

Connecticut LAS Links® Second Edition,
Forms C and D

## Technical Manual

## Forms <br> 

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Connecticut LAS Links Technical Manual<br>English Version, Forms C/D

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## INTRODUCTION

Data Recognition Corporation provides high quality language proficiency assessments for K-12 students in order to meet the needs of educators and students as well as to address local, state and federal requirements. The current LAS Links Second Edition (hereafter LAS Links $2^{\text {nd }}$ Edition) is designed to measure students' language proficiency with an enhanced emphasis on situated language use in school settings. The 2 ${ }^{\text {nd }}$ Edition offers test forms in both English (Forms C and D) and Spanish (Español Form B). The LAS Links summative tests have a reasonable administration time of approximately two hours for all four modalities-Speaking, Listening, Reading, and Writing. The tests offer a common scale across five grade-span levels ( $\mathrm{K}-1,2-3,4-5,6-8$, and 9-12).

Forms C and D are intended to measure students' English language proficiency in Grades K-12 school settings. LAS Links Forms C and D assess knowledge and use of the English language in four domains: Listening, Speaking, Reading, and Writing, with attention to correspondence with the content achievement goals of the Common Core State Standards (CCSS; National Governors Association Center for Best Practices [NGA Center] \& Council of Chief State School Officers [CCSSO], 2010). The tests also provide composite scores including Overall, Oral, Comprehension, Literacy, and Productive. More information about the domain-level and composite scores can be found in Chapter 6.2 of this technical manual.

As with LAS Links $1^{\text {st }}$ Edition, LAS Links $2^{\text {nd }}$ Edition provides many benefits to states, school districts, and local educational agencies (LEAs). Score results from LAS Links Forms C and D may serve as a diagnostic instrument to help determine eligibility for instructional programs in English and to identify difficulties students may have in the language. The results of the LAS Links Forms C and D assessments may also be used to track and monitor progress in attaining English language proficiency. The following is a list of possible uses of the assessment results for LAS Links Forms C and D. These uses are described further in Chapter 1 of this technical manual.

1
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- Eligibility for instructional programs
- Planning instructional programs
- Tracking student growth
- Determining language of assessment

The purpose of this technical manual is to provide information to districts, schools, and educators about the test development procedures and to describe the technical qualities of the LAS Links Forms C and D assessments. Chapter 1 of this manual describes intended uses of LAS Links Forms C and D for instructional decisions. Chapter 2 describes the design and development of the tests, including information about the test standards, test blueprint, item writing, item review process, form assembly, and relevant quality control evidence. Chapter 3 lays out the field testing and data collection procedures. Chapter 4 provides information about the test scale development. Chapter 5 informs readers with recommendations for test operations to support standardized test administration and scoring. Chapter 6 covers the types of scores and reports offered by the assessments as well as the proficiency levels and related standard-setting process for Forms C and D. Descriptive statistics, reliability, validity, and test fairness in support of the intended score interpretations and test uses are discussed in Chapter 7.

## CHAPTER I INTENDED TEST USES

Chapter 1 provides an overview of the intended uses of LAS Links Forms C and D, including relevant background for the test development, intended score interpretations and uses, and the target test population.

### 1.1 Context of the Test Development

In the last several decades, researchers and policy makers have studied and come to understand the pivotal role of academic language in effective curriculum and instruction (Andstrom et al., 2010). Conceptions of academic language have varied depending on the perspectives and goals of the researchers (e.g., curriculum, assessment, or linguistic research); however, many researchers (Bailey \& Huang, 2011; Gee, 2008; Gibbons, 1998, 2003; Scarcella, 2003; Schleppegrell, 2004; van Lier \& Walqui, 2012) agree that academic language is defined as being:

- situated language used within and across specific academic disciplines or content areas
- embedded in sociocultural contexts that involve activities, practices, and language users
- characterized by specific discourse and textual features such as genre, register, functions, syntax, and vocabulary
- integrated across different mediums and modes of communication
- used at different levels of complexity across grade spans

Academic language for the $\mathrm{K}-12$ student population has received growing attention with the releases of the Common Core State Standards (CCSS; National Governors Association Center for Best Practices [NGA Center] \& Council of Chief State School Officers [CCSSO], 2010) and the CCSSO's framework for English language proficiency development standards (2012) that describes perceived correspondence between language demand and the CCSS content standards.

LAS Links $2^{\text {nd }}$ Edition was developed to assess school language that is critical for student intellectual growth in $\mathrm{K}-12$ instructional settings. LAS Links $2^{\text {nd }}$ Edition emphasizes rigor in the measurement of academic language particularly with a focus on the following aspects:

- targeting content areas or strands of academic language use: Foundational Skills; Language Arts, Social Studies, and History; and Mathematics, Science, and Technical Subjects
- the linguistic complexity of receptive and expressive language (e.g., word/sound recognition, vocabulary, grammar, discourse features, etc.)
- the types of language function and tasks for communicative purposes in a school context (e.g., identifying, comprehending, describing, analyzing, etc.)


### 1.2 Intended Score Interpretations and Test Uses

LAS Links Forms C and D provide information regarding students' English language proficiency in school settings. The test scores can be used to identify difficulties students may have in the English language, and to monitor and track their progress in attaining English language proficiency. Such information can be useful in making relevant instructional and assessment decisions.

### 1.2.1 Eligibility for Instructional Programs

Federal and state policies require identification and annual assessment of the English proficiency of English language learners (ELLs). English language proficiency standards must be based upon the four modalities of Listening, Speaking, Reading and Writing. Additionally, the assessment must measure English language proficiency in the five domains of Listening, Speaking, Reading, Writing, and Comprehension.

LAS Links Forms C and D can be used to identify K-12 students who are (or remain) eligible for Title III instructional programs. The test scores are also valuable for identifying students who may benefit from instructional support to improve their academic English for succeeding in classrooms with rigorous English-medium content learning activities.

### 1.2.2 Planning Instructional Programs

Federal and state policies also requires LEAs to assess the English language proficiency of ELLs with the purpose to support their content learning in school. LAS Links Forms C and D provide reliable English language proficiency results needed to make relevant crucial instructional decisions.

The scores on LAS Links Forms C and D can be used as an indicator of proficiency in Listening, Speaking, Reading, and Writing in school English. This information can be used to determine the placement of students in a specific type of instructional program. When determining instructional placement, users are encouraged to consider the decision in conjunction with other available evidence and assessment instruments, including information provided in home language surveys, communication with parents, informal interviews with students, and also possibly test scores on content knowledge, depending on the specific purpose of the instructional program.

LAS Links Forms C and D test scores can also assist in diagnosing students’ strengths and weaknesses in English, especially their ability to use English in school settings. The test scores in Listening, Speaking, Reading, and Writing provide useful information about what skills students have or do not have, as well as determine their particular language needs in each of the four communicative skills. Using these results, teachers are able to plan appropriate instruction or remediation for the students.

### 1.2.3 Tracking Student Growth

Students' progress from a beginning level to an advanced level of English language proficiency can be reflected by the scores on LAS Links Forms C and D. Because there are five grade spans of the tests ( $\mathrm{K}-1,2-3,4-5,6-8$, and $9-12$ ) and two test forms ( C and D ) per grade span that cover kindergarten through Grade 12, the different grade spans as well as the two parallel forms within each grade span can be used to track changes in English proficiency as the student continues in school across the grades and from year to year. This feature may be especially useful in schools with bilingual education programs that have as a goal increasing students' English language proficiency over time.

