	2913	-.5260	.0407	.91	-6.1	.88	-5.8	.45	.34	71.7	68.0	635192
20	2107	2919	-1.0216	.0438	1.12	5.6	1.31	9.0	.17	.33	72.7	74.1	635193
21	1562	2919	-.0935	.0397	1.04	2.6	1.05	2.6	.32	.36	64.1	65.4	635194
22	1382	2913	.1853	.0394	.91	-7.8	.88	-7.2	.46	.35	69.9	64.5	635195
23	1857	2930	-.6121	.0407	.90	-6.7	.86	-6.5	.46	.34	72.0	68.3	635196
24	3896	5816	-.8824	.0296	.94	-4.8	.90	-5.6	.41	.34	71.6	70.2	635197
25	1941	5816	.7119	.0295	1.15	9.9	1.25	9.9	.16	.34	65.9	70.2	635198
26	1888	2919	-.6259	.0413	.93	-4.4	.90	-4.2	.43	.35	71.1	69.4	635199
27	1837	2913	-.5377	.0408	.88	-7.9	.85	-7.4	.48	.34	73.2	68.1	635200
28	1684	2919	-.2882	.0401	.94	-4.5	.91	-4.6	.43	.36	69.1	66.4	635201
29	1057	2919	.7181	.0411	1.10	6.2	1.16	6.6	.23	.35	64.7	68.7	635203
30	1697	2913	-.3094	.0399	.99	-1.0	1.00	.1	.36	.35	68.5	66.0	635204
31	1544	2930	-.1114	.0394	1.05	3.6	1.05	2.6	.30	.35	60.8	64.7	635205
32	2480	5816	.2626	.0283	1.16	9.9	1.20	9.9	.17	.36	57.7	66.0	635206
33	1942	5816	.7111	.0295	1.10	8.2	1.18	9.9	.22	.34	67.8	70.2	635207
34	2752	2930	-2.9955	.0788	.91	-1.4	.60	-4.9	.33	.19	94.0	93.9	635208
35	1616	2913	-.1807	.0396	1.05	3.8	1.05	2.8	.29	.35	61.4	65.2	635209
36	1266	2919	.3750	.0399	.95	-3.7	.95	-2.6	.41	.36	69.1	66.0	635210
37	1990	2919	-.8045	.0423	.97	-1.7	.96	-1.7	.38	.34	72.6	71.4	635211
38	1731	2913	-.3640	.0401	1.01	.5	1.00	.2	.34	.35	66.1	66.5	635212
39	1911	2930	-.7029	.0411	.93	-4.6	.88	-5.2	.43	.34	71.2	69.3	635213
40	1944	5816	.7093	.0295	1.16	9.9	1.25	9.9	.15	.34	64.7	70.2	635214
41	3754	5816	-.7597	.0291	1.06	5.2	1.08	4.6	.27	.34	67.3	68.9	635216
42	1602	2930	-.2021	.0395	1.00	.2	1.00	.1	.35	.35	65.0	65.1	635217
43	1724	2913	-.3527	.0401	1.00	.1	1.02	.9	.34	.35	66.6	66.4	635218
44	1479	2919	.0376	.0396	1.13	9.4	1.19	9.9	.22	.37	58.7	65.2	635219
45	1603	2919	-.1586	.0398	.94	-4.8	.90	-5.4	.44	.36	67.4	65.7	635220
46	1462	2913	.0604	.0394	1.09	6.8	1.10	5.8	.25	.35	59.6	64.4	635221
47	417	2930	2.0221	.0550	1.06	1.6	1.42	6.8	.15	.27	86.2	86.0	635222
48	1021	5816	1.6672	.0361	1.14	6.2	1.45	9.9	.09	.29	82.0	82.9	635223
49	1642	5816	.9847	.0308	1.15	9.9	1.30	9.9	.13	.33	70.9	73.7	635224
50	1426	2930	.0723	.0394	1.23	9.9	1.28	9.9	.08	.35	50.4	64.6	635225
51	721	2913	1.3199	.0450	1.09	4.0	1.21	5.9	.17	.31	74.8	76.2	635226
52	1374	2919	.2032	.0397	1.14	9.9	1.18	9.4	.21	.36	57.7	65.3	635227
53	1784	5849	.9786	.0301	.92	-6.1	.95	-2.4	.41	.34	76.3	72.1	635229
54	2263	2913	-1.3360	.0468	.89	-4.6	.78	-6.5	.46	.31	78.7	78.6	635231
55	1095	2919	.6542	.0408	.96	-2.6	.98	-.7	.39	.36	70.5	68.1	635232
56	1722	2913	-.3495	.0401	1.05	3.4	1.05	2.6	.29	.35	64.0	66.3	635234
57	3316	5849	-.2685	.0282	1.04	4.2	1.05	4.0	.31	.36	64.0	65.9	635235
58	3186	5816	-.2957	.0281	.99	-.9	.98	-1.8	.37	.36	65.1	65.4	635237
59	2498	5816	.2481	.0283	1.03	3.1	1.06	4.3	.32	.36	65.5	65.9	635238
60	1462	2930	.0163	.0394	.99	-.5	.99	-.6	.36	.35	65.1	64.6	635239
61	2112	2913	-1.0267	.0438	.94	-2.8	.88	-4.2	.41	.32	74.4	74.3	635241
62	1839	2930	-.5822	.0406	1.04	2.8	1.06	2.5	.29	.34	66.2	68.0	635242
63	1731	2919	-.3644	.0403	.93	-5.2	.91	-4.7	.44	.36	70.7	67.0	635243
64	1638	2930	-.2587	.0396	1.03	2.4	1.03	1.8	.32	.35	63.8	65.4	635244
65	3203	5816	-.3092	.0281	1.02	2.5	1.03	2.4	.33	.36	65.0	65.4	635245
66	3346	5816	-.4233	.0283	.97	-2.8	.97	-2.1	.38	.35	67.3	66.0	635246
67	5114	8735	-.4238	.0232	.98	-2.7	.95	-4.6	.39	.36	66.0	66.5	635247
68	562	2930	1.6309	.0491	1.06	2.2	1.45	9.2	.16	.30	81.7	81.3	635248
69	1108	2913	.6219	.0404	.94	-4.5	.93	-3.5	.41	.34	71.1	67.2	635249
70	4580	5849	-1.4137	.0333	.98	-1.4	.92	-2.8	.34	.31	79.3	79.0	635250
71	3849	8729	.2433	.0230	.96	-5.6	.96	-4.1	.40	.35	69.1	65.5	635251
72	2686	5849	.2270	.0280	.91	-9.8	.89	-8.8	.46	.36	69.9	65.2	635252
73	938	2913	.9106	.0419	1.13	7.4	1.22	7.9	.16	.33	66.6	70.5	635253
74	3132	8729	.6337	.0237	1.12	9.9	1.17	9.9	.20	.35	63.8	68.6	635254
75	1244	5849	1.5224	.0336	1.16	8.0	1.39	9.9	.09	.31	78.2	79.5	635255
76	2915	8746	.7430	.0241	1.01	.9	1.02	1.6	.33	.34	70.2	70.2	635256
77	1607	2913	-.1665	.0396	1.08	6.0	1.10	5.3	.25	.35	60.6	65.1	635257
78	2128	5849	.6784	.0289	1.09	7.7	1.12	7.3	.25	.35	64.8	68.5	635258
79	4898	8729	-.3082	.0230	.93	-9.7	.91	-9.2	.44	.35	69.5	65.6	635259

