Spring 2016

Nebraska State Accountability (NeSA)

Reading, Mathematics and Science

Technical Report Appendices

November 2016

Prepared by Data Recognition Corporation

DATA RECOGNITION

DRC

CORPORATION

Appendix A: NeSA-R Test Blueprint

Nebraska State Accountability - Reading (NeSA-R) 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.					
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				
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 (NeSA-R) 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				
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
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				
LA 4.1.6.p *Respond to text verbally, in writing, or artistically*	Assessed at the local level				

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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**
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				
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				

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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
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
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				

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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					
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
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				
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				

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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
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					
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
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				

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Grade 11

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
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*	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,*	Assessed at the local level				
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 B: NeSA-M Test Blueprint

Nebraska State Accountability - Mathematics (NeSA-M) 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				
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**
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				
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**
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 Accountability - Mathematics (NeSA-M)
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
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**
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**
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
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				
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 Accountability - Mathematics (NeSA-M) 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
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.					
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				
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.					
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 plots	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				
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 Accountability - Mathematics (NeSA-M) 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
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					
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				
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
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
MA 6.4.3.c Find experimental probability for independent events	1	1-3	0	0	1-3

Nebraska State Accountability - Mathematics (NeSA-M) 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				
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
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
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**
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 Accountability - Mathematics (NeSA-M) 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				
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.					
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					
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					
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 Accountability - Mathematics (NeSA-M) 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				
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				
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**
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				
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
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				
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				
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 C: NeSA-S Test Blueprint

Nebraska State Accountability - Science (NeSA-S) Table of Specifications					
Grade 5					
Inquiry, The Nature of Science, and Technology					
Grade 5 Abilities to do Scientific Inquiry	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.1.1 Students will plan and conduct investigations that lead to the development of explanations.					**8-13**
SC 5.1.1.a Ask testable scientific questions	2				
SC 5.1.1.b Plan and conduct investigations and identify factors that have the potential to impact an investigation	3				
SC 5.1.1.c Select and use equipment correctly and accurately	1				
SC 5.1.1.d Make relevant observations and measurements	2				
SC 5.1.1.e Collect and organize data	2				
SC 5.1.1.f Develop a reasonable explanation based on collected data	3				
SC 5.1.1.g Share information, procedures, and results with peers and/or adults	2				
SC 5.1.1.h Provide feedback on scientific investigations	3				
SC 5.1.1.i Use appropriate mathematics in all aspects of scientific inquiry	2				
Grade 5 Nature of Science	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.1.2 Students will describe how scientists go about their work.	**Assessed at the local level**				
SC 5.1.2.a Recognize that scientific explanations are based on evidence and scientific knowledge	1				
SC 5.1.2.b Recognize that new discoveries are always being made which impact scientific knowledge	1				
SC 5.1.2.c Recognize many different people study science	1				

Grade 5 Technology	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
SC 5.1.3 Students will solve a simple design problem.	**Assessed at the local level**				
SC 5.1.3.a Identify a simple problem	2				
SC 5.1.3.b Propose a solution to a simple problem	2				
SC 5.1.3.c Implement the proposed solution	3				
SC 5.1.3.d Evaluate the implementation	3				
SC 5.1.3.e Communicate the problem, design, and solution	2				
PHYSICAL SCIENCE					
Grade 5 Matter	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
SC 5.2.1 Students will explore and describe the physical properties of matter and its changes.					**3-6**
SC 5.2.1.a Identify mixtures and pure substances	1				
SC 5.2.1.b Identify physical properties of matter (color, odor, elasticity, weight, volume)	1				
SC 5.2.1.c Use appropriate metric measurements to describe physical properties	1				
SC 5.2.1.d Identify state change caused by heating and cooling solids, liquids, and gasses	1				
Grade 5 Force and Motion	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
SC 5.2.2 Students will identify the influence of forces on motion.					**3-5**
SC 5.2.2.a Describe motion by tracing and measuring an object's position over a period of time (speed)	2				
SC 5.2.2.b Describe changes in motion due to outside forces (push, pull, gravity)	1				
SC 5.2.2 c Describe magnetic behavior in terms of attraction and repulsion	1				
Grade 5 Energy	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
SC 5.2.3 Students will observe and identify signs of energy transfer.					**4-7**
SC 5.2.3.a Recognize that sound is produced from vibrating objects; the sound can be changed by changing the vibration	1				
SC 5.2.3.b Recognize that light travels in a straight line and can be reflected by an object (mirror)	1				

SC 5.2.3.c Recognize that light can travel through certain materials and not others (transparent, translucent, opaque)	1				
SC 5.2.3.d Identify ways to generate heat (friction, burning, incandescent light bulb)	1				
SC 5.2.3.e Identify materials that act as thermal conductors or insulators	1				
SC 5.2.3.f Recognize that the transfer of electricity in an electrical circuit requires a closed loop	1				
LIFE SCIENCE					
Grade 5 Life Science	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.3.1 Students will investigate and compare the characteristics of living things.					**2-4**
SC 5.3.1.a Compare and contrast characteristics of living and nonliving things	2				
SC 5.3.1.b Identify how parts of plants and animals function to meet basic needs (e.g., leg of an insect helps an insect move, root of a plant helps the plant obtain water)	1				
Grade 5 Heredity	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.3.2 Students will identify variations of inherited characteristics and life cycles.					**2-4**
SC 5.3.2.a Identify inherited characteristics of plants and animals	1				
SC 5.3.2.b Identify the life cycle of an organism	1				
SC 5.3.3 Students will describe relationships within an ecosystem.					**4-7**
SC 5.3.3.a Diagram and explain a simple food chain beginning with the Sun	2				
SC 5.3.3.b Identify the role of producers, consumers, and decomposers in an ecosystem	1				
SC 5.3.3.c Recognize the living and nonliving factors that impact the survival of organisms in an ecosystem	1				
SC 5.3.3.d Recognize all organisms cause changes, some beneficial and some detrimental, in the environment where they live	1				
SC 5.3.4 Students will describe changes in organisms over time.					**1-2**
SC 5.3.4.a Describe adaptations made by plants or animals to survive environmental changes	1				

EARTH AND SPACE SCIENCE					
Grade 5 Earth in Space	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.4.1 Students will observe and describe characteristics, patterns, and changes in the sky.					**1-2**
SC 5.4.1.a Recognize that the observed shape of the Moon changes from day to day during a one month period	1				
SC 5.4.1.b Recognize the motion of objects in the sky (the Sun, the Moon, stars) change over time in recognizable patterns	1				
Grade 5 Earth Structures and Processes	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.4.2 Students will observe and describe Earth's materials, structure, and processes.					**4-6**
SC 5.4.2.a Describe the characteristics of rocks, minerals, soil, water, and the atmosphere	1				
SC 5.4.2.b Identify weathering, erosion, and deposition as processes that build up or break down Earth's surface	1				
SC 5.4.2.c Identify how Earth materials are used (fuels, building materials, sustaining plant life)	1				
Grade 5 Energy in Earth's Systems	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.4.3 Students will observe and describe the effects of energy changes on Earth.					**3-5**
SC 5.4.3.a Describe the Sun's warming effect on the land and water	1				
SC 5.4.3.b Observe, measure, and record changes in weather (temperature, wind direction and speed, precipitation)	2				
SC 5.4.3.c Recognize the difference between weather, climate, and seasons	1				
Grade 5 Earth's History	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 5.4.4 Students will describe changes in Earth.					**1-3**
SC 5.4.4.a Describe how slow processes (erosion, weathering, deposition) and rapid processes (landslides, volcanic eruptions, earthquakes) change Earth's surface	1				

Nebraska State Accountability - Science (NeSA-S) Table of Specifications					
Grade 8					
Inquiry, The Nature of Science, and Technology					
Grade 8 Abilities to do Scientific Inquiry	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.1.1 Students will design and conduct investigations that will lead to descriptions of relationships between evidence and explanations.					**8-13**
SC 8.1.1.a Formulate testable questions that lead to predictions and scientific investigations	2				
SC 8.1.1.b Design and conduct logical and sequential investigations including repeated trials	3				
SC 8.1.1.c Determine controls and use dependent (responding) and independent (manipulated) variables	3				
SC 8.1.1.d Select and use equipment appropriate to the investigation, demonstrate correct techniques	1				
SC 8.1.1.e Make qualitative and quantitative observations	2				
SC 8.1.1.f Record and represent data appropriately and review for quality, accuracy, and relevancy	3				
SC 8.1.1.g Evaluate predictions, draw logical inferences based on observed patterns/relationships, and account for non-relevant information	3				
SC 8.1.1.h Share information, procedures, results, and conclusions with appropriate audiences	2				
SC 8.1.1.i Analyze and provide appropriate critique of scientific investigations	3				
SC 8.1.1.j Use appropriate mathematics in all aspects of scientific inquiry	2				
Grade 8 Nature of Science	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.1.2 Students will apply the nature of science to their own investigations.	**Assessed at the local level**				
SC 8.1.2.a Recognize science is an ongoing process and the scientific community accepts and uses explanations until they encounter new experimental evidence not matching existing explanations	1				
SC 8.1.2.b Describe how scientific discoveries influence and change society	2				

SC 8.1.2.c Recognize scientists from various cultures have made many contributions to explain the natural world	1				
Grade 8 Technology	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.1.3 Students will solve a design problem which involves one or two science concepts.	**Assessed at the local level**				
SC 8.1.3.a Identify problems for technical design	2				
SC 8.1.3.b Design a solution or product	3				
SC 8.1.3.c Implement the proposed design	3				
SC 8.1.3.d Evaluate completed technological designs or products	3				
SC 8.1.3.e Communicate the process of technical design	2				
SC 8.1.3.f Distinguish between scientific inquiry (asking questions about the natural world) and technological design (using science to solve practical problems)	1				
SC 8.1.3.g Describe how science and technology are reciprocal	1				
SC 8.1.3.h Recognize that solutions have intended and unintended consequences	1				
SC 8.1.3.i Compare and contrast the reporting of scientific knowledge and the reporting of technological knowledge	2				
PHYSICAL SCIENCE					
Grade 8 Matter	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.2.1 Students will identify and describe the particulate nature of matter including physical and chemical interactions.					**4-7**
SC 8.2.1.a Compare and contrast elements, compounds, and mixtures	2				
SC 8.2.1.b Describe physical and chemical properties of matter	2				
SC 8.2.1.c Recognize most substances can exist as a solid, liquid, or gas depending on temperature	1				
SC 8.2.1.d Compare and contrast solids, liquids, and gasses based on properties of these states of matter	2				
SC 8.2.1.e Distinguish between physical and chemical changes (phase changes, dissolving, burning, rusting)	1				
SC 8.2.1.f Recognize conservation of matter in physical and chemical changes	1				

SC 8.2.1.g Classify substances into similar groups based on physical properties	2				
Grade 8 Force and Motion	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.2.2 Students will investigate and describe forces and motion.					**3-6**
SC 8.2.2.a Describe motion of an object by its position and velocity	2				
SC 8.2.2.b Recognize an object that is not being subjected to a force will continue to move at a constant speed in a straight line or stay at rest (Newton's 1st law)	1				
SC 8.2.2.c Compare the motion of objects related to the effects of balanced and unbalanced forces	2				
SC 8.2.2.d Recognize that everything on or around Earth is pulled towards Earth's center by gravitational force	1				
Grade 8 Energy	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.2.3 Students will identify and describe how energy systems and matter interact.					**3-6**
SC 8.2.3.a Recognize that vibrations set up wave-like disturbances that spread away from the source (sound, seismic, water waves)	1				
SC 8.2.3.b Identify that waves move at different speeds in different materials	1				
SC 8.2.3.c Recognize that light interacts with matter by transmission (including refraction), absorption, or scattering (including reflection)	1				
SC 8.2.3.d Recognize that to see an object, light from the surface of the object must enter the eye; the color seen depends on the properties of the surface and the color of the available light sources	1				
SC 8.2.3.e Recognize that heat moves from warmer objects to cooler objects until both reach the same temperature	1				
SC 8.2.3.f Describe transfer of energy from electrical and magnetic sources to different energy forms (heat, light, sound, chemical)	1				
SC 8.2.3.g Recognize all energy is neither created nor destroyed	1				

LIFE SCIENCE					
Grade 8 Structure and Function of Living Systems	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.3.1 Students will investigate and describe the structure and function of living organisms.					**4-7**
SC 8.3.1.a Recognize the levels of organization in living organisms (cells, tissues, organs, organ systems, organisms)	1				
SC 8.3.1.b Recognize that all organisms are composed of one or many cells; that these cells must grow, divide, and use energy; and that all cells function similarly	1				
SC 8.3.1.c Recognize specialized cells perform specialized functions in multicellular organisms	1				
SC 8.3.1.d Identify the organs and functions of the major systems of the human body and describe ways that these systems interact with each other	1				
SC 8.3.1.e Describe how plants and animals respond to environmental stimuli	1				
Grade 8 Heredity	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.3.2 Students will investigate and describe the relationship between reproduction and heredity.					**1-3**
SC 8.3.2.a Recognize that hereditary information is contained in genes within the chromosomes of each cell	1				
SC 8.3.2.b Compare and contrast sexual and asexual reproduction	2				
Grade 8 Flow of Matter and Energy in Ecosystems	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.3.3 Students will describe populations and ecosystems.					**3-6**
SC 8.3.3.a Diagram and explain the flow of energy through a simple food web	2				
SC 8.3.3.b Compare the roles of producers, consumers, and decomposers in an ecosystem	2				
SC 8.3.3.c Recognize that producers transform sunlight into chemical energy through photosynthesis	1				
SC 8.3.3.d Determine the biotic and abiotic factors that impact the number of organisms an ecosystem can support	2				
SC 8.3.3.e Recognize a population is all the individuals of a species at a given place and time	1				

SC 8.3.3.f Identify symbiotic relationships among organisms	1				
SC 8.3.3.g Identify positive and negative effects of natural and human activity on an ecosystem	2				
Grade 8 Biodiversity	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.3.4 Students will identify characteristics of organisms that help them survive.					**2-4**
SC 8.3.4.a Describe how an inherited characteristic enables an organism to improve its survival rate	2				
SC 8.3.4.b Recognize the extinction of a species is caused by the inability to adapt to an environmental change	1				
SC 8.3.4.c Use anatomical features of an organism to infer similarities among other organisms	2				
EARTH AND SPACE SCIENCE					
Grade 8 Earth in Space	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.4.1 Students will investigate and describe Earth and the solar system.					**2-4**
SC 8.4.1.a Describe the components of the solar system (the Sun, planets, moons, asteroids, comets)	1				
SC 8.4.1.b Describe the relationship between motion of objects in the solar system and the phenomena of day, year, eclipses, phases of the Moon and seasons	2				
SC 8.4.1.c Describe the effects of gravity on Earth (tides) and the effect of gravity on objects in the solar system	2				
Grade 8 Earth Structures and Processes	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.4.2 Students will investigate and describe Earth's structure, systems, and processes.					**6-10**
SC 8.4.2.a Describe the layers of Earth (core, mantle, crust, atmosphere)	1				
SC 8.4.2.b Describe the physical composition of soil	1				
SC 8.4.2.c Describe the mixture of gasses in Earth's atmosphere and how the atmosphere's properties change at different elevations	1				
SC 8.4.2.d Describe evidence of Earth's magnetic field	1				
SC 8.4.2.e Compare and contrast constructive and destructive forces (deposition, erosion, weathering, plate motion causing uplift, volcanoes, earthquakes) that impact Earth's surface	2				
SC 8.4.2.f Describe the rock cycle	1				

SC 8.4.2.g Describe the water cycle (evaporation, condensation, precipitation)	1				
SC 8.4.2.h Classify Earth materials as renewable or nonrenewable	2				
Grade 8 Energy in Earth's Systems	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.4.3 Students will investigate and describe energy in Earth's systems.					**2-4**
SC 8.4.3.a Describe how energy from the Sun influences the atmosphere and provides energy for plant growth	1				
SC 8.4.3.b Identify factors that influence daily and seasonal changes on Earth (tilt of the Earth, humidity, air pressure, air masses)	1				
SC 8.4.3.c Describe atmospheric movements that influence weather and climate (air masses, jet stream)	1				
Grade 8 Earth's History	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 8.4.4 Students will use evidence to draw conclusions about changes in Earth.					**1-3**
SC 8.4.4.a Recognize that Earth processes we see today are similar to those that occurred in the past (uniformity of processes)	1				
SC 8.4.4.b Describe how environmental conditions have changed through use of the fossil record	2				

Nebraska State Accountability - Science (NeSA-S) Table of Specifications					
Grade 11					
Inquiry, The Nature of Science, and Technology					
Grade 11 Abilities to do Scientific Inquiry	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.1.1 Students will design and conduct investigations that lead to the use of logic and evidence in the formulation of scientific explanations and models.					**8-13**
SC 12.1.1.a Formulate a testable hypothesis supported by prior knowledge to guide an investigation	2				
SC 12.1.1.b Design and conduct logical and sequential scientific investigations with repeated trials and apply findings to new investigations	3				
SC 12.1.1.c Identify and manage variables and constraints	3				
SC 12.1.1.d Select and use lab equipment and technology appropriately and accurately	1				
SC 12.1.1.e Use tools and technology to make detailed qualitative and quantitative observations	1				
SC 12.1.1.f Represent and review collected data in a systematic, accurate, and objective manner	3				
SC 12.1.1.g Analyze and interpret data, synthesize ideas, formulate and evaluate models, and clarify concepts and explanations	3				
SC 12.1.1.h Use results to verify or refute a hypothesis	2				
SC 12.1.1.i Propose and/or evaluate possible revisions and alternate explanations	3				
SC 12.1.1.j Share information, procedures, results, conclusions, and defend findings to a scientific community (peers, science fair audience, policy makers)	3				
SC 12.1.1.k Evaluate scientific investigations and offer revisions and new ideas as appropriate	3				
SC 12.1.1.l Use appropriate mathematics in all aspects of scientific inquiry	2				
Grade 11 Nature of Science	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.1.2 Students will apply the nature of scientific knowledge to their own investigations and in the evaluation of scientific explanations.	**Assessed at the local level**				

SC 12.1.2.a Recognize that scientific explanations must be open to questions, possible modifications, and must be based upon historical and current scientific knowledge	1				
SC 12.1.2.b Describe how society influences the work of scientists and how science, technology, and current scientific discoveries influence and change society	2				
SC 12.1.2.c Recognize that the work of science results in incremental advances, almost always building on prior knowledge, in our understanding of the world	1				
SC 12.1.2.d Research and describe the difficulties experienced by scientific innovators who had to overcome commonly held beliefs of their times to reach conclusions that we now take for granted	2				
Grade 11 Technology	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.1.3 Students will solve a complex design problem.	**Assessed at the local level**				
SC 12.1.3.a Propose designs and choose between alternative solutions of a problem	3				
SC 12.1.3.b Assess the limits of a technological design	3				
SC 12.1.3.c Implement the selected solution	3				
SC 12.1.3.d Evaluate the solution and its consequences	3				
SC 12.1.3.e Communicate the problem, process, and solution	2				
SC 12.1.3.f Compare and contrast the reasons for the pursuit of science and the pursuit of technology	2				
SC 12.1.3.g Explain how science advances with the introduction of new technology	1				
SC 12.1.3.h Recognize creativity, imagination, and a good knowledge base are all needed to advance the work of science and engineering	1				
PHYSICAL SCIENCE					
Grade 11 Matter	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.2.1 Students will investigate and describe matter in terms of its structure, composition and conservation.					**4-7**
SC 12.2.1.a Recognize bonding occurs when outer electrons are transferred (ionic) or shared (covalent)	1				
SC 12.2.1.b Describe the energy transfer associated with phase changes between solids, liquids, and gasses	1				

SC 12.2.1.c Describe the three normal states of matter (solid, liquid, gas) in terms of energy, particle arrangement, particle motion, and strength of bond between molecules	1				
SC 12.2.1.d Recognize a large number of chemical reactions involve the transfer of either electrons (oxidation/reduction) or hydrogen ions (acid/base) between reacting ions, molecules, or atoms	1				
SC 12.2.1.e Identify factors affecting rates of chemical reactions (temperature, particle size, surface area)	1				
SC 12.2.1.f Recognize the charges and relative locations of subatomic particles (neutrons, protons, electrons)	1				
SC 12.2.1.g Describe properties of atoms, ions, and isotopes	1				
SC 12.2.1.h Describe the organization of the periodic table of elements with respect to patterns of physical and chemical properties	1				
Grade 11 Force and Motion	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.2.2 Students will investigate and describe the nature of field forces and their interactions with matter.					**4-8**
SC 12.2.2.a Describe motion with respect to displacement and acceleration	2				
SC 12.2.2.b Describe how the law of inertia (Newton's 1st law) is evident in a real-world event	2				
SC 12.2.2.c Make predictions based on relationships among net force, mass, and acceleration (Newton's 2nd law)	2				
SC 12.2.2.d Recognize that all forces occur in equal and opposite pairs (Newton's 3rd law)	1				
SC 12.2.e Describe how Newton's 3rd law of motion is evident in a real-world event	2				
SC 12.2.2.f Describe gravity as a force that each mass exerts on another mass, which is proportional to the masses and the distance between them	2				
SC 12.2.2.g Recognize that an attractive or repulsive electric force exists between two charged particles and that this force is proportional to the magnitude of the charges and the distance between them	1				
Grade 11 Energy	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.2.3 Students will describe and investigate energy systems relating to the conservation and interaction of energy and matter.					**4-8**

SC 12.2.3.a Describe mechanical wave properties (speed, wavelength, frequency, amplitude) and how waves travel through a medium	1				
SC 12.2.3.b. Recognize that the energy in waves can be changed into other forms of energy	1				
SC 12.2.3.c Recognize that light can behave as a wave (diffraction and interference)	1				
SC 12.2.3.d Distinguish between temperature (a measure of the average kinetic energy of atomic or molecular motion) and heat (the quantity of thermal energy that transfers due to a change in temperature)	2				
SC 12.2.3.e Compare and contrast methods of heat transfer and the interaction of heat with matter via conduction, convection, and radiation	2				
SC 12.2.3.f Recognize that the production of electromagnetic waves is a result of changes in the motion of charges or by a changing magnetic field	1				
SC 12.2.3.g Compare and contrast segments of the electromagnetic spectrum (radio, micro, infrared, visible, ultraviolet, x-rays, gamma) based on frequency and wavelength	2				
SC 12.2.3.h Recognize that nuclear reactions (fission, fusion, radioactive decay) convert a fraction of the mass of interacting particles into energy, and this amount of energy is much greater than the energy in chemical interactions	1				
SC 12.2.3.i Interpret the law of conservation of energy to make predictions for the outcome of an event	2				
SC 12.2.3.j Identify that all energy can be considered to be either kinetic, potential, or energy contained by a field (e.g. electromagnetic waves)	1				
SC 12.2.3.k Identify endothermic and exothermic reactions	1				
LIFE SCIENCE					
Grade 11 Structure and Function of Living Systems	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.3.1 Students will investigate and describe the chemical basis of the growth, development, and maintenance of cells.					**4-7**
SC 12.3.1.a Identify the complex molecules (carbohydrates, lipids, proteins, nucleic acids) that make up living organisms	1				
SC 12.3.1.b Identify the form and function of sub-cellular structures that regulate cellular activities	1				

SC 12.3.1.c Describe the cellular functions of photosynthesis, respiration, cell division, protein synthesis, transport of materials, and energy capture/release	2				
SC 12.3.1.d Describe how an organism senses changes in its internal or external environment and responds to ensure survival	2				
Grade 11 Heredity	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.3.2 Students will describe the molecular basis of reproduction and heredity.					**3-6**
SC 12.3.2.a Identify that information passed from parents to offspring is coded in DNA molecules	1				
SC 12.3.2.b Describe the basic structure of DNA and its function in genetic inheritance	1				
SC 12.3.2.c Recognize how mutations could help, harm, or have no effect on individual organisms	1				
SC 12.3.2.d Describe that sexual reproduction results in a largely predictable, variety of possible gene combinations in the offspring of any two parents	2				
Grade 11 Flow of Matter and Energy in Ecosystems	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.3.3 Students will describe, on a molecular level, the cycling of matter and the flow of energy between organisms and their environment.					**1-3**
SC 12.3.3.a Explain how the stability of an ecosystem is increased by biological diversity	2				
SC 12.3.3.b Recognize that atoms and molecules cycle among living and nonliving components of the biosphere	1				
SC 12.3.3.c Explain how distribution and abundance of different organisms in ecosystems are limited by the availability of matter and energy and the ability of the ecosystem to recycle materials	2				
SC 12.3.3.d Analyze factors which may influence environmental quality	2				
Grade 11 Biodiversity	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.3.4 Students will describe the theory of biological evolution.					**2-5**
SC 12.3.4.a Identify different types of adaptations necessary for survival (morphological, physiological, behavioral)	1				

SC 12.3.4.b Recognize that the concept of biological evolution is a theory which explains the consequence of the interactions of: (1) the potential for a species to increase its numbers, (2) the genetic variability of offspring due to mutation and recombination of genes, (3) a finite supply of the resources required for life, and (4) the ensuing selection by the environment of those offspring better able to survive and leave offspring	1				
SC 12.3.4.c Explain how natural selection provides a scientific explanation of the fossil record and the molecular similarities among the diverse species of living organisms	2				
SC 12.3.4.d Apply the theory of biological evolution to explain diversity of life over time	2				
EARTH AND SPACE SCIENCE					
Grade 11 Earth in Space	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.4.1 Students will investigate and describe the known universe.					**2-4**
SC 12.4.1.a Describe the formation of the universe using the Big Bang Theory	1				
SC 12.4.1.b Recognize that stars, like the Sun, transform matter into energy by nuclear reactions which leads to the formation of other elements	1				
SC 12.4.1.c Describe stellar evolution	1				
Grade 11 Earth Structures and Processes	DOK Level	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.4.2 Students will investigate the relationships among Earth's structure, systems, and processes.					**3-5**
SC 12.4.2.a Recognize how Earth materials move through geochemical cycles (carbon, nitrogen, oxygen) resulting in chemical and physical changes in matter	1				
SC 12.4.2.b Describe how heat convection in the mantle propels the plates comprising Earth's surface across the face of the globe (plate tectonics)	2				
SC 12.4.2.c Evaluate the impact of human activity and natural causes on Earth's resources (groundwater, rivers, land, fossil fuels)	2				

Grade 11 Energy in Earth's Systems	DOK Level	DOK 1	DOK 2	DOK 3	Item Total
SC 12.4.3 Students will investigate and describe the relationships among the sources of energy and their efforts on Earth's systems.					**3-5**
SC 12.4.3.a Describe how radiation, conduction, and convection transfer heat in Earth's systems	1				
SC 12.4.3.b Identify internal and external sources of heat energy in Earth's systems	2				
SC 12.4.3.c Compare and contrast benefits of renewable and nonrenewable energy sources	2				
SC 12.4.3.d Describe natural influences (Earth's rotation, mountain ranges, oceans, differential heating) on global climate	2				
Grade 11 Earth's History	**DOK Level**	**DOK 1**	**DOK 2**	**DOK 3**	**Item Total**
SC 12.4.4 Students will explain the history and evolution of Earth.					**2-5**
SC 12.4.4.a Recognize that in any sequence of sediments or rocks that has not been overturned, the youngest sediments or rocks are at the top of the sequence and the oldest are at the bottom (law of superposition)	1				
SC 12.4.4.b Interpret Earth's history by observing rock sequences, using fossils to correlate the sequences at various locations, and using data from radioactive dating methods	2				
SC 12.4.4.c Compare and contrast the physical and biological differences of the early Earth with the planet we live on today	2				

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

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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 3.2 and 3.6 of the *Standards for Educational and Psychological Testing* (AERA, APA, & NCME, 2014).

> Standard 3.2: Test developers are responsible for developing tests that measure the intended construct and for minimizing the potential for tests' being affected by construct-irrelevant characteristics, such this linguistic, communicative, cognitive, cultural, physical, or other characteristics.

> Standard 3.6: Where credible evidence indicates that test scores may differ in meaning for relevant subgroups in the intended examinee population, test developers and/or users are responsible for exaimimg the evidence for validity of score interpretations for intended uses for individuals from those subgroups. What constitutes a significan difference in subgroup scores and what actions are taken in response to scuh differences may be defined by applicable laws.

In meeting these standards, 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.

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.

PES 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

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Appendix F: Reading Key Verification and Foil Analysis*

Grade 3 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	658151	B	20411	.63	.09	.63	.14	.15	.00	.00	.47	-.47	.47	-.31	-.39
OP	658152	D	20411	.74	.10	.05	.11	.74	.00	.00	.43	-.38	-.26	-.30	.43
OP	658158	B	20411	.68	.11	.68	.13	.07	.00	.00	.52	-.41	.52	-.40	-.42
OP	658159	C	20411	.74	.14	.07	.74	.04	.00	.00	.43	-.33	-.36	.43	-.24
OP	658160	D	20411	.73	.07	.07	.14	.73	.00	.00	.43	-.27	-.35	-.34	.43
OP	658162	A	20411	.48	.48	.15	.27	.10	.00	.00	.34	.34	-.42	-.26	-.28
OP	658163	D	20411	.81	.09	.04	.05	.81	.00	.00	.50	-.37	-.33	-.36	.50
OP	687481	B	20411	.75	.05	.75	.08	.11	.00	.00	.46	-.36	.46	-.34	-.33
OP	687482	A	20411	.56	.56	.13	.29	.02	.00	.00	.36	.36	-.43	-.26	-.31
OP	687483	D	20411	.79	.06	.11	.04	.79	.00	.00	.47	-.34	-.33	-.34	.47
OP	687484	D	20411	.74	.16	.07	.04	.74	.00	.00	.44	-.36	-.30	-.31	.44
OP	687485	B	20411	.79	.07	.79	.05	.10	.00	.00	.47	-.37	.47	-.35	-.30
OP	687486	C	20411	.83	.09	.03	.83	.05	.00	.00	.41	-.32	-.21	.41	-.28
OP	687487	A	20411	.86	.86	.04	.05	.06	.00	.00	.42	.42	-.25	-.28	-.32
OP	687489	C	20411	.75	.02	.21	.75	.02	.00	.00	.23	-.23	-.15	.23	-.24
OP	687491	B	20411	.60	.10	.60	.15	.14	.00	.00	.36	-.36	.36	-.32	-.23
OP	687492	A	20411	.77	.77	.08	.07	.08	.00	.00	.47	.47	-.39	-.32	-.30
OP	687493	D	20411	.68	.14	.13	.04	.68	.00	.00	.43	-.37	-.30	-.35	.43
OP	687494	A	20411	.52	.52	.21	.13	.14	.00	.00	.36	.36	-.26	-.39	-.35
OP	687495	D	20411	.77	.06	.07	.10	.77	.00	.00	.38	-.31	-.27	-.23	.38
OP	687496	B	20411	.51	.27	.51	.16	.06	.00	.00	.45	-.42	.45	-.40	-.41
OP	687499	C	20411	.51	.10	.25	.51	.14	.00	.00	.44	-.36	-.36	.44	-.46
OP	687501	B	20411	.64	.13	.64	.13	.10	.00	.00	.48	-.37	.48	-.40	-.39
OP	706364	B	20411	.60	.11	.60	.18	.11	.00	.00	.25	-.20	.25	-.16	-.23
OP	706367	A	20411	.86	.86	.07	.04	.04	.00	.00	.41	.41	-.29	-.31	-.22
OP	706369	B	20411	.60	.20	.60	.11	.08	.00	.00	.33	-.23	.33	-.26	-.36
OP	706370	B	20411	.43	.31	.43	.15	.11	.00	.00	.33	-.20	.33	-.42	-.45
OP	706371	C	20411	.69	.09	.13	.69	.09	.00	.00	.37	-.30	-.20	.37	-.37
OP	706372	C	20411	.54	.30	.09	.54	.06	.00	.00	.38	-.34	-.30	.38	-.36
OP	706373	A	20411	.66	.66	.12	.18	.04	.00	.00	.29	.29	-.22	-.21	-.28
OP	706375	C	20411	.65	.04	.13	.65	.18	.00	.00	.39	-.34	-.34	.39	-.27
OP	706391	C	20411	.71	.08	.09	.71	.11	.00	.00	.36	-.34	-.27	.36	-.22
OP	706392	B	20411	.66	.09	.66	.16	.09	.00	.00	.37	-.26	.37	-.30	-.32
OP	706393	D	20411	.68	.06	.07	.20	.68	.00	.00	.29	-.23	-.31	-.17	.29
OP	706394	A	20411	.43	.43	.11	.17	.29	.00	.00	.18	.18	-.25	-.29	-.06
OP	706396	C	20411	.87	.06	.02	.87	.04	.00	.00	.35	-.25	-.23	.35	-.21

Grade 3 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	706397	A	20411	.70	.70	.17	.08	.05	.00	.00	.37	.37	-.35	-.16	-.33
OP	706398	B	20411	.71	.11	.71	.05	.13	.00	.00	.46	-.37	.46	-.30	-.37
OP	706399	A	20411	.53	.53	.07	.29	.10	.00	.00	.25	.25	-.36	-.13	-.29
OP	706401	A	20411	.61	.61	.08	.15	.17	.00	.00	.38	.38	-.41	-.31	-.26
OP	706403	C	20411	.43	.14	.18	.43	.25	.00	.00	.29	-.41	-.38	.29	-.11
OP	706404	C	20411	.44	.31	.10	.44	.15	.00	.00	.29	-.23	-.37	.29	-.27
OP	706405	B	20411	.71	.07	.71	.12	.09	.00	.00	.35	-.30	.35	-.11	-.42
OP	706406	D	20411	.50	.12	.13	.25	.50	.00	.00	.38	-.31	-.35	-.36	.38
OP	706409	A	20411	.66	.66	.10	.09	.15	.00	.00	.51	.51	-.42	-.36	-.44
FT	784150	A	4463	.68	.68	.09	.09	.14	.00	.00	.18	.18	-.13	-.12	-.16
FT	784148	D	4463	.48	.10	.31	.11	.48	.00	.00	.30	-.40	-.24	-.23	.30
FT	749292	D	4463	.56	.09	.07	.27	.56	.00	.00	.38	-.43	-.31	-.28	.38
FT	749296	A	4463	.54	.54	.13	.16	.17	.00	.00	.31	.31	-.37	-.18	-.26
FT	749298	C	4463	.48	.11	.34	.48	.07	.00	.00	.41	-.47	-.32	.41	-.40
FT	749295	D	4463	.49	.10	.25	.16	.49	.00	.00	.28	-.27	-.26	-.23	.28
FT	749300	B	4463	.46	.21	.46	.13	.20	.00	.00	.36	-.21	.36	-.45	-.36
FT	749293	C	4463	.78	.07	.09	.78	.06	.00	.00	.49	-.36	-.35	.49	-.33
FT	749297	D	4463	.52	.08	.22	.18	.52	.00	.00	.35	-.39	-.31	-.26	.35
FT	749294	A	4463	.77	.77	.11	.06	.06	.00	.00	.47	.47	-.30	-.38	-.37
FT	797961	C	4000	.55	.07	.18	.55	.20	.00	.00	.37	-.43	-.28	.37	-.30
FT	797962	D	4000	.61	.28	.10	.01	.61	.00	.00	.32	-.28	-.26	-.24	.32
FT	749192	C	4000	.79	.07	.09	.79	.05	.00	.00	.46	-.34	-.35	.46	-.28
FT	749191	B	4000	.47	.28	.47	.17	.07	.00	.00	.38	-.32	.38	-.35	-.42
FT	749195	D	4000	.57	.22	.15	.05	.57	.00	.00	.46	-.46	-.31	-.40	.46
FT	749197	A	4000	.53	.53	.04	.10	.32	.00	.00	.24	.24	-.29	-.32	-.14
FT	749190	C	4000	.93	.02	.02	.93	.03	.00	.00	.38	-.27	-.18	.38	-.25
FT	749196	C	4000	.73	.08	.13	.73	.06	.00	.00	.47	-.34	-.36	.47	-.37
FT	749194	B	4000	.59	.08	.59	.07	.26	.00	.00	.36	-.42	.36	-.39	-.21
FT	749198	B	4000	.70	.09	.70	.06	.16	.00	.00	.46	-.41	.46	-.30	-.34
FT	797966	D	3963	.82	.08	.04	.06	.82	.00	.00	.36	-.27	-.19	-.27	.36
FT	800298	D	3963	.46	.17	.15	.21	.46	.00	.00	.29	-.30	-.24	-.26	.29
FT	748940	B	3963	.55	.07	.55	.27	.11	.00	.00	.24	-.34	.24	-.14	-.22
FT	748931	C	3963	.29	.30	.12	.29	.28	.00	.00	.16	-.20	-.28	.16	-.09
FT	748937	A	3963	.80	.80	.07	.09	.04	.00	.00	.37	.37	-.28	-.24	-.28
FT	748938	C	3963	.72	.11	.10	.72	.07	.00	.00	.45	-.35	-.33	.45	-.36
FT	748932	C	3963	.46	.16	.29	.46	.09	.00	.00	.35	-.41	-.21	.35	-.47
FT	748933	D	3963	.38	.20	.19	.23	.38	.00	.00	.21	-.19	-.25	-.19	.21
FT	748930	B	3963	.45	.32	.45	.07	.15	.00	.00	.29	-.24	.29	-.42	-.22
FT	749331	A	3963	.68	.68	.12	.15	.05	.00	.00	.35	.35	-.26	-.26	-.34
FT	797971	B	3952	.63	.11	.63	.18	.07	.00	.00	.37	-.34	.37	-.25	-.35
FT	797972	B	3952	.29	.23	.29	.34	.14	.00	.00	.16	-.18	.16	-.12	-.27

Grade 3 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	749201	A	3952	.66	.66	.13	.14	.07	.00	.00	.35	.35	-.27	-.22	-.35
FT	749330	B	3952	.61	.21	.61	.08	.11	.00	.00	.45	-.41	.45	-.35	-.33
FT	749202	C	3952	.43	.14	.27	.43	.16	.00	.00	.35	-.38	-.34	.35	-.30
FT	749210	D	3952	.74	.06	.10	.09	.74	.00	.00	.45	-.34	-.31	-.36	.45
FT	749205	A	3952	.68	.68	.12	.12	.07	.00	.00	.46	.46	-.33	-.37	-.39
FT	749211	B	3952	.67	.12	.67	.05	.16	.00	.00	.33	-.07	.33	-.33	-.37
FT	749203	A	3952	.57	.57	.21	.17	.05	.00	.00	.34	.34	-.26	-.29	-.35
FT	749204	D	3952	.42	.20	.08	.31	.42	.00	.00	-.08	.06	-.21	.18	-.08
FT	797976	D	4032	.77	.10	.07	.05	.77	.00	.00	.35	-.27	-.23	-.26	.35
FT	797977	C	4032	.31	.18	.12	.31	.39	.00	.00	.21	-.32	-.30	.21	-.14
FT	749309	C	4032	.54	.06	.35	.54	.05	.00	.00	.36	-.43	-.26	.36	-.41
FT	749305	C	4032	.47	.13	.21	.47	.19	.00	.00	.23	-.29	-.11	.23	-.26
FT	749328	A	4032	.25	.25	.28	.21	.25	.00	.00	.08	.08	-.20	-.11	.05
FT	749308	D	4032	.83	.08	.04	.05	.83	.00	.00	.44	-.31	-.30	-.31	.44
FT	749313	C	4032	.72	.09	.08	.72	.10	.00	.00	.44	-.34	-.30	.44	-.35
FT	749327	D	4032	.36	.11	.15	.38	.36	.00	.00	.19	-.37	-.43	-.02	.19
FT	749312	B	4032	.70	.11	.70	.13	.06	.00	.00	.46	-.38	.46	-.32	-.36
FT	749304	B	4032	.60	.16	.60	.11	.13	.00	.00	.40	-.34	.40	-.36	-.28

***Student counts are based on Online adminstrations only.**

Grade 4 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	687538	C	21337	.59	.17	.12	.59	.11	.00	.00	.41	-.27	-.36	.41	-.39
OP	687543	C	21337	.76	.03	.08	.76	.13	.00	.00	.43	-.28	-.33	.43	-.33
OP	687545	D	21337	.65	.08	.11	.16	.65	.00	.00	.31	-.31	-.34	-.12	.31
OP	687546	B	21337	.54	.27	.54	.15	.04	.00	.00	.25	-.15	.25	-.28	-.32
OP	687547	D	21337	.74	.02	.07	.17	.74	.00	.00	.31	-.22	-.34	-.18	.31
OP	687548	B	21337	.62	.14	.62	.10	.13	.00	.00	.47	-.41	.47	-.31	-.41
OP	687872	A	21337	.82	.82	.11	.04	.03	.00	.00	.23	.23	-.12	-.13	-.28
OP	687874	D	21337	.80	.10	.03	.07	.80	.00	.00	.27	-.20	-.15	-.19	.27
OP	687878	C	21337	.74	.05	.05	.74	.16	.00	.00	.32	-.22	-.22	.32	-.26
OP	687879	D	21337	.68	.05	.22	.05	.68	.00	.00	.35	-.25	-.26	-.34	.35
OP	687880	A	21337	.84	.84	.07	.03	.06	.00	.00	.32	.32	-.18	-.20	-.26
OP	687881	B	21337	.79	.14	.79	.05	.02	.00	.00	.32	-.22	.32	-.27	-.22
OP	687882	D	21337	.62	.02	.33	.02	.62	.00	.00	.33	-.25	-.28	-.29	.33
OP	706610	B	21337	.72	.08	.72	.09	.10	.00	.00	.39	-.33	.39	-.22	-.32
OP	706611	C	21337	.71	.12	.15	.71	.02	.00	.00	.38	-.38	-.22	.38	-.31
OP	706614	A	21337	.92	.92	.03	.03	.03	.00	.00	.37	.37	-.24	-.25	-.22
OP	706615	A	21337	.64	.64	.06	.27	.03	.00	.00	.27	.27	-.33	-.15	-.33

Grade 4 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	706616	C	21337	.67	.09	.12	.67	.13	.00	.00	.38	-.34	-.29	.38	-.26
OP	706617	B	21337	.61	.26	.61	.07	.06	.00	.00	.30	-.25	.30	-.28	-.18
OP	706618	C	21337	.60	.09	.26	.60	.04	.00	.00	.29	-.37	-.17	.29	-.27
OP	706619	D	21337	.47	.05	.24	.23	.47	.00	.00	.37	-.39	-.29	-.36	.37
OP	706621	A	21337	.43	.43	.20	.29	.08	.00	.00	.34	.34	-.31	-.33	-.30
OP	706623	C	21337	.52	.10	.08	.52	.30	.00	.00	.36	-.36	-.33	.36	-.29
OP	706625	D	21337	.42	.08	.23	.26	.42	.00	.00	.31	-.45	-.27	-.25	.31
OP	706626	B	21337	.72	.12	.72	.05	.11	.00	.00	.33	-.14	.33	-.23	-.38
OP	706627	A	21337	.66	.66	.03	.30	.02	.00	.00	.30	.30	-.20	-.27	-.22
OP	706629	B	21337	.65	.24	.65	.04	.07	.00	.00	.42	-.40	.42	-.24	-.28
OP	706630	B	21337	.63	.28	.63	.06	.03	.00	.00	.30	-.24	.30	-.25	-.27
OP	706637	C	21337	.89	.04	.03	.89	.05	.00	.00	.34	-.23	-.21	.34	-.23
OP	706638	D	21337	.52	.36	.07	.05	.52	.00	.00	.32	-.27	-.31	-.32	.32
OP	706640	A	21337	.84	.84	.04	.09	.03	.00	.00	.28	.28	-.22	-.15	-.23
OP	706641	B	21337	.74	.07	.74	.03	.16	.00	.00	.25	-.09	.25	-.17	-.24
OP	706642	D	21337	.55	.09	.20	.15	.55	.00	.00	.30	-.33	-.36	-.07	.30
OP	706645	A	21337	.79	.79	.04	.14	.03	.00	.00	.51	.51	-.34	-.41	-.35
OP	706646	B	21337	.68	.16	.68	.10	.05	.00	.00	.42	-.32	.42	-.32	-.36
OP	706647	C	21337	.61	.24	.05	.61	.10	.00	.00	.32	-.24	-.30	.32	-.28
OP	706649	D	21337	.67	.15	.09	.09	.67	.00	.00	.46	-.37	-.41	-.29	.46
OP	706650	B	21337	.78	.05	.78	.06	.11	.00	.00	.24	-.25	.24	-.19	-.10
OP	706652	C	21337	.76	.12	.05	.76	.07	.00	.00	.39	-.25	-.29	.39	-.32
OP	706655	B	21337	.61	.29	.61	.07	.02	.00	.00	.29	-.23	.29	-.25	-.29
OP	706657	C	21337	.68	.12	.12	.68	.08	.00	.00	.41	-.36	-.28	.41	-.32
OP	706660	A	21337	.53	.53	.20	.16	.11	.00	.00	.34	.34	-.29	-.32	-.29
OP	706661	B	21337	.48	.24	.48	.12	.17	.00	.00	.37	-.25	.37	-.38	-.40
OP	706664	D	21337	.62	.11	.15	.12	.62	.00	.00	.39	-.29	-.27	-.39	.39
OP	706667	C	21337	.58	.05	.12	.58	.24	.00	.00	.36	-.33	-.37	.36	-.24
FT	784678	B	4743	.86	.08	.86	.04	.02	.00	.00	.29	-.18	.29	-.19	-.23
FT	784684	C	4743	.66	.10	.18	.66	.06	.00	.00	.40	-.33	-.33	.40	-.27
FT	749670	A	4743	.76	.76	.04	.06	.15	.00	.00	.40	.40	-.30	-.28	-.29
FT	749669	C	4743	.40	.24	.25	.40	.11	.00	.00	.25	-.22	-.17	.25	-.37
FT	749663	D	4743	.65	.09	.15	.11	.65	.00	.00	.43	-.31	-.36	-.35	.43
FT	749674	D	4743	.61	.07	.16	.15	.61	.00	.00	.44	-.30	-.41	-.35	.44
FT	749668	D	4743	.59	.11	.13	.17	.59	.00	.00	.55	-.45	-.53	-.42	.55
FT	749665	B	4743	.47	.24	.47	.17	.12	.00	.00	.24	-.20	.24	-.25	-.17
FT	749666	A	4743	.63	.63	.13	.14	.11	.00	.00	.44	.44	-.38	-.38	-.28
FT	749667	C	4743	.33	.18	.12	.33	.37	.00	.00	.24	-.35	-.43	.24	-.13
FT	797981	B	4179	.52	.21	.52	.08	.20	.00	.00	.31	-.26	.31	-.32	-.26
FT	749660	A	4179	.90	.90	.03	.04	.03	.00	.00	.36	.36	-.24	-.24	-.21

Grade 4 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	749650	C	4179	.49	.20	.07	.49	.24	.00	.00	.35	-.38	-.24	.35	-.28
FT	749652	B	4179	.79	.06	.79	.04	.10	.00	.00	.37	-.25	.37	-.26	-.27
FT	749657	C	4179	.50	.20	.26	.50	.04	.00	.00	.32	-.24	-.30	.32	-.40
FT	749653	A	4179	.75	.75	.03	.05	.16	.00	.00	.41	.41	-.28	-.31	-.31
FT	749654	D	4179	.69	.17	.08	.06	.69	.00	.00	.14	-.12	-.11	-.06	.14
FT	749659	B	4179	.50	.18	.50	.10	.23	.00	.00	.26	-.26	.26	-.37	-.13
FT	751643	C	4179	.38	.25	.10	.38	.27	.00	.00	.19	-.20	-.23	.19	-.16
FT	797986	D	4133	.85	.06	.02	.06	.85	.00	.00	.37	-.29	-.17	-.26	.37
FT	797987	C	4133	.73	.17	.07	.73	.02	.00	.00	.39	-.34	-.25	.39	-.24
FT	749425	B	4133	.69	.15	.69	.11	.05	.00	.00	.49	-.51	.49	-.27	-.30
FT	749434	D	4133	.68	.10	.11	.11	.68	.00	.00	.45	-.31	-.39	-.33	.45
FT	749431	C	4133	.94	.02	.03	.94	.02	.00	.00	.38	-.22	-.25	.38	-.25
FT	749432	C	4133	.78	.05	.14	.78	.02	.00	.00	.50	-.37	-.40	.50	-.29
FT	749435	A	4133	.53	.53	.19	.07	.21	.00	.00	.33	.33	-.36	-.32	-.20
FT	749436	B	4133	.81	.08	.81	.05	.06	.00	.00	.47	-.33	.47	-.32	-.34
FT	749433	D	4133	.77	.08	.12	.04	.77	.00	.00	.46	-.32	-.34	-.34	.46
FT	749437	A	4133	.63	.63	.05	.02	.30	.00	.00	.37	.37	-.34	-.30	-.31
FT	797995	C	4107	.30	.46	.10	.30	.15	.00	.00	.18	-.16	-.27	.18	-.18
FT	798004	D	4107	.88	.05	.04	.03	.88	.00	.00	.41	-.29	-.23	-.28	.41
FT	749448	B	4107	.94	.02	.94	.02	.02	.00	.00	.34	-.19	.34	-.21	-.24
FT	749449	D	4107	.72	.10	.14	.04	.72	.00	.00	.40	-.31	-.29	-.33	.40
FT	749445	C	4107	.87	.04	.03	.87	.05	.00	.00	.46	-.31	-.29	.46	-.33
FT	749451	A	4107	.91	.91	.04	.03	.01	.00	.00	.24	.24	-.07	-.22	-.21
FT	749442	B	4107	.42	.33	.42	.05	.20	.00	.00	.31	-.30	.31	-.41	-.27
FT	749443	D	4107	.67	.10	.05	.18	.67	.00	.00	.42	-.44	-.32	-.25	.42
FT	749440	C	4107	.70	.18	.06	.70	.07	.00	.00	.49	-.37	-.39	.49	-.40
FT	749441	A	4107	.65	.65	.11	.17	.08	.00	.00	.43	.43	-.36	-.31	-.37
FT	798017	C	4173	.44	.13	.34	.44	.09	.00	.00	.25	-.32	-.15	.25	-.34
FT	798018	D	4173	.47	.10	.14	.30	.47	.00	.00	.16	-.29	-.21	-.06	.16
FT	749580	D	4173	.72	.07	.13	.08	.72	.00	.00	.42	-.31	-.33	-.30	.42
FT	749577	A	4173	.69	.69	.08	.06	.16	.00	.00	.28	.28	-.27	-.32	-.11
FT	749578	C	4173	.51	.25	.17	.51	.07	.00	.00	.18	-.12	-.17	.18	-.24
FT	749583	D	4173	.34	.53	.07	.06	.34	.00	.00	-.08	.18	-.17	-.22	-.08
FT	749584	B	4173	.62	.18	.62	.08	.12	.00	.00	.33	-.28	.33	-.27	-.25
FT	749576	A	4173	.74	.74	.06	.10	.09	.00	.00	.39	.39	-.33	-.28	-.26
FT	749575	B	4173	.60	.29	.60	.05	.05	.00	.00	.32	-.22	.32	-.31	-.39
FT	749581	C	4173	.37	.26	.18	.37	.19	.00	.00	.34	-.30	-.32	.34	-.43

***Student counts are based on Online adminstrations only.**

Grade 5 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	633235	B	20596	.49	.12	.49	.09	.30	.00	.00	.32	-.42	.32	-.33	-.20
OP	633238	A	20596	.69	.69	.17	.09	.05	.00	.00	.32	.32	-.25	-.27	-.22
OP	633240	C	20596	.55	.33	.01	.55	.12	.00	.00	.38	-.38	-.26	.38	-.26
OP	633241	D	20596	.55	.14	.21	.11	.55	.00	.00	.32	-.24	-.26	-.36	.32
OP	633243	B	20596	.60	.12	.60	.09	.19	.00	.00	.31	-.15	.31	-.32	-.29
OP	633244	A	20596	.78	.78	.05	.13	.04	.00	.00	.46	.46	-.32	-.38	-.27
OP	645755	D	20596	.45	.17	.15	.22	.45	.00	.00	.26	-.22	-.26	-.25	.26
OP	645756	C	20596	.87	.04	.03	.87	.05	.00	.00	.30	-.18	-.23	.30	-.18
OP	645757	C	20596	.74	.06	.11	.74	.08	.00	.00	.38	-.27	-.23	.38	-.36
OP	645760	C	20596	.52	.21	.20	.52	.07	.00	.00	.31	-.26	-.29	.31	-.28
OP	645762	A	20596	.78	.78	.07	.13	.03	.00	.00	.30	.30	-.15	-.25	-.25
OP	645763	B	20596	.67	.06	.67	.18	.09	.00	.00	.42	-.36	.42	-.34	-.32
OP	645764	A	20596	.71	.71	.11	.09	.09	.00	.00	.39	.39	-.21	-.35	-.35
OP	658267	C	20596	.84	.11	.03	.84	.02	.00	.00	.30	-.23	-.17	.30	-.22
OP	658269	D	20596	.72	.18	.04	.06	.72	.00	.00	.44	-.37	-.30	-.31	.44
OP	658271	A	20596	.62	.62	.17	.06	.15	.00	.00	.38	.38	-.27	-.31	-.35
OP	658272	A	20596	.86	.86	.05	.05	.04	.00	.00	.44	.44	-.33	-.31	-.26
OP	658273	D	20596	.73	.07	.06	.14	.73	.00	.00	.44	-.30	-.36	-.34	.44
OP	658274	B	20596	.82	.07	.82	.06	.04	.00	.00	.43	-.30	.43	-.28	-.32
OP	658275	C	20596	.81	.04	.02	.81	.12	.00	.00	.36	-.27	-.21	.36	-.28
OP	658276	B	20596	.79	.07	.79	.07	.06	.00	.00	.30	-.17	.30	-.26	-.20
OP	687585	D	20596	.43	.06	.20	.31	.43	.00	.00	.21	-.42	-.19	-.14	.21
OP	687587	B	20596	.77	.10	.77	.05	.08	.00	.00	.48	-.33	.48	-.35	-.39
OP	687590	C	20596	.71	.15	.06	.71	.08	.00	.00	.40	-.28	-.41	.40	-.26
OP	687591	A	20596	.76	.76	.11	.06	.07	.00	.00	.28	.28	-.10	-.29	-.27
OP	687592	D	20596	.79	.10	.04	.08	.79	.00	.00	.48	-.38	-.26	-.38	.48
OP	687609	D	20596	.49	.14	.04	.33	.49	.00	.00	.35	-.35	-.32	-.31	.35
OP	687610	B	20596	.85	.05	.85	.06	.04	.00	.00	.40	-.20	.40	-.35	-.25
OP	687611	B	20596	.64	.12	.64	.03	.21	.00	.00	.22	-.18	.22	-.29	-.15
OP	687612	D	20596	.66	.10	.20	.04	.66	.00	.00	.39	-.33	-.30	-.36	.39
OP	687614	A	20596	.59	.59	.24	.10	.07	.00	.00	.18	.18	-.06	-.20	-.27
OP	687616	C	20596	.90	.06	.02	.90	.02	.00	.00	.37	-.28	-.23	.37	-.18
OP	687617	B	20596	.73	.20	.73	.01	.05	.00	.00	.36	-.33	.36	-.21	-.18
OP	687618	D	20596	.79	.18	.02	.01	.79	.00	.00	.33	-.29	-.22	-.16	.33
OP	687620	D	20596	.66	.01	.16	.18	.66	.00	.00	.38	-.30	-.32	-.32	.38
OP	687625	A	20596	.66	.66	.09	.09	.16	.00	.00	.46	.46	-.49	-.37	-.29
OP	687626	A	20596	.82	.82	.05	.07	.06	.00	.00	.37	.37	-.32	-.21	-.23
OP	687627	B	20596	.59	.27	.59	.09	.05	.00	.00	.28	-.15	.28	-.36	-.31
OP	687628	C	20596	.72	.09	.08	.72	.11	.00	.00	.42	-.37	-.31	.42	-.28
OP	687631	B	20596	.52	.18	.52	.11	.18	.00	.00	.33	-.21	.33	-.23	-.41

Grade 5 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	706468	D	20596	.80	.12	.05	.04	.80	.00	.00	.30	-.17	-.30	-.20	.30
OP	706469	C	20596	.76	.19	.03	.76	.01	.00	.00	.33	-.28	-.19	.33	-.26
OP	706470	B	20596	.53	.21	.53	.04	.21	.00	.00	.21	-.21	.21	-.21	-.13
OP	706471	B	20596	.80	.05	.80	.02	.12	.00	.00	.37	-.28	.37	-.16	-.31
OP	706473	A	20596	.61	.61	.08	.29	.03	.00	.00	.30	.30	-.27	-.25	-.22
OP	706474	C	20596	.67	.11	.09	.67	.13	.00	.00	.38	-.29	-.31	.38	-.29
OP	706476	B	20596	.56	.13	.56	.26	.04	.00	.00	.27	-.24	.27	-.22	-.27
OP	706478	D	20596	.81	.01	.16	.02	.81	.00	.00	.39	-.20	-.33	-.31	.39
FT	784737	A	4095	.84	.84	.04	.08	.05	.00	.00	.40	.40	-.29	-.28	-.27
FT	784738	B	4095	.70	.07	.70	.13	.10	.00	.00	.27	-.21	.27	-.18	-.21
FT	751407	D	4095	.45	.28	.23	.04	.45	.00	.00	.21	-.23	-.13	-.33	.21
FT	751411	D	4095	.33	.32	.25	.10	.33	.00	.00	.18	-.10	-.20	-.38	.18
FT	751408	A	4095	.61	.61	.20	.15	.04	.00	.00	.24	.24	-.16	-.18	-.32
FT	751402	B	4095	.33	.13	.33	.26	.28	.00	.00	.20	-.36	.20	-.18	-.14
FT	751406	A	4095	.66	.66	.03	.04	.26	.00	.00	.30	.30	-.31	-.40	-.19
FT	751410	B	4095	.56	.26	.56	.13	.05	.00	.00	.39	-.39	.39	-.32	-.22
FT	751412	C	4095	.62	.23	.09	.62	.06	.00	.00	.32	-.16	-.38	.32	-.36
FT	751409	B	4095	.76	.09	.76	.07	.07	.00	.00	.36	-.22	.36	-.32	-.25
FT	798028	D	4084	.52	.17	.11	.20	.52	.00	.00	.24	-.26	-.20	-.17	.24
FT	798029	C	4084	.88	.05	.03	.88	.05	.00	.00	.42	-.30	-.22	.42	-.30
FT	751278	B	4084	.69	.03	.69	.24	.04	.00	.00	.41	-.31	.41	-.33	-.36
FT	751283	A	4084	.86	.86	.05	.04	.05	.00	.00	.41	.41	-.26	-.33	-.24
FT	751273	B	4084	.50	.22	.50	.21	.07	.00	.00	.18	-.13	.18	-.11	-.30
FT	751276	B	4084	.26	.30	.26	.38	.06	.00	.00	-.13	.16	-.13	.22	-.21
FT	751274	C	4084	.82	.05	.11	.82	.02	.00	.00	.35	-.27	-.21	.35	-.27
FT	751279	D	4084	.68	.14	.07	.11	.68	.00	.00	.50	-.41	-.41	-.38	.50
FT	751277	A	4084	.64	.64	.06	.17	.13	.00	.00	.43	.43	-.40	-.29	-.39
FT	751272	C	4084	.84	.03	.06	.84	.07	.00	.00	.46	-.31	-.31	.46	-.33
FT	798054	D	4110	.20	.30	.25	.25	.20	.00	.00	.09	-.10	-.20	-.05	.09
FT	749679	D	4110	.57	.11	.24	.08	.57	.00	.00	.47	-.47	-.36	-.42	.47
FT	748968	C	4110	.84	.05	.09	.84	.02	.00	.00	.38	-.33	-.24	.38	-.25
FT	748970	A	4110	.71	.71	.08	.03	.18	.00	.00	.29	.29	-.34	-.26	-.14
FT	748960	B	4110	.44	.05	.44	.16	.35	.00	.00	.23	-.38	.23	-.25	-.16
FT	748958	C	4110	.53	.13	.09	.53	.26	.00	.00	.26	-.31	-.23	.26	-.17
FT	748962	B	4110	.61	.06	.61	.26	.07	.00	.00	.37	-.28	.37	-.32	-.30
FT	748961	B	4110	.50	.14	.50	.27	.09	.00	.00	.27	-.30	.27	-.14	-.39
FT	748959	D	4110	.55	.06	.34	.04	.55	.00	.00	.35	-.42	-.25	-.41	.35
FT	798063	C	4103	.70	.01	.01	.70	.27	.00	.00	.12	-.15	-.11	.12	-.09
FT	798065	B	4103	.75	.02	.75	.06	.17	.00	.00	.20	-.20	.20	-.18	-.13
FT	751232	D	4103	.64	.12	.11	.13	.64	.00	.00	.39	-.37	-.35	-.25	.39

Grade 5 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	751242	C	4103	.76	.15	.05	.76	.04	.00	.00	.22	-.15	-.20	.22	-.15
FT	751243	B	4103	.50	.28	.50	.10	.12	.00	.00	.31	-.23	.31	-.38	-.26
FT	751238	A	4103	.91	.91	.02	.01	.06	.00	.00	.35	.35	-.19	-.18	-.27
FT	751233	D	4103	.70	.06	.20	.04	.70	.00	.00	.37	-.32	-.25	-.36	.37
FT	751241	B	4103	.38	.25	.38	.22	.15	.00	.00	.20	-.09	.20	-.25	-.28
FT	751236	C	4103	.49	.21	.15	.49	.15	.00	.00	.38	-.28	-.43	.38	-.36
FT	751240	A	4103	.74	.74	.15	.08	.04	.00	.00	.33	.33	-.24	-.27	-.23
FT	798070	D	4148	.60	.14	.13	.12	.60	.00	.00	.34	-.40	-.33	-.10	.34
FT	798071	D	4148	.91	.02	.02	.05	.91	.00	.00	.30	-.18	-.21	-.20	.30
FT	749010	B	4148	.86	.06	.86	.03	.06	.00	.00	.39	-.25	.39	-.27	-.28
FT	749680	A	4148	.60	.60	.05	.09	.26	.00	.00	.22	.22	-.27	-.32	-.09
FT	749011	D	4148	.57	.04	.11	.28	.57	.00	.00	.24	-.24	-.12	-.23	.24
FT	749012	A	4148	.59	.59	.11	.12	.18	.00	.00	.37	.37	-.36	-.32	-.27
FT	749014	C	4148	.71	.08	.10	.71	.11	.00	.00	.46	-.31	-.40	.46	-.34
FT	749013	D	4148	.85	.04	.03	.09	.85	.00	.00	.39	-.24	-.29	-.29	.39
FT	749017	B	4148	.46	.32	.46	.09	.12	.00	.00	.25	-.19	.25	-.29	-.28
FT	749016	C	4148	.71	.10	.15	.71	.04	.00	.00	.30	-.21	-.22	.30	-.28

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Grade 6 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	658337	A	21059	.80	.80	.03	.04	.13	.00	.00	.32	.32	-.23	-.26	-.21
OP	658340	C	21059	.67	.06	.22	.67	.04	.00	.00	.38	-.27	-.31	.38	-.29
OP	658341	D	21059	.81	.05	.05	.09	.81	.00	.00	.49	-.31	-.33	-.39	.49
OP	658343	C	21059	.57	.23	.08	.57	.12	.00	.00	.46	-.41	-.37	.46	-.38
OP	658348	D	21059	.79	.07	.08	.06	.79	.00	.00	.44	-.29	-.33	-.32	.44
OP	658350	B	21059	.51	.11	.51	.22	.15	.00	.00	.34	-.37	.34	-.28	-.28
OP	687664	B	21059	.71	.04	.71	.06	.19	.00	.00	.28	-.31	.28	-.12	-.23
OP	687665	D	21059	.57	.28	.11	.04	.57	.00	.00	.26	-.15	-.31	-.35	.26
OP	687666	C	21059	.82	.08	.07	.82	.03	.00	.00	.44	-.29	-.35	.44	-.30
OP	687667	A	21059	.77	.77	.07	.03	.13	.00	.00	.35	.35	-.21	-.27	-.29
OP	687668	A	21059	.71	.71	.18	.05	.07	.00	.00	.32	.32	-.18	-.30	-.31
OP	687669	D	21059	.65	.04	.04	.27	.65	.00	.00	.50	-.41	-.40	-.43	.50
OP	687671	C	21059	.73	.08	.14	.73	.04	.00	.00	.30	-.36	-.10	.30	-.26
OP	687672	B	21059	.59	.14	.59	.07	.20	.00	.00	.34	-.35	.34	-.33	-.20
OP	687673	B	21059	.71	.13	.71	.11	.04	.00	.00	.33	-.35	.33	-.13	-.29
OP	687674	B	21059	.87	.02	.87	.05	.06	.00	.00	.37	-.24	.37	-.27	-.24
OP	687675	C	21059	.87	.06	.03	.87	.04	.00	.00	.44	-.28	-.31	.44	-.29

Grade 6 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	687676	D	21059	.52	.04	.17	.26	.52	.00	.00	.41	-.41	-.47	-.28	.41
OP	687678	C	21059	.90	.05	.03	.90	.02	.00	.00	.41	-.29	-.28	.41	-.23
OP	687681	B	21059	.62	.23	.62	.06	.09	.00	.00	.38	-.21	.38	-.41	-.42
OP	687682	A	21059	.81	.81	.06	.11	.01	.00	.00	.30	.30	-.30	-.15	-.24
OP	706503	C	21059	.72	.07	.06	.72	.14	.00	.00	.28	-.30	-.34	.28	-.06
OP	706504	B	21059	.82	.00	.82	.06	.11	.00	.00	.30	-.15	.30	-.37	-.11
OP	706505	A	21059	.78	.78	.16	.03	.03	.00	.00	.33	.33	-.22	-.31	-.23
OP	706506	A	21059	.75	.75	.13	.06	.06	.00	.00	.34	.34	-.24	-.26	-.23
OP	706510	D	21059	.66	.13	.06	.16	.66	.00	.00	.49	-.37	-.41	-.42	.49
OP	706513	D	21059	.52	.20	.08	.21	.52	.00	.00	.34	-.22	-.32	-.36	.34
OP	706514	B	21059	.68	.06	.68	.05	.20	.00	.00	.34	-.28	.34	-.32	-.24
OP	706515	B	21059	.57	.24	.57	.09	.11	.00	.00	.22	-.07	.22	-.28	-.28
OP	706518	A	21059	.66	.66	.05	.23	.06	.00	.00	.24	.24	-.34	-.12	-.23
OP	706520	C	21059	.71	.01	.05	.71	.23	.00	.00	.30	-.17	-.14	.30	-.28
OP	706522	B	21059	.64	.22	.64	.08	.05	.00	.00	.43	-.38	.43	-.32	-.30
OP	706523	B	21059	.62	.18	.62	.06	.14	.00	.00	.40	-.38	.40	-.27	-.30
OP	706524	C	21059	.79	.10	.08	.79	.03	.00	.00	.45	-.40	-.26	.45	-.31
OP	706540	D	21059	.55	.06	.31	.09	.55	.00	.00	.34	-.37	-.23	-.38	.34
OP	706542	B	21059	.42	.22	.42	.07	.30	.00	.00	.35	-.33	.35	-.34	-.34
OP	706543	C	21059	.43	.30	.05	.43	.22	.00	.00	.26	-.21	-.34	.26	-.24
OP	706544	C	21059	.81	.09	.05	.81	.05	.00	.00	.39	-.28	-.31	.39	-.23
OP	706547	D	21059	.65	.07	.21	.07	.65	.00	.00	.36	-.37	-.29	-.21	.36
OP	706548	C	21059	.49	.11	.34	.49	.06	.00	.00	.32	-.38	-.23	.32	-.30
OP	706552	D	21059	.65	.08	.21	.06	.65	.00	.00	.42	-.27	-.37	-.37	.42
OP	706553	A	21059	.63	.63	.03	.05	.29	.00	.00	.30	.30	-.32	-.33	-.21
OP	706554	B	21059	.68	.13	.68	.16	.03	.00	.00	.44	-.32	.44	-.41	-.27
OP	706555	D	21059	.76	.06	.01	.17	.76	.00	.00	.30	-.21	-.19	-.25	.30
OP	706556	D	21059	.75	.09	.13	.03	.75	.00	.00	.27	-.13	-.23	-.23	.27
OP	706559	C	21059	.61	.16	.12	.61	.11	.00	.00	.41	-.34	-.33	.41	-.34
OP	706560	A	21059	.90	.90	.02	.05	.03	.00	.00	.36	.36	-.22	-.26	-.23
OP	706562	B	21059	.80	.14	.80	.03	.04	.00	.00	.19	-.16	.19	-.08	-.13
FT	784768	A	4221	.73	.73	.06	.10	.11	.00	.00	.23	.23	-.16	-.19	-.16
FT	788680	A	4221	.55	.55	.18	.24	.03	.00	.00	.35	.35	-.26	-.37	-.18
FT	751249	D	4221	.90	.03	.06	.01	.90	.00	.00	.36	-.19	-.31	-.19	.36
FT	751247	B	4221	.51	.02	.51	.03	.44	.00	.00	.32	-.29	.32	-.28	-.29
FT	751244	D	4221	.66	.03	.25	.05	.66	.00	.00	.52	-.34	-.47	-.37	.52
FT	751245	B	4221	.64	.12	.64	.18	.05	.00	.00	.37	-.32	.37	-.29	-.25
FT	751251	A	4221	.82	.82	.03	.06	.09	.00	.00	.28	.28	-.23	-.21	-.16
FT	751250	A	4221	.69	.69	.19	.08	.04	.00	.00	.28	.28	-.14	-.33	-.27
FT	751252	A	4221	.65	.65	.07	.25	.03	.00	.00	.23	.23	-.24	-.17	-.18

Grade 6 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	751246	C	4221	.60	.12	.13	.60	.14	.00	.00	.40	-.29	-.35	.40	-.35
FT	798265	A	4243	.78	.78	.06	.02	.15	.00	.00	.32	.32	-.18	-.17	-.29
FT	798267	B	4243	.30	.41	.30	.10	.18	.00	.00	.19	-.19	.19	-.28	-.20
FT	749683	D	4243	.66	.12	.04	.18	.66	.00	.00	.40	-.33	-.33	-.31	.40
FT	749690	A	4243	.76	.76	.03	.06	.16	.00	.00	.36	.36	-.30	-.33	-.22
FT	749682	C	4243	.54	.25	.13	.54	.08	.00	.00	.40	-.34	-.34	.40	-.36
FT	749686	D	4243	.49	.21	.16	.14	.49	.00	.00	.31	-.25	-.22	-.38	.31
FT	749685	B	4243	.81	.04	.81	.05	.10	.00	.00	.38	-.30	.38	-.23	-.27
FT	749684	D	4243	.60	.12	.19	.09	.60	.00	.00	.32	-.25	-.23	-.32	.32
FT	749687	A	4243	.61	.61	.25	.09	.05	.00	.00	.27	.27	-.11	-.41	-.32
FT	749688	C	4243	.81	.07	.04	.81	.08	.00	.00	.46	-.34	-.30	.46	-.34
FT	798102	B	4208	.46	.12	.46	.19	.23	.00	.00	.16	-.20	.16	-.17	-.08
FT	798106	D	4208	.54	.06	.09	.31	.54	.00	.00	.14	-.27	-.22	-.03	.14
FT	748973	D	4208	.43	.21	.18	.18	.43	.00	.00	.36	-.26	-.44	-.35	.36
FT	748977	B	4208	.30	.07	.30	.05	.58	.00	.00	.08	-.28	.08	-.38	-.01
FT	748976	A	4208	.82	.82	.08	.02	.08	.00	.00	.32	.32	-.27	-.16	-.20
FT	748978	D	4208	.71	.05	.14	.10	.71	.00	.00	.47	-.33	-.37	-.39	.47
FT	748974	C	4208	.40	.23	.22	.40	.14	.00	.00	.27	-.19	-.35	.27	-.26
FT	748972	A	4208	.67	.67	.24	.07	.03	.00	.00	.41	.41	-.35	-.35	-.23
FT	748983	C	4208	.83	.04	.09	.83	.04	.00	.00	.43	-.29	-.32	.43	-.29
FT	748975	B	4208	.89	.05	.89	.02	.03	.00	.00	.44	-.30	.44	-.29	-.29
FT	798269	D	4157	.39	.30	.20	.11	.39	.00	.00	.10	-.11	-.08	-.10	.10
FT	798271	C	4157	.28	.31	.03	.28	.38	.00	.00	.24	-.30	-.38	.24	-.21
FT	748991	A	4157	.77	.77	.07	.07	.09	.00	.00	.39	.39	-.27	-.34	-.23
FT	748992	B	4157	.63	.09	.63	.12	.16	.00	.00	.19	-.29	.19	-.22	.01
FT	748989	A	4157	.76	.76	.09	.08	.07	.00	.00	.36	.36	-.21	-.32	-.25
FT	748995	C	4157	.66	.09	.16	.66	.09	.00	.00	.44	-.36	-.30	.44	-.38
FT	748990	D	4157	.75	.14	.06	.05	.75	.00	.00	.29	-.09	-.34	-.31	.29
FT	754873	D	4157	.73	.17	.03	.07	.73	.00	.00	.42	-.30	-.36	-.33	.42
FT	748993	C	4157	.66	.06	.19	.66	.09	.00	.00	.42	-.27	-.39	.42	-.30
FT	754944	B	4157	.72	.07	.72	.11	.10	.00	.00	.42	-.33	.42	-.35	-.27
FT	798135	D	4209	.30	.38	.17	.15	.30	.00	.00	.03	.06	-.11	-.17	.03
FT	798145	A	4209	.43	.43	.30	.25	.02	.00	.00	.12	.12	-.15	-.05	-.20
FT	751259	C	4209	.87	.06	.05	.87	.02	.00	.00	.32	-.24	-.21	.32	-.18
FT	754875	D	4209	.80	.04	.09	.06	.80	.00	.00	.51	-.34	-.41	-.34	.51
FT	751254	D	4209	.77	.18	.02	.03	.77	.00	.00	.19	-.06	-.30	-.24	.19
FT	751256	A	4209	.53	.53	.09	.26	.12	.00	.00	.28	.28	-.36	-.17	-.27
FT	751260	C	4209	.51	.24	.11	.51	.15	.00	.00	.38	-.27	-.43	.38	-.38
FT	751262	B	4209	.41	.28	.41	.17	.14	.00	.00	.11	-.02	.11	-.18	-.17
FT	751253	A	4209	.49	.49	.18	.03	.30	.00	.00	.29	.29	-.36	-.35	-.19

Grade 6 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	751261	B	4209	.82	.03	.82	.13	.02	.00	.00	.38	-.29	.38	-.29	-.25

*Student counts are based on Online adminstrations only.

Grade 7 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	687694	B	20998	.80	.03	.80	.05	.12	.00	.00	.39	-.26	.39	-.25	-.30
OP	687695	D	20998	.87	.05	.04	.04	.87	.00	.00	.44	-.32	-.26	-.31	.44
OP	687696	B	20998	.55	.38	.55	.05	.03	.00	.00	.40	-.36	.40	-.34	-.37
OP	687698	A	20998	.60	.60	.16	.08	.16	.00	.00	.35	.35	-.26	-.40	-.25
OP	687701	A	20998	.68	.68	.08	.13	.11	.00	.00	.32	.32	-.28	-.16	-.32
OP	687706	C	20998	.66	.16	.15	.66	.03	.00	.00	.38	-.26	-.35	.38	-.26
OP	687720	B	20998	.71	.10	.71	.09	.10	.00	.00	.39	-.31	.39	-.30	-.27
OP	687722	A	20998	.70	.70	.11	.11	.08	.00	.00	.33	.33	-.31	-.24	-.16
OP	687725	B	20998	.54	.35	.54	.02	.09	.00	.00	.35	-.27	.35	-.33	-.43
OP	687727	A	20998	.77	.77	.08	.12	.04	.00	.00	.47	.47	-.40	-.35	-.28
OP	687728	B	20998	.35	.18	.35	.27	.20	.00	.00	.23	-.23	.23	-.28	-.17
OP	687729	C	20998	.65	.02	.22	.65	.11	.00	.00	.39	-.31	-.29	.39	-.37
OP	687732	C	20998	.67	.13	.14	.67	.06	.00	.00	.35	-.25	-.28	.35	-.29
OP	687734	C	20998	.52	.31	.12	.52	.05	.00	.00	.29	-.16	-.42	.29	-.31
OP	687736	B	20998	.72	.03	.72	.03	.21	.00	.00	.30	-.29	.30	-.31	-.19
OP	687737	D	20998	.51	.25	.07	.17	.51	.00	.00	.26	-.31	-.26	-.11	.26
OP	687738	A	20998	.49	.49	.17	.21	.12	.00	.00	.47	.47	-.37	-.49	-.44
OP	687739	D	20998	.77	.03	.05	.15	.77	.00	.00	.52	-.37	-.35	-.43	.52
OP	687741	B	20998	.63	.31	.63	.05	.02	.00	.00	.40	-.35	.40	-.34	-.25
OP	706685	C	20998	.69	.08	.14	.69	.09	.00	.00	.42	-.35	-.35	.42	-.28
OP	706686	C	20998	.90	.01	.09	.90	.00	.00	.00	.28	-.12	-.26	.28	-.08
OP	706689	B	20998	.89	.07	.89	.02	.02	.00	.00	.29	-.16	.29	-.26	-.20
OP	706692	B	20998	.49	.21	.49	.11	.19	.00	.00	.30	-.23	.30	-.45	-.20
OP	706694	A	20998	.61	.61	.17	.15	.07	.00	.00	.23	.23	-.28	-.08	-.19
OP	706695	D	20998	.75	.06	.07	.11	.75	.00	.00	.37	-.29	-.32	-.23	.37
OP	706696	A	20998	.78	.78	.06	.07	.09	.00	.00	.44	.44	-.35	-.32	-.30
OP	706699	C	20998	.78	.02	.13	.78	.06	.00	.00	.21	-.19	-.07	.21	-.26
OP	706700	B	20998	.77	.04	.77	.14	.05	.00	.00	.46	-.32	.46	-.36	-.31
OP	706701	A	20998	.84	.84	.08	.01	.06	.00	.00	.34	.34	-.27	-.22	-.22
OP	706707	A	20998	.80	.80	.08	.07	.04	.00	.00	.35	.35	-.32	-.22	-.17
OP	706708	C	20998	.54	.08	.25	.54	.13	.00	.00	.25	-.28	-.20	.25	-.19
OP	706709	C	20998	.89	.05	.03	.89	.03	.00	.00	.38	-.27	-.23	.38	-.26
OP	706711	D	20998	.64	.23	.04	.09	.64	.00	.00	.30	-.21	-.21	-.33	.30

Grade 7 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	706713	B	20998	.72	.13	.72	.03	.12	.00	.00	.32	-.25	.32	-.27	-.22
OP	706714	B	20998	.33	.22	.33	.09	.35	.00	.00	.22	-.33	.22	-.33	-.14
OP	706728	D	20998	.85	.11	.01	.03	.85	.00	.00	.34	-.23	-.22	-.28	.34
OP	706729	B	20998	.55	.35	.55	.04	.07	.00	.00	.20	-.10	.20	-.28	-.37
OP	706730	D	20998	.29	.33	.10	.28	.29	.00	.00	.24	-.18	-.43	-.27	.24
OP	706731	D	20998	.67	.10	.04	.18	.67	.00	.00	.44	-.28	-.35	-.39	.44
OP	706732	A	20998	.82	.82	.04	.05	.09	.00	.00	.37	.37	-.28	-.31	-.21
OP	706733	C	20998	.85	.06	.06	.85	.02	.00	.00	.36	-.24	-.26	.36	-.24
OP	706734	C	20998	.78	.12	.07	.78	.03	.00	.00	.40	-.33	-.28	.40	-.23
OP	706736	D	20998	.80	.06	.05	.09	.80	.00	.00	.39	-.32	-.15	-.33	.39
OP	706737	D	20998	.60	.16	.09	.16	.60	.00	.00	.23	-.10	-.26	-.22	.23
OP	706738	C	20998	.61	.06	.11	.61	.21	.00	.00	.48	-.43	-.42	.48	-.40
OP	706740	A	20998	.71	.71	.06	.06	.17	.00	.00	.38	.38	-.34	-.34	-.24
OP	706866	A	20998	.54	.54	.32	.10	.04	.00	.00	.26	.26	-.19	-.25	-.34
OP	706867	B	20998	.57	.13	.57	.11	.19	.00	.00	.42	-.38	.42	-.33	-.37
FT	784772	D	4185	.54	.36	.04	.06	.54	.00	.00	.35	-.33	-.24	-.25	.35
FT	784773	C	4185	.61	.18	.09	.61	.13	.00	.00	.38	-.29	-.43	.38	-.24
FT	751441	A	4185	.40	.40	.16	.38	.06	.00	.00	.07	.07	-.07	-.02	-.28
FT	751442	C	4185	.60	.25	.07	.60	.08	.00	.00	.32	-.24	-.36	.32	-.23
FT	751435	B	4185	.67	.12	.67	.10	.11	.00	.00	.46	-.33	.46	-.34	-.40
FT	751445	D	4185	.55	.05	.31	.09	.55	.00	.00	.30	-.36	-.21	-.34	.30
FT	751443	B	4185	.56	.17	.56	.07	.20	.00	.00	.30	-.27	.30	-.35	-.19
FT	751444	A	4185	.48	.48	.16	.15	.21	.00	.00	.35	.35	-.35	-.37	-.26
FT	751434	C	4185	.46	.24	.14	.46	.15	.00	.00	.38	-.33	-.42	.38	-.32
FT	751436	C	4185	.77	.05	.11	.77	.06	.00	.00	.44	-.32	-.32	.44	-.32
FT	798364	D	4184	.44	.13	.04	.39	.44	.00	.00	.08	-.26	-.19	.02	.08
FT	798365	D	4184	.34	.36	.03	.27	.34	.00	.00	.33	-.28	-.36	-.41	.33
FT	751324	B	4184	.82	.02	.82	.08	.08	.00	.00	.29	-.24	.29	-.26	-.12
FT	751330	A	4184	.77	.77	.06	.09	.09	.00	.00	.44	.44	-.35	-.33	-.28
FT	751321	C	4184	.74	.02	.14	.74	.10	.00	.00	.39	-.30	-.30	.39	-.29
FT	751326	B	4184	.40	.50	.40	.05	.05	.00	.00	.23	-.18	.23	-.30	-.34
FT	751319	A	4184	.53	.53	.17	.09	.21	.00	.00	.23	.23	-.23	-.26	-.14
FT	751323	D	4184	.53	.31	.08	.08	.53	.00	.00	.32	-.23	-.35	-.36	.32
FT	751325	B	4184	.28	.06	.28	.39	.27	.00	.00	.09	-.29	.09	-.01	-.16
FT	751322	C	4184	.59	.19	.14	.59	.08	.00	.00	.18	-.02	-.18	.18	-.32
FT	798368	D	4197	.59	.15	.25	.01	.59	.00	.00	.09	-.07	-.06	-.20	.09
FT	798369	D	4197	.47	.13	.24	.16	.47	.00	.00	.17	-.13	-.11	-.25	.17
FT	751286	A	4197	.64	.64	.12	.03	.21	.00	.00	.32	.32	-.33	-.30	-.21
FT	751289	D	4197	.59	.23	.02	.16	.59	.00	.00	.41	-.34	-.33	-.38	.41
FT	751285	C	4197	.81	.08	.08	.81	.04	.00	.00	.42	-.30	-.30	.42	-.28

Grade 7 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	751292	D	4197	.88	.04	.05	.03	.88	.00	.00	.49	-.33	-.36	-.31	.49
FT	751290	B	4197	.75	.04	.75	.19	.01	.00	.00	.37	-.38	.37	-.28	-.18
FT	751291	C	4197	.65	.17	.08	.65	.10	.00	.00	.40	-.28	-.38	.40	-.34
FT	751293	A	4197	.57	.57	.06	.33	.04	.00	.00	.48	.48	-.46	-.42	-.38
FT	751294	B	4197	.47	.08	.47	.30	.15	.00	.00	.32	-.37	.32	-.27	-.31
FT	798372	D	4192	.50	.27	.20	.03	.50	.00	.00	.31	-.36	-.16	-.33	.31
FT	798373	B	4192	.70	.15	.70	.03	.12	.00	.00	.28	-.18	.28	-.27	-.22
FT	751535	B	4192	.76	.08	.76	.06	.10	.00	.00	.13	-.14	.13	-.11	-.04
FT	751526	A	4192	.76	.76	.11	.04	.09	.00	.00	.38	.38	-.29	-.36	-.23
FT	751529	C	4192	.80	.02	.06	.80	.12	.00	.00	.37	-.22	-.30	.37	-.26
FT	751531	B	4192	.91	.05	.91	.03	.01	.00	.00	.42	-.34	.42	-.24	-.22
FT	751527	C	4192	.55	.09	.20	.55	.16	.00	.00	.18	-.24	-.09	.18	-.15
FT	751534	A	4192	.47	.47	.11	.12	.31	.00	.00	.07	.07	-.22	-.16	.05
FT	751530	D	4192	.58	.13	.08	.20	.58	.00	.00	.32	-.31	-.32	-.20	.32
FT	751525	A	4192	.51	.51	.26	.08	.15	.00	.00	.29	.29	-.30	-.39	-.10
FT	798381	D	4203	.55	.07	.32	.07	.55	.00	.00	.27	-.31	-.17	-.33	.27
FT	798382	D	4203	.53	.18	.24	.05	.53	.00	.00	.24	-.15	-.22	-.33	.24
FT	751541	A	4203	.82	.82	.05	.08	.05	.00	.00	.36	.36	-.27	-.35	-.11
FT	751544	B	4203	.50	.21	.50	.06	.24	.00	.00	.40	-.39	.40	-.37	-.33
FT	754777	C	4203	.43	.12	.40	.43	.05	.00	.00	.25	-.32	-.19	.25	-.34
FT	751537	B	4203	.45	.16	.45	.31	.08	.00	.00	.18	-.23	.18	-.12	-.21
FT	751542	A	4203	.75	.75	.04	.11	.10	.00	.00	.41	.41	-.33	-.36	-.23
FT	751543	D	4203	.38	.15	.11	.36	.38	.00	.00	.18	-.26	-.37	-.07	.18
FT	751540	B	4203	.87	.04	.87	.05	.05	.00	.00	.46	-.32	.46	-.30	-.31
FT	751545	D	4203	.76	.05	.14	.05	.76	.00	.00	.42	-.31	-.28	-.36	.42

***Student counts are based on Online adminstrations only.**

Grade 8 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	687745	B	20745	.80	.07	.80	.11	.02	.00	.00	.38	-.32	.38	-.26	-.26
OP	687746	B	20745	.78	.07	.78	.10	.05	.00	.00	.45	-.29	.45	-.35	-.32
OP	687747	C	20745	.75	.11	.06	.75	.08	.00	.00	.48	-.33	-.36	.48	-.39
OP	687750	A	20745	.70	.70	.17	.07	.06	.00	.00	.30	.30	-.21	-.26	-.22
OP	687751	C	20745	.79	.07	.08	.79	.05	.00	.00	.46	-.34	-.36	.46	-.29
OP	687752	D	20745	.58	.23	.12	.07	.58	.00	.00	.42	-.35	-.38	-.33	.42
OP	687754	B	20745	.43	.06	.43	.07	.44	.00	.00	.31	-.35	.31	-.36	-.26
OP	687755	D	20745	.74	.05	.14	.06	.74	.00	.00	.42	-.32	-.31	-.30	.42
OP	687757	C	20745	.80	.10	.07	.80	.03	.00	.00	.39	-.26	-.31	.39	-.26