### 1.2.4 Determining Language of Assessment

A growing number of states provide a written translation of the state academic assessment to ELLs in their native language. The decision to administer a native language version of a state assessment can rest on a variety of criteria. In a survey of state policies concerning translation, Stansfield and Bowles (2006) found that the two most frequently used criteria are English language proficiency and native language proficiency, including literacy in the native language.

LAS Links Forms C and D results can help schools and districts decide whether to administer statewide content-area assessments in English to ELLs if a written translation in their native language is available or if an oral translation is permissible. According to the Standards for Educational and Psychological Testing (American Educational Research Association [AERA], American Psychological Association [APA], \& National Council on Measurement in Education [NCME], 1999), "When testing an examinee proficient in two or more languages for which the test is available, the examinee's relative language proficiencies should be determined" (p. 189). The Standards also recommend that tests "generally should be administered in the test taker's more proficient language, unless proficiency in the less proficient language is part of the assessment" (p. 189). The scores on LAS Links Forms C and D can determine for each student if using the regular English version of the state's standards-based achievement test is appropriate.

### 1.3 Target Test Population

LAS Links Forms C and D are mainly developed to serve K-12 students, specifically ELLs who are still in the process of developing English language proficiency. Because of its increased rigor in academic language, LAS Links Forms C and D may be particularly useful in understanding and diagnosing students' language needs for actively participating not only in general instructional settings but in discipline-specific learning as well.

## CHAPTER II TEST DESIGN AND DEVELOPMENT

Chapter 2 focuses on the test design and development where information about the LAS Links Standards Framework, test blueprint, item development and review process, and test form assembly is provided. Relevant procedural evidence on quality control is also presented.

### 2.1 LAS Links Standards Framework

The LAS Links 2012 Standards Framework reflects a modification of several language development models currently used in guiding the education of English Language Learners. The framework evaluates the receptive and productive control of language by English Language Learners (ELLs) in social, school, and academic contexts. The standards in the framework are organized into a) language context strands, b) language domains and subtests, c) subskills/objectives, and d) proficiency levels.

The LAS Links 2012 Standards Framework meets the requirements for challenging expectations reflected in standards such as the TESOL standards (2006), Common European Framework of Reference for Languages (CEFR; 2001), and the CCSS (2010). Ensuring correspondence of the LAS Links standards to these international and national standards is a key step to ensure that the LAS Links standards are equitable and comprehensive enough to assess English Language learners' ability to use English in various school contexts.

### 2.1.1 Language Context Strands

Although LAS Links tests include diverse culturally-relevant content coverage, the focus of the assessments is on language and not on content knowledge. The social and school content covers intercultural and instructional communication (e.g., school-related tasks), while the academic content coverage includes communications related to English language arts, mathematics, science, social studies, history, and technical subjects. As previously mentioned, there are four language context strands applicable across all grade levels and language domains in the LAS Links 2012 Standards Framework:

Strand 1. Students are able to listen, speak, read, and write for Social, Intercultural, and Instructional Communication.
Strand 2. Students are able to listen, speak, read, and write for Language Arts, Social Studies, and History.
Strand 3. Students are able to listen, speak, read, and write for Mathematics, Science, and Technical Subjects.
Strand 4. Students are beginning to develop Foundational Skills for reading and writing (Grades K-3 only).

### 2.1.2 Language Domains and Subtests

The LAS Links 2012 Standards Framework includes four language domains. Listening and Reading domains assess students' receptive control of language while the Speaking and Writing domains evaluate students' productive control of language.

## Listening

The Listening test consists of two subtests: Listen for Information and Listen for Academic Instruction. All Listening items are in multiple-choice (MC) format. All instructions, audio passages, questions, and answer choices are played on the accompanying audio CD. Each question has three answer choices. In Grades $\mathrm{K}-1$, all answer choices are pictures. In Grades $2-3$, there is a mix of both picture- and text-based answer choices. In Grades 4-12, all answer choices are text-based.

## Listen for Information

In Listen for Information, students listen to directions, brief school announcements, content-based discussions, and conversations. Then students answer questions about what they heard. Students are tested on skills such as following common, explicit oral directions, identifying main ideas, and making inferences. In upper grade spans, students are also asked to comprehend idiomatic expressions and make predictions.

## Listen for Academic Instruction

In Listen for Academic Instruction, students listen to longer content-based discussions led by a teacher, with comments and contributions provided by class members. In this way, the listening texts approximate authentic classroom discourse patterns that are co-constructed by the teacher and the class members. Discussions are drawn from two broad academic categories: (a) Language Arts, Social Studies, and History; and (b) Mathematics, Science, and Technical Subjects. Students identify main ideas and supporting details and make inferences. At the upper grade spans, students also make predictions.

## Reading

The Reading test consists of three subtests in Grades K-3: Read Words, Read School Texts, and Read Academic Texts; and two subtests in Grades 4-12: Read School Texts and Read Academic Texts.

Reading questions are multiple-choice in format with three answer choices (some picture-based and some text-based) in Grades K-3 and four text-based answer choices in Grades 4-12.

## Read Words (Grades K-1 and 2-3)

In Read Words, Grade K-1 students respond to items addressing word-analysis tasks: identifying rhyming words, applying letter-sound relationships to read English words, and applying lettersound relationships to read English phonemes/graphemes. In Grades 2-3, students have the additional task of applying knowledge of morphemes and grammar to word meaning.

## Read School Texts

In Read School Texts, students read a variety of short texts, such as classroom signs, school notices, letters, website postings, emails and text messages between students. In addition, students in Grades 1-12 read texts they will likely encounter in the content areas of English Language Arts, History, and Social Studies or Mathematics, Science, and Technical Subjects. These texts emulate grade-span appropriate workbook or classroom tasks and measure students' ability to understand the text, not their ability to complete the task being described. All questions are multiple-choice in format and measure students' ability to identify main ideas and supporting detail, interpret words and phrases as they are used in text, and identify view, tone, and attitude.

## Read Academic Texts

In Read Academic Texts, students read extended grade-span appropriate passages drawn from two broad academic categories: (a) Language Arts, Social Studies, and History; and (b) Mathematics, Science, and Technical Subjects. Although both fiction and non-fiction texts are included, there is an emphasis on more complex non-fiction texts.

In Grades $\mathrm{K}-1$, each passage has two related questions that measure the student's ability to identify main ideas and important details, or identify view, tone, and attitude. In Grades 2-3, each passage has five related questions that measure the student's ability to identify main ideas and important details, identify view, tone, and attitude, and interpret words and phrases as they are used in text. In Grades 4-12, each passage has six related questions that measure the student's ability to identify main ideas and important details, identify view, tone, and attitude, and interpret words and phrases as they are used in text. Two of the six items related to each passage in Grades 4-12 require students to complete a table, time line, or illustration with text taken directly from the passage. These items are scored as either being incorrect ( 0 points) or correct (1 point).