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
80	2024	5849	.7667	.0292	1.16	9.9	1.28	9.9	.15	.35	64.4	69.5	635260
81	4343	8729	-.0164	.0228	.99	-.8	1.00	-.4	.36	.36	65.1	64.8	635261
82	3063	5816	-.1985	.0280	1.11	9.9	1.14	9.9	.23	.36	59.4	65.1	635262
83	2126	2930	-1.0893	.0437	.95	-2.5	.94	-2.0	.38	.32	75.9	74.2	635263
84	1383	2913	.1837	.0394	.99	-1.0	.98	-1.2	.36	.35	65.6	64.5	635264
85	2062	2919	-.9363	.0432	.94	-3.0	.87	-4.5	.42	.34	73.4	73.1	635265
86	2095	2919	-.9987	.0436	.86	-7.3	.79	-7.3	.50	.34	78.4	73.9	635266
87	1652	2913	-.2377	.0398	1.00	.2	1.00	.1	.35	.35	64.8	65.5	635267
88	1183	2930	.4555	.0400	1.04	2.5	1.04	2.2	.31	.35	65.2	66.5	635268
89	2615	5816	.1548	.0281	.98	-2.2	.99	-1.1	.38	.36	67.1	65.5	635269
90	2216	5816	.4778	.0288	1.05	4.4	1.08	5.2	.29	.35	66.7	67.7	635270
91	1880	2930	-.6505	.0409	1.01	.3	1.02	1.1	.33	.34	69.5	68.7	635271
92	877	2913	1.0199	.0426	1.18	9.0	1.23	7.9	.11	.32	66.7	72.0	635272
93	961	2919	.8840	.0419	1.13	7.0	1.18	6.6	.20	.35	65.5	70.6	635273
94	1773	2919	-.4331	.0405	.95	-3.7	.92	-4.0	.42	.36	68.7	67.5	635274
95	1773	2913	-.4321	.0403	.99	-.8	.96	-2.1	.37	.34	65.2	67.0	635275
96	2322	2930	-1.4977	.0477	.95	-1.8	.88	-3.0	.36	.30	79.9	79.8	635276
97	3657	5816	-.6778	.0289	.97	-3.1	.93	-4.3	.39	.35	68.1	68.0	635277
98	2351	2919	-1.5437	.0491	.95	-1.7	.88	-2.9	.37	.30	81.0	81.0	635278
99	4034	5816	-1.0059	.0301	.88	-9.7	.81	-9.9	.48	.33	74.6	71.8	635279
100	1318	2930	.2411	.0395	.94	-4.7	.93	-4.2	.42	.35	68.4	65.1	635280
101	2467	2913	-1.8443	.0536	.85	-4.5	.75	-5.3	.46	.27	85.9	84.9	635281
102	2554	2919	-2.1176	.0580	.95	-1.3	.85	-2.5	.33	.26	87.5	87.6	635282
103	1117	2919	.6176	.0406	1.17	9.9	1.23	9.9	.16	.36	60.4	67.8	635283
104	1108	2913	.6219	.0404	1.10	6.9	1.14	6.4	.21	.34	63.2	67.2	635284
105	1509	2930	-.0568	.0394	1.08	6.0	1.11	6.5	.26	.35	61.5	64.6	635285
106	1505	5816	1.1188	.0316	1.17	9.9	1.36	9.9	.10	.32	73.7	75.5	635286
107	4391	5816	-1.3512	.0321	.84	-9.9	.73	-9.9	.51	.31	79.4	76.4	635287
108	1894	2930	-.6741	.0410	.96	-2.7	.95	-2.3	.39	.34	71.4	69.0	635288
109	2283	2913	-1.3804	.0473	.90	-3.8	.77	-6.7	.45	.30	79.3	79.2	635289
110	2066	2919	-.9438	.0432	.84	-8.6	.77	-8.3	.52	.34	77.8	73.2	635290
111	1294	2913	.3233	.0396	.84	-9.9	.81	-9.9	.53	.35	75.0	65.0	635291
112	2206	2930	-1.2475	.0451	.95	-2.1	.94	-1.7	.36	.31	77.9	76.4	635292
113	3940	5816	-.9213	.0297	.95	-4.2	.93	-4.1	.40	.34	72.6	70.7	635293
114	4148	5816	-1.1115	.0306	.94	-4.6	.89	-5.5	.40	.33	74.4	73.2	635294
115	1698	2930	-.3537	.0398	.93	-5.3	.92	-4.5	.43	.35	68.9	66.0	635295
116	2200	2913	-1.2020	.0454	.87	-5.8	.79	-6.6	.48	.31	78.9	76.8	635296
117	1555	2919	-.0825	.0397	.92	-6.6	.90	-5.6	.46	.36	70.8	65.4	635297
118	1518	5816	1.1058	.0316	1.03	2.1	1.06	2.7	.28	.33	74.9	75.4	635488
119	1835	2913	-.5343	.0407	.90	-6.6	.87	-6.5	.46	.34	72.5	68.1	635489
120	2375	2919	-1.6027	.0498	.89	-4.0	.79	-4.9	.43	.30	82.9	81.7	635490
121	2698	2919	-2.7112	.0717	.91	-1.7	.76	-3.0	.34	.21	92.5	92.4	635491
122	1394	2913	.1665	.0394	1.01	1.1	1.01	.7	.33	.35	63.3	64.5	635492
123	1977	2930	-.8169	.0418	.94	-3.3	.91	-3.7	.41	.34	72.3	70.7	635493
124	3558	5816	-.5956	.0286	.93	-6.5	.92	-5.6	.42	.35	70.8	67.3	635494
125	5330	8729	-.5408	.0234	.93	-8.8	.91	-7.6	.43	.35	70.9	67.3	635495
126	3137	5849	-.1269	.0280	1.04	3.8	1.04	3.5	.32	.36	62.7	65.2	635496
127	4130	8729	.0952	.0229	.92	-9.9	.90	-9.9	.45	.36	70.0	65.0	635497
128	1640	2919	-.2176	.0399	.92	-6.4	.90	-5.5	.46	.36	71.0	66.0	635498
129	2370	2913	-1.5854	.0498	.91	-3.0	.77	-5.6	.42	.29	81.8	81.9	635499
130	2031	2930	-.9128	.0424	.88	-7.1	.84	-6.3	.48	.33	76.4	71.9	635501
131	2176	2930	-1.1870	.0445	.93	-3.4	.86	-4.5	.41	.32	76.7	75.6	635502
132	3873	5816	-.8622	.0295	.90	-8.9	.84	-9.7	.46	.34	73.1	70.0	635503
133	1566	2930	-.1457	.0394	1.02	1.6	1.01	.7	.33	.35	62.5	64.8	635504
134	1998	2913	-.8152	.0423	1.02	.8	1.01	.2	.32	.33	70.8	71.4	635505
135	1809	2919	-.4927	.0407	.98	-1.1	.97	-1.4	.38	.36	68.1	68.1	635506
136	1518	2919	-.0240	.0396	.94	-4.9	.91	-5.0	.44	.36	68.6	65.3	635507
137	972	2913	.8511	.0415	1.09	5.0	1.20	7.8	.21	.33	67.7	69.8	635508
138	832	2930	1.0601	.0433	1.14	6.7	1.25	8.0	.15	.33	70.9	73.6	635509
139	2475	5816	.2666	.0283	1.16	9.9	1.20	9.9	.17	.36	57.8	66.1	635510
140	2095	5816	.5793	.0291	1.07	5.9	1.11	6.4	.27	.35	67.0	68.7	635511
141	544	2930	1.6750	.0497	1.05	1.6	1.18	3.9	.22	.29	81.8	81.9	635512
142	675	2913	1.4158	.0460	1.18	7.0	1.48	9.9	.04	.30	75.7	77.5	635513
143	979	2919	.8524	.0417	1.07	4.2	1.10	4.0	.27	.35	67.5	70.2	635514
144	880	2919	1.0301	.0428	1.17	8.5	1.30	9.7	.14	.34	68.4	72.4	635515
145	1855	2913	-.5678	.0409	1.03	2.1	1.04	2.0	.30	.34	67.2	68.4	635516
146	1006	2930	.7486	.0413	1.01	.8	1.04	1.6	.32	.34	69.2	69.5	635517
147	1556	5816	1.0681	.0313	1.12	7.4	1.21	8.8	.18	.33	72.5	74.8	635518
148	1542	5816	1.0819	.0314	1.08	4.9	1.25	9.9	.22	.33	74.7	75.0	635519
149	1730	2930	-.4048	.0400	1.00	-.2	.98	-1.0	.36	.35	66.0	66.4	635520