Grade 8 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	687761	A	20745	.68	.68	.02	.12	.17	.00	.00	.37	.37	-.33	-.42	-.19
OP	687762	D	20745	.74	.12	.08	.07	.74	.00	.00	.40	-.28	-.30	-.32	.40
OP	687764	C	20745	.86	.03	.06	.86	.05	.00	.00	.38	-.23	-.25	.38	-.29
OP	687775	B	20745	.50	.18	.50	.24	.08	.00	.00	.35	-.45	.35	-.20	-.34
OP	687776	D	20745	.71	.07	.08	.14	.71	.00	.00	.37	-.22	-.27	-.33	.37
OP	687777	C	20745	.51	.13	.12	.51	.24	.00	.00	.27	-.32	-.36	.27	-.11
OP	687778	B	20745	.86	.02	.86	.03	.09	.00	.00	.45	-.29	.45	-.29	-.34
OP	687782	C	20745	.63	.16	.16	.63	.05	.00	.00	.19	-.25	-.03	.19	-.22
OP	687784	B	20745	.77	.03	.77	.10	.10	.00	.00	.29	-.23	.29	-.19	-.21
OP	687785	D	20745	.75	.03	.01	.21	.75	.00	.00	.19	-.11	-.23	-.14	.19
OP	687792	A	20745	.68	.68	.01	.04	.26	.00	.00	.34	.34	-.29	-.33	-.27
OP	687793	A	20745	.84	.84	.03	.02	.11	.00	.00	.44	.44	-.31	-.32	-.32
OP	687794	A	20745	.59	.59	.04	.13	.24	.00	.00	.33	.33	-.35	-.32	-.24
OP	687795	A	20745	.68	.68	.10	.16	.06	.00	.00	.35	.35	-.29	-.31	-.19
OP	687800	D	20745	.85	.01	.10	.04	.85	.00	.00	.35	-.21	-.23	-.29	.35
OP	687801	C	20745	.86	.12	.01	.86	.01	.00	.00	.33	-.26	-.23	.33	-.20
OP	706743	C	20745	.50	.13	.25	.50	.12	.00	.00	.19	-.26	-.11	.19	-.17
OP	706744	A	20745	.58	.58	.07	.23	.12	.00	.00	.21	.21	-.27	-.14	-.16
OP	706745	B	20745	.71	.16	.71	.08	.04	.00	.00	.23	-.05	.23	-.34	-.21
OP	706748	C	20745	.69	.09	.14	.69	.08	.00	.00	.38	-.30	-.29	.38	-.30
OP	706749	D	20745	.71	.08	.10	.10	.71	.00	.00	.29	-.26	-.30	-.08	.29
OP	706752	B	20745	.61	.20	.61	.04	.15	.00	.00	.24	-.29	.24	-.19	-.08
OP	706753	D	20745	.50	.07	.36	.07	.50	.00	.00	.30	-.45	-.18	-.39	.30
OP	706768	D	20745	.82	.03	.06	.09	.82	.00	.00	.44	-.29	-.22	-.39	.44
OP	706769	B	20745	.77	.07	.77	.01	.15	.00	.00	.08	-.09	.08	-.15	-.01
OP	706773	B	20745	.80	.06	.80	.12	.02	.00	.00	.42	-.26	.42	-.36	-.24
OP	706774	A	20745	.69	.69	.15	.09	.08	.00	.00	.28	.28	-.18	-.26	-.20
OP	706776	A	20745	.85	.85	.03	.08	.05	.00	.00	.36	.36	-.21	-.25	-.27
OP	706778	D	20745	.83	.06	.03	.09	.83	.00	.00	.29	-.24	-.29	-.13	.29
OP	706780	D	20745	.48	.15	.31	.06	.48	.00	.00	.33	-.40	-.20	-.49	.33
OP	706781	B	20745	.79	.08	.79	.09	.04	.00	.00	.35	-.20	.35	-.33	-.19
OP	706783	A	20745	.70	.70	.07	.08	.15	.00	.00	.43	.43	-.43	-.45	-.21
OP	706785	A	20745	.57	.57	.20	.18	.04	.00	.00	.31	.31	-.37	-.11	-.31
OP	706787	C	20745	.61	.18	.10	.61	.11	.00	.00	.35	-.29	-.31	.35	-.26
OP	706788	C	20745	.72	.12	.10	.72	.06	.00	.00	.43	-.37	-.31	.43	-.27
OP	706793	D	20745	.48	.10	.33	.10	.48	.00	.00	.28	-.39	-.14	-.40	.28
OP	706794	D	20745	.60	.18	.15	.07	.60	.00	.00	.28	-.18	-.24	-.34	.28
OP	706795	B	20745	.78	.03	.78	.04	.15	.00	.00	.40	-.30	.40	-.34	-.28
OP	706797	A	20745	.74	.74	.05	.17	.03	.00	.00	.44	.44	-.36	-.33	-.37
OP	706800	C	20745	.44	.18	.31	.44	.07	.00	.00	.21	-.17	-.19	.21	-.21

Grade 8 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	706801	B	20745	.38	.37	.38	.12	.13	.00	.00	.38	-.42	.38	-.39	-.26
FT	784776	C	4114	.65	.26	.03	.65	.05	.00	.00	.31	-.29	-.26	.31	-.17
FT	784779	A	4114	.64	.64	.05	.21	.11	.00	.00	.23	.23	-.24	-.14	-.22
FT	749032	C	4114	.91	.02	.06	.91	.01	.00	.00	.30	-.24	-.19	.30	-.17
FT	749029	D	4114	.45	.11	.29	.15	.45	.00	.00	.27	-.21	-.23	-.34	.27
FT	749027	A	4114	.85	.85	.03	.07	.05	.00	.00	.35	.35	-.28	-.26	-.16
FT	749022	B	4114	.58	.20	.58	.13	.09	.00	.00	.09	.07	.09	-.15	-.23
FT	749024	D	4114	.52	.20	.19	.09	.52	.00	.00	.26	-.14	-.27	-.33	.26
FT	749023	C	4114	.62	.18	.14	.62	.06	.00	.00	.37	-.25	-.37	.37	-.26
FT	749030	A	4114	.39	.39	.11	.20	.30	.00	.00	.38	.38	-.51	-.40	-.30
FT	749028	B	4114	.52	.23	.52	.21	.04	.00	.00	.31	-.28	.31	-.26	-.27
FT	798192	B	4136	.61	.06	.61	.20	.13	.00	.00	.26	-.18	.26	-.18	-.26
FT	798198	B	4136	.45	.31	.45	.05	.20	.00	.00	.24	-.24	.24	-.34	-.16
FT	749093	C	4136	.79	.07	.10	.79	.04	.00	.00	.42	-.27	-.34	.42	-.28
FT	749092	B	4136	.79	.07	.79	.06	.09	.00	.00	.25	-.14	.25	-.28	-.11
FT	749681	C	4136	.28	.24	.38	.28	.09	.00	.00	.07	-.13	-.01	.07	-.18
FT	749099	A	4136	.64	.64	.07	.26	.02	.00	.00	.27	.27	-.31	-.18	-.26
FT	749097	C	4136	.73	.16	.05	.73	.06	.00	.00	.26	-.15	-.31	.26	-.14
FT	749098	A	4136	.58	.58	.12	.28	.02	.00	.00	.38	.38	-.35	-.31	-.33
FT	749095	D	4136	.53	.09	.25	.13	.53	.00	.00	.35	-.34	-.29	-.30	.35
FT	749094	B	4136	.79	.07	.79	.08	.05	.00	.00	.40	-.21	.40	-.33	-.32
FT	798226	C	4170	.67	.04	.22	.67	.06	.00	.00	.37	-.28	-.34	.37	-.21
FT	798227	D	4170	.33	.08	.47	.12	.33	.00	.00	.20	-.32	-.18	-.21	.20
FT	749489	D	4170	.66	.11	.07	.16	.66	.00	.00	.39	-.34	-.34	-.27	.39
FT	749490	A	4170	.63	.63	.21	.09	.07	.00	.00	.32	.32	-.20	-.35	-.26
FT	749494	C	4170	.91	.03	.03	.91	.03	.00	.00	.37	-.23	-.26	.37	-.23
FT	749500	B	4170	.81	.07	.81	.07	.06	.00	.00	.36	-.27	.36	-.23	-.27
FT	749496	C	4170	.87	.03	.04	.87	.07	.00	.00	.38	-.17	-.26	.38	-.31
FT	749495	D	4170	.36	.11	.36	.16	.36	.00	.00	.17	.01	-.20	-.23	.17
FT	749497	B	4170	.61	.10	.61	.14	.15	.00	.00	.27	-.25	.27	-.22	-.19
FT	749499	A	4170	.72	.72	.11	.11	.06	.00	.00	.41	.41	-.37	-.29	-.26
FT	798231	D	4132	.61	.15	.15	.08	.61	.00	.00	.34	-.35	-.23	-.24	.34
FT	798232	D	4132	.46	.08	.30	.16	.46	.00	.00	.15	-.32	-.11	-.09	.15
FT	749107	B	4132	.78	.05	.78	.06	.11	.00	.00	.39	-.22	.39	-.36	-.26
FT	749115	D	4132	.83	.05	.02	.09	.83	.00	.00	.35	-.19	-.22	-.29	.35
FT	749105	A	4132	.74	.74	.07	.08	.12	.00	.00	.31	.31	-.25	-.30	-.15
FT	749113	B	4132	.83	.06	.83	.06	.05	.00	.00	.38	-.25	.38	-.31	-.23
FT	749108	A	4132	.58	.58	.10	.25	.07	.00	.00	.31	.31	-.40	-.17	-.30
FT	751269	B	4132	.34	.28	.34	.26	.12	.00	.00	.17	-.16	.17	-.24	-.06
FT	749104	C	4132	.76	.11	.06	.76	.08	.00	.00	.36	-.29	-.23	.36	-.25

Grade 8 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	749114	D	4132	.30	.38	.19	.13	.30	.00	.00	.34	-.37	-.34	-.38	.34
FT	798236	B	4144	.59	.13	.59	.14	.13	.00	.00	.28	-.27	.28	-.25	-.16
FT	798237	C	4144	.33	.34	.26	.33	.07	.00	.00	.14	-.05	-.25	.14	-.17
FT	749604	B	4144	.45	.14	.45	.36	.05	.00	.00	.27	-.35	.27	-.20	-.30
FT	749594	C	4144	.38	.07	.19	.38	.36	.00	.00	.24	-.39	-.26	.24	-.18
FT	749596	B	4144	.57	.25	.57	.10	.08	.00	.00	.36	-.28	.36	-.27	-.40
FT	749598	C	4144	.42	.07	.44	.42	.06	.00	.00	-.01	-.10	.09	-.01	-.25
FT	749599	D	4144	.62	.07	.22	.10	.62	.00	.00	.41	-.40	-.33	-.33	.41
FT	749597	A	4144	.53	.53	.24	.19	.04	.00	.00	.37	.37	-.29	-.38	-.37
FT	749595	B	4144	.42	.37	.42	.13	.08	.00	.00	.28	-.20	.28	-.30	-.42
FT	749593	D	4144	.74	.19	.02	.04	.74	.00	.00	.32	-.22	-.30	-.31	.32

***Student counts are based on Online adminstrations only.**

Grade 11 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	602833	C	20699	.85	.06	.07	.85	.02	.00	.00	.25	-.17	-.13	.25	-.21
OP	602835	D	20699	.72	.12	.15	.01	.72	.00	.00	.40	-.36	-.28	-.29	.40
OP	602840	D	20699	.84	.04	.07	.05	.84	.00	.00	.35	-.26	-.26	-.21	.35
OP	602841	A	20699	.67	.67	.13	.12	.08	.00	.00	.42	.42	-.37	-.26	-.36
OP	602842	C	20699	.68	.18	.03	.68	.10	.00	.00	.41	-.27	-.33	.41	-.39
OP	602843	D	20699	.71	.14	.09	.06	.71	.00	.00	.40	-.31	-.27	-.35	.40
OP	602844	B	20699	.80	.05	.80	.06	.09	.00	.00	.41	-.15	.41	-.35	-.33
OP	632830	A	20699	.77	.77	.05	.15	.02	.00	.00	.40	.40	-.36	-.27	-.30
OP	632832	C	20699	.84	.05	.08	.84	.04	.00	.00	.33	-.24	-.19	.33	-.25
OP	632833	D	20699	.74	.08	.11	.07	.74	.00	.00	.43	-.35	-.29	-.34	.43
OP	632835	A	20699	.63	.63	.05	.07	.25	.00	.00	.32	.32	-.41	-.39	-.15
OP	632837	D	20699	.76	.12	.04	.08	.76	.00	.00	.50	-.37	-.37	-.39	.50
OP	632838	B	20699	.65	.16	.65	.11	.07	.00	.00	.40	-.34	.40	-.30	-.31
OP	687804	D	20699	.61	.03	.10	.26	.61	.00	.00	.36	-.39	-.29	-.29	.36
OP	687805	C	20699	.51	.32	.08	.51	.09	.00	.00	.35	-.33	-.30	.35	-.27
OP	687806	B	20699	.81	.03	.81	.14	.02	.00	.00	.41	-.30	.41	-.30	-.30
OP	687807	C	20699	.60	.21	.05	.60	.13	.00	.00	.39	-.32	-.39	.39	-.28
OP	687808	A	20699	.84	.84	.06	.02	.08	.00	.00	.36	.36	-.28	-.27	-.22
OP	687809	B	20699	.64	.11	.64	.03	.21	.00	.00	.31	-.14	.31	-.37	-.29
OP	687810	D	20699	.76	.04	.05	.15	.76	.00	.00	.38	-.33	-.31	-.25	.38
OP	687812	A	20699	.41	.41	.03	.12	.44	.00	.00	.27	.27	-.46	-.40	-.19
OP	687851	C	20699	.69	.15	.12	.69	.04	.00	.00	.40	-.29	-.35	.40	-.29
OP	687852	B	20699	.52	.11	.52	.30	.06	.00	.00	.31	-.33	.31	-.23	-.30

Grade 11 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	687853	A	20699	.46	.46	.33	.06	.14	.00	.00	.30	.30	-.25	-.30	-.29
OP	687857	C	20699	.87	.02	.04	.87	.07	.00	.00	.49	-.28	-.35	.49	-.36
OP	687858	A	20699	.63	.63	.10	.22	.05	.00	.00	.41	.41	-.36	-.31	-.39
OP	687859	D	20699	.41	.41	.06	.12	.41	.00	.00	.37	-.32	-.47	-.39	.37
OP	687860	D	20699	.81	.06	.05	.07	.81	.00	.00	.40	-.23	-.30	-.32	.40
OP	706802	B	20699	.74	.02	.74	.17	.08	.00	.00	.37	-.29	.37	-.28	-.30
OP	706803	B	20699	.55	.17	.55	.13	.15	.00	.00	.32	-.12	.32	-.36	-.35
OP	706806	C	20699	.71	.13	.14	.71	.02	.00	.00	.41	-.41	-.26	.41	-.23
OP	706807	D	20699	.67	.06	.16	.10	.67	.00	.00	.35	-.34	-.28	-.23	.35
OP	706810	D	20699	.56	.25	.07	.11	.56	.00	.00	.20	-.15	-.20	-.17	.20
OP	706811	A	20699	.82	.82	.10	.06	.02	.00	.00	.44	.44	-.32	-.32	-.30
OP	706814	D	20699	.64	.05	.14	.17	.64	.00	.00	.37	-.34	-.29	-.31	.37
OP	706815	D	20699	.77	.04	.05	.14	.77	.00	.00	.46	-.30	-.32	-.38	.46
OP	706816	C	20699	.63	.32	.02	.63	.02	.00	.00	.36	-.33	-.29	.36	-.19
OP	706817	A	20699	.74	.74	.05	.04	.17	.00	.00	.36	.36	-.35	-.30	-.22
OP	706818	C	20699	.70	.12	.06	.70	.13	.00	.00	.34	-.11	-.33	.34	-.34
OP	706819	C	20699	.59	.09	.21	.59	.11	.00	.00	.27	-.14	-.29	.27	-.17
OP	706821	A	20699	.74	.74	.17	.05	.04	.00	.00	.33	.33	-.20	-.32	-.28
OP	706823	D	20699	.49	.23	.16	.12	.49	.00	.00	.39	-.36	-.26	-.49	.39
OP	706824	B	20699	.70	.06	.70	.08	.16	.00	.00	.16	-.17	.16	-.13	-.08
OP	706856	C	20699	.76	.03	.13	.76	.08	.00	.00	.35	-.34	-.30	.35	-.15
OP	706857	B	20699	.62	.08	.62	.17	.12	.00	.00	.36	-.39	.36	-.22	-.30
OP	706858	D	20699	.86	.01	.08	.04	.86	.00	.00	.41	-.24	-.28	-.32	.41
OP	706859	B	20699	.78	.06	.78	.05	.11	.00	.00	.41	-.32	.41	-.34	-.25
OP	706860	C	20699	.49	.18	.06	.49	.27	.00	.00	.28	-.16	-.33	.28	-.29
OP	706861	B	20699	.69	.07	.69	.16	.08	.00	.00	.45	-.32	.45	-.39	-.32
OP	706863	C	20699	.77	.04	.13	.77	.05	.00	.00	.46	-.34	-.42	.46	-.20
FT	784782	B	4123	.83	.03	.83	.09	.05	.00	.00	.33	-.27	.33	-.31	-.07
FT	784783	D	4123	.73	.13	.08	.06	.73	.00	.00	.45	-.33	-.39	-.32	.45
FT	752237	A	4123	.43	.43	.12	.19	.26	.00	.00	.43	.43	-.45	-.39	-.43
FT	752244	C	4123	.51	.13	.14	.51	.22	.00	.00	.28	-.32	-.33	.28	-.13
FT	752258	D	4123	.76	.06	.06	.12	.76	.00	.00	.54	-.42	-.43	-.40	.54
FT	752239	C	4123	.84	.04	.07	.84	.06	.00	.00	.46	-.31	-.35	.46	-.29
FT	752238	B	4123	.79	.04	.79	.07	.11	.00	.00	.44	-.33	.44	-.37	-.28
FT	752257	A	4123	.83	.83	.05	.05	.06	.00	.00	.52	.52	-.37	-.36	-.38
FT	752242	B	4123	.44	.05	.44	.42	.09	.00	.00	.25	-.37	.25	-.20	-.27
FT	752241	D	4123	.50	.24	.12	.14	.50	.00	.00	.43	-.36	-.40	-.43	.43
FT	797936	B	4131	.60	.11	.60	.13	.16	.00	.00	.25	-.17	.25	-.28	-.16
FT	797937	C	4131	.91	.04	.03	.91	.03	.00	.00	.32	-.15	-.21	.32	-.26
FT	751806	B	4131	.64	.13	.64	.17	.06	.00	.00	.41	-.27	.41	-.37	-.34

Grade 11 Reading

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	751810	D	4131	.35	.11	.07	.47	.35	.00	.00	.11	-.30	-.41	.01	.11
FT	751805	A	4131	.38	.38	.37	.04	.21	.00	.00	.44	.44	-.48	-.55	-.36
FT	751809	C	4131	.77	.04	.14	.77	.05	.00	.00	.34	-.28	-.19	.34	-.32
FT	751814	B	4131	.67	.10	.67	.18	.05	.00	.00	.32	-.30	.32	-.19	-.29
FT	751816	C	4131	.66	.22	.05	.66	.07	.00	.00	.36	-.29	-.35	.36	-.24
FT	751807	D	4131	.36	.26	.25	.14	.36	.00	.00	.20	-.10	-.26	-.29	.20
FT	751808	A	4131	.75	.75	.10	.07	.07	.00	.00	.52	.52	-.40	-.42	-.36
FT	797941	C	4115	.73	.10	.12	.73	.04	.00	.00	.41	-.34	-.38	.41	-.13
FT	797942	C	4115	.64	.05	.20	.64	.10	.00	.00	.34	-.34	-.22	.34	-.30
FT	754851	A	4115	.54	.54	.11	.20	.16	.00	.00	.38	.38	-.39	-.36	-.25
FT	754854	D	4115	.88	.06	.02	.05	.88	.00	.00	.36	-.15	-.26	-.33	.36
FT	754857	B	4115	.36	.15	.36	.17	.32	.00	.00	.26	-.29	.26	-.31	-.21
FT	754849	C	4115	.82	.05	.05	.82	.08	.00	.00	.46	-.31	-.34	.46	-.31
FT	754858	D	4115	.22	.03	.50	.24	.22	.00	.00	.17	-.38	-.19	-.13	.17
FT	754852	A	4115	.37	.37	.17	.35	.10	.00	.00	.22	.22	-.33	-.16	-.20
FT	754850	B	4115	.70	.09	.70	.13	.08	.00	.00	.30	-.24	.30	-.16	-.32
FT	754848	C	4115	.60	.11	.14	.60	.14	.00	.00	.30	-.20	-.21	.30	-.30
FT	797945	A	4118	.85	.85	.05	.04	.07	.00	.00	.43	.43	-.38	-.32	-.22
FT	797946	A	4118	.63	.63	.05	.18	.14	.00	.00	.38	.38	-.40	-.28	-.29
FT	754838	B	4118	.81	.03	.81	.07	.09	.00	.00	.43	-.28	.43	-.36	-.27
FT	754841	C	4118	.79	.08	.06	.79	.07	.00	.00	.49	-.34	-.35	.49	-.37
FT	754837	A	4118	.85	.85	.05	.07	.03	.00	.00	.50	.50	-.35	-.39	-.29
FT	754842	D	4118	.62	.19	.15	.05	.62	.00	.00	.52	-.43	-.49	-.42	.52
FT	754835	C	4118	.36	.13	.29	.36	.23	.00	.00	.11	-.08	-.09	.11	-.14
FT	754847	D	4118	.66	.09	.05	.20	.66	.00	.00	.54	-.42	-.46	-.46	.54
FT	754839	A	4118	.85	.85	.05	.06	.04	.00	.00	.50	.50	-.36	-.38	-.28
FT	754840	B	4118	.83	.02	.83	.09	.07	.00	.00	.44	-.26	.44	-.40	-.24
FT	797950	C	4106	.48	.11	.37	.48	.04	.00	.00	.18	-.35	-.08	.18	-.21
FT	797951	C	4106	.71	.15	.11	.71	.03	.00	.00	.39	-.29	-.33	.39	-.27
FT	751738	B	4106	.79	.12	.79	.04	.04	.00	.00	.43	-.33	.43	-.32	-.26
FT	751739	C	4106	.62	.32	.03	.62	.03	.00	.00	.10	.01	-.30	.10	-.30
FT	751740	D	4106	.56	.05	.30	.09	.56	.00	.00	.30	-.37	-.16	-.40	.30
FT	751741	A	4106	.55	.55	.23	.05	.16	.00	.00	.37	.37	-.30	-.43	-.29
FT	751748	B	4106	.61	.22	.61	.06	.11	.00	.00	.35	-.27	.35	-.43	-.25
FT	751743	C	4106	.67	.05	.16	.67	.12	.00	.00	.33	-.25	-.28	.33	-.24
FT	751746	A	4106	.39	.39	.19	.13	.29	.00	.00	.15	.15	-.16	-.25	-.08
FT	751744	B	4106	.46	.24	.46	.15	.15	.00	.00	.20	-.12	.20	-.26	-.20

***Student counts are based on Online adminstrations only.**

Appendix G: Mathematics Key Verification and Foil Analysis

Grade 3 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	599737	C	22028	.74	.08	.09	.74	.09	.00	.00	.49	-.38	-.35	.49	-.36
OP	599771	D	22028	.46	.20	.28	.05	.46	.00	.00	.38	-.39	-.29	-.44	.38
OP	600451	A	22028	.79	.79	.04	.14	.04	.00	.00	.36	.36	-.26	-.26	-.26
OP	633865	A	22028	.83	.83	.09	.05	.02	.00	.00	.39	.39	-.34	-.18	-.24
OP	659843	C	22028	.69	.19	.05	.69	.06	.00	.00	.38	-.26	-.33	.38	-.31
OP	659850	B	22028	.54	.23	.54	.16	.07	.00	.00	.38	-.30	.38	-.34	-.35
OP	659852	B	22028	.66	.17	.66	.11	.06	.00	.00	.35	-.33	.35	-.21	-.27
OP	659859	B	22028	.57	.04	.57	.33	.06	.00	.00	.43	-.28	.43	-.37	-.45
OP	659862	A	22028	.61	.61	.14	.13	.12	.00	.00	.37	.37	-.32	-.29	-.27
OP	659867	A	22028	.76	.76	.08	.08	.07	.00	.00	.41	.41	-.27	-.28	-.33
OP	659868	C	22028	.68	.17	.08	.68	.07	.00	.00	.34	-.34	-.17	.34	-.23
OP	659874	A	22028	.72	.72	.23	.03	.03	.00	.00	.37	.37	-.28	-.31	-.32
OP	659887	D	22028	.68	.02	.25	.04	.68	.00	.00	.36	-.22	-.31	-.27	.36
OP	689743	C	22028	.71	.10	.11	.71	.08	.00	.00	.45	-.33	-.36	.45	-.33
OP	689757	D	22028	.78	.07	.05	.10	.78	.00	.00	.36	-.22	-.25	-.28	.36
OP	689759	B	22028	.76	.04	.76	.02	.19	.00	.00	.45	-.30	.45	-.25	-.39
OP	689766	D	22028	.50	.10	.30	.09	.50	.00	.00	.49	-.36	-.48	-.42	.49
OP	689768	C	22028	.53	.08	.20	.53	.19	.00	.00	.39	-.20	-.23	.39	-.51
OP	689773	C	22028	.72	.19	.06	.72	.04	.00	.00	.41	-.35	-.31	.41	-.24
OP	689780	C	22028	.59	.03	.01	.59	.37	.00	.00	.47	-.38	-.22	.47	-.45
OP	689791	B	22028	.65	.07	.65	.09	.18	.00	.00	.42	-.34	.42	-.34	-.33
OP	689801	B	22028	.74	.05	.74	.10	.10	.00	.00	.42	-.27	.42	-.33	-.31
OP	706982	C	22028	.78	.07	.11	.78	.04	.00	.00	.39	-.30	-.23	.39	-.31
OP	706987	C	22028	.62	.16	.13	.62	.09	.00	.00	.45	-.29	-.45	.45	-.39
OP	706988	B	22028	.67	.18	.67	.07	.08	.00	.00	.45	-.39	.45	-.33	-.30
OP	706989	B	22028	.66	.04	.66	.13	.17	.00	.00	.51	-.28	.51	-.35	-.52
OP	706990	B	22028	.80	.14	.80	.03	.03	.00	.00	.52	-.48	.52	-.26	-.27
OP	706995	C	22028	.51	.24	.07	.51	.17	.00	.00	.48	-.56	-.26	.48	-.34
OP	706996	B	22028	.79	.08	.79	.04	.09	.00	.00	.40	-.23	.40	-.28	-.34
OP	707000	A	22028	.67	.67	.19	.04	.10	.00	.00	.39	.39	-.33	-.32	-.27
OP	707001	A	22028	.62	.62	.08	.23	.07	.00	.00	.41	.41	-.33	-.32	-.37
OP	707004	C	22028	.78	.11	.07	.78	.03	.00	.00	.39	-.29	-.29	.39	-.23
OP	707010	B	22028	.47	.29	.47	.13	.11	.00	.00	.39	-.30	.39	-.37	-.44
OP	707013	B	22028	.59	.13	.59	.21	.06	.00	.00	.40	-.43	.40	-.27	-.30
OP	707014	C	22028	.58	.05	.21	.58	.16	.00	.00	.41	-.37	-.35	.41	-.31
OP	707017	A	22028	.80	.80	.09	.05	.06	.00	.00	.35	.35	-.24	-.26	-.24
OP	707020	B	22028	.36	.11	.36	.11	.42	.00	.00	.30	-.26	.30	-.29	-.30
OP	707022	D	22028	.61	.20	.10	.08	.61	.00	.00	.26	-.14	-.27	-.27	.26
OP	707023	C	22028	.73	.06	.09	.73	.11	.00	.00	.48	-.32	-.34	.48	-.40
OP	707024	D	22028	.71	.05	.08	.16	.71	.00	.00	.46	-.42	-.28	-.37	.46

Grade 3 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	707025	D	22028	.67	.02	.03	.28	.67	.00	.00	.50	-.30	-.26	-.47	.50
OP	707026	A	22028	.62	.62	.08	.12	.18	.00	.00	.49	.49	-.37	-.40	-.43
OP	707027	D	22028	.71	.05	.10	.14	.71	.00	.00	.32	-.16	-.28	-.24	.32
OP	707029	D	22028	.55	.16	.12	.16	.55	.00	.00	.42	-.44	-.33	-.30	.42
OP	707031	A	22028	.69	.69	.08	.06	.16	.00	.00	.44	.44	-.35	-.38	-.32
OP	707032	D	22028	.78	.08	.06	.08	.78	.00	.00	.45	-.37	-.27	-.31	.45
OP	707034	D	22028	.55	.28	.06	.11	.55	.00	.00	.40	-.34	-.39	-.32	.40
OP	707035	D	22028	.66	.05	.21	.07	.66	.00	.00	.48	-.36	-.41	-.34	.48
OP	707037	A	22028	.65	.65	.12	.15	.08	.00	.00	.48	.48	-.30	-.43	-.46
OP	707039	D	22028	.35	.06	.47	.12	.35	.00	.00	.25	-.35	-.16	-.45	.25
FT	744504	A	4237	.73	.73	.06	.14	.07	.00	.00	.42	.42	-.32	-.33	-.30
FT	744508	B	3980	.56	.13	.56	.25	.06	.00	.00	.56	-.52	.56	-.52	-.41
FT	744511	D	5903	.52	.23	.06	.19	.52	.00	.00	.50	-.60	-.23	-.35	.50
FT	744519	C	3995	.57	.24	.07	.57	.12	.00	.00	.39	-.48	-.30	.39	-.10
FT	744520	B	3990	.86	.06	.86	.05	.03	.00	.00	.43	-.35	.43	-.24	-.25
FT	744522	B	4315	.86	.04	.86	.07	.03	.00	.00	.42	-.24	.42	-.32	-.28
FT	744523	C	3997	.87	.05	.06	.87	.01	.00	.00	.40	-.27	-.32	.40	-.16
FT	744524	B	4437	.93	.02	.93	.03	.02	.00	.00	.31	-.16	.31	-.23	-.19
FT	744528	B	3924	.89	.03	.89	.03	.05	.00	.00	.39	-.22	.39	-.20	-.32
FT	744530	A	4399	.86	.86	.11	.01	.02	.00	.00	.37	.37	-.36	-.12	-.13
FT	744531	A	4252	.53	.53	.28	.07	.12	.00	.00	.39	.39	-.33	-.29	-.37
FT	744532	B	3879	.49	.06	.49	.05	.41	.00	.00	.52	-.37	.52	-.26	-.53
FT	744534	A	5821	.19	.19	.04	.70	.07	.00	.00	.43	.43	-.39	-.44	-.49
FT	744536	D	4149	.61	.16	.11	.12	.61	.00	.00	.41	-.28	-.31	-.41	.41
FT	744538	D	4170	.87	.04	.04	.04	.87	.00	.00	.46	-.33	-.30	-.29	.46
FT	744544	D	6399	.90	.05	.02	.03	.90	.00	.00	.35	-.26	-.20	-.21	.35
FT	744550	B	3719	.87	.03	.87	.10	.01	.00	.00	.18	-.05	.18	-.16	-.16
FT	744552	A	6059	.95	.95	.01	.01	.02	.00	.00	.13	.13	-.07	-.06	-.10
FT	744555	C	3495	.80	.12	.07	.80	.01	.00	.00	.33	-.25	-.25	.33	-.13
FT	744558	B	3823	.80	.02	.80	.12	.06	.00	.00	.40	-.19	.40	-.34	-.26
FT	744563	D	6156	.79	.15	.04	.02	.79	.00	.00	.26	-.21	-.16	-.15	.26
FT	744566	D	3929	.44	.33	.18	.05	.44	.00	.00	.23	-.25	-.13	-.28	.23
FT	744569	D	4003	.62	.08	.04	.26	.62	.00	.00	.30	-.31	-.19	-.23	.30
FT	744571	D	4103	.59	.15	.14	.12	.59	.00	.00	.44	-.37	-.38	-.34	.44
FT	744573	A	3973	.52	.52	.26	.21	.01	.00	.00	.07	.07	.02	-.12	-.21
FT	744576	D	4019	.96	.03	.01	.01	.96	.00	.00	.25	-.15	-.15	-.17	.25
FT	744582	B	3878	.55	.34	.55	.08	.03	.00	.00	.17	-.13	.17	-.10	-.27
FT	744612	A	4285	.94	.94	.02	.01	.03	.00	.00	.15	.15	-.07	-.11	-.10
FT	744613	D	4076	.72	.07	.17	.04	.72	.00	.00	.47	-.40	-.37	-.29	.47
FT	744614	C	3429	.82	.05	.08	.82	.05	.00	.00	.46	-.34	-.35	.46	-.26
FT	744617	A	3691	.33	.33	.07	.08	.52	.00	.00	.35	.35	-.44	-.50	-.31

Grade 3 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	744620	C	3474	.75	.15	.04	.75	.06	.00	.00	.45	-.38	-.25	.45	-.32
FT	744624	B	5934	.60	.05	.60	.11	.24	.00	.00	.53	-.37	.53	-.40	-.49
FT	744626	A	4008	.63	.63	.14	.08	.16	.00	.00	.33	.33	-.36	-.30	-.16
FT	744628	C	3462	.78	.07	.06	.78	.09	.00	.00	.43	-.28	-.31	.43	-.34
FT	744631	C	3891	.70	.13	.08	.70	.09	.00	.00	.44	-.34	-.29	.44	-.36
FT	744636	A	4261	.78	.78	.07	.04	.10	.00	.00	.43	.43	-.33	-.27	-.33
FT	744637	A	6338	.61	.61	.12	.12	.14	.00	.00	.46	.46	-.36	-.31	-.42
FT	744638	B	6097	.85	.08	.85	.03	.03	.00	.00	.40	-.30	.40	-.25	-.23
FT	744641	B	6004	.71	.05	.71	.06	.18	.00	.00	.43	-.32	.43	-.35	-.32
FT	744642	D	3940	.71	.08	.11	.10	.71	.00	.00	.42	-.32	-.28	-.36	.42
FT	744643	C	4072	.80	.08	.07	.80	.06	.00	.00	.48	-.40	-.33	.48	-.29
FT	744644	A	4300	.84	.84	.04	.10	.03	.00	.00	.33	.33	-.30	-.16	-.27
FT	744647	B	3932	.72	.09	.72	.12	.07	.00	.00	.47	-.41	.47	-.32	-.36
FT	744653	D	4046	.76	.09	.10	.04	.76	.00	.00	.38	-.35	-.21	-.28	.38
FT	744658	C	5973	.67	.08	.13	.67	.12	.00	.00	.54	-.37	-.44	.54	-.44
FT	744659	B	4199	.66	.16	.66	.09	.09	.00	.00	.43	-.34	.43	-.36	-.31
FT	744660	D	4063	.49	.19	.14	.18	.49	.00	.00	.47	-.47	-.41	-.42	.47
FT	744663	C	3977	.53	.15	.24	.53	.08	.00	.00	.43	-.38	-.38	.43	-.39
FT	744667	D	3829	.80	.07	.08	.05	.80	.00	.00	.41	-.30	-.28	-.28	.41

Grade 4 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	603920	A	23143	.74	.74	.05	.02	.19	.00	.00	.47	.47	-.33	-.33	-.39
OP	603962	A	23143	.78	.78	.15	.05	.01	.00	.00	.38	.38	-.36	-.18	-.15
OP	604004	C	23143	.82	.07	.05	.82	.06	.00	.00	.40	-.27	-.25	.40	-.29
OP	604044	D	23143	.69	.05	.20	.06	.69	.00	.00	.18	-.32	.01	-.29	.18
OP	604096	A	23143	.66	.66	.06	.14	.14	.00	.00	.57	.57	-.35	-.49	-.51
OP	604102	D	23143	.69	.09	.04	.17	.69	.00	.00	.50	-.44	-.37	-.37	.50
OP	604128	D	23143	.62	.09	.04	.24	.62	.00	.00	.45	-.54	-.37	-.30	.45
OP	634173	B	23143	.73	.04	.73	.16	.07	.00	.00	.51	-.18	.51	-.47	-.39
OP	634177	B	23143	.75	.17	.75	.03	.05	.00	.00	.45	-.41	.45	-.19	-.31
OP	646586	A	23143	.62	.62	.07	.22	.09	.00	.00	.46	.46	-.31	-.35	-.48
OP	646588	B	23143	.82	.06	.82	.09	.03	.00	.00	.47	-.24	.47	-.41	-.29
OP	646592	A	23143	.76	.76	.08	.12	.05	.00	.00	.38	.38	-.27	-.24	-.34
OP	646594	D	23143	.70	.13	.12	.05	.70	.00	.00	.36	-.37	-.23	-.18	.36
OP	646601	C	23143	.54	.34	.08	.54	.04	.00	.00	.45	-.40	-.42	.45	-.38
OP	659906	C	23143	.69	.09	.13	.69	.09	.00	.00	.42	-.27	-.34	.42	-.33
OP	659932	B	23143	.64	.14	.64	.19	.03	.00	.00	.46	-.43	.46	-.36	-.29

Grade 4 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	659935	D	23143	.71	.09	.08	.12	.71	.00	.00	.46	-.44	-.35	-.26	.46
OP	659939	B	23143	.62	.16	.62	.09	.13	.00	.00	.38	-.27	.38	-.36	-.29
OP	659941	C	23143	.58	.28	.04	.58	.09	.00	.00	.39	-.34	-.35	.39	-.28
OP	659945	D	23143	.52	.23	.13	.11	.52	.00	.00	.42	-.40	-.42	-.27	.42
OP	659961	A	23143	.55	.55	.08	.33	.04	.00	.00	.42	.42	-.51	-.35	-.27
OP	659971	C	23143	.64	.20	.08	.64	.08	.00	.00	.58	-.56	-.42	.58	-.40
OP	659976	B	23143	.68	.12	.68	.10	.10	.00	.00	.42	-.31	.42	-.31	-.33
OP	659977	B	23143	.78	.03	.78	.12	.07	.00	.00	.40	-.30	.40	-.34	-.22
OP	659979	B	23143	.59	.07	.59	.23	.11	.00	.00	.33	-.38	.33	-.26	-.22
OP	689809	A	23143	.49	.49	.17	.09	.24	.00	.00	.46	.46	-.32	-.49	-.44
OP	689814	C	23143	.45	.04	.20	.45	.31	.00	.00	.49	-.37	-.56	.49	-.42
OP	689821	B	23143	.50	.09	.50	.39	.02	.00	.00	.44	-.20	.44	-.48	-.30
OP	689825	A	23143	.55	.55	.31	.11	.03	.00	.00	.55	.55	-.52	-.50	-.40
OP	689834	C	23143	.66	.06	.07	.66	.21	.00	.00	.32	-.32	-.29	.32	-.20
OP	689835	D	23143	.70	.02	.11	.17	.70	.00	.00	.33	-.19	-.30	-.24	.33
OP	689844	B	23143	.62	.04	.62	.12	.22	.00	.00	.53	-.31	.53	-.42	-.50
OP	692376	D	23143	.60	.14	.12	.14	.60	.00	.00	.34	-.27	-.29	-.26	.34
OP	707043	A	23143	.67	.67	.05	.07	.21	.00	.00	.35	.35	-.33	-.43	-.17
OP	707045	B	23143	.66	.11	.66	.08	.15	.00	.00	.35	-.35	.35	-.31	-.18
OP	707046	B	23143	.68	.17	.68	.06	.09	.00	.00	.51	-.43	.51	-.38	-.37
OP	707052	C	23143	.59	.03	.33	.59	.05	.00	.00	.54	-.15	-.55	.54	-.37
OP	707056	C	23143	.69	.02	.23	.69	.05	.00	.00	.36	-.25	-.27	.36	-.34
OP	707058	D	23143	.60	.05	.12	.23	.60	.00	.00	.35	-.16	-.41	-.25	.35
OP	707059	B	23143	.81	.14	.81	.05	.01	.00	.00	.36	-.29	.36	-.25	-.18
OP	707062	C	23143	.74	.06	.03	.74	.17	.00	.00	.32	-.16	-.14	.32	-.31
OP	707063	A	23143	.81	.81	.02	.15	.02	.00	.00	.28	.28	-.16	-.22	-.20
OP	707067	D	23143	.78	.08	.09	.05	.78	.00	.00	.46	-.36	-.35	-.24	.46
OP	707069	C	23143	.63	.02	.11	.63	.24	.00	.00	.31	-.23	-.25	.31	-.25
OP	707071	A	23143	.65	.65	.16	.09	.09	.00	.00	.41	.41	-.39	-.26	-.29
OP	707077	B	23143	.57	.03	.57	.38	.03	.00	.00	.29	-.28	.29	-.25	-.24
OP	707078	D	23143	.83	.08	.02	.07	.83	.00	.00	.42	-.27	-.30	-.33	.42
OP	707079	C	23143	.66	.21	.03	.66	.09	.00	.00	.47	-.44	-.29	.47	-.32
OP	707082	B	23143	.41	.10	.41	.37	.12	.00	.00	.40	-.43	.40	-.39	-.37
OP	707083	D	23143	.56	.24	.15	.05	.56	.00	.00	.41	-.41	-.28	-.34	.41
OP	707085	A	23143	.73	.73	.08	.15	.04	.00	.00	.27	.27	-.34	-.09	-.24
OP	707088	D	23143	.61	.17	.13	.09	.61	.00	.00	.41	-.26	-.41	-.35	.41
OP	707092	B	23143	.60	.14	.60	.08	.18	.00	.00	.35	-.41	.35	-.28	-.19
OP	707100	C	23143	.40	.51	.07	.40	.02	.00	.00	.42	-.39	-.54	.42	-.27
OP	707101	A	23143	.62	.62	.11	.13	.14	.00	.00	.50	.50	-.44	-.47	-.36
FT	744684	B	6714	.44	.09	.44	.26	.21	.00	.00	.46	-.32	.46	-.36	-.55

Grade 4 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	744689	A	6182	.41	.41	.30	.18	.10	.00	.00	.62	.62	-.59	-.67	-.57
FT	744698	B	3908	.53	.30	.53	.14	.03	.00	.00	.66	-.66	.66	-.65	-.28
FT	744701	C	4342	.93	.05	.01	.93	.02	.00	.00	.35	-.28	-.09	.35	-.24
FT	744702	D	4360	.77	.10	.06	.07	.77	.00	.00	.46	-.36	-.38	-.27	.46
FT	744703	D	4142	.73	.18	.03	.05	.73	.00	.00	.55	-.54	-.28	-.28	.55
FT	744704	C	4347	.64	.02	.10	.64	.24	.00	.00	.34	-.18	-.26	.34	-.30
FT	744705	B	3743	.83	.09	.83	.03	.05	.00	.00	.36	-.26	.36	-.26	-.24
FT	744706	A	3819	.73	.73	.08	.10	.08	.00	.00	.43	.43	-.27	-.30	-.39
FT	744717	B	4199	.44	.25	.44	.19	.12	.00	.00	.14	-.11	.14	-.07	-.22
FT	744723	C	4190	.87	.03	.08	.87	.01	.00	.00	.37	-.26	-.30	.37	-.15
FT	744729	B	6679	.53	.28	.53	.09	.09	.00	.00	.36	-.25	.36	-.37	-.37
FT	744734	C	3735	.37	.13	.25	.37	.24	.00	.00	.44	-.43	-.50	.44	-.42
FT	744736	B	4350	.79	.03	.79	.08	.10	.00	.00	.42	-.20	.42	-.33	-.32
FT	744740	C	4196	.87	.07	.04	.87	.02	.00	.00	.42	-.29	-.33	.42	-.23
FT	744744	D	4722	.84	.07	.03	.05	.84	.00	.00	.52	-.44	-.29	-.33	.52
FT	744745	A	4251	.63	.63	.05	.23	.09	.00	.00	.49	.49	-.33	-.43	-.42
FT	744754	C	3784	.65	.14	.12	.65	.08	.00	.00	.43	-.38	-.32	.43	-.31
FT	744757	B	4245	.63	.15	.63	.14	.08	.00	.00	.46	-.41	.46	-.39	-.33
FT	744760	B	4333	.94	.04	.94	.02	.00	.00	.00	.31	-.22	.31	-.21	-.09
FT	744765	A	4117	.54	.54	.22	.06	.18	.00	.00	.51	.51	-.47	-.36	-.48
FT	744769	D	6455	.38	.24	.18	.20	.38	.00	.00	.26	-.22	-.23	-.29	.26
FT	744771	B	6172	.78	.12	.78	.07	.02	.00	.00	.42	-.32	.42	-.32	-.22
FT	744773	A	4135	.83	.83	.03	.02	.12	.00	.00	.32	.32	-.28	-.14	-.23
FT	744775	C	4362	.75	.03	.11	.75	.11	.00	.00	.39	-.17	-.24	.39	-.37
FT	744778	C	6742	.84	.08	.02	.84	.07	.00	.00	.36	-.24	-.19	.36	-.27
FT	744780	A	4239	.72	.72	.27	.01	.01	.00	.00	.22	.22	-.20	-.13	-.16
FT	744781	A	4127	.91	.91	.06	.02	.00	.00	.00	.29	.29	-.26	-.14	-.12
FT	744783	B	4590	.84	.07	.84	.00	.08	.00	.00	.33	-.31	.33	-.06	-.22
FT	744786	B	3883	.77	.18	.77	.03	.01	.00	.00	.43	-.40	.43	-.25	-.18
FT	744791	B	4015	.82	.01	.82	.11	.06	.00	.00	.40	-.19	.40	-.28	-.34
FT	744796	A	4324	.76	.76	.10	.05	.10	.00	.00	.28	.28	-.15	-.28	-.21
FT	744797	C	4026	.74	.05	.15	.74	.06	.00	.00	.29	-.25	-.18	.29	-.22
FT	744810	D	4454	.58	.19	.12	.11	.58	.00	.00	.48	-.47	-.34	-.39	.48
FT	744811	C	6273	.70	.17	.06	.70	.07	.00	.00	.42	-.36	-.25	.42	-.27
FT	744813	B	6813	.89	.04	.89	.04	.03	.00	.00	.41	-.25	.41	-.30	-.25
FT	744814	A	4078	.93	.93	.04	.01	.02	.00	.00	.36	.36	-.31	-.20	-.15
FT	744815	A	4211	.93	.93	.03	.01	.02	.00	.00	.37	.37	-.27	-.20	-.21
FT	744816	D	3765	.51	.42	.04	.03	.51	.00	.00	.49	-.47	-.42	-.33	.49
FT	744819	A	6770	.86	.86	.04	.03	.07	.00	.00	.36	.36	-.29	-.22	-.21
FT	744821	B	4249	.82	.07	.82	.05	.06	.00	.00	.35	-.26	.35	-.25	-.22

Grade 4 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	744823	C	6147	.35	.36	.10	.35	.19	.00	.00	.47	-.50	-.52	.47	-.41
FT	744825	C	4250	.71	.05	.11	.71	.12	.00	.00	.44	-.36	-.30	.44	-.35
FT	744827	D	4588	.34	.07	.51	.07	.34	.00	.00	.32	-.48	-.29	-.29	.32
FT	744829	D	3994	.79	.03	.15	.03	.79	.00	.00	.48	-.33	-.39	-.31	.48
FT	744833	D	4327	.49	.09	.23	.19	.49	.00	.00	.38	-.39	-.34	-.34	.38
FT	744839	C	3794	.67	.02	.07	.67	.23	.00	.00	.51	-.23	-.30	.51	-.51
FT	744907	D	4563	.82	.12	.04	.02	.82	.00	.00	.41	-.35	-.23	-.25	.41
FT	744910	A	3757	.79	.79	.09	.05	.07	.00	.00	.41	.41	-.32	-.23	-.31
FT	744911	D	3979	.92	.02	.02	.04	.92	.00	.00	.21	-.12	-.10	-.16	.21

Grade 5 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	603427	B	22799	.60	.06	.60	.07	.27	.00	.00	.28	-.34	.28	-.29	-.15
OP	603428	D	22799	.71	.08	.06	.15	.71	.00	.00	.45	-.36	-.30	-.34	.45
OP	603482	A	22799	.66	.66	.25	.05	.03	.00	.00	.44	.44	-.43	-.26	-.17
OP	603534	B	22799	.52	.22	.52	.08	.18	.00	.00	.44	-.44	.44	-.50	-.26
OP	634248	D	22799	.69	.05	.05	.21	.69	.00	.00	.44	-.39	-.37	-.31	.44
OP	634267	A	22799	.60	.60	.07	.08	.25	.00	.00	.35	.35	-.30	-.32	-.27
OP	646629	D	22799	.67	.16	.10	.07	.67	.00	.00	.54	-.39	-.44	-.45	.54
OP	646667	B	22799	.56	.18	.56	.09	.16	.00	.00	.57	-.52	.57	-.45	-.50
OP	659999	B	22799	.58	.16	.58	.22	.04	.00	.00	.30	-.22	.30	-.26	-.27
OP	660008	A	22799	.72	.72	.08	.15	.04	.00	.00	.39	.39	-.31	-.30	-.24
OP	660018	C	22799	.56	.10	.10	.56	.24	.00	.00	.28	-.30	-.31	.28	-.15
OP	689865	C	22799	.51	.23	.17	.51	.09	.00	.00	.36	-.30	-.34	.36	-.30
OP	689866	D	22799	.62	.07	.05	.26	.62	.00	.00	.53	-.31	-.36	-.51	.53
OP	689879	A	22799	.51	.51	.34	.09	.07	.00	.00	.47	.47	-.46	-.38	-.30
OP	689881	D	22799	.41	.33	.11	.15	.41	.00	.00	.52	-.56	-.51	-.36	.52
OP	689884	D	22799	.71	.06	.14	.09	.71	.00	.00	.51	-.32	-.43	-.40	.51
OP	689887	B	22799	.66	.18	.66	.09	.08	.00	.00	.43	-.38	.43	-.31	-.26
OP	689893	D	22799	.56	.27	.06	.11	.56	.00	.00	.49	-.50	-.28	-.34	.49
OP	689895	A	22799	.73	.73	.13	.12	.02	.00	.00	.29	.29	-.24	-.20	-.20
OP	689897	D	22799	.51	.14	.16	.18	.51	.00	.00	.35	-.41	-.24	-.27	.35
OP	689899	B	22799	.60	.11	.60	.09	.20	.00	.00	.50	-.35	.50	-.37	-.48
OP	689912	A	22799	.68	.68	.10	.09	.13	.00	.00	.46	.46	-.37	-.35	-.33
OP	689921	A	22799	.72	.72	.09	.07	.12	.00	.00	.41	.41	-.28	-.31	-.31
OP	689924	B	22799	.48	.15	.48	.15	.23	.00	.00	.29	-.37	.29	-.38	-.10
OP	689926	C	22799	.46	.22	.24	.46	.09	.00	.00	.46	-.49	-.42	.46	-.33

Grade 5 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	707102	C	22799	.55	.11	.12	.55	.21	.00	.00	.41	-.44	-.38	.41	-.25
OP	707103	C	22799	.54	.14	.08	.54	.24	.00	.00	.32	-.31	-.36	.32	-.19
OP	707106	C	22799	.78	.06	.11	.78	.05	.00	.00	.45	-.32	-.30	.45	-.37
OP	707107	D	22799	.43	.14	.11	.32	.43	.00	.00	.41	-.51	-.42	-.31	.41
OP	707109	C	22799	.79	.04	.03	.79	.14	.00	.00	.29	-.21	-.21	.29	-.20
OP	707112	B	22799	.70	.15	.70	.11	.03	.00	.00	.54	-.52	.54	-.38	-.24
OP	707113	D	22799	.51	.19	.18	.13	.51	.00	.00	.51	-.38	-.45	-.54	.51
OP	707114	B	22799	.63	.15	.63	.12	.10	.00	.00	.46	-.46	.46	-.32	-.28
OP	707115	C	22799	.69	.20	.07	.69	.04	.00	.00	.40	-.30	-.35	.40	-.30
OP	707116	C	22799	.75	.05	.13	.75	.07	.00	.00	.48	-.36	-.39	.48	-.29
OP	707118	B	22799	.66	.05	.66	.22	.06	.00	.00	.48	-.28	.48	-.47	-.23
OP	707120	C	22799	.62	.06	.22	.62	.09	.00	.00	.41	-.33	-.36	.41	-.27
OP	707122	D	22799	.55	.32	.05	.08	.55	.00	.00	.53	-.50	-.43	-.37	.53
OP	707125	A	22799	.82	.82	.05	.05	.08	.00	.00	.50	.50	-.30	-.32	-.42
OP	707128	C	22799	.78	.11	.07	.78	.05	.00	.00	.41	-.24	-.36	.41	-.28
OP	707129	D	22799	.65	.05	.28	.02	.65	.00	.00	.39	-.27	-.36	-.20	.39
OP	707131	A	22799	.70	.70	.18	.04	.08	.00	.00	.46	.46	-.43	-.29	-.29
OP	707135	D	22799	.84	.02	.13	.02	.84	.00	.00	.29	-.17	-.23	-.17	.29
OP	707136	A	22799	.71	.71	.18	.09	.01	.00	.00	.25	.25	-.17	-.24	-.17
OP	707138	D	22799	.64	.12	.16	.08	.64	.00	.00	.52	-.46	-.41	-.35	.52
OP	707140	B	22799	.74	.07	.74	.05	.14	.00	.00	.37	-.32	.37	-.23	-.25
OP	707143	D	22799	.53	.08	.28	.11	.53	.00	.00	.49	-.29	-.48	-.43	.49
OP	707146	C	22799	.59	.14	.17	.59	.10	.00	.00	.42	-.32	-.34	.42	-.38
OP	707149	C	22799	.66	.26	.05	.66	.03	.00	.00	.26	-.16	-.24	.26	-.31
OP	707152	D	22799	.61	.26	.06	.07	.61	.00	.00	.33	-.21	-.37	-.33	.33
OP	707153	A	22799	.53	.53	.18	.21	.08	.00	.00	.50	.50	-.45	-.42	-.44
OP	707154	B	22799	.53	.19	.53	.22	.06	.00	.00	.39	-.39	.39	-.31	-.26
OP	707155	A	22799	.79	.79	.10	.04	.07	.00	.00	.46	.46	-.33	-.31	-.33
OP	707157	B	22799	.50	.45	.50	.03	.02	.00	.00	.41	-.39	.41	-.24	-.28
OP	707158	C	22799	.84	.01	.08	.84	.06	.00	.00	.36	-.21	-.29	.36	-.21
FT	744824	A	4544	.72	.72	.16	.09	.03	.00	.00	.53	.53	-.41	-.45	-.35
FT	744883	A	4306	.68	.68	.16	.10	.06	.00	.00	.44	.44	-.44	-.25	-.26
FT	744887	D	3782	.73	.13	.09	.05	.73	.00	.00	.47	-.38	-.37	-.27	.47
FT	744888	D	4683	.71	.12	.08	.08	.71	.00	.00	.57	-.45	-.49	-.41	.57
FT	744889	C	6531	.63	.35	.02	.63	.01	.00	.00	.48	-.47	-.22	.48	-.18
FT	744891	C	6444	.65	.04	.27	.65	.04	.00	.00	.39	-.29	-.35	.39	-.22
FT	744892	A	5976	.74	.74	.10	.06	.10	.00	.00	.55	.55	-.36	-.37	-.47
FT	744893	D	4131	.50	.04	.20	.26	.50	.00	.00	.33	-.33	-.23	-.34	.33
FT	744894	C	6506	.88	.03	.05	.88	.05	.00	.00	.39	-.21	-.26	.39	-.26
FT	744895	B	4350	.83	.01	.83	.04	.12	.00	.00	.24	-.15	.24	-.29	-.13

Grade 5 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	744896	A	4281	.69	.69	.26	.02	.03	.00	.00	.22	.22	-.15	-.26	-.18
FT	744897	C	4133	.68	.18	.09	.68	.05	.00	.00	.42	-.34	-.32	.42	-.32
FT	744898	D	4264	.67	.15	.09	.09	.67	.00	.00	.42	-.33	-.33	-.32	.42
FT	744899	A	4243	.82	.82	.08	.06	.04	.00	.00	.41	.41	-.29	-.28	-.30
FT	744901	A	4176	.79	.79	.12	.06	.03	.00	.00	.39	.39	-.29	-.30	-.22
FT	744912	B	5881	.48	.12	.48	.33	.07	.00	.00	.43	-.38	.43	-.40	-.33
FT	744916	B	5904	.50	.37	.50	.07	.07	.00	.00	.26	-.19	.26	-.28	-.28
FT	744918	B	4235	.52	.40	.52	.04	.03	.00	.00	.35	-.30	.35	-.34	-.34
FT	744919	A	4237	.85	.85	.03	.06	.06	.00	.00	.42	.42	-.25	-.33	-.27
FT	744920	C	4241	.82	.07	.04	.82	.07	.00	.00	.38	-.29	-.23	.38	-.24
FT	744921	C	4297	.47	.09	.05	.47	.39	.00	.00	.24	-.35	-.29	.24	-.16
FT	744923	B	4237	.59	.07	.59	.07	.27	.00	.00	.59	-.41	.59	-.41	-.57
FT	744924	C	4112	.79	.00	.17	.79	.03	.00	.00	.41	-.13	-.38	.41	-.23
FT	744926	A	4032	.77	.77	.06	.12	.05	.00	.00	.43	.43	-.29	-.33	-.29
FT	744928	D	3772	.55	.09	.33	.03	.55	.00	.00	.55	-.28	-.58	-.31	.55
FT	744929	B	4348	.84	.05	.84	.03	.08	.00	.00	.30	-.18	.30	-.22	-.21
FT	744930	A	4211	.69	.69	.13	.16	.01	.00	.00	.28	.28	-.18	-.26	-.16
FT	744931	D	3646	.83	.04	.02	.12	.83	.00	.00	.40	-.26	-.20	-.32	.40
FT	744932	C	3865	.79	.05	.15	.79	.01	.00	.00	.41	-.29	-.34	.41	-.18
FT	744933	C	4116	.43	.12	.14	.43	.31	.00	.00	.31	-.37	-.24	.31	-.28
FT	744935	B	4343	.31	.06	.31	.34	.28	.00	.00	.23	-.28	.23	-.20	-.27
FT	744936	D	4092	.69	.05	.12	.14	.69	.00	.00	.36	-.29	-.29	-.25	.36
FT	744937	C	3782	.89	.03	.04	.89	.03	.00	.00	.36	-.24	-.25	.36	-.20
FT	744938	B	3668	.62	.36	.62	.01	.00	.00	.00	.23	-.22	.23	-.17	-.11
FT	744939	B	4274	.46	.12	.46	.27	.15	.00	.00	.47	-.40	.47	-.44	-.45
FT	744940	B	3922	.76	.03	.76	.10	.10	.00	.00	.49	-.29	.49	-.38	-.38
FT	744941	D	4047	.77	.10	.02	.11	.77	.00	.00	.37	-.28	-.24	-.26	.37
FT	744942	A	3895	.83	.83	.10	.06	.01	.00	.00	.32	.32	-.26	-.21	-.16
FT	744943	D	6572	.83	.07	.03	.06	.83	.00	.00	.47	-.30	-.27	-.35	.47
FT	744946	B	3997	.58	.30	.58	.07	.05	.00	.00	.48	-.41	.48	-.40	-.42
FT	744948	B	4123	.66	.17	.66	.07	.10	.00	.00	.38	-.35	.38	-.27	-.23
FT	744951	A	4178	.78	.78	.13	.05	.05	.00	.00	.30	.30	-.24	-.20	-.17
FT	744953	A	6511	.31	.31	.20	.33	.16	.00	.00	.23	.23	-.27	-.25	-.18
FT	744956	A	4259	.34	.34	.22	.25	.19	.00	.00	.18	.18	-.31	-.02	-.26
FT	744957	B	4292	.32	.46	.32	.06	.15	.00	.00	.31	-.35	.31	-.38	-.20
FT	744967	D	4443	.69	.01	.04	.25	.69	.00	.00	.41	-.22	-.23	-.38	.41
FT	744968	C	3796	.92	.01	.05	.92	.02	.00	.00	.24	-.12	-.17	.24	-.16
FT	744972	D	6443	.46	.20	.13	.21	.46	.00	.00	.47	-.44	-.41	-.42	.47
FT	744975	D	6014	.80	.18	.01	.01	.80	.00	.00	.35	-.33	-.14	-.15	.35
FT	744976	C	3835	.88	.01	.01	.88	.11	.00	.00	.25	-.08	-.10	.25	-.23

Grade 6 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	603180	B	22997	.65	.08	.65	.13	.13	.00	.00	.41	-.30	.41	-.37	-.28
OP	603182	A	22997	.87	.87	.10	.01	.01	.00	.00	.34	.34	-.29	-.18	-.16
OP	603346	A	22997	.53	.53	.23	.17	.07	.00	.00	.55	.55	-.51	-.46	-.45
OP	634408	C	22997	.62	.16	.05	.62	.18	.00	.00	.37	-.36	-.37	.37	-.20
OP	646694	C	22997	.63	.13	.14	.63	.09	.00	.00	.40	-.38	-.27	.40	-.27
OP	646714	D	22997	.63	.28	.05	.04	.63	.00	.00	.59	-.57	-.36	-.38	.59
OP	660042	A	22997	.84	.84	.04	.03	.10	.00	.00	.41	.41	-.25	-.27	-.31
OP	660052	D	22997	.64	.20	.06	.09	.64	.00	.00	.41	-.29	-.35	-.37	.41
OP	660054	D	22997	.71	.06	.15	.09	.71	.00	.00	.53	-.29	-.46	-.41	.53
OP	660057	C	22997	.65	.11	.14	.65	.10	.00	.00	.35	-.27	-.26	.35	-.28
OP	660086	A	22997	.60	.60	.09	.15	.16	.00	.00	.52	.52	-.35	-.45	-.47
OP	660094	A	22997	.71	.71	.07	.13	.09	.00	.00	.42	.42	-.35	-.30	-.31
OP	660110	C	22997	.58	.05	.26	.58	.11	.00	.00	.29	-.24	-.31	.29	-.11
OP	660113	A	22997	.41	.41	.12	.18	.29	.00	.00	.40	.40	-.43	-.45	-.32
OP	660116	D	22997	.67	.13	.08	.11	.67	.00	.00	.46	-.32	-.38	-.38	.46
OP	689937	D	22997	.64	.13	.08	.16	.64	.00	.00	.51	-.38	-.41	-.43	.51
OP	689942	D	22997	.81	.02	.04	.13	.81	.00	.00	.39	-.23	-.28	-.30	.39
OP	689955	D	22997	.65	.12	.11	.13	.65	.00	.00	.43	-.36	-.31	-.33	.43
OP	689956	A	22997	.51	.51	.15	.14	.21	.00	.00	.56	.56	-.43	-.42	-.63
OP	689958	B	22997	.63	.20	.63	.14	.03	.00	.00	.45	-.31	.45	-.46	-.27
OP	689968	C	22997	.61	.17	.17	.61	.05	.00	.00	.31	-.26	-.24	.31	-.25
OP	689977	B	22997	.68	.10	.68	.09	.13	.00	.00	.36	-.27	.36	-.34	-.22
OP	689984	D	22997	.48	.27	.10	.15	.48	.00	.00	.55	-.55	-.62	-.35	.55
OP	689985	C	22997	.62	.07	.28	.62	.04	.00	.00	.36	-.32	-.28	.36	-.34
OP	689987	C	22997	.55	.12	.20	.55	.13	.00	.00	.51	-.45	-.52	.51	-.34
OP	689988	C	22997	.68	.10	.12	.68	.10	.00	.00	.47	-.32	-.37	.47	-.38
OP	689992	B	22997	.81	.07	.81	.05	.07	.00	.00	.48	-.34	.48	-.32	-.36
OP	707167	D	22997	.51	.07	.12	.30	.51	.00	.00	.31	-.35	-.31	-.24	.31
OP	707168	D	22997	.76	.13	.06	.05	.76	.00	.00	.49	-.52	-.20	-.24	.49
OP	707169	D	22997	.81	.08	.06	.06	.81	.00	.00	.42	-.24	-.32	-.32	.42
OP	707170	C	22997	.57	.25	.10	.57	.08	.00	.00	.51	-.49	-.41	.51	-.35
OP	707171	C	22997	.72	.06	.17	.72	.05	.00	.00	.54	-.34	-.51	.54	-.27
OP	707172	A	22997	.59	.59	.20	.11	.11	.00	.00	.53	.53	-.52	-.44	-.31
OP	707175	B	22997	.40	.48	.40	.07	.04	.00	.00	.28	-.23	.28	-.37	-.29
OP	707176	D	22997	.73	.06	.09	.11	.73	.00	.00	.44	-.30	-.35	-.31	.44
OP	707179	A	22997	.68	.68	.10	.18	.04	.00	.00	.27	.27	-.27	-.13	-.29
OP	707182	A	22997	.71	.71	.12	.14	.04	.00	.00	.37	.37	-.28	-.31	-.21
OP	707183	B	22997	.74	.12	.74	.04	.10	.00	.00	.41	-.27	.41	-.29	-.34

Grade 6 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	707184	A	22997	.61	.61	.26	.07	.05	.00	.00	.41	.41	-.31	-.37	-.36
OP	707186	A	22997	.61	.61	.25	.06	.07	.00	.00	.48	.48	-.37	-.43	-.44
OP	707191	D	22997	.43	.03	.42	.12	.43	.00	.00	.44	-.26	-.46	-.33	.44
OP	707192	C	22997	.46	.12	.20	.46	.22	.00	.00	.44	-.49	-.40	.44	-.35
OP	707193	C	22997	.60	.25	.08	.60	.07	.00	.00	.49	-.45	-.33	.49	-.37
OP	707194	A	22997	.73	.73	.17	.03	.06	.00	.00	.56	.56	-.48	-.34	-.39
OP	707197	B	22997	.63	.18	.63	.12	.07	.00	.00	.51	-.57	.51	-.28	-.29
OP	707199	D	22997	.72	.13	.07	.07	.72	.00	.00	.51	-.43	-.34	-.36	.51
OP	707200	B	22997	.63	.11	.63	.11	.15	.00	.00	.33	-.12	.33	-.24	-.39
OP	707202	B	22997	.70	.19	.70	.09	.02	.00	.00	.44	-.33	.44	-.39	-.26
OP	707203	D	22997	.67	.05	.09	.20	.67	.00	.00	.53	-.39	-.36	-.48	.53
OP	707204	C	22997	.73	.05	.08	.73	.14	.00	.00	.41	-.26	-.29	.41	-.33
OP	707207	D	22997	.70	.08	.06	.17	.70	.00	.00	.39	-.41	-.31	-.23	.39
OP	707208	D	22997	.65	.04	.15	.15	.65	.00	.00	.50	-.29	-.49	-.36	.50
OP	707209	A	22997	.62	.62	.13	.09	.16	.00	.00	.53	.53	-.35	-.39	-.53
OP	707210	D	22997	.58	.22	.14	.06	.58	.00	.00	.47	-.41	-.41	-.34	.47
OP	707211	B	22997	.58	.11	.58	.18	.13	.00	.00	.43	-.45	.43	-.40	-.21
OP	707212	A	22997	.59	.59	.16	.17	.08	.00	.00	.40	.40	-.35	-.27	-.40
OP	707216	C	22997	.57	.15	.15	.57	.12	.00	.00	.39	-.26	-.46	.39	-.22
OP	707220	C	22997	.69	.05	.10	.69	.16	.00	.00	.57	-.39	-.45	.57	-.48
FT	744977	C	4105	.81	.03	.09	.81	.08	.00	.00	.32	-.19	-.17	.32	-.29
FT	744978	C	6424	.69	.05	.13	.69	.13	.00	.00	.40	-.31	-.21	.40	-.39
FT	744979	A	4548	.81	.81	.14	.03	.02	.00	.00	.33	.33	-.24	-.24	-.26
FT	744980	B	3857	.47	.11	.47	.27	.15	.00	.00	.41	-.31	.41	-.36	-.44
FT	744981	B	4067	.78	.12	.78	.06	.04	.00	.00	.46	-.38	.46	-.31	-.26
FT	744982	C	3707	.63	.27	.06	.63	.04	.00	.00	.38	-.34	-.28	.38	-.24
FT	744984	B	3957	.88	.04	.88	.03	.06	.00	.00	.33	-.22	.33	-.21	-.22
FT	744985	D	4233	.42	.21	.25	.12	.42	.00	.00	.50	-.49	-.45	-.53	.50
FT	744986	D	3888	.59	.23	.05	.13	.59	.00	.00	.53	-.49	-.45	-.40	.53
FT	744988	C	4544	.65	.13	.11	.65	.11	.00	.00	.38	-.32	-.32	.38	-.26
FT	744990	C	4565	.90	.01	.09	.90	.01	.00	.00	.28	-.13	-.25	.28	-.11
FT	744991	A	6507	.74	.74	.22	.02	.02	.00	.00	.28	.28	-.23	-.19	-.18
FT	744992	A	4402	.58	.58	.28	.03	.11	.00	.00	.29	.29	-.22	-.23	-.29
FT	744993	A	5907	.62	.62	.20	.05	.12	.00	.00	.31	.31	-.23	-.28	-.24
FT	744995	B	4455	.59	.06	.59	.12	.23	.00	.00	.27	-.29	.27	-.23	-.19
FT	744996	A	4609	.59	.59	.10	.23	.08	.00	.00	.41	.41	-.38	-.29	-.38
FT	744997	B	3857	.43	.25	.43	.03	.30	.00	.00	.46	-.59	.46	-.44	-.33
FT	744998	D	6094	.29	.37	.07	.27	.29	.00	.00	.34	-.47	-.40	-.20	.34
FT	745000	A	4708	.39	.39	.26	.23	.12	.00	.00	.22	.22	-.21	-.15	-.29
FT	745002	D	4516	.75	.01	.04	.20	.75	.00	.00	.36	-.21	-.22	-.32	.36

Grade 6 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	745003	D	4295	.79	.08	.03	.10	.79	.00	.00	.46	-.42	-.31	-.27	.46
FT	745004	C	4216	.76	.02	.07	.76	.14	.00	.00	.50	-.23	-.32	.50	-.45
FT	745005	A	3987	.66	.66	.07	.22	.05	.00	.00	.37	.37	-.32	-.26	-.29
FT	745007	D	4607	.65	.12	.13	.10	.65	.00	.00	.49	-.32	-.50	-.31	.49
FT	745008	A	4480	.72	.72	.03	.11	.15	.00	.00	.33	.33	-.28	-.31	-.19
FT	745009	C	4734	.36	.16	.41	.36	.07	.00	.00	.21	-.41	-.10	.21	-.30
FT	745011	D	3611	.91	.06	.02	.01	.91	.00	.00	.37	-.27	-.27	-.15	.37
FT	745013	A	6133	.66	.66	.18	.10	.06	.00	.00	.48	.48	-.44	-.31	-.31
FT	745014	D	3657	.68	.17	.11	.04	.68	.00	.00	.51	-.54	-.28	-.25	.51
FT	745015	A	4392	.64	.64	.20	.13	.03	.00	.00	.57	.57	-.57	-.38	-.33
FT	745016	C	4159	.58	.07	.07	.58	.27	.00	.00	.44	-.41	-.30	.44	-.38
FT	745017	C	6428	.68	.11	.14	.68	.06	.00	.00	.53	-.47	-.42	.53	-.27
FT	745018	A	4065	.69	.69	.06	.21	.04	.00	.00	.43	.43	-.39	-.32	-.31
FT	745019	C	4235	.75	.02	.13	.75	.10	.00	.00	.42	-.22	-.38	.42	-.27
FT	745020	A	3812	.85	.85	.08	.06	.02	.00	.00	.43	.43	-.37	-.27	-.18
FT	745022	D	3724	.78	.18	.02	.02	.78	.00	.00	.42	-.35	-.28	-.27	.42
FT	745023	C	5852	.71	.02	.10	.71	.17	.00	.00	.42	-.22	-.38	.42	-.29
FT	745024	C	4442	.87	.05	.03	.87	.05	.00	.00	.48	-.37	-.27	.48	-.32
FT	745025	A	4500	.86	.86	.09	.03	.02	.00	.00	.50	.50	-.43	-.30	-.24
FT	745026	C	4116	.72	.09	.08	.72	.11	.00	.00	.45	-.36	-.34	.45	-.30
FT	745027	B	6080	.58	.10	.58	.23	.08	.00	.00	.51	-.44	.51	-.44	-.33
FT	745028	D	4355	.57	.22	.12	.10	.57	.00	.00	.43	-.37	-.37	-.37	.43
FT	745029	B	4817	.82	.07	.82	.06	.06	.00	.00	.40	-.31	.40	-.23	-.27
FT	745030	D	3767	.46	.04	.44	.06	.46	.00	.00	.38	-.31	-.36	-.35	.38
FT	745031	C	4192	.63	.10	.16	.63	.11	.00	.00	.32	-.34	-.16	.32	-.30
FT	745032	B	3831	.74	.05	.74	.11	.10	.00	.00	.52	-.30	.52	-.40	-.43
FT	745033	C	4123	.79	.14	.03	.79	.04	.00	.00	.47	-.44	-.21	.47	-.25
FT	745034	D	6084	.57	.11	.26	.05	.57	.00	.00	.35	-.34	-.23	-.35	.35
FT	745035	B	6359	.49	.27	.49	.09	.14	.00	.00	.49	-.38	.49	-.44	-.48
FT	745036	B	3947	.79	.16	.79	.02	.04	.00	.00	.36	-.32	.36	-.20	-.19

Grade 7 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	599957	D	22716	.61	.11	.15	.12	.61	.00	.00	.56	-.50	-.47	-.41	.56
OP	600040	A	22716	.72	.72	.03	.23	.02	.00	.00	.49	.49	-.32	-.44	-.25
OP	600076	B	22716	.61	.25	.61	.09	.05	.00	.00	.48	-.50	.48	-.23	-.31

Grade 7 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	600087	A	22716	.78	.78	.12	.05	.04	.00	.00	.39	.39	-.23	-.35	-.29
OP	600120	A	22716	.66	.66	.17	.12	.05	.00	.00	.44	.44	-.33	-.39	-.31
OP	600122	C	22716	.58	.11	.21	.58	.10	.00	.00	.38	-.32	-.38	.38	-.18
OP	634568	B	22716	.67	.13	.67	.15	.05	.00	.00	.49	-.29	.49	-.49	-.34
OP	646868	D	22716	.69	.17	.09	.06	.69	.00	.00	.56	-.43	-.44	-.47	.56
OP	646881	A	22716	.51	.51	.26	.11	.11	.00	.00	.40	.40	-.31	-.33	-.44
OP	646908	A	22716	.47	.47	.29	.16	.08	.00	.00	.40	.40	-.29	-.44	-.40
OP	646911	A	22716	.68	.68	.19	.09	.05	.00	.00	.41	.41	-.27	-.41	-.32
OP	646916	C	22716	.58	.12	.15	.58	.15	.00	.00	.36	-.27	-.36	.36	-.24
OP	646919	D	22716	.63	.13	.10	.14	.63	.00	.00	.50	-.36	-.40	-.45	.50
OP	660127	B	22716	.52	.25	.52	.16	.06	.00	.00	.40	-.28	.40	-.43	-.39
OP	660138	D	22716	.57	.14	.18	.11	.57	.00	.00	.44	-.32	-.41	-.37	.44
OP	660149	B	22716	.55	.09	.55	.19	.17	.00	.00	.30	-.30	.30	-.19	-.29
OP	660162	A	22716	.70	.70	.25	.03	.02	.00	.00	.32	.32	-.26	-.28	-.25
OP	660176	A	22716	.75	.75	.07	.04	.13	.00	.00	.47	.47	-.38	-.35	-.32
OP	660186	A	22716	.53	.53	.18	.21	.07	.00	.00	.34	.34	-.39	-.24	-.22
OP	689997	B	22716	.73	.09	.73	.08	.10	.00	.00	.45	-.29	.45	-.26	-.42
OP	690000	B	22716	.74	.15	.74	.05	.05	.00	.00	.56	-.51	.56	-.35	-.34
OP	690002	C	22716	.64	.05	.22	.64	.08	.00	.00	.57	-.48	-.50	.57	-.37
OP	690008	D	22716	.66	.24	.06	.04	.66	.00	.00	.43	-.31	-.42	-.38	.43
OP	690012	D	22716	.64	.10	.13	.13	.64	.00	.00	.46	-.36	-.34	-.39	.46
OP	690014	C	22716	.76	.10	.10	.76	.04	.00	.00	.45	-.28	-.39	.45	-.30
OP	690019	B	22716	.63	.10	.63	.07	.20	.00	.00	.34	-.31	.34	-.31	-.22
OP	690024	D	22716	.72	.05	.10	.13	.72	.00	.00	.34	-.30	-.32	-.16	.34
OP	690028	D	22716	.57	.09	.13	.22	.57	.00	.00	.48	-.45	-.48	-.33	.48
OP	690041	C	22716	.64	.09	.14	.64	.13	.00	.00	.50	-.44	-.43	.50	-.33
OP	690042	B	22716	.59	.05	.59	.13	.22	.00	.00	.49	-.45	.49	-.36	-.43
OP	707223	B	22716	.73	.11	.73	.10	.06	.00	.00	.40	-.28	.40	-.31	-.26
OP	707232	C	22716	.45	.40	.08	.45	.07	.00	.00	.56	-.57	-.44	.56	-.48
OP	707233	D	22716	.60	.04	.22	.14	.60	.00	.00	.48	-.39	-.36	-.47	.48
OP	707234	A	22716	.67	.67	.05	.05	.23	.00	.00	.43	.43	-.24	-.26	-.40
OP	707235	B	22716	.68	.05	.68	.07	.20	.00	.00	.50	-.31	.50	-.35	-.45
OP	707236	B	22716	.72	.13	.72	.10	.05	.00	.00	.33	-.08	.33	-.38	-.30
OP	707239	C	22716	.73	.12	.07	.73	.08	.00	.00	.43	-.31	-.39	.43	-.27
OP	707240	C	22716	.79	.03	.04	.79	.13	.00	.00	.35	-.27	-.23	.35	-.25
OP	707241	A	22716	.77	.77	.13	.06	.03	.00	.00	.41	.41	-.29	-.30	-.30
OP	707242	D	22716	.74	.08	.15	.03	.74	.00	.00	.43	-.20	-.42	-.27	.43
OP	707244	A	22716	.66	.66	.18	.04	.11	.00	.00	.36	.36	-.34	-.30	-.18
OP	707245	D	22716	.76	.06	.10	.08	.76	.00	.00	.53	-.36	-.42	-.37	.53
OP	707249	B	22716	.70	.07	.70	.19	.04	.00	.00	.49	-.38	.49	-.41	-.29

Grade 7 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	707256	C	22716	.53	.40	.05	.53	.03	.00	.00	.31	-.25	-.35	.31	-.31
OP	707257	B	22716	.63	.15	.63	.09	.12	.00	.00	.49	-.39	.49	-.38	-.40
OP	707263	B	22716	.64	.12	.64	.20	.03	.00	.00	.44	-.38	.44	-.35	-.28
OP	707264	C	22716	.54	.08	.22	.54	.16	.00	.00	.49	-.36	-.55	.49	-.29
OP	707265	C	22716	.67	.07	.14	.67	.11	.00	.00	.50	-.37	-.47	.50	-.30
OP	707266	C	22716	.43	.19	.34	.43	.04	.00	.00	.40	-.40	-.37	.40	-.31
OP	707267	D	22716	.58	.13	.18	.12	.58	.00	.00	.47	-.37	-.43	-.38	.47
OP	707270	B	22716	.56	.13	.56	.07	.24	.00	.00	.43	-.39	.43	-.30	-.36
OP	707272	A	22716	.51	.51	.39	.07	.03	.00	.00	.47	.47	-.42	-.46	-.36
OP	707275	A	22716	.73	.73	.11	.08	.08	.00	.00	.54	.54	-.40	-.40	-.40
OP	707276	C	22716	.46	.27	.12	.46	.15	.00	.00	.25	-.18	-.37	.25	-.17
OP	707278	B	22716	.77	.10	.77	.10	.03	.00	.00	.48	-.41	.48	-.32	-.28
OP	707279	D	22716	.57	.18	.11	.14	.57	.00	.00	.50	-.38	-.45	-.46	.50
OP	707280	A	22716	.56	.56	.15	.19	.10	.00	.00	.50	.50	-.43	-.45	-.35
OP	707281	C	22716	.64	.19	.08	.64	.08	.00	.00	.37	-.32	-.28	.37	-.24
FT	745037	C	4756	.46	.24	.13	.46	.17	.00	.00	.29	-.20	-.37	.29	-.25
FT	745038	D	4621	.45	.05	.04	.46	.45	.00	.00	.46	-.47	-.45	-.42	.46
FT	745039	A	6182	.45	.45	.14	.33	.08	.00	.00	.53	.53	-.52	-.50	-.38
FT	745040	A	4271	.58	.58	.16	.13	.12	.00	.00	.57	.57	-.46	-.48	-.52
FT	745041	D	5774	.63	.09	.18	.10	.63	.00	.00	.60	-.55	-.46	-.45	.60
FT	745042	B	5893	.51	.32	.51	.08	.09	.00	.00	.55	-.55	.55	-.34	-.39
FT	745043	A	6073	.41	.41	.16	.28	.15	.00	.00	.34	.34	-.39	-.23	-.36
FT	745044	B	4281	.55	.11	.55	.23	.12	.00	.00	.41	-.36	.41	-.33	-.33
FT	745045	B	4053	.69	.19	.69	.06	.06	.00	.00	.48	-.47	.48	-.37	-.18
FT	745048	D	4396	.69	.16	.10	.05	.69	.00	.00	.46	-.26	-.46	-.38	.46
FT	745049	C	4474	.54	.11	.28	.54	.07	.00	.00	.48	-.54	-.40	.48	-.32
FT	745050	B	4486	.53	.10	.53	.28	.10	.00	.00	.42	-.36	.42	-.37	-.36
FT	745051	B	4481	.54	.28	.54	.10	.08	.00	.00	.49	-.47	.49	-.33	-.41
FT	745052	A	4515	.52	.52	.14	.17	.16	.00	.00	.40	.40	-.15	-.47	-.40
FT	745053	D	4665	.71	.23	.02	.03	.71	.00	.00	.40	-.35	-.27	-.27	.40
FT	745054	C	3952	.73	.04	.09	.73	.14	.00	.00	.40	-.27	-.35	.40	-.27
FT	745055	D	4528	.72	.08	.06	.14	.72	.00	.00	.48	-.36	-.36	-.36	.48
FT	745056	D	5730	.46	.12	.16	.27	.46	.00	.00	.51	-.53	-.54	-.38	.51
FT	745057	C	3823	.47	.25	.18	.47	.09	.00	.00	.30	-.19	-.30	.30	-.41
FT	745058	B	5860	.55	.19	.55	.14	.12	.00	.00	.55	-.56	.55	-.42	-.38
FT	745059	B	4424	.40	.19	.40	.18	.22	.00	.00	.42	-.37	.42	-.52	-.35
FT	745061	C	4523	.69	.11	.10	.69	.10	.00	.00	.58	-.51	-.40	.58	-.44
FT	745062	B	4021	.65	.21	.65	.07	.08	.00	.00	.46	-.37	.46	-.36	-.35
FT	745063	B	3692	.76	.05	.76	.08	.11	.00	.00	.36	-.32	.36	-.26	-.23
FT	745064	A	5790	.36	.36	.23	.19	.22	.00	.00	.45	.45	-.45	-.41	-.47

Grade 7 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	745065	D	3683	.86	.01	.04	.09	.86	.00	.00	.51	-.21	-.34	-.43	.51
FT	745066	A	3827	.80	.80	.08	.05	.08	.00	.00	.45	.45	-.31	-.32	-.32
FT	745067	D	4548	.62	.14	.13	.10	.62	.00	.00	.52	-.36	-.48	-.44	.52
FT	745068	B	3840	.67	.08	.67	.17	.07	.00	.00	.45	-.42	.45	-.31	-.34
FT	745069	D	4074	.73	.06	.12	.09	.73	.00	.00	.49	-.31	-.43	-.34	.49
FT	745070	A	3975	.89	.89	.04	.04	.03	.00	.00	.40	.40	-.28	-.25	-.23
FT	745071	A	4505	.41	.41	.19	.13	.27	.00	.00	.32	.32	-.29	-.37	-.26
FT	745072	C	6181	.51	.20	.16	.51	.13	.00	.00	.45	-.38	-.39	.45	-.38
FT	745073	B	4302	.52	.13	.52	.16	.20	.00	.00	.09	-.16	.09	-.14	.05
FT	745074	B	5707	.47	.13	.47	.18	.22	.00	.00	.23	-.31	.23	-.32	-.01
FT	745075	B	4046	.66	.20	.66	.08	.07	.00	.00	.41	-.30	.41	-.36	-.33
FT	745076	B	4087	.60	.24	.60	.12	.04	.00	.00	.43	-.37	.43	-.38	-.30
FT	745077	B	4569	.33	.17	.33	.27	.23	.00	.00	.23	-.09	.23	-.35	-.19
FT	745080	D	3975	.36	.26	.22	.16	.36	.00	.00	.31	-.26	-.37	-.31	.31
FT	745081	A	3918	.37	.37	.36	.13	.14	.00	.00	.30	.30	-.24	-.36	-.38
FT	745082	C	3853	.64	.07	.16	.64	.13	.00	.00	.41	-.34	-.31	.41	-.32
FT	745083	C	3713	.51	.19	.10	.51	.20	.00	.00	.24	-.26	-.34	.24	-.06
FT	745087	A	4225	.56	.56	.13	.16	.15	.00	.00	.43	.43	-.42	-.40	-.28
FT	745089	B	4519	.96	.01	.96	.02	.01	.00	.00	.25	-.14	.25	-.17	-.14
FT	745091	C	3867	.78	.06	.11	.78	.05	.00	.00	.42	-.32	-.32	.42	-.25
FT	745092	D	4507	.67	.11	.12	.10	.67	.00	.00	.50	-.47	-.31	-.42	.50
FT	745093	C	6239	.45	.21	.24	.45	.11	.00	.00	.38	-.26	-.39	.38	-.42
FT	745094	C	3723	.72	.10	.10	.72	.08	.00	.00	.49	-.39	-.39	.49	-.33
FT	745095	A	3751	.41	.41	.14	.07	.38	.00	.00	.28	.28	-.30	-.30	-.23
FT	751223	D	4265	.89	.03	.02	.05	.89	.00	.00	.40	-.30	-.23	-.26	.40

Grade 8 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	600368	B	22320	.62	.18	.62	.14	.07	.00	.00	.34	-.25	.34	-.30	-.27
OP	600513	C	22320	.62	.07	.17	.62	.14	.00	.00	.41	-.33	-.33	.41	-.32
OP	634592	C	22320	.82	.04	.07	.82	.08	.00	.00	.41	-.29	-.28	.41	-.29
OP	634655	A	22320	.70	.70	.17	.11	.02	.00	.00	.43	.43	-.35	-.34	-.24
OP	634656	D	22320	.84	.05	.05	.06	.84	.00	.00	.47	-.33	-.29	-.34	.47
OP	646824	B	22320	.78	.13	.78	.04	.04	.00	.00	.39	-.30	.39	-.34	-.16
OP	646826	B	22320	.67	.09	.67	.08	.16	.00	.00	.54	-.26	.54	-.40	-.55
OP	646829	D	22320	.68	.06	.13	.14	.68	.00	.00	.43	-.35	-.34	-.32	.43
OP	646843	D	22320	.75	.09	.06	.10	.75	.00	.00	.54	-.39	-.41	-.40	.54

Grade 8 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	646846	D	22320	.82	.09	.04	.05	.82	.00	.00	.48	-.37	-.32	-.30	.48
OP	646849	A	22320	.65	.65	.13	.15	.07	.00	.00	.56	.56	-.48	-.46	-.38
OP	660228	B	22320	.67	.04	.67	.21	.09	.00	.00	.47	-.23	.47	-.40	-.39
OP	660245	C	22320	.58	.11	.16	.58	.15	.00	.00	.38	-.28	-.34	.38	-.28
OP	690055	A	22320	.62	.62	.17	.18	.03	.00	.00	.42	.42	-.35	-.34	-.34
OP	690060	B	22320	.70	.13	.70	.06	.10	.00	.00	.45	-.40	.45	-.35	-.25
OP	690061	B	22320	.65	.08	.65	.19	.08	.00	.00	.54	-.43	.54	-.45	-.41
OP	690063	D	22320	.62	.13	.10	.15	.62	.00	.00	.52	-.42	-.39	-.44	.52
OP	690065	C	22320	.46	.08	.19	.46	.27	.00	.00	.39	-.37	-.50	.39	-.23
OP	690071	A	22320	.52	.52	.14	.21	.14	.00	.00	.36	.36	-.34	-.28	-.32
OP	690075	A	22320	.78	.78	.04	.01	.17	.00	.00	.31	.31	-.23	-.17	-.25
OP	690079	B	22320	.73	.11	.73	.06	.10	.00	.00	.35	-.38	.35	-.26	-.11
OP	690086	C	22320	.73	.06	.14	.73	.08	.00	.00	.46	-.28	-.45	.46	-.25
OP	690088	D	22320	.71	.08	.06	.15	.71	.00	.00	.46	-.33	-.38	-.34	.46
OP	690096	B	22320	.73	.11	.73	.09	.07	.00	.00	.40	-.26	.40	-.31	-.33
OP	690100	A	22320	.61	.61	.28	.07	.04	.00	.00	.40	.40	-.33	-.36	-.30
OP	690102	C	22320	.76	.14	.06	.76	.04	.00	.00	.43	-.40	-.28	.43	-.17
OP	690103	D	22320	.78	.05	.07	.10	.78	.00	.00	.53	-.33	-.37	-.42	.53
OP	707283	B	22320	.62	.27	.62	.05	.06	.00	.00	.36	-.24	.36	-.38	-.34
OP	707286	D	22320	.54	.04	.06	.36	.54	.00	.00	.44	-.42	-.48	-.36	.44
OP	707288	C	22320	.54	.07	.29	.54	.10	.00	.00	.47	-.36	-.41	.47	-.41
OP	707289	C	22320	.66	.19	.11	.66	.04	.00	.00	.40	-.26	-.35	.40	-.39
OP	707290	C	22320	.59	.06	.19	.59	.16	.00	.00	.29	-.12	-.18	.29	-.35
OP	707291	C	22320	.58	.12	.14	.58	.16	.00	.00	.42	-.39	-.41	.42	-.24
OP	707293	A	22320	.77	.77	.10	.11	.02	.00	.00	.36	.36	-.32	-.22	-.21
OP	707298	B	22320	.70	.07	.70	.18	.05	.00	.00	.33	-.25	.33	-.23	-.29
OP	707299	D	22320	.63	.13	.16	.09	.63	.00	.00	.57	-.44	-.54	-.38	.57
OP	707301	C	22320	.57	.20	.18	.57	.05	.00	.00	.40	-.30	-.37	.40	-.35
OP	707304	B	22320	.51	.16	.51	.10	.22	.00	.00	.44	-.41	.44	-.51	-.28
OP	707305	D	22320	.75	.09	.07	.09	.75	.00	.00	.45	-.37	-.28	-.30	.45
OP	707306	C	22320	.80	.15	.03	.80	.03	.00	.00	.38	-.29	-.24	.38	-.28
OP	707307	C	22320	.56	.06	.10	.56	.28	.00	.00	.43	-.40	-.38	.43	-.33
OP	707308	D	22320	.65	.04	.05	.26	.65	.00	.00	.45	-.35	-.34	-.38	.45
OP	707310	D	22320	.51	.19	.08	.22	.51	.00	.00	.41	-.36	-.38	-.34	.41
OP	707312	C	22320	.48	.12	.27	.48	.13	.00	.00	.48	-.45	-.42	.48	-.43
OP	707313	A	22320	.47	.47	.10	.22	.21	.00	.00	.36	.36	-.34	-.36	-.28
OP	707314	B	22320	.67	.17	.67	.11	.05	.00	.00	.33	-.19	.33	-.31	-.24
OP	707316	D	22320	.71	.07	.10	.12	.71	.00	.00	.52	-.34	-.41	-.43	.52
OP	707317	C	22320	.58	.16	.10	.58	.15	.00	.00	.41	-.42	-.41	.41	-.19
OP	707320	C	22320	.72	.14	.04	.72	.10	.00	.00	.32	-.14	-.26	.32	-.35