## Speaking

The Speaking test consists of five subtests: Make Conversation, Use Academic Words, Describe and Request Information, Present and Explain Information, and Tell a Story. Note that Kindergarten students take only the first set of questions in Present and Explain Information. All Speaking items are performance-based in format. They measure vocabulary and grammatically correct verbal expressions in social and academic language. Tasks in the Speaking subtest elicit
the production of single-word responses as well as multiple sentences related to schoolappropriate topics.

## Make Conversation

In Make Conversation, students are shown a picture of people engaging in a conversation in a school or social setting and then the students are asked to imagine that they are a participant in the scenario. Students answer basic conversational questions that are appropriate for their participant role by either providing information or expressing opinions and preferences. Student responses are scored as incorrect ( 0 points), correct (1 point), or no response (NR).

## Use Academic Words

In Use Academic Words, students are shown pictures of common objects or concepts they encounter in the classroom. The students are asked to identify the object or concept. Students respond with a single word or short phrases. Student responses are scored as incorrect ( 0 points), correct (1 point), or no response (NR).

## Describe and Request Information

In Describe and Request Information, students are shown a picture depicting an academic or social situation and asked to describe it using sentences. Next, students are required to complete a speech act or function by, for example, saying what they would do if they were a participant in the scenario. Grades K-1 students demonstrate their ability to ask questions, request clarification, and negotiate for meaning. Additionally, in Grades 2-12, students demonstrate their ability to make various requests. Student responses are scored on a $0-3$ rubric.

## Present and Explain Information

In Present and Explain Information, student responses are scored on a $0-3$ rubric. In Grades $\mathrm{K}-1$, students are shown an illustration of an academic or social situation and asked to describe what is happening in the illustration or explain the purpose, use, or feature of a particular object in the illustration using words, phrases, or sentences. Grade 1 students take an extended section of the same task with four more questions in which they describe or elaborate on an additional set of illustrations.

In Grades 2-3, students are shown an illustration of people, a location, or scenery and asked to describe the illustration. Students are then shown a different but related illustration and asked to describe that one as well. Next, students are asked to compare the information in the two graphics and explain how the information is the same or different. Finally, students are asked to express their own opinion or state a preference based on the two graphics.

In Grades 4-12, students are shown a slide, map, or other graphic depicting information, such as a chart, and asked to talk about the information in the graphic as if they were giving a presentation to a class. Students are then shown a different but related graphic and asked to present that information as well. Next, students are asked to compare the information in the two graphics and explain how the information is the same or different. Finally, students are asked to express their own opinion or state a preference based on the information provided in the two graphics.

## Tell a Story

In Tell a Story, students are shown four related pictures that illustrate a story with a beginning, middle, and end. Pointing to the series of four pictures, the Examiner begins the story by reading a story starter to contextualize the pictures without giving away vocabulary or key content. Students are then asked to complete the detailed story depicted in the series of illustrations using multiple sentences to interpret, narrate, and paraphrase events. Student responses are scored on a $0-4$ rubric.

## Writing

The Writing test consists of four sections for Grades K-1: Start Writing, Use Grammar and Conventions, Write to Express Ideas, and Write Academic Texts. (Kindergarten students do not take the Write Academic Texts section). For Grades 2-12, there are three sections: Use Grammar and Conventions, Write Academic Texts, and Write to Express Ideas.

The Writing subtest includes both multiple-choice and constructed-response (CR) items that assess the student's knowledge of grammar, word order, and word choice and the student's ability to apply that knowledge to produce sentences and paragraphs that are commonly expected of students at their respective grade levels.

## Start Writing (Grades K-1 Only)

In Start Writing, Grades K-1 students copy words and sentences and write numbers and letters. In addition, students write English words identifying pictures of common objects.

## Use Grammar and Conventions

In Use Grammar and Conventions, K-1 students select grammatically correct sentences and indicate whether a sentence has correct use of capital letters, punctuation, articles, singular and plural nouns, pronouns, and subject/verb agreement. In Grades $2-12$, students select the grammatically-appropriate response to complete sentences and paragraphs. Grammatical features are selected according to each grade span and assess the correct use of capitalization, sentence-ending marks, articles, adjectives and adverbs, singular and plural nouns, pronouns,
subject/verb agreement, tense and aspect, prepositional phrases, conjunctions, commas, and auxiliary verbs.

## Write Academic Texts

In Write Academic Texts, Grades 1-3 students write sentences that describe pictures representing two broad academic categories: (a) Language Arts, Social Studies, and History; and (b)
Mathematics, Science, and Technical Subjects. These tasks approximate common real-world classroom assignments for which Grades 1-3 students are expected to write about something they see. Grades 2-3 students also write simple sentences to interpret, analyze, or state opinions regarding what they see.

Students in Grades 4-12 are first asked to write a short summary (two to five sentences) of a paragraph selected from a passage they had read earlier in the Read Academic Texts section of the Reading subtest. Next, students are shown a table, time line, pie chart, or checklist and asked to write one or two full sentences explaining the information it contains. Finally, students are asked to either (a) compare the paragraph and the information contained in the table, time line, pie chart, or checklist and explain in one or two sentences how they are the same or different or (b) provide an opinion or preference based on the content of both sets of information. These tasks approximate common real-world classroom assignments where students are expected to summarize, in their own words, course reading material; extract tabular information and express it in prose; and compare and contrast academic content.

Responses are scored on a $0-3$ rubric to assess the student's ability to communicate effectively using appropriate grammar, vocabulary, and conventions.

## Write to Express Ideas

In Write to Express Ideas, students are given an opportunity to write for personal communication. Grades K-1 students write a sentence describing a person. Students in Grades 2-3 write a letter. Students in Grades 4-12 write extended responses to an email message, note, or blog entry. The writing tasks for Grades 2-12 are designed for students to be able to demonstrate their ability to describe, explain, report, compare, narrate, persuade, or express ideas in writing. Responses are scored on a $0-4$ holistic rubric to assess the student's use of appropriate grammar and vocabulary and the student's ability to express meaning in a cohesive and coherent manner.

### 2.1.3 Subskills/Objectives

Table 2.1 presents a complete list of subskills/objectives within the LAS Links 2012 Standards Framework. These subskills/objectives are organized by language domains.

Table 2.1 LAS Links 2012 Standards Framework

## Listening Subskills/Objectives

L1 Follow common, explicit oral directions to participate in diverse academic or social tasks
L2 Respond to idiomatic expressions to participate in diverse academic or social tasks, including phrasal verbs with idiomatic meaning (e.g., give me a hand or settle for)

L3 Demonstrate understanding of academic and social situations that contain diverse language genres, registers, and varieties

L3.1 Identify purpose
L3.2 Identify main ideas
L3.3 Identify supporting details
L3.4 Relate to practical issue
L4 Interpret layers of meaning using critical listening skills and learning strategies in academic and social situations that contain diverse language genres, registers, and varieties