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PT-MEASURE CORR.	PT-MEASURE EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	Science
1273	2913	.3565	.0397	1.40	9.9	1.48	9.9	-.13	.35	41.8	65.1	635521	150
151	221	2919	2.8525	.0718	1.03	.5	1.64	6.3	.12	.22	92.5	92.4	635522
152	1089	2919	.6642	.0408	1.21	9.9	1.32	9.9	.11	.36	59.6	68.2	635523
153	675	2913	1.4158	.0460	1.05	1.9	1.24	6.2	.20	.30	78.9	77.5	635524
154	1134	2930	.5349	.0403	.94	-4.2	.95	-2.7	.41	.35	72.5	67.2	635525
155	1476	5816	1.1481	.0318	1.14	8.4	1.27	9.9	.15	.32	73.5	76.0	635526
156	2562	5816	.1970	.0282	1.08	7.9	1.09	6.7	.27	.36	61.6	65.7	635527
157	1883	2930	-.6556	.0409	.93	-4.8	.89	-5.0	.43	.34	71.1	68.8	635528
158	577	2913	1.6353	.0485	1.02	.8	1.18	4.2	.24	.29	80.6	80.5	635529
159	2059	2919	-.9307	.0431	.93	-3.7	.89	-3.8	.42	.34	74.9	73.0	635530
160	1646	2919	-.2272	.0399	1.15	9.9	1.25	9.9	.18	.36	60.3	66.0	635531
161	2285	2913	-1.3849	.0473	.86	-5.8	.78	-6.3	.48	.30	81.5	79.3	635532
162	452	2930	1.9192	.0533	1.21	5.8	1.64	9.9	-.03	.28	83.5	84.8	635533
163	5110	5816	-2.2842	.0414	.84	-5.9	.57	-9.9	.47	.25	88.1	87.9	635534
164	4021	5816	-.9940	.0300	.92	-6.2	.89	-5.7	.42	.33	73.8	71.6	635535
165	1836	2930	-.5772	.0406	1.14	9.0	1.18	8.1	.18	.34	61.7	67.9	635536
166	1343	2919	.2523	.0397	1.01	.7	1.01	.4	.35	.36	65.3	65.4	635537
167	964	2919	.8787	.0419	1.05	3.1	1.08	3.1	.28	.35	69.5	70.5	635539
168	1273	2919	.3638	.0399	.96	-2.6	.97	-1.5	.40	.36	69.5	65.9	635540
169	1036	2913	.7418	.0409	.97	-2.1	.99	-.4	.36	.34	71.2	68.4	635541
170	919	2930	.9006	.0422	1.03	1.8	1.12	4.4	.28	.34	71.2	71.4	635542
171	3425	5816	-.4870	.0284	.88	-9.9	.84	-9.9	.50	.35	72.5	66.4	635543
172	3684	5816	-.7004	.0289	.88	-9.9	.84	-9.9	.49	.35	72.7	68.3	635544
173	659	2930	1.4086	.0465	.94	-2.3	.94	-1.6	.37	.31	79.2	78.4	635545
174	972	2913	.8511	.0415	1.12	7.2	1.21	8.0	.17	.33	67.6	69.8	635547
175	2664	2919	-2.5464	.0674	.96	-.8	.95	-.6	.27	.22	91.3	91.3	635548
176	2459	2913	-1.8214	.0532	.87	-4.0	.78	-4.6	.44	.28	85.7	84.7	635549
177	2069	2930	-.9822	.0429	.87	-7.3	.81	-7.0	.49	.33	76.8	72.8	635550
178	760	2913	1.2417	.0443	1.03	1.6	1.09	2.8	.26	.31	74.9	75.0	635551
179	2197	2930	-1.2292	.0449	.95	-2.1	.91	-2.7	.38	.31	76.7	76.1	635552
180	4993	5816	-2.0943	.0390	.94	-2.5	.98	-.6	.33	.26	86.0	85.9	635553
181	1507	5816	1.1168	.0316	1.07	4.2	1.22	9.0	.22	.32	76.1	75.5	635554
182	2207	2930	-1.2495	.0451	.92	-3.5	.85	-4.7	.42	.31	77.5	76.4	635555
183	995	2913	.8115	.0413	.97	-2.1	.99	-.3	.36	.33	72.7	69.3	635556
184	1618	2919	-.1825	.0398	.95	-3.7	.93	-4.1	.42	.36	67.5	65.8	635557
185	1720	2919	-.3465	.0402	.89	-8.1	.85	-7.7	.49	.36	71.6	66.8	635558
186	946	2913	.8965	.0418	.98	-.9	1.06	2.4	.33	.33	73.0	70.3	635559
187	1177	2930	.4652	.0401	1.10	7.2	1.14	6.9	.22	.35	62.8	66.6	635560
188	3412	5816	-.4765	.0284	.94	-5.8	.93	-5.0	.42	.35	69.3	66.4	635562
189	1173	2913	.5161	.0401	1.24	9.9	1.32	9.9	.05	.34	54.6	66.2	635563
190	646	2919	1.5001	.0470	1.02	1.0	1.22	5.2	.26	.32	79.2	78.8	635564
191	3374	5849	-.3148	.0282	.85	-9.9	.82	-9.9	.53	.36	74.3	66.1	635565
192	2834	8729	.8056	.0242	.99	-1.4	1.00	.2	.35	.34	71.6	70.6	635566
193	2199	2919	-1.2051	.0454	.87	-6.1	.76	-7.5	.49	.32	77.7	76.6	636026
194	2117	2913	-1.0363	.0439	1.00	.1	1.00	.1	.32	.32	73.8	74.5	636027
195	2384	5849	.4676	.0284	.90	-9.9	.89	-8.5	.47	.36	73.0	66.6	636028
196	3880	8729	.2268	.0230	.99	-.9	.99	-.6	.36	.35	65.7	65.4	636029
197	3711	8729	.3167	.0231	.99	-1.9	.99	-.5	.37	.35	67.3	65.9	636030
198	1482	5849	1.2679	.0317	1.10	6.3	1.25	9.7	.18	.32	74.7	76.0	636031
199	4723	8729	-.2157	.0229	.90	-9.9	.88	-9.9	.47	.36	71.5	65.2	636032
200	4985	5849	-1.9288	.0383	.85	-6.4	.68	-9.3	.46	.27	85.9	85.4	636033
201	4523	5849	-1.3509	.0329	.89	-6.2	.82	-7.2	.44	.31	79.4	78.1	636034
202	5746	8729	-.7742	.0240	.97	-3.4	.97	-2.0	.38	.34	71.8	69.6	636036
203	1044	2930	.6841	.0410	1.08	4.9	1.11	4.8	.25	.34	65.8	68.8	636037
204	1004	5816	1.6895	.0363	1.17	7.1	1.46	9.9	.06	.29	81.8	83.1	636038
205	4723	5816	-1.7248	.0350	.88	-6.4	.82	-5.9	.43	.29	82.6	81.5	636039
206	1400	2930	.1128	.0394	1.03	2.1	1.03	2.0	.32	.35	63.9	64.7	636040
207	2056	2913	-.9209	.0430	.95	-2.7	.89	-4.0	.40	.33	73.6	72.8	636041
208	1329	2919	.2745	.0398	1.00	-.1	1.00	.1	.36	.36	66.7	65.5	636042
209	1622	2919	-.1889	.0398	1.05	3.7	1.06	3.1	.31	.36	63.0	65.8	636043
210	6124	8729	-.9990	.0248	.91	-8.3	.87	-8.6	.44	.33	75.2	72.4	636044
211	2427	2930	-1.7542	.0511	.92	-2.6	.83	-3.7	.39	.28	83.3	83.1	636045
212	3945	5816	-.9258	.0297	.96	-2.9	.96	-2.2	.37	.34	72.5	70.8	636046
213	3266	5816	-.3593	.0282	.94	-6.2	.94	-4.8	.42	.36	69.6	65.7	636047
MEAN	2143.8	4106.5	-.1463	.0386	1.00	-.4	1.01	.0			71.2	71.1	
S.D.	1138.2	1773.8	.9767	.0091	.10	5.7	.18	6.1			7.7	6.6	

Appendix S: Reading Pre- and Post-Equating Summary

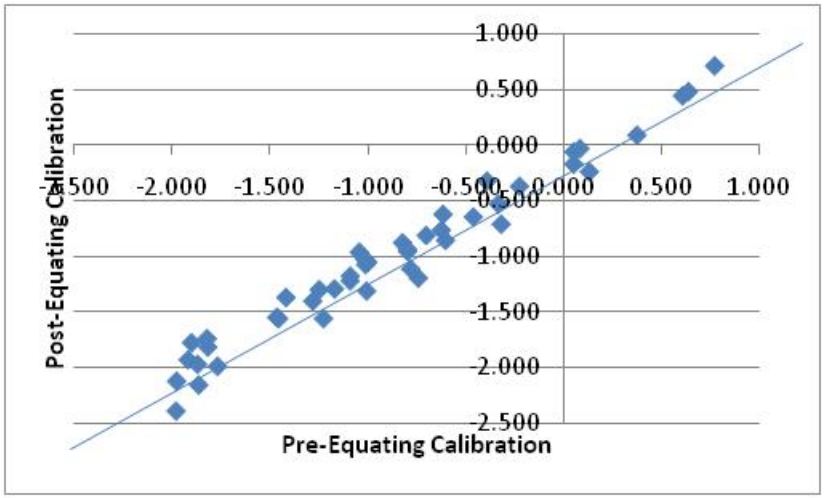
Pre- and Post Equating Comparison. The Pre- values were taken from the calibrated item and used to create the Raw-to-Scale Conversion Tables. The Post- values were taken directly from unanchored calibration runs.