Grade 8 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	707321	A	22320	.57	.57	.09	.29	.05	.00	.00	.51	.51	-.44	-.44	-.41
OP	707322	B	22320	.61	.21	.61	.10	.08	.00	.00	.41	-.30	.41	-.41	-.26
OP	707323	A	22320	.55	.55	.14	.20	.10	.00	.00	.47	.47	-.29	-.45	-.44
OP	707325	A	22320	.42	.42	.22	.24	.12	.00	.00	.38	.38	-.37	-.34	-.36
OP	707327	D	22320	.59	.06	.27	.07	.59	.00	.00	.38	-.36	-.26	-.42	.38
OP	707330	D	22320	.67	.08	.13	.12	.67	.00	.00	.49	-.37	-.42	-.35	.49
OP	707331	B	22320	.60	.16	.60	.11	.13	.00	.00	.24	-.11	.24	-.32	-.18
OP	707332	B	22320	.42	.05	.42	.04	.50	.00	.00	.30	-.38	.30	-.39	-.25
OP	707335	A	22320	.52	.52	.22	.09	.16	.00	.00	.52	.52	-.48	-.50	-.39
OP	707336	C	22320	.63	.08	.18	.63	.11	.00	.00	.29	-.21	-.19	.29	-.28
OP	707337	A	22320	.56	.56	.22	.15	.07	.00	.00	.42	.42	-.32	-.38	-.39
FT	745113	D	5717	.72	.05	.12	.11	.72	.00	.00	.50	-.35	-.39	-.36	.50
FT	745115	C	4025	.78	.12	.05	.78	.05	.00	.00	.39	-.29	-.30	.39	-.24
FT	745116	B	4182	.46	.17	.46	.28	.09	.00	.00	.38	-.29	.38	-.37	-.36
FT	745117	D	4851	.51	.21	.14	.14	.51	.00	.00	.29	-.18	-.30	-.30	.29
FT	745119	C	4112	.79	.09	.09	.79	.04	.00	.00	.45	-.42	-.28	.45	-.23
FT	745120	D	4430	.55	.08	.16	.21	.55	.00	.00	.52	-.47	-.48	-.41	.52
FT	745122	A	5789	.62	.62	.12	.12	.14	.00	.00	.51	.51	-.45	-.37	-.40
FT	745123	B	3937	.64	.12	.64	.11	.14	.00	.00	.50	-.44	.50	-.43	-.33
FT	745124	A	4112	.58	.58	.12	.19	.10	.00	.00	.57	.57	-.49	-.48	-.49
FT	745125	B	4088	.67	.12	.67	.18	.03	.00	.00	.46	-.20	.46	-.51	-.28
FT	745126	B	5956	.47	.36	.47	.10	.07	.00	.00	.28	-.18	.28	-.34	-.33
FT	745127	D	4479	.59	.25	.09	.07	.59	.00	.00	.47	-.34	-.44	-.49	.47
FT	745128	D	4524	.58	.13	.12	.17	.58	.00	.00	.55	-.50	-.43	-.47	.55
FT	745129	B	4141	.83	.03	.83	.08	.07	.00	.00	.44	-.29	.44	-.36	-.26
FT	745130	D	4208	.49	.12	.18	.21	.49	.00	.00	.42	-.27	-.43	-.39	.42
FT	745131	C	4023	.69	.03	.06	.69	.22	.00	.00	.23	-.23	-.27	.23	-.12
FT	745132	D	4050	.56	.05	.16	.23	.56	.00	.00	.43	-.34	-.47	-.30	.43
FT	745133	B	4067	.35	.23	.35	.24	.19	.00	.00	.24	-.28	.24	-.18	-.27
FT	745134	B	5612	.44	.17	.44	.16	.22	.00	.00	.34	-.34	.34	-.49	-.14
FT	745136	A	3872	.64	.64	.24	.09	.02	.00	.00	.35	.35	-.31	-.24	-.21
FT	745137	A	3923	.77	.77	.11	.07	.05	.00	.00	.43	.43	-.32	-.32	-.29
FT	745138	B	4591	.66	.12	.66	.17	.05	.00	.00	.44	-.32	.44	-.36	-.33
FT	745139	A	5607	.77	.77	.07	.09	.06	.00	.00	.45	.45	-.31	-.36	-.27
FT	745140	C	3965	.36	.04	.55	.36	.04	.00	.00	.39	-.35	-.38	.39	-.35
FT	745141	D	4011	.80	.08	.05	.07	.80	.00	.00	.52	-.33	-.35	-.43	.52
FT	745142	B	4173	.75	.19	.75	.04	.01	.00	.00	.38	-.32	.38	-.28	-.20
FT	745143	C	5649	.46	.07	.12	.46	.35	.00	.00	.37	-.40	-.48	.37	-.24
FT	745144	C	5753	.59	.11	.08	.59	.22	.00	.00	.41	-.24	-.44	.41	-.34
FT	745145	D	4174	.59	.21	.11	.09	.59	.00	.00	.52	-.43	-.42	-.47	.52

Grade 8 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	745147	C	3996	.70	.07	.04	.70	.20	.00	.00	.30	-.32	-.32	.30	-.15
FT	745148	C	4193	.41	.31	.18	.41	.10	.00	.00	.45	-.48	-.45	.45	-.27
FT	745149	A	4065	.41	.41	.21	.13	.25	.00	.00	.48	.48	-.44	-.48	-.46
FT	745150	D	3484	.57	.13	.04	.26	.57	.00	.00	.57	-.39	-.46	-.57	.57
FT	745151	B	3604	.84	.06	.84	.05	.06	.00	.00	.42	-.29	.42	-.31	-.25
FT	745152	D	5641	.65	.09	.11	.15	.65	.00	.00	.63	-.50	-.49	-.52	.63
FT	745153	A	4646	.51	.51	.13	.10	.26	.00	.00	.36	.36	-.38	-.29	-.29
FT	745154	B	4705	.76	.02	.76	.19	.02	.00	.00	.25	-.27	.25	-.17	-.17
FT	745156	D	4148	.79	.05	.07	.09	.79	.00	.00	.48	-.35	-.35	-.34	.48
FT	745157	B	4615	.90	.03	.90	.04	.02	.00	.00	.36	-.23	.36	-.27	-.18
FT	745158	D	3851	.46	.16	.21	.17	.46	.00	.00	.38	-.32	-.38	-.34	.38
FT	745159	B	3911	.60	.06	.60	.11	.23	.00	.00	.51	-.33	.51	-.54	-.42
FT	745160	B	4204	.61	.19	.61	.11	.09	.00	.00	.45	-.37	.45	-.38	-.31
FT	745162	C	4415	.51	.15	.17	.51	.17	.00	.00	.37	-.32	-.42	.37	-.21
FT	745163	C	4529	.42	.26	.20	.42	.12	.00	.00	.30	-.19	-.38	.30	-.25
FT	745164	C	4036	.78	.08	.08	.78	.07	.00	.00	.39	-.26	-.33	.39	-.23
FT	745165	C	5775	.62	.10	.13	.62	.14	.00	.00	.46	-.30	-.41	.46	-.36
FT	745166	A	4076	.64	.64	.22	.06	.07	.00	.00	.37	.37	-.24	-.31	-.38
FT	745167	D	3759	.44	.14	.12	.31	.44	.00	.00	.43	-.42	-.46	-.39	.43
FT	745168	C	3768	.81	.02	.14	.81	.03	.00	.00	.27	-.19	-.20	.27	-.20
FT	745170	A	5708	.26	.26	.05	.54	.14	.00	.00	.48	.48	-.52	-.48	-.58

Grade 11 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	600406	B	21357	.66	.05	.66	.21	.08	.00	.00	.52	-.33	.52	-.45	-.43
OP	600576	A	21357	.77	.77	.08	.11	.04	.00	.00	.45	.45	-.38	-.30	-.28
OP	600592	B	21357	.78	.04	.78	.06	.11	.00	.00	.39	-.25	.39	-.33	-.25
OP	600660	D	21357	.67	.13	.15	.04	.67	.00	.00	.53	-.47	-.40	-.37	.53
OP	600677	A	21357	.71	.71	.17	.06	.05	.00	.00	.42	.42	-.23	-.42	-.40
OP	600733	A	21357	.75	.75	.16	.06	.03	.00	.00	.43	.43	-.30	-.36	-.31
OP	600748	B	21357	.71	.11	.71	.15	.03	.00	.00	.45	-.26	.45	-.43	-.30
OP	634476	D	21357	.69	.11	.08	.12	.69	.00	.00	.55	-.46	-.34	-.48	.55
OP	646740	B	21357	.73	.09	.73	.09	.09	.00	.00	.54	-.33	.54	-.45	-.43
OP	646744	D	21357	.64	.07	.12	.17	.64	.00	.00	.47	-.34	-.34	-.41	.47
OP	646755	A	21357	.82	.82	.08	.06	.04	.00	.00	.48	.48	-.34	-.35	-.28
OP	646759	A	21357	.51	.51	.06	.34	.09	.00	.00	.41	.41	-.35	-.38	-.27
OP	646760	A	21357	.59	.59	.09	.16	.15	.00	.00	.42	.42	-.32	-.35	-.36

Grade 11 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	646772	D	21357	.65	.05	.21	.09	.65	.00	.00	.52	-.45	-.39	-.49	.52
OP	646785	C	21357	.76	.07	.05	.76	.12	.00	.00	.44	-.40	-.33	.44	-.24
OP	646788	C	21357	.76	.07	.08	.76	.09	.00	.00	.46	-.31	-.33	.46	-.34
OP	660258	D	21357	.75	.06	.07	.11	.75	.00	.00	.54	-.28	-.43	-.45	.54
OP	660306	C	21357	.61	.12	.22	.61	.04	.00	.00	.48	-.35	-.46	.48	-.25
OP	660313	C	21357	.69	.14	.11	.69	.06	.00	.00	.45	-.31	-.36	.45	-.36
OP	660327	C	21357	.68	.08	.03	.68	.21	.00	.00	.32	-.31	-.27	.32	-.21
OP	660336	C	21357	.70	.09	.04	.70	.17	.00	.00	.44	-.39	-.34	.44	-.31
OP	660354	D	21357	.74	.04	.11	.11	.74	.00	.00	.56	-.33	-.46	-.44	.56
OP	690110	D	21357	.44	.18	.26	.12	.44	.00	.00	.54	-.62	-.45	-.51	.54
OP	690112	B	21357	.62	.08	.62	.15	.15	.00	.00	.40	-.31	.40	-.39	-.23
OP	690113	C	21357	.57	.15	.10	.57	.18	.00	.00	.29	-.16	-.35	.29	-.23
OP	690122	B	21357	.59	.13	.59	.19	.09	.00	.00	.49	-.26	.49	-.49	-.45
OP	690132	D	21357	.54	.09	.17	.20	.54	.00	.00	.56	-.44	-.49	-.52	.56
OP	690133	D	21357	.58	.07	.21	.13	.58	.00	.00	.59	-.42	-.53	-.52	.59
OP	690142	D	21357	.57	.11	.18	.14	.57	.00	.00	.46	-.29	-.43	-.41	.46
OP	690149	A	21357	.67	.67	.11	.16	.06	.00	.00	.44	.44	-.30	-.39	-.31
OP	690156	A	21357	.58	.58	.17	.17	.07	.00	.00	.45	.45	-.38	-.39	-.34
OP	707347	A	21357	.62	.62	.14	.14	.10	.00	.00	.45	.45	-.38	-.40	-.32
OP	707348	A	21357	.73	.73	.09	.05	.14	.00	.00	.48	.48	-.43	-.37	-.30
OP	707350	C	21357	.43	.21	.15	.43	.21	.00	.00	.41	-.28	-.49	.41	-.42
OP	707354	B	21357	.43	.15	.43	.22	.19	.00	.00	.33	-.35	.33	-.30	-.26
OP	707356	C	21357	.63	.07	.14	.63	.15	.00	.00	.41	-.31	-.32	.41	-.33
OP	707358	C	21357	.47	.14	.28	.47	.11	.00	.00	.34	-.39	-.34	.34	-.16
OP	707359	D	21357	.61	.14	.09	.17	.61	.00	.00	.44	-.38	-.35	-.35	.44
OP	707361	B	21357	.63	.14	.63	.18	.04	.00	.00	.37	-.25	.37	-.35	-.21
OP	707364	B	21357	.48	.19	.48	.10	.23	.00	.00	.54	-.54	.54	-.37	-.51
OP	707371	B	21357	.46	.14	.46	.27	.12	.00	.00	.32	-.16	.32	-.35	-.29
OP	707373	A	21357	.53	.53	.18	.22	.06	.00	.00	.43	.43	-.40	-.37	-.34
OP	707374	D	21357	.56	.09	.10	.25	.56	.00	.00	.43	-.29	-.39	-.38	.43
OP	707375	A	21357	.61	.61	.13	.12	.14	.00	.00	.55	.55	-.32	-.57	-.48
OP	707378	B	21357	.68	.20	.68	.06	.07	.00	.00	.38	-.32	.38	-.26	-.24
OP	707379	A	21357	.64	.64	.08	.25	.03	.00	.00	.43	.43	-.31	-.38	-.28
OP	707381	C	21357	.71	.20	.05	.71	.05	.00	.00	.47	-.37	-.38	.47	-.32
OP	707383	B	21357	.78	.06	.78	.09	.06	.00	.00	.47	-.33	.47	-.39	-.27
OP	707384	C	21357	.65	.12	.16	.65	.06	.00	.00	.41	-.38	-.35	.41	-.19
OP	707385	C	21357	.61	.13	.18	.61	.08	.00	.00	.50	-.29	-.48	.50	-.44
OP	707386	B	21357	.78	.09	.78	.06	.07	.00	.00	.56	-.41	.56	-.39	-.41
OP	707388	D	21357	.65	.21	.07	.08	.65	.00	.00	.67	-.60	-.57	-.48	.67
OP	707389	B	21357	.58	.24	.58	.13	.06	.00	.00	.49	-.40	.49	-.45	-.39

Grade 11 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	707391	A	21357	.76	.76	.04	.14	.06	.00	.00	.55	.55	-.35	-.49	-.33
OP	707392	A	21357	.75	.75	.13	.07	.05	.00	.00	.35	.35	-.25	-.27	-.23
OP	707394	A	21357	.53	.53	.34	.10	.03	.00	.00	.46	.46	-.42	-.41	-.29
OP	707396	A	21357	.46	.46	.35	.15	.04	.00	.00	.50	.50	-.56	-.28	-.45
OP	707399	D	21357	.66	.14	.10	.10	.66	.00	.00	.45	-.38	-.33	-.35	.45
OP	707400	C	21357	.62	.17	.13	.62	.08	.00	.00	.46	-.39	-.39	.46	-.30
OP	707404	C	21357	.55	.10	.12	.55	.23	.00	.00	.35	-.37	-.33	.35	-.22
FT	707401	B	3765	.66	.15	.66	.13	.06	.00	.00	.38	-.33	.38	-.31	-.22
FT	745172	C	3786	.60	.11	.17	.60	.12	.00	.00	.30	-.21	-.26	.30	-.24
FT	745174	B	3931	.60	.07	.60	.21	.13	.00	.00	.31	-.25	.31	-.18	-.35
FT	745175	D	3763	.26	.14	.42	.17	.26	.00	.00	.41	-.48	-.43	-.46	.41
FT	745177	D	4991	.49	.09	.21	.20	.49	.00	.00	.59	-.52	-.54	-.53	.59
FT	745178	D	3785	.42	.17	.27	.14	.42	.00	.00	.45	-.40	-.44	-.46	.45
FT	745180	C	3982	.48	.37	.09	.48	.05	.00	.00	.22	-.13	-.37	.22	-.23
FT	745181	C	4131	.38	.48	.10	.38	.04	.00	.00	.32	-.29	-.39	.32	-.29
FT	745183	A	3883	.38	.38	.40	.10	.12	.00	.00	.43	.43	-.43	-.46	-.32
FT	745184	C	4051	.33	.28	.08	.33	.31	.00	.00	.20	-.18	-.40	.20	-.16
FT	745185	D	4047	.64	.12	.12	.11	.64	.00	.00	.51	-.40	-.46	-.36	.51
FT	745187	D	3946	.19	.51	.14	.16	.19	.00	.00	.38	-.43	-.53	-.43	.38
FT	745188	B	3879	.32	.13	.32	.48	.07	.00	.00	.27	-.23	.27	-.30	-.19
FT	745190	A	4554	.62	.62	.10	.08	.20	.00	.00	.39	.39	-.39	-.38	-.21
FT	745191	B	4660	.47	.02	.47	.44	.07	.00	.00	.42	-.24	.42	-.38	-.45
FT	745192	A	4069	.66	.66	.13	.12	.10	.00	.00	.45	.45	-.33	-.39	-.32
FT	745194	D	4130	.73	.14	.07	.06	.73	.00	.00	.23	-.11	-.27	-.15	.23
FT	745195	A	4446	.72	.72	.19	.06	.03	.00	.00	.50	.50	-.38	-.44	-.32
FT	745196	B	4479	.51	.08	.51	.10	.30	.00	.00	.36	-.39	.36	-.49	-.20
FT	745197	D	4845	.35	.22	.28	.15	.35	.00	.00	.55	-.59	-.54	-.55	.55
FT	745198	C	4091	.74	.06	.17	.74	.03	.00	.00	.17	-.24	-.03	.17	-.17
FT	745199	B	4761	.50	.11	.50	.23	.16	.00	.00	.41	-.25	.41	-.32	-.48
FT	745200	C	4088	.72	.07	.10	.72	.11	.00	.00	.46	-.33	-.34	.46	-.34
FT	745201	C	3491	.34	.21	.32	.34	.12	.00	.00	.08	-.14	.01	.08	-.18
FT	745203	A	4949	.43	.43	.35	.15	.07	.00	.00	.48	.48	-.46	-.43	-.43
FT	745205	D	3583	.68	.04	.09	.18	.68	.00	.00	.40	-.35	-.41	-.25	.40
FT	745206	C	4059	.56	.21	.18	.56	.05	.00	.00	.47	-.43	-.43	.47	-.26
FT	745207	A	4804	.50	.50	.21	.21	.08	.00	.00	.48	.48	-.51	-.35	-.38
FT	745208	C	4879	.43	.12	.18	.43	.26	.00	.00	.31	-.36	-.32	.31	-.21
FT	745210	A	4007	.64	.64	.18	.12	.06	.00	.00	.48	.48	-.41	-.45	-.27
FT	745212	D	4683	.49	.13	.15	.23	.49	.00	.00	.54	-.50	-.54	-.44	.54
FT	745213	D	3952	.74	.06	.08	.11	.74	.00	.00	.53	-.31	-.41	-.43	.53
FT	745214	D	4050	.79	.06	.04	.10	.79	.00	.00	.48	-.31	-.31	-.40	.48

Grade 11 Mathematics

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	745215	C	4515	.46	.15	.26	.46	.12	.00	.00	.38	-.37	-.35	.38	-.31
FT	745216	B	4589	.75	.11	.75	.06	.08	.00	.00	.51	-.39	.51	-.43	-.30
FT	745217	D	4130	.43	.11	.19	.26	.43	.00	.00	.33	-.39	-.44	-.15	.33
FT	745219	C	4026	.73	.04	.12	.73	.10	.00	.00	.57	-.39	-.48	.57	-.41
FT	745222	C	4425	.37	.05	.54	.37	.04	.00	.00	.06	-.26	.00	.06	-.26
FT	745223	A	4731	.51	.51	.12	.08	.29	.00	.00	.22	.22	-.36	-.34	-.05
FT	745224	B	4989	.40	.22	.40	.17	.20	.00	.00	.34	-.34	.34	-.34	-.31
FT	745226	A	4307	.56	.56	.26	.12	.06	.00	.00	.32	.32	-.22	-.35	-.30
FT	745227	D	4124	.27	.33	.16	.24	.27	.00	.00	.25	-.04	-.45	-.47	.25
FT	745228	A	4366	.47	.47	.23	.22	.08	.00	.00	.49	.49	-.42	-.46	-.53
FT	745229	B	4705	.16	.23	.16	.08	.54	.00	.00	.07	.31	.07	-.34	-.19
FT	745230	D	4845	.46	.09	.16	.29	.46	.00	.00	.43	-.39	-.43	-.38	.43
FT	749776	C	4017	.45	.12	.38	.45	.04	.00	.00	.35	-.32	-.33	.35	-.23
FT	749778	D	4818	.43	.13	.17	.27	.43	.00	.00	.26	-.38	-.35	-.10	.26
FT	749779	B	4076	.36	.17	.36	.24	.23	.00	.00	.18	-.16	.18	-.28	-.06
FT	749781	B	4195	.64	.15	.64	.12	.09	.00	.00	.52	-.37	.52	-.43	-.49
FT	749784	B	4137	.72	.08	.72	.12	.08	.00	.00	.51	-.32	.51	-.45	-.35

Appendix H: Science Key Verification and Foil Analysis

Grade 5 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	634838	D	22798	.59	.22	.13	.05	.59	.00	.00	.33	-.25	-.26	-.35	.33
OP	634839	A	22798	.63	.63	.11	.11	.15	.00	.00	.40	.40	-.32	-.36	-.29
OP	634847	D	22798	.62	.04	.25	.09	.62	.00	.00	.39	-.38	-.30	-.35	.39
OP	634849	C	22798	.75	.07	.07	.75	.10	.00	.00	.45	-.35	-.27	.45	-.38
OP	634862	D	22798	.62	.23	.06	.09	.62	.00	.00	.28	-.16	-.29	-.31	.28
OP	634877	A	22798	.65	.65	.05	.27	.04	.00	.00	.31	.31	-.28	-.25	-.25
OP	634917	A	22798	.72	.72	.17	.04	.06	.00	.00	.37	.37	-.27	-.30	-.28
OP	634925	D	22798	.61	.15	.15	.09	.61	.00	.00	.36	-.30	-.25	-.35	.36
OP	634934	A	22798	.70	.70	.07	.07	.16	.00	.00	.43	.43	-.38	-.28	-.33
OP	634948	B	22798	.46	.16	.46	.19	.20	.00	.00	.17	-.14	.17	-.22	-.12
OP	634961	C	22798	.57	.16	.10	.57	.16	.00	.00	.41	-.36	-.36	.41	-.31
OP	635044	B	22798	.64	.01	.64	.23	.12	.00	.00	.34	-.25	.34	-.28	-.29
OP	647385	B	22798	.65	.05	.65	.05	.26	.00	.00	.32	-.26	.32	-.29	-.25
OP	647394	B	22798	.74	.09	.74	.04	.13	.00	.00	.30	-.22	.30	-.20	-.22
OP	647402	D	22798	.56	.22	.06	.16	.56	.00	.00	.32	-.29	-.36	-.22	.32
OP	647410	D	22798	.51	.02	.44	.03	.51	.00	.00	.25	-.29	-.20	-.29	.25
OP	647412	C	22798	.72	.18	.06	.72	.04	.00	.00	.18	-.12	-.14	.18	-.17
OP	647427	A	22798	.51	.51	.29	.10	.10	.00	.00	.36	.36	-.31	-.35	-.30
OP	647434	C	22798	.62	.03	.19	.62	.15	.00	.00	.34	-.28	-.21	.34	-.37
OP	661223	A	22798	.39	.39	.18	.16	.27	.00	.00	.17	.17	-.15	-.29	-.10
OP	661272	A	22798	.77	.77	.07	.07	.08	.00	.00	.45	.45	-.34	-.32	-.32
OP	661274	D	22798	.66	.06	.04	.24	.66	.00	.00	.44	-.38	-.36	-.35	.44
OP	690178	C	22798	.47	.10	.26	.47	.17	.00	.00	.26	-.31	-.19	.26	-.26
OP	690185	C	22798	.77	.12	.06	.77	.05	.00	.00	.42	-.31	-.30	.42	-.28
OP	690196	B	22798	.65	.15	.65	.10	.09	.00	.00	.23	-.14	.23	-.20	-.21
OP	690216	B	22798	.82	.04	.82	.07	.06	.00	.00	.39	-.31	.39	-.24	-.27
OP	705707	D	22798	.53	.24	.08	.16	.53	.00	.00	.40	-.37	-.38	-.30	.40
OP	705711	A	22798	.76	.76	.05	.08	.11	.00	.00	.45	.45	-.29	-.39	-.31
OP	705714	A	22798	.86	.86	.03	.09	.02	.00	.00	.44	.44	-.30	-.34	-.25
OP	705715	D	22798	.73	.09	.09	.09	.73	.00	.00	.43	-.32	-.32	-.35	.43
OP	705718	B	22798	.80	.07	.80	.06	.06	.00	.00	.40	-.28	.40	-.30	-.27
OP	705720	B	22798	.81	.13	.81	.02	.04	.00	.00	.30	-.18	.30	-.23	-.26
OP	705721	C	22798	.72	.17	.07	.72	.04	.00	.00	.32	-.24	-.24	.32	-.23
OP	705722	C	22798	.69	.06	.05	.69	.20	.00	.00	.32	-.22	-.21	.32	-.27
OP	705723	A	22798	.79	.79	.03	.08	.10	.00	.00	.30	.30	-.22	-.26	-.16
OP	705724	C	22798	.74	.01	.23	.74	.02	.00	.00	.43	-.24	-.38	.43	-.27
OP	705729	C	22798	.48	.18	.14	.48	.20	.00	.00	.32	-.42	-.41	.32	-.06
OP	705735	A	22798	.78	.78	.05	.07	.10	.00	.00	.48	.48	-.28	-.35	-.40

Grade 5 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	705736	B	22798	.41	.20	.41	.30	.09	.00	.00	.35	-.31	.35	-.33	-.44
OP	705739	D	22798	.66	.09	.09	.16	.66	.00	.00	.37	-.19	-.32	-.35	.37
OP	705740	D	22798	.87	.07	.02	.05	.87	.00	.00	.36	-.27	-.18	-.25	.36
OP	705742	D	22798	.59	.03	.22	.16	.59	.00	.00	.22	-.26	-.24	-.08	.22
OP	705743	B	22798	.67	.10	.67	.12	.11	.00	.00	.37	-.29	.37	-.31	-.26
OP	705744	D	22798	.83	.01	.12	.03	.83	.00	.00	.28	-.17	-.24	-.12	.28
OP	705745	C	22798	.63	.07	.07	.63	.23	.00	.00	.39	-.41	-.42	.39	-.24
OP	705748	C	22798	.78	.10	.04	.78	.07	.00	.00	.45	-.34	-.34	.45	-.29
OP	705752	D	22798	.52	.22	.15	.11	.52	.00	.00	.35	-.23	-.41	-.32	.35
OP	705753	D	22798	.82	.06	.06	.06	.82	.00	.00	.39	-.29	-.29	-.22	.39
OP	705757	D	22798	.84	.01	.07	.08	.84	.00	.00	.31	-.21	-.24	-.20	.31
OP	705760	A	22798	.38	.38	.29	.11	.22	.00	.00	.32	.32	-.30	-.40	-.30
FT	745231	D	6372	.89	.07	.03	.02	.89	.00	.00	.28	-.15	-.23	-.19	.28
FT	745232	D	4315	.90	.03	.03	.03	.90	.00	.00	.42	-.25	-.29	-.27	.42
FT	745233	D	3978	.02	.05	.02	.90	.02	.00	.00	-.16	.13	-.08	.19	-.16
FT	745235	B	3990	.82	.09	.82	.06	.03	.00	.00	.41	-.27	.41	-.31	-.28
FT	745236	A	4049	.93	.93	.04	.01	.02	.00	.00	.30	.30	-.24	-.17	-.14
FT	745238	A	6321	.53	.53	.17	.22	.07	.00	.00	.33	.33	-.28	-.29	-.26
FT	745239	C	4503	.78	.02	.10	.78	.11	.00	.00	.39	-.21	-.27	.39	-.33
FT	745240	C	4017	.82	.00	.15	.82	.03	.00	.00	.22	-.12	-.18	.22	-.17
FT	745241	C	6103	.88	.04	.05	.88	.03	.00	.00	.43	-.26	-.32	.43	-.25
FT	745242	B	4427	.96	.00	.96	.02	.02	.00	.00	.20	-.11	.20	-.14	-.13
FT	745243	D	4190	.97	.01	.00	.02	.97	.00	.00	.20	-.18	-.11	-.09	.20
FT	745244	C	4616	.84	.05	.04	.84	.08	.00	.00	.46	-.35	-.28	.46	-.33
FT	745245	D	3941	.96	.01	.01	.01	.96	.00	.00	.28	-.18	-.19	-.12	.28
FT	745246	D	4317	.73	.02	.21	.03	.73	.00	.00	.37	-.30	-.32	-.20	.37
FT	745247	B	6523	.20	.06	.20	.55	.18	.00	.00	-.03	-.29	-.03	.12	-.08
FT	745248	B	4054	.70	.18	.70	.05	.07	.00	.00	.19	-.12	.19	-.19	-.15
FT	745249	A	4027	.81	.81	.03	.02	.14	.00	.00	.19	.19	-.16	-.19	-.11
FT	745250	B	4016	.65	.08	.65	.04	.23	.00	.00	.36	-.19	.36	-.26	-.34
FT	745251	C	3841	.87	.02	.06	.87	.05	.00	.00	.22	-.17	-.13	.22	-.13
FT	745252	D	6334	.95	.01	.01	.02	.95	.00	.00	.32	-.18	-.18	-.23	.32
FT	745253	D	3545	.97	.00	.02	.00	.97	.00	.00	.24	-.08	-.22	-.08	.24
FT	745254	A	3985	.90	.90	.06	.02	.02	.00	.00	.31	.31	-.26	-.19	-.11
FT	745255	C	4177	.95	.02	.01	.95	.02	.00	.00	.23	-.10	-.14	.23	-.17
FT	745256	B	4473	.80	.04	.80	.05	.11	.00	.00	.36	-.23	.36	-.28	-.24
FT	745258	B	3787	.92	.01	.92	.07	.00	.00	.00	.19	-.11	.19	-.17	-.08
FT	745259	B	4116	.79	.01	.79	.17	.03	.00	.00	.32	-.21	.32	-.24	-.27
FT	745260	D	3677	.77	.07	.06	.09	.77	.00	.00	.38	-.25	-.26	-.30	.38
FT	745261	B	4526	.72	.06	.72	.02	.20	.00	.00	.24	-.18	.24	-.14	-.20

Grade 5 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	745262	A	6611	.50	.50	.36	.08	.05	.00	.00	.40	.40	-.35	-.40	-.31
FT	745263	B	4492	.66	.07	.66	.03	.24	.00	.00	.44	-.34	.44	-.23	-.39
FT	745264	B	3960	.96	.02	.96	.01	.02	.00	.00	.29	-.20	.29	-.11	-.21
FT	745265	D	4139	.88	.02	.04	.05	.88	.00	.00	.40	-.21	-.28	-.29	.40
FT	745267	D	4136	.86	.07	.02	.05	.86	.00	.00	.36	-.32	-.19	-.19	.36
FT	745268	C	6317	.66	.13	.09	.66	.12	.00	.00	.45	-.31	-.32	.45	-.41
FT	745271	C	5773	.48	.09	.32	.48	.10	.00	.00	.18	-.25	-.04	.18	-.33
FT	745272	A	4164	.91	.91	.02	.05	.02	.00	.00	.31	.31	-.21	-.21	-.19
FT	745273	D	3575	.51	.28	.09	.12	.51	.00	.00	.19	-.20	-.03	-.21	.19
FT	745274	B	4310	.85	.02	.85	.12	.01	.00	.00	.12	-.07	.12	-.07	-.13
FT	745275	D	6334	.85	.03	.05	.07	.85	.00	.00	.37	-.21	-.26	-.27	.37
FT	745277	C	4054	.89	.03	.01	.89	.07	.00	.00	.28	-.21	-.17	.28	-.18
FT	745278	C	4204	.38	.31	.12	.38	.20	.00	.00	-.03	-.01	.08	-.03	.05
FT	745279	A	4418	.84	.84	.10	.05	.02	.00	.00	.41	.41	-.35	-.22	-.22
FT	745280	B	4086	.88	.11	.88	.00	.00	.00	.00	.13	-.11	.13	-.08	-.11
FT	745282	C	4140	.53	.29	.05	.53	.13	.00	.00	.41	-.36	-.36	.41	-.36
FT	745283	A	3991	.85	.85	.04	.06	.05	.00	.00	.44	.44	-.27	-.33	-.28
FT	745284	D	4341	.81	.07	.03	.09	.81	.00	.00	.42	-.28	-.22	-.36	.42
FT	745285	A	4197	.98	.98	.01	.00	.01	.00	.00	.23	.23	-.16	-.10	-.13
FT	745286	B	4051	1.00	.00	1.00	.00	.00	.00	.00	.14	-.11	.14	-.06	-.05
FT	745287	C	6200	.91	.03	.04	.91	.02	.00	.00	.34	-.17	-.29	.34	-.17
FT	745288	D	4287	.80	.14	.03	.03	.80	.00	.00	.39	-.29	-.27	-.31	.39

Grade 8 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	635004	D	22328	.75	.08	.12	.05	.75	.00	.00	.36	-.35	-.16	-.33	.36
OP	635011	C	22328	.67	.17	.12	.67	.04	.00	.00	.39	-.29	-.33	.39	-.27
OP	635012	B	22328	.58	.08	.58	.14	.21	.00	.00	.40	-.34	.40	-.36	-.31
OP	635018	B	22328	.65	.11	.65	.13	.10	.00	.00	.29	-.20	.29	-.30	-.16
OP	635025	B	22328	.79	.02	.79	.02	.18	.00	.00	.39	-.25	.39	-.23	-.33
OP	635034	B	22328	.42	.04	.42	.07	.47	.00	.00	.40	-.44	.40	-.51	-.35
OP	635041	D	22328	.44	.07	.45	.03	.44	.00	.00	.26	-.34	-.20	-.38	.26
OP	635053	C	22328	.64	.16	.12	.64	.08	.00	.00	.36	-.33	-.21	.36	-.30
OP	635078	D	22328	.63	.06	.07	.23	.63	.00	.00	.39	-.37	-.25	-.32	.39
OP	635101	A	22328	.75	.75	.17	.06	.03	.00	.00	.33	.33	-.24	-.20	-.33
OP	635105	C	22328	.48	.16	.19	.48	.17	.00	.00	.15	-.10	-.10	.15	-.20
OP	635116	B	22328	.68	.15	.68	.10	.06	.00	.00	.45	-.35	.45	-.36	-.33

Grade 8 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	635120	B	22328	.78	.11	.78	.07	.04	.00	.00	.34	-.23	.34	-.25	-.25
OP	635134	C	22328	.61	.11	.12	.61	.16	.00	.00	.39	-.27	-.35	.39	-.33
OP	635144	A	22328	.52	.52	.26	.08	.15	.00	.00	.27	.27	-.21	-.36	-.17
OP	635146	A	22328	.49	.49	.31	.13	.07	.00	.00	.34	.34	-.33	-.27	-.32
OP	635156	D	22328	.68	.02	.23	.06	.68	.00	.00	.50	-.34	-.42	-.42	.50
OP	635162	B	22328	.62	.16	.62	.16	.06	.00	.00	.37	-.22	.37	-.41	-.23
OP	647112	C	22328	.77	.05	.13	.77	.05	.00	.00	.35	-.25	-.23	.35	-.28
OP	647120	D	22328	.46	.32	.10	.12	.46	.00	.00	.36	-.28	-.33	-.44	.36
OP	647122	B	22328	.44	.36	.44	.05	.15	.00	.00	.29	-.21	.29	-.41	-.33
OP	647123	C	22328	.59	.20	.16	.59	.05	.00	.00	.34	-.31	-.23	.34	-.30
OP	647136	A	22328	.75	.75	.09	.06	.10	.00	.00	.41	.41	-.34	-.34	-.23
OP	647138	B	22328	.71	.05	.71	.16	.08	.00	.00	.40	-.32	.40	-.31	-.28
OP	647142	A	22328	.49	.49	.05	.25	.21	.00	.00	.23	.23	-.22	-.23	-.18
OP	661279	B	22328	.61	.19	.61	.06	.13	.00	.00	.45	-.39	.45	-.33	-.37
OP	661294	D	22328	.66	.05	.11	.17	.66	.00	.00	.51	-.40	-.43	-.41	.51
OP	661295	A	22328	.60	.60	.14	.14	.11	.00	.00	.37	.37	-.30	-.28	-.31
OP	661305	C	22328	.66	.04	.06	.66	.23	.00	.00	.48	-.34	-.35	.48	-.42
OP	690224	B	22328	.86	.06	.86	.03	.05	.00	.00	.32	-.18	.32	-.24	-.22
OP	690238	C	22328	.56	.23	.12	.56	.09	.00	.00	.43	-.35	-.33	.43	-.41
OP	690251	C	22328	.60	.15	.12	.60	.13	.00	.00	.32	-.19	-.29	.32	-.30
OP	690252	C	22328	.51	.17	.08	.51	.24	.00	.00	.29	-.29	-.32	.29	-.18
OP	690263	D	22328	.76	.05	.15	.03	.76	.00	.00	.43	-.30	-.33	-.32	.43
OP	705761	C	22328	.65	.11	.09	.65	.15	.00	.00	.35	-.31	-.29	.35	-.21
OP	705765	C	22328	.74	.09	.07	.74	.10	.00	.00	.36	-.27	-.24	.36	-.25
OP	705767	C	22328	.72	.08	.07	.72	.13	.00	.00	.45	-.28	-.36	.45	-.35
OP	705768	B	22328	.80	.06	.80	.05	.09	.00	.00	.45	-.31	.45	-.27	-.36
OP	705770	C	22328	.66	.06	.05	.66	.23	.00	.00	.38	-.36	-.31	.38	-.27
OP	705772	D	22328	.69	.04	.19	.07	.69	.00	.00	.25	-.10	-.25	-.14	.25
OP	705778	A	22328	.74	.74	.04	.10	.12	.00	.00	.45	.45	-.29	-.25	-.43
OP	705780	C	22328	.73	.13	.06	.73	.08	.00	.00	.44	-.28	-.37	.44	-.34
OP	705781	B	22328	.65	.05	.65	.24	.05	.00	.00	.43	-.25	.43	-.41	-.27
OP	705782	D	22328	.56	.11	.25	.08	.56	.00	.00	.35	-.35	-.25	-.32	.35
OP	705784	B	22328	.55	.18	.55	.16	.11	.00	.00	.34	-.30	.34	-.36	-.18
OP	705788	D	22328	.72	.13	.07	.08	.72	.00	.00	.44	-.33	-.31	-.34	.44
OP	705790	A	22328	.83	.83	.10	.04	.03	.00	.00	.45	.45	-.34	-.29	-.31
OP	705792	B	22328	.85	.07	.85	.05	.03	.00	.00	.33	-.24	.33	-.21	-.21
OP	705793	D	22328	.90	.03	.03	.04	.90	.00	.00	.32	-.19	-.21	-.22	.32
OP	705795	C	22328	.63	.11	.08	.63	.19	.00	.00	.39	-.34	-.36	.39	-.26
OP	705796	D	22328	.50	.11	.21	.18	.50	.00	.00	.37	-.31	-.28	-.40	.37
OP	705797	A	22328	.79	.79	.02	.09	.10	.00	.00	.26	.26	-.24	-.25	-.11

Grade 8 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	705799	C	22328	.72	.01	.24	.72	.03	.00	.00	.45	-.22	-.42	.45	-.25
OP	705803	D	22328	.73	.07	.06	.15	.73	.00	.00	.55	-.35	-.42	-.47	.55
OP	705807	D	22328	.82	.03	.04	.11	.82	.00	.00	.32	-.23	-.26	-.20	.32
OP	705809	A	22328	.54	.54	.26	.06	.14	.00	.00	.26	.26	-.26	-.26	-.13
OP	705810	C	22328	.51	.10	.16	.51	.23	.00	.00	.26	-.17	-.30	.26	-.20
OP	705812	C	22328	.62	.16	.11	.62	.11	.00	.00	.47	-.44	-.41	.47	-.28
OP	705814	A	22328	.71	.71	.03	.14	.13	.00	.00	.23	.23	-.19	-.17	-.17
OP	705817	C	22328	.41	.07	.09	.41	.43	.00	.00	.16	-.33	-.21	.16	-.09
FT	745289	C	5637	.77	.04	.09	.77	.10	.00	.00	.48	-.29	-.39	.48	-.32
FT	745290	A	4205	.75	.75	.14	.06	.04	.00	.00	.33	.33	-.21	-.30	-.24
FT	745291	C	4141	.41	.38	.17	.41	.03	.00	.00	.29	-.28	-.26	.29	-.31
FT	745295	C	3912	.42	.07	.22	.42	.29	.00	.00	.28	-.28	-.35	.28	-.19
FT	745296	B	5592	.31	.37	.31	.19	.13	.00	.00	.25	-.17	.25	-.34	-.35
FT	745297	B	4170	.55	.14	.55	.21	.11	.00	.00	.14	-.09	.14	-.04	-.27
FT	745298	D	3887	.36	.06	.05	.53	.36	.00	.00	.36	-.50	-.52	-.31	.36
FT	745299	D	3865	.58	.17	.13	.12	.58	.00	.00	.50	-.39	-.45	-.44	.50
FT	745300	B	4654	.50	.39	.50	.07	.04	.00	.00	.35	-.32	.35	-.31	-.25
FT	745301	D	4637	.50	.32	.02	.16	.50	.00	.00	.51	-.51	-.35	-.43	.51
FT	745302	B	3696	.26	.45	.26	.13	.15	.00	.00	.21	-.14	.21	-.39	-.33
FT	745303	D	5094	.64	.18	.04	.13	.64	.00	.00	.44	-.31	-.35	-.39	.44
FT	745304	A	3970	.62	.62	.21	.09	.08	.00	.00	.47	.47	-.36	-.42	-.41
FT	745305	A	4178	.48	.48	.27	.07	.18	.00	.00	.45	.45	-.37	-.38	-.49
FT	745306	B	4165	.70	.06	.70	.14	.10	.00	.00	.20	-.22	.20	-.09	-.17
FT	745307	D	4213	.50	.14	.15	.21	.50	.00	.00	.27	-.25	-.29	-.19	.27
FT	745309	A	5820	.58	.58	.09	.15	.19	.00	.00	.43	.43	-.40	-.34	-.34
FT	745310	C	4189	.69	.03	.26	.69	.03	.00	.00	.31	-.17	-.26	.31	-.25
FT	745311	A	4043	.26	.26	.07	.32	.35	.00	.00	.07	.07	-.26	.01	-.11
FT	745312	A	5364	.53	.53	.17	.22	.07	.00	.00	.40	.40	-.34	-.33	-.37
FT	745313	C	4130	.63	.17	.10	.63	.10	.00	.00	.48	-.40	-.43	.48	-.34
FT	745314	A	4078	.41	.41	.20	.17	.22	.00	.00	.33	.33	-.41	-.46	-.14
FT	745315	B	3801	.72	.11	.72	.11	.05	.00	.00	.42	-.32	.42	-.33	-.28
FT	745316	D	5431	.87	.07	.02	.04	.87	.00	.00	.42	-.29	-.24	-.29	.42
FT	745317	C	3902	.92	.02	.02	.92	.03	.00	.00	.32	-.17	-.22	.32	-.20
FT	745318	B	3908	.51	.07	.51	.19	.23	.00	.00	.34	-.34	.34	-.30	-.29
FT	745319	B	5778	.33	.20	.33	.16	.31	.00	.00	.22	-.23	.22	-.28	-.17
FT	745320	D	4120	.71	.10	.07	.12	.71	.00	.00	.39	-.15	-.37	-.36	.39
FT	745321	B	4119	.55	.04	.55	.27	.14	.00	.00	.41	-.28	.41	-.35	-.40
FT	745323	C	4238	.84	.01	.08	.84	.06	.00	.00	.34	-.23	-.26	.34	-.21
FT	745324	A	4016	.39	.39	.46	.09	.06	.00	.00	.38	.38	-.33	-.46	-.46
FT	745325	C	4029	.27	.12	.05	.27	.55	.00	.00	.24	-.28	-.36	.24	-.23

Grade 8 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	745326	D	5616	.56	.11	.11	.22	.56	.00	.00	.39	-.38	-.44	-.22	.39
FT	745327	D	4049	.71	.06	.13	.10	.71	.00	.00	.46	-.36	-.30	-.39	.46
FT	745328	C	4182	.31	.39	.09	.31	.20	.00	.00	.09	.02	-.36	.09	-.18
FT	745329	D	4328	.45	.38	.12	.05	.45	.00	.00	.22	-.10	-.37	-.37	.22
FT	745330	A	6060	.53	.53	.24	.12	.10	.00	.00	.40	.40	-.30	-.37	-.40
FT	745331	D	4568	.54	.01	.26	.18	.54	.00	.00	.22	-.16	-.17	-.22	.22
FT	745333	D	4106	.23	.23	.30	.24	.23	.00	.00	.19	-.12	-.26	-.30	.19
FT	745334	A	4076	.85	.85	.06	.04	.04	.00	.00	.36	.36	-.25	-.23	-.23
FT	745335	B	3961	.77	.16	.77	.04	.03	.00	.00	.25	-.13	.25	-.27	-.23
FT	745336	B	4146	.48	.18	.48	.19	.15	.00	.00	.18	-.15	.18	-.19	-.14
FT	745337	D	4564	.46	.21	.16	.17	.46	.00	.00	.31	-.28	-.39	-.20	.31
FT	745338	A	4589	.67	.67	.16	.08	.09	.00	.00	.41	.41	-.32	-.32	-.30
FT	745339	A	6020	.65	.65	.14	.12	.09	.00	.00	.46	.46	-.45	-.35	-.25
FT	745341	A	4642	.87	.87	.07	.03	.03	.00	.00	.40	.40	-.27	-.27	-.25
FT	745343	D	4547	.64	.03	.11	.23	.64	.00	.00	.29	-.23	-.31	-.19	.29
FT	745344	A	4488	.37	.37	.24	.06	.33	.00	.00	.34	.34	-.38	-.48	-.28
FT	745345	B	4112	.44	.02	.44	.30	.24	.00	.00	.33	-.26	.33	-.32	-.32
FT	745346	B	4224	.56	.16	.56	.23	.04	.00	.00	.17	-.25	.17	-.04	-.20

Grade 11 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	635189	D	21366	.65	.06	.21	.08	.65	.00	.00	.34	-.30	-.25	-.29	.34
OP	635234	C	21366	.64	.09	.18	.64	.08	.00	.00	.24	-.22	-.11	.24	-.28
OP	635261	B	21366	.62	.10	.62	.17	.11	.00	.00	.38	-.31	.38	-.33	-.24
OP	635265	A	21366	.69	.69	.11	.12	.07	.00	.00	.40	.40	-.26	-.32	-.32
OP	635279	A	21366	.74	.74	.14	.09	.03	.00	.00	.49	.49	-.38	-.39	-.32
OP	635288	C	21366	.69	.07	.10	.69	.14	.00	.00	.34	-.26	-.36	.34	-.18
OP	635295	A	21366	.58	.58	.23	.16	.03	.00	.00	.46	.46	-.44	-.39	-.27
OP	635489	C	21366	.68	.18	.07	.68	.07	.00	.00	.44	-.28	-.44	.44	-.35
OP	635492	C	21366	.53	.20	.14	.53	.13	.00	.00	.28	-.13	-.37	.28	-.26
OP	635494	D	21366	.67	.06	.15	.12	.67	.00	.00	.48	-.38	-.39	-.40	.48
OP	635499	C	21366	.78	.08	.10	.78	.03	.00	.00	.46	-.41	-.29	.46	-.30
OP	635503	C	21366	.72	.07	.12	.72	.09	.00	.00	.49	-.38	-.41	.49	-.32
OP	635504	C	21366	.58	.04	.34	.58	.03	.00	.00	.22	-.27	-.15	.22	-.26
OP	635517	A	21366	.41	.41	.19	.15	.24	.00	.00	.28	.28	-.29	-.31	-.22
OP	635528	B	21366	.67	.09	.67	.19	.05	.00	.00	.42	-.26	.42	-.41	-.24
OP	635535	B	21366	.77	.14	.77	.03	.06	.00	.00	.38	-.28	.38	-.32	-.26
OP	635544	C	21366	.73	.08	.06	.73	.12	.00	.00	.48	-.32	-.38	.48	-.38

Grade 11 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	635550	A	21366	.78	.78	.06	.09	.06	.00	.00	.44	.44	-.35	-.33	-.27
OP	635553	C	21366	.90	.03	.06	.90	.01	.00	.00	.36	-.19	-.30	.36	-.17
OP	647170	D	21366	.44	.23	.13	.20	.44	.00	.00	.38	-.29	-.46	-.38	.38
OP	647183	C	21366	.74	.07	.06	.74	.12	.00	.00	.50	-.36	-.38	.50	-.39
OP	647214	D	21366	.53	.14	.11	.22	.53	.00	.00	.26	-.28	-.23	-.19	.26
OP	661349	B	21366	.56	.08	.56	.08	.28	.00	.00	.29	-.22	.29	-.37	-.20
OP	661355	D	21366	.41	.13	.37	.09	.41	.00	.00	.41	-.40	-.42	-.36	.41
OP	661362	A	21366	.74	.74	.03	.19	.04	.00	.00	.39	.39	-.33	-.32	-.23
OP	661375	B	21366	.59	.06	.59	.22	.13	.00	.00	.25	-.34	.25	-.23	-.10
OP	690291	C	21366	.69	.08	.16	.69	.07	.00	.00	.31	-.29	-.15	.31	-.31
OP	690299	A	21366	.59	.59	.11	.25	.05	.00	.00	.38	.38	-.41	-.27	-.33
OP	690302	A	21366	.84	.84	.04	.08	.04	.00	.00	.46	.46	-.35	-.31	-.29
OP	690304	C	21366	.66	.25	.03	.66	.06	.00	.00	.49	-.42	-.37	.49	-.41
OP	690306	B	21366	.82	.05	.82	.05	.08	.00	.00	.50	-.34	.50	-.35	-.36
OP	690308	C	21366	.62	.08	.12	.62	.18	.00	.00	.30	-.22	-.40	.30	-.13
OP	690312	B	21366	.64	.05	.64	.09	.22	.00	.00	.43	-.38	.43	-.33	-.36
OP	690313	D	21366	.44	.12	.11	.33	.44	.00	.00	.32	-.37	-.41	-.21	.32
OP	690315	B	21366	.73	.06	.73	.15	.06	.00	.00	.41	-.25	.41	-.38	-.22
OP	690328	A	21366	.60	.60	.24	.07	.08	.00	.00	.46	.46	-.39	-.46	-.34
OP	690333	D	21366	.72	.08	.08	.11	.72	.00	.00	.44	-.32	-.33	-.33	.44
OP	705818	A	21366	.79	.79	.06	.13	.03	.00	.00	.44	.44	-.31	-.34	-.29
OP	705819	A	21366	.49	.49	.26	.22	.04	.00	.00	.31	.31	-.28	-.29	-.24
OP	705821	D	21366	.83	.04	.10	.02	.83	.00	.00	.43	-.22	-.36	-.28	.43
OP	705823	A	21366	.60	.60	.22	.04	.13	.00	.00	.33	.33	-.23	-.33	-.32
OP	705826	D	21366	.83	.03	.05	.09	.83	.00	.00	.42	-.27	-.35	-.26	.42
OP	705827	B	21366	.35	.08	.35	.52	.04	.00	.00	.22	-.20	.22	-.21	-.22
OP	705828	D	21366	.71	.10	.07	.13	.71	.00	.00	.40	-.25	-.32	-.33	.40
OP	705829	B	21366	.65	.06	.65	.03	.25	.00	.00	.32	-.26	.32	-.21	-.26
OP	705831	C	21366	.39	.44	.04	.39	.13	.00	.00	.16	-.06	-.38	.16	-.29
OP	705833	A	21366	.52	.52	.22	.12	.14	.00	.00	.36	.36	-.35	-.43	-.16
OP	705834	D	21366	.76	.06	.05	.12	.76	.00	.00	.44	-.34	-.32	-.33	.44
OP	705837	B	21366	.82	.03	.82	.11	.04	.00	.00	.32	-.28	.32	-.21	-.21
OP	705838	C	21366	.64	.27	.05	.64	.03	.00	.00	.32	-.22	-.36	.32	-.27
OP	705841	B	21366	.63	.22	.63	.11	.04	.00	.00	.39	-.31	.39	-.33	-.32
OP	705843	A	21366	.69	.69	.14	.12	.04	.00	.00	.43	.43	-.28	-.42	-.30
OP	705846	D	21366	.78	.03	.14	.05	.78	.00	.00	.40	-.29	-.30	-.28	.40
OP	705849	C	21366	.59	.04	.22	.59	.14	.00	.00	.25	-.19	-.20	.25	-.23
OP	705855	A	21366	.68	.68	.20	.09	.03	.00	.00	.34	.34	-.19	-.38	-.34
OP	705856	C	21366	.62	.09	.15	.62	.14	.00	.00	.36	-.23	-.28	.36	-.35
OP	705860	B	21366	.45	.41	.45	.09	.04	.00	.00	.20	-.08	.20	-.38	-.33

Grade 11 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
OP	705865	A	21366	.68	.68	.03	.13	.16	.00	.00	.38	.38	-.36	-.36	-.24
OP	705868	C	21366	.76	.05	.08	.76	.11	.00	.00	.45	-.32	-.34	.45	-.32
OP	705875	C	21366	.69	.12	.06	.69	.13	.00	.00	.40	-.33	-.32	.40	-.28
FT	745348	D	4072	.45	.05	.24	.26	.45	.00	.00	.24	-.31	-.16	-.25	.24
FT	745349	D	4667	.28	.21	.34	.17	.28	.00	.00	.11	-.16	.03	-.35	.11
FT	745350	D	4303	.37	.08	.37	.18	.37	.00	.00	.29	-.13	-.26	-.42	.29
FT	745351	D	4009	.59	.11	.18	.12	.59	.00	.00	.41	-.20	-.42	-.37	.41
FT	745352	C	3634	.44	.10	.07	.44	.38	.00	.00	.32	-.32	-.40	.32	-.26
FT	745353	A	4036	.31	.31	.33	.26	.10	.00	.00	.16	.16	-.12	-.15	-.36
FT	745354	B	4599	.35	.51	.35	.06	.08	.00	.00	-.04	.18	-.04	-.31	-.30
FT	745355	C	4561	.56	.20	.16	.56	.07	.00	.00	.26	-.12	-.33	.26	-.20
FT	745356	A	3982	.49	.49	.19	.18	.14	.00	.00	.35	.35	-.25	-.41	-.28
FT	745357	B	5272	.73	.10	.73	.10	.07	.00	.00	.50	-.32	.50	-.42	-.37
FT	745358	A	4085	.70	.70	.09	.04	.16	.00	.00	.47	.47	-.37	-.39	-.36
FT	745359	C	4026	.80	.10	.07	.80	.04	.00	.00	.32	-.23	-.21	.32	-.23
FT	745360	B	4117	.54	.18	.54	.16	.12	.00	.00	.40	-.29	.40	-.41	-.31
FT	745361	B	4146	.64	.05	.64	.20	.11	.00	.00	.37	-.36	.37	-.36	-.14
FT	745362	C	4746	.42	.32	.20	.42	.07	.00	.00	.06	.07	-.16	.06	-.22
FT	745363	A	4112	.39	.39	.21	.34	.06	.00	.00	.38	.38	-.35	-.39	-.39
FT	745364	C	4177	.46	.19	.12	.46	.24	.00	.00	.20	-.26	-.31	.20	-.04
FT	745365	D	4054	.43	.09	.14	.34	.43	.00	.00	.33	-.31	-.42	-.26	.33
FT	745366	C	4650	.70	.07	.10	.70	.12	.00	.00	.48	-.30	-.43	.48	-.36
FT	745367	C	3818	.47	.20	.10	.47	.22	.00	.00	.03	.04	-.26	.03	.05
FT	745368	D	3653	.12	.03	.02	.83	.12	.00	.00	-.10	-.35	-.37	.14	-.10
FT	745369	D	4065	.35	.20	.26	.18	.35	.00	.00	.29	-.24	-.28	-.36	.29
FT	745370	C	4089	.60	.19	.07	.60	.14	.00	.00	.28	-.22	-.36	.28	-.17
FT	745371	A	4108	.72	.72	.22	.04	.02	.00	.00	.32	.32	-.24	-.25	-.29
FT	745372	D	3806	.28	.33	.23	.15	.28	.00	.00	.17	-.18	-.19	-.24	.17
FT	745373	B	4202	.28	.21	.28	.20	.31	.00	.00	.09	-.12	.09	-.14	-.04
FT	745374	A	3908	.34	.34	.32	.29	.05	.00	.00	.04	.04	-.03	.02	-.34
FT	745375	A	4148	.40	.40	.32	.16	.11	.00	.00	.41	.41	-.35	-.50	-.39
FT	745376	C	4028	.74	.15	.05	.74	.06	.00	.00	.33	-.22	-.31	.33	-.22
FT	745377	B	4918	.42	.25	.42	.15	.18	.00	.00	.11	-.17	.11	-.08	-.02
FT	745378	D	4124	.45	.24	.15	.16	.45	.00	.00	.33	-.30	-.28	-.35	.33
FT	745379	D	4078	.59	.08	.22	.11	.59	.00	.00	.49	-.39	-.40	-.49	.49
FT	745380	D	4754	.50	.08	.27	.15	.50	.00	.00	.34	-.36	-.27	-.32	.34
FT	745381	B	4557	.62	.05	.62	.26	.08	.00	.00	.29	-.30	.29	-.21	-.25
FT	745382	A	4123	.61	.61	.17	.16	.05	.00	.00	.32	.32	-.29	-.20	-.31
FT	745383	C	4471	.39	.49	.05	.39	.06	.00	.00	.25	-.19	-.39	.25	-.29
FT	745384	C	4058	.38	.22	.21	.38	.19	.00	.00	.10	-.18	-.09	.10	.00

Grade 11 Science

GENERAL			COUNTS	PROPORTIONS							CORRELATIONS				
Type	Item ID	Key	*N*	*p*-value	A	B	C	D	-	*	Total	A	B	C	D
FT	745385	C	4407	.62	.03	.13	.62	.22	.00	.00	.31	-.21	-.25	.31	-.26
FT	745386	B	4222	.54	.11	.54	.20	.14	.00	.00	.20	-.18	.20	-.29	.00
FT	745387	C	4709	.46	.11	.34	.46	.08	.00	.00	.16	-.28	-.03	.16	-.29
FT	745388	B	4086	.56	.25	.56	.16	.03	.00	.00	.29	-.23	.29	-.26	-.25
FT	745389	A	5079	.12	.12	.26	.57	.05	.00	.00	.17	.17	-.49	-.08	-.37
FT	745390	A	4242	.43	.43	.19	.15	.23	.00	.00	.33	.33	-.35	-.40	-.24
FT	745391	A	5450	.72	.72	.05	.15	.08	.00	.00	.43	.43	-.32	-.34	-.32
FT	745392	B	3995	.49	.08	.49	.29	.14	.00	.00	.21	-.24	.21	-.16	-.18
FT	745393	B	4485	.46	.28	.46	.13	.13	.00	.00	.27	-.21	.27	-.26	-.31
FT	745394	D	4841	.33	.12	.30	.24	.33	.00	.00	.20	-.26	-.11	-.28	.20
FT	798392	A	3677	.45	.45	.37	.11	.07	.00	.00	.22	.22	-.08	-.39	-.38
FT	798394	D	4125	.41	.10	.14	.34	.41	.00	.00	.26	-.30	-.36	-.18	.26
FT	798397	A	4111	.68	.68	.05	.24	.03	.00	.00	.33	.33	-.37	-.23	-.27

APPENDIX I: 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

George 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 & Mok, 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 (2015) implements the joint maximum likelihood estimation procedure (Linacre, 2015) 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 (1) 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 J: Reading, Mathematics, and Science 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 State NE READING Spring 2016 Grade 3 O RE03_OUT.txt  Sep 28 2016 12:58
INPUT: 394393 Student  45 READ  REPORTED: 21893 Student  45 READ  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------------

     SUMMARY OF 21845 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      29.1      45.0       .7362   .3800      1.02     .2   1.00     .2 |
| P.SD       8.9        .5      1.1257   .0996       .10     .8    .22     .9 |
| S.SD       8.9        .5      1.1257   .0996       .10     .8    .22     .9 |
| MAX.      44.0      45.0      3.9513  1.0216      1.48    4.0   3.80    4.0 |
| MIN.       2.0      16.0     -2.9456   .3164       .69   -3.4    .37   -3.3 |
|---------------------------------------------------------------------------------|
| REAL RMSE  .4005 TRUE SD  1.0520  SEPARATION  2.63  Studen RELIABILITY  .87 |
|MODEL RMSE  .3929 TRUE SD  1.0549  SEPARATION  2.69  Studen RELIABILITY  .88 |
| S.E. OF Student MEAN = .0076                                                    |
-----------------------------------------------------------------------------------
```

Grade 4

```
TABLE 3.1 State NE READING Spring 2016 Grade 4 O RE04_OUT.txt  Sep 28 2016 12:59
INPUT: 394393 Student  45 READ  REPORTED: 23038 Student  45 READ  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------------

     SUMMARY OF 22978 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      29.2      45.0       .5483   .3708      1.00     .0    .99     .0 |
| P.SD       8.3        .4      1.0291   .0969       .08     .7    .16     .8 |
| S.SD       8.3        .4      1.0291   .0970       .08     .7    .16     .8 |
| MAX.      44.0      45.0      3.7225  1.0194      1.32    3.5   3.86    3.8 |
| MIN.       2.0      14.0     -3.4823   .3107       .75   -3.4    .31   -3.2 |
|---------------------------------------------------------------------------------|
| REAL RMSE  .3894 TRUE SD   .9526  SEPARATION  2.45  Studen RELIABILITY  .86 |
|MODEL RMSE  .3833 TRUE SD   .9551  SEPARATION  2.49  Studen RELIABILITY  .86 |
| S.E. OF Student MEAN = .0068                                                    |
-----------------------------------------------------------------------------------
```

Grade 5

```
TABLE 3.1 State NE READING Spring 2016 Grade 5 O RE05_OUT.txt  Sep 28 2016 13: 1
INPUT: 394393 Student  48 READ  REPORTED: 22695 Student  48 READ  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------------

     SUMMARY OF 22654 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------------|
| MEAN      32.2      48.0       .7536   .3695      1.01     .2    .99     .1 |
| P.SD       8.9        .5      1.0610   .0963       .09     .7    .20     .8 |
| S.SD       8.9        .5      1.0610   .0963       .09     .7    .20     .8 |
| MAX.      47.0      48.0      3.8982  1.0203      1.45    3.8   4.01    3.7 |
| MIN.       1.0      23.0     -4.2595   .3046       .71   -3.5    .35   -3.2 |
|---------------------------------------------------------------------------------|
| REAL RMSE  .3882 TRUE SD   .9874  SEPARATION  2.54  Studen RELIABILITY  .87 |
|MODEL RMSE  .3819 TRUE SD   .9899  SEPARATION  2.59  Studen RELIABILITY  .87 |
| S.E. OF Student MEAN = .0070                                                    |
-----------------------------------------------------------------------------------
```

Grade 6

```
TABLE 3.1 State NE READING Spring 2016 Grade 6 O RE06_OUT.txt  Sep 28 2016 13: 2
INPUT: 394393 Student  48 READ  REPORTED: 22915 Student  48 READ  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22856 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      32.0      48.0       .6646   .3730      1.01     .2   1.01     .2 |
| P.SD       9.0        .4      1.0972   .1059       .10     .7    .21     .9 |
| S.SD       9.0        .4      1.0972   .1059       .10     .7    .21     .9 |
| MAX.      47.0      48.0      3.8229  1.0211      1.49    4.6   5.11    4.5 |
| MIN.       1.0      22.0     -4.3666   .3053       .72   -3.2    .32   -3.1 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3951 TRUE SD  1.0236  SEPARATION  2.59  Studen RELIABILITY  .87 |
|MODEL RMSE  .3878 TRUE SD  1.0264  SEPARATION  2.65  Studen RELIABILITY  .88 |
| S.E. OF Student MEAN = .0073                                              |
-----------------------------------------------------------------------------
```

Grade 7

```
TABLE 3.1 State NE READING Spring 2016 Grade 7 O RE07_OUT.txt  Sep 28 2016 13: 4
INPUT: 394393 Student  48 READ  REPORTED: 22609 Student  48 READ  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22593 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      31.3      48.0       .6792   .3646      1.00     .1    .99     .1 |
| P.SD       8.9        .6      1.0535   .0795       .11     .8    .23     .9 |
| S.SD       8.9        .6      1.0535   .0795       .11     .8    .23     .9 |
| MAX.      47.0      48.0      4.0181  1.0392      1.54    4.5   3.55    4.3 |
| MIN.       1.0      23.0     -3.6914   .3093       .69   -3.3    .24   -3.1 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3809 TRUE SD   .9823  SEPARATION  2.58  Studen RELIABILITY  .87 |
|MODEL RMSE  .3732 TRUE SD   .9852  SEPARATION  2.64  Studen RELIABILITY  .87 |
| S.E. OF Student MEAN = .0070                                              |
-----------------------------------------------------------------------------
```

Grade 8

```
TABLE 3.1 State NE READING Spring 2016 Grade 8 O RE08_OUT.txt  Sep 28 2016 13: 6
INPUT: 394393 Student  50 READ  REPORTED: 22224 Student  50 READ  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22202 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      33.3      50.0       .4629   .3600      1.02     .2   1.02     .2 |
| P.SD       9.0        .6      1.0359   .0878       .11     .8    .21     .9 |
| S.SD       9.0        .6      1.0359   .0878       .11     .8    .21     .9 |
| MAX.      49.0      50.0      3.7254  1.0212      1.50    4.1   2.86    4.4 |
| MIN.       1.0      25.0     -4.5886   .3004       .66   -3.5    .31   -3.3 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3787 TRUE SD   .9642  SEPARATION  2.55  Studen RELIABILITY  .87 |
|MODEL RMSE  .3705 TRUE SD   .9673  SEPARATION  2.61  Studen RELIABILITY  .87 |
| S.E. OF Student MEAN = .0070                                              |
-----------------------------------------------------------------------------
```

Grade 11

```
TABLE 3.1 State NE READING Spring 2016 Grade 11  RE11_OUT.txt  Sep 28 2016 13: 7
INPUT: 394393 Student  50 READ  REPORTED: 21417 Student  50 READ  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 21383 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      33.8      50.0       .2831   .3670      1.01     .2   1.01     .2 |
| P.SD       9.3       1.0      1.0807   .1000       .10     .7    .22     .8 |
| S.SD       9.3       1.0      1.0807   .1000       .10     .7    .22     .8 |
| MAX.      49.0      50.0      3.4443  1.0204      1.50    4.7   4.90    4.4 |
| MIN.       1.0      24.0     -4.8223   .2985       .72   -2.8    .26   -2.7 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3875 TRUE SD  1.0088  SEPARATION  2.60  Studen RELIABILITY  .87 |
|MODEL RMSE  .3804 TRUE SD  1.0115  SEPARATION  2.66  Studen RELIABILITY  .88 |
| S.E. OF Student MEAN = .0074                                              |
-----------------------------------------------------------------------------
```

Mathematics

Grade 3

```
TABLE 3.1 State NE MATH Spring 2016 Grade 3 OP T MA03_OUT.txt  Sep 28 2016 12:40
INPUT: 394393 Student  50 MATH  REPORTED: 22031 Student  50 MATH  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 21880 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      32.6      50.0       .4154   .3687      1.00     .1    .99     .1 |
| P.SD      10.2        .4      1.1868   .1188       .08     .7    .20     .8 |
| S.SD      10.2        .4      1.1869   .1188       .08     .7    .20     .8 |
| MAX.      49.0      50.0      3.6447  1.0180      1.38    4.0   4.06    3.7 |
| MIN.       1.0      25.0     -4.5065   .2949       .73   -3.7    .29   -3.6 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3924 TRUE SD  1.1201  SEPARATION  2.85  Studen RELIABILITY  .89 |
|MODEL RMSE  .3874 TRUE SD  1.1218  SEPARATION  2.90  Studen RELIABILITY  .89 |
| S.E. OF Student MEAN = .0080                                              |
-----------------------------------------------------------------------------
```

Grade 4

```
TABLE 3.1 State NE MATH Spring 2016 Grade 4 OP T MA04_OUT.txt  Sep 28 2016 12:41
INPUT: 394393 Student  55 MATH  REPORTED: 23147 Student  55 MATH  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 23029 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      35.7      55.0       .4027   .3517      1.01     .1   1.03     .1 |
| P.SD      11.4        .4      1.1950   .1156       .07     .7    .19     .8 |
| S.SD      11.4        .4      1.1950   .1156       .07     .7    .19     .8 |
| MAX.      54.0      55.0      3.7273  1.0168      1.34    3.9   4.18    3.9 |
| MIN.       1.0      27.0     -4.6123   .2809       .76   -3.1    .33   -3.0 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3764 TRUE SD  1.1342  SEPARATION  3.01  Studen RELIABILITY  .90 |
|MODEL RMSE  .3703 TRUE SD  1.1362  SEPARATION  3.07  Studen RELIABILITY  .90 |
| S.E. OF Student MEAN = .0079                                              |
-----------------------------------------------------------------------------
```

Grade 5

```
TABLE 3.1 State NE MATH Spring 2016 Grade 5 OP T MA05_OUT.txt  Sep 28 2016 12:43
INPUT: 394393 Student  55 MATH  REPORTED: 22800 Student  55 MATH  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22646 MEASURED (NON-EXTREME) Student
-------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      34.5      55.0       .3709   .3490      1.02     .1   1.03     .2 |
| P.SD      11.6        .4      1.2222   .1155       .08     .7    .20     .8 |
| S.SD      11.6        .4      1.2222   .1155       .08     .7    .20     .8 |
| MAX.      54.0      55.0      3.8211  1.0177      1.36    4.0   4.34    3.9 |
| MIN.       1.0      27.0     -4.5665   .2828       .69   -4.2    .34   -4.0 |
|-----------------------------------------------------------------------------|
| REAL RMSE  .3740 TRUE SD  1.1636  SEPARATION  3.11  Studen RELIABILITY  .91 |
|MODEL RMSE  .3676 TRUE SD  1.1656  SEPARATION  3.17  Studen RELIABILITY  .91 |
| S.E. OF Student MEAN = .0081                                                |
-------------------------------------------------------------------------------
```

Grade 6

```
TABLE 3.1 State NE MATH Spring 2016 Grade 6 OP T MA06_OUT.txt  Sep 28 2016 12:44
INPUT: 394393 Student  58 MATH  REPORTED: 22997 Student  58 MATH  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22778 MEASURED (NON-EXTREME) Student
-------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      36.9      58.0       .4139   .3496      1.01     .1   1.01     .1 |
| P.SD      12.7        .4      1.2889   .1283       .07     .7    .18     .8 |
| S.SD      12.7        .4      1.2889   .1283       .07     .7    .18     .8 |
| MAX.      57.0      58.0      3.8419  1.0165      1.29    3.7   3.72    3.6 |
| MIN.       2.0      29.0     -3.8916   .2733       .77   -3.4    .28   -3.1 |
|-----------------------------------------------------------------------------|
| REAL RMSE  .3777 TRUE SD  1.2323  SEPARATION  3.26  Studen RELIABILITY  .91 |
|MODEL RMSE  .3724 TRUE SD  1.2339  SEPARATION  3.31  Studen RELIABILITY  .92 |
| S.E. OF Student MEAN = .0085                                                |
-------------------------------------------------------------------------------
```

Grade 7

```
TABLE 3.1 State NE MATH Spring 2016 Grade 7 OP T MA07_OUT.txt  Sep 28 2016 12:46
INPUT: 394393 Student  58 MATH  REPORTED: 22579 Student  58 MATH  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22392 MEASURED (NON-EXTREME) Student
-------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      36.9      58.0       .3577   .3474      1.01     .1   1.01     .1 |
| P.SD      12.7        .5      1.2719   .1286       .07     .7    .17     .8 |
| S.SD      12.7        .5      1.2720   .1287       .07     .7    .17     .8 |
| MAX.      57.0      58.0      3.7590  1.0148      1.30    4.0   3.30    4.1 |
| MIN.       2.0      29.0     -3.9013   .2717       .77   -3.5    .36   -3.4 |
|-----------------------------------------------------------------------------|
| REAL RMSE  .3749 TRUE SD  1.2154  SEPARATION  3.24  Studen RELIABILITY  .91 |
|MODEL RMSE  .3705 TRUE SD  1.2168  SEPARATION  3.28  Studen RELIABILITY  .92 |
| S.E. OF Student MEAN = .0085                                                |
-------------------------------------------------------------------------------
```

Grade 8

```
TABLE 3.1 State NE MATH Spring 2016 Grade 8 OP T MA08_OUT.txt  Sep 28 2016 12:47
INPUT: 394393 Student  60 MATH  REPORTED: 22324 Student  60 MATH  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22114 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      38.1      60.0       .2826   .3377      1.01     .1   1.02     .1 |
| P.SD      12.6        .9      1.2299   .1216       .08     .7    .18     .8 |
| S.SD      12.6        .9      1.2300   .1216       .08     .7    .18     .8 |
| MAX.      59.0      60.0      3.7624  1.0161      1.39    3.6   3.82    3.8 |
| MIN.       1.0      30.0     -4.7626   .2692       .75   -3.8    .31   -3.7 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3642 TRUE SD  1.1748  SEPARATION  3.23  Studen RELIABILITY  .91 |
|MODEL RMSE  .3589 TRUE SD  1.1764  SEPARATION  3.28  Studen RELIABILITY  .91 |
| S.E. OF Student MEAN = .0083                                              |
-----------------------------------------------------------------------------
```

Grade 11

```
TABLE 3.1 State NE MATH Spring 2016 Grade 11 OP  MA11_OUT.txt  Sep 28 2016 12:49
INPUT: 394393 Student  60 MATH  REPORTED: 21364 Student  60 MATH  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 21097 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      37.8      60.0       .2580   .3461      1.00     .0   1.00     .0 |
| P.SD      13.5       1.0      1.3235   .1363       .07     .7    .16     .8 |
| S.SD      13.5       1.0      1.3236   .1363       .07     .7    .16     .8 |
| MAX.      59.0      60.0      3.7137  1.0219      1.30    3.5   2.61    3.7 |
| MIN.       1.0      30.0     -4.7402   .2674       .76   -3.6    .38   -3.5 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3759 TRUE SD  1.2690  SEPARATION  3.38  Studen RELIABILITY  .92 |
|MODEL RMSE  .3719 TRUE SD  1.2702  SEPARATION  3.42  Studen RELIABILITY  .92 |
| S.E. OF Student MEAN = .0091                                              |
-----------------------------------------------------------------------------
```

Science

Grade 5

```
TABLE 3.1 State NE SCIENCE Spring 2016 Grade 5 O SC05_OUT.txt  Sep 28 2016 12:52
INPUT: 394393 Student  50 SCIE  REPORTED: 22803 Student  50 SCIE  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22772 MEASURED (NON-EXTREME) Student
-----------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|---------------------------------------------------------------------------|
| MEAN      33.1      50.0       .1444   .3561      1.01     .1   1.00     .1 |
| P.SD       8.9        .4      1.0136   .0885       .10     .8    .19     .8 |
| S.SD       8.9        .4      1.0136   .0885       .10     .8    .19     .8 |
| MAX.      49.0      50.0      3.4141  1.0203      1.43    4.0   3.16    4.1 |
| MIN.       2.0      25.0     -4.1305   .2991       .70   -3.0    .31   -3.0 |
|---------------------------------------------------------------------------|
| REAL RMSE  .3737 TRUE SD   .9422  SEPARATION  2.52  Studen RELIABILITY  .86 |
|MODEL RMSE  .3669 TRUE SD   .9448  SEPARATION  2.58  Studen RELIABILITY  .87 |
| S.E. OF Student MEAN = .0067                                              |
-----------------------------------------------------------------------------
```

Grade 8

```
TABLE 3.1 State NE SCIENCE Spring 2016 Grade 8 O SC08_OUT.txt  Sep 28 2016 12:53
INPUT: 394393 Student  60 SCIE  REPORTED: 22331 Student  60 SCIE  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 22308 MEASURED (NON-EXTREME) Student
-------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      39.0      60.0       .1181   .3219      1.00     .1    .99     .1 |
| P.SD      11.0        .6      1.0297   .0841       .08     .7    .17     .8 |
| S.SD      11.0        .6      1.0297   .0841       .08     .7    .17     .8 |
| MAX.      59.0      60.0      3.5963  1.0178      1.41    4.0   3.91    4.2 |
| MIN.       1.0      30.0     -4.9985   .2710       .75   -3.2    .30   -3.0 |
|-----------------------------------------------------------------------------|
| REAL RMSE  .3373 TRUE SD   .9729  SEPARATION  2.88  Studen RELIABILITY  .89 |
|MODEL RMSE  .3328 TRUE SD   .9744  SEPARATION  2.93  Studen RELIABILITY  .90 |
| S.E. OF Student MEAN = .0069                                                |
-------------------------------------------------------------------------------
```

Grade 11

```
TABLE 3.1 State NE SCIENCE Spring 2016 Grade 11  SC11_OUT.txt  Sep 28 2016 12:55
INPUT: 394393 Student  60 SCIE  REPORTED: 21369 Student  60 SCIE  2 CATS WINSTEPS 3.92.1
-------------------------------------------------------------------------------------

     SUMMARY OF 21347 MEASURED (NON-EXTREME) Student
-------------------------------------------------------------------------------
|          TOTAL                          MODEL         INFIT        OUTFIT    |
|          SCORE     COUNT     MEASURE    S.E.      MNSQ   ZSTD   MNSQ   ZSTD |
|-----------------------------------------------------------------------------|
| MEAN      39.2      60.0       .1676   .3220      1.00     .1    .98     .0 |
| P.SD      11.1        .9      1.0282   .0785       .09     .8    .17     .9 |
| S.SD      11.1        .9      1.0283   .0785       .09     .8    .17     .9 |
| MAX.      59.0      60.0      3.6498  1.0174      1.38    4.0   5.59    4.5 |
| MIN.       1.0      30.0     -4.9373   .2707       .74   -3.2    .28   -3.0 |
|-----------------------------------------------------------------------------|
| REAL RMSE  .3361 TRUE SD   .9718  SEPARATION  2.89  Studen RELIABILITY  .89 |
|MODEL RMSE  .3315 TRUE SD   .9734  SEPARATION  2.94  Studen RELIABILITY  .90 |
| S.E. OF Student MEAN = .0070                                                |
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Appendix K: Reading Item Bank Difficulties

Grade 3 Reading

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
1	13539	21888	-.4134A	.0166	1.12	9.9	1.10	6.4	.47	.38	70.6	75.4	.5419	658151
2	16189	21888	-.5684	.0170	.97	-4.0	.88	-8.1	.41	.38	76.6	76.8	.0001	658152
3	14316	21888	-.3398A	.0164	.96	-5.9	.86	-9.9	.52	.39	74.6	74.7	.2759	658158
4	16078	21888	-.7452A	.0175	1.03	3.3	.97	-1.8	.43	.36	77.0	78.6	.2131	658159
5	15747	21888	-.6977A	.0174	1.06	6.4	1.01	.4	.43	.37	76.0	78.1	.2587	658160
6	10295	21888	.6441A	.0152	1.08	9.9	1.11	9.9	.34	.41	66.2	69.6	.2401	658162
7	17563	21888	-1.2056A	.0194	.97	-3.1	.75	-9.9	.50	.33	82.3	83.4	.2141	658163
8	16163	21892	-.1074A	.0159	.83	-9.9	.75	-9.9	.47	.40	78.8	72.9	-.4638	687481
9	12100	21892	.4163A	.0153	1.06	9.3	1.07	6.9	.36	.41	67.5	70.0	.0502	687482
10	17186	21892	-.7810A	.0176	.86	-9.9	.73	-9.9	.47	.36	81.8	78.9	-.0926	687483
11	15829	21892	-.3791A	.0165	.91	-9.9	.84	-9.9	.44	.39	77.4	75.1	-.0890	687484
12	16886	21892	-.8592A	.0179	.92	-8.7	.82	-9.9	.47	.36	81.0	79.7	.0851	687485
13	17878	21892	-1.0728A	.0188	.91	-8.9	.80	-9.8	.42	.34	83.4	82.0	-.0340	687486
14	18490	21892	-1.4289A	.0206	.94	-4.7	.76	-9.9	.44	.31	85.4	85.7	.0939	687487
15	16315	21892	-.7883A	.0177	1.22	9.9	1.50	9.9	.23	.36	75.0	79.0	.1876	687489
16	12979	21888	.2824A	.0154	1.04	5.9	1.03	3.4	.37	.41	68.7	70.5	-.0232	687491
17	16552	21888	-.9366A	.0182	1.01	1.4	.93	-3.7	.47	.35	79.3	80.6	.2672	687492
18	14511	21888	.0170A	.0157	.94	-9.3	.92	-7.7	.43	.40	74.6	72.0	-.1351	687493
19	11250	21888	.5430A	.0153	1.06	9.7	1.09	9.8	.36	.41	67.5	69.7	.1205	687494
20	16839	21888	-.8281A	.0178	1.02	2.6	1.03	1.4	.37	.36	78.8	79.4	.0678	687495
21	11036	21888	.6985A	.0152	.95	-9.0	.93	-8.1	.45	.41	71.5	69.5	.0148	687496
22	11135	21888	.6853A	.0152	.97	-4.9	.96	-4.4	.43	.41	70.9	69.5	.0053	687499
23	13644	21888	-.1189A	.0159	.97	-4.2	.90	-8.8	.48	.40	72.8	72.9	.2200	687501
24	12938	21892	.4724A	.0153	1.16	9.9	1.19	9.9	.25	.41	63.4	69.9	-.2037	706364
25	18659	21892	-1.1853A	.0193	.80	-9.9	.72	-9.9	.41	.33	86.6	83.2	-.2305	706367
26	13018	21892	.5102A	.0153	1.06	9.9	1.07	7.6	.33	.41	66.8	69.8	-.2604	706369
27	9288	21892	1.1777A	.0154	1.08	9.9	1.13	9.9	.33	.40	67.7	70.5	-.0555	706370
28	14797	21892	.1599A	.0155	.98	-3.8	.95	-4.9	.38	.41	71.9	71.1	-.3540	706371
29	11605	21892	.9598A	.0153	1.06	9.5	1.09	9.9	.39	.40	67.6	69.8	-.3740	706372
30	14323	21892	.0940A	.0156	1.08	9.9	1.08	6.8	.30	.40	67.1	71.5	-.1643	706373
31	13867	21892	.6126A	.0152	1.01	1.9	1.01	1.3	.40	.41	69.5	69.6	-.5689	706375
32	15377	21888	-.3289A	.0164	1.02	2.1	1.02	1.5	.37	.39	74.1	74.6	-.0141	706391
33	14331	21888	.0310A	.0157	1.01	1.4	.98	-1.9	.37	.40	70.9	71.9	-.1031	706392
34	14686	21888	-.0746A	.0159	1.10	9.9	1.13	9.9	.28	.40	68.7	72.6	-.0879	706393
35	9236	21888	.9681A	.0153	1.24	9.9	1.34	9.9	.19	.40	60.9	69.8	.1637	706394
36	18858	21888	-1.6327A	.0218	1.03	2.4	.94	-2.1	.36	.29	86.4	87.6	.1436	706396
37	15094	21888	-.1461A	.0160	.98	-2.2	1.00	.3	.38	.40	74.2	73.2	-.1230	706397
38	15207	21888	-.5210A	.0168	1.00	-.6	.91	-5.8	.47	.38	76.0	76.4	.2274	706398
39	11277	21888	.7102A	.0152	1.16	9.9	1.19	9.9	.26	.41	62.6	69.5	-.0524	706399
40	13104	21888	.3120A	.0154	1.02	3.2	1.06	6.3	.38	.41	70.2	70.4	-.0830	706401
41	9259	21888	1.1935A	.0154	1.12	9.9	1.21	9.9	.29	.40	66.7	70.6	-.0645	706403
42	9295	21888	.8906A	.0152	1.10	9.9	1.15	9.9	.30	.41	65.9	69.6	.2271	706404
43	15362	21888	-.4213A	.0166	1.03	4.2	1.26	9.9	.37	.38	76.5	75.5	.0842	706405
44	10631	21888	.7139A	.0152	1.02	3.5	1.03	3.6	.38	.41	69.0	69.5	.0928	706406
45	14157	21888	-.0942A	.0159	.90	-9.9	.85	-9.9	.51	.40	76.0	72.8	.0675	706409
46	3042	4465	-.3006	.0354	1.19	9.9	1.32	9.9	.20	.39	66.9	73.2	.0015	784150
47	2130	4465	.7520	.0335	1.10	7.7	1.12	6.3	.31	.41	64.2	69.0	.0016	784148
48	2491	4465	.3479	.0336	1.02	1.2	1.01	.7	.39	.41	68.0	69.3	.0015	749292
49	2393	4465	.4580	.0335	1.10	7.6	1.11	5.5	.31	.41	64.6	69.1	.0015	749296
50	2144	4465	.7363	.0335	.98	-1.4	.99	-.7	.41	.41	70.2	68.9	.0016	749298
51	2197	4465	.6771	.0334	1.11	8.5	1.15	7.4	.30	.41	64.1	68.9	.0016	749295
52	2077	4465	.8114	.0335	1.03	2.6	1.06	2.9	.37	.41	67.4	69.1	.0016	749300
53	3505	4465	-.9399	.0395	.86	-7.0	.70	-8.2	.49	.35	81.6	79.5	.0015	749293