L4.1 Make predictions based on known information
L4.2 Make inferences based on known information
Reading Subskills/Objectives
R1 Analyze words
R1.1 Identify rhyming words
R1.2 Apply letter-sound relationships to read English words
R1.3 Apply letter-sound relationships to read English phonemes
R1.4 Apply knowledge of morphemes and syntax to word meaning
R2 Understand word meaning
R2.1 Associate words with their representation
R2.2 Classify words
R2.3 Interpret words and phrases as they are used in a text, including determining technical,connotative, and figurative meanings.
R3 Comprehend written material
R3.1 Identify main ideas
R3.2 Identify supporting details
R3.3 Identify important literary features of text
R3.4 Analyze the structure of texts, including how specific sentences, paragraphs, and largerportions of the text (e.g., a section, chapter, scene, or stanza) relate to each other and thewhole
R3.5 Identify point of view, tone, and attitude
R3.6 Make predictions based on known information
R3.7 Make inferences based on known information

## Speaking Subskills/Objectives

S1 Participate in diverse academic or social conversations, with attention to appropriate register, grammar, vocabulary, and pronunciation

S1.1 Provide information
S1.2 Describe information
S1.3 Interpret and analyze information
S1.4 Relate information to personal experience or practical issue
S1.5 Express opinions and preferences
S1.6 Make requests
S1.7 Ask questions, request clarification, and negotiate for understanding
S1.8 Conduct transactions
S2 Demonstrate knowledge related to diverse academic or social settings, with attention to appropriate register, grammar, vocabulary, and pronunciation

S2.1 Identify an object (inanimate and animate) or concept
S2.2 Describe purpose, use, or feature, using words, phrases, or sentences
S2.3 Identify an academic or social situation and describe it, using sentences
S3 Describe ideas, experiences, and immediate surroundings in diverse academic and social settings, with attention to appropriate register, grammar, vocabulary, and pronunciation

S3.1 Describe process
S3.2 Describe people, locations, and scenery
S4 Speak persuasively in diverse academic or social situations, with attention to appropriate register, grammar, vocabulary, and pronunciation

S4.1 Explain process
S4.2 Explain ideas and opinions
S5 Talk in depth and with detail about diverse academic or social events, with attention to appropriate register, grammar, vocabulary, and pronunciation
S5.1 Interpret, narrate, and paraphrase events, using visual information
S6 Present with integrated information
S6.1 Present with integrated information from multiple sources

| Writing Subskills/Objectives |  |  |
| :--- | :--- | :--- |
| W1 | Copy words and sentences |  |
| W2 | Write letters, numerals, and words |  |
| W3 | Use appropriate grammar and style |  |
|  | W3.1 | Use articles |
|  | W3.2 | Demonstrate correct use of singular and plural |
|  | W3.3 | Use subject/verb agreement |
|  | W3.4 | Demonstrate correct use of tense and aspect |
|  | W3.5 | Use conjunctions |
|  | W3.6 | Use pronouns correctly |
|  | W3.7 | Distinguish adjectives and adverbs |
|  | W3.8 | Use prepositional phrases |
|  | W3.9 | Use auxiliary verbs |
|  | W3.10 | Use nominalization |
|  | W3.11 | Use parallel structure |
| W4 | Use appropriate capitalization and punctuation |  |
|  | W4.1 | Use appropriate capitalization |
|  | W4.2 | Use appropriate sentence-ending marks |
|  | W4.3 | Use commas appropriately |
|  | W4.5 | Use semi-colons appropriately |
|  | W4.6 | Use colons appropriately |
| W5 | Use appropriate sentence structure |  |
|  | W5.1 | Differentiate complete sentences from fragments |
|  | W5.2 | Differentiate complete sentences from run-ons |
|  | W5.3 | Form statements and questions |
|  | W5.4 | Use various types of clauses |
|  | W5.5 | Use various types of phrases (noun, verb, adjectival, adverbial, participial, prepositional, |
|  |  | and absolute) |
| W6 | Write sentences to summarize, describe, narrate, interpret, analyze, state opinion, relate, or |  |
|  | explain |  |
|  | W6.1 | Write sentences to summarize |
|  | W6.2 | Write sentences to describe or narrate |
|  | W6.3 | Write sentences to interpret or analyze |
|  | W6.4 | Write sentences to state opinions |
|  | W6.5 | Write sentences to relate to personal experience or practical issue |
|  | W6.6 | Write sentences to explain |
|  | Write expository compositions |  |
|  | W7.1 | Write to describe, explain, report, compare, narrate, persuade, or express |
| W8 | Write with integrated information from multiple sources |  |

### 2.1.4 Proficiency Level

The LAS Links 2012 Standards Framework represents a continuum of English language development in social, school, and academic contexts. LAS Links has the following five levels, and each level builds on to the next level (see Appendix D for a full description of the LAS Links Proficiency Level Definitions):

## Beginning $\boldsymbol{\rightarrow}$ Early Intermediate $\boldsymbol{\rightarrow}$ Intermediate $\boldsymbol{\rightarrow}$ Proficient $\boldsymbol{\rightarrow}$ Above Proficient

To describe these levels, the following represents the progression of the development of ELLs’ receptive and productive control of lexical, syntactic, phonological, and discourse features in English:

Developing $\boldsymbol{\rightarrow}$ Emerging $\boldsymbol{\rightarrow}$ Exhibiting limited range $\boldsymbol{\rightarrow}$ Exhibiting control $\boldsymbol{\rightarrow}$ Commanding a high degree of control

In terms of the complexity or the difficulty of texts that ELLs can comprehend and analyze, the following progression applies:

Very basic level $\rightarrow$ Familiar topics $\rightarrow$ Range of grade-level appropriate $\rightarrow$ Across and within disciplines (grade-level appropriate) $\boldsymbol{\rightarrow}$ Wide range

Finally, in terms of communicative skills of ELLs, the following progression applies:

Developing the ability, using familiar topics $\rightarrow$ Developing the ability to communicate effectively $\rightarrow$ Refining the ability to communicate effectively, using context clues $\boldsymbol{\rightarrow}$ Communicating effectively and beginning to express in creative forms $\boldsymbol{\rightarrow}$ Communicating effectively, skillfully organize and explain information, and express subtle nuances.

### 2.1.5 Correspondence to External Standards

Correspondence between the LAS Links 2012 Standards Framework and the CCSS (2010) is highly valuable, because the CCSS serves as a set of overarching educational standards for $\mathrm{K}-12$ students in the United States. The correspondence ensures that LAS Links shares the expectations of language proficiency in Listening, Speaking, Reading, and Writing, as well as knowledge and skills in various content areas relevant to social, school, and academic contexts.

Table 2.2 represents a sample correspondence of LAS Links standards to the CCSS (2010). This sample focuses on students' summarizing skills, determining/identifying main ideas, and explaining/supporting with details.

Table 2.2 Sample Correspondence of LAS Links Standards with the CCSS (2010)

| CCSS | LAS Links 2012 Standards Framework |
| :--- | :--- |
| SL.5.2: Summarize a written text read aloud or <br> information presented in diverse media and <br> formats, including visually, quantitatively, and <br> orally. | W6 Write sentences to summarize, describe, <br> narrate, interpret, analyze, state opinion, or explain <br> W6.1 Write sentences to summarize |
|  | W6.2 Write sentences to describe or narrate |
| W6.6 Write sentences to explain |  |
|  | W7 Write expository compositions |
| W7.1 Write to describe, explain, report, |  |
|  | compare, narrate, persuade, or express |
|  | W8 Write with integrated information |
|  | W8.1 Write with integrated information from |
| multiple sources |  |


| CCSS | LAS Links 2012 Standards Framework |
| :---: | :---: |
|  | using visual information |
|  | S6 Present with integrated information |
|  | S6.1 Present with integrated information from |
|  | multiple sources |

It is valuable to compare the LAS Links context strands with the TESOL standards (2006) because TESOL standards play a critical role in developing ESL standards for teachers of K-12 students in the United States. LAS Links examines its correspondence with TESOL because the target audience of both LAS Links and TESOL involves students who use language other than English and who need to learn English to be successful inside and outside of the U.S. classroom. Table 2.3 shows how LAS Links reporting strands correspond to the TESOL standards (2006). LAS Links has combined the target language use skills into three strands for practical use and reporting.