	3		4		5		6		7		8		11	
Item	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
1	-1.767	-1.985	-0.960	-1.180	-1.495	-1.318	-1.534	-1.764	-0.386	-0.369	-0.345	-0.288	0.303	0.266
2	-1.900	-1.773	-1.561	-1.699	-1.143	-1.095	-1.567	-1.726	-1.228	-1.312	-1.761	-1.961	-0.467	-0.502
3	-0.461	-0.640	0.288	0.146	-0.527	-0.425	-1.176	-1.383	0.134	-0.070	-1.425	-1.194	-1.832	-2.036
4	-1.918	-1.927	-1.510	-1.516	-0.962	-1.111	-1.791	-1.946	-1.748	-1.939	-0.431	-0.608	-1.910	-2.204
5	-1.816	-1.812	-1.458	-1.552	-1.535	-1.780	-1.459	-1.623	-1.503	-1.225	-0.506	-0.722	-0.298	-0.429
6	-1.464	-1.544	-1.409	-1.581	-1.542	-1.949	-0.831	-1.023	-2.043	-2.186	-1.206	-1.259	-1.940	-2.289
7	-1.821	-1.737	-1.756	-1.796	-1.547	-1.357	-0.694	-0.928	-0.514	-0.573	0.161	-0.382	-0.551	-0.566
8	0.052	-0.055	-1.379	-1.423	-0.639	-0.671	-0.902	-1.044	-1.282	-1.621	-0.922	-1.063	-0.587	-0.613
9	-0.624	-0.760	-1.388	-1.423	-0.848	-1.144	-1.565	-1.718	-0.059	0.104	-0.900	-1.104	-0.044	-0.116
10	-1.869	-1.967	-1.131	-1.301	-0.296	-0.405	-1.746	-1.904	-0.753	-0.711	-1.533	-1.734	-0.813	-0.757
11	-1.248	-1.296	-1.160	-1.460	0.594	0.471	-1.524	-1.381	-0.408	-0.306	-0.490	-1.068	-0.124	-0.064
12	-0.823	-0.872	-1.898	-1.932	-0.966	-1.343	-0.304	-0.617	-1.983	-1.885	0.090	0.014	-2.020	-2.053
13	-1.090	-1.217	-0.985	-0.967	-2.322	-2.254	-0.079	-0.203	-0.955	-1.055	-0.172	-0.107	-0.451	-0.431
14	-0.701	-0.807	-0.055	-0.138	-0.497	-0.643	-0.640	-0.678	-0.411	-0.769	-0.522	-0.517	-0.067	-0.033
15	-1.226	-1.556	-1.135	-1.107	-1.730	-1.733	-0.820	-1.065	-1.336	-1.320	-0.789	-0.415	-1.237	-1.213
16	-1.011	-1.070	0.207	0.106	-0.382	-0.491	-0.809	-1.303	-0.395	-0.347	-1.159	-0.922	-1.472	-1.343
17	-0.616	-0.618	-1.951	-2.023	-2.822	-2.618	-0.421	-0.850	-0.848	-1.072	-1.243	-0.983	-0.802	-0.869
18	-1.170	-1.288	-0.773	-0.954	-1.924	-1.647	-0.579	-0.919	-0.504	-0.480	-1.006	-0.803	-1.562	-1.692
19	-1.976	-2.120	-1.477	-1.570	0.006	-0.031	-2.441	-2.736	0.053	-0.083	-0.468	-0.326	-1.211	-1.126
20	-0.225	-0.365	-0.641	-0.763	0.062	0.113	-2.561	-2.711	-1.564	-1.771	-0.357	-0.581	-1.352	-2.011
21	-1.089	-1.173	-0.914	-1.209	0.649	0.404	-0.406	-0.541	-1.934	-1.785	0.308	0.131	-0.767	-0.407

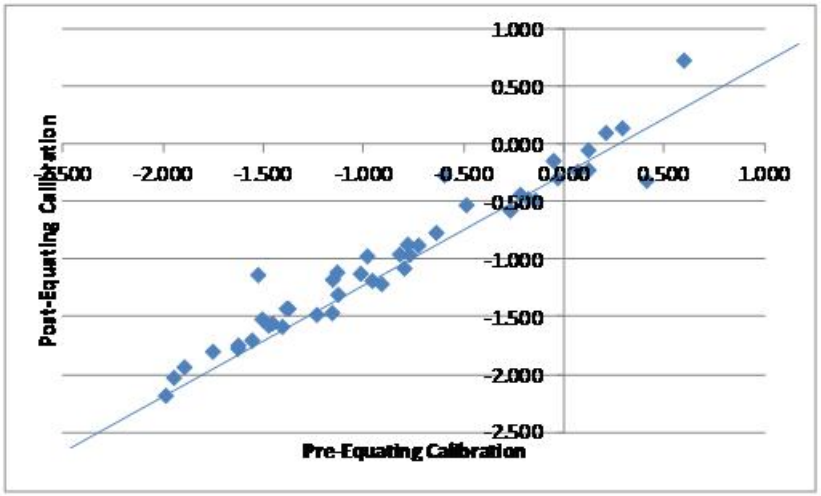
	3		4		5		6		7		8		11	
Item	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
22	0.132	-0.234	-0.272	-0.570	0.088	-0.181	-1.286	-1.101	-2.182	-2.462	-1.156	-1.362	-0.390	-0.543
23	-0.603	-0.851	0.118	-0.046	0.386	0.082	0.305	-0.272	0.723	0.473	-1.867	-2.237	-0.370	-0.740
24	-1.006	-1.308	-0.823	-0.951	-0.342	-0.810	-1.201	-1.290	-0.479	-0.820	-1.723	-2.306	-0.218	-0.265
25	-0.742	-1.192	0.066	-0.232	-1.041	-1.137	-2.357	-2.423	-0.201	-0.185	-1.282	-1.629	-0.913	-1.402
26	-1.979	-2.389	-1.238	-1.476	-0.823	-0.826	0.769	0.671	-0.966	-1.186	-2.198	-2.714	-0.075	-0.012
27	-1.281	-1.399	-1.991	-2.179	-1.321	-1.546	-2.323	-2.557	-1.595	-2.000	-0.453	-0.300	0.125	-0.108
28	0.608	0.450	0.119	-0.218	-0.551	-0.620	-1.217	-1.462	0.332	-0.028	-1.136	-1.345	-0.166	-0.305
29	0.084	-0.024	0.409	-0.310	-1.113	-1.385	1.311	0.958	-0.127	-0.208	-1.601	-1.686	-0.609	-0.475
30	0.772	0.720	0.939	1.033	-1.411	-1.599	-0.505	-0.603	-0.483	-1.110	-0.601	-0.716	-0.432	-0.059
31	-1.418	-1.366	0.595	0.736	0.187	-0.172	-1.461	-1.381	-1.219	-1.629	-2.330	-2.395	1.010	0.891
32	0.638	0.488	-1.630	-1.769	-0.746	-0.835	-0.637	-1.075	-0.015	-0.106	-0.505	-0.594	-2.150	-1.687
33	-1.863	-2.153	-0.784	-0.865	-0.612	-0.892	-1.426	-1.421	-1.421	-1.786	-0.762	-0.864	-1.078	-1.286
34	-1.043	-0.958	-0.600	-0.264	-1.186	-1.565	-0.985	-1.193	-0.666	-0.896	-1.418	-1.278	-1.530	-1.529
35	-0.332	-0.524	-1.018	-1.119	-1.124	-1.343	-0.895	-0.974	-0.995	-1.419	0.090	0.021	-0.484	-0.454
36	-0.796	-0.951	-0.035	-0.288	-0.271	-0.489	-2.094	-2.338	-1.889	-2.139	-0.645	-0.674	-1.542	-1.376
37	-0.798	-0.930	-0.145	-0.481	-1.421	-1.581	0.142	-0.112	-1.436	-1.645	-0.180	-0.245	-0.486	-1.128
38	0.375	0.096	-1.531	-1.129	-1.788	-2.034	-0.138	-0.264	-1.114	-1.357	-1.475	-1.345	-0.818	-0.725
39	-0.781	-1.110	-0.730	-0.873	0.625	0.373	0.435	0.504	-0.850	-1.007	-0.975	-0.944	-0.343	-0.440
40	0.052	-0.165	-0.490	-0.522	0.616	0.390	0.630	0.311	0.372	0.125	-1.150	-1.284	0.066	0.060
41	-1.000	-1.048	-0.222	-0.432	-0.798	-0.720	-0.517	-0.465	-0.442	-0.529	0.137	-0.001	-1.177	-1.230
42	-1.017	-1.018	-1.629	-1.743	0.143	-0.384	-0.285	-0.469	-1.839	-2.130	-1.231	-1.367	-1.847	-1.626
43	-0.391	-0.319	-0.800	-1.072	-1.521	-1.873	-0.694	-0.774	-1.393	-1.803	-0.252	-0.454	-1.196	-1.206
44	-0.319	-0.706	-1.158	-1.171	-1.102	-1.239	-1.983	-2.221	0.267	0.290	-0.620	-0.741	-1.634	-1.492
45	-1.455	-1.556	-0.181	-0.471	0.165	-0.093	-0.351	-0.731	-0.747	-0.714	-0.325	-0.507	0.743	0.933
46					-1.657	-1.741	-0.260	-0.552	-1.341	-1.524	-0.360	-0.318	-1.110	-1.053
47					-2.238	-2.503	-1.304	-1.672	-1.072	-1.270	-1.023	-0.939	-1.597	-1.462
48					-0.710	-0.882	0.489	0.093	-0.545	-0.640	-0.319	-0.387	-2.142	-2.089
49											-0.261	-0.436	-1.275	-1.246
50											0.065	-0.084	-0.361	-0.309