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
54	2305	4465	.5564	.0334	1.04	3.3	1.07	3.7	.36	.41	67.2	68.9	.0016	749297
55	3426	4465	-.8200	.0385	.89	-6.0	.76	-6.7	.47	.35	80.6	78.2	.0015	749294
56	3427	4465	1.1474	.0226	1.17	8.4	1.31	9.9	.43	.54	50.1	54.7	.0016	749299
57	5198	4465	.1950	.0248	1.12	6.6	1.14	6.8	.42	.51	54.3	56.1	.0015	784149
58	6703	4465	-.6898	.0265	.94	-2.7	.96	-1.3	.51	.48	64.8	63.5	.0015	784644
59	3685	4465	1.8967	.0372	1.10	4.0	1.13	4.0	.26	.36	77.1	78.4	.0018	749302
46	2207	3998	.5254	.0353	1.02	1.4	1.02	1.0	.38	.40	68.1	68.9	.0025	797961
47	2438	3998	.2327	.0359	1.07	4.8	1.08	3.5	.33	.40	67.5	70.4	.0025	797962
48	3141	3998	-.7948	.0418	.90	-4.8	.78	-5.8	.46	.35	81.4	79.9	.0021	749192
49	1877	3998	.9346	.0352	.98	-1.1	1.02	1.0	.39	.40	70.5	68.5	.0025	749191
50	2287	3998	.4251	.0355	.91	-6.8	.88	-5.8	.48	.40	73.8	69.3	.0025	749195
51	2133	3998	.6176	.0352	1.16	9.9	1.23	9.9	.25	.40	62.1	68.7	.0025	749197
52	3722	3998	-2.2606	.0648	.88	-2.6	.59	-5.2	.38	.23	93.1	93.1	.0023	749190
53	2917	3998	-.4311	.0390	.90	-5.6	.81	-6.2	.48	.37	77.8	76.1	.0023	749196
54	2372	3998	.3174	.0357	1.03	2.2	1.05	2.4	.37	.40	69.0	69.9	.0025	749194
55	2798	3998	-.2552	.0380	.92	-4.9	.84	-5.8	.47	.38	76.4	74.3	.0023	749198
56	1971	3998	.8182	.0352	1.15	9.9	1.23	9.9	.25	.40	62.7	68.4	.0026	749199
57	4187	3998	.6953	.0217	1.32	9.9	1.43	9.9	.42	.57	45.8	52.6	.0032	797965
58	3850	3998	.8998	.0280	1.09	4.5	1.10	4.7	.40	.47	59.1	60.7	.0024	797964
59	5502	3998	-1.1912	.0343	1.03	1.7	1.03	1.2	.37	.40	68.3	68.9	.0010	749187
46	3244	3962	-.9254	.0440	.95	-1.9	.91	-2.1	.36	.31	83.0	82.3	.0027	797966
47	1839	3962	1.0313	.0350	1.05	4.1	1.09	4.9	.30	.37	65.5	67.7	.0026	800298
48	2174	3962	.6223	.0351	1.13	9.2	1.16	8.3	.25	.37	61.4	68.0	.0026	748940
49	1161	3962	1.9115	.0379	1.12	6.5	1.32	9.9	.18	.33	72.6	73.8	.0026	748931
50	3167	3962	-.7815	.0425	.95	-2.0	.90	-2.4	.38	.32	80.9	80.7	.0027	748937
51	2848	3962	-.2656	.0384	.91	-5.3	.83	-5.9	.46	.35	77.5	74.8	.0027	748938
52	1834	3962	1.0374	.0350	1.00	.2	1.02	1.1	.36	.37	67.2	67.7	.0026	748932
53	1512	3962	1.4386	.0358	1.13	8.8	1.21	9.3	.22	.36	65.1	69.3	.0026	748933
54	1800	3962	1.0790	.0350	1.06	4.5	1.09	4.9	.30	.37	65.6	67.8	.0026	748930
55	2709	3962	-.0674	.0372	1.01	.4	1.02	.8	.35	.36	73.1	72.8	.0027	749331
56	4794	3962	.3139	.0259	1.04	2.2	1.05	2.6	.44	.47	53.3	54.7	.0027	797968
57	3626	3962	1.0485	.0238	1.20	9.9	1.23	9.9	.35	.49	44.7	50.4	.0026	797969
58	6585	3962	-.7063	.0291	1.01	.3	.99	-.2	.43	.43	72.7	71.8	.0030	748929
59	3028	3962	1.3140	.0223	1.31	9.9	1.60	9.9	.32	.50	44.6	51.9	.0025	748936
46	2506	3952	.1333	.0362	1.00	-.2	.97	-1.2	.38	.37	70.6	70.7	.0038	797971
47	1156	3952	1.8472	.0378	1.13	7.2	1.32	9.9	.16	.32	71.1	73.4	.0038	797972
48	2603	3952	.0046	.0367	1.02	1.3	1.02	.9	.35	.37	70.4	71.8	.0038	749201
49	2402	3952	.2677	.0358	.92	-5.6	.89	-5.9	.45	.37	72.7	69.7	.0038	749330
50	1705	3952	1.1278	.0352	.98	-1.3	1.02	.9	.36	.36	70.0	67.9	.0039	749202
51	2944	3952	-.4870	.0396	.90	-5.2	.80	-6.7	.46	.35	78.8	76.7	.0038	749210
52	2705	3952	-.1351	.0374	.90	-6.0	.85	-6.4	.47	.36	76.1	73.1	.0038	749205
53	2659	3952	-.0715	.0371	1.03	1.6	1.06	2.4	.34	.37	72.7	72.5	.0039	749211
54	2253	3952	.4554	.0353	1.02	1.8	1.01	.6	.35	.37	66.3	68.6	.0039	749203
55	1641	3952	1.2073	.0353	1.44	9.9	1.61	9.9	-.08	.36	48.3	68.3	.0038	749204
56	3169	3952	1.3660	.0274	1.35	9.9	1.40	9.9	.18	.44	55.3	59.0	.0038	749209
57	4722	3952	.3416	.0246	1.02	1.2	1.01	.3	.48	.50	51.6	52.5	.0039	797973
58	478	3952	2.8195	.0370	1.30	5.4	6.50	9.9	.04	.24	88.4	90.0	.0019	749206
59	3539	3952	1.0885	.0269	1.19	9.2	1.21	9.9	.29	.45	53.5	57.6	.0038	797974
46	3121	4032	-.6820	.0406	.98	-1.1	.97	-.8	.35	.33	79.7	78.5	.0023	797976
47	1233	4032	1.7703	.0371	1.10	5.9	1.27	9.3	.21	.34	71.3	73.0	.0027	797977
48	2179	4032	.5904	.0348	1.02	1.3	1.03	1.6	.36	.38	66.8	68.1	.0024	749309
49	1890	4032	.9379	.0347	1.13	9.4	1.18	9.9	.24	.37	62.8	67.8	.0025	749305
50	1020	4032	2.0790	.0391	1.22	9.9	1.50	9.9	.07	.32	71.8	76.4	.0028	749328
51	3360	4032	-1.1148	.0450	.88	-4.6	.69	-7.5	.45	.30	84.2	83.6	.0022	749308
52	2922	4032	-.3743	.0383	.91	-5.3	.84	-5.9	.45	.35	77.4	75.1	.0023	749313
53	1451	4032	1.4804	.0359	1.14	9.1	1.26	9.9	.20	.35	66.0	70.4	.0026	749327
54	2819	4032	-.2272	.0374	.90	-5.8	.84	-6.2	.46	.36	76.4	73.6	.0023	749312
55	2400	4032	.3202	.0352	.98	-1.6	.97	-1.6	.40	.37	70.2	69.2	.0024	749304
56	1856	4032	2.3323	.0294	1.16	6.8	1.32	9.9	.24	.40	57.2	64.8	.0031	749314
57	4144	4032	.7030	.0271	1.10	5.2	1.11	5.3	.36	.45	57.0	58.5	.0025	797978

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
58	3117	4032	1.5775	.0297	1.37	9.9	1.38	9.9	.09	.41	56.6	64.3	.0028	797979
59	5769	4032	-.2406	.0259	1.23	9.9	1.33	9.9	.33	.48	59.4	59.3	.0021	749306

Grade 4 Reading

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
1	13505	23036	.1146	.0147	.96	-7.2	.93	-8.1	.41	.37	70.1	68.8	-.0001	687538
2	17063	23036	-.6979A	.0162	.89	-9.9	.80	-9.9	.45	.33	77.8	75.7	-.0256	687543
3	14661	23036	-.3448A	.0154	1.10	9.9	1.17	9.9	.32	.35	69.1	72.0	.2058	687545
4	12021	23036	.0150A	.0148	1.18	9.9	1.24	9.9	.26	.37	61.7	69.3	.4191	687546
5	16772	23036	-.6468	.0161	1.02	2.1	1.07	4.9	.32	.34	75.5	75.1	-.0003	687547
6	13989	23036	-.3793A	.0154	1.02	3.1	.97	-2.8	.47	.35	70.3	72.3	.3913	687548
7	18643	23037	-1.1031A	.0176	.99	-.6	1.13	6.7	.25	.31	81.8	80.5	-.0801	687872
8	18157	23037	-.6297A	.0160	.91	-9.9	.89	-8.5	.28	.34	78.6	74.9	-.4129	687874
9	16685	23037	-.3455A	.0154	.93	-9.9	.92	-7.2	.35	.35	75.5	72.0	-.2856	687878
10	15258	23037	-.0650A	.0149	.96	-6.4	.95	-5.7	.36	.36	71.0	69.7	-.2160	687879
11	19062	23037	-1.0375A	.0173	.85	-9.9	.77	-9.9	.33	.31	83.2	79.7	-.2924	687880
12	17950	23037	-1.0810A	.0175	1.04	4.1	1.06	3.1	.33	.31	79.4	80.2	.1144	687881
13	14127	23037	-.2576A	.0152	1.10	9.9	1.11	9.4	.32	.36	66.8	71.2	.2381	687882
14	16169	23036	-.2660A	.0152	.89	-9.9	.89	-9.9	.41	.36	76.0	71.3	-.2338	706610
15	15861	23036	-.3626A	.0154	.94	-8.8	.91	-7.8	.40	.35	74.0	72.2	-.0587	706611
16	20768	23036	-1.6051A	.0201	.66	-9.9	.46	-9.9	.40	.27	90.5	86.1	-.4503	706614
17	14323	23036	-.1845A	.0151	1.10	9.9	1.17	9.9	.29	.36	67.6	70.6	.1204	706615
18	15082	23036	-.2343A	.0152	.97	-4.6	.97	-3.1	.39	.36	72.4	71.0	-.0029	706616
19	13636	23036	.0240A	.0148	1.07	9.9	1.10	9.9	.31	.37	66.8	69.2	.0624	706617
20	13680	23036	-.0241A	.0149	1.09	9.9	1.13	9.9	.29	.36	65.8	69.5	.1012	706618
21	10657	23036	.5666A	.0146	.99	-1.0	1.00	-.5	.37	.37	68.3	68.0	.1561	706619
22	9504	23037	1.1585A	.0151	1.04	6.8	1.11	9.9	.34	.36	70.5	70.8	-.1830	706621
23	11711	23037	.8452A	.0147	1.05	8.7	1.08	9.7	.36	.37	66.3	68.8	-.3443	706623
24	9456	23037	.9858A	.0148	1.06	9.2	1.09	9.9	.31	.37	67.2	69.6	-.0022	706625
25	16206	23037	-.4128A	.0155	.97	-4.5	1.01	.5	.35	.35	74.7	72.7	-.0932	706626
26	14904	23037	-.3890A	.0155	1.11	9.9	1.13	9.9	.31	.35	68.4	72.4	.1952	706627
27	14584	23037	-.1054A	.0150	.93	-9.9	.91	-9.7	.43	.36	73.1	70.0	-.0185	706629
28	14235	23037	-.2060A	.0151	1.09	9.9	1.09	8.6	.31	.36	66.3	70.8	.1619	706630
29	20075	23036	-1.4277A	.0191	.78	-9.9	.66	-9.9	.37	.29	87.7	84.2	-.2908	706637
30	11649	23036	.7069A	.0146	1.06	9.9	1.10	9.9	.32	.37	66.4	68.3	-.1944	706638
31	18874	23036	-.9860A	.0171	.87	-9.9	.90	-5.8	.31	.32	83.1	79.1	-.2796	706640
32	16771	23036	-.6155A	.0160	1.05	6.6	1.13	9.3	.27	.34	74.2	74.8	-.0320	706641
33	12427	23036	.5052A	.0146	1.06	9.9	1.08	9.9	.31	.37	65.2	67.9	-.1591	706642
34	17604	23036	-.9972A	.0172	.88	-9.9	.73	-9.9	.52	.32	80.5	79.2	.1295	706645
35	15288	23036	-.2203A	.0151	.92	-9.9	.88	-9.9	.43	.36	74.2	70.9	-.0656	706646
36	13733	23036	.1559A	.0147	1.03	4.9	1.03	3.8	.33	.37	67.2	68.6	-.0920	706647
37	15271	23036	-.4032A	.0155	.94	-8.6	.89	-9.3	.45	.35	73.4	72.6	.1242	706649
38	17652	23036	-.8663A	.0167	1.04	4.5	1.28	9.9	.26	.32	78.6	77.7	-.0179	706650
39	17086	23036	-.7530A	.0164	.95	-7.0	.85	-9.9	.41	.33	76.8	76.3	.0242	706652
40	13764	23036	-.0878A	.0150	1.09	9.9	1.15	9.9	.30	.36	66.5	69.9	.1470	706655
41	15191	23036	-.5114A	.0157	1.02	2.7	1.00	.3	.42	.35	71.9	73.7	.2523	706657
42	11931	23036	.2871A	.0146	1.04	8.1	1.07	7.9	.34	.37	66.2	68.1	.1650	706660
43	10718	23036	.7023A	.0146	.99	-2.6	.99	-.8	.37	.37	69.6	68.3	.0078	706661
44	14101	23036	-.2234A	.0152	1.03	4.3	1.01	.6	.39	.36	69.0	70.9	.2093	706664
45	13048	23036	.2133	.0147	1.01	1.2	1.00	-.2	.36	.37	68.1	68.4	-.0001	706667
46	4062	4749	-1.5971	.0434	.97	-1.0	1.08	1.6	.29	.27	85.7	85.6	.0015	784678
47	3115	4749	-.2977	.0333	.95	-3.4	.92	-3.6	.41	.36	72.2	70.8	.0017	784684
48	3595	4749	-.8733	.0364	.94	-3.6	.84	-5.1	.41	.33	77.2	76.9	.0016	749670
49	1913	4749	.9597	.0327	1.09	6.8	1.18	9.1	.26	.38	67.6	69.8	.0019	749669

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
50	3068	4749	-.2459	.0331	.92	-6.4	.89	-5.1	.45	.36	74.0	70.4	.0017	749663
51	2899	4749	-.0635	.0326	.91	-7.4	.87	-6.7	.47	.37	72.9	69.2	.0017	749674
52	2779	4749	.0629	.0323	.81	-9.9	.75	-9.9	.57	.38	77.1	68.5	.0018	749668
53	2242	4749	.6159	.0321	1.14	9.9	1.17	9.7	.24	.38	62.7	68.2	.0019	749665
54	2989	4749	-.1599	.0329	.92	-6.0	.87	-6.4	.45	.37	71.9	69.8	.0017	749666
55	1574	4749	1.3340	.0339	1.10	6.5	1.20	8.3	.25	.37	70.3	72.7	.0020	749667
56	3680	4749	1.3626	.0284	1.07	3.5	1.07	3.4	.35	.41	65.5	65.8	.0024	749671
57	4071	4749	.8852	.0244	1.14	7.6	1.15	8.1	.34	.47	51.3	56.8	.0021	784734
58	7432	4749	-1.3621	.0289	1.01	.5	1.03	1.1	.39	.40	66.2	66.8	.0013	784718
59	4113	4749	.8470	.0240	.85	-9.1	.84	-9.3	.59	.47	59.7	55.6	.0021	749673
46	2174	4179	.5266	.0337	1.03	2.3	1.03	1.9	.31	.35	65.9	66.7	-.0001	797981
47	3760	4179	-1.8759	.0534	.91	-2.4	.70	-5.2	.36	.23	90.0	90.0	.0004	749660
48	2034	4179	.6856	.0337	1.00	-.4	1.01	.3	.35	.35	67.4	66.7	-.0001	749650
49	3301	4179	-.9179	.0403	.94	-2.8	.86	-3.9	.37	.30	80.5	79.6	.0001	749652
50	2071	4179	.6436	.0337	1.02	1.5	1.02	1.5	.33	.35	65.8	66.6	-.0001	749657
51	3148	4179	-.6817	.0383	.92	-4.1	.82	-5.9	.41	.31	77.4	76.5	.0001	749653
52	2881	4179	-.3147	.0360	1.16	9.8	1.23	8.3	.14	.33	66.7	72.1	.0000	749654
53	2073	4179	.6413	.0337	1.07	5.6	1.09	5.5	.27	.35	63.3	66.6	-.0001	749659
54	1603	4179	1.1849	.0346	1.12	8.6	1.19	9.6	.20	.34	64.6	69.0	-.0002	751643
55	5332	4179	.0722	.0222	.95	-2.9	.91	-3.2	.52	.49	54.8	51.1	.0003	749662
56	1662	4179	1.1147	.0344	1.05	3.9	1.08	4.0	.29	.34	65.9	68.5	-.0002	797982
57	4066	4179	.6895	.0242	1.15	8.0	1.17	8.5	.33	.45	48.9	52.4	-.0001	797984
58	6834	4179	-1.4308	.0319	1.13	5.8	1.30	9.8	.21	.36	63.0	69.2	-.0001	797985
59	7453	4179	-1.2405	.0321	.95	-1.3	1.00	.0	.38	.35	82.5	80.9	.0021	749661
46	3528	4133	-1.4052	.0466	.93	-2.4	.81	-4.0	.38	.29	85.5	85.5	.0007	797986
47	3033	4133	-.5461	.0381	.95	-2.9	.88	-4.0	.41	.35	76.6	75.7	.0006	797987
48	2855	4133	-.2979	.0366	.87	-8.7	.79	-8.0	.51	.36	77.5	73.0	.0006	749425
49	2802	4133	-.2274	.0363	.91	-5.8	.84	-6.2	.46	.36	74.6	72.4	.0006	749434
50	3867	4133	-2.4014	.0654	.87	-2.7	.51	-6.8	.40	.21	93.6	93.6	.0006	749431
51	3237	4133	-.8606	.0406	.84	-7.8	.69	-9.0	.51	.33	81.7	79.4	.0006	749432
52	2181	4133	.5333	.0343	1.04	2.8	1.04	2.1	.33	.37	65.9	67.7	.0007	749435
53	3361	4133	-1.0748	.0426	.86	-6.1	.69	-8.2	.48	.31	83.3	81.8	.0007	749436
54	3173	4133	-.7576	.0397	.89	-5.8	.78	-6.6	.47	.33	79.9	78.1	.0006	749433
55	2599	4133	.0318	.0353	1.00	-.1	1.00	.2	.37	.37	69.6	70.2	.0007	749437
56	3055	4133	1.1349	.0212	1.54	9.9	2.11	9.9	.24	.51	42.8	54.4	.0007	749429
57	6068	4133	-.7864	.0292	1.12	5.7	1.15	5.8	.32	.43	57.9	63.5	.0006	797989
58	1602	4133	4.2956	.0348	.89	-8.1	.87	-6.8	.46	.36	74.4	69.3	.0017	798024
59	5280	4133	-.0640	.0258	1.07	3.6	1.10	4.3	.42	.47	52.8	56.4	.0006	749428
46	1222	4107	1.6435	.0373	1.12	6.9	1.36	9.9	.18	.34	73.0	74.2	.0023	797995
47	3611	4107	-1.7065	.0503	.88	-3.8	.66	-6.3	.42	.26	88.1	88.0	.0017	798004
48	3868	4107	-2.5668	.0685	.89	-2.1	.53	-6.0	.35	.19	94.2	94.2	.0018	749448
49	2955	4107	-.5207	.0376	.94	-3.2	.89	-3.8	.41	.35	76.3	74.6	.0019	749449
50	3572	4107	-1.6110	.0488	.84	-5.1	.58	-8.6	.47	.27	87.2	87.0	.0019	749445
51	3752	4107	-2.1124	.0577	.96	-1.0	1.09	1.2	.25	.23	91.4	91.4	.0018	749451
52	1715	4107	1.0094	.0348	1.06	4.2	1.09	4.5	.31	.37	67.4	68.9	.0021	749442
53	2765	4107	-.2622	.0362	.93	-4.7	.90	-3.9	.43	.36	74.3	71.9	.0019	749443
54	2855	4107	-.3822	.0368	.87	-8.4	.78	-8.5	.50	.35	76.1	73.1	.0019	749440
55	2653	4107	-.1177	.0356	.92	-5.3	.92	-3.3	.44	.36	73.3	70.6	.0019	749441
56	2095	4107	1.9646	.0282	1.21	9.1	1.32	9.9	.25	.42	54.4	63.1	.0028	749446
57	4895	4107	.1355	.0247	1.02	1.1	.99	-.2	.46	.48	55.0	53.9	.0019	798012
58	5053	4107	-.1772	.0292	1.10	4.7	1.10	4.6	.34	.42	62.8	63.8	.0018	798006
59	3026	4107	1.2959	.0258	1.01	.4	1.01	.3	.44	.46	52.1	56.2	.0024	749450
46	1827	4173	.9539	.0339	1.08	6.5	1.12	6.8	.25	.34	63.8	67.3	-.0005	798017
47	1952	4173	.8110	.0337	1.17	9.9	1.23	9.9	.16	.34	59.2	66.7	-.0006	798018
48	2997	4173	-.4338	.0369	.91	-5.4	.84	-6.2	.43	.32	76.3	73.8	-.0009	749580
49	2877	4173	-.2749	.0359	1.03	2.1	1.05	2.0	.29	.33	71.6	72.0	-.0009	749577
50	2131	4173	.6081	.0336	1.14	9.9	1.19	9.9	.19	.35	59.9	66.4	-.0006	749578
51	1408	4173	1.4543	.0355	1.37	9.9	1.61	9.9	-.08	.33	59.1	71.1	-.0003	749583
52	2601	4173	.0665	.0345	.99	-1.0	.95	-2.6	.35	.34	68.3	68.6	-.0008	749584
53	3081	4173	-.5502	.0376	.93	-4.2	.87	-4.6	.41	.31	76.8	75.3	-.0009	749576

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL CORR.	EXP.	EXACT MATCH OBS%	EXP%	DISPLACE	READ
54	2520	4173	.1623	.0343	1.02	1.4	1.02	.9	.32	.34	67.0	67.9	-.0008	749575
55	1528	4173	1.3061	.0349	.96	-2.7	.99	-.7	.36	.33	71.7	69.7	-.0004	749581
56	5794	4173	-.2034	.0241	.93	-3.8	.92	-2.9	.50	.45	55.0	55.3	-.0002	749586
57	5190	4173	.0311	.0253	1.01	.3	1.00	.0	.43	.43	58.1	55.4	-.0013	749585
58	5115	4173	-.0701	.0282	.98	-.9	.98	-.8	.42	.40	61.8	62.6	-.0026	798020
59	6090	4173	-.4367	.0256	.83	-9.0	.77	-9.1	.57	.43	64.5	59.1	-.0002	798022

Grade 5 Reading

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL CORR.	EXP.	EXACT MATCH OBS%	EXP%	DISPLACE	READ
1	10792	22688	.5744A	.0148	1.07	9.9	1.11	9.9	.33	.39	65.4	68.7	.3014	633235
2	15364	22688	-.1548	.0157	1.04	5.7	1.04	3.4	.34	.38	71.4	73.1	.0003	633238
3	11929	22688	.6284	.0148	1.00	-.1	1.02	1.9	.38	.39	69.0	68.6	.0005	633240
4	11894	22688	.9236A	.0148	1.07	9.9	1.11	9.9	.33	.38	66.0	68.6	-.2840	633241
5	13351	22688	.3144	.0150	1.07	9.9	1.07	7.2	.31	.39	66.1	69.7	.0003	633243
6	17192	22688	-.6354	.0169	.90	-9.9	.76	-9.9	.47	.35	79.3	77.9	.0002	633244
7	9949	22694	.5732A	.0148	1.15	9.9	1.20	9.9	.27	.39	61.9	68.7	.4876	645755
8	19436	22694	-1.3574A	.0200	.95	-3.9	.91	-3.9	.34	.31	86.2	85.5	-.0314	645756
9	16152	22694	-.1620A	.0157	.92	-9.9	.86	-9.9	.41	.38	75.5	73.1	-.1935	645757
10	11507	22694	.9374A	.0148	1.07	9.9	1.12	9.9	.32	.38	65.8	68.6	-.2138	645760
11	17175	22694	-.7147A	.0172	1.04	4.9	1.15	8.5	.34	.35	78.5	78.7	.0865	645762
12	14569	22694	-.2008A	.0157	1.00	.5	1.02	1.5	.45	.37	73.3	73.5	.2393	645763
13	15431	22694	-.4316A	.0163	1.06	7.0	1.03	2.4	.42	.37	73.7	75.7	.2639	645764
14	18673	22694	-1.3622A	.0201	1.17	9.9	1.15	6.0	.32	.30	82.9	85.6	.2678	658267
15	15782	22694	-.3455A	.0161	.97	-4.5	.89	-8.9	.44	.37	74.8	74.9	.0889	658269
16	13597	22694	.0985A	.0152	1.02	3.7	1.00	.3	.39	.38	69.2	71.0	.1620	658271
17	18818	22694	-1.5794A	.0214	1.16	9.9	.91	-3.5	.48	.29	83.5	87.7	.4351	658272
18	15850	22694	-.1104A	.0156	.88	-9.9	.82	-9.9	.45	.38	76.6	72.7	-.1669	658273
19	18171	22694	-1.0155A	.0183	.93	-6.7	.79	-9.9	.46	.33	82.1	82.0	.0861	658274
20	17980	22694	-1.1082A	.0188	1.08	7.4	1.05	2.5	.39	.32	80.8	83.0	.2427	658275
21	17547	22694	-.5120A	.0165	.93	-8.2	.94	-4.4	.34	.36	79.0	76.6	-.2315	658276
22	9340	22688	.7467A	.0148	1.17	9.9	1.24	9.9	.22	.38	60.9	68.4	.4487	687585
23	16709	22688	-.7096A	.0171	.96	-4.4	.84	-9.9	.50	.35	78.0	78.6	.2120	687587
24	15675	22688	-.1812A	.0157	.95	-7.8	.90	-8.5	.42	.38	75.0	73.3	-.0512	687590
25	16856	22688	-.8868A	.0178	1.20	9.9	1.47	9.9	.32	.34	76.9	80.6	.3508	687591
26	17320	22688	-.9189A	.0179	1.00	-.3	.83	-9.5	.49	.34	79.0	80.9	.2511	687592
27	10636	22688	1.1362A	.0149	1.05	7.7	1.07	7.4	.36	.37	67.4	69.2	-.2216	687609
28	18614	22688	-1.0042A	.0183	.87	-9.9	.74	-9.9	.43	.33	83.8	81.8	-.0791	687610
29	14085	22688	.3158A	.0150	1.13	9.9	1.19	9.9	.24	.39	64.5	69.7	-.1683	687611
30	14394	22688	.2415A	.0150	.95	-8.1	.94	-6.6	.41	.39	72.3	70.1	-.1659	687612
31	13027	22688	.2241A	.0151	1.23	9.9	1.32	9.9	.19	.38	61.0	70.2	.1634	687614
32	20068	22688	-1.1502A	.0190	.67	-9.9	.53	-9.9	.41	.32	89.7	83.4	-.5424	687616
33	16000	22688	-.4324A	.0163	1.03	3.3	1.01	.5	.39	.37	74.4	75.7	.1202	687617
34	17600	22688	-.6473A	.0169	.95	-5.6	.93	-4.2	.36	.35	79.5	78.0	-.1103	687618
35	14368	22688	.1507A	.0152	.98	-3.3	.95	-5.1	.39	.38	71.1	70.7	-.0683	687620
36	14188	22688	.1543A	.0152	.89	-9.9	.84	-9.9	.49	.38	74.9	70.6	-.0301	687625
37	18124	22688	-1.1191A	.0188	1.04	3.3	1.00	.2	.41	.32	81.9	83.1	.2063	687626
38	13162	22688	.4212A	.0149	1.09	9.9	1.11	9.9	.29	.39	65.3	69.2	-.0642	687627
39	15622	22688	-.2289A	.0158	.93	-9.6	.88	-9.8	.45	.37	75.8	73.8	.0105	687628
40	11457	22688	.6693A	.0148	1.05	8.3	1.07	8.4	.34	.39	66.8	68.5	.0623	687631
41	17686	22694	-.4570A	.0164	.92	-9.8	.93	-5.4	.32	.36	79.0	76.0	-.3312	706468
42	16899	22694	-.2214A	.0158	.94	-8.6	.93	-6.0	.34	.37	75.9	73.7	-.3373	706469
43	11773	22694	.7560A	.0148	1.17	9.9	1.25	9.9	.22	.38	61.4	68.5	-.0921	706470

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
44	17653	22694	-.3856A	.0162	.84	-9.9	.77	-9.9	.41	.37	80.6	75.3	-.3939	706471
45	13432	22694	.6136A	.0148	1.07	9.9	1.08	9.2	.30	.39	65.3	68.6	-.3159	706473
46	14624	22694	-.0213A	.0154	1.00	-.7	.95	-4.4	.40	.38	71.2	71.9	.0451	706474
47	12381	22694	.6469A	.0148	1.11	9.9	1.14	9.9	.28	.39	63.7	68.5	-.1162	706476
48	17953	22694	-.6257A	.0169	.85	-9.9	.77	-9.9	.41	.36	81.7	77.7	-.2424	706478
49	3746	4715	-.9186	.0387	.90	-4.7	.80	-5.7	.44	.33	81.9	80.3	.0013	784737
50	3177	4715	-.1822	.0339	1.07	4.3	1.09	3.8	.30	.37	69.5	72.4	.0014	784738
51	1997	4715	1.0631	.0323	1.12	9.6	1.18	9.8	.24	.37	62.9	68.2	.0015	751407
52	1485	4715	1.6233	.0341	1.13	8.4	1.30	9.9	.19	.34	69.5	72.5	.0015	751411
53	2815	4715	.2164	.0326	1.10	7.8	1.13	6.6	.27	.38	64.9	69.3	.0014	751408
54	1498	4715	1.6082	.0340	1.11	7.1	1.29	9.9	.20	.34	71.9	72.4	.0015	751402
55	3025	4715	-.0109	.0333	1.05	3.7	1.12	5.7	.32	.37	69.4	70.9	.0014	751406
56	2457	4715	.5891	.0321	.95	-4.5	.93	-4.3	.43	.38	69.7	67.7	.0014	751410
57	2810	4715	.2218	.0326	1.04	2.9	1.04	2.2	.34	.38	67.1	69.2	.0014	751412
58	3454	4715	-.5168	.0357	.96	-2.3	.93	-2.4	.40	.35	76.3	75.8	.0014	751409
59	3174	4715	1.2877	.0201	1.14	7.0	1.54	9.9	.41	.50	49.8	54.6	.0014	784735
60	3094	4715	1.3825	.0213	1.33	9.9	1.68	9.9	.27	.48	44.3	54.0	.0015	751405
61	5279	4715	.4065	.0226	.91	-5.5	.89	-6.0	.56	.50	54.7	51.8	.0014	784736
62	7318	4715	-.8513	.0271	1.03	1.4	.97	-1.0	.43	.44	65.8	65.7	.0013	751403
63	1961	1872	1.7898	.0484	.97	-.6	.97	-.8	.42	.39	74.0	74.3	.0025	751404
49	2124	4084	.7309	.0341	1.10	8.0	1.12	7.4	.24	.35	61.5	66.8	.0015	798028
50	3576	4084	-1.4320	.0499	.88	-3.8	.67	-6.8	.44	.27	87.9	87.7	.0015	798029
51	2829	4084	-.1343	.0367	.93	-4.0	.89	-4.7	.42	.34	74.8	73.0	.0016	751278
52	3516	4084	-1.2895	.0477	.89	-3.8	.76	-5.2	.42	.28	86.7	86.2	.0015	751283
53	2056	4084	.8099	.0341	1.15	9.9	1.21	9.9	.18	.35	58.9	66.6	.0016	751273
54	1063	4084	2.0476	.0382	1.38	9.9	1.86	9.9	-.14	.29	68.3	75.5	.0016	751276
55	3361	4084	-.9682	.0436	.95	-2.0	.91	-2.1	.37	.30	83.1	82.7	.0015	751274
56	2770	4084	-.0557	.0363	.86	-9.2	.80	-9.2	.50	.35	76.8	72.2	.0016	751279
57	2624	4084	.1320	.0355	.93	-5.1	.89	-5.4	.43	.35	72.4	70.3	.0015	751277
58	3448	4084	-1.1414	.0457	.86	-5.0	.67	-8.0	.47	.29	85.5	84.7	.0016	751272
59	5996	4084	-.1010	.0239	1.49	9.9	2.20	9.9	.19	.50	56.5	60.3	.0015	751282
60	4700	4084	.5084	.0230	1.00	.0	1.01	.6	.48	.49	49.4	48.8	.0015	798032
61	6402	4084	-.4312	.0264	1.04	1.8	1.09	2.2	.43	.46	67.3	65.7	.0015	798034
62	3770	4084	1.1202	.0310	1.07	3.1	1.07	2.9	.29	.37	68.9	69.5	.0015	751280
63	2083	1824	2.0902	.0485	.94	-1.2	.92	-1.5	.39	.33	77.1	76.6	.0033	751281
49	823	4110	2.5095	.0416	1.14	5.8	1.50	9.9	.09	.28	79.7	80.7	.0009	798054
50	2357	4110	.5282	.0345	.89	-9.0	.85	-8.7	.47	.36	72.5	68.2	.0008	749679
51	3459	4110	-1.0764	.0454	.93	-2.7	.81	-4.3	.39	.30	84.7	84.4	.0008	748968
52	2927	4110	-.1961	.0374	1.05	2.6	1.08	2.9	.30	.35	73.7	74.4	.0008	748970
53	1805	4110	1.1755	.0343	1.10	8.1	1.17	9.0	.24	.35	63.9	67.6	.0008	748960
54	2185	4110	.7311	.0342	1.08	6.4	1.10	5.7	.27	.36	63.8	67.4	.0008	748958
55	2488	4110	.3707	.0349	.98	-1.6	.96	-2.0	.38	.36	69.8	69.1	.0008	748962
56	2064	4110	.8724	.0341	1.07	5.4	1.10	5.8	.29	.36	64.8	67.2	.0008	748961
57	2260	4110	.6430	.0343	1.01	.7	1.00	.1	.36	.36	66.5	67.6	.0008	748959
58	3797	4110	1.1202	.0278	.96	-2.2	.96	-2.0	.45	.42	63.5	61.6	.0008	748966
59	4753	4110	.4714	.0254	1.18	8.9	1.20	9.7	.34	.46	46.0	54.9	.0008	748965
60	3590	4110	-1.3690	.0494	.94	-1.8	.91	-1.7	.34	.27	87.8	87.4	.0008	798059
61	6420	4110	-.6196	.0286	1.00	-.1	1.00	.1	.44	.43	66.7	66.0	.0007	798060
62	6717	4110	-.9084	.0307	.90	-4.1	.83	-5.3	.50	.41	73.4	69.8	.0007	798061
63	2050	1808	2.4481	.0497	.94	-1.3	.94	-1.3	.40	.35	75.5	75.3	.0026	748963
49	2886	4103	-.2127	.0369	1.19	9.9	1.29	9.9	.12	.34	67.3	73.4	.0005	798063
50	3096	4103	-.5135	.0389	1.09	4.7	1.21	6.1	.21	.32	75.0	77.0	.0004	798065
51	2639	4103	.1085	.0354	.96	-3.1	.95	-2.5	.40	.35	71.7	70.1	.0005	751232
52	3118	4103	-.5470	.0392	1.08	3.8	1.14	4.2	.23	.32	75.9	77.4	.0005	751242
53	2067	4103	.7884	.0340	1.03	2.6	1.06	3.6	.31	.35	65.4	66.7	.0005	751243
54	3737	4103	-1.8502	.0569	.92	-1.8	.72	-4.5	.35	.23	91.1	91.1	.0003	751238
55	2874	4103	-.1965	.0368	.97	-2.0	.96	-1.4	.38	.34	74.2	73.3	.0005	751233
56	1571	4103	1.3721	.0349	1.11	7.7	1.20	9.5	.21	.34	66.3	68.8	.0005	751241
57	2024	4103	.8382	.0340	.97	-2.9	.96	-2.2	.38	.35	68.5	66.7	.0005	751236
58	3017	4103	-.3965	.0381	.99	-.6	1.01	.3	.34	.33	76.3	75.6	.0005	751240

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
59	3811	4103	.9285	.0204	1.55	9.9	1.99	9.9	.21	.51	35.6	47.4	.0005	751237
60	5911	4103	-.3830	.0273	.93	-3.2	.91	-3.8	.49	.43	62.9	60.6	.0005	798069
61	5118	4103	.1503	.0259	1.07	3.7	1.07	3.6	.38	.44	55.1	56.1	.0005	798066
62	4924	4103	-.7560	.0389	.91	-3.9	.88	-3.9	.38	.30	79.6	78.4	.0006	751235
63	1849	1600	2.0378	.0529	.94	-1.0	.94	-1.1	.39	.34	77.1	77.2	.0020	751234
49	2509	4148	.3654	.0347	1.02	1.5	1.07	3.3	.34	.36	68.8	68.8	.0006	798070
50	3774	4148	-1.7856	.0564	.94	-1.5	.86	-2.1	.31	.24	91.0	91.0	.0005	798071
51	3553	4148	-1.2095	.0468	.91	-3.2	.77	-4.8	.39	.28	86.1	85.8	.0006	749010
52	2489	4148	.3893	.0346	1.12	8.8	1.16	7.8	.23	.36	63.3	68.6	.0006	749680
53	2365	4148	.5364	.0343	1.10	8.0	1.12	6.3	.25	.36	62.6	67.7	.0006	749011
54	2430	4148	.4596	.0344	.98	-1.5	.96	-2.1	.38	.36	67.8	68.2	.0006	749012
55	2954	4148	-.2019	.0371	.89	-7.0	.78	-8.2	.48	.34	76.6	74.2	.0006	749014
56	3516	4148	-1.1304	.0457	.90	-3.5	.74	-5.8	.41	.29	85.5	85.0	.0006	749013
57	1920	4148	1.0529	.0341	1.09	6.8	1.15	8.2	.26	.36	65.0	67.2	.0006	749017
58	2938	4148	-.1800	.0370	1.03	1.6	1.07	2.3	.31	.35	73.7	73.9	.0006	749016
59	4564	4148	.6825	.0214	1.16	8.4	1.23	7.7	.42	.52	45.5	48.2	.0006	749006
60	6416	4148	-1.2857	.0323	.97	-1.7	.95	-2.3	.41	.38	67.1	66.5	.0006	798074
61	4336	4148	.7743	.0230	1.22	9.9	1.26	9.9	.34	.49	46.1	49.6	.0006	798075
62	2533	4148	1.8736	.0261	1.06	3.0	1.07	2.9	.38	.43	53.4	58.3	.0007	749018
63	2205	1558	1.9132	.0459	.99	-.2	.99	-.3	.44	.43	62.6	63.0	.0017	749019

Grade 6 Reading

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
1	18052	22910	-1.2117A	.0187	1.14	9.9	1.18	7.9	.34	.32	80.1	82.8	.2714	658337
2	14961	22910	-.6477A	.0166	1.21	9.9	1.25	9.9	.39	.36	69.7	76.8	.5261	658340
3	17874	22910	-1.6755A	.0212	1.48	9.9	1.14	4.8	.51	.29	78.4	87.6	.7890	658341
4	12474	22910	.1870A	.0150	.96	-6.9	.93	-7.4	.47	.39	71.0	70.0	.2504	658343
5	17717	22910	-1.3285A	.0192	1.21	9.9	1.07	3.0	.45	.31	78.6	84.1	.4908	658348
6	11383	22910	.5474A	.0148	1.05	8.3	1.07	8.4	.35	.40	67.3	68.9	.1277	658350
7	15857	22915	-.3141A	.0157	1.07	9.5	1.11	8.5	.30	.38	71.5	73.5	-.0297	687664
8	12711	22915	.3737A	.0149	1.13	9.9	1.22	9.9	.28	.40	64.8	69.2	.0110	687665
9	18212	22915	-.7654A	.0169	.80	-9.9	.68	-9.9	.47	.36	83.0	78.0	-.2360	687666
10	17028	22915	-.2821A	.0157	.90	-9.9	.82	-9.9	.39	.38	76.5	73.3	-.3758	687667
11	15720	22915	-.5075A	.0162	1.11	9.9	1.18	9.9	.34	.37	72.5	75.4	.2013	687668
12	14429	22915	.1383A	.0150	.86	-9.9	.81	-9.9	.50	.39	76.2	70.2	-.1413	687669
13	16263	22915	-.3857A	.0159	1.03	4.8	1.12	8.5	.32	.38	73.9	74.2	-.0616	687671
14	13048	22915	.4867A	.0148	1.04	6.9	1.06	6.4	.36	.40	67.5	69.0	-.1768	687672
15	15762	22910	-.4962A	.0161	1.08	9.8	1.17	9.9	.36	.37	73.3	75.3	.1788	687673
16	19466	22910	-1.3326A	.0192	.86	-9.9	.82	-8.3	.41	.31	86.1	84.1	-.1026	687674
17	19454	22910	-1.4202A	.0197	.85	-9.9	.66	-9.9	.47	.31	85.8	85.0	-.0074	687675
18	11583	22910	.5707A	.0148	.98	-3.7	.97	-3.2	.41	.40	70.1	68.9	.0609	687676
19	20110	22910	-1.6624A	.0211	.84	-9.9	.59	-9.9	.44	.29	88.1	87.4	-.0425	687678
20	13756	22910	.0338A	.0152	1.02	3.7	1.01	1.1	.39	.39	69.8	70.8	.1186	687681
21	18170	22910	-1.2478A	.0188	1.15	9.9	1.29	9.9	.33	.32	81.0	83.2	.2708	687682
22	16140	22910	-.3088A	.0157	1.04	5.2	1.13	9.7	.31	.38	73.6	73.5	-.1081	706503
23	18357	22910	-.9241A	.0175	.95	-5.8	.98	-1.2	.34	.35	81.9	79.7	-.1211	706504
24	17258	22910	-.8034A	.0170	1.03	3.3	1.03	1.6	.37	.35	77.8	78.4	.0923	706505
25	16716	22910	-.4309A	.0160	.97	-3.7	.95	-3.5	.36	.38	75.5	74.6	-.1373	706506
26	14590	22910	-.0039A	.0152	.88	-9.9	.83	-9.9	.50	.39	75.7	71.1	-.0358	706510
27	11380	22910	.6194A	.0148	1.04	6.6	1.05	5.5	.35	.40	67.3	68.9	.0564	706513
28	14995	22910	-.0767A	.0153	1.01	2.1	1.00	.3	.36	.39	70.9	71.6	-.0586	706514
29	12765	22910	.3004A	.0149	1.19	9.9	1.29	9.9	.23	.40	62.3	69.5	.0722	706515

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
30	14732	22910	.0799A	.0151	1.10	9.9	1.20	9.9	.27	.39	67.3	70.6	-.1542	706518
31	15839	22910	-.4641A	.0161	1.11	9.9	1.12	8.4	.31	.37	71.0	74.9	.1270	706520
32	14054	22910	.1986A	.0150	.93	-9.9	.89	-9.9	.44	.39	72.4	69.9	-.1154	706522
33	13637	22910	.1465A	.0150	.98	-3.5	.96	-3.7	.42	.39	71.0	70.2	.0321	706523
34	17457	22910	-.7163A	.0168	.87	-9.9	.77	-9.9	.47	.36	80.4	77.5	-.0545	706524
35	12149	22915	.6970A	.0148	1.06	9.9	1.09	9.9	.34	.40	66.6	68.9	-.1882	706540
36	9187	22915	1.1372A	.0151	1.01	1.9	1.09	9.5	.35	.39	71.0	70.4	.0252	706542
37	9495	22915	1.1698A	.0151	1.13	9.9	1.24	9.9	.26	.38	66.7	70.6	-.0759	706543
38	17883	22915	-1.0003A	.0177	.97	-2.8	.90	-5.6	.43	.34	80.6	80.6	.1094	706544
39	14345	22915	.0476A	.0151	1.01	1.2	.99	-1.0	.38	.39	69.7	70.8	-.0301	706547
40	11029	22915	.7344A	.0148	1.07	9.9	1.11	9.9	.31	.40	66.9	69.0	.0185	706548
41	14534	22915	.1839A	.0150	.94	-9.9	.91	-9.9	.43	.39	73.0	70.0	-.2119	706552
42	13872	22915	.3885A	.0148	1.06	9.6	1.08	8.3	.33	.40	67.2	69.2	-.2640	706553
43	14975	22915	.0102A	.0152	.90	-9.9	.86	-9.9	.46	.39	74.8	71.0	-.1412	706554
44	17031	22915	-.5284A	.0162	1.00	-.4	.99	-.7	.33	.37	75.7	75.6	-.1237	706555
45	16707	22915	-.5370A	.0162	1.06	7.6	1.12	7.7	.30	.37	74.2	75.7	-.0252	706556
46	13361	22915	.1902A	.0150	.97	-5.1	.94	-6.1	.43	.39	71.2	70.0	.0507	706559
47	20009	22915	-1.2279A	.0187	.71	-9.9	.58	-9.9	.41	.32	88.4	83.0	-.4473	706560
48	18023	22915	-.7257A	.0168	1.06	6.6	1.14	8.5	.21	.36	76.6	77.6	-.2167	706562
49	3489	4842	-.5802	.0348	1.12	7.1	1.27	8.8	.23	.36	72.2	74.9	.0008	784768
50	2516	4842	.4683	.0318	1.01	1.0	1.02	1.2	.38	.39	67.7	68.1	.0008	788680
51	4057	4842	-1.3843	.0414	.86	-5.8	.69	-7.5	.46	.30	84.8	84.0	.0009	751249
52	2508	4842	.4764	.0318	1.10	8.1	1.12	6.9	.28	.39	63.9	68.1	.0008	751247
53	2994	4842	-.0236	.0325	.85	-9.9	.79	-9.9	.53	.38	75.7	70.0	.0008	751244
54	2914	4842	.0605	.0323	.97	-2.2	.95	-2.9	.41	.39	70.6	69.5	.0009	751245
55	3838	4842	-1.0401	.0381	.99	-.6	.99	-.3	.34	.33	80.9	80.0	.0008	751251
56	3146	4842	-.1870	.0331	1.02	1.2	1.09	3.9	.36	.38	72.1	71.2	.0008	751250
57	2984	4842	-.0131	.0325	1.10	7.6	1.20	9.3	.28	.38	66.3	69.9	.0008	751252
58	2751	4842	.2292	.0320	.97	-2.4	.95	-2.7	.41	.39	69.8	68.6	.0009	751246
59	4355	4842	.7476	.0198	1.57	9.9	1.93	9.9	.27	.55	39.4	50.5	.0008	784771
60	4092	4842	.8625	.0203	1.29	9.9	1.53	9.9	.38	.54	44.8	51.6	.0008	754879
61	7572	4842	-.8858	.0258	.96	-1.9	.92	-2.7	.49	.45	68.8	65.8	.0008	789346
62	6968	4842	-.4852	.0236	1.17	8.3	1.24	8.2	.38	.49	62.2	59.6	.0008	751248
63	2081	2046	2.4880	.0483	.99	-.2	.98	-.5	.38	.37	78.2	77.5	.0030	754876
49	3301	4243	-.7578	.0396	.99	-.3	.99	-.3	.33	.33	79.1	78.8	.0007	798265
50	1279	4243	1.7346	.0364	1.13	7.7	1.28	9.9	.19	.34	69.3	73.6	.0007	798267
51	2792	4243	-.0567	.0353	.95	-3.5	.91	-4.0	.42	.36	72.3	71.2	.0007	749683
52	3218	4243	-.6309	.0386	.96	-1.8	.94	-1.8	.37	.33	78.3	77.3	.0006	749690
53	2293	4243	.5323	.0338	.94	-4.8	.92	-4.5	.42	.37	71.2	67.6	.0007	749682
54	2069	4243	.7870	.0337	1.05	3.9	1.07	4.1	.32	.37	65.5	67.4	.0007	749686
55	3437	4243	-.9823	.0417	.93	-2.9	.89	-2.6	.39	.31	81.9	81.5	.0007	749685
56	2529	4243	.2599	.0342	1.03	2.1	1.02	1.0	.34	.37	67.5	68.7	.0007	749684
57	2587	4243	.1916	.0344	1.09	6.6	1.20	9.5	.27	.37	67.8	69.1	.0007	749687
58	3418	4243	-.9495	.0414	.86	-6.2	.72	-7.7	.48	.31	82.6	81.1	.0006	749688
59	4865	4243	.4595	.0207	1.27	9.9	1.42	9.9	.39	.54	44.7	50.0	.0007	754871
60	2781	4243	1.6034	.0254	1.16	7.7	1.23	9.6	.31	.45	50.0	57.2	.0008	798089
61	3699	4243	1.0646	.0250	1.08	4.4	1.10	5.3	.39	.46	52.0	55.1	.0007	798097
62	6431	4243	-.6560	.0275	.98	-.8	1.01	.5	.45	.44	66.1	63.4	.0007	749692
63	1812	1964	2.9464	.0551	1.04	.8	1.07	1.3	.28	.32	80.7	81.0	.0024	749691
49	1928	4208	.9781	.0340	1.20	9.9	1.28	9.9	.16	.37	59.9	67.7	.0010	798102
50	2265	4208	.5910	.0339	1.22	9.9	1.29	9.9	.15	.37	58.1	67.6	.0010	798106
51	1803	4208	1.1231	.0342	.97	-2.1	1.01	.6	.37	.36	71.2	68.2	.0010	748973
52	1242	4208	1.8196	.0368	1.23	9.9	1.48	9.9	.08	.33	67.9	74.0	.0011	748977
53	3459	4208	-1.0282	.0430	.99	-.5	.96	-.8	.32	.31	82.6	82.7	.0009	748976
54	2998	4208	-.3083	.0369	.88	-7.6	.78	-8.2	.49	.35	76.8	74.3	.0009	748978
55	1688	4208	1.2586	.0345	1.07	4.8	1.11	5.2	.28	.36	66.2	69.0	.0010	748974
56	2804	4208	-.0536	.0356	.95	-3.3	.90	-4.2	.42	.36	72.5	71.6	.0009	748972
57	3489	4208	-1.0843	.0436	.88	-4.6	.74	-6.3	.44	.30	84.4	83.3	.0009	748983
58	3757	4208	-1.6860	.0522	.85	-4.3	.57	-7.8	.45	.26	89.5	89.3	.0009	748975
59	4822	4208	.5077	.0209	1.11	5.8	1.14	4.0	.47	.54	47.7	50.3	.0010	748982

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
60	5117	4208	.2349	.0247	1.04	1.9	1.02	1.0	.45	.48	54.7	54.4	.0009	798268
61	5655	4208	-.2072	.0270	1.06	3.3	1.11	4.9	.40	.45	55.3	59.5	.0009	798109
62	6548	4208	-1.4313	.0323	.88	-7.2	.85	-7.2	.51	.39	72.9	67.1	.0009	748971
63	2470	2045	2.0273	.0422	.98	-.5	.99	-.3	.42	.39	70.4	71.0	.0030	748979
49	1631	4157	1.2661	.0348	1.25	9.9	1.38	9.9	.10	.36	59.7	69.4	.0009	798269
50	1176	4157	1.8540	.0374	1.03	1.6	1.26	8.5	.25	.33	75.7	74.7	.0010	798271
51	3217	4157	-.7230	.0398	.94	-2.9	.86	-4.0	.40	.33	79.5	78.5	.0009	748991
52	2639	4157	.0733	.0352	1.16	9.9	1.29	9.9	.20	.37	65.7	70.1	.0008	748992
53	3162	4157	-.6372	.0391	.97	-1.4	.92	-2.4	.37	.33	77.4	77.5	.0009	748989
54	2738	4157	-.0510	.0357	.93	-5.1	.86	-6.1	.44	.36	72.6	71.2	.0008	748995
55	3123	4157	-.5782	.0387	1.02	1.2	1.10	2.8	.31	.34	76.8	76.8	.0008	748990
56	3025	4157	-.4354	.0377	.93	-4.3	.87	-4.7	.43	.35	76.8	75.2	.0008	754873
57	2736	4157	-.0484	.0357	.94	-3.8	.89	-4.8	.42	.36	73.2	71.2	.0008	748993
58	2995	4157	-.3930	.0374	.92	-4.7	.84	-5.6	.44	.35	76.1	74.7	.0009	754944
59	5628	4157	-.0631	.0243	1.00	.1	1.03	1.1	.49	.49	55.9	55.4	.0008	748987
60	6516	4157	-1.4499	.0325	.96	-2.4	.93	-3.2	.43	.39	68.2	67.5	.0008	798129
61	4123	4157	.7843	.0341	1.12	4.6	1.12	4.4	.23	.36	75.3	75.5	.0009	798386
62	3820	4157	.9317	.0240	.98	-1.2	.98	-.8	.49	.48	51.6	51.9	.0009	748988
63	2558	2329	2.2848	.0494	.99	-.2	1.03	.6	.34	.31	82.6	82.5	.0032	748994
49	1266	4209	1.7815	.0365	1.30	9.9	1.51	9.9	.03	.33	65.1	73.4	.0010	798135
50	1796	4209	1.1288	.0341	1.23	9.9	1.33	9.9	.13	.36	59.6	68.1	.0009	798145
51	3660	4209	-1.4478	.0483	.96	-1.3	.88	-2.3	.33	.28	87.3	87.1	.0008	751259
52	3379	4209	-.8900	.0415	.83	-7.8	.66	-9.7	.52	.32	83.0	81.1	.0008	754875
53	3222	4209	-.6348	.0392	1.11	5.2	1.31	8.2	.20	.34	76.4	78.1	.0008	751254
54	2238	4209	.6206	.0339	1.08	6.3	1.11	6.2	.29	.37	63.8	67.5	.0009	751256
55	2143	4209	.7296	.0338	.98	-1.9	.99	-.8	.38	.37	68.9	67.3	.0009	751260
56	1732	4209	1.2037	.0343	1.23	9.9	1.34	9.9	.12	.35	59.7	68.5	.0009	751262
57	2073	4209	.8097	.0338	1.05	3.9	1.07	4.0	.31	.37	66.0	67.3	.0009	751253
58	3456	4209	-1.0272	.0429	.93	-3.0	.84	-3.8	.40	.31	83.3	82.6	.0008	751261
59	3526	4209	-1.1607	.0445	.87	-5.0	.72	-6.7	.46	.30	85.1	84.1	.0008	751258
60	6596	4209	-.8078	.0289	.93	-3.3	.87	-4.7	.49	.43	69.5	66.5	.0007	798273
61	7118	4209	-1.5071	.0336	.98	-.7	.96	-1.1	.40	.38	74.0	73.5	.0007	751257
62	5603	4209	-.1369	.0264	1.02	1.1	1.03	1.3	.44	.45	56.8	58.1	.0008	798275
63	3150	2640	2.2190	.0377	1.01	.2	1.02	.5	.39	.39	69.4	70.8	.0029	754877

Grade 7 Reading

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
1	17480	22605	-.7213A	.0170	.90	-9.9	.83	-9.9	.42	.35	80.6	78.0	-.0936	687694
2	19071	22605	-1.7378A	.0220	1.13	8.3	.89	-4.1	.47	.28	84.8	88.4	.3974	687695
3	11932	22605	.4317A	.0149	.98	-3.0	.97	-3.9	.41	.39	69.9	69.0	.1127	687696
4	13119	22605	.3884A	.0149	1.00	.8	1.01	1.2	.37	.39	69.3	69.2	-.1060	687698
5	14851	22605	-.2585A	.0158	1.07	9.9	1.12	9.5	.35	.38	71.4	73.4	.1418	687701
6	14566	22605	-.2504A	.0157	1.06	7.7	1.04	3.4	.39	.38	71.0	73.4	.2020	687706
7	15551	22605	-.4710A	.0162	1.03	3.8	1.00	.2	.41	.37	74.0	75.4	.1840	687720
8	15354	22605	-.5363A	.0164	1.15	9.9	1.15	9.9	.34	.36	71.4	76.1	.2991	687722
9	11778	22605	.5914A	.0148	1.02	3.1	1.03	3.6	.36	.39	67.8	68.6	-.0128	687725
10	16747	22605	-.8956A	.0176	1.00	.5	.88	-7.2	.50	.34	78.2	79.8	.2974	687727
11	7646	22605	1.4583A	.0154	1.10	9.9	1.24	9.9	.23	.36	69.2	71.6	.0480	687728
12	14120	22605	-.1477A	.0155	1.02	3.1	1.01	1.4	.41	.38	71.7	72.5	.2034	687729
13	14632	22597	-.0400A	.0154	1.01	1.8	1.00	.2	.37	.38	71.2	71.7	-.0269	687732
14	11402	22597	.4272A	.0149	1.11	9.9	1.16	9.9	.29	.39	64.6	69.0	.2320	687734

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
15	15884	22597	-.1367A	.0155	.99	-1.9	1.01	1.1	.33	.38	73.6	72.4	-.2413	687736
16	11147	22597	.5537A	.0148	1.13	9.9	1.18	9.9	.28	.39	63.3	68.7	.1613	687737
17	10712	22597	.7140A	.0148	.89	-9.9	.88	-9.9	.47	.38	74.2	68.5	.0964	687738
18	16756	22597	-.6349A	.0167	.84	-9.9	.70	-9.9	.54	.36	80.1	77.1	.0289	687739
19	13711	22597	-.1098A	.0155	1.04	5.4	.99	-1.3	.41	.38	69.3	72.2	.2584	687741
20	15123	22605	.2504A	.0150	.91	-9.9	.87	-9.9	.43	.39	73.6	69.8	-.4365	706685
21	20033	22605	-1.5712A	.0209	.87	-9.9	.78	-9.4	.31	.29	88.9	86.9	-.1993	706686
22	19576	22605	-1.3954A	.0199	.89	-9.7	.80	-9.5	.33	.31	86.9	85.2	-.1636	706689
23	10800	22605	1.2239A	.0151	1.15	9.9	1.25	9.9	.31	.37	64.2	69.9	-.4213	706692
24	13529	22605	.2892A	.0150	1.14	9.9	1.20	9.9	.24	.39	64.2	69.6	-.0995	706694
25	16458	22605	-.4191A	.0161	.94	-7.7	.89	-8.9	.39	.37	76.3	74.9	-.1065	706695
26	17069	22605	-.5621A	.0165	.85	-9.9	.77	-9.9	.47	.36	80.5	76.3	-.1338	706696
27	17222	22597	-.9834A	.0179	1.20	9.9	1.49	9.9	.26	.34	77.7	80.8	.2495	706699
28	16950	22597	-.6336A	.0167	.88	-9.9	.76	-9.9	.48	.36	79.6	77.1	-.0279	706700
29	18619	22597	-1.1487A	.0186	.94	-6.0	.85	-7.8	.37	.33	83.8	82.6	-.0359	706701
30	17723	22605	-.7562A	.0171	.92	-9.4	.85	-9.9	.38	.35	80.3	78.4	-.1336	706707
31	11820	22605	.6553A	.0148	1.12	9.9	1.17	9.9	.26	.39	63.2	68.5	-.0851	706708
32	19616	22605	-1.4822A	.0204	.85	-9.9	.67	-9.9	.41	.30	87.4	86.0	-.0918	706709
33	14201	22605	.1430A	.0151	1.05	7.8	1.07	7.5	.32	.39	68.8	70.4	-.1079	706711
34	15944	22605	-.1551A	.0156	.98	-3.2	.96	-3.5	.34	.38	73.0	72.6	-.2372	706713
35	7362	22605	1.4746A	.0154	1.10	9.9	1.24	9.9	.22	.35	69.3	71.7	.0994	706714
36	18594	22597	-1.0723A	.0183	.89	-9.9	.88	-6.7	.38	.33	84.1	81.7	-.1051	706728
37	11991	22597	.7693A	.0148	1.18	9.9	1.27	9.9	.23	.38	61.5	68.5	-.2356	706729
38	6479	22597	1.6519A	.0158	1.03	4.9	1.21	9.9	.23	.34	73.7	73.3	.1429	706730
39	14592	22597	-.0054A	.0153	.92	-9.9	.87	-9.9	.45	.38	73.7	71.4	-.0524	706731
40	18109	22597	-1.1439A	.0186	.99	-.8	.98	-.8	.41	.33	82.3	82.5	.1366	706732
41	18828	22597	-1.1093A	.0185	.86	-9.9	.78	-9.9	.40	.33	85.0	82.1	-.1543	706733
42	16975	22597	-.5026A	.0163	.88	-9.9	.81	-9.9	.43	.37	79.3	75.7	-.1687	706734
43	17583	22597	-.8887A	.0176	.95	-5.1	.93	-4.4	.41	.34	80.6	79.8	.0440	706736
44	13218	22597	.0892A	.0152	1.18	9.9	1.27	9.9	.24	.38	63.9	70.8	.1704	706737
45	13283	22597	.3010A	.0150	.88	-9.9	.84	-9.9	.50	.39	75.1	69.6	-.0566	706738
46	15571	22597	-.0996A	.0155	.94	-9.9	.89	-9.9	.40	.38	74.0	72.1	-.1982	706740
47	11937	22597	.1751A	.0151	1.18	9.9	1.25	9.9	.27	.39	63.0	70.2	.3677	706866
48	12306	22597	.6453A	.0148	.95	-9.7	.93	-8.5	.43	.39	71.2	68.5	-.1819	706867
49	2437	4893	.5510	.0317	.98	-1.6	.97	-1.9	.41	.39	69.7	68.4	.0014	784772
50	2765	4893	.2205	.0319	.98	-1.4	.96	-2.3	.41	.39	69.3	69.2	.0014	784773
51	1878	4893	1.1200	.0324	1.28	9.9	1.39	9.9	.11	.38	58.2	69.9	.0014	751441
52	2785	4893	.2001	.0319	1.04	2.8	1.04	2.4	.36	.39	67.6	69.3	.0014	751442
53	3041	4893	-.0653	.0325	.90	-7.4	.84	-8.4	.49	.39	73.4	70.6	.0014	751435
54	2536	4893	.4517	.0317	1.05	4.2	1.07	4.2	.34	.39	66.6	68.5	.0014	751445
55	2587	4893	.4004	.0317	1.08	6.1	1.10	5.7	.32	.39	64.8	68.6	.0014	751443
56	2169	4893	.8206	.0318	.99	-.9	.99	-.5	.40	.39	69.9	68.7	.0014	751444
57	2133	4893	.8571	.0319	.98	-1.3	1.03	1.9	.38	.39	71.4	68.8	.0014	751434
58	3599	4893	-.6989	.0353	.90	-6.3	.79	-7.8	.47	.36	78.0	75.9	.0013	751436
59	4645	4893	.6633	.0222	1.33	9.9	1.37	9.9	.31	.51	45.1	51.9	.0014	751439
60	6984	4893	-.4828	.0235	1.06	2.8	1.05	1.7	.47	.50	62.2	59.4	.0014	784774
61	5066	4893	.4401	.0241	1.07	3.9	1.07	3.8	.43	.48	55.8	56.7	.0014	786233
62	4759	4893	.6212	.0246	1.02	1.0	1.02	.9	.46	.47	57.1	58.2	.0014	751446
63	2542	2178	2.1989	.0389	1.00	.0	1.00	.0	.46	.45	64.0	65.3	.0025	751438
49	1853	4184	.9952	.0338	1.24	9.9	1.31	9.9	.08	.34	56.1	66.8	.0020	798364
50	1429	4184	1.4953	.0352	.97	-2.0	1.03	1.3	.33	.32	72.9	70.3	.0021	798365
51	3413	4184	-1.0009	.0423	.99	-.3	1.03	.8	.29	.29	82.5	81.9	.0018	751324
52	3206	4184	-.6609	.0390	.89	-5.6	.79	-7.0	.45	.31	79.1	77.7	.0018	751330
53	3083	4184	-.4803	.0377	.94	-3.4	.91	-3.4	.40	.32	76.9	75.5	.0019	751321
54	1669	4184	1.2074	.0342	1.06	5.0	1.13	7.2	.24	.34	66.5	67.9	.0020	751326
55	2236	4184	.5619	.0337	1.10	7.9	1.11	7.1	.24	.35	61.1	66.7	.0020	751319
56	2234	4184	.5642	.0337	1.01	.9	1.00	.2	.33	.35	65.9	66.7	.0020	751323
57	1164	4184	1.8388	.0370	1.16	8.7	1.39	9.9	.10	.30	70.8	74.2	.0021	751325
58	2467	4184	.2973	.0341	1.15	9.9	1.19	9.9	.18	.35	61.4	68.0	.0019	751322
59	4962	4184	.4213	.0201	1.16	8.0	1.23	5.6	.44	.53	47.5	50.4	.0019	798366

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL CORR.	EXP.	EXACT MATCH OBS%	EXP%	DISPLACE	READ
60	1963	4184	2.4941	.0304	1.32	9.9	1.53	9.9	.06	.36	55.5	64.7	.0024	751329
61	5846	4184	-.4438	.0277	.82	-9.9	.80	-9.9	.58	.41	71.7	60.5	.0017	751327
62	6300	4184	-.7061	.0283	.94	-2.8	.95	-2.3	.45	.41	64.3	63.2	.0017	798367
63	2622	1801	1.4041	.0364	.94	-1.7	.94	-1.8	.50	.45	57.1	57.5	.0030	751328
49	2475	4197	.3584	.0343	1.25	9.9	1.35	9.9	.10	.36	57.6	68.4	.0019	798368
50	1980	4197	.9268	.0338	1.17	9.9	1.23	9.9	.18	.36	58.9	67.1	.0019	798369
51	2684	4197	.1081	.0350	1.03	1.8	1.01	.7	.33	.36	68.4	70.2	.0019	751286
52	2491	4197	.3396	.0343	.94	-4.8	.91	-5.1	.43	.36	71.4	68.5	.0020	751289
53	3397	4197	-.9087	.0420	.90	-4.1	.74	-6.9	.44	.31	82.1	81.6	.0020	751285
54	3710	4197	-1.5631	.0506	.81	-5.9	.50	-9.9	.51	.26	88.6	88.5	.0019	751292
55	3155	4197	-.5197	.0385	.96	-2.1	.94	-2.0	.38	.33	78.0	77.0	.0019	751290
56	2708	4197	.0786	.0351	.95	-3.4	.95	-2.5	.41	.36	72.8	70.5	.0019	751291
57	2399	4197	.4471	.0341	.87	-9.9	.84	-9.5	.50	.36	74.4	67.9	.0019	751293
58	1959	4197	.9508	.0338	1.01	1.2	1.05	2.7	.33	.36	67.3	67.1	.0020	751294
59	3557	4197	1.0536	.0202	1.07	3.9	1.18	4.3	.47	.52	47.0	49.8	.0019	798371
60	3475	4197	1.0974	.0206	1.15	7.7	1.36	9.3	.41	.51	44.3	48.8	.0020	751295
61	4451	4197	.6087	.0268	1.11	5.7	1.11	5.7	.33	.43	58.0	59.6	.0020	751287
62	6925	4197	-.8176	.0289	.87	-5.3	.72	-7.6	.54	.42	75.3	71.0	.0019	798370
63	2091	1697	2.3677	.0415	.92	-2.2	.92	-2.3	.52	.45	63.7	62.5	.0039	751288
49	2090	4191	.7410	.0336	1.03	2.6	1.03	2.0	.31	.35	64.4	66.5	.0024	798372
50	2940	4191	-.2730	.0365	1.05	3.1	1.06	2.5	.28	.34	71.4	73.6	.0023	798373
51	3199	4191	-.6401	.0390	1.16	7.4	1.31	8.7	.13	.32	75.4	77.8	.0023	751535
52	3193	4191	-.6310	.0390	.95	-2.7	.89	-3.6	.39	.33	78.8	77.7	.0024	751526
53	3366	4191	-.9095	.0415	.94	-2.4	.85	-4.0	.38	.31	81.7	81.1	.0023	751529
54	3816	4191	-1.9236	.0563	.85	-3.7	.54	-8.2	.44	.23	91.1	91.1	.0023	751531
55	2326	4191	.4733	.0338	1.15	9.9	1.18	9.9	.19	.35	60.3	67.2	.0024	751527
56	1953	4191	.8958	.0337	1.26	9.9	1.34	9.9	.07	.35	53.2	66.6	.0024	751534
57	2443	4191	.3386	.0341	1.02	1.9	1.01	.8	.32	.35	66.0	68.0	.0024	751530
58	2135	4191	.6901	.0336	1.05	4.3	1.08	5.0	.30	.35	64.6	66.6	.0024	751525
59	3127	4191	1.1980	.0210	1.18	9.5	1.51	9.9	.34	.47	41.5	48.9	.0023	798379
60	4031	4191	.8308	.0247	1.14	7.6	1.15	7.8	.35	.44	51.1	54.0	.0024	751536
61	5301	4191	.0258	.0258	1.06	3.2	1.06	3.1	.39	.44	55.7	56.1	.0022	798377
62	6572	4191	-.7378	.0281	.85	-6.8	.80	-7.1	.55	.43	70.9	66.0	.0022	751532
63	1938	1725	1.3553	.0467	.95	-1.1	.95	-1.2	.43	.37	72.5	72.2	.0038	751533
49	2300	4203	.5932	.0340	1.09	6.7	1.10	5.8	.28	.37	63.4	67.8	.0011	798381
50	2212	4203	.6944	.0339	1.11	8.7	1.15	8.5	.25	.37	63.2	67.5	.0011	798382
51	3427	4203	-.9356	.0425	.95	-2.2	.94	-1.5	.37	.32	83.4	82.2	.0012	751541
52	2083	4203	.8422	.0338	.95	-4.4	.95	-3.0	.41	.37	69.8	67.3	.0012	751544
53	1794	4203	1.1747	.0341	1.08	5.8	1.15	7.9	.26	.36	65.5	67.9	.0012	754777
54	1871	4203	1.0854	.0340	1.16	9.9	1.24	9.9	.19	.36	60.3	67.6	.0012	751537
55	3152	4203	-.4880	.0385	.93	-3.5	.89	-3.7	.42	.34	78.7	77.0	.0011	751542
56	1597	4203	1.4074	.0347	1.14	9.7	1.25	9.9	.19	.35	64.8	69.2	.0012	751543
57	3644	4203	-1.3757	.0480	.85	-5.1	.62	-8.0	.47	.28	87.3	86.8	.0011	751540
58	3200	4203	-.5602	.0391	.92	-4.1	.91	-2.8	.43	.34	79.5	77.9	.0011	751545
59	4969	4203	.5082	.0207	1.06	3.2	1.09	2.2	.51	.55	51.2	52.0	.0011	751547
60	5184	4203	.2474	.0246	1.04	2.0	1.03	1.4	.45	.48	52.7	54.0	.0011	800299
61	5878	4203	-.4258	.0284	.96	-2.3	.94	-2.9	.47	.43	64.0	61.8	.0010	798383
62	7501	4203	-1.5354	.0363	.95	-1.5	.93	-1.4	.43	.36	83.1	80.5	.0009	751548
63	2471	2067	2.5648	.0410	1.01	.2	1.01	.3	.42	.40	68.7	68.9	.0027	751546

Grade 8 Reading

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
1	17204	22210	-1.1367A	.0178	.97	-3.3	.99	-.6	.42	.33	80.5	80.2	.1115	687745
2	16885	22210	-1.0696A	.0176	.95	-5.0	.84	-9.7	.47	.34	79.4	79.4	.1394	687746
3	16188	22210	-.9032A	.0170	.94	-6.9	.82	-9.9	.49	.35	77.5	77.6	.1689	687747
4	15230	22210	-.5690A	.0160	1.07	9.0	1.09	7.3	.32	.36	72.5	74.1	.0830	687750
5	17169	22210	-.7375A	.0165	.80	-9.9	.67	-9.9	.48	.36	80.9	75.8	-.2861	687751
6	12326	22210	.0629A	.0150	.95	-7.9	.93	-8.5	.44	.38	70.7	69.1	.1298	687752
7	9420	22223	.8319A	.0150	1.04	6.2	1.12	9.9	.30	.37	69.2	68.8	.0065	687754
8	16073	22223	-.9819A	.0172	1.05	6.0	.97	-1.9	.44	.34	75.8	78.5	.2822	687755
9	17411	22223	-.9680A	.0172	.88	-9.9	.85	-9.9	.41	.34	81.2	78.3	-.1229	687757
10	14687	22223	-.3829A	.0156	.98	-3.1	1.01	1.2	.40	.37	73.8	72.4	.0321	687761
11	15890	22223	-.4466A	.0158	.89	-9.9	.82	-9.9	.43	.37	76.3	72.9	-.2114	687762
12	18748	22223	-1.8351A	.0214	1.09	6.4	.95	-2.1	.42	.28	84.8	87.5	.2911	687764
13	10642	22210	.3068A	.0149	1.02	3.0	1.03	3.6	.36	.38	67.8	68.2	.2575	687775
14	15302	22210	-.2694A	.0154	.93	-9.9	.91	-9.2	.40	.37	74.3	71.4	-.2386	687776
15	11003	22210	.6823A	.0149	1.10	9.9	1.16	9.9	.28	.37	64.8	68.2	-.1946	687777
16	18673	22210	-1.3209A	.0186	.76	-9.9	.57	-9.9	.49	.32	85.9	82.2	-.2102	687778
17	13724	22210	-.1132A	.0152	1.17	9.9	1.26	9.9	.21	.38	64.1	70.2	-.0114	687782
18	16861	22210	-1.1734A	.0180	1.16	9.9	1.22	9.9	.31	.33	76.8	80.6	.2519	687784
19	16403	22210	-.8611A	.0168	1.16	9.9	1.30	9.9	.21	.35	74.1	77.1	.0663	687785
20	14827	22210	-.8102A	.0167	1.19	9.9	1.22	9.9	.36	.35	70.9	76.6	.4268	687792
21	18093	22210	-1.5365A	.0197	1.00	-.4	.83	-7.8	.47	.31	82.8	84.5	.2273	687793
22	12666	22210	-.0837A	.0152	1.06	9.5	1.09	9.3	.35	.38	68.2	70.0	.2007	687794
23	14611	22210	-.4272A	.0157	1.03	3.7	1.05	4.3	.37	.37	72.1	72.8	.0936	687795
24	18381	22210	-1.6052A	.0200	1.05	3.8	.99	-.6	.38	.30	83.8	85.2	.1938	687800
25	18667	22210	-1.7786A	.0211	1.11	8.0	1.06	2.3	.36	.29	84.4	86.9	.2617	687801
26	10988	22223	.7104A	.0149	1.18	9.9	1.29	9.9	.19	.37	61.7	68.3	-.2176	706743
27	12591	22223	.3474A	.0149	1.15	9.9	1.20	9.9	.24	.38	61.9	68.1	-.2117	706744
28	15481	22223	-.4424A	.0158	1.07	9.7	1.17	9.9	.26	.37	71.1	72.9	-.1077	706745
29	14864	22223	-.0866A	.0152	.93	-9.9	.89	-9.9	.40	.38	72.4	70.0	-.3100	706748
30	15581	22223	-.3871A	.0156	1.02	2.4	1.02	1.9	.30	.37	72.2	72.4	-.1902	706749
31	13248	22223	-.3070A	.0155	1.19	9.9	1.25	9.9	.26	.37	64.5	71.7	.2949	706752
32	10750	22223	.7929A	.0150	1.09	9.9	1.14	9.9	.31	.37	65.0	68.6	-.2467	706753
33	17708	22223	-.9726A	.0172	.80	-9.9	.67	-9.9	.47	.34	83.0	78.4	-.2148	706768
34	16972	22223	-.9833A	.0172	1.21	9.9	1.62	9.9	.12	.34	75.2	78.5	.0280	706769
35	17477	22223	-.9563A	.0171	.86	-9.9	.74	-9.9	.43	.34	81.1	78.2	-.1558	706773
36	14908	22223	-.3063A	.0155	1.05	8.2	1.06	5.9	.29	.37	69.5	71.7	-.0996	706774
37	18425	22223	-1.0709A	.0176	.80	-9.9	.68	-9.9	.39	.34	84.0	79.4	-.3685	706776
38	17951	22223	-1.0247A	.0174	.90	-9.9	.92	-4.9	.33	.34	82.8	78.9	-.2446	706778
39	10260	22210	.7194A	.0149	1.03	5.2	1.06	7.1	.34	.37	67.5	68.3	-.0688	706780
40	17009	22210	-.9929A	.0173	.96	-4.3	.99	-.8	.39	.34	79.8	78.6	.0243	706781
41	15005	22210	-.5740A	.0161	.96	-5.9	.98	-1.6	.46	.36	76.1	74.2	.1446	706783
42	12269	22210	.4416A	.0149	1.05	8.9	1.07	8.4	.33	.38	65.8	68.0	-.2348	706785
43	13131	22210	-.1276A	.0152	1.03	5.5	1.04	3.9	.37	.38	68.8	70.3	.1396	706787
44	15456	22210	-.5419A	.0160	.92	-9.9	.85	-9.9	.45	.36	75.9	73.8	-.0025	706788
45	10327	22223	.8184A	.0150	1.10	9.9	1.16	9.9	.28	.37	65.2	68.7	-.1796	706793
46	13182	22223	-.2120A	.0154	1.13	9.9	1.18	9.9	.29	.37	65.7	70.9	.2143	706794
47	16866	22223	-.9785A	.0172	.94	-6.4	.89	-7.1	.43	.34	79.1	78.4	.0550	706795
48	15983	22223	-.9147A	.0170	1.00	-.1	.93	-4.4	.46	.35	76.5	77.7	.2384	706797
49	9715	22223	.8184A	.0150	1.14	9.9	1.27	9.9	.20	.37	64.6	68.7	-.0453	706800
50	8075	22223	1.0432A	.0152	.92	-9.9	.98	-2.3	.38	.36	74.7	70.0	.1033	706801
51	2890	4812	-.1824	.0324	1.00	.3	1.02	1.1	.38	.38	69.8	69.7	.0016	784776
52	2886	4812	-.1783	.0324	1.09	6.7	1.09	4.7	.30	.38	65.3	69.7	.0016	784779
53	4203	4812	-1.9636	.0458	.92	-2.6	.81	-3.7	.37	.28	87.5	87.4	.0015	749032
54	2017	4812	.7102	.0322	1.08	6.2	1.13	6.7	.28	.37	66.1	68.7	.0017	749029
55	3914	4812	-1.4437	.0397	.92	-3.4	.84	-4.2	.41	.32	82.7	81.9	.0016	749027
56	2687	4812	.0280	.0320	1.24	9.9	1.34	9.9	.15	.39	59.3	68.6	.0016	749022
57	2366	4812	.3542	.0318	1.10	8.0	1.12	7.3	.28	.38	63.3	67.9	.0017	749024
58	2810	4812	-.0989	.0322	1.01	.7	.97	-1.5	.37	.39	67.3	69.2	.0016	749023
59	1705	4812	1.0408	.0330	.93	-5.1	.98	-1.1	.40	.36	74.6	70.8	.0017	749030

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
60	2316	4812	.4048	.0318	1.04	3.4	1.07	4.0	.33	.38	66.9	67.9	.0017	749028
61	6142	4812	-.2240	.0207	.98	-1.2	.94	-1.8	.56	.55	55.2	54.4	.0016	749034
62	353	4812	3.2479	.0574	1.20	4.4	3.12	9.9	-.13	.20	92.5	92.7	.0019	784777
63	5564	4812	-.2011	.0262	1.04	2.2	1.04	2.2	.41	.44	59.9	62.0	.0017	784778
64	3854	4812	1.4868	.0335	1.09	3.9	1.11	4.1	.27	.37	73.8	75.5	.0018	749025
65	1874	1598	1.4122	.0401	.88	-3.1	.88	-3.4	.57	.47	61.7	60.3	.0038	749026
51	2514	4136	.0548	.0344	1.06	4.6	1.06	3.4	.26	.34	64.9	68.2	.0019	798192
52	1856	4136	.8080	.0338	1.07	5.5	1.10	6.3	.25	.33	63.8	66.3	.0020	798198
53	3279	4136	-.9844	.0408	.91	-4.2	.78	-6.7	.42	.30	80.7	79.9	.0019	749093
54	3248	4136	-.9336	.0403	1.03	1.6	1.07	2.1	.25	.30	79.2	79.3	.0019	749092
55	1160	4136	1.6595	.0370	1.17	9.4	1.40	9.9	.07	.29	71.1	73.9	.0021	749681
56	2663	4136	-.1245	.0350	1.05	3.3	1.06	3.1	.28	.33	68.2	69.8	.0019	749099
57	3000	4136	-.5625	.0373	1.04	2.4	1.07	2.5	.26	.32	73.9	74.7	.0019	749097
58	2411	4136	.1756	.0341	.95	-4.0	.92	-4.6	.39	.34	69.3	67.4	.0019	749098
59	2199	4136	.4189	.0337	.98	-2.1	.97	-1.7	.36	.34	67.5	66.2	.0020	749095
60	3283	4136	-.9911	.0408	.92	-3.8	.83	-4.9	.41	.30	81.0	80.0	.0019	749094
61	4971	4136	.2352	.0204	1.10	5.2	1.16	4.5	.45	.51	47.4	49.5	.0019	798209
62	1339	4136	1.9781	.0270	1.39	9.9	2.61	9.9	.04	.34	64.4	71.9	.0024	749101
63	3750	4136	1.4301	.0450	.97	-1.0	.88	-3.1	.31	.26	86.1	86.1	.0018	798217
64	4356	4136	.3122	.0336	1.03	1.2	1.03	1.1	.29	.33	74.8	74.9	.0019	751788
65	2800	2141	1.3029	.0332	.99	-.3	1.03	.8	.43	.40	61.1	61.0	.0030	749100
51	2805	4169	-.2997	.0357	.97	-2.0	.93	-3.0	.38	.34	71.7	71.7	.0018	798226
52	1396	4169	1.3630	.0355	1.10	6.8	1.18	7.7	.21	.32	67.6	71.0	.0020	798227
53	2766	4169	-.2503	.0355	.95	-3.4	.91	-4.1	.40	.35	72.2	71.2	.0018	749489
54	2624	4169	-.0749	.0348	1.02	1.7	1.03	1.5	.32	.35	69.0	69.5	.0018	749490
55	3814	4169	-2.1602	.0576	.89	-2.5	.63	-6.0	.38	.23	91.6	91.5	.0018	749494
56	3357	4169	-1.1055	.0417	.94	-2.7	.94	-1.6	.38	.31	82.2	81.2	.0018	749500
57	3608	4169	-1.6004	.0478	.90	-3.2	.82	-3.6	.39	.27	87.1	86.7	.0017	749496
58	1515	4169	1.2155	.0349	1.14	9.5	1.25	9.9	.17	.33	65.2	69.6	.0019	749495
59	2527	4169	.0414	.0345	1.06	4.5	1.07	3.5	.29	.35	65.4	68.6	.0018	749497
60	3014	4169	-.5775	.0373	.92	-4.4	.89	-4.1	.42	.33	77.0	74.8	.0017	749499
61	1761	4169	.9232	.0341	1.29	9.9	1.41	9.9	.04	.34	55.3	67.5	.0019	749492
62	5305	4169	-.1012	.0246	1.02	1.1	1.01	.6	.45	.46	54.2	53.8	.0017	798229
63	4258	4169	.4965	.0250	1.02	1.2	1.03	1.6	.42	.45	54.9	54.5	.0018	798228
64	4578	4169	.2688	.0264	1.11	5.4	1.10	5.3	.33	.43	57.4	58.2	.0018	749493
65	2123	1732	1.7508	.0401	.95	-1.2	.95	-1.2	.48	.42	62.9	63.0	.0042	749491
51	2524	4131	-.0270	.0347	1.00	.0	1.01	.7	.35	.35	69.2	68.9	.0021	798231
52	1912	4131	.6831	.0339	1.18	9.9	1.23	9.9	.16	.35	57.4	66.5	.0021	798232
53	3232	4131	-.9914	.0403	.93	-3.1	.86	-4.2	.40	.32	80.5	79.3	.0019	749107
54	3446	4131	-1.3722	.0444	.95	-2.0	.88	-2.8	.36	.29	84.6	83.7	.0020	749115
55	3051	4131	-.7140	.0381	1.01	.6	1.04	1.3	.32	.33	76.3	76.0	.0020	749105
56	3425	4131	-1.3314	.0439	.92	-3.2	.81	-4.6	.40	.29	83.9	83.3	.0019	749113
57	2397	4131	.1239	.0343	1.03	2.6	1.04	2.3	.32	.35	66.0	67.9	.0021	749108
58	1400	4131	1.2932	.0355	1.13	8.5	1.24	9.9	.17	.32	66.2	70.5	.0022	751269
59	3135	4131	-.8388	.0390	.96	-1.9	.92	-2.6	.37	.32	78.3	77.5	.0019	749104
60	1224	4131	1.5218	.0366	.94	-3.7	1.03	1.0	.34	.31	76.0	73.1	.0023	749114
61	5740	4131	-.1917	.0221	.97	-1.2	.89	-2.6	.53	.51	59.3	58.1	.0019	749110
62	4889	4131	-1.0294	.0397	.98	-.6	.99	-.3	.28	.28	80.8	79.8	.0021	798233
63	1447	4131	2.9018	.0336	1.48	9.9	1.82	9.9	-.13	.33	55.0	70.0	.0030	798235
64	5185	4131	-.8630	.0342	.95	-2.3	.94	-2.4	.39	.33	72.1	71.5	.0019	749111
65	2852	1862	1.1556	.0378	.92	-2.4	.92	-2.3	.49	.43	58.5	58.4	.0037	749109
51	2437	4144	.1134	.0342	1.05	3.8	1.04	2.3	.29	.34	65.0	67.6	.0019	798236
52	1381	4144	1.3447	.0355	1.13	8.6	1.29	9.9	.15	.32	67.4	70.9	.0020	798237
53	1858	4144	.7758	.0339	1.03	2.2	1.06	3.9	.29	.34	66.3	66.7	.0020	749604
54	1571	4144	1.1113	.0346	1.06	4.5	1.12	6.1	.25	.33	67.2	68.7	.0020	749594
55	2372	4144	.1890	.0340	.98	-2.0	.96	-2.2	.37	.34	68.4	67.2	.0019	749596
56	1745	4144	.9062	.0341	1.32	9.9	1.42	9.9	-.01	.34	52.9	67.3	.0020	749598
57	2559	4144	-.0307	.0346	.93	-5.6	.92	-4.2	.42	.34	72.5	68.6	.0019	749599
58	2178	4144	.4115	.0337	.96	-3.8	.94	-4.0	.39	.34	68.2	66.4	.0019	749597
59	1758	4144	.8911	.0341	1.05	4.1	1.09	5.2	.28	.34	65.7	67.2	.0020	749595

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
60	3075	4144	-.6997	.0380	.98	-1.0	.97	-.9	.34	.32	76.3	75.9	.0018	749593
61	5113	4144	.1338	.0206	1.37	9.9	1.67	9.9	.30	.51	43.3	49.8	.0019	749602
62	6119	4144	-1.4485	.0318	.89	-6.9	.86	-7.7	.48	.36	70.2	64.9	.0016	798238
63	3146	4144	1.4874	.0308	1.14	6.3	1.14	6.3	.23	.37	63.7	66.9	.0021	749600
64	6595	4144	-1.2228	.0303	.82	-8.4	.77	-9.5	.55	.38	74.0	66.8	.0015	798239
65	3256	2267	1.2151	.0329	.99	-.4	1.00	-.1	.46	.44	57.8	58.8	.0031	749601

Grade 11 Reading

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
1	18099	21412	-1.5300A	.0191	.94	-5.5	.99	-.3	.26	.34	84.8	82.5	-.2469	602833
2	15254	21412	-.4842A	.0159	.90	-9.9	.87	-9.9	.41	.39	75.6	72.1	-.3529	602835
3	17718	21412	-1.6184	.0195	.96	-3.9	.94	-3.0	.37	.33	84.5	83.4	.0002	602840
4	14087	21412	-.8178A	.0166	1.06	7.6	1.06	4.6	.43	.38	72.5	75.1	.2973	602841
5	14447	21412	-.3427A	.0157	.93	-9.9	.88	-9.9	.41	.39	73.6	71.0	-.2755	602842
6	14958	21412	-.7516	.0164	.97	-3.8	.96	-3.2	.41	.38	75.3	74.4	.0003	602843
7	17077	21412	-1.1774A	.0177	.87	-9.9	.74	-9.9	.41	.36	81.4	78.7	-.2160	602844
8	16359	21391	-1.2115A	.0178	.97	-3.2	.98	-1.0	.41	.36	80.2	79.1	.0542	632830
9	17738	21391	-2.0523A	.0220	1.28	9.9	1.38	9.9	.34	.30	83.5	87.6	.4280	632832
10	15663	21391	-.9510	.0170	.93	-8.2	.86	-9.7	.44	.37	77.8	76.4	.0004	632833
11	13383	21391	-.4318A	.0158	1.09	9.9	1.14	9.9	.33	.39	68.8	71.7	.0828	632835
12	16040	21391	-1.0615	.0173	.86	-9.9	.74	-9.9	.51	.37	79.9	77.5	.0003	632837
13	13768	21391	-.5308A	.0160	1.00	-.1	.97	-2.5	.41	.39	71.9	72.4	.0865	632838
14	12828	21412	-.3176A	.0156	1.05	7.5	1.06	5.5	.36	.39	69.0	70.8	.1056	687804
15	10877	21412	.2188A	.0152	1.03	4.4	1.04	4.7	.36	.39	67.5	68.6	.0276	687805
16	17087	21412	-1.3649A	.0184	.93	-7.6	.85	-8.5	.42	.35	81.9	80.7	-.0267	687806
17	12752	21412	.0806A	.0153	.98	-3.9	.98	-2.6	.39	.39	70.3	68.9	-.2744	687807
18	17894	21412	-1.8389A	.0207	1.04	3.0	1.08	3.3	.37	.31	84.7	85.6	.1559	687808
19	13656	21412	-.4799A	.0159	1.09	9.9	1.14	9.9	.32	.39	68.7	72.0	.0657	687809
20	16032	21412	-1.4017A	.0185	1.14	9.9	1.24	9.9	.39	.35	78.0	81.1	.3516	687810
21	8644	21412	.9519A	.0157	1.13	9.9	1.26	9.9	.27	.37	67.0	71.0	-.1781	687812
22	14518	21391	-.9362A	.0169	1.09	9.9	1.13	8.7	.40	.37	73.5	76.2	.3023	687851
23	11069	21391	.0485A	.0153	1.09	9.9	1.11	9.9	.31	.39	64.9	69.0	.1515	687852
24	9836	21391	.0744A	.0153	1.12	9.9	1.14	9.9	.29	.39	63.2	68.9	.4116	687853
25	18304	21391	-2.1403A	.0226	1.03	1.8	.69	-9.9	.50	.29	86.0	88.4	.2840	687857
26	13250	21391	-.1644A	.0155	.95	-7.5	.94	-6.1	.42	.39	72.1	69.9	-.1529	687858
27	8676	21391	.7610	.0155	.98	-2.5	1.02	2.5	.37	.37	71.4	69.8	.0005	687859
28	17251	21391	-1.8955A	.0210	1.21	9.9	1.29	9.9	.41	.31	81.9	86.2	.4498	687860
29	15700	21391	-1.1445A	.0176	1.07	7.5	1.11	6.5	.38	.36	76.3	78.4	.1863	706802
30	11634	21391	-.0411A	.0154	1.09	9.9	1.12	9.9	.32	.39	66.1	69.3	.1096	706803
31	14974	21391	-.8366A	.0167	.99	-1.3	.97	-2.4	.42	.38	75.0	75.2	.0792	706806
32	14249	21391	-.8876A	.0168	1.14	9.9	1.25	9.9	.36	.37	71.8	75.7	.3234	706807
33	11885	21391	-.1030A	.0154	1.22	9.9	1.35	9.9	.20	.39	61.3	69.6	.1128	706810
34	17242	21391	-1.2827A	.0181	.83	-9.9	.75	-9.9	.45	.35	83.6	79.9	-.1713	706811
35	13494	21412	-.1776A	.0155	.99	-1.9	.96	-4.3	.38	.39	70.0	70.0	-.1977	706814
36	16249	21412	-.9683A	.0170	.85	-9.9	.74	-9.9	.47	.37	80.0	76.6	-.1556	706815
37	13294	21412	-.3724A	.0157	1.04	5.6	1.03	3.1	.36	.39	69.7	71.2	.0472	706816
38	15713	21412	-.7267A	.0164	.95	-6.9	.90	-7.7	.36	.38	75.8	74.2	-.2395	706817
39	14739	21412	-.5652A	.0160	1.01	1.0	1.00	.2	.35	.39	72.2	72.7	-.1291	706818
40	12601	21412	-.0951A	.0154	1.11	9.9	1.13	9.9	.27	.39	64.2	69.6	-.0629	706819
41	15783	21412	-.7337A	.0164	.97	-4.6	.98	-1.8	.34	.38	75.9	74.2	-.2528	706821
42	10228	21412	.3712A	.0152	.98	-2.9	1.00	-.5	.40	.39	69.7	68.6	.0259	706823
43	14777	21412	-.6689A	.0162	1.20	9.9	1.37	9.9	.17	.38	67.5	73.6	-.0342	706824
44	16148	21391	-1.0939	.0174	1.01	1.1	1.01	.5	.36	.36	77.6	77.9	.0001	706856
45	13098	21391	-.1093A	.0154	1.01	2.1	1.05	4.9	.36	.39	70.1	69.6	-.1707	706857
46	18307	21391	-1.6210A	.0195	.79	-9.9	.70	-9.9	.42	.33	87.3	83.4	-.2508	706858
47	16530	21391	-1.2121	.0178	.94	-6.0	.89	-6.6	.42	.36	80.2	79.1	.0003	706859
48	10426	21391	.4592A	.0153	1.11	9.9	1.18	9.9	.28	.38	64.4	68.7	-.1081	706860
49	14445	21391	-.3863A	.0157	.88	-9.9	.82	-9.9	.46	.39	75.7	71.3	-.2339	706861
50	16284	21391	-1.0127A	.0171	.85	-9.9	.74	-9.9	.48	.37	80.5	77.0	-.1252	706863
51	3573	4336	-1.6537	.0430	.98	-1.0	1.08	1.6	.35	.34	83.6	83.0	.0013	784782
52	3110	4336	-.9268	.0371	.91	-5.6	.84	-5.5	.48	.38	78.5	75.3	.0013	784783
53	1799	4336	.6481	.0343	.92	-5.8	.91	-4.3	.45	.39	73.1	69.8	.0014	752237
54	2191	4336	.1945	.0339	1.11	7.9	1.16	7.9	.29	.40	65.1	68.9	.0014	752244