Table 2.3 LAS Links Strands and the TESOL Standards (2006)

| LAS Links | TESOL |
| :---: | :---: |
| Strand 1: Students are able to listen, speak, read, and write for Social, Intercultural, and Instructional Communication. | Standard 1: English language learners communicate for social, intercultural, and instructional purposes within the school setting. |
| Strand 2: Students are able to listen, speak, read, and write for Language Arts, Social Studies, and History. | Standard 2: English language learners communicate information, ideas, and concepts necessary for academic success in the area of Language Arts. <br> Standard 5: English language learners communicate information, ideas, and concepts necessary for academic success in the area of Social Studies. |
| Strand 3: Students are able to listen, speak, read, and write for Mathematics, Science, and Technical Subjects. | Standard 3: English language learners communicate information, ideas, and concepts necessary for academic success in the area of Mathematics. <br> Standard 4: English language learners communicate information, ideas, and concepts necessary for academic success in the area of Science. |


| LAS Links | TESOL |
| :--- | :--- |
| Strand 4: Students are beginning to develop <br> Foundational Skills for reading and writing (only <br> applicable for Grades K-3). |  |

The CEFR (2001) serves as an influential source in the development of language and education policies in Europe and beyond. Many language testers and education/examination boards refer to the CEFR to help define language proficiency levels and analyze language qualifications. Figure 2.1 shows how LAS Links proficiency levels conceptually align with the CEFR (2001).

Figure 2.1 Correspondence of LAS Links Proficiency Levels with the CEFR (2001)


### 2.2 Test Blueprint

LAS Links Forms C and D were developed for administration to five grade spans ( $\mathrm{K}-1,2-3$, $4-$ 5, 6-8, and 9-12) and are used to measure four domains or skill areas of English language proficiency: Listening, Speaking, Reading, and Writing. They also measure the combined domains of Comprehension (Listening and Reading), Productive (Speaking and Writing), Oral (Speaking and Listening), Literacy (Reading and Writing), and Overall (Listening, Speaking, Reading, and Writing). Within each domain (or skill area), a combination of item types including selected-response (SR) (also known as multiple-choice), short constructed-response (SCR), and extended constructed-response (ECR) is used to provide diverse opportunities for students to demonstrate proficiency and to maintain reasonable testing time.

In general, constructed-response items are used to assess the productive skill areas of Speaking and Writing, whereas multiple-choice items are used to assess the receptive skill areas of Listening and Reading, as well as grammar-based items in Writing. A new feature in Forms C and D in the Reading skill area in Grades $4-12$ is the inclusion of SCR test items, which are scored as either correct or incorrect. The SCR test items require students to complete graphics with a short written response.

The Forms C and D assessments include four language context strands to provide an additional perspective on language competencies and to target contextualized language used in schools. Three of the context strands focus on language used within academic practices: 1) Foundational Skills; 2) Language Arts, Social Studies, and History; and 3) Math, Science, and Technical Subjects. The fourth context strand (Social, Intercultural, and Instructional Communication) focuses on language used in school for instructional and interpersonal purposes.

Tasks within the Language Arts, Social Studies, and History strand focus on the vocabulary and textual features common to these subjects and inherent in the academic register and discourse. For example, social and historical language may include narratives or expository forms of writing and text students engage with in school contexts. Items in this strand contribute to the academic score.

Tasks within the Mathematics, Science, and Technical Subjects strand focus on the vocabulary and textual features common to these subjects and inherent in the academic register and discourse. Students may be asked to communicate using information, ideas, or abstract concepts necessary in the math, science, and technical topics. For example, science, mathematics, and technology can be more lexically diverse, contain more abstract comparisons, and use more technical terms than social science texts. Items in this strand also contribute to the academic score.

The Foundational Skills strand encompasses beginning reading and writing skills that young students are developing in both their first and second languages. Tasks in this strand require students to demonstrate early English literacy and communication skills. Foundational Reading (Read Words) includes tasks such as applying letter-sound correspondences and decoding words. Foundational Writing (Start Writing) includes tasks such as writing letters and numbers, spelling and writing words, and copying sentences. Scores are reported for Foundational Reading and Foundational Writing separately. Items in this strand contribute to the academic score as well.

The Social, Intercultural, and Instructional Communication strand is the language used in school activities and associated with instructional language that is general across the curriculum. This strand provides information on the students' ability to communicate with peers, teachers, or other members of the community. The tasks may take the form of listening to announcements, requesting information, or writing correspondence, for example. Items in this strand are not included in the academic score and only contribute to the overall proficiency score.

Table 2.4 shows an overview of the test blueprint, including numbers and types of items, for each domain by grade span. Note that the actual item points for scoring in each operational test form (see Appendix C) may show some slight variation from the targets in the test blueprint.

Table 2.4 Test Blueprint Overview

| Skill Area | Language Context Strand | Sub-skill area / subtest | K-1Number of <br> Items |  | $\begin{gathered} \text { 4-5 } \\ \text { Number } \\ \text { of Items } \end{gathered}$ | 6-8 and 9-12 <br> Number of Items | Item Type (SR/SCR/ECR) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Listening | Social, Intercultural, and Instructional Communication | Listen for Information | 8 | 8 | 8 | 9 | SR |
|  | Language Arts/Social Studies/History | Listen for Academic Instruction | 2 | 3 | 3 | 3 |  |
|  |  | Listen for Information | 4 | 3 | 3 | 4 |  |
|  | Mathematics/Science/Technical Subjects | Listen for Academic Instruction | 2 | 3 | 3 | 3 |  |
|  |  | Listen for Information | 4 | 3 | 3 | 4 |  |
|  |  | Total | 20 | 20 | 20 | 23 |  |
| Speaking | Social, Intercultural, and Instructional Communication | Make Conversation | 3 | 3 | 3 | 3 | SCR |
|  |  | Describe and Request Information | 2 | 2 | 2 | 2 | SCR |
|  |  | Tell A Story | 1 | 1 | 1 | 1 | ECR |
|  | Language Arts/Social Studies/History | Use Academic Words | 2 | 2 | 2 | 2 | SCR |
|  |  | Present and Explain Information | 4 (2 for K) | 4 | 4 | 4 | SCR |
|  | Mathematics/Science/Technical Subjects | Use Academic Words | 2 | 2 | 2 | 2 | SCR |
|  |  | Present and Explain Information | 4 (2 for K) | 4 | 4 | 4 | SCR |
|  |  | Total | 18 (14 for K) | 18 | 18 | 18 |  |
| Reading | Foundational Skills | Read Words | 12 | 6 | N/A | N/A | SR |
|  | Social, Intercultural, and Instructional Communication | Read School Texts | 10 | 10 | 14 | 14 | SR |
|  | Language Arts/Social Studies/History | Read Academic Texts | 2 | 5 | 4 | 4 | SR |
|  |  |  | N/A | N/A | 2 | 2 | SCR |
|  |  | Read School Texts (Gr. 1-12 only) | 2 (N/A for K) | 2 | 2 | 2 | SR |
|  | Mathematics/Science/Technical Subjects | Read Academic Texts | 2 | 5 | 4 | 4 | SR |
|  |  |  | N/A | N/A | 2 | 2 | SCR |
|  |  | Read School Texts (Gr. 1-12 only) | 2 (N/A for K) | 2 | 2 | 2 | SR |
|  |  | Total | 30 (26 for K) | 30 | 30 | 30 |  |
| Writing | Foundational Skills | Start Writing | 8 | N/A | N/A | N/A | SCR |
|  |  |  | 1 |  |  |  | SCR |
|  | Social, Intercultural, and Instructional Communication | Use Grammar and Conventions | 4 | 6 | 6 | 6 | SR |
|  |  | Write to Express Ideas | 1 | N/A | N/A | N/A | SCR |
|  |  |  | N/A | 1 | 1 | 1 | ECR |
|  | Language Arts/Social Studies/History | Use Grammar and Conventions | 1 | 2 | 2 | 2 | SR |
|  |  | Write Academic Texts | 2 (N/A for K) | 3 | 3 | 3 | SCR |
|  | Mathematics/Science/Technical Subjects | Use Grammar and Conventions | 1 | 2 | 2 | 2 | SR |
|  |  | Write Academic Texts | 2 (N/A for K) | 3 | 3 | 3 | SCR |
|  |  | Total | 20 (16 for K) | 17 | 17 | 17 |  |