	3		4		5		6		7		8		11	
Item	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post	Pre	Post
Mean	-0.865	-1.001	-0.802	-0.928	-0.821	-0.971	-0.869	-1.060	-0.854	-1.010	-0.805	-0.900	-0.824	-0.857
Shift	0.136		0.126		0.150		0.191		0.156		0.096		0.033	
Corr	0.983		0.971		0.976		0.984		0.970		0.951		0.959	
S D	0.752	0.737	0.745	0.724	0.829	0.785	0.882	0.858	0.720	0.756	0.633	0.675	0.751	0.769
Ratio	1.021		1.029		1.057		1.029		0.953		0.938		0.976	

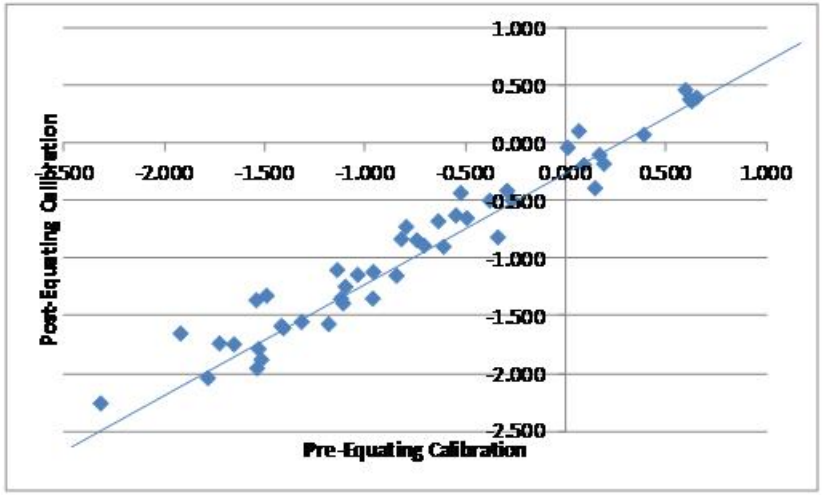
Grade 3 Pre- and Post-Equating Calibrations



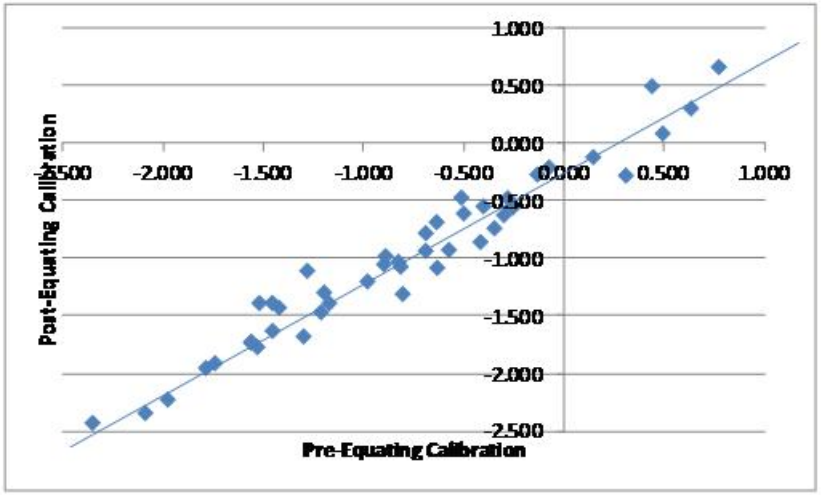
Grade 4 Pre- and Post-Equating Calibrations



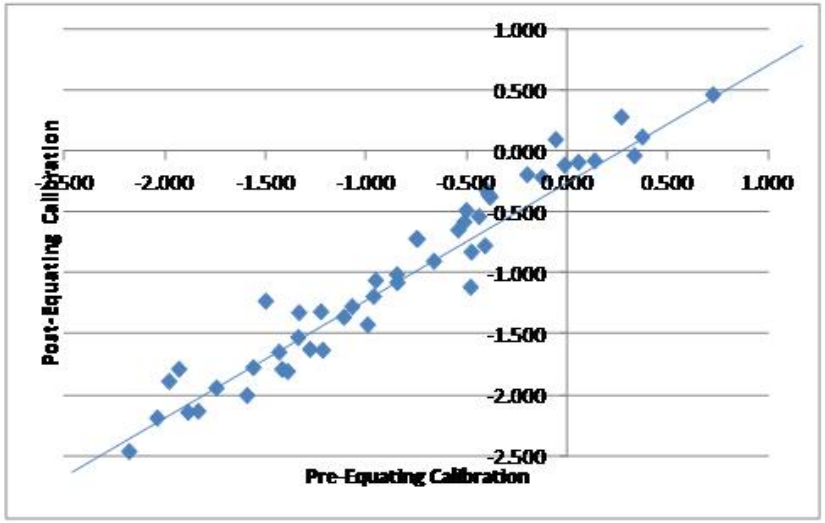
Grade 5 Pre- and Post-Equating Calibrations



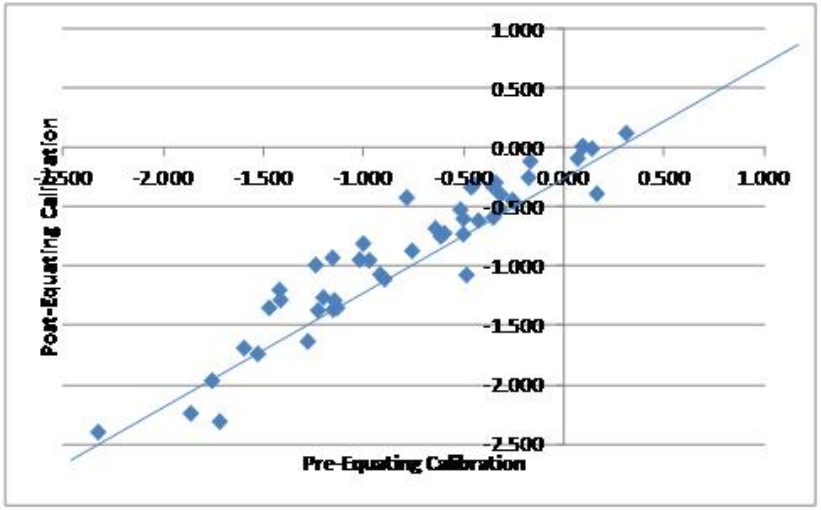
Grade 6 Pre- and Post-Equating Calibrations