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	READ
55	3201	4336	-1.0546	.0379	.80	-9.9	.66	-9.9	.58	.38	81.3	76.6	.0013	752258
56	3588	4336	-1.6815	.0433	.87	-5.5	.67	-7.8	.48	.33	84.3	83.3	.0013	752239
57	3383	4336	-1.3290	.0399	.90	-4.7	.77	-6.2	.46	.36	81.2	79.5	.0014	752238
58	3548	4336	-1.6081	.0425	.81	-8.4	.62	-9.5	.54	.34	84.5	82.5	.0013	752257
59	1865	4336	.5707	.0342	1.15	9.9	1.24	9.9	.26	.40	63.7	69.5	.0015	752242
60	2109	4336	.2887	.0339	.93	-5.4	.94	-3.4	.45	.40	72.8	68.9	.0014	752241
61	3512	4336	.6742	.0237	1.14	7.4	1.18	7.7	.41	.51	46.6	53.9	.0015	752234
62	5252	4336	-.4056	.0265	1.00	.2	1.01	.4	.49	.49	59.5	59.1	.0014	784780
64	7054	4336	-1.3951	.0283	.97	-1.1	.87	-3.3	.50	.47	73.6	70.2	.0012	752236
65	2489	1812	1.0568	.0322	1.01	.4	1.01	.3	.56	.56	52.5	50.4	.0027	752247
51	2480	4131	-.1454	.0349	1.11	8.1	1.14	6.7	.26	.38	64.7	69.4	.0023	797936
52	3758	4131	-2.3480	.0568	.93	-1.7	.88	-1.6	.33	.25	91.0	91.0	.0022	797937
53	2663	4131	-.3731	.0357	.95	-3.3	.89	-4.8	.42	.38	72.1	71.0	.0023	751806
54	1457	4131	1.0833	.0357	1.25	9.9	1.41	9.9	.11	.35	61.7	70.9	.0023	751810
55	1563	4131	.9501	.0352	.89	-8.0	.90	-4.8	.44	.36	75.6	69.9	.0024	751805
56	3178	4131	-1.0966	.0400	.99	-.5	1.00	.0	.35	.35	79.7	78.6	.0023	751809
57	2774	4131	-.5166	.0363	1.04	2.8	1.04	1.7	.33	.37	70.5	72.3	.0023	751814
58	2707	4131	-.4294	.0359	.99	-.5	.96	-1.8	.38	.38	71.0	71.5	.0023	751816
59	1486	4131	1.0465	.0355	1.12	8.3	1.27	9.9	.21	.35	66.8	70.7	.0024	751807
60	3113	4131	-.9949	.0392	.83	-9.2	.68	-9.9	.55	.35	80.2	77.4	.0023	751808
61	6621	4131	-.9825	.0265	.95	-2.0	.88	-2.4	.52	.48	71.7	68.7	.0024	797938
62	5078	4131	-.0453	.0208	1.11	5.4	1.16	2.9	.50	.56	52.1	54.2	.0023	751812
63	3734	4131	.6531	.0278	1.10	4.8	1.10	5.1	.37	.44	58.9	61.6	.0024	797940
64	6899	4131	-1.8297	.0332	.93	-3.1	.90	-3.1	.47	.40	76.1	72.5	.0021	751813
65	2484	1662	.8763	.0333	1.00	.0	.99	-.4	.55	.53	51.6	50.7	.0036	751815
51	3011	4114	-.8813	.0381	.94	-3.5	.86	-4.8	.42	.35	76.9	75.7	.0027	797941
52	2646	4114	-.3912	.0355	1.02	1.2	1.02	.8	.34	.36	69.3	70.6	.0027	797942
53	2204	4114	.1415	.0342	.97	-2.6	.96	-2.5	.39	.37	68.6	67.4	.0027	754851
54	3611	4114	-1.9846	.0502	.91	-2.7	.99	-.1	.37	.28	88.1	87.9	.0027	754854
55	1467	4114	1.0161	.0354	1.04	2.7	1.16	6.9	.27	.34	71.0	70.0	.0027	754857
56	3392	4114	-1.5082	.0437	.87	-5.0	.70	-7.6	.47	.31	84.0	83.0	.0027	754849
57	923	4114	1.7741	.0400	1.06	2.8	1.41	9.9	.18	.29	78.6	78.7	.0028	754858
58	1536	4114	.9304	.0351	1.10	7.0	1.18	7.9	.23	.34	66.7	69.3	.0027	754852
59	2860	4114	-.6700	.0368	1.04	2.1	1.08	2.9	.32	.36	72.9	73.4	.0027	754850
60	2474	4114	-.1790	.0348	1.05	3.5	1.06	2.9	.31	.37	67.0	69.0	.0027	754848
61	2195	4114	1.2259	.0233	1.55	9.9	2.55	9.9	.11	.44	46.1	58.3	.0027	754872
62	5518	4114	-.4027	.0235	.97	-1.2	.94	-2.0	.53	.50	58.8	54.9	.0027	754855
63	6661	4114	-1.0436	.0269	1.15	5.4	1.36	6.6	.37	.47	67.8	69.2	.0027	797943
64	4510	4114	.0206	.0271	1.09	4.3	1.09	4.3	.36	.44	57.5	59.6	.0027	797944
65	2450	1694	1.0477	.0340	.99	-.2	.99	-.2	.51	.51	54.4	52.1	.0040	754856
51	3480	4117	-1.7506	.0465	.89	-3.9	.78	-4.4	.45	.34	85.8	85.0	.0013	797945
52	2579	4117	-.3261	.0359	1.02	1.1	1.02	.9	.39	.41	71.3	71.5	.0014	797946
53	3345	4117	-1.4790	.0434	.92	-3.4	.76	-5.7	.45	.36	82.7	82.3	.0012	754838
54	3243	4117	-1.2949	.0417	.86	-6.3	.72	-7.4	.51	.37	82.5	80.5	.0013	754841
55	3483	4117	-1.7570	.0465	.83	-6.4	.59	-8.8	.53	.34	86.0	85.1	.0013	754837
56	2550	4117	-.2889	.0358	.85	-9.9	.81	-9.1	.54	.41	76.8	71.2	.0014	754842
57	1480	4117	1.0308	.0359	1.26	9.9	1.54	9.9	.11	.37	62.9	71.1	.0015	754835
58	2737	4117	-.5336	.0367	.82	-9.9	.74	-9.9	.57	.40	78.5	73.1	.0013	754847
59	3491	4117	-1.7745	.0468	.81	-7.1	.55	-9.7	.55	.34	86.4	85.2	.0014	754839
60	3407	4117	-1.5992	.0447	.89	-4.5	.71	-6.6	.47	.35	84.9	83.5	.0013	754840
61	5657	4117	-.5917	.0255	1.02	1.1	1.03	1.0	.52	.53	59.8	58.9	.0013	797948
62	5748	4117	-.6413	.0256	.80	-9.9	.74	-9.6	.65	.53	63.7	59.6	.0013	754845
63	6001	4117	-1.0243	.0285	1.04	1.8	1.02	.9	.46	.49	63.0	63.2	.0012	797947
64	4042	4117	.3825	.0319	.95	-2.1	.95	-2.2	.47	.42	71.6	70.7	.0015	754844
65	2839	2009	1.1086	.0319	.98	-.6	.97	-.9	.57	.54	52.8	52.8	.0029	754843
51	1955	4105	.4543	.0340	1.15	9.9	1.20	9.9	.19	.35	59.6	66.6	.0020	797950
52	2926	4105	-.7341	.0373	.96	-2.4	.91	-3.5	.39	.35	74.9	74.5	.0019	797951
53	3261	4105	-1.2477	.0414	.91	-4.1	.77	-6.8	.44	.32	80.9	80.5	.0019	751738
54	2531	4105	-.2224	.0350	1.23	9.9	1.35	9.9	.11	.36	61.3	69.4	.0020	751739
55	2287	4105	.0690	.0343	1.04	3.4	1.06	3.4	.31	.36	65.5	67.4	.0020	751740
56	2262	4105	.0982	.0342	.97	-2.4	.97	-1.9	.38	.36	68.8	67.2	.0020	751741
57	2514	4105	-.2017	.0349	1.00	-.3	.99	-.6	.36	.36	69.2	69.2	.0019	751748
58	2730	4105	-.4718	.0359	1.01	.9	1.01	.5	.34	.35	70.9	71.7	.0019	751743
59	1591	4105	.8823	.0347	1.17	9.9	1.28	9.9	.15	.33	61.2	68.3	.0021	751746
60	1889	4105	.5308	.0341	1.12	9.8	1.18	9.9	.21	.35	61.5	66.7	.0020	751744
61	1680	4105	1.4963	.0246	1.10	3.8	1.85	9.9	.27	.38	61.2	65.5	.0022	751749
62	3411	4105	1.0006	.0311	1.25	9.9	1.25	9.9	.14	.38	66.5	68.7	.0020	797953
63	2759	4105	-.5093	.0361	.96	-2.3	.92	-3.6	.39	.35	72.1	72.1	.0019	797954
64	5614	4105	-.7832	.0282	1.01	.6	1.03	1.4	.41	.42	56.8	60.5	.0018	751745
65	2163	1507	.9818	.0351	.97	-.9	.96	-1.1	.54	.51	52.2	50.7	.0029	751747

Appendix L: Mathematics Item Bank Difficulties

Grade 3 Mathematics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
1	16361	22030	-1.4245A	.0188	1.16	9.9	1.12	4.8	.50	.36	77.2	82.0	.5013	599737_OP
2	10160	22027	.5547A	.0154	1.05	8.4	1.09	9.2	.38	.44	68.7	70.4	.0581	599771_OP
3	17353	22030	-1.0364A	.0174	.94	-6.9	.90	-5.7	.37	.39	79.9	78.1	-.2063	600451_OP
4	18358	22027	-1.6340A	.0198	.97	-2.5	.94	-2.2	.39	.34	84.3	84.2	.0456	633865_OP
5	15278	22030	-.5382A	.0161	1.02	2.3	1.00	.3	.38	.42	72.9	73.7	-.0940	659843_OP
6	11994	22027	.3988A	.0153	1.06	9.9	1.09	9.0	.38	.44	67.7	70.2	-.2180	659850_OP
7	14450	22030	-.4092A	.0159	1.08	9.9	1.15	9.9	.35	.42	70.4	72.8	-.0061	659852_OP
8	12487	22027	.3778A	.0153	1.03	4.2	1.04	4.2	.43	.44	69.1	70.2	-.3142	659859_OP
9	13349	22030	-.0755A	.0155	1.06	9.3	1.05	4.1	.37	.43	68.4	71.0	-.0676	659862_OP
10	16835	22027	-.4425A	.0160	.88	-9.9	.79	-9.9	.41	.42	76.9	73.1	-.6523	659867_OP
11	14917	22030	-.4945A	.0161	1.07	9.4	1.13	9.2	.35	.42	71.4	73.4	-.0414	659868_OP
12	15766	22027	-.6115A	.0163	1.01	.9	.96	-2.9	.37	.41	73.7	74.3	-.1552	659874_OP
13	15074	22030	-.6229A	.0163	1.07	9.8	1.07	4.8	.36	.41	71.2	74.4	.0476	659887_OP
14	15561	22030	-.5609A	.0162	.92	-9.9	.86	-9.9	.45	.42	76.1	73.9	-.1489	689743_OP
15	17098	22030	-.8452A	.0168	.93	-8.4	.92	-4.8	.36	.40	78.8	76.3	-.3196	689757_OP
16	16687	22027	-.8930A	.0170	.89	-9.9	.81	-9.9	.45	.40	79.5	76.7	-.1391	689759_OP
17	11035	22030	.2189A	.0154	.94	-9.9	.92	-8.5	.49	.44	73.3	70.3	.1881	689766_OP
18	11713	22027	.0918A	.0154	1.06	9.8	1.08	7.4	.39	.44	67.8	70.5	.1558	689768_OP
19	15757	22030	-.8694A	.0169	1.02	3.0	1.06	3.5	.41	.40	76.1	76.5	.1118	689773_OP
20	12895	22027	-.0117A	.0155	.95	-8.3	.93	-6.4	.48	.43	72.7	70.8	-.0217	689780_OP
21	14409	22030	-.5774A	.0162	1.04	5.6	1.05	3.4	.43	.42	72.6	74.0	.1753	689791_OP
22	16412	22027	-.9829A	.0172	.99	-1.8	.92	-4.4	.42	.39	77.4	77.6	.0375	689801_OP
23	17263	22030	-1.1573A	.0178	.96	-4.3	1.02	.8	.39	.38	80.8	79.3	-.0508	706982_OP
24	13633	22027	-.3717A	.0159	1.00	.5	1.02	1.8	.46	.42	72.8	72.6	.1617	706987_OP
25	14770	22030	-.5625A	.0162	.99	-1.9	.92	-5.6	.45	.42	73.4	73.9	.0666	706988_OP
26	14441	22027	-.6568A	.0164	.97	-4.7	.94	-4.0	.52	.41	75.8	74.7	.2472	706989_OP
27	17592	22030	-1.2651A	.0182	.82	-9.9	.65	-9.9	.53	.37	83.3	80.4	-.0513	706990_OP
28	11306	22027	.3450A	.0153	.95	-8.2	.94	-6.3	.48	.44	72.4	70.2	-.0021	706995_OP
29	17421	22030	-1.6629A	.0199	1.19	9.9	1.35	9.9	.40	.34	80.6	84.5	.4132	706996_OP
30	14785	22027	-.3908A	.0159	1.01	1.1	1.01	.7	.39	.42	72.3	72.7	-.1126	707000_OP
31	13645	22030	-.2887A	.0157	1.04	5.6	1.05	3.8	.41	.43	70.7	72.1	.0750	707001_OP
32	17241	22027	-1.1097A	.0176	.96	-5.1	.89	-5.9	.39	.38	80.1	78.8	-.0933	707004_OP
33	10396	22030	.3295A	.0153	1.05	8.6	1.07	7.0	.39	.44	68.1	70.2	.2276	707010_OP
34	13008	22027	.1289A	.0154	1.03	5.1	1.03	2.6	.40	.44	69.1	70.4	-.1906	707013_OP
35	12715	22027	.2227A	.0154	1.03	4.3	1.02	1.9	.40	.44	69.0	70.3	-.2139	707014_OP
36	17561	22027	-1.2870A	.0182	1.00	.3	1.07	3.0	.35	.37	81.3	80.6	-.0186	707017_OP
37	7887	22030	.8633A	.0156	1.10	9.9	1.19	9.9	.30	.43	68.9	71.5	.3033	707020_OP
38	13428	22027	-.1252A	.0156	1.19	9.9	1.31	9.9	.26	.43	64.5	71.2	-.0371	707022_OP
39	16141	22030	-.8970A	.0170	.92	-9.9	.84	-9.8	.48	.40	78.7	76.8	.0301	707023_OP
40	15627	22027	-.6091A	.0163	.91	-9.9	.85	-9.9	.47	.41	76.9	74.3	-.1184	707024_OP
41	14729	22030	-.3636A	.0159	.89	-9.9	.82	-9.9	.50	.42	76.0	72.5	-.1251	707025_OP
42	13673	22027	-.2713A	.0157	.93	-9.9	.87	-9.9	.50	.43	74.1	72.0	.0501	707026_OP
43	15563	22030	-.7336A	.0165	1.11	9.9	1.14	8.6	.32	.41	71.2	75.3	.0273	707027_OP
44	12099	22027	.1524A	.0154	1.02	2.5	1.03	3.0	.42	.44	69.8	70.4	.0037	707029_OP
45	15297	22030	-.7115A	.0165	.98	-2.3	.99	-.9	.45	.41	75.7	75.1	.0778	707031_OP
46	17116	22027	-1.1774A	.0178	.93	-7.8	.85	-8.1	.45	.38	80.8	79.5	.0177	707032_OP
47	12132	22030	.1149A	.0154	1.04	6.9	1.07	6.9	.40	.44	69.0	70.4	.0338	707034_OP
48	14603	22027	-.4753A	.0160	.94	-9.0	.87	-9.9	.48	.42	74.8	73.3	.0212	707035_OP
49	14265	22030	-.4825A	.0160	.95	-6.6	.94	-4.9	.49	.42	74.8	73.3	.1158	707037_OP
50	7632	22027	1.0262A	.0158	1.16	9.9	1.31	9.9	.24	.42	68.1	72.4	.2062	707039_OP
51	3083	4237	-.7144	.0382	.97	-1.9	.90	-2.9	.43	.39	76.7	76.0	.0007	744504_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
52	2242	3980	.1964	.0362	.85	-9.9	.81	-8.3	.56	.43	76.7	70.5	.0008	744508_FT
53	3092	5903	-.0147	.0298	.94	-4.8	.96	-2.2	.50	.45	73.8	70.8	.0005	744511_FT
54	2284	3995	.1676	.0361	1.03	2.4	1.06	2.6	.40	.42	68.4	70.2	.0008	744519_FT
55	3436	3990	-1.7042	.0491	.90	-3.5	.69	-5.1	.43	.32	86.8	86.2	.0008	744520_FT
56	3718	4315	-1.7300	.0471	.90	-3.6	.72	-4.9	.43	.31	86.7	86.3	.0009	744522_FT
57	3489	3997	-1.8394	.0507	.91	-2.8	.78	-3.4	.40	.31	88.2	87.4	.0008	744523_FT
58	4105	4437	-2.4936	.0596	.93	-1.6	.90	-1.1	.32	.25	92.5	92.5	.0011	744524_FT
59	3496	3924	-2.0266	.0543	.90	-2.7	.80	-2.7	.39	.29	89.3	89.1	.0009	744528_FT
60	3804	4399	-1.7778	.0472	.95	-1.8	.85	-2.4	.37	.32	86.7	86.5	.0008	744530_FT
61	2257	4252	.3549	.0348	1.03	2.5	1.03	1.6	.39	.43	68.2	69.9	.0008	744531_FT
62	1887	3879	.5971	.0364	.88	-8.7	.85	-7.0	.52	.42	75.4	69.9	.0008	744532_FT
63	1126	5821	1.9543	.0375	.89	-5.4	1.03	.7	.42	.38	85.6	83.2	.0008	744534_FT
64	2549	4149	-.0672	.0358	1.01	.5	1.00	-.2	.41	.42	70.6	71.1	.0008	744536_FT
65	3638	4170	-1.8289	.0495	.86	-4.7	.59	-7.2	.46	.30	88.0	87.3	.0009	744538_FT
66	5745	6399	-2.4892	.0436	.92	-2.7	.72	-4.7	.36	.28	89.8	89.8	.0007	744544_FT
67	3227	3719	-1.7622	.0516	1.10	3.0	1.47	6.0	.19	.31	86.5	86.8	.0009	744550_FT
68	5769	6059	-3.4092	.0619	1.03	.6	1.76	6.5	.13	.19	95.2	95.2	.0011	744552_FT
69	2786	3495	-1.1823	.0457	1.03	1.3	.99	-.1	.33	.36	80.5	80.7	.0007	744555_FT
70	3043	3823	-1.1608	.0437	.97	-1.4	.86	-2.9	.40	.36	81.5	80.6	.0007	744558_FT
71	4839	6156	-1.5095	.0340	1.10	5.6	1.31	7.0	.26	.37	78.7	79.7	.0005	744563_FT
72	1726	3929	.8301	.0364	1.21	9.9	1.34	9.9	.23	.42	63.3	70.4	.0009	744566_FT
73	2473	4003	-.0788	.0365	1.13	8.5	1.13	4.7	.30	.42	66.1	71.1	.0007	744569_FT
74	2425	4103	.0429	.0358	.98	-1.1	.96	-1.8	.44	.43	71.0	70.7	.0008	744571_FT
75	2064	3973	.4122	.0357	1.40	9.9	1.59	9.9	.07	.42	54.5	69.4	.0009	744573_FT
76	3839	4019	-3.0617	.0784	.96	-.7	.74	-2.4	.25	.19	95.5	95.5	.0015	744576_FT
77	2141	3878	.2081	.0363	1.29	9.9	1.44	9.9	.17	.42	58.2	69.7	.0008	744582_FT
78	4026	4285	-2.7343	.0665	1.04	.7	1.69	5.6	.15	.22	93.9	93.9	.0013	744612_FT
79	2954	4076	-.6870	.0389	.92	-4.4	.85	-4.2	.47	.40	78.1	75.9	.0007	744613_FT
80	2820	3429	-1.3602	.0484	.89	-4.2	.74	-4.7	.46	.35	84.0	82.8	.0007	744614_FT
81	1235	3691	1.3863	.0393	1.06	3.1	1.11	3.6	.35	.39	71.6	73.8	.0010	744617_FT
82	2614	3474	-.8497	.0433	.93	-3.2	.86	-3.3	.45	.39	79.2	77.7	.0007	744620_FT
83	3539	5934	-.3977	.0300	.89	-8.9	.83	-7.9	.53	.44	75.1	71.3	.0004	744624_FT
84	2514	4008	-.1559	.0367	1.10	6.5	1.17	5.9	.33	.42	68.5	71.7	.0007	744626_FT
85	2699	3462	-1.0860	.0449	.93	-3.0	.90	-2.1	.44	.37	81.2	79.5	.0007	744628_FT
86	2735	3891	-.5733	.0390	.96	-2.0	.94	-1.7	.44	.40	75.9	74.7	.0007	744631_FT
87	3328	4261	-1.0731	.0405	.93	-3.5	.88	-2.7	.44	.37	80.7	79.6	.0007	744636_FT
88	3889	6338	-.4691	.0292	.98	-1.8	.93	-3.1	.46	.44	72.0	71.6	.0005	744637_FT
89	5207	6097	-2.0635	.0388	.91	-4.0	.78	-4.4	.40	.31	86.0	85.5	.0006	744638_FT
90	4290	6004	-1.0486	.0318	.97	-2.2	.96	-1.4	.44	.40	75.4	75.2	.0004	744641_FT
91	2803	3940	-.6189	.0390	.97	-1.6	1.02	.4	.43	.40	76.7	75.2	.0007	744642_FT
92	3253	4072	-1.1897	.0426	.88	-5.3	.76	-5.3	.48	.36	83.3	81.0	.0007	744643_FT
93	3601	4300	-1.4947	.0445	.99	-.2	1.05	.8	.33	.33	84.6	84.2	.0008	744644_FT
94	2818	3932	-.6275	.0392	.92	-4.8	.83	-4.9	.48	.39	78.7	75.5	.0008	744647_FT
95	3093	4046	-.9454	.0406	.99	-.5	1.03	.7	.38	.38	78.8	78.4	.0007	744653_FT
96	4006	5973	-.8098	.0309	.86	-9.9	.77	-9.0	.54	.42	77.8	73.3	.0004	744658_FT
97	2763	4199	-.3093	.0366	.99	-.4	.96	-1.4	.43	.42	73.0	73.0	.0007	744659_FT
98	1987	4063	.5817	.0356	.93	-5.1	.93	-3.4	.47	.43	73.9	69.9	.0008	744660_FT
99	2120	3977	.3343	.0360	.99	-.6	.98	-1.0	.43	.43	70.2	70.0	.0008	744663_FT
100	3078	3829	-1.2372	.0445	.95	-1.9	.94	-1.1	.41	.37	82.4	81.4	.0007	744667_FT
MEAN	8755.7	13217	-.6332	.0292	.99	-.5	.99	-.6			76.3	76.4	.0004	
P.SD	5942.1	8832.5	.9174	.0145	.09	6.3	.20	5.9			7.5	6.4	.1335	

Grade 4 Mathematics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
1	17017	23142	-.4594A	.0156	.85	-9.9	.78	-9.9	.47	.43	78.2	73.1	-.4578	603920_OP
2	18120	23146	-1.3827A	.0181	1.07	7.2	1.10	4.3	.38	.37	79.6	81.4	.1659	603962_OP
3	19034	23142	-1.5542A	.0188	.96	-3.5	.94	-2.4	.40	.35	83.5	83.2	.0358	604004_OP
4	15898	23142	-.6116	.0159	1.25	9.9	1.73	9.9	.18	.42	68.5	74.2	.0007	604044_OP
5	15328	23146	-.2281A	.0153	.80	-9.9	.72	-9.9	.58	.44	79.5	71.8	-.2459	604096_OP
6	16031	23142	-.1968A	.0153	.86	-9.9	.79	-9.9	.50	.44	76.6	71.6	-.4578	604102_OP
7	14447	23142	-.4087A	.0155	1.01	.9	1.06	4.9	.46	.43	73.2	72.8	.1515	604128_OP
8	17005	23146	-.9634A	.0167	.90	-9.9	.86	-8.5	.51	.40	80.0	77.2	.0650	634173_OP
9	17462	23146	-.9064A	.0165	.91	-9.9	.76	-9.9	.46	.40	77.6	76.7	-.1245	634177_OP
10	14416	23146	.0528A	.0151	.96	-7.1	.93	-7.2	.46	.44	72.2	70.7	-.3082	646586_OP
11	18933	23146	-1.7063A	.0196	1.00	.2	.93	-2.8	.47	.34	83.2	84.7	.2284	646588_OP
12	17616	23142	-1.2773A	.0177	1.10	9.9	1.10	4.7	.38	.37	77.8	80.3	.2106	646592_OP
13	16108	23146	-.3737A	.0155	1.01	1.5	.98	-1.3	.37	.43	72.0	72.6	-.2970	646594_OP
14	12537	23146	.2550A	.0150	.98	-3.8	.97	-3.4	.45	.44	71.7	70.4	-.0770	646601_OP
15	16065	23146	-.8015A	.0163	1.05	6.2	1.03	1.7	.42	.41	74.2	75.7	.1516	659906_OP
16	14734	23146	-.1851A	.0152	.94	-9.0	.89	-9.9	.46	.44	73.2	71.6	-.1438	659932_OP
17	16482	23142	-.8338A	.0163	.97	-4.6	.94	-3.8	.46	.41	77.3	76.0	.0749	659935_OP
18	14445	23146	-.3456A	.0154	1.08	9.9	1.09	6.8	.38	.43	69.3	72.4	.0882	659939_OP
19	13491	23142	.1200A	.0150	1.05	7.5	1.06	5.7	.39	.44	69.2	70.6	-.1592	659941_OP
20	12124	23146	.0930A	.0150	1.03	5.2	1.04	3.5	.43	.44	69.6	70.6	.1788	659945_OP
21	12679	23142	-.1937A	.0153	1.07	9.9	1.11	9.1	.43	.44	68.6	71.6	.3420	659961_OP
22	14701	23142	-.2343A	.0153	.81	-9.9	.74	-9.9	.59	.43	79.4	71.8	-.0861	659971_OP
23	15847	23142	-.3947A	.0155	.97	-5.0	.91	-7.0	.42	.43	73.3	72.7	-.2078	659976_OP
24	18000	23142	-1.2492A	.0176	1.00	.0	.99	-.4	.41	.38	79.9	80.0	.0659	659977_OP
25	13580	23146	-.1643A	.0152	1.14	9.9	1.24	9.9	.33	.44	66.7	71.5	.1070	659979_OP
26	11365	23142	.4280A	.0150	.96	-5.9	.96	-3.8	.46	.44	72.6	70.4	.0135	689809_OP
27	10457	23146	.7289A	.0151	.93	-9.9	.93	-7.6	.49	.44	74.6	71.1	-.0815	689814_OP
28	11466	23142	.3990A	.0150	1.00	.3	1.00	.0	.44	.44	70.0	70.4	.0198	689821_OP
29	12626	23146	.3279A	.0150	.87	-9.9	.82	-9.9	.56	.44	75.6	70.4	-.1701	689825_OP
30	15357	23146	-.7235A	.0161	1.19	9.9	1.33	9.9	.32	.41	69.6	75.1	.2509	689834_OP
31	16134	23142	-.4701A	.0156	1.06	8.5	1.12	8.7	.33	.43	71.4	73.2	-.2053	689835_OP
32	14437	23146	-.1237A	.0152	.88	-9.9	.83	-9.9	.53	.44	76.1	71.3	-.1348	689844_OP
33	13801	23146	-.3828A	.0155	1.17	9.9	1.25	9.9	.34	.43	66.1	72.6	.2767	692376_OP
34	15506	23146	-.4369A	.0156	1.07	9.9	1.16	9.9	.35	.43	71.1	73.0	-.0777	707043_OP
35	15341	23146	-.6791A	.0160	1.14	9.9	1.20	9.9	.35	.42	70.2	74.7	.2098	707045_OP
36	15732	23142	-.6582A	.0160	.92	-9.9	.83	-9.9	.51	.42	76.3	74.6	.0906	707046_OP
37	13739	23142	.0276A	.0151	.86	-9.9	.81	-9.9	.55	.44	76.4	70.8	-.1236	707052_OP
38	16083	23142	-.6453A	.0159	1.06	8.7	1.13	8.5	.36	.42	72.9	74.5	-.0127	707056_OP
39	13800	23142	-.1536A	.0152	1.11	9.9	1.14	9.9	.35	.44	67.1	71.4	.0452	707058_OP
40	18653	23142	-1.4378A	.0183	1.02	1.9	1.05	2.0	.37	.36	81.7	82.0	.0487	707059_OP
41	17178	23142	-.9011A	.0165	1.07	8.1	1.15	8.5	.32	.40	75.4	76.6	-.0481	707062_OP
42	18777	23146	-1.5725A	.0189	1.14	9.9	1.40	9.9	.28	.35	81.6	83.3	.1455	707063_OP
43	18054	23146	-1.2705A	.0177	.94	-6.3	.87	-6.6	.46	.37	81.4	80.2	.0715	707067_OP
44	14483	23142	-.2387A	.0153	1.14	9.9	1.18	9.9	.31	.43	66.2	71.8	-.0294	707069_OP
45	15094	23146	-.3620A	.0155	1.01	1.5	1.00	.3	.41	.43	72.3	72.5	-.0518	707071_OP
46	13085	23142	-.1826A	.0152	1.22	9.9	1.47	9.9	.29	.44	64.7	71.6	.2388	707077_OP
47	19156	23146	-1.3436A	.0179	.83	-9.9	.74	-9.9	.43	.37	84.9	81.0	-.2273	707078_OP
48	15324	23142	-.3045A	.0154	.92	-9.9	.87	-9.9	.48	.43	75.2	72.2	-.1674	707079_OP
49	9547	23142	.8654A	.0153	1.03	4.2	1.07	7.2	.40	.43	71.6	71.7	-.0096	707082_OP
50	12882	23146	.0635A	.0151	1.04	6.6	1.07	6.6	.41	.44	69.5	70.7	.0371	707083_OP
51	16965	23142	-1.0920A	.0171	1.21	9.9	1.54	9.9	.28	.39	74.5	78.4	.2072	707085_OP
52	14229	23146	-.3222A	.0154	1.05	7.3	1.06	4.8	.41	.43	70.5	72.3	.1155	707088_OP
53	13858	23146	-.3560A	.0154	1.14	9.9	1.27	9.9	.36	.43	68.1	72.5	.2364	707092_OP
54	9208	23142	.8959A	.0153	.98	-2.4	1.03	3.3	.42	.43	73.4	71.9	.0386	707100_OP
55	14351	23146	-.3715A	.0155	.95	-8.3	.93	-5.5	.50	.43	74.6	72.6	.1367	707101_OP
56	2946	6714	.4413	.0282	.98	-1.5	.98	-1.1	.46	.45	72.3	71.5	.0008	744684_FT
57	2520	6182	.5437	.0298	.78	-9.9	.73	-9.9	.63	.46	80.0	72.5	.0007	744689_FT
58	2087	3908	.3584	.0364	.73	-9.9	.65	-9.9	.66	.44	80.8	70.3	.0009	744698_FT
59	4018	4342	-2.5238	.0603	.91	-2.1	.70	-3.5	.35	.25	92.5	92.5	.0012	744701_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
60	3357	4360	-1.0172	.0396	.91	-4.3	.83	-4.0	.47	.38	81.1	78.8	.0008	744702_FT
61	3039	4142	-.8079	.0389	.83	-9.5	.70	-8.8	.56	.40	81.3	76.6	.0008	744703_FT
62	2782	4347	-.2273	.0354	1.09	6.0	1.08	2.9	.33	.42	67.5	71.9	.0008	744704_FT
63	3105	3743	-1.4277	.0471	.97	-1.2	1.10	1.6	.37	.35	84.1	83.4	.0009	744705_FT
64	2800	3819	-.7597	.0405	.97	-1.5	.91	-2.3	.43	.40	77.4	76.6	.0008	744706_FT
65	1861	4199	.8250	.0351	1.32	9.9	1.49	9.9	.14	.42	58.3	70.2	.0010	744717_FT
66	3642	4190	-1.8047	.0490	.95	-1.8	.81	-3.0	.37	.32	87.2	87.0	.0009	744723_FT
67	3557	6679	-.0865	.0279	1.10	8.7	1.15	7.9	.36	.44	66.0	70.3	.0007	744729_FT
68	1378	3735	1.1928	.0385	.93	-4.2	.96	-1.3	.44	.42	76.6	72.8	.0010	744734_FT
69	3444	4350	-1.1520	.0409	.97	-1.6	.86	-3.2	.41	.37	81.1	80.5	.0009	744736_FT
70	3637	4196	-1.7839	.0486	.91	-3.1	.69	-5.1	.42	.32	86.8	86.8	.0009	744740_FT
71	3974	4722	-1.5385	.0431	.82	-7.6	.58	-8.9	.53	.34	85.9	84.5	.0009	744744_FT
72	2689	4251	-.1839	.0358	.93	-5.1	.86	-5.5	.49	.43	74.6	72.0	.0008	744745_FT
73	2463	3784	-.2427	.0383	1.00	-.2	.97	-1.1	.43	.42	72.6	72.6	.0008	744754_FT
74	2676	4245	-.1771	.0358	.95	-3.2	.92	-3.0	.47	.43	73.9	72.0	.0008	744757_FT
75	4062	4333	-2.6872	.0651	.94	-1.1	.68	-3.6	.30	.23	93.8	93.7	.0013	744760_FT
76	2206	4117	.3379	.0353	.90	-7.7	.85	-7.0	.51	.43	74.2	69.8	.0009	744765_FT
77	2470	6455	.7163	.0294	1.21	9.9	1.37	9.9	.26	.45	67.6	73.1	.0008	744769_FT
78	4843	6172	-1.5634	.0338	.94	-3.8	.84	-4.0	.43	.36	80.2	79.4	.0005	744771_FT
79	3435	4135	-1.4370	.0448	1.02	.8	1.00	.1	.32	.35	83.8	83.6	.0009	744773_FT
80	3292	4362	-.8890	.0387	1.00	.3	.93	-1.8	.38	.38	77.4	77.6	.0008	744775_FT
81	5634	6742	-1.9153	.0353	.96	-1.8	.90	-2.2	.36	.33	83.9	83.8	.0006	744778_FT
82	3045	4239	-.6296	.0378	1.19	9.9	1.38	9.5	.22	.40	70.8	75.6	.0008	744780_FT
83	3755	4127	-2.3104	.0571	.98	-.5	.94	-.7	.30	.27	91.0	91.0	.0011	744781_FT
84	3877	4590	-1.5915	.0439	1.00	-.1	1.02	.4	.34	.34	84.8	84.7	.0009	744783_FT
85	3004	3883	-1.0095	.0421	.94	-2.6	.98	-.5	.43	.38	80.2	79.1	.0008	744786_FT
86	3277	4015	-1.3457	.0441	.96	-1.7	.84	-3.2	.40	.35	82.6	82.3	.0009	744791_FT
87	3284	4324	-.9272	.0391	1.10	4.8	1.23	5.3	.28	.38	76.1	78.1	.0008	744796_FT
88	2991	4026	-.8117	.0398	1.10	5.2	1.13	3.2	.29	.39	74.2	76.9	.0008	744797_FT
89	2579	4454	.0876	.0343	.94	-4.4	.91	-3.8	.48	.43	73.2	70.7	.0009	744810_FT
90	4402	6273	-1.0210	.0306	.99	-.8	.90	-3.4	.42	.40	73.5	74.3	.0005	744811_FT
91	6061	6813	-2.4325	.0408	.87	-5.1	.61	-7.4	.42	.28	89.0	89.0	.0007	744813_FT
92	3779	4078	-2.5075	.0629	.89	-2.3	.72	-3.2	.37	.25	92.7	92.7	.0012	744814_FT
93	3926	4211	-2.6413	.0639	.89	-2.3	.58	-4.9	.37	.24	93.2	93.2	.0013	744815_FT
94	1925	3765	.4354	.0370	.92	-5.4	.90	-4.6	.49	.43	74.0	70.0	.0009	744816_FT
95	5848	6770	-2.1723	.0377	.93	-3.1	.89	-2.2	.37	.30	86.6	86.4	.0006	744819_FT
96	3480	4249	-1.3907	.0432	1.00	-.1	1.05	.9	.35	.35	82.5	82.5	.0008	744821_FT
97	2147	6147	.8816	.0307	.96	-3.2	.95	-2.0	.47	.44	75.8	74.4	.0008	744823_FT
98	3036	4250	-.6701	.0378	.97	-1.7	.90	-2.9	.44	.41	75.5	75.6	.0008	744825_FT
99	1572	4588	1.3652	.0354	1.09	5.7	1.23	7.9	.32	.41	71.7	74.1	.0010	744827_FT
100	3153	3994	-1.1402	.0425	.89	-4.8	.76	-5.4	.48	.37	82.0	80.3	.0008	744829_FT
101	2118	4327	.5570	.0345	1.05	3.4	1.07	3.3	.39	.43	68.5	69.8	.0009	744833_FT
102	2545	3794	-.3937	.0387	.90	-6.0	.82	-5.8	.51	.42	76.3	73.5	.0008	744839_FT
103	3750	4563	-1.3681	.0420	.94	-2.7	.95	-.9	.41	.36	83.7	82.8	.0009	744907_FT
104	2966	3757	-1.1445	.0438	.96	-1.7	.92	-1.5	.41	.37	80.7	80.2	.0008	744910_FT
105	3656	3979	-2.4074	.0607	1.03	.6	1.22	2.3	.21	.26	91.8	91.8	.0012	744911_FT
MEAN	9437.0	14327	-.6347	.0279	.99	-.2	.98	-.4			76.6	76.5	.0018	
P.SD	6181.2	9271.2	.8858	.0140	.11	6.8	.21	6.6			7.0	6.2	.1291	

Grade 5 Mathematics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
1	13643	22799	-.7680A	.0162	1.38	9.9	1.75	9.9	.28	.41	64.1	74.8	.6083	603427_OP
2	16184	22795	-1.0527A	.0169	1.05	6.0	1.03	1.7	.45	.39	75.2	77.4	.2685	603428_OP
3	15143	22799	-.5295A	.0157	.98	-3.1	.92	-6.0	.44	.42	73.1	73.0	.0052	603482_OP

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
4	11855	22795	.3865A	.0151	1.01	.9	1.01	.9	.45	.45	71.0	70.6	-.1412	603534_OP
5	15813	22799	-.7369A	.0161	.98	-3.2	1.03	2.1	.44	.41	76.4	74.5	.0450	634248_OP
6	13660	22799	-.4284A	.0156	1.15	9.9	1.24	9.9	.35	.43	67.2	72.3	.2628	634267_OP
7	15242	22795	-.6653A	.0160	.90	-9.9	.84	-9.9	.54	.41	77.4	74.0	.1183	646629_OP
8	12855	22799	.3195A	.0151	.85	-9.9	.82	-9.9	.58	.45	77.4	70.5	-.3046	646667_OP
9	13145	22795	-.1691A	.0153	1.18	9.9	1.30	9.9	.30	.44	64.7	71.1	.1206	659999_OP
10	16461	22799	-.9424A	.0166	1.03	4.1	1.08	4.7	.39	.39	75.7	76.3	.0816	660008_OP
11	12759	22795	.0573A	.0152	1.19	9.9	1.28	9.9	.28	.44	63.5	70.5	-.0186	660018_OP
12	11620	22795	.2637A	.0151	1.10	9.9	1.14	9.9	.36	.45	66.2	70.4	.0360	689865_OP
13	14156	22799	-.1323A	.0153	.88	-9.9	.81	-9.9	.52	.44	75.2	71.0	-.1563	689866_OP
14	11597	22795	.4618A	.0152	.97	-5.6	.96	-4.1	.47	.45	72.5	70.7	-.1573	689879_OP
15	9456	22799	.9483A	.0156	.92	-9.9	.91	-8.2	.52	.44	76.2	72.8	-.1459	689881_OP
16	16158	22795	-.7083A	.0160	.86	-9.9	.76	-9.9	.52	.41	78.8	74.3	-.0770	689884_OP
17	14973	22795	-.2513A	.0154	.97	-5.0	.91	-8.1	.43	.43	71.9	71.4	-.2371	689887_OP
18	12729	22799	-.0365A	.0152	.95	-8.9	.90	-9.3	.49	.44	72.6	70.7	.0836	689893_OP
19	16602	22799	-1.2134A	.0174	1.24	9.9	1.53	9.9	.29	.37	74.6	79.0	.3192	689895_OP
20	11652	22799	.1486A	.0151	1.12	9.9	1.18	9.9	.35	.45	66.6	70.4	.1448	689897_OP
21	13588	22799	.0179A	.0152	.91	-9.9	.85	-9.9	.51	.44	73.8	70.6	-.1727	689899_OP
22	15508	22795	-.6930A	.0160	.97	-3.8	.94	-4.3	.46	.41	74.9	74.2	.0787	689912_OP
23	16358	22799	-.8233A	.0163	.98	-2.4	1.00	.2	.41	.40	76.6	75.3	-.0124	689921_OP
24	10840	22799	.5380A	.0152	1.20	9.9	1.31	9.9	.29	.45	63.5	70.9	-.0595	689924_OP
25	10383	22795	.4930A	.0152	.97	-5.6	.97	-3.2	.47	.45	72.8	70.8	.0905	689926_OP
26	12506	22799	.2128A	.0151	1.04	6.5	1.05	4.9	.41	.45	69.1	70.4	-.1163	707102_OP
27	12267	22795	.0014A	.0152	1.17	9.9	1.23	9.9	.32	.44	64.1	70.6	.1515	707103_OP
28	17800	22799	-1.3313A	.0178	.94	-6.4	.86	-6.5	.46	.36	80.8	80.2	.0883	707106_OP
29	9738	22795	.8310A	.0154	1.05	7.4	1.09	8.7	.41	.44	70.5	72.1	-.0963	707107_OP
30	18100	22799	-1.1328A	.0171	1.00	-.3	1.12	6.1	.29	.38	79.5	78.2	-.2148	707109_OP
31	16036	22799	-.8345A	.0163	.87	-9.9	.81	-9.9	.54	.40	79.3	75.3	.0860	707112_OP
32	11518	22795	.5876A	.0152	.93	-9.9	.94	-6.4	.51	.45	74.4	71.1	-.2647	707113_OP
33	14276	22795	-.5434A	.0157	1.02	3.1	1.06	4.1	.46	.42	72.9	73.1	.2322	707114_OP
34	15765	22795	-.4861A	.0157	.97	-3.8	.98	-1.8	.40	.42	73.8	72.7	-.2005	707115_OP
35	17009	22799	-.8086A	.0163	.85	-9.9	.74	-9.9	.48	.40	79.8	75.1	-.2121	707116_OP
36	15062	22795	-.4151A	.0156	.93	-9.9	.87	-9.9	.47	.43	74.4	72.3	-.0920	707118_OP
37	14193	22799	-.2559A	.0154	1.02	3.5	.96	-3.2	.41	.43	69.2	71.4	-.0395	707120_OP
38	12581	22795	.0282A	.0152	.90	-9.9	.86	-9.9	.53	.44	74.5	70.6	.0521	707122_OP
39	18637	22799	-1.6458A	.0192	.90	-9.8	.69	-9.9	.51	.34	83.4	83.6	.1327	707125_OP
40	17722	22795	-1.2531A	.0175	.96	-4.2	.99	-.7	.41	.37	80.4	79.4	.0313	707128_OP
41	14823	22799	-.4251A	.0156	1.03	5.0	1.05	4.1	.39	.43	71.2	72.3	-.0213	707129_OP
42	15863	22799	-.9608A	.0166	1.02	2.9	1.02	1.1	.47	.39	75.8	76.5	.2604	707131_OP
43	19085	22795	-1.6495A	.0192	1.01	1.3	1.12	4.6	.30	.34	84.1	83.6	-.0304	707135_OP
44	16291	22799	-.8695A	.0164	1.18	9.9	1.36	9.9	.26	.40	70.6	75.7	.0533	707136_OP
45	14572	22795	-.4271A	.0156	.90	-9.9	.83	-9.9	.52	.43	76.0	72.3	.0421	707138_OP
46	16908	22795	-1.0367A	.0168	1.04	4.9	1.06	3.2	.37	.39	76.2	77.2	.0521	707140_OP
47	12135	22799	-.1091A	.0152	.98	-3.6	.99	-.9	.49	.44	72.5	70.9	.2937	707143_OP
48	13410	22795	-.0689A	.0152	1.01	2.4	1.01	.6	.42	.44	69.9	70.8	-.0431	707146_OP
49	15139	22795	-.3325A	.0155	1.16	9.9	1.27	9.9	.26	.43	66.3	71.8	-.1960	707149_OP
50	13904	22799	-.0869A	.0152	1.11	9.9	1.16	9.9	.33	.44	66.2	70.8	-.1417	707152_OP
51	11973	22795	.3325A	.0151	.94	-9.9	.92	-8.9	.50	.45	73.7	70.5	-.1142	707153_OP
52	12028	22799	.3951A	.0151	1.06	9.9	1.09	8.7	.39	.45	68.7	70.6	-.1892	707154_OP
53	18103	22795	-1.3131A	.0178	.88	-9.9	.77	-9.9	.47	.37	82.5	80.0	-.0292	707155_OP
54	11452	22795	.3726A	.0151	1.05	8.2	1.07	7.5	.41	.45	68.4	70.5	-.0348	707157_OP
55	19088	22799	-1.5894A	.0189	.92	-7.3	.88	-4.8	.36	.34	84.3	83.0	-.0929	707158_OP
56	3250	4544	-.6903	.0365	.86	-8.7	.79	-6.4	.53	.40	79.6	75.1	.0006	744824_FT
57	2916	4306	-.4686	.0362	.97	-2.1	.94	-1.9	.44	.41	74.5	73.2	.0006	744883_FT
58	2759	3782	-.7550	.0404	.92	-4.2	.89	-2.8	.47	.39	78.8	76.0	.0006	744887_FT
59	3334	4683	-.6852	.0359	.81	-9.9	.72	-8.7	.58	.41	81.1	75.3	.0005	744888_FT
60	4089	6531	-.6160	.0288	.94	-5.6	.91	-3.6	.48	.43	74.4	71.5	.0002	744889_FT
61	4193	6444	-.7693	.0292	1.02	1.8	1.11	4.2	.40	.42	71.8	72.1	.0001	744891_FT
62	4401	5976	-1.3051	.0323	.81	-9.9	.66	-9.9	.55	.38	80.9	75.8	.0001	744892_FT
63	2081	4131	.4608	.0353	1.13	8.7	1.16	6.9	.33	.43	64.8	70.0	.0008	744893_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
64	5693	6506	-2.3393	.0396	.89	-4.6	.71	-5.4	.39	.28	87.6	87.5	.0002	744894_FT
65	3627	4350	-1.5092	.0439	1.06	2.2	1.57	8.4	.25	.34	84.2	83.7	.0006	744895_FT
66	2942	4281	-.5397	.0366	1.20	9.9	1.50	9.9	.22	.41	69.4	73.7	.0006	744896_FT
67	2804	4133	-.4861	.0370	.98	-1.4	.97	-.9	.43	.40	74.0	73.1	.0005	744897_FT
68	2859	4264	-.4212	.0365	.99	-.4	.97	-.8	.43	.42	73.3	73.2	.0006	744898_FT
69	3467	4243	-1.3519	.0429	.92	-3.3	.86	-2.6	.42	.34	83.6	82.2	.0006	744899_FT
70	3313	4176	-1.1966	.0416	.96	-1.9	.96	-.7	.39	.36	81.4	80.2	.0006	744901_FT
71	2798	5881	.1204	.0298	1.02	2.0	1.02	.8	.43	.45	69.8	70.9	.0003	744912_FT
72	2930	5904	-.0051	.0296	1.22	9.9	1.29	9.9	.26	.45	60.8	70.4	.0003	744916_FT
73	2212	4235	.3627	.0349	1.09	6.3	1.12	5.4	.35	.44	66.8	70.0	.0007	744918_FT
74	3622	4237	-1.7090	.0467	.90	-3.8	.72	-4.7	.43	.32	86.4	85.6	.0006	744919_FT
75	3489	4241	-1.4412	.0435	.97	-1.4	.93	-1.2	.38	.34	83.3	82.7	.0006	744920_FT
76	2007	4297	.6425	.0347	1.22	9.9	1.33	9.9	.24	.43	63.3	70.4	.0008	744921_FT
77	2505	4237	-.0078	.0352	.82	-9.9	.75	-9.9	.59	.43	78.3	70.5	.0006	744923_FT
78	3258	4112	-1.1807	.0419	.95	-2.1	.90	-2.1	.41	.36	81.6	80.3	.0006	744924_FT
79	3095	4032	-1.0157	.0409	.95	-2.5	.81	-4.3	.43	.38	78.5	78.4	.0006	744926_FT
80	2082	3772	.2085	.0371	.87	-9.6	.80	-8.5	.55	.44	75.8	70.0	.0007	744928_FT
81	3634	4348	-1.5601	.0441	1.02	.8	1.22	3.7	.30	.33	84.0	83.8	.0006	744929_FT
82	2911	4211	-.5604	.0370	1.13	7.6	1.27	7.1	.28	.40	71.0	73.9	.0006	744930_FT
83	3018	3646	-1.4715	.0473	.94	-2.1	.81	-3.3	.40	.34	83.7	83.0	.0006	744931_FT
84	3067	3865	-1.2081	.0433	.94	-2.5	.96	-.8	.41	.36	81.8	80.4	.0005	744932_FT
85	1782	4116	.8036	.0358	1.15	9.8	1.23	9.3	.31	.43	64.6	71.1	.0008	744933_FT
86	1347	4343	1.4862	.0373	1.17	9.1	1.48	9.9	.23	.41	72.9	75.8	.0010	744935_FT
87	2812	4092	-.5048	.0375	1.05	2.9	1.04	1.1	.36	.40	71.3	73.6	.0006	744936_FT
88	3374	3782	-2.0717	.0553	.92	-2.1	.75	-3.3	.36	.28	89.4	89.2	.0007	744937_FT
89	2286	3668	-.1680	.0383	1.22	9.9	1.38	9.9	.23	.43	62.8	71.4	.0006	744938_FT
90	1956	4274	.6801	.0350	.95	-3.4	.94	-2.9	.47	.44	72.9	70.7	.0008	744939_FT
91	2998	3922	-.9840	.0412	.88	-6.0	.75	-6.0	.49	.38	79.8	78.1	.0006	744940_FT
92	3115	4047	-1.0332	.0409	1.01	.7	1.00	-.1	.37	.38	78.4	78.5	.0005	744941_FT
93	3250	3895	-1.5232	.0464	1.00	-.1	.99	-.2	.33	.33	84.4	83.7	.0006	744942_FT
94	5486	6572	-1.9745	.0356	.84	-8.3	.62	-8.8	.47	.32	84.5	83.6	.0001	744943_FT
95	2299	3997	.1212	.0361	.94	-3.9	.91	-3.5	.48	.43	73.4	70.4	.0007	744946_FT
96	2736	4123	-.3584	.0368	1.04	2.4	1.05	1.6	.38	.42	71.6	72.8	.0006	744948_FT
97	3260	4178	-1.1023	.0407	1.06	2.8	1.19	3.7	.30	.37	78.6	79.2	.0006	744951_FT
98	2017	6511	1.0735	.0307	1.22	9.9	1.50	9.9	.23	.44	71.9	76.3	.0006	744953_FT
99	1460	4259	1.2579	.0365	1.27	9.9	1.47	9.9	.18	.41	66.5	73.8	.0010	744956_FT
100	1370	4292	1.4519	.0373	1.08	4.4	1.29	9.2	.31	.41	74.5	75.2	.0010	744957_FT
101	3067	4443	-.5447	.0362	1.01	.4	1.00	-.1	.41	.41	73.8	74.0	.0006	744967_FT
102	3511	3796	-2.4682	.0641	.99	-.2	1.09	.9	.25	.24	92.5	92.5	.0010	744968_FT
103	2983	6443	.2306	.0287	.99	-.5	.98	-.9	.47	.46	71.2	71.4	.0004	744972_FT
104	4821	6014	-1.7329	.0350	.98	-1.0	1.00	.1	.35	.34	81.3	80.6	.0001	744975_FT
105	3376	3835	-1.9636	.0527	1.03	.9	1.20	2.5	.24	.29	88.2	88.0	.0007	744976_FT
MEAN	8971.7	14112	-.4872	.0268	1.01	-.2	1.03	.2			74.9	75.2	.0015	
P.SD	5959.3	9129.3	.8275	.0123	.11	7.0	.22	6.9			6.6	5.1	.1236	

Grade 6 Mathematics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
1	15009	22995	-.3655A	.0156	1.03	5.1	1.04	3.0	.41	.45	71.8	72.9	-.0721	603180_OP
2	19989	22995	-1.4968A	.0185	.79	-9.9	.74	-9.9	.34	.36	87.1	82.0	-.5034	603182_OP
3	12184	22995	.3100A	.0153	.89	-9.9	.85	-9.9	.55	.47	76.6	71.5	-.0747	603346_OP
4	14169	22995	-.4368A	.0157	1.15	9.9	1.21	9.9	.37	.45	68.0	73.2	.2089	634408_OP
5	14583	22995	-.1454A	.0154	1.06	8.5	1.08	6.2	.40	.46	69.8	72.0	-.1902	646694_OP
6	14446	22995	-.1697A	.0154	.82	-9.9	.75	-9.9	.60	.46	79.4	72.1	-.1312	646714_OP
7	19213	22995	-1.5112A	.0186	.87	-9.9	.79	-8.8	.41	.36	84.5	82.2	-.1555	660042_OP

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
8	14755	22995	-.2081A	.0155	1.03	3.9	1.03	2.3	.42	.46	71.1	72.2	-.1692	660052_OP
9	16217	22995	-.9248A	.0167	.94	-8.1	.81	-9.9	.53	.42	77.6	76.5	.1856	660054_OP
10	15063	22995	-.5423A	.0159	1.14	9.9	1.26	9.9	.35	.44	68.8	73.8	.0952	660057_OP
11	13810	22995	-.2770A	.0155	.94	-9.0	.88	-9.4	.52	.46	73.8	72.5	.1334	660086_OP
12	16271	22995	-.8873A	.0166	1.04	5.0	1.07	3.5	.43	.42	75.6	76.2	.1327	660094_OP
13	13436	22995	-.0839A	.0154	1.22	9.9	1.35	9.9	.29	.46	64.1	71.8	.0272	660110_OP
14	9339	22995	1.0452A	.0158	1.11	9.9	1.20	9.9	.40	.46	71.2	73.9	-.1356	660113_OP
15	15512	22995	-.6439A	.0161	.99	-1.2	.93	-4.5	.47	.44	74.3	74.4	.0841	660116_OP
16	14635	22995	-.3111A	.0156	.93	-9.9	.85	-9.9	.51	.45	74.5	72.6	-.0339	689937_OP
17	18559	22995	-1.5289A	.0187	1.02	1.7	1.05	1.8	.39	.36	82.0	82.3	.1023	689942_OP
18	14864	22995	-.4098A	.0157	1.03	4.2	1.00	.3	.43	.45	71.7	73.1	.0097	689955_OP
19	11649	22995	.1588A	.0153	.89	-9.9	.84	-9.9	.57	.47	76.1	71.5	.2028	689956_OP
20	14452	22995	-.1087A	.0154	.98	-2.5	.93	-5.7	.45	.46	72.3	71.9	-.1952	689958_OP
21	13955	22995	-.3447A	.0156	1.21	9.9	1.36	9.9	.31	.45	65.8	72.8	.1672	689968_OP
22	15572	22995	-.7656A	.0163	1.15	9.9	1.26	9.9	.36	.43	71.2	75.3	.1931	689977_OP
23	10942	22995	.5470A	.0153	.89	-9.9	.87	-9.9	.55	.47	76.2	71.9	-.0213	689984_OP
24	14175	22995	-.3133A	.0156	1.12	9.9	1.28	9.9	.37	.45	69.5	72.6	.0818	689985_OP
25	12638	22995	.0843A	.0153	.94	-9.0	.94	-5.1	.51	.47	74.3	71.6	.0462	689987_OP
26	15603	22995	-.6218A	.0160	.97	-4.4	.89	-7.5	.47	.44	74.7	74.3	.0377	689988_OP
27	18539	22995	-1.5483A	.0188	.93	-6.9	.83	-7.0	.49	.36	82.4	82.5	.1290	689992_OP
28	11715	22995	.3563A	.0153	1.21	9.9	1.31	9.9	.31	.47	63.6	71.6	-.0114	707167_OP
29	17414	22995	-1.1098A	.0172	.90	-9.9	.90	-5.0	.50	.40	81.9	78.2	.0363	707168_OP
30	18627	22995	-1.6670A	.0193	1.05	4.5	1.03	1.1	.42	.35	82.2	83.8	.2207	707169_OP
31	13089	22995	.0171A	.0153	.94	-9.1	.91	-7.7	.51	.47	74.1	71.6	.0075	707170_OP
32	16485	22995	-.8731A	.0165	.89	-9.9	.79	-9.9	.54	.42	79.4	76.1	.0594	707171_OP
33	13472	22995	-.1172A	.0154	.92	-9.9	.87	-9.9	.53	.46	74.8	71.9	.0524	707172_OP
34	9312	22995	1.1177A	.0159	1.26	9.9	1.49	9.9	.28	.46	67.9	74.4	-.2003	707175_OP
35	16863	22995	-.9687A	.0168	.99	-1.2	.93	-4.0	.44	.41	76.9	76.9	.0519	707176_OP
36	15621	22995	-.5007A	.0158	1.18	9.9	1.23	9.9	.27	.44	66.7	73.6	-.0914	707179_OP
37	16223	22995	-.7066A	.0162	1.05	7.4	1.12	7.1	.37	.43	73.7	74.9	-.0401	707182_OP
38	16991	22995	-.8976A	.0166	.98	-2.2	1.04	2.3	.41	.42	77.4	76.3	-.0585	707183_OP
39	14122	22995	-.2733A	.0155	1.06	9.3	1.03	2.4	.41	.46	69.6	72.5	.0540	707184_OP
40	14048	22995	-.1386A	.0154	.97	-5.3	.96	-3.7	.48	.46	73.5	72.0	-.0650	707186_OP
41	9947	22995	.8425A	.0155	1.04	5.0	1.07	6.1	.44	.47	72.1	72.9	-.0807	707191_OP
42	10634	22995	.6163A	.0154	1.02	3.5	1.04	4.1	.44	.47	71.9	72.1	-.0183	707192_OP
43	13833	22995	-.0724A	.0154	.95	-8.7	.89	-9.5	.50	.46	73.7	71.8	-.0801	707193_OP
44	16839	22995	-.8261A	.0164	.82	-9.9	.68	-9.9	.56	.42	80.9	75.7	-.0889	707194_OP
45	14496	22995	-.3292A	.0156	.93	-9.9	.91	-6.7	.51	.45	75.3	72.7	.0193	707197_OP
46	16608	22995	-1.0079A	.0169	.95	-5.9	.81	-9.9	.51	.41	77.6	77.2	.1639	707199_OP
47	14495	22995	-.4518A	.0157	1.18	9.9	1.43	9.9	.33	.45	68.4	73.3	.1444	707200_OP
48	16209	22995	-.6619A	.0161	.97	-4.1	.92	-5.0	.44	.43	75.2	74.6	-.0825	707202_OP
49	15320	22995	-.5804A	.0159	.90	-9.9	.83	-9.9	.54	.44	77.7	74.0	.0685	707203_OP
50	16843	22995	-.9634A	.0168	1.02	2.0	.99	-.7	.42	.41	76.3	76.9	.0521	707204_OP
51	16082	22995	-.6356A	.0160	1.02	3.5	1.12	7.3	.39	.44	74.4	74.4	-.0752	707207_OP
52	15003	22995	-.4775A	.0158	.94	-8.6	.92	-5.4	.50	.45	75.8	73.4	.0439	707208_OP
53	14285	22995	-.2344A	.0155	.91	-9.9	.86	-9.9	.53	.46	75.6	72.3	-.0254	707209_OP
54	13363	22995	.0166A	.0153	.99	-2.2	.96	-3.2	.47	.47	72.4	71.6	-.0573	707210_OP
55	13391	22995	.1931A	.0153	1.05	7.0	1.03	2.9	.43	.47	69.6	71.5	-.2429	707211_OP
56	13536	22995	.0199A	.0153	1.07	9.9	1.11	9.0	.40	.47	69.0	71.6	-.1022	707212_OP
57	13049	22995	-.0096A	.0153	1.10	9.9	1.15	9.9	.39	.47	68.1	71.7	.0439	707216_OP
58	15915	22995	-.7927A	.0163	.87	-9.9	.77	-9.9	.58	.42	79.6	75.5	.1310	707220_OP
59	3306	4105	-1.3056	.0430	1.04	1.9	1.10	1.7	.32	.37	81.0	81.1	.0002	744977_FT
60	4444	6424	-.9692	.0303	1.02	1.8	1.12	3.7	.40	.42	74.3	73.9	-.0004	744978_FT
61	3699	4548	-1.3436	.0415	1.04	1.9	1.07	1.3	.33	.37	81.3	81.9	.0003	744979_FT
62	1808	3857	.6731	.0373	1.04	2.4	1.09	3.7	.41	.46	71.3	71.4	.0005	744980_FT
63	3186	4067	-1.1063	.0419	.93	-3.5	.76	-5.3	.47	.39	79.7	79.7	.0002	744981_FT
64	2328	3707	-.1806	.0387	1.09	5.4	1.20	6.0	.38	.45	69.8	72.5	.0003	744982_FT
65	3467	3957	-1.9203	.0515	.98	-.7	.98	-.2	.33	.31	87.7	87.6	.0004	744984_FT
66	1778	4233	.9100	.0361	.94	-4.0	.94	-2.7	.50	.46	75.2	72.7	.0006	744985_FT
67	2275	3888	.0647	.0371	.90	-6.8	.84	-6.2	.53	.45	74.5	71.2	.0004	744986_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
68	2964	4544	-.3031	.0352	1.06	4.1	1.11	3.5	.38	.44	70.6	72.9	.0003	744988_FT
69	4100	4565	-2.1451	.0517	1.00	-.1	1.08	1.0	.28	.29	89.9	89.8	.0005	744990_FT
70	4825	6507	-1.2568	.0313	1.13	8.5	1.39	9.3	.28	.40	74.1	76.2	-.0004	744991_FT
71	2566	4402	.1051	.0349	1.20	9.9	1.38	9.9	.29	.45	63.3	71.3	.0004	744992_FT
72	3683	5907	-.6405	.0305	1.16	9.9	1.34	9.9	.31	.45	67.3	71.8	-.0003	744993_FT
73	2613	4455	.0590	.0347	1.21	9.9	1.31	9.9	.27	.45	63.2	71.2	.0004	744995_FT
74	2711	4609	.0656	.0343	1.05	3.7	1.04	1.4	.41	.46	69.0	71.6	.0003	744996_FT
75	1642	3857	.9245	.0378	.99	-.8	1.00	.2	.46	.46	73.1	72.5	.0006	744997_FT
76	1754	6094	1.2636	.0329	1.16	8.9	1.31	9.9	.34	.46	74.9	78.2	.0003	744998_FT
77	1838	4708	1.1039	.0345	1.26	9.9	1.50	9.9	.21	.45	66.6	73.2	.0006	745000_FT
78	3375	4516	-.8613	.0380	1.04	2.4	1.10	2.3	.36	.41	77.0	77.4	.0002	745002_FT
79	3392	4295	-1.1489	.0411	.91	-4.3	.83	-3.4	.46	.38	82.4	80.0	.0003	745003_FT
80	3215	4216	-.9460	.0402	.90	-5.4	.73	-6.3	.50	.40	79.5	78.3	.0002	745004_FT
81	2640	3987	-.3621	.0379	1.09	5.2	1.03	.9	.37	.44	68.3	73.5	.0003	745005_FT
82	3004	4607	-.3441	.0349	.95	-3.7	.92	-2.8	.48	.44	75.1	72.8	.0003	745007_FT
83	3208	4480	-.6639	.0371	1.10	5.9	1.15	3.8	.33	.42	71.6	75.6	.0003	745008_FT
84	1705	4734	1.2673	.0349	1.27	9.9	1.52	9.9	.21	.44	66.6	74.2	.0007	745009_FT
85	3295	3611	-2.3472	.0619	.90	-2.2	.77	-2.5	.37	.27	91.3	91.2	.0006	745011_FT
86	4032	6133	-.7890	.0304	.94	-4.5	.91	-3.2	.48	.44	75.2	72.8	-.0004	745013_FT
87	2503	3657	-.5184	.0400	.91	-5.4	.86	-3.9	.51	.43	77.5	74.2	.0003	745014_FT
88	2820	4392	-.2643	.0358	.85	-9.9	.77	-8.1	.57	.45	78.7	72.8	.0003	745015_FT
89	2416	4159	.0561	.0359	1.01	.8	1.00	.1	.44	.45	70.3	71.2	.0003	745016_FT
90	4388	6428	-.9308	.0301	.87	-9.9	.76	-8.6	.54	.43	78.1	73.6	-.0004	745017_FT
91	2787	4065	-.4804	.0380	1.00	.0	.94	-1.6	.43	.43	73.2	74.1	.0003	745018_FT
92	3193	4235	-.9258	.0394	.97	-1.5	.90	-2.2	.43	.40	78.2	77.6	.0002	745019_FT
93	3226	3812	-1.6235	.0484	.91	-3.2	.70	-4.8	.44	.34	85.4	84.7	.0003	745020_FT
94	2916	3724	-1.1415	.0438	.95	-2.1	.98	-.4	.42	.39	81.7	79.7	.0003	745022_FT
95	4179	5852	-1.1438	.0321	.99	-.8	.95	-1.4	.42	.41	73.9	74.6	-.0004	745023_FT
96	3858	4442	-1.8665	.0476	.83	-6.0	.64	-5.7	.49	.32	87.3	86.8	.0004	745024_FT
97	3852	4500	-1.7529	.0456	.82	-7.0	.54	-7.8	.51	.33	86.3	85.6	.0003	745025_FT
98	2958	4116	-.7158	.0387	.97	-1.9	.92	-2.0	.45	.42	76.8	75.8	.0002	745026_FT
99	3548	6080	-.3757	.0298	.95	-4.3	.90	-4.3	.51	.47	73.6	71.8	-.0003	745027_FT
100	2470	4355	.1855	.0351	1.03	2.4	1.05	1.9	.43	.46	70.1	71.5	.0004	745028_FT
101	3931	4817	-1.3843	.0404	.95	-2.1	1.08	1.5	.40	.36	82.7	82.0	.0003	745029_FT
102	1722	3767	.7570	.0379	1.12	7.0	1.18	6.8	.38	.46	67.6	71.9	.0005	745030_FT
103	2649	4192	-.1960	.0363	1.15	9.2	1.52	9.9	.32	.44	68.8	72.3	.0003	745031_FT
104	2829	3831	-.8354	.0410	.88	-6.2	.77	-5.5	.52	.42	79.9	77.0	.0002	745032_FT
105	3276	4123	-1.1987	.0423	.90	-4.7	.81	-3.7	.47	.38	82.4	80.5	.0003	745033_FT
106	3480	6084	-.3317	.0297	1.14	9.9	1.24	9.4	.35	.46	65.9	71.6	-.0002	745034_FT
107	3131	6359	.1332	.0291	.98	-1.5	.98	-.9	.49	.48	73.9	72.1	-.0001	745035_FT
108	3109	3947	-1.1511	.0428	1.02	1.0	1.04	.7	.37	.38	79.7	79.9	.0003	745036_FT
MEAN	9310.2	14478	-.4677	.0263	1.01	-.1	1.01	-.2			74.9	75.2	.0000	
P.SD	6076.5	9191.0	.7436	.0119	.11	7.1	.20	6.8			5.9	4.4	.0965	

Grade 7 Mathematics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
1	13847	22580	-.6203A	.0160	.96	-6.3	.91	-6.2	.56	.43	75.1	73.7	.3547	599957_OP
2	16307	22573	-.6729A	.0161	.87	-9.9	.81	-9.9	.49	.43	78.6	74.0	-.2356	600040_OP
3	13826	22580	-.6512A	.0161	1.07	9.7	1.12	7.4	.48	.43	72.1	73.9	.3910	600076_OP
4	17617	22573	-1.4914A	.0184	1.08	7.6	1.40	9.9	.38	.36	80.0	81.4	.2159	600087_OP
5	14859	22573	-.6157A	.0160	1.02	2.2	.99	-.7	.44	.43	73.1	73.6	.0969	600120_OP
6	13111	22580	-.0761A	.0154	1.08	9.9	1.09	7.6	.39	.46	68.1	71.4	-.0188	600122_OP
7	15139	22580	-.7064A	.0162	.96	-5.7	.91	-6.1	.50	.43	75.3	74.2	.1180	634568_OP
8	15603	22580	-.7197A	.0162	.85	-9.9	.73	-9.9	.56	.43	79.0	74.3	.0090	646868_OP

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
9	11668	22573	.0985A	.0154	1.08	9.9	1.07	6.7	.40	.46	67.3	71.2	.1486	646881_OP
10	10697	22573	.4823A	.0154	1.05	7.5	1.09	8.4	.41	.47	70.9	71.7	-.0070	646908_OP
11	15328	22580	-.6726A	.0161	1.03	4.2	1.14	8.3	.41	.43	74.0	74.0	.0338	646911_OP
12	13241	22573	.0969A	.0154	1.11	9.9	1.13	9.9	.36	.46	66.7	71.2	-.2263	646916_OP
13	14237	22573	-.3508A	.0156	.93	-9.9	.90	-7.9	.50	.45	74.9	72.3	-.0163	646919_OP
14	11849	22573	.1481A	.0153	1.07	9.9	1.09	8.2	.41	.47	68.6	71.2	.0556	660127_OP
15	12929	22573	-.1747A	.0155	1.04	5.5	1.02	1.6	.44	.46	69.9	71.7	.1247	660138_OP
16	12425	22573	-.0147A	.0154	1.20	9.9	1.34	9.9	.31	.46	64.0	71.3	.0832	660149_OP
17	15815	22580	-.7577A	.0163	1.11	9.9	1.30	9.9	.32	.42	71.7	74.6	-.0094	660162_OP
18	16997	22573	-.9829A	.0168	.89	-9.9	.78	-9.9	.47	.41	78.7	76.4	-.1166	660176_OP
19	12041	22580	-.0438A	.0154	1.18	9.9	1.31	9.9	.34	.46	64.9	71.4	.2042	660186_OP
20	16476	22580	-.8667A	.0165	.94	-8.3	.87	-7.9	.45	.42	77.3	75.4	-.0821	689997_OP
21	16814	22580	-1.1368A	.0172	.86	-9.9	.72	-9.9	.56	.39	80.7	77.8	.0985	690000_OP
22	14533	22580	-.3392A	.0156	.84	-9.9	.74	-9.9	.57	.45	78.2	72.2	-.1023	690002_OP
23	14898	22573	-.6035A	.0160	1.02	3.5	1.10	6.5	.43	.43	73.4	73.6	.0744	690008_OP
24	14524	22573	-.4328A	.0157	.98	-3.0	.91	-6.5	.46	.44	72.5	72.6	-.0048	690012_OP
25	17174	22580	-1.0309A	.0169	.90	-9.9	.83	-9.2	.45	.40	79.5	76.8	-.1198	690014_OP
26	14272	22580	-.2866A	.0156	1.12	9.9	1.14	9.9	.34	.45	67.5	72.0	-.0901	690019_OP
27	16336	22580	-.8987A	.0166	1.08	9.9	1.22	9.9	.34	.41	74.3	75.7	-.0089	690024_OP
28	12806	22580	-.0877A	.0154	.98	-2.4	.97	-2.4	.48	.46	71.9	71.5	.0664	690028_OP
29	14577	22580	-.3774A	.0157	.93	-9.9	.88	-9.2	.50	.45	74.7	72.4	-.0744	690041_OP
30	13470	22573	-.1141A	.0154	.94	-9.4	.91	-7.9	.50	.46	74.0	71.5	-.0679	690042_OP
31	16577	22573	-1.0567A	.0170	1.04	5.3	1.01	.7	.39	.40	76.2	77.1	.0842	707223_OP
32	10125	22573	.7634A	.0156	.88	-9.9	.86	-9.9	.57	.47	77.3	72.7	-.1507	707232_OP
33	13515	22580	-.1378A	.0155	.97	-5.3	.95	-4.2	.48	.46	72.8	71.6	-.0543	707233_OP
34	15147	22580	-.6413A	.0160	1.01	2.1	1.00	.3	.43	.43	73.5	73.8	.0492	707234_OP
35	15408	22573	-.8346A	.0164	.96	-4.9	.92	-4.6	.50	.42	76.1	75.2	.1779	707235_OP
36	16352	22580	-.6219A	.0160	1.05	6.4	1.11	6.7	.32	.43	72.6	73.7	-.3008	707236_OP
37	16469	22580	-1.0003A	.0168	1.00	.2	1.02	.8	.42	.41	76.8	76.5	.0580	707239_OP
38	17939	22580	-1.3480A	.0179	1.01	.8	1.14	5.8	.34	.38	80.9	79.9	-.0364	707240_OP
39	17528	22573	-1.3163A	.0178	1.00	-.3	1.00	.2	.41	.38	80.0	79.6	.0642	707241_OP
40	16654	22573	-.9865A	.0168	.97	-3.4	.97	-1.8	.42	.41	77.9	76.4	-.0106	707242_OP
41	14946	22573	-.6000A	.0160	1.10	9.9	1.20	9.9	.36	.43	70.7	73.5	.0584	707244_OP
42	17253	22573	-1.2814A	.0177	.90	-9.9	.70	-9.9	.53	.38	80.0	79.2	.1143	707245_OP
43	15916	22580	-.7387A	.0162	.91	-9.9	.80	-9.9	.49	.43	75.9	74.5	-.0567	707249_OP
44	11890	22580	.1216A	.0154	1.20	9.9	1.31	9.9	.31	.46	64.0	71.2	.0730	707256_OP
45	14307	22573	-.2344A	.0155	.92	-9.9	.88	-9.9	.50	.45	74.4	71.8	-.1529	707257_OP
46	14454	22573	-.3004A	.0156	1.00	-.4	.99	-.9	.44	.45	71.9	72.1	-.1226	707263_OP
47	12186	22580	.2296A	.0153	.97	-5.2	.94	-6.3	.49	.47	72.2	71.3	-.1063	707264_OP
48	15209	22573	-.5577A	.0159	.91	-9.9	.82	-9.9	.50	.44	76.0	73.3	-.0536	707265_OP
49	9795	22580	.7475A	.0156	1.07	9.9	1.14	9.9	.40	.47	70.8	72.6	-.0556	707266_OP
50	13027	22573	-.0835A	.0154	.98	-2.8	.95	-4.1	.47	.46	72.1	71.4	.0086	707267_OP
51	12698	22573	.0304A	.0154	1.04	6.3	1.05	4.7	.43	.46	69.4	71.3	-.0277	707270_OP
52	11556	22580	.4761A	.0154	1.01	2.1	1.03	3.1	.47	.47	71.3	71.7	-.2041	707272_OP
53	16564	22573	-.9714A	.0167	.86	-9.9	.72	-9.9	.53	.41	80.1	76.3	-.0001	707275_OP
54	10514	22580	.6434A	.0155	1.31	9.9	1.45	9.9	.25	.47	61.7	72.2	-.1240	707276_OP
55	17560	22580	-1.2774A	.0176	.90	-9.9	.87	-6.2	.47	.38	81.8	79.2	.0149	707278_OP
56	12828	22573	-.0393A	.0154	.95	-7.5	.94	-5.7	.50	.46	73.4	71.4	.0117	707279_OP
57	12621	22573	.1528A	.0153	.94	-9.1	.91	-9.0	.50	.47	73.6	71.2	-.1331	707280_OP
58	14518	22580	-.4683A	.0158	1.10	9.9	1.09	6.2	.37	.44	68.9	72.8	.0337	707281_OP
59	2205	4756	.6543	.0336	1.22	9.9	1.32	9.9	.29	.46	64.1	71.6	.0007	745037_FT
60	2094	4621	.6800	.0340	.97	-1.9	.98	-.7	.47	.46	73.4	71.6	.0007	745038_FT
61	2776	6042	.2492	.0300	.92	-6.3	.90	-5.1	.53	.48	75.9	72.3	.0003	745039_FT
62	2486	4272	.0231	.0354	.86	-9.9	.79	-8.9	.57	.45	76.7	71.2	.0005	745040_FT
63	3603	5634	-.7641	.0314	.81	-9.9	.76	-9.1	.59	.44	80.1	72.2	.0001	745041_FT
64	2970	5753	-.0755	.0305	.92	-6.7	.85	-6.9	.54	.48	74.7	71.7	.0002	745042_FT
65	2453	5933	.4892	.0307	1.17	9.9	1.25	9.9	.34	.48	68.6	73.5	.0004	745043_FT
66	2342	4281	.1406	.0350	1.04	2.8	1.02	.9	.41	.45	68.5	70.8	.0005	745044_FT
67	2788	4053	-.5858	.0381	.95	-3.3	.89	-3.1	.48	.43	75.4	74.1	.0005	745045_FT
68	3037	4396	-.5985	.0366	.96	-2.4	.95	-1.4	.46	.42	75.6	74.1	.0005	745048_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
69	2431	4474	.2463	.0343	.95	-3.9	.91	-4.0	.49	.45	72.8	70.6	.0006	745049_FT
70	2356	4486	.3290	.0343	1.02	1.7	.99	-.4	.43	.46	69.6	71.0	.0006	745050_FT
71	2423	4481	.2003	.0343	.95	-3.4	.91	-3.8	.49	.46	72.3	70.9	.0006	745051_FT
72	2360	4515	.3170	.0341	1.05	3.8	1.07	3.1	.41	.45	69.2	70.7	.0006	745052_FT
73	3332	4665	-.7345	.0362	1.01	.8	1.01	.2	.41	.42	75.0	75.4	.0004	745053_FT
74	2892	3952	-.8437	.0399	1.01	.4	.97	-.6	.40	.41	76.0	76.2	.0004	745054_FT
75	3258	4528	-.7478	.0369	.93	-4.2	.88	-3.2	.48	.42	77.7	75.7	.0004	745055_FT
76	2624	5590	.1422	.0311	.97	-2.4	.96	-2.1	.50	.48	73.4	72.1	.0002	745056_FT
77	1795	3823	.6382	.0373	1.19	9.9	1.27	9.9	.31	.46	64.4	71.4	.0007	745057_FT
78	3160	5720	-.2668	.0306	.90	-7.8	.87	-5.7	.55	.47	75.2	71.6	.0002	745058_FT
79	1765	4424	.9837	.0354	1.03	1.8	1.06	2.6	.42	.45	72.0	72.9	.0008	745059_FT
80	3108	4523	-.5857	.0359	.82	-9.9	.71	-9.4	.58	.42	79.7	73.9	.0004	745061_FT
81	2595	4022	-.3357	.0371	.97	-1.6	.98	-.7	.46	.43	73.3	72.3	.0005	745062_FT
82	2809	3693	-1.0135	.0425	1.02	1.0	1.13	2.7	.36	.39	78.5	77.8	.0005	745063_FT
83	2064	5650	.7536	.0324	1.00	-.1	1.06	2.5	.46	.48	76.4	75.2	.0005	745064_FT
84	3149	3683	-1.7470	.0501	.83	-6.1	.54	-7.4	.50	.32	86.3	85.6	.0005	745065_FT
85	3052	3827	-1.2715	.0438	.91	-3.9	.80	-4.0	.45	.37	82.1	80.5	.0005	745066_FT
86	2840	4548	-.2013	.0347	.91	-6.4	.88	-4.3	.52	.44	75.7	72.0	.0005	745067_FT
87	2589	3840	-.5059	.0386	.97	-1.8	.88	-3.4	.45	.42	73.1	73.2	.0005	745068_FT
88	2984	4075	-.8499	.0393	.91	-5.2	.80	-5.1	.49	.41	78.8	76.2	.0004	745069_FT
89	3548	3975	-2.1503	.0541	.90	-2.9	.66	-4.6	.40	.29	89.3	89.2	.0007	745070_FT
90	1849	4505	.9179	.0349	1.11	7.2	1.23	9.4	.32	.45	70.3	72.5	.0007	745071_FT
91	3118	6041	-.0397	.0298	1.03	2.6	1.02	.8	.45	.48	70.4	71.8	.0002	745072_FT
92	2221	4302	.3512	.0348	1.43	9.9	1.62	9.9	.09	.45	54.8	70.6	.0006	745073_FT
93	2644	5567	.1199	.0312	1.34	9.9	1.45	9.9	.23	.49	60.4	72.3	.0003	745074_FT
94	2658	4046	-.4135	.0372	1.02	1.0	.99	-.3	.42	.43	71.5	72.5	.0005	745075_FT
95	2452	4087	-.0772	.0363	1.02	1.2	1.07	2.5	.43	.45	71.8	71.5	.0005	745076_FT
96	1499	4569	1.3669	.0361	1.20	9.9	1.48	9.9	.23	.43	70.8	75.2	.0009	745077_FT
97	1434	3975	1.2120	.0380	1.16	9.0	1.26	8.5	.31	.44	69.0	74.0	.0009	745080_FT
98	1455	3918	1.1416	.0380	1.15	8.6	1.27	9.1	.31	.44	68.9	73.5	.0009	745081_FT
99	2470	3853	-.2919	.0379	1.03	1.7	.98	-.6	.41	.44	69.5	72.2	.0005	745082_FT
100	1894	3713	.3910	.0375	1.23	9.9	1.30	9.9	.25	.45	61.4	70.6	.0006	745083_FT
101	2372	4225	.1510	.0353	1.02	1.3	1.00	-.2	.43	.45	69.3	70.8	.0005	745087_FT
102	4331	4519	-3.2442	.0765	.96	-.6	.75	-2.2	.24	.19	95.8	95.8	.0014	745089_FT
103	3014	3867	-1.1543	.0425	.96	-2.1	.92	-1.5	.42	.38	80.5	79.2	.0004	745091_FT
104	3001	4507	-.4891	.0355	.91	-5.8	.91	-2.9	.50	.43	76.4	73.1	.0004	745092_FT
105	2736	6100	.2925	.0300	1.12	8.9	1.19	8.8	.39	.48	68.8	72.7	.0003	745093_FT
106	2666	3723	-.7573	.0403	.90	-5.6	.88	-3.0	.49	.40	78.6	75.0	.0005	745094_FT
107	1527	3751	.9400	.0381	1.20	9.9	1.32	9.9	.28	.44	65.4	72.2	.0007	745095_FT
108	3815	4265	-2.1653	.0526	.89	-3.3	.65	-4.9	.40	.28	89.4	89.4	.0007	751223_FT
MEAN	8963.1	14215	-.3186	.0259	1.01	-.1	1.01	.0			73.7	74.1	.0007	
P.SD	6093.7	9018.7	.7444	.0118	.11	7.2	.20	6.9			6.0	4.0	.0940	

Grade 8 Mathematics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
1	13867	22311	-.3174A	.0155	1.10	9.9	1.16	9.9	.34	.44	67.3	71.2	-.0612	600368_OP
2	13745	22311	-.6697A	.0160	1.11	9.9	1.11	6.8	.41	.42	68.7	73.1	.3271	600513_OP
3	18213	22319	-1.3587A	.0178	.85	-9.9	.77	-9.9	.41	.37	83.2	79.4	-.2451	634592_OP
4	15629	22311	-.7597A	.0161	.97	-4.9	.90	-6.8	.43	.42	74.2	73.8	-.0641	634655_OP
5	18739	22319	-1.8765A	.0201	.91	-7.9	.71	-9.9	.47	.32	84.6	85.0	.0939	634656_OP
6	17460	22311	-1.6030A	.0187	1.10	9.7	1.17	6.2	.39	.35	79.6	82.1	.2640	646824_OP
7	14850	22319	-.6611A	.0160	.88	-9.9	.84	-9.9	.54	.42	77.7	73.1	.0423	646826_OP
8	15135	22319	-.3851A	.0156	.95	-8.5	.97	-2.7	.44	.44	74.0	71.5	-.3162	646829_OP
9	16771	22319	-1.2077A	.0173	.86	-9.9	.74	-9.9	.54	.38	80.3	77.8	.0731	646843_OP