### 2.3 Item Development and Review

CTB Content and Research experts worked together on the development of grade-level test specifications to conceptualize the LAS Links new generation of language proficiency assessments and to guide item writers through the test development process. The English Language Learners Advisory Panel (ELLAP; see Appendix A for a list of the panel members) reviewed the specifications and sample items and provided guidance during the LAS Links test specifications development process. The test specifications contain measures that are linked to the goals of the CCSS (2010). The specifications were designed to ensure that passage and items are appropriate in terms of content, difficulty level, item construct, and Universal Design considerations.

A team of writers/reviewers collaborated during the development of this project. Item writers and content specialists are experts in content alignment, and the majority of content editorial and supervisory staff had classroom teaching experience. Content development specialists were assigned to a specific grade span in the creation of LAS Links. Their prior experience teaching and working with the subject matter helped them effectively develop appropriate assessment content. Detailed item specifications guided item writers, and assignments contained information on avoiding biased content with details specific to the ELL student population. Every item created during the test development process was written and aligned to a specific standard in order to ensure a wide range of skills were covered in each test skill area. Items were developed in a team environment, and each item underwent several layers of content review by senior specialists. Figure 2.2 shows the general LAS Links test development process.

Figure 2.2 LAS Links 2nd Edition Test Development Process

| LAS Links Second Edition Test Development Process |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | CTB ReviewsELPAS Standards for alignment |  |  |  |  |
|  | CTB creates LAS Links Blueprint | CTB creates LAS Links Foun dation a Specifications | $\begin{aligned} & \text { ELLAP reviews } \\ & \text { spectications and } \\ & \text { recommenes andations } \end{aligned}$ | CTB revises specification sand prepares somple set of itemsmofor tiem development |  |
|  | CTB selects and trains vendor to develop LAS Links second Edition | $\begin{array}{\|l\|} \text { Passage stimuli and } \\ \text { art for items are } \\ \text { developed } \end{array}$ | vich $\begin{gathered}\text { Vendor produces } \\ \text { final simuli and art }\end{gathered}$ | $\begin{array}{\|c\|} \hline \text { Vendor develops } \\ \text { firs ser of titerns and } \\ \text { items undergoc cri } \\ \text { reviews } \end{array}$ |  |
|  | $\begin{array}{\|c\|} \hline \text { CTB content editors } \\ \text { prepare final set of } \\ \text { items for external } \\ \text { review } \end{array}$ | $\begin{aligned} & \text { iters sunderio } \\ & \text { extern al review } \end{aligned}$ | $\begin{aligned} & \text { CTB content editors } \\ & \text { and research review } \\ & \text { recommendations } \\ & \text { for bias/sen sitivity } \end{aligned}$ |  | Field Test materials are produced |
|  | CTB holds small scale tryoutsfor new items | Training for Scorers is conducted | $\Rightarrow \begin{gathered} \text { FieldTest } \\ \text { Administration } \end{gathered}$ | Test Materials are collected and scored |  |
|  | Post Field Test Analysisis conducted | $\begin{gathered} \text { Item Selection } \\ \text { Criteria are } \\ \text { established and } \\ \text { reviewed with } \\ \text { content editors } \end{gathered}$ | Parallel Test forms are selected | $\geqslant \begin{gathered} \text { Test Forms are } \\ \text { pubished } \end{gathered}$ |  |

To ensure that the content of the tests were consistent and appropriate with content that is taught in schools, the range of subject matter for the two academic school contexts (Language Arts/ Social Studies/History and Mathematics/Science/Technical Subjects) was limited to topics explicitly noted in the CCSS (2010) or the TESOL standards (2006).

## Listening test considerations

Brown (1995) provides a very useful set of Cognitive Load Principles, which we have adapted below.

- Less is more. It is easier to understand a text involving fewer individuals, characters, or objects. As the number of people or things involved in a Listening passage increases so does the likelihood of confusion, even for native speakers, as these details must be retained in short-term memory.
- Distinguish between interactants. It is less cognitively demanding to understand a text (e.g., narrative, description, instruction) involving individuals and objects that are easily distinguishable from one another. It would be easier to understand and remember story details about a dump truck, an ambulance, and an SUV than one about three sedans. "The more individuals and objects are similar and the more they are described in similar terms, the more likely they are to be misidentified . . ." (Brown, 1995, p. 63).
- There's no "there there". It is easier to understand texts that involve uncomplicated spatial relations. When we listen to a story we construct a mental model of the scene and use this model as a stage on which to place the people and things and observe their actions. The simpler the spatial relations, the easier it is to visualize them. The same can be said for temporal relationships.
- Straight talk. It is easier to understand texts when the order of telling matches the order in which the events occurred. As they listen to a narrative, listeners assume the events happened in the order reported. Such narratives are easier to understand because they require less manipulation of the listeners' mental model and do not overburden short-term memory.
- Be clear. It is easier to understand a text if relatively few inferences are necessary to relate each sentence to the preceding text. In other words, avoid ambiguity and obscurity, and be clear with respect to orderliness. In the English spoken in the United States, the rhetorical style is for more general details to precede more specific ones and for causes to precede effects, to avoid non-linear narratives. On the other hand, a related pitfall we find
is that in attempting to "simplify" texts, some writers make the mistake of eliminating detail in an effort to shorten sentences. An analysis by Beck, McKeown, Sinatra, \& Loxterman (1991) has shown that texts that present only facts with little explanation of their relationship are more difficult to comprehend than texts that provide more elaboration on how the material is connected. One reason for this may be that the lack of elaboration puts the onus of drawing all such inferences on the reader. Likewise, some syntactically simple texts are difficult to comprehend because the text is poorly organized. The following excerpt from a reading passage exemplifies this point:

A house on stilts is high above the ground. People build houses on stilts in Thailand. Thailand is a country in Southeast Asia. The weather in Thailand is very warm. Air can move around well in a house on stilts. In the summer the country has heavy rainstorms. These heavy storms are called monsoons. One area of Thailand gets the most rain.