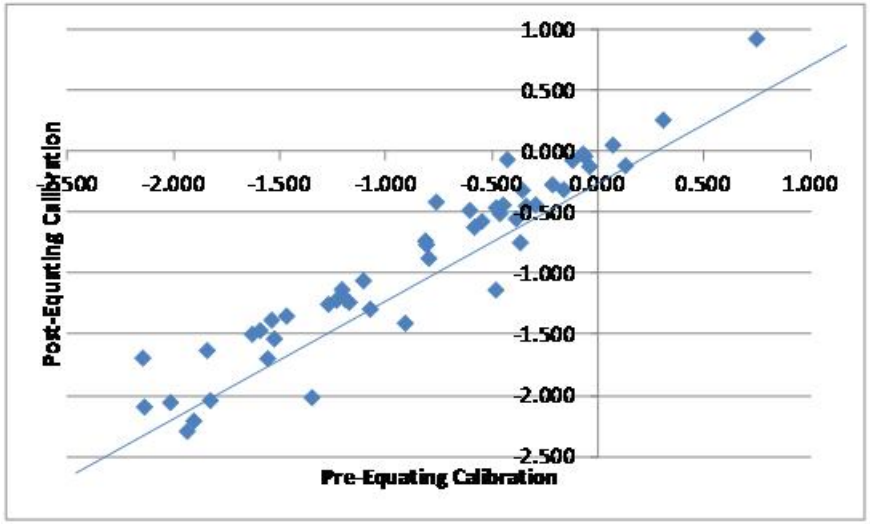
Grade 7 Pre- and Post-Equating Calibrations



Grade 8 Pre- and Post-Equating Calibrations



Grade 11 Pre- and Post-Equating Calibrations



Appendix T: Reading and Mathematics Demographic Summary Sheets

Reading

Grade 3

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		21852	30.9	8.1	0.88	0.89	104.3	31.5	29.0	56.3	14.7
Gender	Male	11071	30.3	8.3	0.89	0.89	102.3	31.6	31.7	54.7	13.6
	Female	10781	31.4	7.9	0.88	0.88	106.5	31.3	26.2	58.0	15.8
Ethnicity	BL	1416	26.6	8.0	0.86	0.86	88.1	27.0	48.2	48.6	3.2
	AM	325	23.7	8.6	0.88	0.88	78.9	28.5	62.2	36.6	1.2
	HI	3800	26.9	8.1	0.86	0.86	89.5	28.0	46.6	48.3	5.2
	AS	420	32.7	9.1	0.92	0.92	113.4	37.1	24.3	48.1	27.6
	WH	15198	32.3	7.6	0.87	0.88	109.9	30.7	22.2	59.6	18.1
	MU	665	30.7	8.0	0.88	0.88	103.0	30.1	29.3	58.3	12.3
SPED	No	18553	31.6	7.8	0.88	0.88	107.1	30.9	25.2	58.6	16.1
	Yes	3299	26.5	8.7	0.88	0.88	88.7	30.5	50.2	43.3	6.5
ELL	No	19818	31.5	7.9	0.88	0.88	106.7	31.2	26.0	58.0	16.0
	Yes	2034	24.8	7.6	0.84	0.84	81.8	24.8	58.4	40.1	1.6
FLS	No	11813	33.3	7.3	0.87	0.87	113.8	30.7	18.1	60.3	21.6
	Yes	9909	28.1	8.1	0.87	0.87	93.4	28.6	41.6	51.9	6.6

Grade 4

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		21545	30.6	7.6	0.86	0.86	109.0	35.2	24.5	50.6	24.9
Gender	Male	10974	30.1	7.7	0.87	0.87	107.0	35.8	26.8	49.5	23.7
	Female	10571	31.0	7.3	0.86	0.86	111.1	34.6	22.2	51.7	26.2
Ethnicity	BL	1481	25.5	7.8	0.85	0.85	86.3	32.9	49.8	42.3	7.8
	AM	352	24.6	7.9	0.85	0.85	83.2	33.3	55.4	35.5	9.1
	HI	3558	27.3	7.3	0.84	0.84	93.6	31.2	39.6	50.0	10.3
	AS	440	31.3	8.8	0.91	0.91	113.9	41.6	25.5	39.8	34.8
	WH	15059	32.0	7.0	0.85	0.85	115.4	33.9	17.7	52.1	30.2
	MU	628	30.2	7.5	0.86	0.86	107.0	34.1	26.0	51.8	22.3
SPED	No	18197	31.4	7.1	0.85	0.85	112.8	33.9	20.4	52.2	27.5
	Yes	3348	25.9	8.2	0.87	0.87	88.4	35.3	47.3	41.8	10.9
ELL	No	19750	31.1	7.4	0.86	0.86	111.2	35.0	22.2	51.1	26.7
	Yes	1795	25.3	6.9	0.81	0.81	85.0	28.4	49.9	45.2	5.0
FLS	No	11840	32.9	6.7	0.84	0.84	119.7	33.4	14.2	51.2	34.6
	Yes	9548	27.8	7.6	0.85	0.85	96.2	32.8	36.7	50.1	13.2

Grade 5

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		21328	32.6	8.6	0.89	0.89	107.7	41.3	29.9	45.9	24.2
Gender	Male	10949	32.0	8.7	0.89	0.89	104.9	41.2	31.8	45.8	22.3
	Female	10379	33.1	8.4	0.89	0.89	110.6	41.2	27.8	46.1	26.1
Ethnicity	BL	1447	26.8	9.0	0.88	0.88	81.0	39.2	55.9	35.6	8.5
	AM	342	25.4	8.8	0.87	0.87	75.4	38.5	63.7	29.5	6.7
	HI	3477	29.3	8.5	0.87	0.88	92.0	38.3	45.0	42.5	12.5
	AS	391	33.7	9.5	0.91	0.92	114.6	46.9	25.3	41.9	32.7
	WH	15027	34.0	8.0	0.88	0.88	114.5	39.6	23.1	48.2	28.7
	MU	625	32.3	8.6	0.89	0.89	106.3	41.4	32.2	46.2	21.6
SPED	No	18011	33.7	8.0	0.87	0.87	112.9	39.3	24.6	48.4	27.0
	Yes	3317	26.3	9.2	0.89	0.89	79.2	40.2	58.5	32.7	8.7
ELL	No	19882	33.0	8.5	0.89	0.89	109.9	41.0	27.6	46.7	25.7
	Yes	1446	26.0	7.8	0.84	0.84	77.3	32.6	61.3	34.9	3.9
FLS	No	11898	35.0	7.6	0.87	0.87	119.4	39.0	19.2	47.9	32.9
	Yes	9303	29.5	8.7	0.88	0.88	93.2	39.2	43.0	43.7	13.2

Grade 6

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20805	33.3	8.2	0.88	0.88	108.9	38.5	26.2	48.2	25.6
Gender	Male	10638	32.6	8.4	0.88	0.88	105.6	38.8	29.3	47.2	23.5
	Female	10167	34.0	7.8	0.87	0.87	112.4	37.8	23.0	49.2	27.8
Ethnicity	BL	1334	28.7	8.8	0.88	0.88	88.0	38.0	46.6	42.0	11.4
	AM	299	27.2	8.9	0.88	0.88	81.9	37.7	54.8	36.1	9.0
	HI	3254	29.7	8.2	0.87	0.87	92.0	35.8	42.2	46.5	11.3
	AS	423	35.2	8.7	0.91	0.91	119.6	42.8	19.4	40.4	40.2
	WH	14839	34.5	7.6	0.87	0.87	114.8	37.0	20.4	49.5	30.1
	MU	631	33.1	8.1	0.88	0.88	107.9	37.7	26.9	49.9	23.1
SPED	No	17828	34.4	7.4	0.86	0.86	114.1	36.2	20.7	50.6	28.8
	Yes	2977	26.2	8.7	0.87	0.87	77.7	36.9	59.3	34.1	6.7
ELL	No	19695	33.7	8.0	0.88	0.88	110.9	38.0	24.1	49.0	26.9
	Yes	1110	25.5	7.5	0.82	0.82	74.1	30.3	64.4	33.3	2.3
FLS	No	11712	35.5	7.2	0.86	0.86	119.7	36.2	16.5	48.9	34.6
	Yes	8960	30.4	8.3	0.87	0.87	95.3	36.8	38.4	47.5	14.1