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
10	18241	22319	-1.6670A	.0190	.89	-9.9	.79	-8.7	.48	.34	83.3	82.8	.0660	646846_OP
11	14504	22319	-.5485A	.0158	.85	-9.9	.76	-9.9	.56	.43	77.2	72.4	.0158	646849_OP
12	14884	22319	-.7024A	.0160	.97	-5.0	.91	-5.7	.47	.42	74.2	73.4	.0758	660228_OP
13	12944	22311	-.3274A	.0155	1.10	9.9	1.12	9.2	.38	.44	67.0	71.3	.1739	660245_OP
14	13882	22319	-.2985A	.0155	1.01	1.3	.99	-.9	.42	.44	70.6	71.2	-.0835	690055_OP
15	15612	22319	-.9579A	.0166	1.00	.0	.98	-1.4	.45	.40	75.0	75.4	.1450	690060_OP
16	14419	22311	-.3012A	.0155	.85	-9.9	.78	-9.9	.54	.44	77.4	71.2	-.2167	690061_OP
17	13864	22319	-.5557A	.0158	.95	-8.4	.89	-8.0	.52	.43	74.2	72.4	.1831	690063_OP
18	10346	22311	.6036A	.0155	1.09	9.9	1.14	9.9	.39	.46	69.2	71.7	-.1475	690065_OP
19	11522	22311	.2551A	.0153	1.11	9.9	1.13	9.9	.36	.46	66.0	70.6	-.0770	690071_OP
20	17378	22311	-1.2943A	.0175	1.04	4.9	1.25	9.9	.31	.37	79.1	78.7	-.0270	690075_OP
21	16219	22311	-.9381A	.0165	1.03	4.2	1.07	3.8	.36	.40	75.3	75.2	-.0448	690079_OP
22	16251	22319	-.9236A	.0165	.91	-9.9	.90	-6.2	.46	.40	78.7	75.1	-.0678	690086_OP
23	15802	22319	-.9116A	.0165	.96	-5.8	.90	-6.1	.46	.40	76.4	75.0	.0458	690088_OP
24	16321	22319	-1.1238A	.0170	1.03	3.5	1.13	6.6	.40	.39	76.7	77.0	.1183	690096_OP
25	13579	22311	-.5181A	.0158	1.08	9.9	1.15	9.9	.40	.43	69.6	72.2	.2140	690100_OP
26	16977	22319	-1.0674A	.0169	.90	-9.9	.96	-1.9	.43	.39	80.2	76.4	-.1347	690102_OP
27	17480	22319	-1.3260A	.0176	.82	-9.9	.66	-9.9	.53	.37	82.7	79.1	-.0258	690103_OP
28	13754	22319	-.3201A	.0155	1.09	9.9	1.12	9.3	.36	.44	67.5	71.2	-.0297	707283_OP
29	12076	22319	.1354A	.0153	1.01	2.4	1.02	1.9	.44	.45	69.9	70.5	-.0870	707286_OP
30	11981	22311	.2027A	.0153	.97	-4.4	.96	-3.6	.47	.46	72.3	70.5	-.1330	707288_OP
31	14704	22319	-.6631A	.0160	1.05	6.8	1.10	6.4	.40	.42	71.4	73.1	.0820	707289_OP
32	13216	22311	-.0964A	.0154	1.17	9.9	1.23	9.9	.29	.45	63.6	70.6	-.1265	707290_OP
33	12902	22319	-.2251A	.0154	1.04	5.7	1.03	2.9	.42	.44	69.3	70.9	.0809	707291_OP
34	17248	22311	-1.2220A	.0173	.99	-1.3	1.04	1.7	.36	.38	79.0	78.0	-.0603	707293_OP
35	15589	22311	-.6804A	.0160	1.06	8.1	1.18	9.9	.33	.42	72.2	73.2	-.1350	707298_OP
36	14042	22319	-.4441A	.0157	.84	-9.9	.75	-9.9	.58	.43	77.9	71.8	.0254	707299_OP
37	12669	22311	-.0373A	.0153	1.05	7.8	1.08	6.7	.40	.45	68.8	70.5	-.0544	707301_OP
38	11494	22311	.4428A	.0154	1.03	4.2	1.05	5.0	.44	.46	70.9	71.1	-.2589	707304_OP
39	16721	22311	-1.0780A	.0169	.92	-9.9	.83	-9.2	.45	.39	78.7	76.5	-.0470	707305_OP
40	17755	22319	-1.2648A	.0174	.92	-9.9	.86	-6.9	.38	.38	81.1	78.4	-.1813	707306_OP
41	12497	22311	-.0372A	.0153	1.02	2.9	.99	-1.1	.43	.45	69.6	70.5	-.0134	707307_OP
42	14575	22311	-.5586A	.0158	.97	-4.2	.94	-4.3	.45	.43	72.8	72.4	.0073	707308_OP
43	11331	22311	.0060A	.0153	1.06	9.9	1.07	6.2	.41	.45	68.1	70.5	.2193	707310_OP
44	10781	22311	.3027A	.0153	.95	-8.1	.93	-6.9	.49	.46	73.0	70.7	.0506	707312_OP
45	10451	22319	.3564A	.0154	1.11	9.9	1.15	9.9	.36	.46	66.4	70.8	.0755	707313_OP
46	14970	22311	-.8862A	.0164	1.19	9.9	1.29	9.9	.33	.41	68.2	74.8	.2402	707314_OP
47	15784	22319	-.7683A	.0162	.85	-9.9	.76	-9.9	.52	.41	79.2	73.9	-.0968	707316_OP
48	12892	22311	-.1679A	.0154	1.04	6.8	1.07	5.5	.41	.45	69.2	70.8	.0245	707317_OP
49	16084	22319	-1.2827A	.0175	1.21	9.9	1.71	9.9	.32	.38	74.9	78.6	.3468	707320_OP
50	12713	22311	-.1272A	.0154	.93	-9.9	.95	-4.4	.51	.45	74.3	70.7	.0262	707321_OP
51	13533	22319	-.2231A	.0154	1.03	4.4	.99	-1.0	.41	.44	69.3	70.9	-.0742	707322_OP
52	12348	22311	-.0585A	.0154	.97	-4.3	.95	-4.2	.47	.45	71.6	70.6	.0438	707323_OP
53	9415	22319	.7983A	.0157	1.09	9.9	1.19	9.9	.38	.45	70.7	72.7	-.1174	707325_OP
54	13273	22311	-.0026A	.0153	1.07	9.9	1.09	8.0	.39	.45	67.7	70.5	-.2358	707327_OP
55	15004	22319	-.8522A	.0163	.98	-3.1	.93	-4.1	.49	.41	75.3	74.5	.1977	707330_OP
56	13355	22311	-.2830A	.0155	1.24	9.9	1.52	9.9	.25	.44	63.4	71.1	.0295	707331_OP
57	9292	22311	.8951A	.0159	1.20	9.9	1.39	9.9	.31	.45	68.4	73.3	-.1839	707332_OP
58	11657	22319	.1399A	.0153	.91	-9.9	.86	-9.9	.52	.45	73.8	70.5	.0078	707335_OP
59	14090	22311	-.5351A	.0158	1.18	9.9	1.18	9.9	.30	.43	64.2	72.3	.1055	707336_OP
60	12530	22319	-.0791A	.0154	1.03	5.0	1.02	1.9	.42	.45	69.1	70.6	.0219	707337_OP
61	4105	5717	-1.2289	.0326	.89	-8.3	.84	-4.7	.50	.40	79.4	74.9	-.0002	745113_FT
62	3145	4025	-1.2372	.0415	.97	-1.5	.96	-.7	.39	.36	79.4	79.0	.0003	745115_FT
63	1910	4182	.5481	.0353	1.05	3.4	1.07	3.1	.38	.44	68.8	70.4	.0005	745116_FT
64	2490	4851	.3133	.0327	1.19	9.9	1.24	9.9	.29	.45	62.7	70.3	.0005	745117_FT
65	3232	4112	-1.2794	.0414	.91	-4.4	.87	-2.7	.45	.36	81.8	79.5	.0003	745119_FT
66	2416	4430	.1016	.0342	.91	-6.8	.89	-4.9	.52	.44	74.2	70.0	.0004	745120_FT
67	3599	5789	-.6754	.0307	.92	-6.8	.85	-5.6	.51	.44	75.4	71.7	-.0002	745122_FT
68	2516	3937	-.3449	.0373	.92	-5.3	.87	-4.4	.50	.43	74.8	71.8	.0003	745123_FT
69	2400	4112	-.0887	.0358	.84	-9.9	.77	-9.3	.57	.44	77.0	70.5	.0004	745124_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
70	2747	4088	-.5252	.0373	.95	-3.2	.91	-2.7	.47	.42	74.7	72.9	.0003	745125_FT
71	2799	5956	.1209	.0299	1.22	9.9	1.32	9.9	.28	.47	63.8	71.5	.0001	745126_FT
72	2636	4479	-.1120	.0343	.96	-2.8	1.06	2.2	.47	.44	73.4	70.6	.0004	745127_FT
73	2636	4524	-.0604	.0341	.87	-9.9	.82	-7.7	.55	.44	76.2	70.4	.0004	745128_FT
74	3424	4141	-1.5575	.0442	.89	-4.5	.74	-4.8	.45	.33	83.6	82.9	.0004	745129_FT
75	2044	4208	.4144	.0351	1.01	.5	1.05	2.1	.43	.44	70.9	70.2	.0005	745130_FT
76	2791	4023	-.6408	.0379	1.18	9.9	1.30	7.7	.23	.40	67.4	73.7	.0003	745131_FT
77	2250	4050	.0643	.0361	1.01	.6	1.01	.3	.44	.45	70.3	70.6	.0004	745132_FT
78	1405	4067	1.2337	.0378	1.20	9.9	1.42	9.9	.24	.43	70.0	74.5	.0007	745133_FT
79	2490	5612	.2359	.0311	1.17	9.9	1.24	9.9	.34	.47	67.2	72.1	.0001	745134_FT
80	2490	3872	-.3880	.0375	1.08	4.9	1.08	2.4	.35	.42	67.8	71.6	.0004	745136_FT
81	3003	3923	-1.1243	.0412	.94	-3.1	.88	-2.6	.43	.37	79.8	78.0	.0003	745137_FT
82	3024	4591	-.4758	.0348	.98	-1.3	.91	-3.2	.44	.42	72.3	72.3	.0003	745138_FT
83	4324	5607	-1.5664	.0347	.91	-5.8	.87	-3.0	.45	.37	80.4	78.1	-.0002	745139_FT
84	1423	3965	1.1047	.0379	1.01	.8	1.12	4.3	.39	.43	75.1	73.9	.0007	745140_FT
85	3221	4011	-1.4072	.0430	.83	-7.7	.67	-6.9	.52	.35	83.3	80.9	.0003	745141_FT
86	3141	4173	-1.0365	.0393	.99	-.4	1.04	.9	.39	.38	77.3	77.0	.0003	745142_FT
87	2595	5649	.1606	.0308	1.11	8.1	1.15	7.0	.38	.47	68.4	71.9	.0001	745143_FT
88	3378	5753	-.5016	.0305	1.05	3.6	1.07	2.7	.41	.45	69.1	71.1	-.0001	745144_FT
89	2445	4174	-.0745	.0356	.91	-6.8	.88	-4.7	.52	.44	74.6	70.6	.0004	745145_FT
90	2778	3996	-.6690	.0383	1.11	6.6	1.43	9.9	.30	.41	70.9	74.0	.0003	745147_FT
91	1719	4193	.8699	.0361	.96	-2.4	1.00	.1	.46	.45	75.7	72.4	.0006	745148_FT
92	1656	4065	.8504	.0365	.91	-5.9	.94	-2.8	.49	.44	76.9	72.0	.0006	745149_FT
93	1979	3484	.0163	.0387	.84	-9.9	.77	-9.3	.57	.44	76.4	70.5	.0004	745150_FT
94	3015	3604	-1.6456	.0483	.92	-2.8	.79	-3.4	.41	.33	84.1	83.8	.0004	745151_FT
95	3641	5641	-.8253	.0313	.77	-9.9	.66	-9.9	.63	.43	81.3	72.1	-.0002	745152_FT
96	2362	4646	.3418	.0334	1.11	7.7	1.17	7.3	.36	.44	65.7	70.0	.0005	745153_FT
97	3564	4705	-1.0599	.0373	1.12	6.5	1.27	5.8	.26	.38	75.4	77.4	.0003	745154_FT
98	3290	4148	-1.2996	.0417	.87	-6.0	.80	-4.2	.48	.36	82.7	80.1	.0003	745156_FT
99	4175	4615	-2.3459	.0526	.91	-2.4	.67	-4.7	.36	.26	90.4	90.4	.0006	745157_FT
100	1777	3851	.5830	.0369	1.06	3.8	1.09	3.8	.38	.44	68.6	70.6	.0005	745158_FT
101	2363	3911	-.1641	.0369	.92	-5.6	.94	-2.1	.51	.44	75.8	70.8	.0004	745159_FT
102	2566	4204	-.2106	.0357	.97	-1.8	.93	-2.6	.45	.43	72.5	71.0	.0004	745160_FT
103	2240	4415	.3219	.0343	1.08	5.9	1.09	4.0	.37	.45	67.6	70.2	.0005	745162_FT
104	1916	4529	.7899	.0344	1.14	9.1	1.23	9.7	.30	.44	68.2	71.6	.0006	745163_FT
105	3138	4036	-1.1945	.0412	.97	-1.6	1.01	.1	.39	.36	80.1	78.8	.0003	745164_FT
106	3563	5775	-.6653	.0306	.98	-2.0	.96	-1.6	.46	.44	72.5	71.5	-.0001	745165_FT
107	2612	4076	-.3703	.0366	1.06	4.1	1.09	2.8	.37	.43	69.8	71.9	.0004	745166_FT
108	1636	3759	.6897	.0377	1.01	.9	1.01	.5	.44	.45	70.8	71.3	.0005	745167_FT
109	3054	3768	-1.4064	.0449	1.06	2.3	1.25	4.0	.27	.34	81.1	81.5	.0003	745168_FT
110	1490	5708	1.3574	.0350	.90	-5.5	1.00	.1	.49	.45	82.6	79.8	.0005	745170_FT
MEAN	8999.8	14200	-.4193	.0256	1.00	.1	1.01	.4			73.8	73.8	.0008	
P.SD	6014.2	8901.0	.7283	.0108	.10	7.3	.19	6.7			5.6	4.0	.1051	

Grade 11 Mathematics

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
1	14047	21357	-.6107A	.0163	.90	-9.9	.87	-9.1	.52	.45	77.4	73.4	-.0138	600406_OP
2	16382	21346	-1.1624A	.0175	.90	-9.9	.82	-9.4	.45	.41	80.5	77.2	-.1451	600576_OP
3	16746	21346	-1.1885A	.0176	.92	-9.5	.87	-6.4	.39	.41	79.8	77.4	-.2431	600592_OP
4	14393	21357	-.7163A	.0165	.89	-9.9	.84	-9.9	.53	.44	78.1	74.0	-.0012	600660_OP
5	15227	21346	-.9966A	.0171	1.01	1.5	1.07	3.8	.42	.42	76.3	75.9	.0461	600677_OP
6	15961	21346	-1.0409A	.0172	.93	-8.4	.99	-.8	.43	.42	79.2	76.2	-.1338	600733_OP
7	15111	21357	-.8004A	.0166	.95	-7.1	.90	-6.1	.45	.44	75.9	74.5	-.1208	600748_OP
8	14798	21357	-.4923A	.0162	.82	-9.9	.77	-9.9	.55	.45	80.6	72.9	-.3478	634476_OP
9	15588	21346	-1.1876A	.0176	.91	-9.9	.83	-8.7	.53	.41	79.5	77.4	.1343	646740_OP

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	MATH
10	13625	21346	-.4175A	.0161	.97	-4.2	.96	-3.2	.47	.46	73.9	72.6	-.0980	646744_OP
11	17488	21357	-1.7104A	.0195	.90	-9.8	.67	-9.9	.47	.36	83.2	82.6	.0306	646755_OP
12	10809	21346	.4166A	.0159	1.10	9.9	1.13	9.9	.41	.47	68.5	71.9	-.2151	646759_OP
13	12659	21357	-.5765A	.0163	1.11	9.9	1.09	6.0	.43	.45	68.9	73.3	.3183	646760_OP
14	13785	21357	-.6651A	.0164	.93	-9.6	1.02	1.1	.52	.44	77.5	73.7	.1131	646772_OP
15	16239	21346	-1.2534A	.0178	.96	-5.2	.91	-4.4	.44	.40	79.3	78.0	-.0029	646785_OP
16	16250	21357	-1.2895A	.0179	.95	-5.9	.82	-8.5	.46	.40	79.0	78.3	.0327	646788_OP
17	16070	21346	-1.1510A	.0175	.83	-9.9	.71	-9.9	.54	.41	81.3	77.1	-.0543	660258_OP
18	13131	21346	-.2493A	.0160	.96	-5.9	.93	-5.9	.48	.46	73.4	72.0	-.1381	660306_OP
19	14649	21346	-1.0391A	.0172	1.07	8.8	.99	-.7	.45	.42	72.7	76.2	.2562	660313_OP
20	14437	21357	-.9967A	.0171	1.22	9.9	1.46	9.9	.32	.42	70.3	75.9	.2733	660327_OP
21	14877	21357	-.8132A	.0167	.99	-1.8	.99	-.4	.43	.43	75.7	74.6	-.0391	660336_OP
22	15842	21357	-1.0787A	.0173	.81	-9.9	.71	-9.9	.56	.41	82.1	76.5	-.0551	660354_OP
23	9329	21357	.4781A	.0159	.89	-9.9	.84	-9.9	.55	.47	76.2	72.1	.0985	690110_OP
24	13214	21357	-.3988A	.0161	1.07	9.9	1.02	1.6	.40	.46	68.9	72.5	-.0066	690112_OP
25	12129	21357	-.1879A	.0159	1.23	9.9	1.46	9.9	.29	.47	64.3	71.8	.0601	690113_OP
26	12593	21357	-.3967A	.0161	.99	-1.8	.97	-1.9	.49	.46	73.2	72.5	.1530	690122_OP
27	11492	21357	-.2692A	.0160	.92	-9.9	.86	-9.9	.56	.46	75.1	72.1	.3037	690132_OP
28	12393	21357	-.1675A	.0159	.84	-9.9	.75	-9.9	.59	.47	78.0	71.8	-.0282	690133_OP
29	12109	21357	.1113A	.0158	1.01	.9	.98	-1.6	.46	.47	71.1	71.5	-.2375	690142_OP
30	14350	21357	-.7122A	.0165	1.00	.0	.96	-2.4	.44	.44	73.7	74.0	.0066	690149_OP
31	12476	21346	.1369A	.0158	1.03	3.9	1.02	2.2	.45	.47	70.7	71.5	-.3587	690156_OP
32	13288	21346	-.5100A	.0162	1.02	2.5	1.17	9.9	.45	.45	73.8	72.9	.0864	707347_OP
33	15525	21357	-1.0887A	.0173	.95	-6.9	.92	-4.2	.47	.41	78.5	76.6	.0532	707348_OP
34	9141	21346	.4937A	.0160	1.04	6.2	1.09	7.6	.42	.47	71.4	72.1	.1308	707350_OP
35	9241	21346	.5325A	.0160	1.16	9.9	1.24	9.9	.33	.47	67.8	72.3	.0663	707354_OP
36	13519	21357	-.5402A	.0162	1.06	8.4	1.03	1.9	.41	.45	70.0	73.1	.0568	707356_OP
37	9960	21346	.4143A	.0159	1.15	9.9	1.24	9.9	.35	.47	67.7	71.9	.0013	707358_OP
38	12987	21357	-.4435A	.0161	1.03	5.0	1.05	3.7	.44	.46	71.5	72.7	.0985	707359_OP
39	13432	21346	-.4521A	.0161	1.11	9.9	1.08	5.4	.37	.46	68.2	72.7	-.0109	707361_OP
40	10231	21346	.2774A	.0159	.89	-9.9	.87	-9.9	.55	.47	76.5	71.6	.0700	707364_OP
41	9859	21346	.3907A	.0159	1.17	9.9	1.23	9.9	.33	.47	66.5	71.8	.0505	707371_OP
42	11391	21357	.0126A	.0158	1.04	6.0	1.06	4.8	.44	.47	70.0	71.5	.0446	707373_OP
43	11951	21346	.0291A	.0158	1.04	6.4	1.04	3.5	.43	.47	69.2	71.5	-.1149	707374_OP
44	13022	21346	-.4232A	.0161	.90	-9.9	.83	-9.9	.55	.46	76.2	72.6	.0678	707375_OP
45	14432	21346	-.6968A	.0165	1.07	9.8	1.08	4.8	.38	.44	71.0	73.9	-.0333	707378_OP
46	13614	21357	-.4993A	.0162	1.03	3.7	.99	-.4	.43	.45	71.3	72.9	-.0104	707379_OP
47	15065	21357	-.8521A	.0167	.94	-8.4	.88	-7.0	.47	.43	76.6	74.8	-.0538	707381_OP
48	16669	21346	-1.3321A	.0180	.89	-9.9	.78	-9.9	.47	.39	80.9	78.7	-.0658	707383_OP
49	13921	21357	-.4971A	.0162	1.04	5.5	1.05	3.4	.41	.45	71.4	72.9	-.0957	707384_OP
50	12930	21346	-.1408A	.0159	.94	-8.5	.91	-7.9	.50	.47	74.1	71.7	-.1956	707385_OP
51	16607	21346	-1.2987A	.0179	.79	-9.9	.61	-9.9	.56	.40	83.1	78.4	-.0792	707386_OP
52	13900	21357	-.5984A	.0163	.74	-9.9	.63	-9.9	.67	.45	83.6	73.4	.0138	707388_OP
53	12309	21346	-.1798A	.0159	.96	-5.8	.91	-7.7	.49	.47	73.0	71.8	.0051	707389_OP
54	16160	21346	-1.1746A	.0175	.81	-9.9	.67	-9.9	.55	.41	82.7	77.3	-.0589	707391_OP
55	15969	21357	-1.2011A	.0176	1.06	7.2	1.37	9.9	.34	.40	78.2	77.5	.0316	707392_OP
56	11315	21357	-.3985A	.0161	1.09	9.9	1.09	6.6	.46	.46	68.6	72.5	.4783	707394_OP
57	9826	21346	.3138A	.0159	.93	-9.9	.92	-7.1	.51	.47	75.0	71.7	.1360	707396_OP
58	14011	21357	-.4891A	.0162	.98	-3.2	.96	-2.9	.45	.45	73.5	72.9	-.1286	707399_OP
59	13234	21346	-.0728A	.0159	.99	-1.2	.97	-2.6	.46	.47	71.9	71.6	-.3452	707400_OP
60	11746	21346	-.1257A	.0159	1.15	9.9	1.17	9.9	.35	.47	65.9	71.7	.0938	707404_OP
61	2486	3765	-.5500	.0390	1.07	4.2	1.05	1.5	.39	.45	70.7	73.7	.0002	707401_FT
62	2267	3786	-.2579	.0379	1.19	9.9	1.30	9.0	.31	.46	64.9	72.0	.0002	745172_FT
63	2340	3931	-.2231	.0371	1.17	9.9	1.18	5.8	.32	.46	63.8	71.7	.0002	745174_FT
64	995	3763	1.6535	.0426	.93	-3.1	1.15	3.6	.42	.43	82.4	79.1	.0006	745175_FT
65	2430	4991	.1248	.0331	.85	-9.9	.82	-8.3	.59	.49	79.3	72.6	.0002	745177_FT
66	1579	3785	.7336	.0381	1.00	.0	1.03	1.0	.45	.46	73.1	72.4	.0004	745178_FT
67	1914	3982	.3830	.0368	1.32	9.9	1.45	9.9	.23	.48	60.5	71.7	.0003	745180_FT
68	1572	4131	.9446	.0371	1.14	7.8	1.30	9.9	.33	.46	69.9	73.5	.0004	745181_FT
69	1468	3883	.9646	.0384	1.00	-.2	1.10	3.4	.43	.46	76.0	73.8	.0004	745183_FT
70	1328	4051	1.2346	.0387	1.32	9.9	1.63	9.9	.20	.45	67.4	75.8	.0005	745184_FT
71	2606	4047	-.5033	.0373	.93	-4.6	.90	-3.2	.51	.45	75.6	73.2	.0002	745185_FT
72	731	3946	2.2503	.0467	.96	-1.6	1.10	1.8	.39	.38	85.2	84.2	.0007	745187_FT
73	1237	3879	1.3091	.0397	1.16	7.9	1.45	9.9	.28	.44	73.2	76.1	.0005	745188_FT
74	2845	4554	-.3428	.0349	1.08	5.2	1.10	3.2	.39	.45	69.3	72.6	.0002	745190_FT
75	2176	4660	.4594	.0338	1.06	4.4	1.12	5.1	.42	.46	69.2	71.4	.0003	745191_FT
76	2672	4069	-.5795	.0373	.99	-.9	.91	-2.5	.45	.44	72.9	73.1	.0002	745192_FT
77	3032	4130	-1.0239	.0392	1.19	9.8	1.55	9.9	.23	.41	72.9	76.6	.0001	745194_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL CORR.	EXP.	EXACT MATCH OBS%	EXP%	DISPLACE	MATH
78	3219	4446	-.9724	.0375	.91	-5.1	.85	-3.8	.49	.42	78.7	76.2	.0001	745195_FT
79	2305	4479	.2146	.0345	1.14	9.2	1.21	8.0	.36	.47	66.7	71.5	.0003	745196_FT
80	1717	4845	.8751	.0353	.86	-8.5	.85	-5.7	.56	.48	80.5	75.7	.0003	745197_FT
81	3010	4091	-1.0200	.0395	1.27	9.9	1.59	9.9	.17	.41	70.6	76.7	.0001	745198_FT
82	2384	4761	.0279	.0336	1.09	6.0	1.13	5.2	.41	.48	68.9	71.9	.0002	745199_FT
83	2959	4088	-.9462	.0390	.95	-2.7	.85	-3.7	.46	.41	77.0	75.9	.0001	745200_FT
84	1204	3491	1.1397	.0413	1.49	9.9	1.91	9.9	.09	.45	62.5	75.2	.0005	745201_FT
85	2118	4949	.4528	.0337	.98	-1.6	.99	-.6	.49	.49	75.6	73.4	.0003	745203_FT
86	2442	3583	-.7209	.0405	1.03	1.8	1.30	6.8	.40	.44	74.6	74.3	.0002	745205_FT
87	2272	4059	-.0084	.0364	1.00	-.2	.98	-.6	.47	.47	71.8	71.5	.0002	745206_FT
88	2402	4804	.0578	.0336	.99	-.7	.97	-1.2	.49	.49	72.5	72.1	.0002	745207_FT
89	2122	4879	.4058	.0337	1.22	9.9	1.34	9.9	.31	.48	66.5	72.9	.0003	745208_FT
90	2570	4007	-.4717	.0375	.96	-2.4	.96	-1.2	.48	.45	74.9	73.1	.0002	745210_FT
91	2275	4683	.1345	.0341	.92	-5.2	.93	-2.7	.54	.49	75.4	72.4	.0002	745212_FT
92	2942	3952	-1.1126	.0406	.87	-7.2	.77	-5.3	.52	.41	81.5	77.3	.0001	745213_FT
93	3205	4050	-1.4250	.0425	.89	-5.4	.74	-5.1	.49	.38	82.8	80.3	.0001	745214_FT
94	2092	4515	.4864	.0344	1.10	6.7	1.14	6.0	.38	.46	68.1	71.4	.0003	745215_FT
95	3451	4589	-1.1430	.0379	.89	-6.5	.74	-6.4	.51	.40	80.0	77.6	.0001	745216_FT
96	1793	4130	.5991	.0363	1.18	9.9	1.27	9.9	.33	.47	65.5	72.2	.0004	745217_FT
97	2933	4026	-.9869	.0396	.83	-9.7	.70	-7.5	.57	.42	80.3	76.4	.0001	745219_FT
98	1631	4425	1.0120	.0361	1.55	9.9	1.91	9.9	.06	.46	58.7	74.2	.0004	745222_FT
99	2413	4731	-.0098	.0337	1.36	9.9	1.59	9.9	.22	.48	59.4	71.9	.0002	745223_FT
100	2004	4989	.6137	.0338	1.18	9.9	1.27	9.9	.35	.48	68.3	73.8	.0003	745224_FT
101	2403	4307	-.0448	.0351	1.16	9.9	1.24	8.6	.33	.46	65.3	71.0	.0002	745226_FT
102	1109	4124	1.6159	.0403	1.24	9.9	1.49	9.9	.25	.42	73.0	78.5	.0006	745227_FT
103	2031	4366	.4730	.0350	.94	-4.0	.93	-3.1	.50	.47	73.9	71.5	.0003	745228_FT
104	738	4705	2.5547	.0453	1.44	9.9	2.60	9.9	.07	.36	80.8	86.1	.0007	745229_FT
105	2238	4845	.4986	.0333	1.04	2.5	1.03	1.3	.44	.47	70.1	71.7	.0003	745230_FT
106	1825	4017	.5272	.0368	1.13	8.1	1.20	7.4	.35	.47	67.8	72.0	.0003	749776_FT
107	2078	4818	.4282	.0339	1.29	9.9	1.40	9.9	.27	.48	63.3	73.0	.0003	749778_FT
108	1482	4076	1.0402	.0377	1.32	9.9	1.63	9.9	.18	.46	67.3	74.3	.0005	749779_FT
109	2668	4195	-.4569	.0366	.92	-5.5	.90	-3.0	.52	.45	76.6	73.0	.0002	749781_FT
110	2990	4137	-.9515	.0389	.90	-5.6	.84	-4.0	.51	.42	79.0	76.1	.0001	749784_FT
MEAN	8383.2	13587	-.1956	.0260	1.03	.5	1.07	.6			73.4	74.2	-.0010	
P.SD	5894.8	8509.4	.8071	.0106	.15	7.8	.29	7.1			5.8	2.8	.1143	

Appendix M: Science Item Bank Difficulties

Grade 5 Science

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	SCIE
1	13524	22800	-.2906A	.0148	1.04	6.5	1.05	5.7	.33	.37	67.1	68.7	-.0281	634838_OP
2	14329	22800	-.6709A	.0153	1.01	1.9	1.02	2.0	.40	.36	71.0	71.6	.1749	634839_OP
3	14168	22800	-.7248A	.0154	1.05	6.9	1.05	4.5	.40	.36	70.0	72.1	.2656	634847_OP
4	17180	22800	-1.0680A	.0162	.85	-9.9	.79	-9.9	.46	.35	80.2	75.7	-.1339	634849_OP
5	14143	22800	-.6230A	.0152	1.12	9.9	1.14	9.9	.28	.36	65.8	71.1	.1686	634862_OP
6	14757	22800	-1.0103A	.0161	1.20	9.9	1.29	9.9	.32	.35	68.6	75.0	.4190	634877_OP
7	16464	22800	-.8024A	.0156	.92	-9.9	.89	-9.9	.38	.36	75.4	72.8	-.2096	634917_OP
8	13908	22800	-.3971A	.0149	1.01	1.0	1.02	1.9	.36	.37	69.6	69.4	-.0062	634925_OP
9	15924	22800	-.8057A	.0156	.91	-9.9	.86	-9.9	.43	.36	75.8	72.9	-.0676	634934_OP
10	10411	22800	.0474A	.0146	1.20	9.9	1.27	9.9	.17	.37	58.4	67.6	.3002	634948_OP
11	13102	22800	.1828A	.0146	.97	-6.3	.98	-3.1	.41	.37	70.0	67.6	-.4074	634961_OP
12	14703	22800	-.9373A	.0159	1.15	9.9	1.21	9.9	.34	.35	69.2	74.2	.3579	635044_OP
13	14794	22800	-.6618A	.0153	1.05	8.1	1.11	9.7	.32	.36	70.2	71.5	.0590	647385_OP
14	16887	22800	-1.3649A	.0172	1.15	9.9	1.25	9.9	.30	.33	75.7	79.1	.2492	647394_OP
15	12687	22800	.1413A	.0146	1.04	8.3	1.06	8.1	.33	.37	65.7	67.6	-.2771	647402_OP
16	11637	22800	-.1467A	.0147	1.14	9.9	1.19	9.9	.24	.37	61.7	68.1	.2338	647410_OP
17	16418	22800	-1.0535A	.0162	1.17	9.9	1.33	9.9	.19	.35	71.5	75.5	.0578	647412_OP
18	11664	22800	.0324A	.0146	1.00	.4	1.01	1.1	.36	.37	68.2	67.6	.0489	647427_OP
19	14250	22800	-.5457A	.0151	1.04	5.7	1.07	7.2	.34	.37	69.6	70.5	.0666	647434_OP
20	8934	22800	.6085A	.0148	1.15	9.9	1.27	9.9	.17	.36	64.4	69.1	.0610	661223_OP
21	17549	22800	-1.4323A	.0174	.95	-5.4	.86	-8.5	.46	.33	79.9	79.9	.1317	661272_OP
22	15153	22800	-.6952A	.0153	.93	-9.9	.87	-9.9	.44	.36	73.7	71.8	.0084	661274_OP
23	10665	22800	.5598A	.0148	1.13	9.9	1.22	9.9	.26	.36	63.7	68.8	-.2618	690178_OP
24	17555	22800	-1.3938A	.0173	.97	-3.4	.88	-7.8	.42	.33	79.1	79.4	.0908	690185_OP
25	14779	22800	-.5062A	.0150	1.11	9.9	1.15	9.9	.23	.37	66.1	70.2	-.0946	690196_OP
26	18747	22800	-1.6023A	.0182	.89	-9.9	.83	-9.4	.40	.31	83.9	81.8	-.0769	690216_OP
27	11984	22800	.1066A	.0146	.96	-7.2	.96	-5.6	.40	.37	69.9	67.6	-.0928	705707_OP
28	17367	22800	-1.3449A	.0171	.93	-7.5	.88	-7.8	.45	.33	79.9	78.8	.0954	705711_OP
29	19571	22800	-1.9373A	.0198	.84	-9.9	.68	-9.9	.45	.29	86.6	85.5	-.0468	705714_OP
30	16563	22800	-1.0749A	.0162	.93	-9.1	.92	-6.2	.44	.35	77.6	75.7	.0415	705715_OP
31	18349	22800	-1.6416A	.0183	.97	-2.6	.92	-4.2	.41	.31	81.9	82.3	.0981	705718_OP
32	18513	22800	-1.4787A	.0176	.96	-4.3	.94	-3.4	.30	.32	82.0	80.4	-.1233	705720_OP
33	16434	22800	-.9708A	.0160	1.02	2.5	.99	-.9	.32	.35	73.5	74.6	-.0305	705721_OP
34	15835	22800	-.7955A	.0155	1.02	3.2	1.02	1.6	.32	.36	71.8	72.8	-.0557	705722_OP
35	18018	22800	-1.3637A	.0172	.99	-1.2	.99	-.4	.30	.33	79.8	79.1	-.0802	705723_OP
36	16945	22800	-1.0921A	.0163	.91	-9.9	.84	-9.9	.43	.35	78.1	75.9	-.0438	705724_OP
37	10958	22800	.1210A	.0146	1.05	9.1	1.08	9.9	.32	.37	65.7	67.6	.1103	705729_OP
38	17692	22800	-1.0762A	.0162	.78	-9.9	.68	-9.9	.49	.35	82.1	75.7	-.2749	705735_OP
39	9311	22800	.7211A	.0150	1.02	3.0	1.06	6.3	.35	.35	69.9	69.8	-.1319	705736_OP
40	14963	22800	-.4621A	.0150	.96	-7.3	.94	-6.6	.38	.37	71.7	69.8	-.1820	705739_OP
41	19799	22800	-2.1057A	.0209	.94	-4.2	.79	-9.0	.37	.28	87.3	87.2	.0288	705740_OP
42	13556	22800	-.0996A	.0146	1.13	9.9	1.17	9.9	.22	.37	61.9	67.9	-.2263	705742_OP
43	15374	22800	-.8184A	.0156	1.01	1.3	1.01	.8	.38	.36	72.6	73.0	.0803	705743_OP
44	19008	22800	-1.8787A	.0195	1.08	6.5	1.06	2.7	.29	.29	83.7	84.9	.1126	705744_OP
45	14351	22800	-.4196A	.0149	.96	-7.3	.93	-7.6	.40	.37	70.7	69.5	-.0833	705745_OP
46	17890	22800	-1.2421A	.0168	.83	-9.9	.72	-9.9	.45	.34	81.2	77.6	-.1651	705748_OP
47	11918	22800	.1227A	.0146	1.01	2.4	1.02	3.0	.35	.37	67.3	67.6	-.0948	705752_OP
48	18644	22800	-1.5932A	.0181	.91	-9.5	.80	-9.9	.40	.32	83.2	81.7	-.0505	705753_OP
49	19072	22800	-1.6514A	.0184	.92	-7.7	.85	-7.9	.32	.31	84.1	82.4	-.1444	705757_OP
50	8765	22800	.5905A	.0148	1.00	-.2	1.04	4.4	.32	.36	69.9	69.0	.1160	705760_OP
51	5644	6372	-2.5541	.0413	.97	-1.2	.94	-1.1	.29	.26	88.7	88.6	.0006	745231_FT
52	3897	4315	-2.3476	.0538	.87	-3.6	.67	-5.5	.43	.25	90.5	90.4	.0007	745232_FT
53	3590	3978	-2.3069	.0556	.94	-1.4	.86	-2.1	.30	.23	90.4	90.3	.0007	745233_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	SCIE
54	3276	3990	-1.5304	.0439	.91	-3.6	.78	-5.2	.41	.30	83.3	82.5	.0006	745235_FT
55	3780	4049	-2.7422	.0651	.93	-1.4	.73	-3.5	.31	.20	93.4	93.4	.0007	745236_FT
56	3359	6321	-.3136	.0279	1.06	5.3	1.06	4.0	.33	.39	65.7	68.3	.0005	745238_FT
57	3502	4503	-1.2105	.0384	.94	-3.2	.87	-4.0	.39	.31	79.4	78.8	.0006	745239_FT
58	3275	4017	-1.4833	.0432	1.05	2.0	1.15	3.4	.23	.30	81.9	82.0	.0006	745240_FT
59	5363	6103	-2.4981	.0413	.87	-5.1	.59	-9.2	.44	.27	88.0	87.9	.0005	745241_FT
60	4267	4427	-3.4257	.0822	.96	-.5	.86	-1.3	.21	.16	96.4	96.4	.0009	745242_FT
61	4058	4190	-3.5931	.0902	.95	-.6	.97	-.2	.21	.15	96.8	96.9	.0009	745243_FT
62	3867	4616	-1.6888	.0424	.86	-5.5	.69	-7.7	.47	.29	84.7	84.1	.0006	745244_FT
63	3782	3941	-3.3338	.0828	.93	-1.0	.64	-3.6	.28	.17	96.0	96.0	.0009	745245_FT
64	3162	4317	-.9730	.0371	.97	-1.8	1.00	-.1	.37	.33	77.0	75.5	.0006	745246_FT
65	1324	6523	1.5195	.0334	1.35	9.9	1.98	9.9	-.03	.32	76.6	81.0	.0005	745247_FT
66	2824	4054	-.7225	.0369	1.12	7.1	1.17	6.0	.19	.33	68.3	72.8	.0006	745248_FT
67	3279	4027	-1.4937	.0431	1.08	3.3	1.15	3.3	.19	.30	81.0	81.9	.0006	745249_FT
68	2608	4016	-.5127	.0360	.99	-.9	.95	-2.1	.36	.35	70.6	70.5	.0006	745250_FT
69	3326	3841	-1.9323	.0498	1.04	1.3	1.07	1.3	.22	.27	86.3	86.7	.0007	745251_FT
70	6030	6334	-3.5670	.0603	.89	-2.2	.45	-8.1	.33	.18	95.2	95.2	.0007	745252_FT
71	3454	3545	-3.8136	.1079	.93	-.7	.56	-3.5	.25	.14	97.4	97.4	.0009	745253_FT
72	3572	3985	-2.2464	.0543	.95	-1.4	.86	-2.1	.31	.25	89.9	89.7	.0007	745254_FT
73	3966	4177	-3.0748	.0725	.95	-.7	.94	-.6	.24	.18	95.0	95.0	.0007	745255_FT
74	3597	4473	-1.4165	.0402	.96	-1.6	.87	-3.5	.36	.31	81.1	81.0	.0006	745256_FT
75	3476	3787	-2.5192	.0613	1.02	.5	1.00	.1	.20	.22	91.8	91.8	.0007	745258_FT
76	3250	4116	-1.2944	.0409	.99	-.3	.94	-1.6	.32	.31	79.9	79.9	.0006	745259_FT
77	2838	3677	-1.1999	.0421	.95	-2.4	.86	-3.7	.38	.32	79.5	78.4	.0006	745260_FT
78	3261	4526	-.8578	.0357	1.07	4.2	1.08	2.7	.25	.33	71.9	74.4	.0006	745261_FT
79	3335	6611	-.1514	.0274	.99	-.8	.98	-1.2	.40	.40	68.9	68.6	.0005	745262_FT
80	2963	4492	-.5455	.0342	.92	-6.2	.88	-5.3	.44	.35	73.4	70.8	.0006	745263_FT
81	3789	3960	-3.2263	.0800	.92	-1.3	.58	-4.5	.30	.17	95.7	95.7	.0009	745264_FT
82	3643	4139	-2.0741	.0502	.90	-3.2	.66	-6.3	.41	.26	88.4	88.1	.0007	745265_FT
83	3561	4136	-1.8692	.0474	.93	-2.4	.83	-3.5	.36	.27	86.7	86.3	.0006	745267_FT
84	4161	6317	-.9477	.0292	.93	-6.1	.87	-6.6	.46	.38	73.9	71.7	.0005	745268_FT
85	2777	5773	-.1248	.0292	1.22	9.9	1.30	9.9	.17	.39	58.8	68.3	.0005	745271_FT
86	3801	4164	-2.4584	.0572	.94	-1.4	.82	-2.5	.32	.23	91.3	91.3	.0007	745272_FT
87	1821	3575	.2121	.0365	1.16	9.9	1.24	9.9	.18	.35	59.6	66.8	.0005	745273_FT
88	3642	4310	-1.7484	.0445	1.12	4.0	1.43	8.0	.12	.29	84.8	84.7	.0006	745274_FT
89	5379	6334	-2.1969	.0372	.92	-3.4	.82	-4.3	.38	.29	85.5	85.1	.0005	745275_FT
90	3623	4054	-2.2355	.0532	.97	-.8	.93	-1.0	.28	.25	89.4	89.4	.0007	745277_FT
91	1591	4204	.8108	.0345	1.32	9.9	1.50	9.9	-.03	.33	57.7	69.1	.0005	745278_FT
92	3691	4418	-1.6464	.0430	.91	-3.6	.80	-4.7	.40	.29	84.6	83.9	.0006	745279_FT
93	3600	4086	-2.0945	.0506	1.08	2.4	1.26	4.0	.14	.25	88.1	88.1	.0007	745280_FT
94	2177	4140	.1345	.0341	.94	-4.8	.95	-3.0	.40	.36	71.2	67.2	.0005	745282_FT
95	3398	3991	-1.8045	.0471	.88	-4.2	.68	-6.7	.44	.28	85.7	85.3	.0006	745283_FT
96	3534	4341	-1.4748	.0415	.90	-4.3	.80	-5.0	.43	.30	82.9	81.9	.0006	745284_FT
97	4120	4197	-4.1590	.1163	.94	-.6	.48	-4.2	.23	.11	98.2	98.2	.0010	745285_FT
98	4034	4051	-5.6709	.2439	.96	-.1	.31	-4.7	.15	.06	99.6	99.6	.0011	745286_FT
99	5629	6200	-2.8271	.0458	.91	-2.8	.68	-5.9	.35	.24	90.8	90.8	.0005	745287_FT
100	3439	4287	-1.4108	.0409	.93	-3.1	.83	-4.6	.40	.31	81.4	80.9	.0006	745288_FT
MEAN	9345.5	13680	-1.2719	.0349	.99	-.2	.95	-.7			78.4	78.9	.0002	
P.SD	6142.4	9142.0	1.1872	.0301	.10	6.2	.23	6.5			10.3	9.2	.1194	

Grade 8 Science

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	SCIE
1	16793	22329	-1.2330A	.0167	.98	-2.4	1.01	.5	.36	.34	77.9	76.8	.0096	635004_OP
2	15015	22329	-.6189A	.0153	.95	-7.7	.93	-6.8	.39	.37	72.6	70.7	-.1477	635011_OP
3	12884	22321	-.1337A	.0148	.97	-4.8	.96	-4.5	.40	.38	69.2	68.1	-.1415	635012_OP
4	14608	22329	-.4871A	.0151	1.05	7.8	1.06	5.8	.29	.38	67.6	69.7	-.1824	635018_OP
5	17582	22321	-1.0795A	.0163	.84	-9.9	.75	-9.9	.38	.35	80.4	75.1	-.3877	635025_OP
6	9275	22329	.7761A	.0153	1.02	3.3	1.06	5.9	.40	.37	70.4	70.8	-.2537	635034_OP
7	9897	22321	.2861A	.0148	1.11	9.9	1.15	9.9	.26	.38	63.5	68.1	.0925	635041_OP
8	14246	22329	-.7084A	.0154	1.04	6.1	1.04	3.4	.36	.37	69.7	71.4	.1274	635053_OP
9	14112	22321	-.4131A	.0150	.96	-6.3	.94	-6.3	.39	.38	70.5	69.3	-.1404	635078_OP
10	16710	22329	-1.1837A	.0166	1.00	.3	1.01	.6	.33	.34	76.9	76.2	-.0173	635101_OP
11	10698	22321	.0620A	.0148	1.23	9.9	1.31	9.9	.15	.38	57.3	67.8	.1411	635105_OP
12	15294	22321	-.8216A	.0157	.91	-9.9	.85	-9.9	.45	.36	74.8	72.4	-.0119	635116_OP
13	17468	22329	-1.5269A	.0178	1.03	3.4	1.09	4.7	.34	.32	79.5	80.3	.1099	635120_OP
14	13640	22329	-.7481A	.0155	1.07	9.9	1.07	6.1	.39	.37	68.4	71.7	.3072	635134_OP
15	11618	22321	-.1923A	.0148	1.14	9.9	1.16	9.9	.26	.38	62.0	68.3	.1956	635144_OP
16	10837	22321	-.1439A	.0148	1.07	9.9	1.13	9.9	.34	.38	65.9	68.1	.3170	635146_OP
17	15285	22321	-.7603A	.0155	.85	-9.9	.79	-9.9	.50	.37	77.3	71.9	-.0720	635156_OP
18	13822	22321	-.5303A	.0152	1.01	1.6	1.00	.0	.38	.37	69.5	70.0	.0451	635162_OP
19	17179	22329	-1.5384A	.0179	1.08	8.4	1.16	8.4	.34	.32	78.4	80.5	.2089	647112_OP
20	10325	22321	-.1261A	.0148	1.05	9.3	1.07	8.0	.36	.38	65.8	68.1	.4109	647120_OP
21	9835	22321	.3077A	.0148	1.09	9.9	1.12	9.9	.29	.38	64.0	68.1	.0846	647122_OP
22	13195	22329	-.4287A	.0150	1.05	8.4	1.06	6.0	.34	.38	67.0	69.4	.0858	647123_OP
23	16675	22321	-1.2164A	.0167	.95	-6.3	.87	-9.4	.41	.34	77.5	76.6	.0249	647136_OP
24	15943	22329	-1.2255A	.0167	1.05	6.2	.99	-.7	.40	.34	74.3	76.7	.2335	647138_OP
25	10902	22329	-.1196A	.0148	1.17	9.9	1.22	9.9	.23	.38	60.4	68.0	.2789	647142_OP
26	13705	22329	-.0646A	.0148	.92	-9.9	.89	-9.9	.46	.38	71.7	67.9	-.3953	661279_OP
27	14777	22321	-.5932A	.0153	.84	-9.9	.79	-9.9	.51	.37	77.2	70.5	-.1165	661294_OP
28	13468	22329	-.1807A	.0148	1.00	-.7	.98	-1.9	.37	.38	67.9	68.2	-.2251	661295_OP
29	14817	22329	-.7002A	.0154	.89	-9.9	.84	-9.9	.48	.37	75.3	71.3	-.0169	661305_OP
30	19229	22321	-2.1410A	.0210	1.02	1.5	1.01	.5	.32	.27	86.3	87.2	.1054	690224_OP
31	12468	22321	-.3188A	.0149	.97	-5.7	.94	-7.3	.43	.38	69.9	68.8	.1364	690238_OP
32	13431	22329	-.3816A	.0150	1.05	8.6	1.04	4.6	.32	.38	66.4	69.1	-.0149	690251_OP
33	11466	22321	.0915A	.0148	1.09	9.9	1.12	9.9	.29	.38	63.7	67.8	-.0552	690252_OP
34	16970	22321	-1.4051A	.0173	.97	-3.1	.88	-7.7	.43	.33	78.5	78.9	.1332	690263_OP
35	14455	22329	-.5622A	.0152	1.01	1.7	.98	-1.5	.35	.37	69.0	70.2	-.0699	705761_OP
36	16476	22321	-1.1397A	.0165	.99	-.8	.99	-.5	.35	.34	76.0	75.7	.0022	705765_OP
37	16004	22321	-1.1068A	.0164	.95	-6.5	.87	-9.9	.45	.35	75.7	75.4	.0960	705767_OP
38	17870	22321	-1.2659A	.0169	.79	-9.9	.67	-9.9	.45	.34	82.4	77.2	-.2889	705768_OP
39	14751	22329	-.6161A	.0153	.97	-4.5	.93	-7.3	.38	.37	70.6	70.6	-.0862	705770_OP
40	15409	22329	-.6923A	.0154	1.07	9.9	1.07	6.7	.25	.37	68.3	71.3	-.1715	705772_OP
41	16553	22329	-1.0936A	.0163	.88	-9.9	.79	-9.9	.45	.35	78.1	75.2	-.0653	705778_OP
42	16378	22329	-1.1215A	.0164	.92	-9.9	.86	-9.9	.44	.35	77.3	75.5	.0116	705780_OP
43	14612	22321	-.3806A	.0150	.90	-9.9	.86	-9.9	.44	.38	72.8	69.1	-.2917	705781_OP
44	12534	22329	-.1875A	.0148	1.03	5.3	1.02	2.8	.35	.38	66.2	68.2	-.0094	705782_OP
45	12333	22321	-.4293A	.0150	1.08	9.9	1.09	9.9	.35	.38	65.4	69.4	.2773	705784_OP
46	16099	22329	-1.0499A	.0162	.93	-9.9	.86	-9.9	.44	.35	76.5	74.7	.0138	705788_OP
47	18636	22321	-1.9515A	.0199	.95	-3.9	.78	-9.9	.45	.28	83.9	85.3	.1477	705790_OP
48	18881	22321	-1.9136A	.0197	.97	-2.5	.90	-4.6	.33	.29	85.0	84.8	.0149	705792_OP
49	20121	22329	-2.3662A	.0226	.87	-8.3	.77	-8.8	.32	.25	90.2	89.3	-.0943	705793_OP
50	13997	22321	-.5532A	.0152	.98	-2.7	.95	-5.3	.40	.37	70.1	70.2	.0278	705795_OP
51	11105	22329	.2895A	.0148	1.02	3.2	1.03	3.5	.37	.38	67.6	68.1	-.1730	705796_OP
52	17639	22321	-1.4849A	.0176	1.05	5.1	1.15	8.3	.26	.32	79.9	79.8	.0120	705797_OP
53	16144	22329	-1.0765A	.0163	.92	-9.9	.86	-9.9	.45	.35	77.1	75.0	.0289	705799_OP
54	16218	22321	-1.1620A	.0165	.85	-9.9	.72	-9.9	.55	.34	78.4	76.0	.0952	705803_OP
55	18269	22329	-1.4841A	.0176	.91	-9.9	.87	-7.9	.32	.32	82.5	79.8	-.1982	705807_OP
56	12005	22321	-.0203A	.0148	1.11	9.9	1.14	9.9	.26	.38	62.2	67.9	-.0611	705809_OP
57	11284	22329	.2752A	.0148	1.12	9.9	1.17	9.9	.27	.38	63.2	68.1	-.1976	705810_OP
58	13904	22321	-.4756A	.0151	.90	-9.9	.86	-9.9	.47	.38	74.3	69.7	-.0290	705812_OP
59	15882	22329	-1.0363A	.0162	1.13	9.9	1.28	9.9	.23	.35	72.1	74.6	.0572	705814_OP

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	SCIE
60	9062	22329	.5385A	.0150	1.21	9.9	1.32	9.9	.16	.38	61.3	69.1	.0269	705817_OP
61	4335	5636	-1.6132	.0341	.87	-7.9	.73	-8.6	.48	.34	78.9	77.8	.0001	745289_FT
62	3154	4205	-1.1175	.0382	1.00	.0	.97	-.9	.33	.33	76.0	76.3	.0005	745290_FT
63	1712	4141	.5985	.0346	1.07	5.4	1.10	5.1	.29	.37	65.1	68.8	.0009	745291_FT
64	1645	3912	.6048	.0356	1.09	6.7	1.14	6.9	.28	.37	65.0	68.7	.0009	745295_FT
65	1735	5591	.8269	.0320	1.09	6.2	1.29	9.9	.25	.38	73.7	74.1	.0007	745296_FT
66	2282	4170	-.0370	.0340	1.22	9.9	1.30	9.9	.14	.36	57.0	67.3	.0008	745297_FT
67	1387	3887	.9126	.0365	.98	-1.4	.99	-.5	.36	.35	71.6	70.5	.0010	745298_FT
68	2239	3865	-.2026	.0356	.87	-9.9	.83	-9.3	.50	.37	73.5	68.0	.0007	745299_FT
69	2330	4654	.1942	.0321	1.00	.0	1.01	.6	.36	.37	67.9	67.3	.0008	745300_FT
70	2320	4637	.1917	.0322	.85	-9.9	.83	-9.9	.52	.37	74.3	67.3	.0008	745301_FT
71	972	3696	1.4313	.0407	1.10	5.0	1.25	7.1	.21	.34	75.2	76.6	.0010	745302_FT
72	3285	5093	-.9289	.0323	.95	-4.0	.90	-4.3	.44	.39	72.7	71.1	.0001	745303_FT
73	2453	3970	-.3736	.0356	.90	-7.6	.85	-7.3	.47	.36	73.7	69.2	.0007	745304_FT
74	2014	4178	.2937	.0340	.92	-6.6	.91	-5.5	.45	.37	71.9	67.4	.0008	745305_FT
75	2933	4165	-.8490	.0367	1.12	7.0	1.30	9.8	.20	.34	70.9	73.2	.0006	745306_FT
76	2088	4213	.2111	.0338	1.11	8.7	1.16	8.9	.27	.37	62.3	67.4	.0008	745307_FT
77	3352	5819	-.5325	.0294	.96	-3.1	.93	-4.1	.43	.40	70.1	69.2	.0003	745309_FT
78	2880	4189	-.7663	.0361	1.04	2.3	1.02	.9	.31	.35	70.4	72.3	.0006	745310_FT
79	1046	4043	1.4260	.0388	1.22	9.9	1.49	9.9	.07	.32	72.7	76.3	.0010	745311_FT
80	2862	5363	-.3394	.0304	1.00	.3	.98	-1.2	.40	.41	68.1	69.0	.0003	745312_FT
81	2599	4130	-.4540	.0351	.89	-8.0	.84	-7.6	.48	.36	73.8	69.7	.0006	745313_FT
82	1661	4078	.6389	.0350	1.02	1.7	1.05	2.6	.34	.36	68.3	68.9	.0009	745314_FT
83	2735	3801	-.9196	.0389	.93	-3.9	.84	-5.4	.42	.34	74.7	74.3	.0006	745315_FT
84	4707	5430	-2.3872	.0420	.88	-4.8	.64	-7.7	.42	.27	86.9	86.7	.0001	745316_FT
85	3608	3902	-2.6618	.0625	.93	-1.4	.66	-4.7	.31	.21	92.5	92.5	.0007	745317_FT
86	1974	3908	.1473	.0351	1.02	1.6	1.03	1.5	.35	.37	67.2	67.5	.0008	745318_FT
87	1891	5777	.7378	.0311	1.16	9.9	1.32	9.9	.22	.39	70.0	73.3	.0007	745319_FT
88	2931	4120	-.8795	.0372	.96	-2.4	.92	-2.7	.39	.35	74.4	73.9	.0006	745320_FT
89	2278	4119	-.0619	.0342	.94	-4.6	.92	-4.6	.42	.36	69.8	67.3	.0008	745321_FT
90	3564	4238	-1.7806	.0443	.95	-1.9	.98	-.5	.34	.28	84.8	84.2	.0005	745323_FT
91	1564	4016	.7256	.0354	.99	-1.1	.99	-.6	.37	.36	69.0	69.3	.0010	745324_FT
92	1094	4029	1.3387	.0384	1.03	1.7	1.23	7.3	.25	.33	76.5	75.5	.0010	745325_FT
93	3119	5615	-.4337	.0299	1.02	1.9	1.04	2.2	.39	.41	68.4	69.3	.0003	745326_FT
94	2890	4049	-.8893	.0376	.90	-5.8	.85	-5.5	.46	.35	76.7	73.9	.0005	745327_FT
95	1307	4182	1.1078	.0363	1.23	9.9	1.40	9.9	.09	.34	65.6	72.7	.0010	745328_FT
96	1935	4328	.4681	.0335	1.15	9.9	1.21	9.9	.22	.37	60.4	67.8	.0009	745329_FT
97	3207	6059	-.2765	.0286	1.00	.2	1.00	.1	.40	.40	68.7	68.8	.0004	745330_FT
98	2483	4568	.0017	.0325	1.14	9.9	1.20	9.9	.21	.37	61.9	67.5	.0008	745331_FT
99	931	4106	1.6357	.0402	1.09	4.2	1.29	7.8	.19	.31	77.4	78.8	.0010	745333_FT
100	3480	4076	-1.8604	.0467	.94	-2.2	.81	-3.8	.36	.28	85.5	85.4	.0006	745334_FT
101	3059	3961	-1.2751	.0405	1.05	2.4	1.15	3.9	.25	.31	77.0	78.0	.0005	745335_FT
102	2004	4146	.2810	.0341	1.19	9.9	1.26	9.9	.18	.37	59.2	67.5	.0008	745336_FT
103	2085	4564	.3971	.0326	1.05	4.4	1.06	3.7	.31	.37	64.7	67.8	.0008	745337_FT
104	3093	4589	-.6748	.0342	.95	-3.6	.93	-3.2	.41	.35	73.6	71.6	.0006	745338_FT
105	3911	6019	-.8827	.0297	.92	-6.4	.88	-5.8	.46	.39	74.7	71.3	.0002	745339_FT
106	4054	4642	-2.0610	.0463	.90	-3.3	.71	-5.8	.39	.26	87.5	87.4	.0006	745341_FT
107	2904	4547	-.5075	.0335	1.06	4.7	1.07	3.3	.29	.36	66.9	69.8	.0006	745343_FT
108	1678	4488	.7975	.0338	1.00	.3	1.03	1.4	.35	.36	70.5	70.0	.0009	745344_FT
109	1815	4112	.4298	.0344	1.02	1.6	1.03	1.7	.34	.37	66.5	67.9	.0009	745345_FT
110	2367	4224	-.1168	.0339	1.18	9.9	1.22	9.9	.17	.37	58.5	67.5	.0007	745346_FT
MEAN	9043.1	14207	-.4641	.0251	1.01	.4	1.01	.1			72.1	72.7	-.0002	
P.SD	6335.0	8903.5	.8675	.0107	.10	7.1	.17	7.3			7.2	5.6	.1243	

Grade 11 Science

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	SCIE
1	13876	21365	-.6264A	.0157	1.03	5.1	1.04	4.1	.34	.36	69.9	71.3	.0428	635189_OP
2	13745	21352	-.4173A	.0154	1.09	9.9	1.10	9.9	.24	.37	65.1	69.6	-.1371	635234_OP
3	13283	21365	-.0842A	.0151	.96	-7.3	.95	-7.0	.38	.37	69.7	67.7	-.3571	635261_OP
4	14829	21352	-.9370A	.0164	1.01	.7	.94	-4.8	.40	.35	72.6	74.4	.1128	635265_OP
5	15798	21352	-1.0682A	.0168	.87	-9.9	.79	-9.9	.48	.34	79.0	75.8	-.0207	635279_OP
6	14815	21365	-.8644A	.0162	1.03	3.6	1.04	3.1	.34	.35	73.0	73.6	.0447	635288_OP
7	12291	21352	-.4215A	.0154	.95	-7.7	.93	-7.8	.46	.37	70.9	69.6	.2111	635295_OP
8	14600	21365	-.6021A	.0157	.89	-9.9	.85	-9.9	.44	.36	74.9	71.1	-.1645	635489_OP
9	11230	21365	-.1572A	.0151	1.11	9.9	1.14	9.9	.28	.37	63.0	68.0	.1883	635492_OP
10	14313	21352	-.6634A	.0158	.88	-9.9	.85	-9.9	.48	.36	76.9	71.6	-.0307	635494_OP
11	16632	21365	-1.4715A	.0182	.96	-4.3	.87	-7.7	.46	.32	80.0	80.5	.1398	635499_OP
12	15451	21352	-.9152A	.0164	.85	-9.9	.77	-9.9	.49	.35	78.2	74.2	-.0777	635503_OP
13	12424	21365	-.2245A	.0152	1.14	9.9	1.16	9.9	.22	.37	61.3	68.3	-.0159	635504_OP
14	8808	21365	.6808A	.0153	1.09	9.9	1.15	9.9	.28	.36	66.1	68.9	-.0989	635517_OP
15	14227	21352	-.8363A	.0162	1.00	.3	.98	-1.9	.42	.36	72.3	73.3	.1657	635528_OP
16	16559	21365	-1.3227A	.0176	.96	-4.4	.97	-2.0	.38	.33	80.0	78.8	.0113	635535_OP
17	15660	21365	-1.0514A	.0167	.88	-9.9	.78	-9.9	.48	.35	77.7	75.7	.0039	635544_OP
18	16675	21365	-1.0500A	.0167	.81	-9.9	.75	-9.9	.44	.35	81.6	75.6	-.3050	635550_OP
19	19154	21352	-2.1621A	.0221	.80	-9.9	.72	-9.9	.36	.27	89.9	88.0	-.1966	635553_OP
20	9460	21365	.3740A	.0151	.98	-4.0	.98	-2.4	.38	.37	68.9	67.4	.0562	647170_OP
21	15850	21365	-.7358A	.0159	.78	-9.9	.71	-9.9	.50	.36	80.9	72.3	-.3721	647183_OP
22	11351	21352	-.1764A	.0151	1.12	9.9	1.15	9.9	.27	.37	62.1	68.1	.1792	647214_OP
23	11961	21365	-.1547A	.0151	1.08	9.9	1.09	9.9	.29	.37	63.8	68.0	.0204	661349_OP
24	8659	21365	.6426A	.0153	.93	-9.9	.95	-5.3	.42	.36	73.1	68.7	-.0274	661355_OP
25	15824	21352	-1.1620A	.0171	.98	-2.0	.95	-3.7	.39	.34	77.3	76.9	.0672	661362_OP
26	12692	21352	-.3824A	.0153	1.13	9.9	1.24	9.9	.25	.37	65.3	69.3	.0790	661375_OP
27	14845	21365	-.7646A	.0160	1.03	3.7	1.06	5.2	.31	.36	72.3	72.6	-.0642	690291_OP
28	12674	21365	-.3219A	.0153	.99	-1.8	.97	-3.4	.39	.37	68.8	68.9	.0237	690299_OP
29	18047	21352	-1.5942A	.0188	.76	-9.9	.61	-9.9	.45	.31	86.0	82.0	-.2485	690302_OP
30	14188	21365	-.6339A	.0157	.87	-9.9	.84	-9.9	.49	.36	76.1	71.4	-.0273	690304_OP
31	17424	21365	-1.5945A	.0188	.84	-9.9	.68	-9.9	.50	.31	83.2	82.0	-.0029	690306_OP
32	13178	21365	-.4473A	.0154	1.07	9.9	1.09	9.4	.31	.37	67.0	69.8	.0312	690308_OP
33	13579	21352	-.2452A	.0152	.91	-9.9	.90	-9.9	.43	.37	73.0	68.4	-.2692	690312_OP
34	9335	21352	.5701A	.0152	1.05	8.8	1.09	9.9	.32	.36	66.8	68.2	-.1101	690313_OP
35	15616	21365	-1.1006A	.0169	.97	-3.3	.89	-7.9	.41	.34	76.0	76.2	.0663	690315_OP
36	12893	21352	-.3995A	.0154	.92	-9.9	.89	-9.9	.46	.37	72.9	69.4	.0492	690328_OP
37	15400	21352	-.9214A	.0164	.91	-9.9	.85	-9.9	.44	.35	77.0	74.2	-.0572	690333_OP
38	16782	21365	-1.2392A	.0173	.85	-9.9	.75	-9.9	.44	.33	81.2	77.8	-.1460	705818_OP
39	10377	21352	.0805A	.0150	1.05	9.8	1.07	8.4	.31	.37	64.5	67.3	.1412	705819_OP
40	17783	21352	-1.8704A	.0202	.97	-2.2	.89	-5.0	.42	.29	84.1	85.1	.1415	705821_OP
41	12867	21352	-.2923A	.0152	1.03	5.8	1.05	5.6	.33	.37	67.3	68.7	-.0523	705823_OP
42	17777	21365	-1.7154A	.0194	.90	-9.0	.81	-9.9	.41	.30	84.4	83.3	-.0113	705826_OP
43	7410	21352	.8878A	.0156	1.09	9.9	1.23	9.9	.22	.35	68.9	70.6	.0236	705827_OP
44	15125	21365	-.8297A	.0161	.94	-8.1	.91	-8.1	.39	.36	75.2	73.3	-.0731	705828_OP
45	13988	21352	-.6088A	.0157	1.05	6.8	1.06	5.6	.32	.36	69.3	71.1	-.0042	705829_OP
46	8230	21352	.3585A	.0151	1.16	9.9	1.23	9.9	.16	.37	60.4	67.4	.3533	705831_OP
47	11168	21365	.0565A	.0150	1.00	.4	1.00	-.1	.36	.37	67.3	67.3	-.0111	705833_OP
48	16237	21352	-1.2045A	.0172	.90	-9.9	.84	-9.9	.44	.34	80.0	77.4	-.0119	705834_OP
49	17616	21365	-1.8153A	.0199	1.07	5.5	1.17	7.6	.32	.29	83.1	84.5	.1521	705837_OP
50	13760	21352	-.5619A	.0156	1.04	6.7	1.04	4.1	.32	.37	68.5	70.7	.0048	705838_OP
51	13366	21352	-.4930A	.0155	.99	-2.0	.96	-3.7	.39	.37	69.5	70.1	.0309	705841_OP
52	14817	21352	-.9739A	.0165	.99	-1.5	.97	-2.1	.43	.35	75.1	74.8	.1533	705843_OP
53	16572	21365	-1.3205A	.0176	.94	-6.5	.96	-2.4	.39	.33	80.4	78.7	.0049	705846_OP
54	12606	21365	-.3347A	.0153	1.12	9.9	1.17	9.9	.25	.37	63.9	69.0	.0524	705849_OP
55	14624	21352	-.9532A	.0165	1.07	9.4	1.19	9.9	.34	.35	73.5	74.6	.1826	705855_OP
56	13189	21365	-.2799A	.0152	.98	-2.9	.97	-3.6	.37	.37	69.6	68.6	-.1394	705856_OP
57	9603	21352	.3264A	.0150	1.14	9.9	1.19	9.9	.20	.37	60.9	67.3	.0703	705860_OP
58	14632	21352	-.6598A	.0158	.95	-7.5	.93	-6.7	.38	.36	74.0	71.6	-.1162	705865_OP
59	16254	21352	-1.3803A	.0179	.98	-2.0	.90	-6.5	.44	.33	78.5	79.5	.1619	705868_OP
60	14808	21365	-.8260A	.0161	.97	-4.9	.90	-8.4	.40	.36	73.0	73.2	.0077	705875_OP
61	1851	4072	.4218	.0344	1.11	8.9	1.17	9.1	.24	.36	62.8	67.1	.0007	745348_FT
62	1309	4667	1.3233	.0352	1.16	9.4	1.41	9.9	.12	.32	71.9	74.6	.0009	745349_FT
63	1608	4303	.6175	.0347	1.07	5.0	1.14	6.4	.29	.38	68.6	70.4	.0005	745350_FT
64	2375	4009	-.2442	.0352	.96	-3.1	.93	-3.3	.41	.37	70.1	68.7	.0004	745351_FT
65	1614	3634	.4647	.0365	1.00	.3	1.07	3.5	.33	.36	69.7	67.3	.0006	745352_FT
66	1241	4036	1.1466	.0370	1.15	8.8	1.29	9.9	.17	.33	68.4	72.8	.0008	745353_FT
67	1602	4599	.7640	.0339	1.41	9.9	1.64	9.9	-.04	.37	57.5	71.1	.0006	745354_FT
68	2575	4561	-.1034	.0326	1.09	7.7	1.12	6.6	.26	.37	63.7	67.7	.0005	745355_FT

ENTRY NUMBER	TOTAL SCORE	TOTAL COUNT	MEASURE	MODEL S.E.	INFIT MNSQ	INFIT ZSTD	OUTFIT MNSQ	OUTFIT ZSTD	PTBISERL-EX CORR.	PTBISERL-EX EXP.	EXACT MATCH OBS%	EXACT MATCH EXP%	DISPLACE	SCIE
69	1944	3982	.2392	.0347	1.00	-.2	.99	-.5	.36	.36	66.6	66.9	.0006	745356_FT
70	3864	5272	-1.1807	.0337	.87	-8.3	.77	-8.7	.49	.35	78.3	75.5	.0000	745357_FT
71	2870	4085	-.8413	.0372	.90	-6.1	.84	-6.0	.47	.36	76.4	73.8	.0003	745358_FT
72	3211	4026	-1.4214	.0420	1.00	-.1	.99	-.2	.32	.32	80.8	80.5	.0002	745359_FT
73	2222	4117	-.0192	.0342	.96	-3.2	.94	-3.2	.40	.37	69.5	67.3	.0005	745360_FT
74	2658	4146	-.4855	.0353	1.00	-.1	.96	-1.7	.37	.36	69.8	70.5	.0004	745361_FT
75	1970	4746	.4124	.0324	1.30	9.9	1.41	9.9	.07	.38	56.5	68.8	.0005	745362_FT
76	1622	4112	.6829	.0349	.95	-3.6	.96	-1.9	.39	.36	71.8	68.9	.0007	745363_FT
77	1916	4177	.3883	.0339	1.14	9.9	1.20	9.9	.20	.36	61.3	67.1	.0006	745364_FT
78	1749	4054	.5268	.0346	1.01	1.0	1.04	2.0	.33	.36	67.7	67.5	.0007	745365_FT
79	3253	4650	-1.0200	.0349	.89	-7.0	.82	-7.1	.48	.36	76.5	73.6	.0000	745366_FT
80	1810	3818	.3078	.0354	1.32	9.9	1.42	9.9	.03	.36	51.5	66.8	.0006	745367_FT
81	430	3653	2.5527	.0538	1.17	4.4	2.50	9.9	-.10	.23	88.5	88.4	.0007	745368_FT
82	1436	4065	.8999	.0357	1.02	1.3	1.11	4.7	.30	.34	71.4	70.3	.0008	745369_FT
83	2453	4089	-.2757	.0349	1.07	5.3	1.10	4.8	.29	.37	65.9	68.7	.0004	745370_FT
84	2964	4108	-.9320	.0376	1.02	1.3	1.03	1.2	.32	.35	74.3	74.8	.0003	745371_FT
85	1078	3806	1.2962	.0387	1.12	6.5	1.24	7.7	.18	.31	71.5	74.1	.0009	745372_FT
86	1170	4202	1.3634	.0372	1.17	9.3	1.46	9.9	.09	.32	72.5	74.7	.0009	745373_FT
87	1339	3908	.9641	.0365	1.26	9.9	1.42	9.9	.04	.33	62.6	70.5	.0008	745374_FT
88	1679	4148	.6625	.0346	.93	-5.8	.95	-2.7	.42	.36	72.9	68.4	.0007	745375_FT
89	2974	4028	-1.0157	.0386	1.01	.4	1.00	.1	.33	.34	75.4	75.9	.0003	745376_FT
90	2063	4918	.4078	.0318	1.26	9.9	1.37	9.9	.11	.38	58.5	68.7	.0005	745377_FT
91	1839	4124	.4534	.0343	1.01	1.0	1.04	2.0	.34	.37	67.6	67.6	.0007	745378_FT
92	2396	4078	-.2460	.0348	.88	-9.5	.83	-9.3	.50	.37	73.5	68.5	.0004	745379_FT
93	2392	4754	-.0012	.0320	1.04	3.7	1.05	2.8	.34	.39	65.3	67.9	.0004	745380_FT
94	2810	4557	-.3768	.0332	1.07	4.9	1.06	3.1	.29	.36	66.2	69.4	.0004	745381_FT
95	2526	4123	-.3822	.0349	1.05	3.5	1.07	3.2	.32	.37	67.1	69.3	.0004	745382_FT
96	1763	4471	.7039	.0334	1.06	4.8	1.17	8.6	.26	.35	69.0	68.7	.0007	745383_FT
97	1530	4058	.7835	.0352	1.22	9.9	1.35	9.9	.10	.35	61.3	69.2	.0007	745384_FT
98	2736	4407	-.3826	.0338	1.04	3.0	1.02	.9	.32	.36	66.2	69.2	.0004	745385_FT
99	2288	4222	-.0228	.0337	1.16	9.9	1.25	9.9	.19	.36	60.6	67.2	.0005	745386_FT
100	2187	4709	.3722	.0319	1.19	9.9	1.27	9.9	.15	.36	58.0	66.9	.0007	745387_FT
101	2272	4086	-.0428	.0344	1.07	5.6	1.07	3.6	.29	.37	62.6	67.5	.0005	745388_FT
102	595	5079	2.4180	.0462	1.01	.3	1.60	9.3	.18	.26	88.8	88.5	.0006	745389_FT
103	1803	4242	.5663	.0339	1.02	1.7	1.05	2.6	.33	.36	66.8	67.7	.0007	745390_FT
104	3908	5450	-1.0868	.0327	.93	-4.6	.93	-2.9	.43	.36	76.8	74.7	.0001	745391_FT
105	1957	3995	.2323	.0346	1.14	9.9	1.17	9.1	.21	.37	59.9	67.1	.0006	745392_FT
106	2075	4485	.3656	.0328	1.08	6.6	1.12	7.2	.28	.36	63.8	67.2	.0006	745393_FT
107	1611	4841	.8792	.0335	1.16	9.9	1.29	9.9	.20	.37	67.3	72.2	.0007	745394_FT
108	1655	3677	.4219	.0362	1.12	9.1	1.15	7.4	.22	.36	60.9	67.1	.0007	798392_FT
109	1709	4125	.5777	.0345	1.09	6.6	1.12	6.5	.26	.36	64.5	67.9	.0007	798394_FT
110	2791	4111	-.7068	.0363	1.02	1.5	1.03	1.4	.33	.36	72.0	72.4	.0003	798397_FT
MEAN	8551.2	13592	-.2406	.0250	1.02	1.0	1.05	1.1			70.9	72.0	-.0013	
P.SD	6243.5	8512.2	.8607	.0099	.12	7.3	.23	7.5			7.5	5.1	.1026	

Appendix N: Reading Pre- and Post-Equating Summary

The Pre- values were taken from the calibrated item bank. The Post- values were taken directly from unanchored calibration runs. The correlation and SD ratio are from the first linking using all the items, items with large Z were removed from subsequent linking sets until the Robust criteria was met, or other stopping criteria reached.

	3			4			5			6			7			8			11		
item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
1	-0.41	0.19	-2.44	-0.32	0.37	-1.69	0.57	1.03	-0.80	-1.21	-0.67	-1.80	-0.72	-0.64	0.25	-1.14	-0.57	-0.32	-1.53	-1.06	0.71
2	-1.41	-0.48	-3.89	-0.70	-0.45	0.04	-0.87	0.02	-2.17	-0.65	0.13	-3.19	-1.74	-1.16	-2.25	-1.07	-0.48	-0.41	-0.48	-0.14	1.17
3	-0.34	0.01	-1.26	-0.34	0.12	-0.80	-0.29	0.79	-2.77	-1.68	-0.62	-4.85	0.43	0.69	-0.64	-0.90	-0.29	-0.50	-0.49	-0.91	3.97
4	-0.75	-0.45	-1.02	0.01	0.68	-1.60	0.92	0.80	1.04	0.19	0.68	-1.51	0.39	0.43	0.44	-0.57	-0.05	-0.18	-0.82	0.16	-1.14
5	-0.70	-0.36	-1.22	-1.32	-0.38	-2.69	-0.33	0.48	-1.93	-1.33	-0.57	-3.07	-0.26	0.04	-0.85	-0.74	-0.56	1.06	-0.34	0.07	0.92
6	0.64	0.93	-1.01	-0.38	0.26	-1.51	-1.72	-0.45	-3.38	0.55	0.92	-0.76	-0.25	0.11	-1.15	0.06	0.62	-0.29	0.07	-0.06	2.89
7	-1.21	-0.90	-1.08	-1.10	-0.90	0.21	0.57	1.21	-1.38	-0.31	-0.08	0.03	-0.47	-0.13	-1.08	0.83	1.25	0.20	-1.18	-0.69	0.62
8	-0.11	-0.47	1.98	-0.63	-0.75	1.49	-1.36	-1.19	0.09	0.37	0.63	-0.11	-0.54	-0.08	-1.65	-0.98	-0.26	-0.89	-1.21	-0.46	-0.31
9	0.42	0.53	-0.18	-0.35	-0.36	1.05	-0.16	-0.17	0.67	-0.77	-0.72	1.11	0.59	0.72	-0.00	-0.97	-0.63	0.49	-2.05	-0.93	-1.69
10	-0.78	-0.78	0.29	-0.06	-0.02	0.81	0.94	0.88	0.82	-0.28	-0.38	1.97	-0.90	-0.43	-1.68	-0.38	0.09	0.01	-1.61	-0.26	-2.49
11	-0.38	-0.38	0.32	-1.04	-1.04	1.01	-0.71	-0.44	-0.21	-0.51	-0.05	-1.31	1.46	1.63	-0.21	-0.45	-0.21	0.84	-0.43	0.33	-0.35
12	-0.86	-0.69	-0.48	-1.08	-0.69	-0.51	-0.20	0.21	-0.65	0.14	0.25	0.72	-0.15	0.21	-1.15	-1.84	-1.08	-0.99	-1.66	-0.37	-2.30
13	-1.07	-1.01	0.01	-0.26	0.23	-0.92	-0.43	0.01	-0.74	-0.39	-0.18	0.19	-0.04	0.09	0.00	0.31	0.98	-0.72	-0.53	0.24	-0.37
14	-1.43	-1.23	-0.58	-0.27	-0.23	0.86	-1.36	-0.91	-0.80	0.49	0.56	0.98	0.43	0.80	-1.24	-0.27	-0.06	0.95	-0.32	0.46	-0.42
15	-0.79	-0.52	-0.92	-0.36	-0.16	0.19	-0.35	-0.08	-0.20	-0.50	-0.06	-1.18	-0.14	-0.21	1.04	0.68	0.90	0.89	0.22	0.91	-0.10
16	0.28	0.32	0.12	-1.61	-1.74	1.53	0.10	0.43	-0.39	-1.33	-1.14	0.29	0.55	0.86	-0.87	-1.32	-1.06	0.75	-1.36	-0.69	-0.04
17	-0.94	-0.59	-1.28	-0.18	0.19	-0.47	-1.58	-0.96	-1.33	-1.42	-1.14	-0.25	0.71	0.95	-0.53	-0.11	0.31	0.18	0.08	0.48	0.96
18	0.02	-0.04	0.57	-0.23	0.02	-0.00	-0.11	-0.10	0.59	0.57	0.87	-0.37	-0.63	-0.44	-0.33	-1.17	-0.47	-0.80	-1.84	-0.98	-0.71
19	0.54	0.72	-0.48	0.02	0.34	-0.23	-1.02	-0.74	-0.23	-1.66	-1.41	-0.08	-0.11	0.30	-1.42	-0.86	-0.35	-0.14	-0.48	0.26	-0.29
20	-0.83	-0.67	-0.40	-0.02	0.33	-0.38	-1.11	-0.68	-0.71	0.03	0.40	-0.77	0.25	-0.02	2.06	-0.81	0.05	-1.38	-1.40	-0.36	-1.37
21	0.70	0.77	0.00	0.57	0.96	-0.55	-0.51	-0.55	0.75	-1.25	-0.70	-1.80	-1.57	-1.57	0.66	-1.54	-0.85	-0.74	0.95	1.42	0.69
22	0.69	0.74	0.04	1.16	1.21	0.81	0.75	1.34	-1.25	-0.31	-0.15	0.47	-1.40	-1.37	0.51	-0.08	0.54	-0.55	-0.94	0.05	-1.16

	3			4			5			6			7			8			11		
item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
23	-0.12	0.17	-0.99	0.85	0.74	1.40	-0.71	-0.32	-0.60	-0.92	-0.76	0.45	1.22	0.93	2.15	-0.43	0.10	-0.20	0.05	0.87	-0.56
24	0.47	0.33	0.94	0.99	1.22	0.09	-0.18	-0.05	0.23	-0.80	-0.44	-0.73	0.29	0.34	0.40	-1.61	-0.95	-0.64	0.07	1.15	-1.49
25	-1.19	-1.30	0.83	-0.41	-0.24	0.32	-0.89	-0.36	-1.03	-0.43	-0.30	0.61	-0.42	-0.36	0.34	-1.78	-1.06	-0.88	-2.14	-1.15	-1.19
26	0.51	0.32	1.19	-0.39	0.06	-0.76	-0.92	-0.49	-0.73	-0.00	0.22	0.10	-0.56	-0.52	0.46	0.71	0.91	0.98	-0.16	0.36	0.50
27	1.18	1.16	0.37	-0.11	0.13	0.06	1.14	1.06	0.86	0.62	0.92	-0.34	-0.98	-0.57	-1.45	0.35	0.56	0.92	1.40	1.42	2.35
28	0.16	-0.11	1.55	-0.21	0.21	-0.62	-1.00	-0.88	0.26	-0.08	0.12	0.22	-0.63	-0.49	-0.06	-0.44	-0.11	0.48	-1.90	-0.75	-1.76
29	0.96	0.64	1.77	-1.43	-1.42	0.96	0.32	0.32	0.63	0.30	0.62	-0.47	-1.15	-1.00	-0.07	-0.09	0.05	1.22	-1.14	-0.27	-0.77
30	0.09	0.00	0.71	0.71	0.76	0.81	0.24	0.25	0.61	0.08	0.18	0.79	-0.76	-0.71	0.44	-0.39	-0.13	0.77	-0.04	0.74	-0.42
31	0.61	0.12	2.57	-0.99	-0.98	0.96	0.22	0.55	-0.39	-0.46	-0.08	-0.88	0.66	0.71	0.36	-0.31	0.42	-0.89	-0.84	-0.07	-0.37
32	-0.33	-0.26	0.00	-0.62	-0.38	0.07	-1.15	-1.46	1.61	0.20	0.34	0.59	-1.48	-1.38	0.15	0.79	0.96	1.09	-0.89	0.12	-1.24
33	0.03	0.00	0.44	0.51	0.59	0.65	-0.43	-0.13	-0.30	0.15	0.43	-0.26	0.14	0.19	0.42	-0.97	-0.72	0.80	-0.10	0.68	-0.43
34	-0.07	-0.09	0.36	-1.00	-0.60	-0.56	-0.65	-0.57	0.38	-0.72	-0.50	0.10	-0.16	-0.22	1.02	-0.98	-0.50	-0.02	-1.28	-0.75	0.46
35	0.97	1.18	-0.63	-0.22	-0.02	0.23	0.15	0.25	0.31	0.70	0.75	1.08	1.47	1.70	-0.47	-0.96	-0.65	0.60	-0.18	0.30	0.66
36	-1.63	-1.38	-0.82	0.16	0.32	0.36	0.15	0.29	0.19	1.14	1.39	-0.09	-1.07	-0.99	0.26	-0.31	0.03	0.47	-0.97	-0.43	0.44
37	-0.15	-0.19	0.50	-0.40	-0.02	-0.50	-1.12	-0.73	-0.60	1.17	1.32	0.50	0.77	0.68	1.14	-1.07	-0.96	1.31	-0.37	0.35	-0.22
38	-0.52	-0.22	-1.06	-0.87	-0.61	0.00	0.42	0.52	0.32	-1.00	-0.62	-0.85	1.65	1.92	-0.68	-1.02	-0.80	0.89	-0.73	-0.27	0.75
39	0.71	0.71	0.30	-0.75	-0.46	-0.14	-0.23	-0.04	0.04	0.05	0.27	0.08	-0.01	0.10	0.12	0.72	1.07	0.45	-0.57	-0.01	0.38
40	0.31	0.29	0.38	-0.09	0.31	-0.56	0.67	0.89	-0.05	0.73	0.99	-0.10	-1.14	-0.83	-0.91	-0.99	-0.52	-0.01	-0.10	0.52	0.19
41	1.19	1.17	0.41	-0.51	-0.00	-0.99	-0.46	-0.59	1.06	0.18	0.23	1.13	-1.11	-1.08	0.49	-0.57	0.01	-0.39	-0.73	-0.29	0.80
42	0.89	1.16	-0.92	0.29	0.70	-0.60	-0.22	-0.37	1.10	0.39	0.38	1.47	-0.50	-0.50	0.64	0.44	0.63	1.01	0.37	1.06	-0.08
43	-0.42	-0.26	-0.43	0.70	0.95	0.03	0.76	0.82	0.43	0.01	0.13	0.70	-0.89	-0.67	-0.43	-0.13	0.44	-0.34	-0.67	-0.02	0.04
44	0.71	0.86	-0.34	-0.22	0.24	-0.81	-0.39	-0.58	1.25	-0.53	-0.38	0.52	0.09	0.41	-0.96	-0.54	-0.10	0.11	-0.49	-0.40	2.08
45	-0.09	0.04	-0.32	-0.27	0.46	-1.87	0.61	0.46	1.11	-0.54	-0.29	-0.03	0.30	0.40	0.18	0.82	1.05	0.85	-0.11	0.40	0.57
46							-0.02	0.19	-0.04	0.19	0.49	-0.36	-0.10	-0.13	0.83	-0.21	0.43	-0.60	-1.62	-1.15	0.71
47							0.65	0.69	0.50	-1.23	-1.36	2.21	0.18	0.69	-1.94	-0.98	-0.47	-0.11	-0.70	-0.51	1.75
48							-0.63	-0.67	0.78	-0.73	-0.66	1.02	0.65	0.61	0.85	-0.91	-0.23	-0.74	0.46	1.01	0.40
49																0.82	1.18	0.38	-0.39	0.07	0.76
50																1.04	1.55	-0.12	-1.01	-0.44	0.32
Mean	-0.10	0.00		-0.28	0.00		-0.25	0.00		-0.27	0.00		-0.16	0.00		-0.45	0.00		-0.64	0.00	
Corr	0.946			0.932			0.889			0.953			0.972			0.964			0.892		

	3			4			5			6			7			8			11		
item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
SD	0.76	0.69		0.63	0.66		0.72	0.68		0.72	0.67		0.82	0.81		0.75	0.69		0.75	0.67	
Ratio	0.90			1.05			0.94			0.94			0.99			0.93			0.89		

Appendix O: Mathematics Pre- and Post-Equating Summary

The Pre- values were taken from the calibrated item bank. The Post- values were taken directly from unanchored calibration runs. The correlation and SD ratio are from the first linking using all the items, items with large Z were removed from subsequent linking sets until the Robust criteria was met, or other stopping criteria reached.