The sentences are syntactically straightforward and, with the exception of "stilts", the vocabulary consists of mostly common words; however, the text lacks coherence, making it very difficult for even a skillful reader to understand. As a result, the excerpt is easy to read but not easy to comprehend.

- Expect the expected. It is easier to understand a text if the information is consistent and fits with the listener's pre-existing knowledge. Thus, it is easier to follow a narrative about a topic we already know well than one we know nothing about. It is, for example, a standard gambit to open a conversation by setting a common point of reference, such as, "Remember the time we went to Lake Revelstoke?" This strategy ensures that everyone involved in the conversation starts from the same point of reference and listeners can retrieve the shared background knowledge necessary for comprehension. If the information that follows is new but compatible with the old, it is easier for listeners to incorporate it into their knowledge system. According to Brown (1995), problems arise for listeners when the incoming information is ambiguous, expressed vaguely, or is not compatible with the listener's existing knowledge.


## Speaking test considerations

- Specifications to develop stimuli for items in the Present and Explain Information subtest provided guidance to ensure test authenticity.
- For items in the Tell a Story subtest, art development was specified so that
- distinct events occurred in each illustration;
- actions were easily understood visually;
- the depicted events and actions had a beginning, middle, and end;
- art specifications did not rely on facial expressions, gestures, or body stance to convey action or meaning, e.g., "He is looking at the pear and the apple but can't decide which one to choose." These subtle clues could very well be tied to a particular culture unknown or unfamiliar to the student. If the narrative relied on these types of clues, students may not understand what is happening, and may stop their telling of the story. This could lead the test administrator to erroneously assume that the student lacks the language skills necessary to tell the story when the cause could in fact be more a matter of the pictures not telling the story.


## Reading test considerations

- Given the expectation that all K-12 students read and comprehend more complex texts, including English Language Learners (ELL), the LAS Links Reading test was designed to reflect this trend. Thus, the criteria for developing extended passages were to ensure that texts were comparable to mainstream classroom texts currently in use throughout the United States in terms of construction, complexity, and appearance.
- ACT, Inc (2006) provided guidance on defining degrees of text complexity. It categorized texts as being Uncomplicated, More Challenging, or Complex. For the purposes of text development for LAS Links, the extended texts were written to align most closely to the More Challenging category, which is defined by the following text features: implicit relationships, detailed richness, involved structure, and a contextdependent use of some more complex vocabulary.
- Reading dichotomous constructed-response (DCR) items consist of a chart, table, or diagram with missing information for students to complete. To avoid raters having to make a judgment as to the veracity of the response, students are required to enter the information exactly as it appears in the text to improve reliability. The information required to respond is contained in the passage in order to ensure that students will not need to rely on background knowledge to complete the table.


## Writing test considerations

- As there are far more assessable features of language than there are test items, developers were asked to target the essential aspects of syntax and mechanics. For guidance, they referred to the skills explicitly noted in the CCSS (2010) for English Language Arts \& Literacy in History/Social Studies, Science, and Technical Subjects.
- The texts in the Writing prompts are designed to be grade-level appropriate and not requiring new background knowledge. This is crucial in order to assess students' language proficiency skills, instead of their content knowledge of specific topics.


### 2.4 Form Assembly

All items selected for the operational Forms C and D came from the Forms C and D field test item pool. Any items that demonstrated poor classical item statistics (e.g., $p$-value and item-total correlations) or failed to fit the Item Response Theory (IRT) models in use (see more information on the IRT models in Chapter 4.1) were removed from the set of field test items available for selection.

The construction of the C and D operational forms was aimed to fulfill both the content and psychometric criteria as listed in Table 2.5. Classical item statistics based on the field test data and item parameters obtained from preliminary IRT analyses were used to inform the item selection and form assembly. After the operational test forms were assembled, their psychometric properties were also examined based on the final IRT item parameters (see relevant discussion in Chapter 7.1).

## Table 2.5 Item Selection and Form Assembly Criteria

| Aspects | Criteria |
| :--- | :--- |
| Test blueprint | Adhere to sub-skill category quotas to ensure content coverage. |
| Item difficulty | Minimize the number of items with $p$-values $<=0.10$ or $>=0.95$. |
| Item-total correlation | Minimize the number of items with item-total correlations $<0.15$ and MC <br> items with any of the distractor point-biserial $>0.05$. |
| Item omit rate | Minimize the number of items with omit rates $>=5 \%$. |
| Test information | Maximize test information at and around the LAS Links cut scores with <br> the target test information equal to or greater than that on the operational <br> Forms A and B. |
| Standard error of <br> measurement | Minimize standard error of measurement for the target student ability span <br> at each grade span. |
| IRT model fit | Minimize the number of poor-fitting items. |
| Distribution of MC <br> answer key positions | The MC answer key positions should be evenly distributed throughout the <br> form in general and should avoid the same position being repeated <br> consecutively. |

The form assembly process was conducted using CTB's proprietary program called Automated Test Assembly (ATA). The use of ATA allows balancing psychometric and content considerations in an efficient way. ATA has been in use for industry-level operations at CTB since 2011 for form selection as well as for investigating and evaluating the psychometric properties of tests. It permits the user to examine the test characteristic curves, standard error curves, test information curves, and the floors and ceilings of the tests built. ATA also enables developers to compare multiple forms, a particularly attractive feature when parallel forms from the same assessment are required or when forms from multiple editions of the assessment need to be compared. The output of ATA can also be used to compare forms across grade span levels through plots of the curves.

### 2.5 Quality Control Evidence

Items were reviewed for adherence to the item-writing specifications, which included developmental appropriateness, item difficulty, freedom from areas of potential bias, and appropriate answer choices and distracters on the basis of both content considerations (e.g., expert reviews) and statistical evidence (e.g., Classical Test Theory [CTT] statistics and differential item functioning [DIF] analyses). Additionally, items went through a thorough review by internal and external review panels for bias and sensitivity. During form development, items and the overall test construction were reviewed for considerations of Universal Design principles (see Section 2.5.2), including equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort, and size and space for approach and use.

### 2.5.1 Item Review Criteria

To ensure appropriate cognitive demands and readability, CTB/McGraw-Hill used the following processes, resources, and texts to develop items:

- Graded word lists, such as EDL Core Vocabularies and The Living Word, used to verify that item vocabulary is consistently at or below the targeted grade level
- Syntax that is grade-level appropriate
- Items including only the information necessary for assessing the skill or knowledge being tested
- Items containing detailed directions or large amounts of text divided into steps, sections, or bulleted lists to help students understand the task
- Key words or phrases in the items in a consistent style to make the task clear for the student
- After items were written, CTB/McGraw-Hill content specialists reviewed the material for standards alignment, grade-level-appropriateness, item difficulty, freedom from areas of potential bias, and appropriate answer choices and distractors. Every item underwent at least two reviews by the content specialists to ensure the following:
- item correspondence to the identified standard and construct
- relevance of each item to the purpose of the test
- correspondence to the principles of quality item development
- appropriate item difficulty
- accuracy of content presented in the item
- appropriateness of language, graphics, artwork, charts, and figures

LAS Links items must demonstrate a match to the LAS Links Standards Framework, high technical quality, and appropriate difficulty; provide appropriate alternative choices (distractors) in multiple-choice (MC) items; and provide complete answers for open-ended questions.