Grade 7

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20652	32.9	8.9	0.90	0.90	110.5	41.3	26.0	47.1	27.0
Gender	Male	10629	32.0	9.1	0.90	0.90	106.5	41.4	29.4	46.2	24.3
	Female	10023	33.8	8.5	0.89	0.89	114.7	40.8	22.3	48.0	29.8
Ethnicity	BL	1323	26.2	9.4	0.89	0.89	81.1	39.0	53.7	38.5	7.8
	AM	270	26.7	9.7	0.90	0.90	83.2	40.7	51.9	35.9	12.2
	HI	3147	28.8	8.9	0.88	0.88	91.5	37.8	42.7	45.2	12.2
	AS	370	34.1	9.9	0.93	0.92	117.6	46.7	23.0	38.6	38.4
	WH	14969	34.4	8.1	0.88	0.88	117.7	39.4	19.4	48.7	32.0
	MU	548	31.4	9.2	0.90	0.90	103.9	42.1	31.2	46.7	22.1
SPED	No	17804	34.2	8.1	0.88	0.88	116.4	38.8	20.1	49.6	30.3
	Yes	2848	24.5	9.1	0.88	0.88	73.9	37.3	62.5	31.4	6.1
ELL	No	19855	33.2	8.7	0.89	0.89	112.1	40.9	24.2	47.8	28.0
	Yes	797	23.6	7.7	0.83	0.83	69.9	30.5	69.3	28.5	2.3
FLS	No	11875	35.5	7.7	0.88	0.88	122.6	38.5	15.4	48.1	36.5
	Yes	8685	29.4	9.1	0.89	0.89	94.4	39.2	39.9	45.9	14.2

Grade 8

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20516	33.4	9.3	0.90	0.90	106.2	38.5	28.5	49.3	22.2
Gender	Male	10523	32.4	9.5	0.90	0.90	102.1	38.3	32.0	49.1	18.9
	Female	9993	34.4	9.0	0.89	0.89	110.5	38.3	24.9	49.5	25.6
Ethnicity	BL	1284	26.6	9.5	0.89	0.89	79.2	35.3	56.6	36.8	6.5
	AM	297	27.0	9.4	0.88	0.88	80.9	35.2	54.5	38.7	6.7
	HI	3123	28.3	9.4	0.89	0.89	85.7	35.6	50.3	41.1	8.5
	AS	395	33.5	10.7	0.93	0.93	108.4	45.5	28.6	43.5	27.8
	WH	14826	35.3	8.4	0.88	0.88	113.6	36.3	20.7	52.5	26.8
	MU	568	31.4	9.2	0.89	0.89	97.7	36.7	36.1	48.1	15.8
SPED	No	17857	34.8	8.6	0.88	0.88	111.3	36.6	22.6	52.5	24.9
	Yes	2659	24.4	8.9	0.87	0.87	71.5	32.8	68.3	27.9	3.8
ELL	No	19841	33.8	9.1	0.89	0.89	107.7	37.9	26.8	50.3	22.9
	Yes	675	21.9	8.1	0.84	0.84	62.1	29.2	78.5	20.0	1.5
FLS	No	12103	36.2	8.1	0.88	0.88	117.6	35.9	17.4	52.1	30.6
	Yes	8330	29.4	9.4	0.89	0.89	89.9	36.0	44.4	45.5	10.1

Grade 11

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20896	33.0	9.3	0.90	0.90	102.6	41.5	32.4	43.2	24.4
Gender	Male	10666	32.1	9.6	0.90	0.90	98.7	42.2	36.1	41.7	22.2
	Female	10230	33.9	8.9	0.89	0.89	106.6	40.3	28.6	44.7	26.6
Ethnicity	BL	1293	25.8	9.7	0.90	0.89	72.1	39.2	62.6	30.6	6.8
	AM	318	27.2	10.0	0.90	0.90	78.0	40.8	58.2	29.6	12.3
	HI	2624	28.1	9.3	0.89	0.89	81.2	38.5	54.1	35.2	10.7
	AS	425	31.7	10.8	0.93	0.93	98.5	48.2	38.8	35.3	25.9
	WH	15663	34.6	8.6	0.89	0.89	109.5	39.3	25.4	46.0	28.6
	MU	545	31.4	9.3	0.89	0.89	95.2	40.4	37.6	44.6	17.8
SPED	No	18589	34.2	8.7	0.89	0.89	107.5	39.5	27.1	46.0	26.9
	Yes	2307	23.5	8.7	0.86	0.86	62.6	35.0	75.2	21.0	3.8
ELL	No	20414	33.3	9.2	0.90	0.90	103.8	40.9	31.2	43.9	24.9
	Yes	482	20.5	7.4	0.81	0.81	50.7	28.6	85.9	13.5	0.6
FLS	No	13796	35.1	8.5	0.89	0.89	111.8	39.5	23.6	45.6	30.8
	Yes	7026	28.9	9.5	0.89	0.89	84.7	39.3	49.5	38.7	11.8

Mathematics

Grade 3

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		21921	36.6	9.3	0.91	0.91	103.5	37.1	32.6	49.9	17.5
Gender	Male	11101	36.9	9.5	0.92	0.92	105.2	38.3	31.4	49.2	19.4
	Female	10820	36.3	9.1	0.91	0.91	101.8	35.7	33.9	50.6	15.5
Ethnicity	BL	1420	29.8	9.9	0.90	0.91	78.2	32.4	61.2	34.5	4.3
	AM	326	27.9	10.6	0.92	0.92	72.4	34.1	67.2	29.1	3.7
	HI	3838	32.4	9.4	0.90	0.90	86.9	32.6	51.4	41.8	6.8
	AS	445	38.7	10.2	0.94	0.94	115.5	43.6	24.3	44.5	31.2
	WH	15200	38.4	8.4	0.90	0.90	110.5	35.7	24.7	53.9	21.4
	MU	663	36.3	9.0	0.90	0.91	101.5	35.4	34.1	52.0	13.9
SPED	No	18620	37.4	8.8	0.91	0.91	106.5	36.2	29.2	51.8	19.0
	Yes	3301	31.9	10.6	0.92	0.92	86.5	37.6	51.7	39.3	9.0
ELL	No	19822	37.3	9.0	0.91	0.91	106.1	36.8	29.6	51.5	18.9
	Yes	2099	30.2	9.3	0.89	0.89	79.0	30.2	61.5	35.1	3.5
FLS	No	11820	39.4	8.1	0.90	0.90	114.7	35.9	20.9	53.9	25.1
	Yes	9954	33.4	9.5	0.90	0.91	90.7	33.9	46.0	45.4	8.6

Grade 4

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		21598	40.9	9.6	0.91	0.91	102.6	35.3	32.4	51.7	15.9
Gender	Male	11007	40.9	9.8	0.92	0.92	103.3	36.3	32.2	50.9	16.9
	Female	10591	40.8	9.4	0.91	0.91	102.0	34.3	32.6	52.5	14.9
Ethnicity	BL	1486	33.1	10.2	0.90	0.91	76.9	30.3	63.6	32.7	3.7
	AM	351	31.8	11.0	0.92	0.92	73.8	32.5	67.2	28.5	4.3
	HI	3582	37.2	9.7	0.90	0.90	89.3	31.3	48.0	44.7	7.2
	AS	463	42.5	10.5	0.94	0.94	112.2	42.3	28.1	45.1	26.8
	WH	15061	42.7	8.7	0.90	0.90	108.8	34.1	24.8	56.0	19.2
	MU	627	40.2	9.7	0.91	0.91	100.4	35.2	35.9	49.9	14.2
SPED	No	18251	41.9	9.1	0.91	0.91	106.1	34.5	28.3	54.1	17.6
	Yes	3347	35.3	10.6	0.91	0.91	83.8	33.4	54.9	38.5	6.5
ELL	No	19750	41.4	9.4	0.91	0.91	104.5	35.2	30.1	52.9	17.0
	Yes	1848	35.1	9.6	0.89	0.90	82.4	29.3	57.3	38.9	3.8
FLS	No	11840	43.6	8.4	0.90	0.90	112.6	34.5	21.5	56.2	22.3
	Yes	9584	37.6	9.9	0.91	0.91	90.8	32.3	45.4	46.5	8.1