	3			4			5			6			7			8			11		
Item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
1	-1.42	-0.49	-3.23	-0.46	-0.46	2.13	-0.77	0.20	-3.36	-0.37	-0.05	0.66	-0.62	0.16	-3.06	-0.32	0.12	0.81	-0.61	-0.11	0.13
2	0.55	1.03	-0.19	-1.38	-0.77	-0.70	-1.05	-0.42	-1.53	-1.50	-1.56	3.71	-0.67	-0.46	1.89	-0.67	0.15	-2.13	-1.16	-0.79	1.21
3	-1.04	-0.79	1.26	-1.55	-1.06	-0.15	-0.53	-0.15	-0.06	0.31	0.62	0.77	-0.65	0.17	-3.37	-1.36	-1.08	-0.29	-1.19	-0.90	2.01
4	-1.63	-1.13	-0.37	-1.47	-0.17	-3.88	0.39	0.60	0.81	-0.44	0.16	-1.51	-1.49	-0.84	-1.94	-0.76	-0.32	-0.02	-0.72	-0.20	0.02
5	-0.54	-0.19	0.64	-0.23	-0.03	1.23	-0.74	-0.32	-0.30	-0.15	0.06	1.59	-0.62	-0.09	-0.82	-1.88	-1.26	0.59	-1.00	-0.44	-0.36
6	0.40	0.60	1.56	-0.20	-0.20	2.17	-0.43	0.19	-1.45	-0.17	0.09	1.14	-0.08	0.33	0.19	-1.60	-0.83	-2.27	-1.04	-0.65	1.12
7	-0.41	0.02	0.10	-0.41	0.17	-0.56	-0.67	-0.18	-0.68	-1.51	-1.25	1.14	-0.71	-0.16	-1.04	-0.66	-0.12	2.91	-0.80	-0.40	1.02
8	0.38	0.49	2.17	-0.96	-0.45	-0.22	0.32	0.38	1.69	-0.21	0.02	1.43	-0.72	-0.27	-0.17	-0.39	-0.19	-1.67	-0.49	-0.31	2.91
9	-0.08	0.29	0.53	-0.91	-0.58	0.62	-0.17	0.31	-0.65	-0.92	-0.35	-1.37	0.10	0.67	-1.23	-1.21	-0.63	1.70	-1.19	-0.54	-1.10
10	-0.44	-0.63	4.11	0.05	0.18	1.55	-0.94	-0.49	-0.51	-0.54	-0.06	-0.64	0.48	0.89	0.19	-1.67	-1.09	-2.57	-0.42	0.00	0.83
11	-0.49	-0.10	0.31	-1.71	-1.02	-1.01	0.06	0.40	0.11	-0.28	0.24	-0.90	-0.67	-0.20	-0.32	-0.55	-0.03	5.97	-1.71	-1.16	-0.25
12	-0.61	-0.32	1.01	-1.28	-0.62	-0.90	0.26	0.66	-0.16	-0.89	-0.36	-0.96	0.10	0.30	1.95	-0.70	-0.13	3.28	0.42	0.72	1.83
13	-0.62	-0.14	-0.26	-0.37	-0.22	1.44	-0.13	0.08	0.83	-0.08	0.33	-0.06	-0.35	0.07	0.09	-0.33	0.34	0.98	-0.58	0.25	-2.68
14	-0.56	-0.27	0.98	0.25	0.60	0.53	0.46	0.66	0.91	1.05	1.28	1.34	0.15	0.63	-0.41	-0.30	0.12	-0.22	-0.67	-0.04	-0.93
15	-0.85	-0.71	1.99	-0.80	-0.21	-0.59	0.95	1.15	0.89	-0.64	-0.17	-0.56	-0.17	0.38	-1.05	-0.96	-0.31	-1.02	-1.25	-0.74	0.04
16	-0.89	-0.58	0.87	-0.19	0.11	0.78	-0.71	-0.41	0.34	-0.31	0.05	0.37	-0.01	0.49	-0.64	-0.30	-0.01	0.22	-1.29	-0.74	-0.25
17	0.22	0.83	-1.06	-0.83	-0.32	-0.25	-0.25	-0.11	1.25	-1.53	-1.03	-0.79	-0.76	-0.33	0.06	-0.56	0.12	-1.15	-1.15	-0.69	0.46
18	0.09	0.67	-0.87	-0.35	0.18	-0.27	-0.04	0.41	-0.44	-0.41	-0.01	0.03	-0.98	-0.65	0.87	0.60	0.94	0.51	-0.25	0.13	1.17
19	-0.87	-0.32	-0.69	0.12	0.39	0.89	-1.21	-0.52	-1.81	0.16	0.74	-1.41	-0.04	0.58	-1.71	0.26	0.67	-2.52	-1.04	-0.27	-2.13
20	-0.01	0.39	0.25	0.09	0.69	-0.64	0.15	0.65	-0.76	-0.11	0.09	1.64	-0.87	-0.50	0.57	-1.29	-0.81	1.74	-1.00	-0.21	-2.28
21	-0.58	0.03	-1.06	-0.19	0.57	-1.40	0.02	0.21	0.94	-0.34	0.21	-1.17	-1.14	-0.59	-1.00	-0.94	-0.47	0.47	-0.81	-0.33	0.34
22	-0.98	-0.50	-0.24	-0.23	0.12	0.52	-0.69	-0.24	-0.47	-0.77	-0.18	-1.42	-0.34	-0.00	0.82	-0.92	-0.48	-0.87	-1.08	-0.62	0.47

	3			4			5			6			7			8			11		
Item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
23	-1.16	-0.76	0.28	-0.39	-0.16	1.04	-0.82	-0.46	-0.00	0.55	0.90	0.37	-0.60	-0.09	-0.70	-0.91	-0.36	-2.14	0.48	1.10	-0.87
24	-0.37	0.22	-0.95	-1.25	-0.73	-0.25	0.54	0.83	0.38	-0.31	0.15	-0.51	-0.43	-0.00	0.01	-1.12	-0.50	-0.32	-0.40	0.11	0.07
25	-0.56	-0.06	-0.37	-0.16	0.37	-0.33	0.49	0.94	-0.44	0.08	0.51	-0.19	-1.03	-0.70	0.87	-0.52	0.19	2.44	-0.19	0.39	-0.50
26	-0.66	0.02	-1.52	0.43	0.86	0.14	0.21	0.46	0.66	-0.62	-0.19	-0.20	-0.29	0.05	0.80	-1.07	-0.69	-0.63	-0.40	0.27	-1.28
27	-1.27	-0.86	0.27	0.73	1.06	0.60	0.00	0.51	-0.81	-1.55	-1.02	-1.00	-0.90	-0.47	0.01	-1.33	-0.84	-0.63	-0.27	0.55	-2.58
28	0.34	0.76	0.16	0.40	0.84	0.11	-1.33	-0.86	-0.59	0.36	0.72	0.28	-0.09	0.41	-0.55	-0.32	0.15	-0.11	-0.17	0.32	0.25
29	-1.66	-0.81	-2.69	0.33	0.58	0.96	0.83	1.08	0.61	-1.11	-0.67	-0.25	-0.38	-0.01	0.55	0.14	0.54	-0.58	0.11	0.39	2.02
30	-0.39	-0.07	0.78	-0.72	-0.04	-1.03	-1.13	-0.95	1.02	-1.67	-1.05	-1.72	-0.11	0.25	0.59	0.20	0.56	-1.30	-0.71	-0.19	-0.03
31	-0.29	0.22	-0.39	-0.47	-0.23	1.02	-0.83	-0.38	-0.53	0.02	0.41	0.09	-1.06	-0.53	-0.80	-0.66	-0.08	0.68	0.14	0.30	3.05
32	-1.11	-0.75	0.55	-0.12	0.18	0.75	0.59	0.68	1.51	-0.87	-0.42	-0.40	0.76	1.03	1.39	-0.10	0.27	-1.15	-0.51	0.09	-0.71
33	0.33	0.98	-1.31	-0.38	0.32	-1.12	-0.54	0.05	-1.29	-0.12	0.32	-0.26	-0.14	0.24	0.44	-0.23	0.35	1.69	-1.09	-0.52	-0.42
34	0.13	0.37	1.35	-0.44	-0.07	0.46	-0.49	-0.31	1.02	1.12	1.29	1.86	-0.64	-0.16	-0.43	-1.22	-0.77	-1.39	0.49	1.15	-1.15
35	0.22	0.44	1.51	-0.68	-0.03	-0.84	-0.81	-0.63	1.05	-0.97	-0.52	-0.34	-0.83	-0.22	-1.56	-0.68	-0.31	1.32	0.53	1.12	-0.60
36	-1.29	-0.85	0.07	-0.66	-0.13	-0.30	-0.42	-0.14	0.46	-0.50	-0.20	0.79	-0.62	-0.47	2.43	-0.44	0.08	0.71	-0.54	0.03	-0.46
37	0.86	1.58	-1.76	0.03	0.34	0.72	-0.26	0.07	0.19	-0.71	-0.35	0.38	-1.00	-0.50	-0.64	-0.04	0.40	0.11	0.41	0.94	-0.02
38	-0.13	0.27	0.33	-0.65	-0.21	0.15	0.03	0.44	-0.27	-0.90	-0.56	0.49	-1.35	-0.94	0.15	0.44	0.67	0.29	-0.44	0.17	-0.81
39	-0.90	-0.42	-0.18	-0.15	0.32	-0.05	-1.65	-1.13	-0.86	-0.27	0.17	-0.29	-1.32	-0.81	-0.65	-1.08	-0.61	0.47	-0.45	0.05	0.10
40	-0.61	-0.28	0.78	-1.44	-0.93	-0.19	-1.25	-0.84	-0.28	-0.14	0.19	0.63	-0.99	-0.55	-0.01	-1.26	-0.92	-0.38	0.28	0.87	-0.61
41	-0.36	-0.05	0.86	-0.90	-0.50	0.28	-0.43	-0.08	0.08	0.84	1.14	0.88	-0.60	-0.11	-0.51	-0.04	0.44	-0.96	0.39	0.96	-0.45
42	-0.27	0.21	-0.23	-1.57	-0.97	-0.63	-0.96	-0.33	-1.48	0.62	0.97	0.36	-1.28	-0.72	-1.13	-0.56	-0.05	-1.63	0.01	0.58	-0.38
43	-0.73	-0.27	-0.14	-1.27	-0.75	-0.28	-1.65	-1.29	0.00	-0.07	0.24	0.76	-0.74	-0.36	0.41	0.01	0.71	0.95	0.03	0.43	0.97
44	0.15	0.58	0.11	-0.24	0.17	0.27	-0.87	-0.44	-0.36	-0.83	-0.51	0.73	0.12	0.62	-0.55	0.30	0.84	0.10	-0.42	0.16	-0.55
45	-0.71	-0.20	-0.46	-0.36	0.02	0.35	-0.43	-0.02	-0.25	-0.33	0.08	-0.03	-0.23	0.04	1.31	0.36	0.92	0.26	-0.70	-0.21	0.30
46	-1.18	-0.71	-0.13	-0.18	0.48	-0.93	-1.04	-0.61	-0.37	-1.01	-0.45	-1.21	-0.30	0.01	1.01	-0.89	-0.15	0.77	-0.50	0.01	0.10
47	0.11	0.57	-0.08	-1.34	-1.10	1.01	-0.11	0.54	-1.59	-0.45	0.08	-1.01	0.23	0.55	0.95	-0.77	-0.36	1.14	-0.85	-0.39	0.47
48	-0.48	-0.02	-0.07	-0.30	-0.03	0.87	-0.07	0.25	0.23	-0.66	-0.35	0.70	-0.56	-0.17	0.41	-0.17	0.35	-0.63	-1.33	-0.88	0.55
49	-0.48	0.07	-0.67	0.87	1.27	0.28	-0.33	-0.15	1.02	-0.58	-0.12	-0.44	0.75	1.11	0.58	-1.28	-0.44	1.04	-0.50	-0.07	0.81
50	1.03	1.64	-1.12	0.06	0.53	0.00	-0.09	0.14	0.76	-0.96	-0.51	-0.35	-0.08	0.35	-0.03	-0.13	0.39	-0.56	-0.14	0.18	1.66
51				-1.09	-0.44	-0.86	0.33	0.58	0.66	-0.64	-0.31	0.65	0.03	0.43	0.26	-0.22	0.20	0.37	-1.30	-0.86	0.66
52				-0.32	0.22	-0.39	0.40	0.56	1.07	-0.48	-0.04	-0.24	0.48	0.70	1.83	-0.06	0.48	1.01	-0.60	-0.07	-0.09

	3			4			5			6			7			8			11		
Item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
53				-0.36	0.31	-0.93	-1.31	-0.96	0.03	-0.23	0.13	0.32	-0.97	-0.53	-0.12	0.80	1.16	-0.17	-0.18	0.34	-0.03
54				0.90	1.34	0.07	0.37	0.69	0.23	0.02	0.35	0.59	0.64	0.94	1.20	-0.00	0.26	0.50	-1.17	-0.71	0.50
55				-0.37	0.20	-0.48	-1.59	-1.29	0.33	0.19	0.34	2.05	-1.28	-0.81	-0.34	-0.85	-0.16	2.16	-1.20	-0.65	-0.24
56										0.02	0.31	0.94	-0.04	0.40	-0.09	-0.28	0.24	0.29	-0.40	0.59	-4.07
57										-0.01	0.42	-0.18	0.15	0.45	1.17	0.90	1.19	1.28	0.31	0.97	-1.19
58										-0.79	-0.27	-0.94	-0.47	-0.00	-0.32	0.14	0.64	0.18	-0.49	-0.10	1.09
59																-0.54	0.07	-0.04	-0.07	0.11	2.92
60																-0.08	0.43	-1.61	-0.13	0.49	-0.79
Mean	-0.44	0.00		-0.46	0.00		-0.37	0.00		-0.39	0.00		-0.44	0.00		-0.50	0.00		-0.52	0.00	
Corr	0.956			0.941			0.966			0.977			0.973			0.974			0.963		
SD	0.62	0.62		0.62	0.57		0.65	0.60		0.61	0.58		0.55	0.52		0.61	0.57		0.55	0.57	
Ratio	1.01			0.92			0.94			0.95			0.94			0.94			1.04		

Appendix P: Science Pre- and Post-Equating Summary

The Pre- values were taken from the calibrated item bank. The Post- values were taken directly from unanchored calibration runs. The correlation and SD ratio are from the first linking using all the items, items with large Z were removed from subsequent linking sets until the Robust criteria was met, or other stopping criteria reached.

	5			8			11		
Item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
1	-0.29	0.40	0.13	-1.23	-0.53	0.00	-0.63	0.07	-0.37
2	-0.67	0.23	-1.18	-0.62	-0.07	1.04	-0.42	0.10	1.37
3	-0.72	0.26	-1.75	-0.13	0.41	1.04	-0.08	0.21	3.53
4	-1.07	-0.46	0.67	-0.49	0.03	1.28	-0.94	-0.18	-1.04
5	-0.62	0.27	-1.13	-1.08	-0.75	2.49	-1.07	-0.44	0.25
6	-1.01	0.13	-2.74	0.78	1.20	1.86	-0.86	-0.17	-0.38
7	-0.80	-0.27	1.18	0.29	1.06	-0.44	-0.42	0.44	-2.03
8	-0.40	0.32	-0.02	-0.71	0.11	-0.71	-0.60	-0.12	1.64
9	-0.81	-0.14	0.30	-0.41	0.14	1.01	-0.16	0.68	-1.82
10	0.05	1.06	-1.90	-1.18	-0.50	0.17	-0.66	-0.04	0.34
11	0.18	0.49	2.58	0.06	0.89	-0.77	-1.47	-0.69	-1.29
12	-0.94	0.14	-2.35	-0.82	-0.14	0.16	-0.92	-0.34	0.80
13	-0.66	0.12	-0.45	-1.53	-0.72	-0.66	-0.22	0.41	0.19
14	-1.36	-0.38	-1.72	-0.75	0.25	-1.88	0.68	1.23	0.99
15	0.14	0.58	1.75	-0.19	0.69	-1.13	-0.84	-0.02	-1.56
16	-0.15	0.80	-1.50	-0.14	0.86	-1.92	-1.32	-0.66	-0.05
17	-1.05	-0.26	-0.49	-0.76	-0.14	0.54	-1.05	-0.40	0.01
18	0.03	0.80	-0.31	-0.53	0.20	-0.18	-1.05	-0.70	2.97
19	-0.55	0.25	-0.49	-1.54	-0.63	-1.29	-2.16	-1.70	1.88
20	0.61	1.38	-0.33	-0.13	0.97	-2.52	0.37	1.08	-0.54
21	-1.43	-0.56	-1.00	0.31	1.08	-0.39	-0.74	-0.45	3.63
22	-0.70	0.04	-0.15	-0.43	0.35	-0.43	-0.18	0.65	-1.73

	5			8			11		
Item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
23	0.56	1.01	1.72	-1.22	-0.49	-0.09	-0.15	0.52	-0.16
24	-1.39	-0.56	-0.74	-1.23	-0.30	-1.42	0.64	1.27	0.28
25	-0.51	0.13	0.51	-0.12	0.84	-1.67	-1.16	-0.45	-0.59
26	-1.60	-0.93	0.25	-0.06	0.23	2.69	-0.38	0.35	-0.73
27	0.11	0.73	0.58	-0.59	-0.01	0.84	-0.76	-0.18	0.67
28	-1.34	-0.51	-0.76	-0.18	0.28	1.58	-0.32	0.35	-0.19
29	-1.94	-1.23	0.02	-0.70	-0.02	0.20	-1.59	-1.18	2.40
30	-1.07	-0.30	-0.40	-2.14	-1.33	-0.68	-0.63	-0.01	0.31
31	-1.64	-0.80	-0.82	-0.32	0.50	-0.75	-1.59	-0.95	0.07
32	-1.48	-0.85	0.55	-0.38	0.29	0.21	-0.45	0.23	-0.26
33	-0.97	-0.26	0.05	0.09	0.72	0.50	-0.25	0.14	2.67
34	-0.80	-0.12	0.23	-1.41	-0.57	-0.80	0.57	1.11	1.10
35	-1.36	-0.70	0.30	-0.56	0.06	0.55	-1.10	-0.39	-0.59
36	-1.09	-0.40	0.12	-1.14	-0.44	0.05	-0.40	0.30	-0.44
37	0.12	0.94	-0.69	-1.11	-0.32	-0.54	-0.92	-0.33	0.60
38	-1.08	-0.60	1.54	-1.27	-0.84	1.86	-1.24	-0.73	1.44
39	0.72	1.29	0.91	-0.62	-0.01	0.65	0.08	0.88	-1.37
40	-0.46	0.09	1.06	-0.69	-0.17	1.19	-1.87	-1.08	-1.30
41	-2.11	-1.32	-0.46	-1.09	-0.46	0.47	-0.29	0.31	0.54
42	-0.10	0.40	1.39	-1.12	-0.41	-0.00	-1.72	-1.08	0.15
43	-0.82	-0.01	-0.61	-0.38	0.02	1.98	0.89	1.57	-0.23
44	-1.88	-1.02	-0.93	-0.19	0.49	0.19	-0.83	-0.25	0.75
45	-0.42	0.22	0.45	-0.43	0.53	-1.67	-0.61	0.04	0.08
46	-1.24	-0.66	0.84	-1.05	-0.34	-0.01	0.36	1.37	-3.48
47	0.12	0.74	0.60	-1.95	-1.10	-0.93	0.06	0.70	0.13
48	-1.59	-0.89	0.09	-1.91	-1.19	-0.08	-1.20	-0.57	0.16
49	-1.65	-1.04	0.65	-2.37	-1.74	0.54	-1.82	-1.02	-1.41
50	0.59	1.41	-0.68	-0.55	0.17	-0.07	-0.56	0.09	-0.00
51				0.29	0.80	1.29	-0.49	0.19	-0.26
52				-1.48	-0.77	-0.03	-0.97	-0.17	-1.43

	5			8			11		
Item	Pre	Post	Z	Pre	Post	Z	Pre	Post	Z
53				-1.08	-0.35	-0.11	-1.32	-0.67	0.00
54				-1.16	-0.37	-0.54	-0.33	0.37	-0.47
55				-1.48	-0.97	1.27	-0.95	-0.12	-1.72
56				-0.02	0.61	0.53	-0.28	0.23	1.40
57				0.28	0.76	1.45	0.33	1.05	-0.68
58				-0.48	0.19	0.29	-0.66	-0.12	1.17
59				-1.04	-0.28	-0.29	-1.38	-0.57	-1.50
60				0.54	1.25	-0.00	-0.83	-0.17	-0.02
Mean	-0.73	0.00		-0.69	0.00		-0.65	0.00	
Corr		0.972			0.969			0.979	
SD	0.72	0.70		0.67	0.66		0.66	0.68	
Ratio		0.97			0.99			1.03	

Appendix Q: Reading Raw-to-Scale Conversion Tables and Distributions of Ability

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 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 table is a 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.

Grade 3

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	3	Read	0	1	0.0	1	0.0	1	1	52
Spr 2016	3	Read	1	0	0.0	1	0.0	1	1	29
Spr 2016	3	Read	2	0	0.0	1	0.0	1	3	21
Spr 2016	3	Read	3	2	0.0	3	0.0	1	16	17
Spr 2016	3	Read	4	0	0.0	3	0.0	1	25	15
Spr 2016	3	Read	5	14	0.1	17	0.1	1	32	14
Spr 2016	3	Read	6	17	0.1	34	0.2	1	39	13
Spr 2016	3	Read	7	45	0.2	79	0.4	1	44	12
Spr 2016	3	Read	8	68	0.3	147	0.7	1	49	12
Spr 2016	3	Read	9	126	0.6	273	1.2	1	53	11
Spr 2016	3	Read	10	152	0.7	425	1.9	2	58	11
Spr 2016	3	Read	11	206	0.9	631	2.9	2	61	10
Spr 2016	3	Read	12	281	1.3	912	4.2	4	65	10
Spr 2016	3	Read	13	319	1.5	1231	5.6	5	69	10
Spr 2016	3	Read	14	366	1.7	1597	7.3	6	72	10
Spr 2016	3	Read	15	413	1.9	2010	9.2	8	75	9
Spr 2016	3	Read	16	435	2.0	2445	11.2	10	78	9
Spr 2016	3	Read	17	445	2.0	2890	13.2	12	81	9

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	3	Read	18	489	2.2	3379	15.4	14	84	9
Spr 2016	3	Read	19	466	2.1	3845	17.6	16	87	9
Spr 2016	3	Read	20	497	2.3	4342	19.8	19	90	9
Spr 2016	3	Read	21	552	2.5	4894	22.4	21	93	9
Spr 2016	3	Read	22	566	2.6	5460	24.9	24	96	9
Spr 2016	3	Read	23	558	2.5	6018	27.5	26	98	9
Spr 2016	3	Read	24	651	3.0	6669	30.5	29	101	9
Spr 2016	3	Read	25	650	3.0	7319	33.4	32	104	9
Spr 2016	3	Read	26	699	3.2	8018	36.6	35	107	9
Spr 2016	3	Read	27	723	3.3	8741	39.9	38	110	9
Spr 2016	3	Read	28	740	3.4	9481	43.3	42	113	9
Spr 2016	3	Read	29	775	3.5	10256	46.8	45	116	9
Spr 2016	3	Read	30	832	3.8	11088	50.6	49	119	9
Spr 2016	3	Read	31	874	4.0	11962	54.6	53	122	10
Spr 2016	3	Read	32	879	4.0	12841	58.7	57	125	10
Spr 2016	3	Read	33	868	4.0	13709	62.6	61	129	10
Spr 2016	3	Read	34	945	4.3	14654	66.9	65	133	10
Spr 2016	3	Read	35	870	4.0	15524	70.9	69	136	11
Spr 2016	3	Read	36	998	4.6	16522	75.5	73	141	11
Spr 2016	3	Read	37	951	4.3	17473	79.8	78	145	12
Spr 2016	3	Read	38	915	4.2	18388	84.0	82	150	12
Spr 2016	3	Read	39	882	4.0	19270	88.0	86	155	13
Spr 2016	3	Read	40	834	3.8	20104	91.8	90	161	14
Spr 2016	3	Read	41	668	3.1	20772	94.9	93	169	15
Spr 2016	3	Read	42	538	2.5	21310	97.3	96	178	17
Spr 2016	3	Read	43	350	1.6	21660	98.9	98	191	21
Spr 2016	3	Read	44	186	0.8	21846	99.8	99	200	29
Spr 2016	3	Read	45	47	0.2	21893	100.0	99	200	52

Grade 4

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	4	Read	0	0	0.0	0	0.0	0	1	67
Spr 2016	4	Read	1	0	0.0	0	0.0	0	1	37
Spr 2016	4	Read	2	1	0.0	1	0.0	1	1	27
Spr 2016	4	Read	3	1	0.0	2	0.0	1	1	22
Spr 2016	4	Read	4	0	0.0	2	0.0	1	3	20
Spr 2016	4	Read	5	9	0.0	11	0.0	1	12	18
Spr 2016	4	Read	6	17	0.1	28	0.1	1	20	16
Spr 2016	4	Read	7	14	0.1	42	0.2	1	27	16
Spr 2016	4	Read	8	37	0.2	79	0.3	1	33	15
Spr 2016	4	Read	9	70	0.3	149	0.6	1	39	14
Spr 2016	4	Read	10	96	0.4	245	1.1	1	44	14
Spr 2016	4	Read	11	158	0.7	403	1.7	1	49	13
Spr 2016	4	Read	12	212	0.9	615	2.7	2	54	13
Spr 2016	4	Read	13	258	1.1	873	3.8	3	58	13
Spr 2016	4	Read	14	318	1.4	1191	5.2	4	63	12
Spr 2016	4	Read	15	337	1.5	1528	6.6	6	67	12
Spr 2016	4	Read	16	371	1.6	1899	8.2	7	71	12
Spr 2016	4	Read	17	429	1.9	2328	10.1	9	74	12
Spr 2016	4	Read	18	488	2.1	2816	12.2	11	78	12
Spr 2016	4	Read	19	525	2.3	3341	14.5	13	82	12
Spr 2016	4	Read	20	600	2.6	3941	17.1	16	85	11
Spr 2016	4	Read	21	590	2.6	4531	19.7	18	89	11
Spr 2016	4	Read	22	683	3.0	5214	22.6	21	93	11
Spr 2016	4	Read	23	683	3.0	5897	25.6	24	96	11
Spr 2016	4	Read	24	803	3.5	6700	29.1	27	100	11
Spr 2016	4	Read	25	778	3.4	7478	32.5	31	103	11
Spr 2016	4	Read	26	860	3.7	8338	36.2	34	107	12

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	4	Read	27	818	3.6	9156	39.7	38	111	12
Spr 2016	4	Read	28	926	4.0	10082	43.8	42	114	12
Spr 2016	4	Read	29	937	4.1	11019	47.8	46	118	12
Spr 2016	4	Read	30	993	4.3	12012	52.1	50	122	12
Spr 2016	4	Read	31	947	4.1	12959	56.3	54	126	12
Spr 2016	4	Read	32	937	4.1	13896	60.3	58	130	12
Spr 2016	4	Read	33	994	4.3	14890	64.6	62	135	13
Spr 2016	4	Read	34	982	4.3	15872	68.9	67	139	13
Spr 2016	4	Read	35	1005	4.4	16877	73.3	71	144	13
Spr 2016	4	Read	36	924	4.0	17801	77.3	75	149	14
Spr 2016	4	Read	37	948	4.1	18749	81.4	79	155	15
Spr 2016	4	Read	38	959	4.2	19708	85.5	83	161	15
Spr 2016	4	Read	39	873	3.8	20581	89.3	87	168	16
Spr 2016	4	Read	40	753	3.3	21334	92.6	91	176	18
Spr 2016	4	Read	41	651	2.8	21985	95.4	94	185	19
Spr 2016	4	Read	42	461	2.0	22446	97.4	96	197	22
Spr 2016	4	Read	43	360	1.6	22806	99.0	98	200	27
Spr 2016	4	Read	44	172	0.7	22978	99.7	99	200	37
Spr 2016	4	Read	45	60	0.3	23038	100.0	99	200	67

Grade 5

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Read	0	1	0.0	1	0.0	1	1	72
Spr 2016	5	Read	1	3	0.0	4	0.0	1	1	40
Spr 2016	5	Read	2	0	0.0	4	0.0	1	1	29
Spr 2016	5	Read	3	0	0.0	4	0.0	1	1	24
Spr 2016	5	Read	4	1	0.0	5	0.0	1	1	21
Spr 2016	5	Read	5	2	0.0	7	0.0	1	2	19
Spr 2016	5	Read	6	7	0.0	14	0.1	1	10	18

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Read	7	19	0.1	33	0.1	1	18	17
Spr 2016	5	Read	8	22	0.1	55	0.2	1	24	16
Spr 2016	5	Read	9	66	0.3	121	0.5	1	30	15
Spr 2016	5	Read	10	72	0.3	193	0.9	1	36	15
Spr 2016	5	Read	11	117	0.5	310	1.4	1	41	14
Spr 2016	5	Read	12	181	0.8	491	2.2	2	46	14
Spr 2016	5	Read	13	177	0.8	668	2.9	3	51	13
Spr 2016	5	Read	14	216	1.0	884	3.9	3	55	13
Spr 2016	5	Read	15	250	1.1	1134	5.0	4	59	13
Spr 2016	5	Read	16	292	1.3	1426	6.3	6	63	13
Spr 2016	5	Read	17	354	1.6	1780	7.8	7	67	12
Spr 2016	5	Read	18	345	1.5	2125	9.4	9	71	12
Spr 2016	5	Read	19	380	1.7	2505	11.0	10	75	12
Spr 2016	5	Read	20	384	1.7	2889	12.7	12	79	12
Spr 2016	5	Read	21	412	1.8	3301	14.5	14	83	12
Spr 2016	5	Read	22	422	1.9	3723	16.4	15	86	12
Spr 2016	5	Read	23	502	2.2	4225	18.6	18	90	12
Spr 2016	5	Read	24	518	2.3	4743	20.9	20	94	12
Spr 2016	5	Read	25	555	2.4	5298	23.3	22	97	12
Spr 2016	5	Read	26	557	2.5	5855	25.8	25	101	12
Spr 2016	5	Read	27	640	2.8	6495	28.6	27	105	12
Spr 2016	5	Read	28	654	2.9	7149	31.5	30	108	12
Spr 2016	5	Read	29	766	3.4	7915	34.9	33	112	12
Spr 2016	5	Read	30	743	3.3	8658	38.1	37	116	12
Spr 2016	5	Read	31	818	3.6	9476	41.8	40	120	12
Spr 2016	5	Read	32	859	3.8	10335	45.5	44	124	13
Spr 2016	5	Read	33	890	3.9	11225	49.5	47	128	13
Spr 2016	5	Read	34	908	4.0	12133	53.5	51	132	13
Spr 2016	5	Read	35	935	4.1	13068	57.6	56	137	13
Spr 2016	5	Read	36	994	4.4	14062	62.0	60	141	14

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Read	37	1004	4.4	15066	66.4	64	146	14
Spr 2016	5	Read	38	1105	4.9	16171	71.3	69	151	15
Spr 2016	5	Read	39	1054	4.6	17225	75.9	74	157	15
Spr 2016	5	Read	40	1062	4.7	18287	80.6	78	163	16
Spr 2016	5	Read	41	971	4.3	19258	84.9	83	170	17
Spr 2016	5	Read	42	888	3.9	20146	88.8	87	177	18
Spr 2016	5	Read	43	812	3.6	20958	92.3	91	186	19
Spr 2016	5	Read	44	734	3.2	21692	95.6	94	196	21
Spr 2016	5	Read	45	501	2.2	22193	97.8	97	200	24
Spr 2016	5	Read	46	309	1.4	22502	99.1	98	200	29
Spr 2016	5	Read	47	153	0.7	22655	99.8	99	200	40
Spr 2016	5	Read	48	40	0.2	22695	100.0	99	200	72

Grade 6

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	6	Read	0	0	0.0	0	0.0	0	1	69
Spr 2016	6	Read	1	1	0.0	1	0.0	1	1	38
Spr 2016	6	Read	2	0	0.0	1	0.0	1	1	28
Spr 2016	6	Read	3	0	0.0	1	0.0	1	1	23
Spr 2016	6	Read	4	0	0.0	1	0.0	1	1	20
Spr 2016	6	Read	5	2	0.0	3	0.0	1	2	18
Spr 2016	6	Read	6	7	0.0	10	0.0	1	10	17
Spr 2016	6	Read	7	9	0.0	19	0.1	1	18	16
Spr 2016	6	Read	8	26	0.1	45	0.2	1	24	15
Spr 2016	6	Read	9	42	0.2	87	0.4	1	30	14
Spr 2016	6	Read	10	82	0.4	169	0.7	1	35	14
Spr 2016	6	Read	11	117	0.5	286	1.2	1	40	14
Spr 2016	6	Read	12	178	0.8	464	2.0	2	45	13
Spr 2016	6	Read	13	232	1.0	696	3.0	3	49	13

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	6	Read	14	216	0.9	912	4.0	4	54	13
Spr 2016	6	Read	15	290	1.3	1202	5.2	5	58	12
Spr 2016	6	Read	16	319	1.4	1521	6.6	6	62	12
Spr 2016	6	Read	17	331	1.4	1852	8.1	7	66	12
Spr 2016	6	Read	18	329	1.4	2181	9.5	9	69	12
Spr 2016	6	Read	19	403	1.8	2584	11.3	10	73	12
Spr 2016	6	Read	20	419	1.8	3003	13.1	12	77	12
Spr 2016	6	Read	21	457	2.0	3460	15.1	14	80	12
Spr 2016	6	Read	22	474	2.1	3934	17.2	16	84	12
Spr 2016	6	Read	23	506	2.2	4440	19.4	18	87	12
Spr 2016	6	Read	24	579	2.5	5019	21.9	21	91	12
Spr 2016	6	Read	25	566	2.5	5585	24.4	23	94	12
Spr 2016	6	Read	26	609	2.7	6194	27.0	26	98	12
Spr 2016	6	Read	27	644	2.8	6838	29.8	28	102	12
Spr 2016	6	Read	28	714	3.1	7552	33.0	31	105	12
Spr 2016	6	Read	29	769	3.4	8321	36.3	35	109	12
Spr 2016	6	Read	30	780	3.4	9101	39.7	38	112	12
Spr 2016	6	Read	31	796	3.5	9897	43.2	41	116	12
Spr 2016	6	Read	32	882	3.8	10779	47.0	45	120	12
Spr 2016	6	Read	33	910	4.0	11689	51.0	49	124	12
Spr 2016	6	Read	34	864	3.8	12553	54.8	53	128	13
Spr 2016	6	Read	35	968	4.2	13521	59.0	57	132	13
Spr 2016	6	Read	36	934	4.1	14455	63.1	61	137	13
Spr 2016	6	Read	37	959	4.2	15414	67.3	65	141	13
Spr 2016	6	Read	38	936	4.1	16350	71.4	69	146	14
Spr 2016	6	Read	39	964	4.2	17314	75.6	73	152	14
Spr 2016	6	Read	40	1000	4.4	18314	79.9	78	158	15
Spr 2016	6	Read	41	883	3.9	19197	83.8	82	164	16
Spr 2016	6	Read	42	888	3.9	20085	87.7	86	171	17
Spr 2016	6	Read	43	804	3.5	20889	91.2	89	179	18

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	6	Read	44	742	3.2	21631	94.4	93	189	20
Spr 2016	6	Read	45	624	2.7	22255	97.1	96	200	23
Spr 2016	6	Read	46	377	1.6	22632	98.8	98	200	28
Spr 2016	6	Read	47	224	1.0	22856	99.7	99	200	38
Spr 2016	6	Read	48	59	0.3	22915	100.0	99	200	69

Grade 7

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	7	Read	0	0	0.0	0	0.0	0	1	71
Spr 2016	7	Read	1	0	0.0	0	0.0	0	1	39
Spr 2016	7	Read	2	1	0.0	1	0.0	1	1	28
Spr 2016	7	Read	3	0	0.0	1	0.0	1	1	23
Spr 2016	7	Read	4	0	0.0	1	0.0	1	1	21
Spr 2016	7	Read	5	4	0.0	5	0.0	1	6	19
Spr 2016	7	Read	6	11	0.0	16	0.1	1	14	17
Spr 2016	7	Read	7	15	0.1	31	0.1	1	22	16
Spr 2016	7	Read	8	39	0.2	70	0.3	1	28	16
Spr 2016	7	Read	9	60	0.3	130	0.6	1	34	15
Spr 2016	7	Read	10	105	0.5	235	1.0	1	40	14
Spr 2016	7	Read	11	119	0.5	354	1.6	1	45	14
Spr 2016	7	Read	12	182	0.8	536	2.4	2	50	14
Spr 2016	7	Read	13	225	1.0	761	3.4	3	54	13
Spr 2016	7	Read	14	276	1.2	1037	4.6	4	59	13
Spr 2016	7	Read	15	301	1.3	1338	5.9	5	63	13
Spr 2016	7	Read	16	341	1.5	1679	7.4	7	67	13
Spr 2016	7	Read	17	352	1.6	2031	9.0	8	71	12
Spr 2016	7	Read	18	381	1.7	2412	10.7	10	75	12
Spr 2016	7	Read	19	434	1.9	2846	12.6	12	79	12
Spr 2016	7	Read	20	455	2.0	3301	14.6	14	83	12

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	7	Read	21	483	2.1	3784	16.7	16	87	12
Spr 2016	7	Read	22	493	2.2	4277	18.9	18	90	12
Spr 2016	7	Read	23	524	2.3	4801	21.2	20	94	12
Spr 2016	7	Read	24	533	2.4	5334	23.6	22	98	12
Spr 2016	7	Read	25	592	2.6	5926	26.2	25	102	12
Spr 2016	7	Read	26	587	2.6	6513	28.8	28	105	12
Spr 2016	7	Read	27	660	2.9	7173	31.7	30	109	12
Spr 2016	7	Read	28	689	3.0	7862	34.8	33	113	12
Spr 2016	7	Read	29	710	3.1	8572	37.9	36	117	12
Spr 2016	7	Read	30	772	3.4	9344	41.3	40	120	12
Spr 2016	7	Read	31	848	3.8	10192	45.1	43	124	12
Spr 2016	7	Read	32	888	3.9	11080	49.0	47	128	13
Spr 2016	7	Read	33	879	3.9	11959	52.9	51	133	13
Spr 2016	7	Read	34	1002	4.4	12961	57.3	55	137	13
Spr 2016	7	Read	35	940	4.2	13901	61.5	59	141	13
Spr 2016	7	Read	36	1003	4.4	14904	65.9	64	146	14
Spr 2016	7	Read	37	1038	4.6	15942	70.5	68	151	14
Spr 2016	7	Read	38	1085	4.8	17027	75.3	73	156	14
Spr 2016	7	Read	39	1013	4.5	18040	79.8	78	162	15
Spr 2016	7	Read	40	968	4.3	19008	84.1	82	168	16
Spr 2016	7	Read	41	901	4.0	19909	88.1	86	175	16
Spr 2016	7	Read	42	900	4.0	20809	92.0	90	182	18
Spr 2016	7	Read	43	696	3.1	21505	95.1	94	191	19
Spr 2016	7	Read	44	493	2.2	21998	97.3	96	200	21
Spr 2016	7	Read	45	336	1.5	22334	98.8	98	200	24
Spr 2016	7	Read	46	189	0.8	22523	99.6	99	200	28
Spr 2016	7	Read	47	70	0.3	22593	99.9	99	200	39
Spr 2016	7	Read	48	16	0.1	22609	100.0	99	200	71

Grade 8

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Read	0	0	0.0	0	0.0	0	1	68
Spr 2016	8	Read	1	1	0.0	1	0.0	1	1	38
Spr 2016	8	Read	2	1	0.0	2	0.0	1	1	27
Spr 2016	8	Read	3	0	0.0	2	0.0	1	1	22
Spr 2016	8	Read	4	0	0.0	2	0.0	1	1	20
Spr 2016	8	Read	5	0	0.0	2	0.0	1	1	18
Spr 2016	8	Read	6	4	0.0	6	0.0	1	5	16
Spr 2016	8	Read	7	5	0.0	11	0.0	1	12	15
Spr 2016	8	Read	8	12	0.1	23	0.1	1	18	15
Spr 2016	8	Read	9	39	0.2	62	0.3	1	24	14
Spr 2016	8	Read	10	69	0.3	131	0.6	1	29	14
Spr 2016	8	Read	11	72	0.3	203	0.9	1	34	13
Spr 2016	8	Read	12	132	0.6	335	1.5	1	38	13
Spr 2016	8	Read	13	168	0.8	503	2.3	2	42	12
Spr 2016	8	Read	14	201	0.9	704	3.2	3	47	12
Spr 2016	8	Read	15	198	0.9	902	4.1	4	50	12
Spr 2016	8	Read	16	265	1.2	1167	5.3	5	54	12
Spr 2016	8	Read	17	285	1.3	1452	6.5	6	58	12
Spr 2016	8	Read	18	295	1.3	1747	7.9	7	62	11
Spr 2016	8	Read	19	314	1.4	2061	9.3	9	65	11
Spr 2016	8	Read	20	329	1.5	2390	10.8	10	69	11
Spr 2016	8	Read	21	399	1.8	2789	12.5	12	72	11
Spr 2016	8	Read	22	423	1.9	3212	14.5	14	75	11
Spr 2016	8	Read	23	449	2.0	3661	16.5	15	79	11
Spr 2016	8	Read	24	442	2.0	4103	18.5	17	82	11
Spr 2016	8	Read	25	464	2.1	4567	20.5	20	85	11
Spr 2016	8	Read	26	487	2.2	5054	22.7	22	89	11
Spr 2016	8	Read	27	565	2.5	5619	25.3	24	92	11

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Read	28	590	2.7	6209	27.9	27	95	11
Spr 2016	8	Read	29	660	3.0	6869	30.9	29	99	11
Spr 2016	8	Read	30	672	3.0	7541	33.9	32	102	11
Spr 2016	8	Read	31	748	3.4	8289	37.3	36	106	11
Spr 2016	8	Read	32	808	3.6	9097	40.9	39	109	12
Spr 2016	8	Read	33	863	3.9	9960	44.8	43	113	12
Spr 2016	8	Read	34	896	4.0	10856	48.8	47	117	12
Spr 2016	8	Read	35	902	4.1	11758	52.9	51	121	12
Spr 2016	8	Read	36	990	4.5	12748	57.4	55	125	12
Spr 2016	8	Read	37	951	4.3	13699	61.6	60	129	13
Spr 2016	8	Read	38	1025	4.6	14724	66.3	64	133	13
Spr 2016	8	Read	39	995	4.5	15719	70.7	68	138	13
Spr 2016	8	Read	40	1021	4.6	16740	75.3	73	143	14
Spr 2016	8	Read	41	980	4.4	17720	79.7	78	148	14
Spr 2016	8	Read	42	950	4.3	18670	84.0	82	154	15
Spr 2016	8	Read	43	799	3.6	19469	87.6	86	160	16
Spr 2016	8	Read	44	811	3.6	20280	91.3	89	167	17
Spr 2016	8	Read	45	685	3.1	20965	94.3	93	175	18
Spr 2016	8	Read	46	527	2.4	21492	96.7	96	185	20
Spr 2016	8	Read	47	377	1.7	21869	98.4	98	197	22
Spr 2016	8	Read	48	224	1.0	22093	99.4	99	200	27
Spr 2016	8	Read	49	109	0.5	22202	99.9	99	200	38
Spr 2016	8	Read	50	22	0.1	22224	100.0	99	200	68

Grade 11

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Read	0	2	0.0	2	0.0	1	1	73
Spr 2016	11	Read	1	2	0.0	4	0.0	1	1	40
Spr 2016	11	Read	2	0	0.0	4	0.0	1	1	29

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Read	3	1	0.0	5	0.0	1	1	24
Spr 2016	11	Read	4	1	0.0	6	0.0	1	1	21
Spr 2016	11	Read	5	4	0.0	10	0.0	1	1	19
Spr 2016	11	Read	6	7	0.0	17	0.1	1	1	18
Spr 2016	11	Read	7	16	0.1	33	0.2	1	1	17
Spr 2016	11	Read	8	23	0.1	56	0.3	1	2	16
Spr 2016	11	Read	9	45	0.2	101	0.5	1	8	15
Spr 2016	11	Read	10	72	0.3	173	0.8	1	13	14
Spr 2016	11	Read	11	113	0.5	286	1.3	1	18	14
Spr 2016	11	Read	12	124	0.6	410	1.9	2	23	14
Spr 2016	11	Read	13	153	0.7	563	2.6	2	28	13
Spr 2016	11	Read	14	197	0.9	760	3.5	3	32	13
Spr 2016	11	Read	15	227	1.1	987	4.6	4	36	13
Spr 2016	11	Read	16	207	1.0	1194	5.6	5	40	13
Spr 2016	11	Read	17	228	1.1	1422	6.6	6	44	12
Spr 2016	11	Read	18	263	1.2	1685	7.9	7	48	12
Spr 2016	11	Read	19	279	1.3	1964	9.2	9	52	12
Spr 2016	11	Read	20	341	1.6	2305	10.8	10	55	12
Spr 2016	11	Read	21	343	1.6	2648	12.4	12	59	12
Spr 2016	11	Read	22	340	1.6	2988	14.0	13	63	12
Spr 2016	11	Read	23	362	1.7	3350	15.6	15	66	12
Spr 2016	11	Read	24	454	2.1	3804	17.8	17	70	12
Spr 2016	11	Read	25	474	2.2	4278	20.0	19	73	12
Spr 2016	11	Read	26	507	2.4	4785	22.3	21	77	12
Spr 2016	11	Read	27	504	2.4	5289	24.7	24	80	12
Spr 2016	11	Read	28	499	2.3	5788	27.0	26	84	12
Spr 2016	11	Read	29	577	2.7	6365	29.7	28	87	12
Spr 2016	11	Read	30	614	2.9	6979	32.6	31	91	12
Spr 2016	11	Read	31	623	2.9	7602	35.5	34	95	12
Spr 2016	11	Read	32	711	3.3	8313	38.8	37	98	12

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Read	33	731	3.4	9044	42.2	41	102	12
Spr 2016	11	Read	34	815	3.8	9859	46.0	44	106	13
Spr 2016	11	Read	35	845	3.9	10704	50.0	48	110	13
Spr 2016	11	Read	36	878	4.1	11582	54.1	52	114	13
Spr 2016	11	Read	37	928	4.3	12510	58.4	56	119	13
Spr 2016	11	Read	38	914	4.3	13424	62.7	61	123	14
Spr 2016	11	Read	39	940	4.4	14364	67.1	65	128	14
Spr 2016	11	Read	40	916	4.3	15280	71.3	69	133	15
Spr 2016	11	Read	41	971	4.5	16251	75.9	74	139	15
Spr 2016	11	Read	42	981	4.6	17232	80.5	78	145	16
Spr 2016	11	Read	43	951	4.4	18183	84.9	83	152	17
Spr 2016	11	Read	44	878	4.1	19061	89.0	87	159	18
Spr 2016	11	Read	45	772	3.6	19833	92.6	91	168	19
Spr 2016	11	Read	46	572	2.7	20405	95.3	94	178	21
Spr 2016	11	Read	47	494	2.3	20899	97.6	96	190	24
Spr 2016	11	Read	48	331	1.5	21230	99.1	98	200	29
Spr 2016	11	Read	49	155	0.7	21385	99.9	99	200	40
Spr 2016	11	Read	50	32	0.1	21417	100.0	99	200	73

Appendix R: Mathematics Raw-to-Scale Conversion Tables and Distributions of Ability

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 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 table is a 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.

Grade 3

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	3	Math	0	1	0.0	1	0.0	1	1	54
Spr 2016	3	Math	1	1	0.0	2	0.0	1	1	30
Spr 2016	3	Math	2	1	0.0	3	0.0	1	1	21
Spr 2016	3	Math	3	1	0.0	4	0.0	1	4	18
Spr 2016	3	Math	4	0	0.0	4	0.0	1	13	16
Spr 2016	3	Math	5	7	0.0	11	0.0	1	21	14
Spr 2016	3	Math	6	8	0.0	19	0.1	1	27	13
Spr 2016	3	Math	7	21	0.1	40	0.2	1	32	12
Spr 2016	3	Math	8	53	0.2	93	0.4	1	37	12
Spr 2016	3	Math	9	66	0.3	159	0.7	1	41	11
Spr 2016	3	Math	10	120	0.5	279	1.3	1	45	11
Spr 2016	3	Math	11	173	0.8	452	2.1	2	49	10
Spr 2016	3	Math	12	217	1.0	669	3.0	3	53	10
Spr 2016	3	Math	13	233	1.1	902	4.1	4	56	10
Spr 2016	3	Math	14	288	1.3	1190	5.4	5	59	10
Spr 2016	3	Math	15	331	1.5	1521	6.9	6	62	9
Spr 2016	3	Math	16	331	1.5	1852	8.4	8	65	9
Spr 2016	3	Math	17	340	1.5	2192	9.9	9	68	9
Spr 2016	3	Math	18	383	1.7	2575	11.7	11	71	9

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	3	Math	19	405	1.8	2980	13.5	13	74	9
Spr 2016	3	Math	20	401	1.8	3381	15.3	14	76	9
Spr 2016	3	Math	21	459	2.1	3840	17.4	16	79	9
Spr 2016	3	Math	22	440	2.0	4280	19.4	18	82	9
Spr 2016	3	Math	23	449	2.0	4729	21.5	20	84	9
Spr 2016	3	Math	24	501	2.3	5230	23.7	23	87	9
Spr 2016	3	Math	25	531	2.4	5761	26.1	25	89	9
Spr 2016	3	Math	26	530	2.4	6291	28.6	27	92	9
Spr 2016	3	Math	27	549	2.5	6840	31.0	30	94	9
Spr 2016	3	Math	28	603	2.7	7443	33.8	32	97	9
Spr 2016	3	Math	29	627	2.8	8070	36.6	35	100	9
Spr 2016	3	Math	30	659	3.0	8729	39.6	38	102	9
Spr 2016	3	Math	31	619	2.8	9348	42.4	41	105	9
Spr 2016	3	Math	32	661	3.0	10009	45.4	44	108	9
Spr 2016	3	Math	33	625	2.8	10634	48.3	47	110	9
Spr 2016	3	Math	34	765	3.5	11399	51.7	50	113	9
Spr 2016	3	Math	35	721	3.3	12120	55.0	53	116	9
Spr 2016	3	Math	36	750	3.4	12870	58.4	57	119	10
Spr 2016	3	Math	37	749	3.4	13619	61.8	60	123	10
Spr 2016	3	Math	38	750	3.4	14369	65.2	64	126	10
Spr 2016	3	Math	39	776	3.5	15145	68.7	67	129	10
Spr 2016	3	Math	40	777	3.5	15922	72.3	71	133	11
Spr 2016	3	Math	41	837	3.8	16759	76.1	74	137	11
Spr 2016	3	Math	42	810	3.7	17569	79.7	78	142	12
Spr 2016	3	Math	43	762	3.5	18331	83.2	81	147	12
Spr 2016	3	Math	44	748	3.4	19079	86.6	85	152	13
Spr 2016	3	Math	45	717	3.3	19796	89.9	88	158	14
Spr 2016	3	Math	46	695	3.2	20491	93.0	91	166	16
Spr 2016	3	Math	47	613	2.8	21104	95.8	94	175	18
Spr 2016	3	Math	48	472	2.1	21576	97.9	97	188	21

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	3	Math	49	305	1.4	21881	99.3	99	200	30
Spr 2016	3	Math	50	150	0.7	22031	100.0	99	200	54

Grade 4

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	4	Math	0	0	0.0	0	0.0	0	1	51
Spr 2016	4	Math	1	1	0.0	1	0.0	1	1	28
Spr 2016	4	Math	2	0	0.0	1	0.0	1	1	20
Spr 2016	4	Math	3	0	0.0	1	0.0	1	6	17
Spr 2016	4	Math	4	1	0.0	2	0.0	1	14	15
Spr 2016	4	Math	5	7	0.0	9	0.0	1	21	13
Spr 2016	4	Math	6	8	0.0	17	0.1	1	27	12
Spr 2016	4	Math	7	16	0.1	33	0.1	1	32	11
Spr 2016	4	Math	8	27	0.1	60	0.3	1	37	11
Spr 2016	4	Math	9	54	0.2	114	0.5	1	41	10
Spr 2016	4	Math	10	88	0.4	202	0.9	1	44	10
Spr 2016	4	Math	11	117	0.5	319	1.4	1	48	10
Spr 2016	4	Math	12	157	0.7	476	2.1	2	51	9
Spr 2016	4	Math	13	195	0.8	671	2.9	2	54	9
Spr 2016	4	Math	14	227	1.0	898	3.9	3	57	9
Spr 2016	4	Math	15	259	1.1	1157	5.0	4	60	9
Spr 2016	4	Math	16	275	1.2	1432	6.2	6	62	9
Spr 2016	4	Math	17	336	1.5	1768	7.6	7	65	8
Spr 2016	4	Math	18	329	1.4	2097	9.1	8	67	8
Spr 2016	4	Math	19	367	1.6	2464	10.6	10	70	8
Spr 2016	4	Math	20	400	1.7	2864	12.4	12	72	8
Spr 2016	4	Math	21	397	1.7	3261	14.1	13	74	8
Spr 2016	4	Math	22	432	1.9	3693	16.0	15	77	8
Spr 2016	4	Math	23	415	1.8	4108	17.7	17	79	8

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	4	Math	24	451	1.9	4559	19.7	19	81	8
Spr 2016	4	Math	25	448	1.9	5007	21.6	21	83	8
Spr 2016	4	Math	26	479	2.1	5486	23.7	23	86	8
Spr 2016	4	Math	27	464	2.0	5950	25.7	25	88	8
Spr 2016	4	Math	28	521	2.3	6471	28.0	27	90	8
Spr 2016	4	Math	29	502	2.2	6973	30.1	29	92	8
Spr 2016	4	Math	30	525	2.3	7498	32.4	31	94	8
Spr 2016	4	Math	31	535	2.3	8033	34.7	34	97	8
Spr 2016	4	Math	32	552	2.4	8585	37.1	36	99	8
Spr 2016	4	Math	33	598	2.6	9183	39.7	38	101	8
Spr 2016	4	Math	34	592	2.6	9775	42.2	41	103	8
Spr 2016	4	Math	35	627	2.7	10402	44.9	44	106	8
Spr 2016	4	Math	36	673	2.9	11075	47.8	46	108	8
Spr 2016	4	Math	37	621	2.7	11696	50.5	49	110	8
Spr 2016	4	Math	38	692	3.0	12388	53.5	52	113	8
Spr 2016	4	Math	39	682	2.9	13070	56.5	55	116	9
Spr 2016	4	Math	40	783	3.4	13853	59.8	58	118	9
Spr 2016	4	Math	41	737	3.2	14590	63.0	61	121	9
Spr 2016	4	Math	42	735	3.2	15325	66.2	65	124	9
Spr 2016	4	Math	43	720	3.1	16045	69.3	68	127	9
Spr 2016	4	Math	44	752	3.2	16797	72.6	71	130	10
Spr 2016	4	Math	45	707	3.1	17504	75.6	74	134	10
Spr 2016	4	Math	46	731	3.2	18235	78.8	77	137	10
Spr 2016	4	Math	47	754	3.3	18989	82.0	80	141	11
Spr 2016	4	Math	48	737	3.2	19726	85.2	84	146	11
Spr 2016	4	Math	49	704	3.0	20430	88.3	87	151	12
Spr 2016	4	Math	50	672	2.9	21102	91.2	90	157	13
Spr 2016	4	Math	51	637	2.8	21739	93.9	93	164	15
Spr 2016	4	Math	52	571	2.5	22310	96.4	95	172	17
Spr 2016	4	Math	53	449	1.9	22759	98.3	97	184	20

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	4	Math	54	270	1.2	23029	99.5	99	200	28
Spr 2016	4	Math	55	118	0.5	23147	100.0	99	200	51

Grade 5

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Math	0	0	0.0	0	0.0	0	1	53
Spr 2016	5	Math	1	1	0.0	1	0.0	1	1	29
Spr 2016	5	Math	2	1	0.0	2	0.0	1	1	21
Spr 2016	5	Math	3	1	0.0	3	0.0	1	3	17
Spr 2016	5	Math	4	1	0.0	4	0.0	1	12	15
Spr 2016	5	Math	5	1	0.0	5	0.0	1	19	14
Spr 2016	5	Math	6	10	0.0	15	0.1	1	25	13
Spr 2016	5	Math	7	17	0.1	32	0.1	1	30	12
Spr 2016	5	Math	8	24	0.1	56	0.2	1	35	11
Spr 2016	5	Math	9	52	0.2	108	0.5	1	39	11
Spr 2016	5	Math	10	87	0.4	195	0.9	1	43	10
Spr 2016	5	Math	11	114	0.5	309	1.4	1	47	10
Spr 2016	5	Math	12	165	0.7	474	2.1	2	50	10
Spr 2016	5	Math	13	227	1.0	701	3.1	3	53	10
Spr 2016	5	Math	14	296	1.3	997	4.4	4	56	9
Spr 2016	5	Math	15	337	1.5	1334	5.9	5	59	9
Spr 2016	5	Math	16	363	1.6	1697	7.4	7	62	9
Spr 2016	5	Math	17	375	1.6	2072	9.1	8	65	9
Spr 2016	5	Math	18	414	1.8	2486	10.9	10	68	9
Spr 2016	5	Math	19	416	1.8	2902	12.7	12	70	9
Spr 2016	5	Math	20	452	2.0	3354	14.7	14	73	8
Spr 2016	5	Math	21	443	1.9	3797	16.7	16	75	8
Spr 2016	5	Math	22	493	2.2	4290	18.8	18	77	8

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Math	23	486	2.1	4776	20.9	20	80	8
Spr 2016	5	Math	24	486	2.1	5262	23.1	22	82	8
Spr 2016	5	Math	25	457	2.0	5719	25.1	24	85	8
Spr 2016	5	Math	26	556	2.4	6275	27.5	26	87	8
Spr 2016	5	Math	27	488	2.1	6763	29.7	29	89	8
Spr 2016	5	Math	28	552	2.4	7315	32.1	31	92	8
Spr 2016	5	Math	29	566	2.5	7881	34.6	33	94	8
Spr 2016	5	Math	30	552	2.4	8433	37.0	36	96	8
Spr 2016	5	Math	31	590	2.6	9023	39.6	38	98	8
Spr 2016	5	Math	32	554	2.4	9577	42.0	41	101	8
Spr 2016	5	Math	33	626	2.7	10203	44.8	43	103	8
Spr 2016	5	Math	34	605	2.7	10808	47.4	46	106	8
Spr 2016	5	Math	35	622	2.7	11430	50.1	49	108	8
Spr 2016	5	Math	36	613	2.7	12043	52.8	51	111	9
Spr 2016	5	Math	37	589	2.6	12632	55.4	54	113	9
Spr 2016	5	Math	38	640	2.8	13272	58.2	57	116	9
Spr 2016	5	Math	39	621	2.7	13893	60.9	60	118	9
Spr 2016	5	Math	40	677	3.0	14570	63.9	62	121	9
Spr 2016	5	Math	41	617	2.7	15187	66.6	65	124	9
Spr 2016	5	Math	42	668	2.9	15855	69.5	68	127	9
Spr 2016	5	Math	43	623	2.7	16478	72.3	71	130	10
Spr 2016	5	Math	44	643	2.8	17121	75.1	74	134	10
Spr 2016	5	Math	45	652	2.9	17773	78.0	77	137	10
Spr 2016	5	Math	46	581	2.5	18354	80.5	79	141	11
Spr 2016	5	Math	47	658	2.9	19012	83.4	82	146	11
Spr 2016	5	Math	48	581	2.5	19593	85.9	85	150	12
Spr 2016	5	Math	49	644	2.8	20237	88.8	87	156	13
Spr 2016	5	Math	50	598	2.6	20835	91.4	90	162	14
Spr 2016	5	Math	51	617	2.7	21452	94.1	93	169	15
Spr 2016	5	Math	52	501	2.2	21953	96.3	95	178	17

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Math	53	408	1.8	22361	98.1	97	190	21
Spr 2016	5	Math	54	285	1.3	22646	99.3	99	200	29
Spr 2016	5	Math	55	154	0.7	22800	100.0	99	200	53

Grade 6

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	6	Math	0	1	0.0	1	0.0	1	1	55
Spr 2016	6	Math	1	0	0.0	1	0.0	1	1	31
Spr 2016	6	Math	2	1	0.0	2	0.0	1	1	22
Spr 2016	6	Math	3	0	0.0	2	0.0	1	1	18
Spr 2016	6	Math	4	1	0.0	3	0.0	1	4	16
Spr 2016	6	Math	5	3	0.0	6	0.0	1	11	14
Spr 2016	6	Math	6	3	0.0	9	0.0	1	17	13
Spr 2016	6	Math	7	12	0.1	21	0.1	1	23	12
Spr 2016	6	Math	8	22	0.1	43	0.2	1	28	12
Spr 2016	6	Math	9	39	0.2	82	0.4	1	32	11
Spr 2016	6	Math	10	61	0.3	143	0.6	1	36	11
Spr 2016	6	Math	11	121	0.5	264	1.1	1	40	10
Spr 2016	6	Math	12	160	0.7	424	1.8	1	43	10
Spr 2016	6	Math	13	200	0.9	624	2.7	2	46	10
Spr 2016	6	Math	14	256	1.1	880	3.8	3	50	10
Spr 2016	6	Math	15	325	1.4	1205	5.2	5	53	9
Spr 2016	6	Math	16	338	1.5	1543	6.7	6	55	9
Spr 2016	6	Math	17	359	1.6	1902	8.3	7	58	9
Spr 2016	6	Math	18	398	1.7	2300	10.0	9	61	9
Spr 2016	6	Math	19	362	1.6	2662	11.6	11	63	9
Spr 2016	6	Math	20	408	1.8	3070	13.3	12	66	9
Spr 2016	6	Math	21	391	1.7	3461	15.0	14	68	9
Spr 2016	6	Math	22	417	1.8	3878	16.9	16	71	9

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	6	Math	23	446	1.9	4324	18.8	18	73	8
Spr 2016	6	Math	24	428	1.9	4752	20.7	20	75	8
Spr 2016	6	Math	25	453	2.0	5205	22.6	22	78	8
Spr 2016	6	Math	26	456	2.0	5661	24.6	24	80	8
Spr 2016	6	Math	27	442	1.9	6103	26.5	26	82	8
Spr 2016	6	Math	28	445	1.9	6548	28.5	28	85	8
Spr 2016	6	Math	29	459	2.0	7007	30.5	29	87	8
Spr 2016	6	Math	30	477	2.1	7484	32.5	32	89	8
Spr 2016	6	Math	31	485	2.1	7969	34.7	34	91	8
Spr 2016	6	Math	32	476	2.1	8445	36.7	36	94	8
Spr 2016	6	Math	33	507	2.2	8952	38.9	38	96	8
Spr 2016	6	Math	34	531	2.3	9483	41.2	40	98	8
Spr 2016	6	Math	35	502	2.2	9985	43.4	42	101	8
Spr 2016	6	Math	36	573	2.5	10558	45.9	45	103	9
Spr 2016	6	Math	37	517	2.2	11075	48.2	47	105	9
Spr 2016	6	Math	38	582	2.5	11657	50.7	49	108	9
Spr 2016	6	Math	39	532	2.3	12189	53.0	52	110	9
Spr 2016	6	Math	40	527	2.3	12716	55.3	54	113	9
Spr 2016	6	Math	41	538	2.3	13254	57.6	56	116	9
Spr 2016	6	Math	42	531	2.3	13785	59.9	59	118	9
Spr 2016	6	Math	43	609	2.6	14394	62.6	61	121	9
Spr 2016	6	Math	44	610	2.7	15004	65.2	64	124	10
Spr 2016	6	Math	45	584	2.5	15588	67.8	67	127	10
Spr 2016	6	Math	46	581	2.5	16169	70.3	69	131	10
Spr 2016	6	Math	47	635	2.8	16804	73.1	72	134	10
Spr 2016	6	Math	48	668	2.9	17472	76.0	75	138	11
Spr 2016	6	Math	49	617	2.7	18089	78.7	77	142	11
Spr 2016	6	Math	50	648	2.8	18737	81.5	80	146	12
Spr 2016	6	Math	51	625	2.7	19362	84.2	83	151	12
Spr 2016	6	Math	52	679	3.0	20041	87.1	86	157	13

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	6	Math	53	620	2.7	20661	89.8	88	163	14
Spr 2016	6	Math	54	639	2.8	21300	92.6	91	170	16
Spr 2016	6	Math	55	589	2.6	21889	95.2	94	180	18
Spr 2016	6	Math	56	518	2.3	22407	97.4	96	193	22
Spr 2016	6	Math	57	372	1.6	22779	99.1	98	200	31
Spr 2016	6	Math	58	218	0.9	22997	100.0	99	200	55

Grade 7

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	7	Math	0	0	0.0	0	0.0	0	1	54
Spr 2016	7	Math	1	0	0.0	0	0.0	0	1	30
Spr 2016	7	Math	2	1	0.0	1	0.0	1	1	21
Spr 2016	7	Math	3	0	0.0	1	0.0	1	1	18
Spr 2016	7	Math	4	0	0.0	1	0.0	1	5	15
Spr 2016	7	Math	5	1	0.0	2	0.0	1	12	14
Spr 2016	7	Math	6	3	0.0	5	0.0	1	18	13
Spr 2016	7	Math	7	12	0.1	17	0.1	1	23	12
Spr 2016	7	Math	8	20	0.1	37	0.2	1	28	11
Spr 2016	7	Math	9	39	0.2	76	0.3	1	32	11
Spr 2016	7	Math	10	74	0.3	150	0.7	1	36	10
Spr 2016	7	Math	11	82	0.4	232	1.0	1	40	10
Spr 2016	7	Math	12	159	0.7	391	1.7	1	43	10
Spr 2016	7	Math	13	199	0.9	590	2.6	2	46	9
Spr 2016	7	Math	14	261	1.2	851	3.8	3	49	9
Spr 2016	7	Math	15	316	1.4	1167	5.2	4	52	9
Spr 2016	7	Math	16	314	1.4	1481	6.6	6	55	9
Spr 2016	7	Math	17	323	1.4	1804	8.0	7	57	9
Spr 2016	7	Math	18	395	1.7	2199	9.7	9	60	9
Spr 2016	7	Math	19	427	1.9	2626	11.6	11	62	8

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	7	Math	20	398	1.8	3024	13.4	13	65	8
Spr 2016	7	Math	21	392	1.7	3416	15.1	14	67	8
Spr 2016	7	Math	22	397	1.8	3813	16.9	16	69	8
Spr 2016	7	Math	23	430	1.9	4243	18.8	18	72	8
Spr 2016	7	Math	24	400	1.8	4643	20.6	20	74	8
Spr 2016	7	Math	25	439	1.9	5082	22.5	22	76	8
Spr 2016	7	Math	26	435	1.9	5517	24.4	23	78	8
Spr 2016	7	Math	27	459	2.0	5976	26.5	25	81	8
Spr 2016	7	Math	28	481	2.1	6457	28.6	28	83	8
Spr 2016	7	Math	29	459	2.0	6916	30.6	30	85	8
Spr 2016	7	Math	30	476	2.1	7392	32.7	32	87	8
Spr 2016	7	Math	31	490	2.2	7882	34.9	34	89	8
Spr 2016	7	Math	32	482	2.1	8364	37.0	36	91	8
Spr 2016	7	Math	33	493	2.2	8857	39.2	38	94	8
Spr 2016	7	Math	34	501	2.2	9358	41.4	40	96	8
Spr 2016	7	Math	35	552	2.4	9910	43.9	43	98	8
Spr 2016	7	Math	36	508	2.2	10418	46.1	45	100	8
Spr 2016	7	Math	37	496	2.2	10914	48.3	47	103	8
Spr 2016	7	Math	38	561	2.5	11475	50.8	50	105	8
Spr 2016	7	Math	39	539	2.4	12014	53.2	52	107	8
Spr 2016	7	Math	40	540	2.4	12554	55.6	54	110	9
Spr 2016	7	Math	41	502	2.2	13056	57.8	57	113	9
Spr 2016	7	Math	42	537	2.4	13593	60.2	59	115	9
Spr 2016	7	Math	43	531	2.4	14124	62.6	61	118	9
Spr 2016	7	Math	44	587	2.6	14711	65.2	64	121	9
Spr 2016	7	Math	45	595	2.6	15306	67.8	66	124	10
Spr 2016	7	Math	46	616	2.7	15922	70.5	69	127	10
Spr 2016	7	Math	47	616	2.7	16538	73.2	72	130	10
Spr 2016	7	Math	48	610	2.7	17148	75.9	75	134	10
Spr 2016	7	Math	49	664	2.9	17812	78.9	77	138	11

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	7	Math	50	621	2.8	18433	81.6	80	142	11
Spr 2016	7	Math	51	644	2.9	19077	84.5	83	147	12
Spr 2016	7	Math	52	642	2.8	19719	87.3	86	152	13
Spr 2016	7	Math	53	644	2.9	20363	90.2	89	158	14
Spr 2016	7	Math	54	604	2.7	20967	92.9	92	165	15
Spr 2016	7	Math	55	561	2.5	21528	95.3	94	174	18
Spr 2016	7	Math	56	481	2.1	22009	97.5	96	187	21
Spr 2016	7	Math	57	383	1.7	22392	99.2	98	200	30
Spr 2016	7	Math	58	187	0.8	22579	100.0	99	200	54

Grade 8

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Math	0	0	0.0	0	0.0	0	1	54
Spr 2016	8	Math	1	1	0.0	1	0.0	1	1	30
Spr 2016	8	Math	2	1	0.0	2	0.0	1	1	21
Spr 2016	8	Math	3	0	0.0	2	0.0	1	1	18
Spr 2016	8	Math	4	2	0.0	4	0.0	1	1	15
Spr 2016	8	Math	5	1	0.0	5	0.0	1	7	14
Spr 2016	8	Math	6	3	0.0	8	0.0	1	13	13
Spr 2016	8	Math	7	5	0.0	13	0.1	1	18	12
Spr 2016	8	Math	8	15	0.1	28	0.1	1	23	11
Spr 2016	8	Math	9	25	0.1	53	0.2	1	27	11
Spr 2016	8	Math	10	34	0.2	87	0.4	1	31	10
Spr 2016	8	Math	11	66	0.3	153	0.7	1	34	10
Spr 2016	8	Math	12	86	0.4	239	1.1	1	38	10
Spr 2016	8	Math	13	143	0.6	382	1.7	1	41	9
Spr 2016	8	Math	14	187	0.8	569	2.5	2	44	9
Spr 2016	8	Math	15	238	1.1	807	3.6	3	47	9
Spr 2016	8	Math	16	256	1.1	1063	4.8	4	49	9

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Math	17	260	1.2	1323	5.9	5	52	9
Spr 2016	8	Math	18	289	1.3	1612	7.2	7	55	9
Spr 2016	8	Math	19	334	1.5	1946	8.7	8	57	8
Spr 2016	8	Math	20	358	1.6	2304	10.3	10	59	8
Spr 2016	8	Math	21	352	1.6	2656	11.9	11	62	8
Spr 2016	8	Math	22	408	1.8	3064	13.7	13	64	8
Spr 2016	8	Math	23	427	1.9	3491	15.6	15	66	8
Spr 2016	8	Math	24	402	1.8	3893	17.4	17	69	8
Spr 2016	8	Math	25	419	1.9	4312	19.3	18	71	8
Spr 2016	8	Math	26	417	1.9	4729	21.2	20	73	8
Spr 2016	8	Math	27	455	2.0	5184	23.2	22	75	8
Spr 2016	8	Math	28	447	2.0	5631	25.2	24	77	8
Spr 2016	8	Math	29	463	2.1	6094	27.3	26	79	8
Spr 2016	8	Math	30	478	2.1	6572	29.4	28	82	8
Spr 2016	8	Math	31	513	2.3	7085	31.7	31	84	8
Spr 2016	8	Math	32	507	2.3	7592	34.0	33	86	8
Spr 2016	8	Math	33	524	2.3	8116	36.4	35	88	8
Spr 2016	8	Math	34	499	2.2	8615	38.6	37	90	8
Spr 2016	8	Math	35	569	2.5	9184	41.1	40	92	8
Spr 2016	8	Math	36	526	2.4	9710	43.5	42	94	8
Spr 2016	8	Math	37	517	2.3	10227	45.8	45	97	8
Spr 2016	8	Math	38	551	2.5	10778	48.3	47	99	8
Spr 2016	8	Math	39	549	2.5	11327	50.7	50	101	8
Spr 2016	8	Math	40	593	2.7	11920	53.4	52	104	8
Spr 2016	8	Math	41	572	2.6	12492	56.0	55	106	8
Spr 2016	8	Math	42	537	2.4	13029	58.4	57	109	9
Spr 2016	8	Math	43	558	2.5	13587	60.9	60	111	9
Spr 2016	8	Math	44	588	2.6	14175	63.5	62	114	9
Spr 2016	8	Math	45	568	2.5	14743	66.0	65	116	9
Spr 2016	8	Math	46	608	2.7	15351	68.8	67	119	9

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Math	47	544	2.4	15895	71.2	70	122	9
Spr 2016	8	Math	48	565	2.5	16460	73.7	72	125	10
Spr 2016	8	Math	49	594	2.7	17054	76.4	75	129	10
Spr 2016	8	Math	50	567	2.5	17621	78.9	78	132	10
Spr 2016	8	Math	51	576	2.6	18197	81.5	80	136	11
Spr 2016	8	Math	52	556	2.5	18753	84.0	83	140	11
Spr 2016	8	Math	53	539	2.4	19292	86.4	85	145	12
Spr 2016	8	Math	54	557	2.5	19849	88.9	88	150	13
Spr 2016	8	Math	55	528	2.4	20377	91.3	90	156	14
Spr 2016	8	Math	56	515	2.3	20892	93.6	92	164	15
Spr 2016	8	Math	57	480	2.2	21372	95.7	95	173	18
Spr 2016	8	Math	58	433	1.9	21805	97.7	97	186	21
Spr 2016	8	Math	59	309	1.4	22114	99.1	98	200	30
Spr 2016	8	Math	60	210	0.9	22324	100.0	99	200	54

Grade 11

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Math	0	2	0.0	2	0.0	1	1	66
Spr 2016	11	Math	1	2	0.0	4	0.0	1	1	36
Spr 2016	11	Math	2	3	0.0	7	0.0	1	1	26
Spr 2016	11	Math	3	1	0.0	8	0.0	1	1	21
Spr 2016	11	Math	4	2	0.0	10	0.0	1	1	19
Spr 2016	11	Math	5	3	0.0	13	0.1	1	1	17
Spr 2016	11	Math	6	7	0.0	20	0.1	1	1	16
Spr 2016	11	Math	7	9	0.0	29	0.1	1	1	15
Spr 2016	11	Math	8	19	0.1	48	0.2	1	5	14

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Math	9	30	0.1	78	0.4	1	10	13
Spr 2016	11	Math	10	69	0.3	147	0.7	1	15	13
Spr 2016	11	Math	11	104	0.5	251	1.2	1	19	12
Spr 2016	11	Math	12	153	0.7	404	1.9	2	23	12
Spr 2016	11	Math	13	206	1.0	610	2.9	2	27	12
Spr 2016	11	Math	14	271	1.3	881	4.1	3	31	11
Spr 2016	11	Math	15	299	1.4	1180	5.5	5	34	11
Spr 2016	11	Math	16	351	1.6	1531	7.2	6	38	11
Spr 2016	11	Math	17	337	1.6	1868	8.7	8	41	11
Spr 2016	11	Math	18	365	1.7	2233	10.5	10	44	10
Spr 2016	11	Math	19	375	1.8	2608	12.2	11	47	10
Spr 2016	11	Math	20	378	1.8	2986	14.0	13	50	10
Spr 2016	11	Math	21	367	1.7	3353	15.7	15	52	10
Spr 2016	11	Math	22	387	1.8	3740	17.5	17	55	10
Spr 2016	11	Math	23	393	1.8	4133	19.3	18	58	10
Spr 2016	11	Math	24	406	1.9	4539	21.2	20	61	10
Spr 2016	11	Math	25	348	1.6	4887	22.9	22	63	10
Spr 2016	11	Math	26	412	1.9	5299	24.8	24	66	10
Spr 2016	11	Math	27	360	1.7	5659	26.5	26	69	10
Spr 2016	11	Math	28	366	1.7	6025	28.2	27	71	10
Spr 2016	11	Math	29	369	1.7	6394	29.9	29	74	10
Spr 2016	11	Math	30	373	1.7	6767	31.7	31	76	10
Spr 2016	11	Math	31	372	1.7	7139	33.4	33	79	10
Spr 2016	11	Math	32	383	1.8	7522	35.2	34	81	10
Spr 2016	11	Math	33	425	2.0	7947	37.2	36	84	10
Spr 2016	11	Math	34	417	2.0	8364	39.1	38	87	10
Spr 2016	11	Math	35	442	2.1	8806	41.2	40	89	10
Spr 2016	11	Math	36	435	2.0	9241	43.3	42	92	10
Spr 2016	11	Math	37	467	2.2	9708	45.4	44	95	10
Spr 2016	11	Math	38	482	2.3	10190	47.7	47	97	10

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Math	39	454	2.1	10644	49.8	49	100	10
Spr 2016	11	Math	40	505	2.4	11149	52.2	51	103	10
Spr 2016	11	Math	41	492	2.3	11641	54.5	53	106	10
Spr 2016	11	Math	42	507	2.4	12148	56.9	56	109	10
Spr 2016	11	Math	43	510	2.4	12658	59.2	58	112	11
Spr 2016	11	Math	44	495	2.3	13153	61.6	60	115	11
Spr 2016	11	Math	45	527	2.5	13680	64.0	63	118	11
Spr 2016	11	Math	46	551	2.6	14231	66.6	65	122	11
Spr 2016	11	Math	47	554	2.6	14785	69.2	68	126	12
Spr 2016	11	Math	48	549	2.6	15334	71.8	70	129	12
Spr 2016	11	Math	49	508	2.4	15842	74.2	73	133	12
Spr 2016	11	Math	50	533	2.5	16375	76.6	75	138	13
Spr 2016	11	Math	51	569	2.7	16944	79.3	78	142	13
Spr 2016	11	Math	52	545	2.6	17489	81.9	81	148	14
Spr 2016	11	Math	53	543	2.5	18032	84.4	83	153	15
Spr 2016	11	Math	54	578	2.7	18610	87.1	86	160	16
Spr 2016	11	Math	55	544	2.5	19154	89.7	88	167	17
Spr 2016	11	Math	56	506	2.4	19660	92.0	91	176	19
Spr 2016	11	Math	57	530	2.5	20190	94.5	93	187	21
Spr 2016	11	Math	58	464	2.2	20654	96.7	96	200	26
Spr 2016	11	Math	59	445	2.1	21099	98.8	98	200	36
Spr 2016	11	Math	60	265	1.2	21364	100.0	99	200	66

Appendix S: Science Raw-to-Scale Conversion Tables and Distributions of Ability

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 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 table is a 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.

Grade 5

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Science	0	1	0.0	1	0.0	1	1	59
Spr 2016	5	Science	1	0	0.0	1	0.0	1	1	33
Spr 2016	5	Science	2	1	0.0	2	0.0	1	1	23
Spr 2016	5	Science	3	1	0.0	3	0.0	1	1	19
Spr 2016	5	Science	4	0	0.0	3	0.0	1	1	17
Spr 2016	5	Science	5	1	0.0	4	0.0	1	1	15
Spr 2016	5	Science	6	6	0.0	10	0.0	1	7	14
Spr 2016	5	Science	7	13	0.1	23	0.1	1	13	13
Spr 2016	5	Science	8	11	0.0	34	0.1	1	19	13
Spr 2016	5	Science	9	30	0.1	64	0.3	1	23	12
Spr 2016	5	Science	10	49	0.2	113	0.5	1	28	12
Spr 2016	5	Science	11	68	0.3	181	0.8	1	32	11
Spr 2016	5	Science	12	98	0.4	279	1.2	1	36	11
Spr 2016	5	Science	13	140	0.6	419	1.8	2	40	11
Spr 2016	5	Science	14	176	0.8	595	2.6	2	43	11
Spr 2016	5	Science	15	207	0.9	802	3.5	3	47	10
Spr 2016	5	Science	16	235	1.0	1037	4.5	4	50	10
Spr 2016	5	Science	17	294	1.3	1331	5.8	5	53	10
Spr 2016	5	Science	18	316	1.4	1647	7.2	7	56	10
Spr 2016	5	Science	19	363	1.6	2010	8.8	8	59	10
Spr 2016	5	Science	20	396	1.7	2406	10.6	10	62	10
Spr 2016	5	Science	21	411	1.8	2817	12.4	11	65	10
Spr 2016	5	Science	22	416	1.8	3233	14.2	13	68	10
Spr 2016	5	Science	23	489	2.1	3722	16.3	15	71	10
Spr 2016	5	Science	24	492	2.2	4214	18.5	17	74	10
Spr 2016	5	Science	25	544	2.4	4758	20.9	20	77	10

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	5	Science	26	638	2.8	5396	23.7	22	80	10
Spr 2016	5	Science	27	611	2.7	6007	26.3	25	83	10
Spr 2016	5	Science	28	678	3.0	6685	29.3	28	85	10
Spr 2016	5	Science	29	728	3.2	7413	32.5	31	88	10
Spr 2016	5	Science	30	773	3.4	8186	35.9	34	91	10
Spr 2016	5	Science	31	816	3.6	9002	39.5	38	94	10
Spr 2016	5	Science	32	879	3.9	9881	43.3	41	97	10
Spr 2016	5	Science	33	847	3.7	10728	47.0	45	101	10
Spr 2016	5	Science	34	890	3.9	11618	50.9	49	104	10
Spr 2016	5	Science	35	953	4.2	12571	55.1	53	107	10
Spr 2016	5	Science	36	965	4.2	13536	59.4	57	111	11
Spr 2016	5	Science	37	972	4.3	14508	63.6	61	114	11
Spr 2016	5	Science	38	988	4.3	15496	68.0	66	118	11
Spr 2016	5	Science	39	987	4.3	16483	72.3	70	122	11
Spr 2016	5	Science	40	978	4.3	17461	76.6	74	126	12
Spr 2016	5	Science	41	917	4.0	18378	80.6	79	131	12
Spr 2016	5	Science	42	910	4.0	19288	84.6	83	136	13
Spr 2016	5	Science	43	880	3.9	20168	88.4	87	141	14
Spr 2016	5	Science	44	741	3.2	20909	91.7	90	147	14
Spr 2016	5	Science	45	622	2.7	21531	94.4	93	154	16
Spr 2016	5	Science	46	524	2.3	22055	96.7	96	162	17
Spr 2016	5	Science	47	356	1.6	22411	98.3	98	173	19
Spr 2016	5	Science	48	241	1.1	22652	99.3	99	187	23
Spr 2016	5	Science	49	121	0.5	22773	99.9	99	200	33
Spr 2016	5	Science	50	30	0.1	22803	100.0	99	200	59

Grade 8

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Science	0	0	0.0	0	0.0	0	1	61
Spr 2016	8	Science	1	1	0.0	1	0.0	1	1	34
Spr 2016	8	Science	2	0	0.0	1	0.0	1	1	24
Spr 2016	8	Science	3	0	0.0	1	0.0	1	1	20
Spr 2016	8	Science	4	0	0.0	1	0.0	1	1	18
Spr 2016	8	Science	5	0	0.0	1	0.0	1	1	16
Spr 2016	8	Science	6	0	0.0	1	0.0	1	1	15
Spr 2016	8	Science	7	1	0.0	2	0.0	1	3	14
Spr 2016	8	Science	8	5	0.0	7	0.0	1	9	13
Spr 2016	8	Science	9	3	0.0	10	0.0	1	13	12
Spr 2016	8	Science	10	13	0.1	23	0.1	1	18	12
Spr 2016	8	Science	11	23	0.1	46	0.2	1	22	12
Spr 2016	8	Science	12	33	0.1	79	0.4	1	26	11

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Science	13	54	0.2	133	0.6	1	30	11
Spr 2016	8	Science	14	89	0.4	222	1.0	1	33	11
Spr 2016	8	Science	15	117	0.5	339	1.5	1	36	10
Spr 2016	8	Science	16	148	0.7	487	2.2	2	39	10
Spr 2016	8	Science	17	191	0.9	678	3.0	3	43	10
Spr 2016	8	Science	18	189	0.8	867	3.9	3	45	10
Spr 2016	8	Science	19	225	1.0	1092	4.9	4	48	10
Spr 2016	8	Science	20	277	1.2	1369	6.1	6	51	10
Spr 2016	8	Science	21	324	1.5	1693	7.6	7	54	9
Spr 2016	8	Science	22	352	1.6	2045	9.2	8	57	9
Spr 2016	8	Science	23	349	1.6	2394	10.7	10	59	9
Spr 2016	8	Science	24	367	1.6	2761	12.4	12	62	9
Spr 2016	8	Science	25	386	1.7	3147	14.1	13	64	9
Spr 2016	8	Science	26	406	1.8	3553	15.9	15	67	9
Spr 2016	8	Science	27	427	1.9	3980	17.8	17	69	9
Spr 2016	8	Science	28	453	2.0	4433	19.9	19	72	9
Spr 2016	8	Science	29	529	2.4	4962	22.2	21	74	9
Spr 2016	8	Science	30	479	2.1	5441	24.4	23	77	9
Spr 2016	8	Science	31	491	2.2	5932	26.6	25	79	9
Spr 2016	8	Science	32	540	2.4	6472	29.0	28	82	9
Spr 2016	8	Science	33	539	2.4	7011	31.4	30	84	9
Spr 2016	8	Science	34	534	2.4	7545	33.8	33	87	9
Spr 2016	8	Science	35	575	2.6	8120	36.4	35	89	9
Spr 2016	8	Science	36	622	2.8	8742	39.1	38	92	9
Spr 2016	8	Science	37	615	2.8	9357	41.9	41	94	9
Spr 2016	8	Science	38	654	2.9	10011	44.8	43	97	9
Spr 2016	8	Science	39	682	3.1	10693	47.9	46	99	9
Spr 2016	8	Science	40	672	3.0	11365	50.9	49	102	10
Spr 2016	8	Science	41	678	3.0	12043	53.9	52	105	10
Spr 2016	8	Science	42	744	3.3	12787	57.3	56	108	10
Spr 2016	8	Science	43	727	3.3	13514	60.5	59	111	10
Spr 2016	8	Science	44	748	3.3	14262	63.9	62	114	10
Spr 2016	8	Science	45	701	3.1	14963	67.0	65	117	10
Spr 2016	8	Science	46	749	3.4	15712	70.4	69	120	11
Spr 2016	8	Science	47	744	3.3	16456	73.7	72	124	11
Spr 2016	8	Science	48	687	3.1	17143	76.8	75	127	11
Spr 2016	8	Science	49	761	3.4	17904	80.2	78	131	12
Spr 2016	8	Science	50	704	3.2	18608	83.3	82	135	12
Spr 2016	8	Science	51	670	3.0	19278	86.3	85	139	12
Spr 2016	8	Science	52	631	2.8	19909	89.2	88	144	13
Spr 2016	8	Science	53	579	2.6	20488	91.7	90	150	14
Spr 2016	8	Science	54	523	2.3	21011	94.1	93	156	15

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	8	Science	55	453	2.0	21464	96.1	95	163	16
Spr 2016	8	Science	56	332	1.5	21796	97.6	97	171	18
Spr 2016	8	Science	57	248	1.1	22044	98.7	98	181	20
Spr 2016	8	Science	58	173	0.8	22217	99.5	99	196	24
Spr 2016	8	Science	59	91	0.4	22308	99.9	99	200	34
Spr 2016	8	Science	60	23	0.1	22331	100.0	99	200	61

Grade 11

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Science	0	3	0.0	3	0.0	1	1	49
Spr 2016	11	Science	1	2	0.0	5	0.0	1	1	27
Spr 2016	11	Science	2	0	0.0	5	0.0	1	1	20
Spr 2016	11	Science	3	0	0.0	5	0.0	1	1	16
Spr 2016	11	Science	4	0	0.0	5	0.0	1	6	14
Spr 2016	11	Science	5	0	0.0	5	0.0	1	12	13
Spr 2016	11	Science	6	2	0.0	7	0.0	1	18	12
Spr 2016	11	Science	7	4	0.0	11	0.1	1	23	11
Spr 2016	11	Science	8	11	0.1	22	0.1	1	27	10
Spr 2016	11	Science	9	11	0.1	33	0.2	1	31	10
Spr 2016	11	Science	10	20	0.1	53	0.2	1	35	10
Spr 2016	11	Science	11	42	0.2	95	0.4	1	38	9
Spr 2016	11	Science	12	61	0.3	156	0.7	1	41	9
Spr 2016	11	Science	13	83	0.4	239	1.1	1	44	9
Spr 2016	11	Science	14	127	0.6	366	1.7	1	47	9
Spr 2016	11	Science	15	132	0.6	498	2.3	2	49	8
Spr 2016	11	Science	16	161	0.8	659	3.1	3	52	8
Spr 2016	11	Science	17	208	1.0	867	4.1	4	54	8
Spr 2016	11	Science	18	197	0.9	1064	5.0	5	57	8
Spr 2016	11	Science	19	233	1.1	1297	6.1	6	59	8
Spr 2016	11	Science	20	261	1.2	1558	7.3	7	61	8
Spr 2016	11	Science	21	291	1.4	1849	8.7	8	63	8
Spr 2016	11	Science	22	278	1.3	2127	10.0	9	65	8
Spr 2016	11	Science	23	307	1.4	2434	11.4	11	67	7
Spr 2016	11	Science	24	311	1.5	2745	12.8	12	70	7
Spr 2016	11	Science	25	327	1.5	3072	14.4	14	72	7
Spr 2016	11	Science	26	339	1.6	3411	16.0	15	74	7
Spr 2016	11	Science	27	340	1.6	3751	17.6	17	76	7
Spr 2016	11	Science	28	362	1.7	4113	19.2	18	78	7
Spr 2016	11	Science	29	404	1.9	4517	21.1	20	80	7
Spr 2016	11	Science	30	433	2.0	4950	23.2	22	82	7
Spr 2016	11	Science	31	407	1.9	5357	25.1	24	84	7

Admin	Grade	Content Area	Raw Score	Count	Percent	Cum. Count	Cum. Percent	Percentile	Scale Score	*S.E.*
Spr 2016	11	Science	32	478	2.2	5835	27.3	26	85	7
Spr 2016	11	Science	33	457	2.1	6292	29.4	28	87	7
Spr 2016	11	Science	34	518	2.4	6810	31.9	31	89	7
Spr 2016	11	Science	35	544	2.5	7354	34.4	33	92	7
Spr 2016	11	Science	36	537	2.5	7891	36.9	36	94	7
Spr 2016	11	Science	37	571	2.7	8462	39.6	38	96	7
Spr 2016	11	Science	38	622	2.9	9084	42.5	41	98	8
Spr 2016	11	Science	39	638	3.0	9722	45.5	44	100	8
Spr 2016	11	Science	40	658	3.1	10380	48.6	47	102	8
Spr 2016	11	Science	41	686	3.2	11066	51.8	50	104	8
Spr 2016	11	Science	42	716	3.4	11782	55.1	53	107	8
Spr 2016	11	Science	43	773	3.6	12555	58.8	57	109	8
Spr 2016	11	Science	44	729	3.4	13284	62.2	60	111	8
Spr 2016	11	Science	45	770	3.6	14054	65.8	64	114	8
Spr 2016	11	Science	46	769	3.6	14823	69.4	68	117	9
Spr 2016	11	Science	47	791	3.7	15614	73.1	71	119	9
Spr 2016	11	Science	48	793	3.7	16407	76.8	75	122	9
Spr 2016	11	Science	49	753	3.5	17160	80.3	79	125	9
Spr 2016	11	Science	50	698	3.3	17858	83.6	82	129	10
Spr 2016	11	Science	51	724	3.4	18582	87.0	85	132	10
Spr 2016	11	Science	52	639	3.0	19221	89.9	88	136	11
Spr 2016	11	Science	53	548	2.6	19769	92.5	91	141	11
Spr 2016	11	Science	54	479	2.2	20248	94.8	94	145	12
Spr 2016	11	Science	55	407	1.9	20655	96.7	96	151	13
Spr 2016	11	Science	56	278	1.3	20933	98.0	97	158	14
Spr 2016	11	Science	57	224	1.0	21157	99.0	98	166	16
Spr 2016	11	Science	58	128	0.6	21285	99.6	99	178	20
Spr 2016	11	Science	59	65	0.3	21350	99.9	99	197	27
Spr 2016	11	Science	60	19	0.1	21369	100.0	99	200	49

Appendix T: Reading Field Test Differential Item Functioning

***AM=American Indian, AS=Asian, BL=African American/Black, HI= Hispanic, MU=Multiple Ethnicities, WH=White**
200 student minimum for reporting.