Grade 5

Group	Subgroup	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		21384	40.4	10.4	0.92	0.93	102.7	38.2	34.0	48.2	17.7
Gender	Male	10975	40.4	10.6	0.93	0.93	103.0	38.7	33.9	47.8	18.2
	Female	10409	40.4	10.3	0.92	0.92	102.3	37.8	34.1	48.6	17.2
Ethnicity	BL	1447	31.2	11.2	0.92	0.92	72.4	33.4	68.3	27.6	4.1
	AM	344	31.7	11.6	0.92	0.93	74.4	35.6	64.0	30.5	5.5
	HI	3508	36.6	10.5	0.92	0.92	88.9	35.1	49.5	41.2	9.3
	AS	412	42.8	10.5	0.94	0.94	113.8	42.8	24.0	48.3	27.7
	WH	15029	42.3	9.4	0.91	0.92	109.2	36.8	26.7	52.2	21.1
	MU	625	40.0	10.2	0.92	0.92	100.6	36.6	33.9	49.8	16.3
SPED	No	18068	41.7	9.6	0.92	0.92	107.1	37.0	29.1	51.0	19.9
	Yes	3316	33.2	11.5	0.92	0.93	78.7	35.9	60.9	32.9	6.2
ELL	No	19883	40.9	10.3	0.92	0.93	104.4	38.2	32.0	49.2	18.8
	Yes	1501	33.8	10.1	0.90	0.90	79.0	30.3	61.1	35.5	3.4
FLS	No	11905	43.3	9.1	0.91	0.91	113.0	36.9	23.4	52.3	24.3
	Yes	9324	36.9	10.9	0.92	0.92	89.9	35.8	47.2	43.3	9.5

Grade 6

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20857	43.2	10.9	0.93	0.93	100.5	40.4	37.3	44.3	18.4
Gender	Male	10662	43.1	11.2	0.93	0.93	100.5	41.3	37.1	43.8	19.0
	Female	10195	43.3	10.6	0.92	0.92	100.4	39.6	37.5	44.7	17.8
Ethnicity	BL	1342	34.2	11.5	0.92	0.92	70.1	34.3	69.7	26.2	4.1
	AM	302	32.2	13.1	0.94	0.94	65.5	39.4	71.5	22.5	6.0
	HI	3273	38.8	11.0	0.92	0.92	84.5	36.6	54.9	36.3	8.9
	AS	437	46.6	10.7	0.94	0.94	117.0	45.4	26.1	39.4	34.6
	WH	14847	45.1	9.9	0.92	0.92	107.1	39.0	30.1	48.2	21.7
	MU	631	42.4	10.9	0.93	0.93	97.1	39.1	38.2	46.1	15.7
SPED	No	17883	44.7	9.9	0.92	0.92	105.5	38.7	31.9	47.5	20.7
	Yes	2974	33.9	12.1	0.93	0.93	69.9	36.9	70.1	24.9	5.0
ELL	No	19704	43.7	10.7	0.93	0.93	102.2	40.2	35.2	45.4	19.4
	Yes	1153	34.5	10.5	0.90	0.90	70.1	30.9	72.6	24.8	2.6
FLS	No	11709	46.2	9.4	0.92	0.92	111.5	38.9	25.9	49.0	25.1
	Yes	8980	39.4	11.3	0.93	0.93	86.6	37.7	51.5	38.5	10.0

Grade 7

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20690	40.7	11.3	0.93	0.93	98.8	38.6	38.5	45.4	16.2
Gender	Male	10650	40.8	11.6	0.93	0.93	99.6	40.0	38.0	44.5	17.5
	Female	10040	40.6	10.9	0.92	0.92	97.9	37.1	38.9	46.3	14.7
Ethnicity	BL	1323	30.7	11.0	0.90	0.90	67.7	30.8	74.6	22.7	2.7
	AM	268	32.3	12.0	0.93	0.93	72.8	35.1	67.5	27.6	4.9
	HI	3168	35.2	11.3	0.92	0.92	80.5	33.9	59.8	33.8	6.3
	AS	389	42.3	12.3	0.95	0.95	107.6	45.7	35.2	37.5	27.2
	WH	14970	43.0	10.2	0.92	0.92	106.0	37.1	29.9	50.5	19.5
	MU	547	38.3	11.8	0.93	0.93	90.6	38.1	47.2	41.7	11.2
SPED	No	17843	42.3	10.4	0.92	0.92	103.8	37.2	32.8	48.8	18.3
	Yes	2847	30.6	11.3	0.91	0.91	67.5	31.7	73.8	23.5	2.7
ELL	No	19845	41.1	11.1	0.93	0.93	100.2	38.4	36.8	46.3	16.8
	Yes	845	30.6	10.1	0.89	0.89	66.8	27.4	76.6	22.1	1.3
FLS	No	11866	44.1	9.8	0.92	0.92	110.1	37.1	25.9	51.4	22.7
	Yes	8709	36.2	11.5	0.92	0.92	83.8	35.1	55.1	37.5	7.4

Grade 8

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20544	43.1	12.1	0.94	0.94	98.0	40.0	39.4	44.5	16.1
Gender	Male	10531	42.8	12.5	0.94	0.94	97.3	41.0	40.2	43.6	16.2
	Female	10013	43.5	11.7	0.93	0.93	98.7	39.0	38.6	45.5	15.9
Ethnicity	BL	1287	32.5	12.2	0.92	0.92	66.3	33.2	75.1	21.1	3.9
	AM	296	34.3	13.2	0.94	0.94	72.1	38.7	67.2	27.0	5.7
	HI	3145	37.0	12.2	0.93	0.93	78.4	35.0	61.1	33.2	5.7
	AS	409	45.5	13.0	0.95	0.95	110.9	49.2	31.1	40.1	28.9
	WH	14814	45.6	10.8	0.93	0.93	105.5	38.3	30.9	49.7	19.4
	MU	570	39.5	12.4	0.93	0.93	86.4	38.1	54.0	36.0	10.0
SPED	No	17897	44.8	11.2	0.93	0.93	102.9	38.7	33.9	48.1	18.0
	Yes	2647	31.9	12.0	0.92	0.92	64.6	32.3	76.9	20.3	2.8
ELL	No	19824	43.5	11.9	0.94	0.94	99.2	39.8	38.1	45.3	16.6
	Yes	720	32.0	11.9	0.92	0.92	64.7	31.3	76.3	21.8	1.9
FLS	No	12092	46.7	10.5	0.93	0.93	109.5	38.5	27.3	50.4	22.3
	Yes	8352	38.1	12.4	0.93	0.93	81.7	36.1	56.6	36.2	7.2

Grade 11

Group	Sub-group	Valid N	Raw Scores		Alpha	Stratified Alpha	Scale Scores		Percent in Performance Level		
			Mean	SD			Mean	SD	Basic	Proficient	Advanced
Overall		20822	38.4	13.3	0.94	0.94	95.5	46.3	45.9	32.8	21.3
Gender	Male	10616	38.4	13.6	0.94	0.94	96.1	47.8	46.0	31.4	22.5
	Female	10206	38.3	13.0	0.94	0.94	94.9	44.6	45.8	34.2	19.9
Ethnicity	BL	1279	26.6	11.4	0.91	0.91	57.7	35.3	81.7	14.5	3.8
	AM	316	29.4	13.2	0.93	0.93	66.9	42.4	71.8	17.7	10.4
	HI	2611	30.9	12.1	0.92	0.92	70.4	37.5	70.1	23.3	6.6
	AS	427	41.5	14.0	0.95	0.95	108.4	51.8	36.1	29.0	34.9
	WH	15619	40.8	12.5	0.94	0.94	103.4	45.0	38.2	36.6	25.3
	MU	542	34.5	13.3	0.94	0.94	82.8	44.7	60.3	25.6	14.0
SPED	No	18533	39.9	12.8	0.94	0.94	100.4	45.4	41.1	35.4	23.5
	Yes	2289	26.0	10.6	0.89	0.89	55.7	32.4	85.0	11.8	3.2
ELL	No	20333	38.7	13.2	0.94	0.94	96.5	46.1	44.9	33.4	21.7
	Yes	489	24.9	9.5	0.86	0.86	52.4	28.4	88.3	9.8	1.8
FLS	No	13748	41.5	12.5	0.94	0.94	106.2	45.6	35.7	36.9	27.4
	Yes	6980	32.2	12.6	0.93	0.93	74.7	40.1	65.7	25.0	9.3