Grade 3 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	784150	4463	2143	A-	335	A-	1007	A-	112		50	
FT	784148	4463	2143	A+	335	A-	1007	A-	112		50	
FT	749292	4463	2143	A-	335	A-	1007	B-	112		50	
FT	749296	4463	2143	A+	335	A+	1007	A+	112		50	
FT	749298	4463	2143	A-	335	A+	1007	A-	112		50	
FT	749295	4463	2143	A+	335	A+	1007	A+	112		50	
FT	749300	4463	2143	A+	335	A+	1007	A+	112		50	
FT	749293	4463	2143	A-	335	A-	1007	A-	112		50	
FT	749297	4463	2143	A+	335	A-	1007	A+	112		50	
FT	749294	4463	2143	A+	335	A-	1007	A+	112		50	
FT	797961	4000	1980	A+	258	A-	668	A-	45		52	
FT	797962	4000	1980	A-	258	A-	668	A-	45		52	
FT	749192	4000	1980	A+	258	A-	668	A+	45		52	
FT	749191	4000	1980	A+	258	A-	668	A-	45		52	
FT	749195	4000	1980	A+	258	A-	668	A-	45		52	
FT	749197	4000	1980	A+	258	A-	668	A+	45		52	
FT	749190	4000	1980	A-	258	C-	668	A-	45		52	
FT	749196	4000	1980	A+	258	A-	668	A-	45		52	
FT	749194	4000	1980	A+	258	A-	668	A-	45		52	
FT	749198	4000	1980	A-	258	A-	668	A-	45		52	
FT	797966	3963	1963	A-	257	B-	536	A-	96		48	
FT	800298	3963	1963	A+	257	A-	536	A-	96		48	
FT	748940	3963	1963	A+	257	A-	536	A-	96		48	

Grade 3 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	748931	3963	1963	A+	257	A-	536	A-	96		48	
FT	748937	3963	1963	A-	257	A+	536	A-	96		48	
FT	748938	3963	1963	A-	257	A-	536	A-	96		48	
FT	748932	3963	1963	A+	257	A-	536	A+	96		48	
FT	748933	3963	1963	A-	257	A-	536	A-	96		48	
FT	748930	3963	1963	A-	257	A+	536	A+	96		48	
FT	749331	3963	1963	A+	257	A-	536	A-	96		48	
FT	797971	3952	1968	A-	222	C-	825	B-	113		66	
FT	797972	3952	1968	A-	222	A+	825	A+	113		66	
FT	749201	3952	1968	A-	222	A-	825	B-	113		66	
FT	749330	3952	1968	A+	222	A-	825	A+	113		66	
FT	749202	3952	1968	A+	222	A-	825	A-	113		66	
FT	749210	3952	1968	A-	222	A-	825	B-	113		66	
FT	749205	3952	1968	A+	222	A-	825	A-	113		66	
FT	749211	3952	1968	B+	222	A-	825	A-	113		66	
FT	749203	3952	1968	A-	222	A-	825	A-	113		66	
FT	749204	3952	1968	A+	222	A+	825	A+	113		66	
FT	797976	4032	1988	A-	273	A-	468	A-	94		61	
FT	797977	4032	1988	A-	273	A+	468	A-	94		61	
FT	749309	4032	1988	A-	273	A-	468	A-	94		61	
FT	749305	4032	1988	A-	273	A-	468	A-	94		61	
FT	749328	4032	1988	A-	273	A+	468	A-	94		61	
FT	749308	4032	1988	A+	273	A-	468	A-	94		61	
FT	749313	4032	1988	A+	273	A-	468	A-	94		61	
FT	749327	4032	1988	A+	273	A-	468	A+	94		61	
FT	749312	4032	1988	A+	273	A+	468	A-	94		61	
FT	749304	4032	1988	A+	273	A-	468	A+	94		61	

Grade 4 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	784678	4743	2316	A+	373	A-	1091	A+	113		56	
FT	784684	4743	2316	A+	373	A-	1091	A+	113		56	
FT	749670	4743	2316	B+	373	B-	1091	B-	113		56	
FT	749669	4743	2316	A-	373	A-	1091	A-	113		56	
FT	749663	4743	2316	A+	373	A-	1091	A+	113		56	
FT	749674	4743	2316	A-	373	A-	1091	A-	113		56	
FT	749668	4743	2316	A+	373	A-	1091	A-	113		56	
FT	749665	4743	2316	A+	373	A-	1091	A-	113		56	
FT	749666	4743	2316	A+	373	A-	1091	A-	113		56	
FT	749667	4743	2316	A-	373	A-	1091	A-	113		56	
FT	797981	4179	2102	A-	269	B-	785	A-	44		49	
FT	749660	4179	2102	B+	269	A+	785	A-	44		49	
FT	749650	4179	2102	A+	269	A-	785	A-	44		49	
FT	749652	4179	2102	A-	269	C-	785	A-	44		49	
FT	749657	4179	2102	A+	269	A+	785	A-	44		49	
FT	749653	4179	2102	A+	269	A-	785	A-	44		49	
FT	749654	4179	2102	A+	269	A+	785	A+	44		49	
FT	749659	4179	2102	A-	269	A-	785	A+	44		49	
FT	751643	4179	2102	A-	269	A-	785	A-	44		49	
FT	797986	4133	2062	B+	267	A-	551	A-	110		55	
FT	797987	4133	2062	A-	267	A+	551	A-	110		55	
FT	749425	4133	2062	A+	267	A-	551	A-	110		55	
FT	749434	4133	2062	A+	267	A-	551	A-	110		55	
FT	749431	4133	2062	A-	267	B-	551	B-	110		55	
FT	749432	4133	2062	A-	267	B-	551	B-	110		55	
FT	749435	4133	2062	A-	267	A-	551	A+	110		55	
FT	749436	4133	2062	A+	267	A-	551	A-	110		55	
FT	749433	4133	2062	A+	267	A-	551	A+	110		55	
FT	749437	4133	2062	A-	267	A-	551	A-	110		55	

Grade 4 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	797995	4107	2072	A-	216	A-	899	A-	133		62	
FT	798004	4107	2072	A+	216	C-	899	B-	133		62	
FT	749448	4107	2072	A+	216	A-	899	A+	133		62	
FT	749449	4107	2072	A+	216	A-	899	A-	133		62	
FT	749445	4107	2072	A-	216	B-	899	A-	133		62	
FT	749451	4107	2072	A+	216	B-	899	A-	133		62	
FT	749442	4107	2072	A-	216	A-	899	A-	133		62	
FT	749443	4107	2072	A+	216	A-	899	A-	133		62	
FT	749440	4107	2072	A+	216	A-	899	A+	133		62	
FT	749441	4107	2072	A+	216	A-	899	A-	133		62	
FT	798017	4173	2063	A+	305	A-	428	A-	126		62	
FT	798018	4173	2063	A+	305	A+	428	A+	126		62	
FT	749580	4173	2063	A-	305	B-	428	C-	126		62	
FT	749577	4173	2063	A+	305	A-	428	A+	126		62	
FT	749578	4173	2063	A-	305	A-	428	A-	126		62	
FT	749583	4173	2063	A+	305	A+	428	A-	126		62	
FT	749584	4173	2063	A-	305	A-	428	A-	126		62	
FT	749576	4173	2063	A-	305	A+	428	A-	126		62	
FT	749575	4173	2063	A+	305	A-	428	A+	126		62	
FT	749581	4173	2063	A-	305	A-	428	A-	126		62	

Grade 5 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	784737	4095	2017	A-	291	C-	696	B-	56		50	
FT	784738	4095	2017	A+	291	A-	696	A-	56		50	
FT	751407	4095	2017	A-	291	A-	696	A-	56		50	
FT	751411	4095	2017	A-	291	A+	696	A-	56		50	
FT	751408	4095	2017	A-	291	A+	696	A+	56		50	
FT	751402	4095	2017	A+	291	A-	696	A-	56		50	
FT	751406	4095	2017	A-	291	A+	696	A-	56		50	
FT	751410	4095	2017	A+	291	A-	696	A-	56		50	
FT	751412	4095	2017	A+	291	A-	696	A-	56		50	
FT	751409	4095	2017	A+	291	A-	696	A-	56		50	
FT	798028	4084	2064	A+	229	A+	727	A+	71		46	
FT	798029	4084	2064	A+	229	A-	727	A-	71		46	
FT	751278	4084	2064	A+	229	A-	727	A-	71		46	
FT	751283	4084	2064	A-	229	A-	727	B-	71		46	
FT	751273	4084	2064	A+	229	A-	727	A-	71		46	
FT	751276	4084	2064	A-	229	A-	727	A+	71		46	
FT	751274	4084	2064	A+	229	A-	727	A+	71		46	
FT	751279	4084	2064	A+	229	A-	727	A+	71		46	
FT	751277	4084	2064	A-	229	A+	727	A-	71		46	
FT	751272	4084	2064	A-	229	A-	727	A-	71		46	
FT	798054	4110	2040	B-	295	A-	596	C-	95		44	
FT	749679	4110	2040	A-	295	A-	596	A-	95		44	
FT	748968	4110	2040	A+	295	B-	596	A-	95		44	
FT	748970	4110	2040	A+	295	A-	596	A-	95		44	
FT	748960	4110	2040	A+	295	A+	596	A+	95		44	
FT	748958	4110	2040	A+	295	A-	596	A-	95		44	

Grade 5 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	748962	4110	2040	A-	295	B-	596	A-	95		44	
FT	748961	4110	2040	A-	295	A+	596	A-	95		44	
FT	748959	4110	2040	A+	295	A-	596	A-	95		44	
FT	798063	4103	2002	A-	245	A+	887	A+	147		58	
FT	798065	4103	2002	A+	245	A-	887	A-	147		58	
FT	751232	4103	2002	A-	245	A-	887	A-	147		58	
FT	751242	4103	2002	A+	245	A-	887	A+	147		58	
FT	751243	4103	2002	A-	245	A+	887	A+	147		58	
FT	751238	4103	2002	B+	245	A-	887	A-	147		58	
FT	751233	4103	2002	A+	245	A+	887	A-	147		58	
FT	751241	4103	2002	A-	245	A-	887	A-	147		58	
FT	751236	4103	2002	A+	245	A-	887	A-	147		58	
FT	751240	4103	2002	A+	245	A+	887	A+	147		58	
FT	798070	4148	2034	A-	301	A-	447	A-	97		63	
FT	798071	4148	2034	A+	301	B-	447	A-	97		63	
FT	749010	4148	2034	A+	301	A-	447	B-	97		63	
FT	749680	4148	2034	A-	301	A-	447	A-	97		63	
FT	749011	4148	2034	A-	301	A-	447	A-	97		63	
FT	749012	4148	2034	A-	301	A-	447	B-	97		63	
FT	749014	4148	2034	A+	301	A-	447	A-	97		63	
FT	749013	4148	2034	A+	301	B-	447	A-	97		63	
FT	749017	4148	2034	A-	301	A-	447	A-	97		63	
FT	749016	4148	2034	A-	301	A-	447	A-	97		63	

Grade 6 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	784768	4221	2168	A+	285	A-	790	A+	71		55	
FT	788680	4221	2168	A+	285	A-	790	A-	71		55	
FT	751249	4221	2168	A-	285	B-	790	B-	71		55	
FT	751247	4221	2168	A-	285	A-	790	A-	71		55	
FT	751244	4221	2168	A-	285	B-	790	B-	71		55	
FT	751245	4221	2168	A-	285	A-	790	A-	71		55	
FT	751251	4221	2168	A+	285	A+	790	A+	71		55	
FT	751250	4221	2168	A+	285	A-	790	A-	71		55	
FT	751252	4221	2168	A+	285	A-	790	A+	71		55	
FT	751246	4221	2168	A+	285	A-	790	A+	71		55	
FT	798265	4243	2141	A+	240	A-	733	C-	53		49	
FT	798267	4243	2141	A-	240	A-	733	A+	53		49	
FT	749683	4243	2141	A+	240	A-	733	A+	53		49	
FT	749690	4243	2141	A+	240	A-	733	A-	53		49	
FT	749682	4243	2141	A-	240	B-	733	A-	53		49	
FT	749686	4243	2141	A+	240	A+	733	A+	53		49	
FT	749685	4243	2141	A+	240	A-	733	A-	53		49	
FT	749684	4243	2141	A+	240	A-	733	A-	53		49	
FT	749687	4243	2141	A+	240	A-	733	A-	53		49	
FT	749688	4243	2141	A+	240	A+	733	A-	53		49	
FT	798102	4208	2099	A+	246	A-	594	A+	123		51	
FT	798106	4208	2099	A+	246	A-	594	A+	123		51	
FT	748973	4208	2099	C-	246	B-	594	A-	123		51	
FT	748977	4208	2099	A+	246	A+	594	A+	123		51	
FT	748976	4208	2099	A-	246	A-	594	A-	123		51	
FT	748978	4208	2099	A+	246	A-	594	A+	123		51	
FT	748974	4208	2099	A+	246	A-	594	A+	123		51	
FT	748972	4208	2099	A+	246	A-	594	A+	123		51	
FT	748983	4208	2099	A-	246	B-	594	A-	123		51	

Grade 6 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	748975	4208	2099	A-	246	B-	594	A-	123		51	
FT	798269	4157	2003	A+	222	A-	960	A-	133		55	
FT	798271	4157	2003	A-	222	A-	960	A-	133		55	
FT	748991	4157	2003	A+	222	A-	960	A-	133		55	
FT	748992	4157	2003	A+	222	A+	960	A+	133		55	
FT	748989	4157	2003	A-	222	A-	960	A-	133		55	
FT	748995	4157	2003	A+	222	A-	960	A-	133		55	
FT	748990	4157	2003	B+	222	A-	960	A-	133		55	
FT	754873	4157	2003	A+	222	A-	960	A-	133		55	
FT	748993	4157	2003	A-	222	A-	960	A-	133		55	
FT	754944	4157	2003	A+	222	A-	960	A+	133		55	
FT	798135	4209	2070	A+	261	A-	471	A+	108		58	
FT	798145	4209	2070	A-	261	A+	471	A-	108		58	
FT	751259	4209	2070	A-	261	B-	471	B-	108		58	
FT	754875	4209	2070	A-	261	C-	471	B-	108		58	
FT	751254	4209	2070	A+	261	A-	471	A-	108		58	
FT	751256	4209	2070	A+	261	A-	471	A+	108		58	
FT	751260	4209	2070	A-	261	C-	471	A-	108		58	
FT	751262	4209	2070	A+	261	A-	471	A-	108		58	
FT	751253	4209	2070	A+	261	A+	471	A-	108		58	
FT	751261	4209	2070	A-	261	A-	471	A-	108		58	

Grade 7 Reading			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	784772	4185	2015	A+	298	A-	768	A-	65		60	
FT	784773	4185	2015	A-	298	A-	768	A-	65		60	
FT	751441	4185	2015	A-	298	A+	768	A-	65		60	
FT	751442	4185	2015	A-	298	A-	768	A-	65		60	
FT	751435	4185	2015	A+	298	B-	768	A-	65		60	
FT	751445	4185	2015	A+	298	A-	768	A+	65		60	
FT	751443	4185	2015	A+	298	A-	768	A+	65		60	
FT	751444	4185	2015	A-	298	A-	768	A+	65		60	
FT	751434	4185	2015	A-	298	A-	768	A-	65		60	
FT	751436	4185	2015	A+	298	A-	768	A+	65		60	
FT	798364	4184	2090	A+	215	A-	791	A-	41		59	
FT	798365	4184	2090	A-	215	A+	791	A-	41		59	
FT	751324	4184	2090	A+	215	A-	791	A+	41		59	
FT	751330	4184	2090	A+	215	A-	791	A-	41		59	
FT	751321	4184	2090	A+	215	A+	791	A+	41		59	
FT	751326	4184	2090	B+	215	A+	791	A+	41		59	
FT	751319	4184	2090	A-	215	A-	791	A-	41		59	
FT	751323	4184	2090	A+	215	A-	791	A-	41		59	
FT	751325	4184	2090	A-	215	A-	791	A-	41		59	
FT	751322	4184	2090	B+	215	A+	791	A+	41		59	
FT	798368	4197	2106	A+	257	A-	576	A+	119		50	
FT	798369	4197	2106	A+	257	A-	576	A+	119		50	
FT	751286	4197	2106	A+	257	A+	576	A+	119		50	
FT	751289	4197	2106	A+	257	A-	576	A-	119		50	
FT	751285	4197	2106	A+	257	A-	576	A-	119		50	
FT	751292	4197	2106	A+	257	A-	576	A-	119		50	
FT	751290	4197	2106	A-	257	A-	576	A-	119		50	
FT	751291	4197	2106	A+	257	A-	576	A+	119		50	

Grade 7 Reading			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	751293	4197	2106	B-	257	A-	576	A-	119		50	
FT	751294	4197	2106	A-	257	A-	576	A-	119		50	
FT	798372	4192	2068	B-	216	B-	964	C-	144		49	
FT	798373	4192	2068	A+	216	A+	964	A+	144		49	
FT	751535	4192	2068	B-	216	A-	964	A-	144		49	
FT	751526	4192	2068	A+	216	A-	964	A-	144		49	
FT	751529	4192	2068	A-	216	A+	964	A-	144		49	
FT	751531	4192	2068	A+	216	B-	964	B-	144		49	
FT	751527	4192	2068	A+	216	A-	964	A-	144		49	
FT	751534	4192	2068	A+	216	A+	964	A+	144		49	
FT	751530	4192	2068	A-	216	A-	964	A-	144		49	
FT	751525	4192	2068	A-	216	A-	964	A-	144		49	
FT	798381	4203	2063	A+	277	A-	477	A-	114		44	
FT	798382	4203	2063	A+	277	A-	477	A+	114		44	
FT	751541	4203	2063	A+	277	A-	477	A-	114		44	
FT	751544	4203	2063	A-	277	A+	477	A-	114		44	
FT	754777	4203	2063	A+	277	A+	477	A+	114		44	
FT	751537	4203	2063	A-	277	A-	477	A+	114		44	
FT	751542	4203	2063	A+	277	A-	477	A+	114		44	
FT	751543	4203	2063	A+	277	A-	477	A-	114		44	
FT	751540	4203	2063	A+	277	A-	477	A-	114		44	
FT	751545	4203	2063	A+	277	A-	477	A-	114		44	

Grade 8 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	784776	4114	2051	A+	261	A+	753	A-	67		51	
FT	784779	4114	2051	A+	261	A-	753	A+	67		51	

Grade 8 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	749032	4114	2051	A+	261	A-	753	A-	67		51	
FT	749029	4114	2051	A-	261	A-	753	A-	67		51	
FT	749027	4114	2051	A+	261	A-	753	A-	67		51	
FT	749022	4114	2051	A+	261	A-	753	A+	67		51	
FT	749024	4114	2051	A-	261	A-	753	A+	67		51	
FT	749023	4114	2051	A+	261	A-	753	A-	67		51	
FT	749030	4114	2051	A+	261	A-	753	B-	67		51	
FT	749028	4114	2051	B+	261	A-	753	A-	67		51	
FT	798192	4136	2078	A+	200	A+	758	A-	62		52	
FT	798198	4136	2078	A+	200	A-	758	A-	62		52	
FT	749093	4136	2078	C-	200	A-	758	B-	62		52	
FT	749092	4136	2078	A-	200	A-	758	A-	62		52	
FT	749681	4136	2078	A-	200	B-	758	A-	62		52	
FT	749099	4136	2078	A+	200	A+	758	A-	62		52	
FT	749097	4136	2078	A+	200	A-	758	A-	62		52	
FT	749098	4136	2078	A-	200	A-	758	A-	62		52	
FT	749095	4136	2078	A+	200	A-	758	A-	62		52	
FT	749094	4136	2078	A+	200	A+	758	A+	62		52	
FT	798226	4170	2102	A-	249	A-	605	B-	102		59	
FT	798227	4170	2102	A+	249	A-	605	A-	102		59	
FT	749489	4170	2102	A+	249	A-	605	A+	102		59	
FT	749490	4170	2102	A+	249	A-	605	A-	102		59	
FT	749494	4170	2102	A+	249	A+	605	A+	102		59	
FT	749500	4170	2102	B+	249	A-	605	A-	102		59	
FT	749496	4170	2102	A+	249	A-	605	C-	102		59	
FT	749495	4170	2102	A-	249	A-	605	A-	102		59	
FT	749497	4170	2102	A+	249	A-	605	A+	102		59	
FT	749499	4170	2102	A+	249	A+	605	A-	102		59	
FT	798231	4132	2052	A+	215	A+	953	A+	119		45	

Grade 8 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	798232	4132	2052	A+	215	A-	953	A-	119		45	
FT	749107	4132	2052	A+	215	A-	953	A-	119		45	
FT	749115	4132	2052	A+	215	B-	953	A-	119		45	
FT	749105	4132	2052	A+	215	A-	953	A+	119		45	
FT	749113	4132	2052	A-	215	A-	953	A+	119		45	
FT	749108	4132	2052	A+	215	A-	953	A+	119		45	
FT	751269	4132	2052	A-	215	A-	953	A-	119		45	
FT	749104	4132	2052	A+	215	A-	953	A+	119		45	
FT	749114	4132	2052	A-	215	A+	953	A-	119		45	
FT	798236	4144	2060	A+	260	A-	496	A-	87		51	
FT	798237	4144	2060	A+	260	A-	496	A-	87		51	
FT	749604	4144	2060	A-	260	A-	496	A+	87		51	
FT	749594	4144	2060	A+	260	B-	496	A-	87		51	
FT	749596	4144	2060	A+	260	A-	496	A-	87		51	
FT	749598	4144	2060	A+	260	A-	496	A-	87		51	
FT	749599	4144	2060	A+	260	A-	496	A+	87		51	
FT	749597	4144	2060	A-	260	A+	496	A-	87		51	
FT	749595	4144	2060	A-	260	A-	496	A-	87		51	
FT	749593	4144	2060	A+	260	A-	496	A-	87		51	

Grade 11 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	784782	4123	2004	A+	266	A-	695	A-	62		54	
FT	784783	4123	2004	C+	266	A-	695	A-	62		54	
FT	752237	4123	2004	A-	266	A-	695	A-	62		54	
FT	752244	4123	2004	A-	266	A-	695	A-	62		54	

Grade 11 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	752258	4123	2004	A+	266	B-	695	A-	62		54	
FT	752239	4123	2004	A+	266	A-	695	A-	62		54	
FT	752238	4123	2004	A+	266	A-	695	A-	62		54	
FT	752257	4123	2004	B+	266	B-	695	A-	62		54	
FT	752242	4123	2004	A-	266	A-	695	A+	62		54	
FT	752241	4123	2004	A+	266	A-	695	A-	62		54	
FT	797936	4131	1982	A-	217	A-	678	A-	73		47	
FT	797937	4131	1982	A+	217	B-	678	A-	73		47	
FT	751806	4131	1982	A+	217	A-	678	A-	73		47	
FT	751810	4131	1982	A+	217	A-	678	A+	73		47	
FT	751805	4131	1982	A-	217	B-	678	A-	73		47	
FT	751809	4131	1982	A-	217	A-	678	A-	73		47	
FT	751814	4131	1982	A+	217	A-	678	A+	73		47	
FT	751816	4131	1982	A+	217	B-	678	A-	73		47	
FT	751807	4131	1982	A+	217	A-	678	A-	73		47	
FT	751808	4131	1982	A+	217	B-	678	A-	73		47	
FT	797941	4115	2009	A-	247	A-	530	B-	97		53	
FT	797942	4115	2009	A+	247	A-	530	A-	97		53	
FT	754851	4115	2009	A-	247	A-	530	B-	97		53	
FT	754854	4115	2009	B+	247	A-	530	A-	97		53	
FT	754857	4115	2009	A-	247	A-	530	A-	97		53	
FT	754849	4115	2009	A+	247	B-	530	A-	97		53	
FT	754858	4115	2009	A+	247	A-	530	A+	97		53	
FT	754852	4115	2009	A+	247	A-	530	A-	97		53	
FT	754850	4115	2009	A-	247	A-	530	A-	97		53	
FT	754848	4115	2009	A+	247	A-	530	A-	97		53	
FT	797945	4118	2003	A+	211	A-	942	A-	149		47	
FT	797946	4118	2003	A-	211	A-	942	A+	149		47	
FT	754838	4118	2003	A+	211	B-	942	A-	149		47	

Grade 11 Reading			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	754841	4118	2003	A-	211	A-	942	A-	149		47	
FT	754837	4118	2003	A+	211	C-	942	B-	149		47	
FT	754842	4118	2003	A-	211	A-	942	A-	149		47	
FT	754835	4118	2003	A+	211	A+	942	A+	149		47	
FT	754847	4118	2003	A+	211	B-	942	A-	149		47	
FT	754839	4118	2003	B+	211	A-	942	A+	149		47	
FT	754840	4118	2003	A+	211	B-	942	A-	149		47	
FT	797950	4106	2058	A+	266	A-	439	A+	125		51	
FT	797951	4106	2058	A+	266	A-	439	B-	125		51	
FT	751738	4106	2058	A-	266	A-	439	A-	125		51	
FT	751739	4106	2058	B+	266	A-	439	A+	125		51	
FT	751740	4106	2058	A-	266	A-	439	A-	125		51	
FT	751741	4106	2058	A-	266	B-	439	B-	125		51	
FT	751748	4106	2058	A-	266	B-	439	B-	125		51	
FT	751743	4106	2058	A-	266	B-	439	A-	125		51	
FT	751746	4106	2058	A-	266	B-	439	A-	125		51	
FT	751744	4106	2058	A+	266	A-	439	A-	125		51	

Appendix U: Mathematics Field Test Differential Item Functioning

***M=Male, F=Female, AM=American Indian, AS=Asian, BL=African American/Black, HI= Hispanic, MU=Multiple Ethnicities, WH=White**
200 student minimum for reporting

Grade 3 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	744504	4237	2122	A-	270	A-	687	A-	97		70	
FT	744508	3980	1972	B-	261	B-	631	A-	83		50	
FT	744511	5903	2696	A-	443	B-	1507	A-	215	A-	81	
FT	744519	3995	1984	A-	266	A-	603	A-	83		64	
FT	744520	3990	1946	A-	243	B-	652	A-	77		53	
FT	744522	4315	2141	A-	280	B-	670	A-	91		66	
FT	744523	3997	1977	A-	262	C-	622	A-	84		54	
FT	744524	4437	2230	A-	294	C-	705	B-	93		55	
FT	744528	3924	1919	B-	248	C-	646	A-	82		48	
FT	744530	4399	2161	A+	277	C-	720	A-	86		57	
FT	744531	4252	2096	A-	285	A-	692	A-	79		63	
FT	744532	3879	1887	B-	266	B-	624	B-	80		64	
FT	744534	5821	2668	A-	441	B-	1489	C-	210	A-	77	
FT	744536	4149	2010	A-	264	A+	661	A-	95		43	
FT	744538	4170	2044	A+	265	A+	670	A+	92		56	
FT	744544	6399	2971	A+	455	A+	1594	A+	236	A+	93	
FT	744550	3719	1837	A+	242	A-	610	A+	80		49	
FT	744552	6059	2774	A+	462	A-	1528	A+	208	A+	75	
FT	744555	3495	1736	A+	247	A+	576	A+	86		53	
FT	744558	3823	1841	A+	269	B+	614	A+	78		56	
FT	744563	6156	2794	A+	454	A-	1557	A+	226	A+	85	
FT	744566	3929	1915	A-	286	A-	616	A-	92		53	
FT	744569	4003	1998	A-	266	A+	637	A+	80		51	
FT	744571	4103	2077	A-	283	A+	658	A+	100		58	
FT	744573	3973	1978	A+	280	A-	640	A-	94		48	

Grade 3 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	744576	4019	1989	A-	262	A-	631	A-	97		59	
FT	744582	3878	1937	A-	246	A-	589	A-	88		61	
FT	744612	4285	2159	A+	286	A-	668	A+	92		58	
FT	744613	4076	2031	A+	264	A-	661	A+	85		47	
FT	744614	3429	1739	A-	206	C-	533	B-	75		55	
FT	744617	3691	1827	A+	266	A+	615	A-	77		58	
FT	744620	3474	1691	A-	238	B-	546	A+	86		58	
FT	744624	5934	2709	A-	440	A-	1518	A-	225	A+	67	
FT	744626	4008	1999	A-	269	A-	670	A-	68		50	
FT	744628	3462	1701	A+	238	A-	553	A+	66		44	
FT	744631	3891	1943	A+	261	A-	636	A+	84		55	
FT	744636	4261	2094	A-	283	A+	691	A+	82		44	
FT	744637	6338	2834	A+	479	A-	1557	A-	222	A+	77	
FT	744638	6097	2822	A+	444	A-	1549	A+	223	A+	73	
FT	744641	6004	2744	A+	420	A-	1540	A-	219	A-	65	
FT	744642	3940	1948	A-	266	A-	597	B-	76		71	
FT	744643	4072	1987	A+	302	A-	672	A+	89		56	
FT	744644	4300	2158	A-	278	A-	697	A-	102		64	
FT	744647	3932	1918	A+	246	A-	605	A-	93		48	
FT	744653	4046	2031	A-	249	A-	632	A+	93		51	
FT	744658	5973	2715	A-	426	A-	1553	A-	225	B-	69	
FT	744659	4199	2094	A+	286	A-	708	A-	99		48	
FT	744660	4063	1942	A-	260	A-	648	A-	84		48	
FT	744663	3977	1992	A-	275	A-	624	A-	78		55	
FT	744667	3829	1852	A+	246	B-	623	A-	75		47	

Grade 4 Mathematics			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	744684	6714	3105	A-	510	A-	1628	A-	242	A+	103	
FT	744689	6182	2818	A+	479	A+	1571	A-	236	A-	102	
FT	744698	3908	1949	A+	295	A-	628	B-	91		46	
FT	744701	4342	2186	A+	281	C-	764	B-	104		55	
FT	744702	4360	2155	A+	314	A-	696	A+	90		56	
FT	744703	4142	2075	A-	263	A-	707	A-	94		49	
FT	744704	4347	2197	A+	308	A+	738	A-	100		59	
FT	744705	3743	1851	A-	245	A-	627	A+	72		42	
FT	744706	3819	1917	A-	261	B-	656	A-	75		46	
FT	744717	4199	2091	A+	265	A-	677	A-	93		48	
FT	744723	4190	2093	A+	276	A-	745	A-	101		51	
FT	744729	6679	3133	A+	539	A+	1630	A-	226	B+	98	
FT	744734	3735	1879	A-	247	A+	609	A-	93		57	
FT	744736	4350	2141	A+	280	A-	739	A-	91		50	
FT	744740	4196	2107	A+	267	B-	678	A-	92		52	
FT	744744	4722	2361	A-	292	C-	775	A-	128		59	
FT	744745	4251	2146	A+	326	B-	676	A-	107		60	
FT	744754	3784	1898	A+	259	A-	615	A+	90		57	
FT	744757	4245	2145	A-	331	A-	702	A+	89		58	
FT	744760	4333	2152	A+	275	A-	704	A+	114		61	
FT	744765	4117	2039	A-	243	A+	668	A+	105		59	
FT	744769	6455	3013	A-	480	A-	1615	A-	221	A-	92	
FT	744771	6172	2850	A+	491	A-	1543	A-	211	A-	85	
FT	744773	4135	2041	A-	276	A+	659	A+	83		48	
FT	744775	4362	2218	A+	298	A+	713	A+	104		43	
FT	744778	6742	3172	A+	504	A-	1708	A-	244	A-	102	
FT	744780	4239	2099	A+	272	A-	675	A-	97		59	
FT	744781	4127	2025	B-	314	A-	694	A-	100		58	

Grade 4 Mathematics			Gender DIF (REF=M, FOC=F)		Ethnicity DIF (REF=WH, FOC=BL)		Ethnicity DIF (REF=WH, FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	744783	4590	2300	A-	304	A-	761	A-	105		60	
FT	744786	3883	1922	A-	256	A-	617	A-	84		48	
FT	744791	4015	2053	A-	266	A-	675	A-	81		54	
FT	744796	4324	2162	A-	308	B-	708	A-	106		65	
FT	744797	4026	2061	A-	269	A-	683	A-	97		52	
FT	744810	4454	2261	A+	310	A-	739	A-	103		57	
FT	744811	6273	2892	A+	497	A-	1579	A-	238	A+	96	
FT	744813	6813	3213	A+	530	A-	1639	A+	244	A+	105	
FT	744814	4078	1974	A+	278	A-	625	A+	82		63	
FT	744815	4211	2092	A-	273	B-	669	A-	95		54	
FT	744816	3765	1867	A-	230	A-	628	A-	76		46	
FT	744819	6770	3109	A+	498	A-	1671	A-	223	A-	111	
FT	744821	4249	2139	A+	296	A-	735	A+	108		58	
FT	744823	6147	2834	A+	497	A-	1542	A-	215	C-	104	
FT	744825	4250	2100	A-	273	B-	731	A-	94		64	
FT	744827	4588	2311	A-	304	A-	748	A-	117		54	
FT	744829	3994	2037	B-	240	A-	684	A-	103		60	
FT	744833	4327	2194	A+	277	A-	708	A-	120		54	
FT	744839	3794	1875	A-	246	A-	588	A+	81		59	
FT	744907	4563	2281	A+	276	C-	713	A-	105		67	
FT	744910	3757	1875	A-	241	A-	631	A-	91		48	
FT	744911	3979	1922	A+	260	A-	641	A-	89		56	

Grade 5 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	744824	4544	2239	A-	285	C-	705	C-	100		70	
FT	744883	4306	2164	A-	291	A-	755	A-	95		52	
FT	744887	3782	1917	A+	249	B+	616	A+	74		44	
FT	744888	4683	2360	A-	343	C-	714	A-	100		60	
FT	744889	6531	3057	A-	481	A-	1518	A-	233	A-	82	
FT	744891	6444	2980	A-	480	B-	1538	B-	210	B-	82	
FT	744892	5976	2790	A+	466	A-	1448	A-	197		91	
FT	744893	4131	2049	A+	268	A+	657	B+	100		53	
FT	744894	6506	3033	A+	518	A-	1495	A+	218	A+	93	
FT	744895	4350	2141	A+	277	A-	720	A-	87		53	
FT	744896	4281	2099	A+	295	A+	686	A-	115		48	
FT	744897	4133	2038	A+	254	B-	728	B-	80		52	
FT	744898	4264	2063	A+	294	A-	682	A-	99		57	
FT	744899	4243	2082	A+	259	A-	684	A+	104		54	
FT	744901	4176	2099	A+	298	B-	665	A-	94		51	
FT	744912	5881	2748	A+	445	A-	1394	A-	205	A-	88	
FT	744916	5904	2707	A+	453	A-	1455	A-	195		87	
FT	744918	4235	2089	A-	288	A-	678	A-	99		43	
FT	744919	4237	2059	A+	293	C-	651	B-	95		55	
FT	744920	4241	2132	A+	281	B-	695	C-	103		57	
FT	744921	4297	2112	A-	286	A-	682	A-	88		57	
FT	744923	4237	2141	A+	306	B-	683	A-	97		56	
FT	744924	4112	1988	A-	264	B-	701	A+	85		53	
FT	744926	4032	2042	A-	280	A-	628	A-	89		49	
FT	744928	3772	1896	A-	247	A-	607	A-	81		53	
FT	744929	4348	2129	A-	314	A-	716	A-	108		62	
FT	744930	4211	2109	A-	252	B-	716	B-	89		49	
FT	744931	3646	1794	B-	228	A-	604	A-	78		43	
FT	744932	3865	1926	A+	247	A-	631	A+	96		48	

Grade 5 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	744933	4116	2048	A+	260	A-	677	A+	81		61	
FT	744935	4343	2196	A-	297	A-	723	A+	94		53	
FT	744936	4092	2030	A-	268	A+	705	A-	85		41	
FT	744937	3782	1817	A-	244	A+	623	A-	94		43	
FT	744938	3668	1842	A+	249	A+	589	A+	95		49	
FT	744939	4274	2088	A+	287	A-	696	A-	108		45	
FT	744940	3922	1919	A-	263	A-	652	A-	105		52	
FT	744941	4047	1968	A+	250	A-	658	A+	90		57	
FT	744942	3895	1924	A+	252	B-	602	A-	112		49	
FT	744943	6572	3067	A-	503	B-	1496	A-	218	C-	95	
FT	744946	3997	1985	A+	262	A-	650	A-	94		46	
FT	744948	4123	1993	B+	263	A-	660	A-	101		49	
FT	744951	4178	2037	A+	258	A-	670	A+	89		67	
FT	744953	6511	3028	A-	519	A+	1495	A+	213	A-	99	
FT	744956	4259	2090	A-	290	A-	710	A+	116		46	
FT	744957	4292	2097	A-	298	A+	677	A-	86		64	
FT	744967	4443	2187	A+	328	B-	723	A-	97		55	
FT	744968	3796	1841	A+	251	B-	623	A+	86		45	
FT	744972	6443	2945	A-	492	A-	1487	A-	217	A+	76	
FT	744975	6014	2764	A+	454	A+	1416	A+	211	A+	82	
FT	744976	3835	1851	A+	275	A-	591	A+	94		49	

Grade 6 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	744977	4105	2069	A-	232	A-	689	A+	88		50	
FT	744978	6424	3074	A+	500	A+	1356	A+	205	A+	111	
FT	744979	4548	2239	A+	278	A-	775	A+	105		50	
FT	744980	3857	1920	A-	238	A-	679	A-	86		44	
FT	744981	4067	2026	A-	239	A-	693	A-	85		59	
FT	744982	3707	1868	A+	225	B-	611	A-	80		61	
FT	744984	3957	1947	A+	236	A+	672	A+	71		56	
FT	744985	4233	2117	A+	268	A+	753	A+	110		58	
FT	744986	3888	1972	A-	230	A-	628	A-	100		52	
FT	744988	4544	2215	A+	263	A-	801	A-	101		54	
FT	744990	4565	2274	A-	288	A-	781	A+	108		58	
FT	744991	6507	3064	A-	479	A-	1374	A+	220	A-	102	
FT	744992	4402	2207	A+	271	A-	702	A-	114		64	
FT	744993	5907	2787	A+	462	A-	1277	A+	211	A+	87	
FT	744995	4455	2188	A-	248	A-	780	A+	96		52	
FT	744996	4609	2301	A-	248	A-	815	A+	124		54	
FT	744997	3857	1925	A-	224	B-	679	A-	98		58	
FT	744998	6094	2825	A-	456	A-	1336	A-	225	A-	95	
FT	745000	4708	2329	A-	273	A-	769	A-	114		49	
FT	745002	4516	2245	A+	268	A-	712	A+	106		58	
FT	745003	4295	2129	A+	253	A-	714	A-	103		53	
FT	745004	4216	2113	A-	241	A+	729	A+	95		55	
FT	745005	3987	1983	A-	216	A+	666	A+	89		58	
FT	745007	4607	2332	A+	273	A+	805	A-	106		51	
FT	745008	4480	2241	A+	281	A+	756	A-	102		58	
FT	745009	4734	2343	A-	270	A+	783	A+	95		79	
FT	745011	3611	1775	A-	206	B-	637	B-	97		46	
FT	745013	6133	2888	A+	472	A+	1290	A-	206	A+	105	
FT	745014	3657	1814	A+	229	A+	607	A+	73		44	

Grade 6 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745015	4392	2152	A-	253	A-	750	A-	112		63	
FT	745016	4159	2065	A-	244	B-	672	A-	82		58	
FT	745017	6428	3025	A+	521	A-	1352	A-	217	A-	101	
FT	745018	4065	2029	A+	231	A-	675	A+	99		53	
FT	745019	4235	2087	A-	255	A+	714	A+	118		54	
FT	745020	3812	1915	A+	226	A-	639	A-	112		40	
FT	745022	3724	1871	A+	234	B-	649	A-	74		51	
FT	745023	5852	2718	A-	462	A-	1247	A-	200	A-	101	
FT	745024	4442	2202	A+	250	A-	780	A-	106		58	
FT	745025	4500	2238	A+	268	B-	764	A-	92		58	
FT	745026	4116	2015	A+	232	A-	732	A+	110		55	
FT	745027	6080	2824	A+	471	A-	1295	A+	199		96	
FT	745028	4355	2222	A+	259	A-	732	A-	93		51	
FT	745029	4817	2358	A-	293	A-	803	A-	123		68	
FT	745030	3767	1863	A-	239	B-	604	B-	82		42	
FT	745031	4192	2042	A+	264	A+	711	A+	83		48	
FT	745032	3831	1899	A+	238	A+	670	A+	94		46	
FT	745033	4123	2042	A-	254	C-	682	B-	96		51	
FT	745034	6084	2902	A-	482	A-	1300	A-	192		100	
FT	745035	6359	2998	A+	501	A+	1307	A-	213	A-	101	
FT	745036	3947	1953	A-	206	A-	643	A+	100		44	

Grade 7 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745037	4756	2389	A-	292	A-	768	A-	124		63	
FT	745038	4621	2279	A-	290	A+	778	A+	112		69	
FT	745039	6182	2861	A-	534	A-	1233	A-	182		98	
FT	745040	4271	2160	C-	265	A-	728	A-	92		54	
FT	745041	5774	2662	A-	498	C-	1204	A-	164		86	
FT	745042	5893	2694	A+	496	A-	1235	A-	171		98	
FT	745043	6073	2822	A-	502	A-	1237	A-	182		88	
FT	745044	4281	2094	A-	267	A-	736	A-	83		62	
FT	745045	4053	2001	A+	250	A-	698	A-	82		55	
FT	745048	4396	2153	A-	253	A-	754	A-	105		49	
FT	745049	4474	2218	A+	246	A+	756	A-	100		51	
FT	745050	4486	2219	A-	271	A-	771	A-	114		55	
FT	745051	4481	2193	A-	264	A-	764	A-	110		58	
FT	745052	4515	2219	A-	269	A-	739	A-	110		49	
FT	745053	4665	2280	A+	308	A+	795	A+	130		61	
FT	745054	3952	1996	A-	237	A-	668	A-	97		46	
FT	745055	4528	2189	A-	242	A-	785	A-	112		60	
FT	745056	5730	2640	A-	480	A-	1221	A-	157		85	
FT	745057	3823	1917	A-	203	A-	676	A-	92		42	
FT	745058	5860	2707	A+	498	A-	1193	A-	182		88	
FT	745059	4424	2171	A-	270	A-	763	A-	97		58	
FT	745061	4523	2226	A+	305	A-	755	A+	108		54	
FT	745062	4021	1927	A+	258	A-	706	A-	80		55	
FT	745063	3692	1826	A+	243	A-	595	A-	87		42	
FT	745064	5790	2720	A+	502	A+	1203	A-	177		87	
FT	745065	3683	1824	A+	206	A-	621	A-	89		35	
FT	745066	3827	1907	A+	235	B-	665	A+	75		59	
FT	745067	4548	2204	A+	255	A+	764	A+	119		74	
FT	745068	3840	1868	A-	229	A+	649	A+	89		40	

Grade 7 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745069	4074	1982	A+	253	A+	713	A+	86		44	
FT	745070	3975	2042	A+	259	B-	633	A-	106		49	
FT	745071	4505	2268	A+	291	A-	807	A-	108		48	
FT	745072	6181	2854	A-	530	A-	1259	A-	176		101	
FT	745073	4302	2110	A+	268	A+	747	A-	96		59	
FT	745074	5707	2714	A-	513	A-	1190	A-	167		98	
FT	745075	4046	1957	A-	238	A-	683	A-	88		51	
FT	745076	4087	2050	A-	247	A-	676	A-	91		44	
FT	745077	4569	2281	A-	244	A-	773	A+	119		50	
FT	745080	3975	1961	A+	224	A-	702	A+	83		56	
FT	745081	3918	1970	A-	265	A-	640	A-	96		57	
FT	745082	3853	1901	A+	235	A-	637	A-	109		43	
FT	745083	3713	1833	A+	202	A-	622	A+	92		39	
FT	745087	4225	2083	A+	244	A-	701	A-	96		57	
FT	745089	4519	2189	B+	259	A-	766	A+	114		64	
FT	745091	3867	1907	A+	232	B-	678	A-	99		44	
FT	745092	4507	2199	A+	266	A-	820	A-	122		54	
FT	745093	6239	2903	A+	511	A-	1271	A-	178		87	
FT	745094	3723	1784	A+	216	A-	654	A-	78		37	
FT	745095	3751	1845	A-	230	A-	689	A-	66		37	
FT	751223	4265	2084	A+	265	A-	739	A-	108		70	

Grade 8 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745113	5717	2726	A+	418	B-	1140	A-	184		76	
FT	745115	4025	1989	A-	238	A-	657	A-	83		36	
FT	745116	4182	2062	A-	252	A+	726	A+	89		55	
FT	745117	4851	2465	A+	278	A+	791	B+	106		58	
FT	745119	4112	2038	A-	238	B-	746	A-	82		47	
FT	745120	4430	2214	A+	269	A-	758	A-	107		68	
FT	745122	5789	2719	A+	445	A-	1207	A-	174		66	
FT	745123	3937	1967	A+	215	A+	657	A+	94		40	
FT	745124	4112	2065	A-	227	A-	746	A-	76		50	
FT	745125	4088	1998	A+	249	A-	695	A-	104		42	
FT	745126	5956	2838	A-	420	A+	1216	A-	176		78	
FT	745127	4479	2251	A+	260	A-	797	A-	84		56	
FT	745128	4524	2207	A+	250	A+	813	A-	92		64	
FT	745129	4141	2075	A-	252	B-	728	A-	101		40	
FT	745130	4208	2112	A-	242	A-	714	A-	90		57	
FT	745131	4023	2049	B-	235	A-	655	A-	89		50	
FT	745132	4050	2022	A+	229	A-	687	A-	83		42	
FT	745133	4067	2007	A-	210	A-	722	A-	85		36	
FT	745134	5612	2595	A-	423	A-	1126	A-	167		80	
FT	745136	3872	1909	A+	230	B-	663	A-	70		54	
FT	745137	3923	1937	A+	221	B-	720	A-	87		47	
FT	745138	4591	2315	A-	259	A-	823	A-	107		51	
FT	745139	5607	2673	A-	431	A-	1133	A-	169		74	
FT	745140	3965	1953	A+	220	A+	664	A+	86		47	
FT	745141	4011	2010	A+	226	A-	718	A-	82		59	
FT	745142	4173	2108	A+	247	A+	723	A-	92		59	
FT	745143	5649	2651	A-	430	A-	1153	A-	183		95	
FT	745144	5753	2726	A-	466	A-	1175	A-	173		82	
FT	745145	4174	2059	A-	257	A-	736	A+	106		43	

Grade 8 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745147	3996	2005	A-	235	A-	676	A-	82		50	
FT	745148	4193	2087	A+	232	A+	672	A-	87		51	
FT	745149	4065	1995	A-	234	A-	708	A+	99		53	
FT	745150	3484	1717	A+	193		620	A-	68		46	
FT	745151	3604	1797	A+	170		622	A-	84		46	
FT	745152	5641	2659	A-	408	B-	1160	A-	170		80	
FT	745153	4646	2306	A+	265	A-	863	A-	97		49	
FT	745154	4705	2359	A+	274	A+	837	A+	91		69	
FT	745156	4148	2104	A+	231	A-	711	A-	95		54	
FT	745157	4615	2297	B+	305	A+	809	A+	80		59	
FT	745158	3851	1926	A-	234	A-	652	A-	97		52	
FT	745159	3911	1923	A+	230	A-	683	A-	78		45	
FT	745160	4204	2159	A+	268	A-	730	A-	103		51	
FT	745162	4415	2152	A+	243	A-	775	A-	110		61	
FT	745163	4529	2219	A+	219	A+	804	A-	103		61	
FT	745164	4036	1993	A+	231	A-	702	A+	105		33	
FT	745165	5775	2770	A+	422	A-	1226	A+	193		84	
FT	745166	4076	2040	B+	235	A+	675	A+	96		57	
FT	745167	3759	1881	A-	240	B-	662	A-	89		47	
FT	745168	3768	1855	A-	239	A-	666	A-	91		50	
FT	745170	5708	2721	A-	420	A-	1168	A-	176		70	

Grade 11 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	707401	3765	1817	A-	216	A-	575	A-	97		51	
FT	745172	3786	1825	A+	236	A-	619	A-	90		33	
FT	745174	3931	1945	A+	209	A-	640	A-	94		43	
FT	745175	3763	1827	A+	212	A+	633	A+	91		54	
FT	745177	4991	2395	A+	285	A+	969	A+	128		85	
FT	745178	3785	1849	A-	242	A+	575	A-	94		45	
FT	745180	3982	1940	A-	238	A+	646	A+	107		50	
FT	745181	4131	1998	A-	252	A+	663	A+	106		54	
FT	745183	3883	1872	A-	213	A+	621	A+	95		45	
FT	745184	4051	1968	A-	243	A+	628	A-	86		51	
FT	745185	4047	2003	A-	240	B-	645	A-	87		48	
FT	745187	3946	1905	A-	216	A-	644	A-	79		52	
FT	745188	3879	1843	A-	210	A-	617	A-	99		53	
FT	745190	4554	2220	A-	276	B-	683	A-	126		52	
FT	745191	4660	2269	B-	280	A-	732	A-	120		52	
FT	745192	4069	1943	A-	234	A-	673	A+	89		50	
FT	745194	4130	2024	A+	239	C-	635	A-	100		58	
FT	745195	4446	2178	A+	258	A-	722	A-	119		61	
FT	745196	4479	2204	A-	281	A+	716	A-	107		61	
FT	745197	4845	2288	A+	291	A-	936	A+	130		81	
FT	745198	4091	1966	A+	230	A+	621	A+	116		48	
FT	745199	4761	2293	A+	285	A-	919	A-	125		77	
FT	745200	4088	1996	A+	243	A-	659	A-	96		49	
FT	745201	3491	1691	A+	198		525	A+	94		35	
FT	745203	4949	2387	A-	290	A+	946	A-	124		74	
FT	745205	3583	1770	A-	216	A-	538	A-	86		44	
FT	745206	4059	1998	A-	255	A-	633	A-	88		49	
FT	745207	4804	2288	A+	301	A+	904	A-	157		72	
FT	745208	4879	2310	A+	282	A-	929	A+	145		64	

Grade 11 Mathematics			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH,FOC=AS)		Ethnicity DIF (REF=WH,FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745210	4007	1957	A+	228	A-	661	A-	101		48	
FT	745212	4683	2279	A+	280	A+	928	A-	132		63	
FT	745213	3952	1894	A+	224	A-	616	A-	93		52	
FT	745214	4050	2041	A+	216	B-	679	A-	95		51	
FT	745215	4515	2197	A-	259	A-	697	A-	124		50	
FT	745216	4589	2257	A+	263	A-	750	A+	112		49	
FT	745217	4130	2010	A+	246	A+	658	A+	98		51	
FT	745219	4026	1989	A+	229	A-	666	A+	100		48	
FT	745222	4425	2203	A+	256	A+	748	A+	102		60	
FT	745223	4731	2250	A+	284	A-	947	A-	130		71	
FT	745224	4989	2412	A-	280	A-	897	A-	136		65	
FT	745226	4307	2165	A-	255	A-	663	A-	102		53	
FT	745227	4124	2047	A-	245	A+	609	A-	99		57	
FT	745228	4366	2113	B-	262	A-	703	B-	115		43	
FT	745229	4705	2319	A-	279	A+	722	A-	119		54	
FT	745230	4845	2384	A-	300	A-	748	A-	128		71	
FT	749776	4017	1931	A-	228	A-	641	A+	99		47	
FT	749778	4818	2377	A-	272	A-	918	A-	133		71	
FT	749779	4076	2016	A+	225	A+	630	A-	99		45	
FT	749781	4195	2052	A+	267	A-	691	A+	112		50	
FT	749784	4137	1975	A+	251	A-	652	A+	96		50	

Appendix V: Science Field Test Differential Item Functioning

***M=Male, F=Female, AM=American Indian, AS=Asian, BL=African American/Black, HI= Hispanic, MU=Multiple Ethnicities, WH=White**
200 student minimum for reporting

Grade 5 Science			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745231	6372	2899	A+	487	A-	1454	A+	221	A-	93	
FT	745232	4315	2096	A+	287	A-	696	A-	88		66	
FT	745233	3978	1937	A-	264	B+	615	A-	86		61	
FT	745235	3990	2003	A+	253	B-	643	B-	109		59	
FT	745236	4049	1980	A+	278	B-	655	B-	106		37	
FT	745238	6321	2916	A-	486	A-	1443	A-	215	A-	97	
FT	745239	4503	2248	A-	288	B-	745	A-	103		50	
FT	745240	4017	1992	A-	274	B-	642	A-	99		56	
FT	745241	6103	2792	A+	451	B-	1432	A-	201	A-	76	
FT	745242	4427	2158	A+	310	A-	742	A-	98		62	
FT	745243	4190	2042	A+	290	C-	662	C-	75		57	
FT	745244	4616	2237	A+	309	B-	780	A-	95		60	
FT	745245	3941	1911	A+	257	B-	605	A-	87		44	
FT	745246	4317	2143	A+	291	B-	752	A-	109		60	
FT	745247	6523	3013	A+	505	A-	1478	A-	213	A-	77	
FT	745248	4054	2019	A+	277	A+	641	A-	98		45	
FT	745249	4027	2019	A-	291	B+	669	A+	98		43	
FT	745250	4016	1998	A-	267	A-	680	A-	89		55	
FT	745251	3841	1877	A+	239	C-	621	B-	98		46	
FT	745252	6334	2920	A+	473	A-	1429	A+	225	B-	86	
FT	745253	3545	1793	A+	249	C-	580	B-	91		57	
FT	745254	3985	1965	A-	285	C-	660	A-	85		56	
FT	745255	4177	2088	A+	254	C-	695	A-	84		50	
FT	745256	4473	2170	A-	301	A+	716	A-	105		48	
FT	745258	3787	1891	A+	226	A-	630	A-	92		54	

Grade 5 Science			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745259	4116	2020	A-	275	C-	665	B-	91		46	
FT	745260	3677	1797	A+	236	B-	623	A-	80		41	
FT	745261	4526	2265	A-	277	A+	769	A-	101		60	
FT	745262	6611	3063	A+	507	A-	1523	A-	213	B-	95	
FT	745263	4492	2279	A-	293	A-	749	A-	104		51	
FT	745264	3960	1949	A-	247	B-	677	A-	84		44	
FT	745265	4139	2032	A+	305	A-	626	B-	97		56	
FT	745267	4136	2044	A-	271	B-	691	A-	84		54	
FT	745268	6317	2978	A-	486	B-	1502	A-	202	B-	90	
FT	745271	5773	2644	A-	460	A-	1403	A+	187		83	
FT	745272	4164	2046	A-	300	B-	685	B-	93		52	
FT	745273	3575	1777	A+	234	B-	594	A-	84		49	
FT	745274	4310	2167	A-	285	A-	729	A+	92		65	
FT	745275	6334	2959	A+	490	A-	1405	A-	206	A-	83	
FT	745277	4054	2025	A-	305	A-	622	A-	108		51	
FT	745278	4204	2082	A+	279	A+	660	A+	99		51	
FT	745279	4418	2191	B-	292	C-	734	C-	97		52	
FT	745280	4086	2032	A+	262	A-	673	B-	87		48	
FT	745282	4140	2051	A-	276	A-	691	A-	98		43	
FT	745283	3991	2006	A+	260	A-	671	B-	92		58	
FT	745284	4341	2107	A-	294	C-	724	A-	107		56	
FT	745285	4197	2105	A+	266	B-	703	A-	89		45	
FT	745286	4051	1969	A-	251	A-	644	A-	108		59	
FT	745287	6200	2899	A+	471	A-	1447	A+	215	A-	89	
FT	745288	4287	2071	A+	281	A+	720	A+	102		59	

Grade 8 Science			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745289	5637	2605	A+	409	A-	1152	A-	176		71	
FT	745290	4205	2132	A-	264	A-	727	A-	93		58	
FT	745291	4141	2052	A-	211	A-	772	A-	91		39	
FT	745295	3912	1980	A+	240	A-	631	A-	76		42	
FT	745296	5592	2626	A-	385	A+	1172	A+	172		80	
FT	745297	4170	2065	B-	248	A-	705	A-	87		57	
FT	745298	3887	1962	A-	239	A-	625	A-	83		50	
FT	745299	3865	1940	B-	215	A-	705	A-	77		49	
FT	745300	4654	2349	A+	258	A-	762	A-	95		55	
FT	745301	4637	2350	A-	268	B-	818	A-	88		55	
FT	745302	3696	1846	A-	221	A+	652	A+	88		48	
FT	745303	5094	2330	A+	412	A-	1079	A-	168		72	
FT	745304	3970	1982	A-	201	A-	690	A-	77		58	
FT	745305	4178	2044	A+	214	B-	694	A-	87		51	
FT	745306	4165	2053	A+	251	A-	699	A-	97		55	
FT	745307	4213	2059	A+	268	A-	693	A-	80		41	
FT	745309	5820	2739	A-	450	A-	1221	A-	195		81	
FT	745310	4189	2086	A-	231	A-	745	A-	89		42	
FT	745311	4043	1960	A+	224	A+	724	A+	87		57	
FT	745312	5364	2523	A+	416	A-	1135	A-	181		73	
FT	745313	4130	2061	A-	245	C-	743	C-	90		50	
FT	745314	4078	2005	A-	242	A+	708	A-	85		63	
FT	745315	3801	1881	A+	213	A-	618	A+	85		45	
FT	745316	5431	2553	A+	404	A-	1132	B-	175		82	
FT	745317	3902	1942	A+	244	A-	686	A-	87		44	
FT	745318	3908	1957	A+	227	A+	659	A+	98		46	
FT	745319	5778	2665	A+	430	A+	1168	A+	187		70	
FT	745320	4120	2066	A+	244	A-	696	A-	74		51	
FT	745321	4119	2078	A-	243	A-	677	A-	85		56	

Grade 8 Science			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745323	4238	2125	A+	251	B-	766	A-	98		49	
FT	745324	4016	1986	A+	235	A-	676	A-	83		55	
FT	745325	4029	2042	A+	229	A+	702	A+	77		47	
FT	745326	5616	2635	A-	422	A-	1145	A-	187		88	
FT	745327	4049	2008	A+	233	B-	689	A-	97		38	
FT	745328	4182	2081	A+	233	A+	765	A+	92		46	
FT	745329	4328	2156	A+	244	A-	734	A-	97		51	
FT	745330	6060	2912	B-	422	A-	1266	A-	193		79	
FT	745331	4568	2306	A-	260	A+	806	A-	92		61	
FT	745333	4106	2082	A-	255	A+	676	A+	85		52	
FT	745334	4076	2044	B-	229	C-	690	A-	95		61	
FT	745335	3961	1941	A-	230	A-	692	A+	90		52	
FT	745336	4146	2038	A-	231	A-	722	A-	90		47	
FT	745337	4564	2309	A-	245	B-	816	A-	99		51	
FT	745338	4589	2265	A+	266	A-	807	A-	107		49	
FT	745339	6020	2841	A+	430	B-	1252	C-	190		75	
FT	745341	4642	2340	A-	303	A-	815	A-	97		56	
FT	745343	4547	2287	A-	260	B-	806	A-	103		58	
FT	745344	4488	2249	B-	253	A-	773	A+	99		57	
FT	745345	4112	2078	A-	249	B-	693	A+	87		54	
FT	745346	4224	2129	A-	258	A-	751	A+	109		48	

Grade 11 Science			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745348	4072	2006	A+	241	A+	645	A+	97		50	
FT	745349	4667	2221	A+	277	A-	714	A+	110		47	
FT	745350	4303	2039	A-	264	A-	835	A-	118		61	
FT	745351	4009	1892	A-	222	B-	677	A-	96		42	
FT	745352	3634	1762	A-	217	A-	622	A-	84		45	
FT	745353	4036	1929	A-	235	A-	642	A-	107		48	
FT	745354	4599	2202	A+	277	A+	876	A+	129		54	
FT	745355	4561	2242	A-	268	A-	708	A-	118		65	
FT	745356	3982	1955	A-	207	A-	681	A-	102		54	
FT	745357	5272	2565	A+	289	A-	994	A+	139		72	
FT	745358	4085	2018	B+	255	A-	657	A+	111		62	
FT	745359	4026	1958	A+	227	A-	609	A+	120		49	
FT	745360	4117	2062	A+	277	B-	659	A-	87		56	
FT	745361	4146	2005	A+	225	A-	667	A-	104		52	
FT	745362	4746	2288	A-	288	A+	875	A-	145		67	
FT	745363	4112	2009	A-	244	A-	655	A-	102		58	
FT	745364	4177	2010	A-	251	A-	663	A-	93		61	
FT	745365	4054	1952	A+	239	A-	643	A-	103		53	
FT	745366	4650	2241	A-	266	A+	897	A-	133		79	
FT	745367	3818	1876	A+	226	A+	624	A-	97		50	
FT	745368	3653	1764	A-	200	A+	605	A+	83		36	
FT	745369	4065	2029	A-	232	A+	649	A-	96		42	
FT	745370	4089	1964	A+	250	A-	630	A-	109		48	
FT	745371	4108	2035	A+	241	A-	648	A-	106		63	
FT	745372	3806	1890	A-	214	A-	552	A+	91		42	
FT	745373	4202	2027	A+	229	A+	617	A+	114		49	
FT	745374	3908	1923	A+	217	A+	625	A-	90		57	
FT	745375	4148	2007	A+	259	A+	645	A-	105		45	
FT	745376	4028	1966	A-	237	A-	612	A-	87		42	

Grade 11 Science			Gender DIF (REF=M,FOC=F)		Ethnicity DIF (REF=WH,FOC=BL)		Ethnicity DIF (REF=WH,FOC=HI)		Ethnicity DIF (REF=WH, FOC=AS)		Ethnicity DIF (REF=WH, FOC=AM)	
Type	Item ID	*N*	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code	NFoc	Code
FT	745377	4918	2346	A+	292	A+	956	A-	151		69	
FT	745378	4124	2066	A-	235	A+	635	A-	101		58	
FT	745379	4078	2021	A-	252	B-	634	A-	101		51	
FT	745380	4754	2293	A-	246	A-	895	A+	113		68	
FT	745381	4557	2274	A-	286	A-	771	A-	114		64	
FT	745382	4123	1969	A-	246	A-	655	A-	102		59	
FT	745383	4471	2140	B-	264	A-	705	A-	92		50	
FT	745384	4058	1992	A-	242	A+	645	A-	112		58	
FT	745385	4407	2175	A-	244	A-	712	A-	103		49	
FT	745386	4222	2029	A-	243	A-	689	A-	106		48	
FT	745387	4709	2293	A+	278	A-	753	A-	98		52	
FT	745388	4086	1990	A-	211	A-	666	A-	99		39	
FT	745389	5079	2416	B-	297	A+	964	A+	115		88	
FT	745390	4242	2066	B-	241	A-	651	A-	110		36	
FT	745391	5450	2637	A-	325	B-	981	A-	144		79	
FT	745392	3995	1951	A-	241	A-	618	A+	88		47	
FT	745393	4485	2183	A-	256	A+	712	A-	125		41	
FT	745394	4841	2302	A-	284	A-	907	A+	137		65	
FT	798392	3677	1817	A+	239	A+	568	A+	99		53	
FT	798394	4125	2002	A+	244	A-	696	A+	95		46	
FT	798397	4111	2076	A-	260	A-	701	A-	99		46	

Appendix W: Reading, Mathematics, and Science Analysis and Demographic Summary Sheets

Reading : Grade 3

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		21887	29.1	8.9	120.2	31.9	15.4	51.5	33.1
Gender	Male	11285	28.5	8.9	118.0	31.4	16.7	53.1	30.2
	Female	10602	29.7	8.9	122.5	32.2	14.1	49.8	36.1
Ethnicity*	AM	293	22.5	8.8	97.2	28.6	38.6	51.9	9.6
	AS	534	30.5	9.3	125.5	34.2	14.4	42.3	43.3
	BL	1496	23.9	9.0	102.2	29.7	33.3	52.1	14.6
	PI	35	26.5	9.5	111.9	33.3	28.6	48.6	22.9
	WH	14630	30.7	8.4	125.8	31.0	10.6	50.1	39.3
	HI	4015	25.7	8.7	107.8	28.8	24.3	57.2	18.5
	MU	884	28.2	8.9	117.0	31.3	18.0	52.8	29.2
Special Ed	No	18785	30.0	8.5	123.3	31.1	12.3	51.6	36.2
	Yes	3102	23.6	9.0	101.4	29.9	34.6	51.0	14.4
ELL	No	20035	29.7	8.8	122.2	31.7	13.7	51.0	35.3
	Yes	1852	22.8	8.0	98.4	25.6	33.6	57.0	9.3
FLS	No	12045	31.7	8.2	129.6	30.8	8.6	46.9	44.5
	Yes	9842	25.9	8.7	108.6	29.2	23.8	57.1	19.1

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 4

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		23039	29.2	8.3	123.4	36.7	14.5	45.8	39.7
Gender	Male	11752	28.8	8.4	121.5	36.7	15.8	46.4	37.8
	Female	11287	29.7	8.2	125.3	36.6	13.2	45.2	41.6
Ethnicity*	AM	322	23.0	8.6	97.2	35.1	40.4	42.2	17.4
	AS	597	29.6	9.4	125.9	42.0	18.4	36.5	45.1
	BL	1600	24.5	8.3	103.0	34.1	30.4	49.6	19.9
	PI	31	25.8	7.7	108.0	31.8	25.8	51.6	22.6
	WH	15353	30.8	7.9	130.3	35.8	9.7	43.0	47.3
	HI	4289	25.8	7.8	108.2	32.2	23.1	55.4	21.5
	MU	847	28.9	8.0	121.5	34.7	15.3	48.1	36.6
Special Ed	No	19498	30.3	7.8	127.7	35.2	10.6	45.7	43.7
	Yes	3541	23.6	8.6	99.6	35.7	36.2	46.3	17.5
ELL	No	21443	29.8	8.1	125.8	36.3	12.6	45.2	42.2
	Yes	1596	21.5	6.6	90.7	25.7	40.3	54.2	5.5
FLS	No	12433	31.9	7.6	135.1	35.2	7.3	39.6	53.1
	Yes	10606	26.1	8.0	109.6	33.6	22.9	53.1	24.0

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 5

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22689	32.2	8.9	129.6	40.0	14.5	38.9	46.6
Gender	Male	11671	31.3	9.1	125.6	40.2	17.1	40.3	42.6
	Female	11018	33.1	8.6	133.8	39.4	11.9	37.4	50.7
Ethnicity*	AM	295	25.9	9.6	102.5	40.3	36.6	39.3	24.1
	AS	567	33.3	9.7	135.5	44.5	13.9	31.7	54.3
	BL	1566	27.5	9.5	109.1	40.3	29.4	43.6	27.1
	PI	32	31.5	9.3	127.2	42.0	21.9	37.5	40.6
	WH	15291	33.7	8.4	136.1	38.4	10.3	36.5	53.2
	HI	4090	29.0	8.8	115.1	37.7	22.5	46.5	31.0
	MU	848	31.2	9.0	125.0	39.6	16.7	41.9	41.4
Special Ed	No	19186	33.6	8.1	135.7	37.4	9.5	38.3	52.2
	Yes	3503	24.4	9.0	96.2	37.5	41.9	42.5	15.6
ELL	No	21602	32.7	8.7	131.6	39.4	13.0	38.5	48.6
	Yes	1087	22.8	7.4	89.0	29.6	45.6	47.8	6.5
FLS	No	12560	34.9	7.9	141.6	37.3	7.5	33.1	59.4
	Yes	10129	28.9	8.9	114.6	38.1	23.3	46.1	30.6

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 6

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22915	32.1	9.0	125.4	39.9	17.2	41.8	41.0
Gender	Male	11684	31.4	9.2	122.6	39.9	19.2	42.4	38.5
	Female	11231	32.7	8.9	128.3	39.6	15.1	41.3	43.6
Ethnicity*	AM	314	24.8	9.2	94.5	36.4	46.5	36.9	16.6
	AS	583	32.5	10.3	128.8	46.2	20.8	33.8	45.5
	BL	1473	26.9	9.3	103.2	37.8	35.4	44.3	20.3
	PI	29	34.7	8.8	138.4	41.7	6.9	41.4	51.7
	WH	15631	33.6	8.5	132.0	38.4	12.3	40.3	47.4
	HI	4098	28.7	8.9	110.3	36.9	26.3	48.2	25.5
	MU	787	31.6	9.3	123.6	40.6	18.7	41.4	39.9
Special Ed	No	19518	33.5	8.3	131.5	37.4	11.5	42.4	46.1
	Yes	3397	23.6	8.7	90.2	34.9	49.7	38.8	11.5
ELL	No	22268	32.4	8.9	126.8	39.2	15.7	42.2	42.1
	Yes	647	19.8	6.8	75.1	26.4	67.9	29.8	2.3
FLS	No	12870	34.7	8.2	137.2	38.0	9.6	37.2	53.2
	Yes	10045	28.6	8.9	110.2	37.0	26.9	47.7	25.4

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 7

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22598	31.3	8.9	129.7	39.3	14.6	38.3	47.1
Gender	Male	11616	30.6	9.0	126.4	39.5	16.6	39.6	43.8
	Female	10982	32.1	8.7	133.3	38.8	12.5	36.8	50.7
Ethnicity*	AM	299	24.4	8.5	99.8	35.0	38.8	45.8	15.4
	AS	550	32.2	10.5	135.1	46.9	18.5	25.8	55.6
	BL	1502	25.5	9.2	104.8	38.8	34.2	42.4	23.4
	PI	24	26.9	6.9	110.1	29.2	16.7	62.5	20.8
	WH	15459	33.0	8.2	136.9	37.2	9.5	36.1	54.4
	HI	3988	27.6	8.8	113.4	36.9	24.7	45.4	29.9
	MU	776	30.9	8.8	127.8	38.7	14.7	41.0	44.3
Special Ed	No	19394	32.8	8.1	136.0	36.4	9.2	37.8	52.9
	Yes	3204	22.4	8.4	92.0	34.9	47.4	40.8	11.8
ELL	No	22019	31.7	8.7	131.2	38.6	13.3	38.4	48.3
	Yes	579	18.5	6.1	75.9	24.7	67.2	30.9	1.9
FLS	No	12822	34.1	7.8	142.0	35.8	7.0	33.0	60.0
	Yes	9776	27.7	8.9	113.7	37.8	24.7	45.2	30.1

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 8

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22220	33.4	9.0	119.1	37.6	18.5	47.7	33.7
Gender	Male	11291	32.3	9.3	114.9	38.0	22.1	47.9	30.1
	Female	10929	34.4	8.6	123.5	36.7	14.8	47.6	37.6
Ethnicity*	AM	283	27.3	9.0	94.7	34.8	38.9	48.1	13.1
	AS	525	32.5	11.0	117.6	46.3	26.7	36.2	37.1
	BL	1370	27.5	9.3	95.6	35.4	40.7	45.3	14.1
	PI	28	31.1	8.7	110.4	36.8	25.0	57.1	17.9
	WH	15315	35.1	8.3	126.3	35.8	12.3	47.4	40.3
	HI	3968	29.3	8.9	102.2	34.5	32.1	51.1	16.9
	MU	731	32.8	9.0	116.5	37.2	19.3	48.7	32.0
Special Ed	No	19259	34.8	8.2	124.9	35.1	12.4	49.6	38.0
	Yes	2961	23.7	8.4	81.4	31.3	58.1	36.0	6.0
ELL	No	21691	33.7	8.8	120.4	37.0	17.0	48.4	34.6
	Yes	529	19.4	6.4	65.7	23.2	78.8	20.6	0.6
FLS	No	12776	36.2	7.9	130.8	35.0	9.5	45.6	44.9
	Yes	9444	29.6	9.1	103.4	35.3	30.7	50.6	18.6

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 11

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		21400	33.9	9.3	111.4	41.8	27.0	44.3	28.7
Gender	Male	10995	33.1	9.7	108.4	43.0	30.0	43.2	26.8
	Female	10405	34.6	8.9	114.6	40.4	23.8	45.5	30.7
Ethnicity*	AM	272	28.4	9.9	87.8	40.6	49.3	36.8	14.0
	AS	541	32.0	11.5	105.4	51.0	37.3	33.8	28.8
	BL	1256	27.7	9.5	84.7	38.5	51.8	38.0	10.2
	PI	33	28.8	9.9	89.7	42.2	42.4	45.5	12.1
	WH	15081	35.6	8.6	118.9	40.0	20.2	45.7	34.1
	HI	3541	29.7	9.3	92.9	38.7	43.2	42.8	14.0
	MU	676	33.1	9.4	107.9	41.5	29.6	44.5	25.9
Special Ed	No	19182	35.0	8.7	116.1	40.0	22.1	46.6	31.4
	Yes	2218	24.3	8.9	71.2	35.3	69.7	24.9	5.5
ELL	No	20919	34.2	9.1	112.9	41.0	25.5	45.2	29.3
	Yes	481	18.2	6.2	47.5	23.9	92.5	7.3	0.2
FLS	No	13542	36.1	8.4	121.6	39.8	18.1	45.2	36.7
	Yes	7858	30.0	9.5	94.0	39.5	42.4	42.8	14.8

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Mathematics

Grade 3

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22028	32.7	10.3	114.8	35.2	21.5	50.8	27.7
Gender	Male	11365	33.5	10.3	117.7	35.6	19.3	49.9	30.8
	Female	10663	31.8	10.3	111.7	34.5	23.8	51.7	24.4
Ethnicity*	AM	295	24.8	10.1	89.5	30.6	50.8	41.4	7.8
	AS	563	34.1	10.9	120.7	39.2	17.2	47.8	35.0
	BL	1504	26.0	10.3	93.3	31.4	44.8	44.7	10.4
	PI	35	31.4	11.7	113.2	41.6	34.3	31.4	34.3
	WH	14652	34.7	9.6	121.5	34.2	15.1	51.2	33.7
	HI	4093	28.6	10.1	100.8	31.6	33.7	52.2	14.1
	MU	886	31.6	10.2	110.5	33.3	23.5	53.6	22.9
Special Ed	No	18912	33.7	9.9	118.1	34.3	17.7	52.1	30.2
	Yes	3116	26.4	10.7	94.9	34.0	44.3	43.2	12.5
ELL	No	20063	33.4	10.1	117.1	34.9	19.1	51.2	29.7
	Yes	1965	25.5	9.6	91.2	28.8	45.5	47.0	7.5
FLS	No	12106	35.7	9.5	125.0	34.5	12.9	49.3	37.8
	Yes	9922	29.0	10.1	102.4	31.8	32.0	52.6	15.4

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 4

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		23143	35.8	11.4	112.7	33.5	21.6	54.0	24.4
Gender	Male	11810	36.4	11.6	114.7	34.4	20.8	52.0	27.2
	Female	11333	35.2	11.2	110.5	32.3	22.4	56.1	21.5
Ethnicity*	AM	320	27.3	11.7	90.0	32.1	48.8	43.1	8.1
	AS	615	37.8	12.5	120.8	39.6	21.8	42.6	35.6
	BL	1611	28.3	11.5	92.0	30.3	44.9	45.7	9.4
	PI	31	32.0	13.1	103.3	37.0	41.9	29.0	29.0
	WH	15365	38.1	10.6	119.2	32.4	14.7	55.5	29.8
	HI	4356	30.9	11.0	98.4	29.2	35.1	54.0	10.9
	MU	845	35.0	11.1	110.0	31.5	22.6	56.2	21.2
Special Ed	No	19598	37.1	10.9	116.2	32.7	17.3	55.7	27.0
	Yes	3545	28.7	11.6	93.3	31.1	45.6	44.7	9.7
ELL	No	21456	36.6	11.2	114.7	33.2	19.3	54.7	26.0
	Yes	1687	26.3	10.0	86.5	25.1	51.5	44.5	4.1
FLS	No	12477	39.3	10.4	122.8	32.6	12.2	54.0	33.8
	Yes	10666	31.7	11.2	100.8	30.5	32.6	54.0	13.4

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 5

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22799	34.7	11.7	112.1	35.6	23.1	52.0	24.9
Gender	Male	11729	34.9	11.9	113.1	36.4	23.2	50.2	26.6
	Female	11070	34.4	11.5	111.1	34.6	23.0	53.9	23.1
Ethnicity*	AM	297	26.2	11.0	87.9	30.2	52.2	40.4	7.4
	AS	590	37.3	12.7	121.7	41.2	20.0	43.1	36.9
	BL	1581	27.0	11.1	90.0	30.1	47.2	44.6	8.2
	PI	32	32.8	11.3	106.0	33.7	25.0	59.4	15.6
	WH	15293	36.9	11.1	118.6	34.8	16.4	53.4	30.2
	HI	4158	30.0	11.1	98.1	31.3	35.7	51.6	12.7
	MU	848	32.9	11.6	107.2	34.8	28.5	51.9	19.6
Special Ed	No	19296	36.2	11.1	116.6	34.6	17.7	54.3	28.0
	Yes	3503	26.0	11.0	87.6	30.6	52.8	39.4	7.8
ELL	No	21602	35.3	11.5	113.8	35.3	21.1	52.8	26.1
	Yes	1197	24.1	9.7	81.9	25.5	58.5	38.0	3.5
FLS	No	12593	38.3	10.9	123.0	35.2	13.5	51.9	34.6
	Yes	10206	30.2	11.1	98.8	31.2	34.9	52.1	12.9

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 6

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22997	37.1	12.8	111.8	39.2	26.5	46.5	26.9
Gender	Male	11735	36.7	13.2	110.9	40.2	28.6	44.4	27.0
	Female	11262	37.5	12.4	112.7	38.1	24.4	48.7	26.8
Ethnicity*	AM	316	26.4	12.5	81.7	34.5	60.4	30.1	9.5
	AS	601	40.2	13.8	123.4	44.9	23.0	36.3	40.8
	BL	1476	29.1	12.2	88.4	33.4	50.3	40.4	9.3
	PI	29	40.6	11.9	120.8	37.0	17.2	48.3	34.5
	WH	15632	39.3	12.3	118.2	38.7	20.5	47.4	32.1
	HI	4159	32.4	12.2	97.3	34.5	38.9	47.1	14.0
	MU	784	36.2	12.3	108.3	36.6	27.4	51.3	21.3
Special Ed	No	19606	39.0	12.1	117.1	38.1	20.5	49.0	30.5
	Yes	3391	26.4	11.3	81.3	30.6	61.3	32.4	6.3
ELL	No	22262	37.6	12.7	113.1	38.9	25.1	47.1	27.8
	Yes	735	23.4	9.7	73.4	25.5	70.1	27.9	2.0
FLS	No	12891	40.9	11.9	123.3	38.6	16.4	46.4	37.2
	Yes	10106	32.3	12.3	97.1	34.7	39.5	46.6	13.8

* AM=American Indian, AS=Asian, BL=African American/Black, PI=Native Hawaiian or other Pacific Islander, WH=White, HI= Hispanic, MU=Multiple Ethnicities

Grade 7

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22716	37.0	12.8	108.6	37.9	29.0	47.1	23.9
Gender	Male	11688	36.9	13.1	108.6	38.9	29.7	45.6	24.6
	Female	11028	37.1	12.5	108.6	36.9	28.2	48.7	23.1
Ethnicity*	AM	301	25.8	11.8	78.3	30.5	66.1	28.6	5.3
	AS	569	40.2	14.1	120.5	44.3	24.6	37.4	38.0
	BL	1516	26.8	11.7	80.6	30.7	61.3	32.9	5.8
	PI	24	33.9	10.8	97.3	29.9	25.0	62.5	12.5
	WH	15443	39.6	12.0	115.9	36.8	20.7	50.3	29.0
	HI	4086	31.6	12.2	93.2	33.2	44.7	43.6	11.7
	MU	777	35.3	12.8	103.7	36.7	35.4	44.8	19.8
Special Ed	No	19528	38.8	12.1	113.7	36.8	22.8	50.2	27.0
	Yes	3188	25.5	11.1	77.5	29.0	66.9	28.3	4.8
ELL	No	22017	37.4	12.7	109.8	37.7	27.4	47.9	24.6
	Yes	699	22.4	9.2	69.5	22.5	77.4	21.6	1.0
FLS	No	12880	41.0	11.7	120.3	37.0	17.2	49.7	33.1
	Yes	9836	31.7	12.3	93.3	33.4	44.4	43.7	11.9

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Grade 8

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22320	38.3	12.7	105.3	36.9	31.8	47.2	21.1
Gender	Male	11347	37.7	13.0	103.9	37.5	33.8	45.5	20.7
	Female	10973	38.9	12.3	106.8	36.1	29.6	48.9	21.5
Ethnicity*	AM	282	28.9	12.3	80.1	31.7	59.6	35.5	5.0
	AS	542	39.5	15.1	112.5	46.9	33.9	32.1	33.9
	BL	1389	28.6	11.5	79.2	28.9	63.7	31.8	4.5
	PI	29	33.6	12.0	91.9	32.1	48.3	41.4	10.3
	WH	15299	40.9	11.8	112.4	35.9	23.1	51.0	25.9
	HI	4050	32.7	12.1	89.4	31.7	50.3	41.0	8.7
	MU	729	36.2	12.6	99.3	35.2	37.6	46.2	16.2
Special Ed	No	19371	40.1	12.0	110.0	35.9	25.7	50.6	23.7
	Yes	2949	26.6	10.7	74.4	27.2	71.5	24.7	3.7
ELL	No	21682	38.8	12.5	106.5	36.6	30.2	48.1	21.6
	Yes	638	22.8	9.4	65.2	22.8	84.2	14.6	1.3
FLS	No	12813	42.3	11.6	116.6	36.3	19.4	51.0	29.5
	Yes	9507	32.9	12.2	90.1	31.9	48.4	41.9	9.6

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Grade 11

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		21357	38.1	13.7	104.7	47.0	37.2	36.9	25.8
Gender	Male	10967	38.0	14.2	105.3	49.0	38.0	34.6	27.4
	Female	10390	38.1	13.2	104.2	44.7	36.4	39.4	24.2
Ethnicity*	AM	274	27.8	12.4	70.7	36.8	67.5	27.7	4.7
	AS	540	38.9	15.8	110.3	56.3	36.9	27.6	35.6
	BL	1254	26.4	12.2	67.1	37.2	72.6	21.9	5.6
	PI	34	32.7	15.7	90.0	54.7	58.8	20.6	20.6
	WH	15034	41.1	12.6	114.4	45.1	28.1	40.4	31.6
	HI	3547	30.9	12.6	80.6	39.5	59.8	30.1	10.1
	MU	674	35.4	13.9	95.8	46.4	43.6	36.8	19.6
Special Ed	No	19174	39.6	13.1	109.6	45.8	32.3	39.3	28.4
	Yes	2183	24.5	11.1	61.7	33.5	80.2	16.2	3.6
ELL	No	20857	38.5	13.5	106.0	46.6	35.9	37.6	26.4
	Yes	500	20.8	8.2	50.4	23.9	90.8	8.4	0.8
FLS	No	13518	41.8	12.7	117.1	45.7	26.0	39.9	34.0
	Yes	7839	31.7	13.0	83.4	41.1	56.5	31.8	11.7

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Science

Grade 5

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22798	33.1	8.9	105.2	32.6	26.3	54.2	19.4
Gender	Male	11731	33.4	9.0	106.2	33.2	25.8	53.4	20.8
	Female	11067	32.9	8.7	104.1	32.0	26.9	55.1	17.9
Ethnicity*	AM	297	26.7	9.1	83.4	31.2	55.9	37.7	6.4
	AS	589	32.3	10.2	103.2	37.4	31.4	47.2	21.4
	BL	1579	27.1	8.9	84.0	29.4	51.6	43.3	5.1
	PI	32	32.6	8.7	103.9	33.7	34.4	46.9	18.8
	WH	15293	35.2	8.0	112.5	30.8	17.6	57.8	24.6
	HI	4160	28.5	8.7	88.9	29.4	45.5	47.2	7.4
	MU	848	32.0	8.9	100.9	32.2	29.6	55.5	14.9
Special Ed	No	19296	34.3	8.4	109.2	31.5	21.2	57.1	21.7
	Yes	3502	26.8	9.0	83.3	30.0	54.9	38.4	6.7
ELL	No	21602	33.7	8.6	107.2	31.9	23.5	56.1	20.5
	Yes	1196	22.1	7.2	67.9	22.3	78.2	21.4	0.4
FLS	No	12596	36.0	7.8	115.5	30.8	15.1	57.3	27.6
	Yes	10202	29.6	8.8	92.4	30.2	40.2	50.5	9.3

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Grade 8

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		22328	39.0	11.0	103.8	34.4	31.4	48.8	19.8
Gender	Male	11353	39.5	11.4	105.5	35.9	30.4	47.1	22.5
	Female	10975	38.5	10.6	101.9	32.6	32.4	50.5	17.1
Ethnicity*	AM	282	30.6	10.4	79.2	29.4	63.1	32.3	4.6
	AS	542	37.6	13.3	101.5	42.4	40.2	34.7	25.1
	BL	1387	30.2	10.5	77.8	29.3	62.3	33.7	4.0
	PI	28	32.5	9.6	84.2	26.7	57.1	35.7	7.1
	WH	15307	41.6	10.0	111.6	32.6	21.7	53.1	25.1
	HI	4053	33.1	10.3	86.0	29.3	53.0	40.7	6.3
	MU	729	37.7	11.0	100.2	34.6	35.3	48.3	16.5
Special Ed	No	19368	40.5	10.4	108.1	33.0	25.7	52.1	22.2
	Yes	2960	29.3	10.3	75.5	29.1	68.8	26.8	4.4
ELL	No	21689	39.5	10.8	105.1	33.8	29.6	50.0	20.4
	Yes	639	22.7	6.5	57.7	17.6	93.4	6.3	0.3
FLS	No	12815	42.5	9.8	114.5	32.6	18.9	53.2	27.9
	Yes	9513	34.2	10.8	89.3	31.3	48.3	42.7	9.0

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Grade 11

Group	Subgroup	Valid *N*	Raw Scores		Scale Scores		Percent in Performance Level		
			Mean	*SD*	Mean	*SD*	Below	Meets	Exceeds
Overall		21366	39.2	11.2	103.7	27.8	25.1	61.9	13.0
Gender	Male	10976	39.8	11.6	105.6	29.4	24.3	59.9	15.7
	Female	10390	38.5	10.7	101.6	26.0	25.9	63.9	10.2
Ethnicity*	AM	271	31.6	10.9	85.6	24.2	51.7	44.3	4.1
	AS	538	36.9	13.9	100.2	35.4	36.1	46.8	17.1
	BL	1251	29.6	10.8	81.1	24.3	59.2	38.4	2.4
	PI	34	33.3	11.5	90.4	28.0	50.0	41.2	8.8
	WH	15053	41.8	9.9	109.9	26.0	16.1	67.6	16.3
	HI	3546	32.7	10.7	88.1	24.2	46.5	50.1	3.4
	MU	673	37.3	11.6	99.2	28.0	30.5	58.2	11.3
Special Ed	No	19161	40.4	10.6	106.5	26.9	20.6	65.1	14.3
	Yes	2205	28.8	10.5	79.6	23.8	63.8	34.0	2.3
ELL	No	20864	39.6	10.9	104.7	27.3	23.4	63.2	13.4
	Yes	502	21.1	6.4	62.8	14.0	93.6	6.4	0.0
FLS	No	13521	42.2	10.0	110.9	26.3	15.4	66.9	17.7
	Yes	7845	34.0	11.2	91.2	25.9	41.9	53.2	5.0

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Appendix X: Reading, Mathematics, and Science Strand Reliability and SEM

****L*=Total Number of Items per Strand, Reliability=Coefficient Alpha, *SEM*= Standard Error of Measurement in raw score metric**

Content	Code	Strand
Reading	R.1	Vocabulary
	R.2	Comprehension
Mathematics	M.1	Number Sense
	M.2	Geometric/Measurement
	M.3	Algebraic
	M.4	Data Analysis/Probability
Science	S.1	Inquiry, the Nature of Science, and Technology
	S.2	Physical Science
	S.3	Life Science
	S.4	Earth and Space Science

Grade 3:

Grade 3	*L*	Reliability	*SEM*
R.1	13	0.73	1.5
R.2	32	0.86	2.4
M.1	21	0.84	1.9
M.2	13	0.75	1.5
M.3	10	0.71	1.3
M.4	6	0.61	1.0

Grade 4:

Grade 4	*L*	Reliability	*SEM*
R.1	13	0.66	1.5
R.2	32	0.84	2.4
M.1	26	0.86	2.1
M.2	17	0.81	1.7
M.3	8	0.66	1.2
M.4	4	0.43	0.8

Grade 5:

Grade 5	*L*	Reliability	*SEM*
R.1	12	0.63	1.5
R.2	36	0.86	2.5
M.1	26	0.88	2.1
M.2	9	0.67	1.2
M.3	11	0.69	1.4
M.4	9	0.70	1.3
S.1	11	0.69	1.4
S.2	16	0.67	1.7
S.3	11	0.65	1.4
S.4	12	0.68	1.5

Grade 6:

Grade 6	*L*	Reliability	*SEM*
R.1	12	0.66	1.4
R.2	36	0.86	2.5
M.1	16	0.80	1.6
M.2	14	0.79	1.6
M.3	17	0.83	1.7
M.4	11	0.77	1.4

Grade 7:

Grade 7	*L*	Reliability	*SEM*
R.1	13	0.67	1.4
R.2	35	0.85	2.5
M.1	20	0.85	1.9
M.2	9	0.69	1.2
M.3	20	0.85	1.9
M.4	9	0.71	1.3

Grade 8:

Grade 8	*L*	Reliability	*SEM*
R.1	14	0.67	1.5
R.2	36	0.84	2.5
M.1	17	0.81	1.7
M.2	15	0.79	1.6
M.3	17	0.81	1.7
M.4	11	0.70	1.4
S.1	10	0.70	1.3
S.2	17	0.74	1.8
S.3	17	0.75	1.7
S.4	16	0.72	1.7

Grade 11:

Grade 11	*L*	Reliability	*SEM*
R.1	11	0.68	1.4
R.2	39	0.87	2.6
M.1	5	0.60	0.9
M.2	20	0.84	1.9
M.3	25	0.89	2.0
M.4	10	0.77	1.3
S.1	11	0.67	1.4
S.2	21	0.77	2.0
S.3	14	0.76	1.5
S.4	14	0.69	1.6