## Match to LAS Links Standards Framework

Each item had to demonstrate a specific match to the selected standard. The item writers were required to establish the close correspondence between the standards and the test questions clearly; this correspondence was verified by CTB/McGraw-Hill content editors and development supervisors. This step represented the first verification of the content validity of each item.

## Technical quality

For multiple-choice items, technical quality included fully stated stems (i.e., the stem states a complete question so that the student understands what is asked before reading the response options); balanced response options (no answer choice is conspicuous due to length, syntax, tone, level of specificity, or other reason); plausible and reasonable distractors; absence of cueing between stem and answer choices; brevity; and clarity. For open-ended items, technical quality included precisely and fairly stated prompts that yield appropriate responses and well-formed and effective scoring rubrics and sample student responses.

## Difficulty level

Items were reviewed to ensure an appropriate difficulty level for the purpose of the test.
CTB/McGraw-Hill's development team kept a record of the estimated difficulty of each item to ensure that items were written within a specific range of difficulty in any given test.

## Appropriate distractors for multiple-choice items

Item writers submitted answer keys with their multiple-choice (MC) items. Writers were directed to double check distractors to verify that no ambiguous or misleading incorrect response options
existed, that there was only one clear correct answer per item, and that answer choices did not include outliers. CTB/McGraw-Hill content editors and development supervisors then verified the correct response.

## Complete answers for open-ended items

When writing open-ended items, the writers provided a correct and complete answer, as well as a range of answers possible for each item. In addition, both the writers and the reviewers examined every item to ensure that none invited a discussion of the personal beliefs or practices of a student or student's family. Any such items were immediately revised or rejected.
Development supervisors, content editors, and item writers further refined items collaboratively until all items met or exceeded both CTB/McGraw-Hill's high standards and the criteria in the specifications. All items developed for the LAS Links pool went through this exacting process.

### 2.5.2 Universal Design

CTB/McGraw-Hill's LAS Links program was developed in accordance with the criteria for test development, administration, and use listed in the Standards for Educational and Psychological Testing (1999). By applying the concept of Universal Design (UD) throughout the development process, CTB/McGraw-Hill created the LAS Links design to be accessible by students in largescale assessments. In developing LAS Links, items and the overall test construction were reviewed for the elements of UD: equitable use, flexibility in use, simple and intuitive use, perceptible information, tolerance for error, low physical effort, and size and space for approach and use. LAS Links items went through extensive reviews by internal and external review panels for bias and sensitivity. These panels were composed of experts in ELD/ELP. In addition, accommodations were developed for students who have Individualized Education Programs (IEP) or 504 plans. Large Print and Braille versions of the test were developed for students who required these accommodations, and they follow the American Printing House for the Blind Guidelines. Other accommodations are also allowed in the test administration, such as clarifying directions, reading the test question (not normally read), using a scribe, spelling aides, and teacher marking the student's response in the student booklet.

### 2.5.3 Content and Bias/Sensitivity Review

Throughout the development process, item developers paid careful editorial attention to item content validity (measuring the test construct and nothing else). Item developers were instructed to pay careful attention to two McGraw-Hill guides to ensure fairness: Guidelines for Bias-Free Publishing (Macmillan/McGraw-Hill, 1993a) and Reflecting Diversity and Multicultural Guidelines for Educational Publishing Professionals (Macmillan/McGraw-Hill, 1993b). Bias can occur if the assessment measures different things for different groups. If the test includes
irrelevant skills or knowledge (however common), the possibility of bias is increased. Therefore, empirical evaluation techniques were applied to all LAS Links items (e.g., differential item functioning); all items flagged as biased were reviewed by experts.

The developers of the LAS Links $2^{\text {nd }}$ Edition gave careful attention to questions of ethnic, racial, gender and age bias following the guidelines specified above. In addition to the internal reviews for bias and sensitive considerations, CTB/McGraw-Hill contracted with Second Language Testing, an external agency, to ensure expertise in item development with teaching experience to conduct the review of the item pool for content considerations and potential biases.

All the LAS Links items went through this professional external review using standard criteria used for CTB Content and Bias/Sensitivity Review prior to field testing. Each reviewer evaluated each item against the criteria and documented ratings with pertinent comments for test developers' consideration.

The internal Content editing staff worked with the Expert Review Committee to address all recommendations to edit language, subject matter, or representation of people. The developers then made revisions to the test items to eliminate potential sources of item bias.

Below are the criteria used by external reviewers for evaluating content and potential bias/sensitivity issues.

- grade span appropriate
- alignment to indicator
- content accuracy
- single correct answer (selected-response items only)
- accurate rubric (constructed- response items only)
- art accuracy (graphics only)
- clear graphics (graphics only)
- adherence to Universal Design principles
- bias and sensitivity issues

Below is a list of the major areas of assessment that were reviewed.

- passages
- artwork
- item questions
- distractors in selected-response items
- cognate "Say words" items (potentially favoring Spanish speakers)
- interchangeable items (where items need to be scored together, and answers are interchangeable)
- scoring rubrics/sample answers
- item/test directions
- standards alignment


## CHAPTER III DATA COLLECTION

Chapter 3 describes the field testing design for constructing LAS Links Forms C and D, characteristics of the student samples that were acquired to support field testing, and the related sample acquisition process.

### 3.1 Field Testing Design

The field testing design used for LAS Links Forms C and D included three field test forms per grade span with content characteristics and item types similar to those of the resulting operational tests (Forms C and D) being constructed. Each field test form had a similar length to the target length of an operational form. Using three field test forms per grade span was intended to provide additional items to support form selection based on content and psychometric criteria without overburdening the test administrators or student participants.

To ensure item quality and minimize chances of item suppression from empirical evaluation, the Forms C and D field test items were reviewed and selected with close attention to content quality and the target student population.

The field testing design was intended to place Forms C and D on the existing LAS Links English common scale (see more information on the common scale in Chapter 4.2) and to support item selection and empirical evaluation in form assembly. Under the design, there were a total of 15 LAS Links field test forms. Each field test form was administered to its corresponding grade span level (Level 1 for Grades K-1; Level 2 for Grades 2-3; Level 3 for Grades 4-5; Level 4 for Grades 6-8; and Level 5 for Grades 9-12).

Three scenarios were created under this design: LAS Links anchor, total battery, and vertical linking. Tables 3.1 through 3.5 outline the LAS Links Forms C and D field test sampling design in accordance with the three design scenarios.

## LAS Links anchor scenario

Under this scenario, a group of students took the complete operational LAS Links Form A and subtests from the Forms C and D field test forms (Forms $\mathrm{S} / \mathrm{T} / \mathrm{U}$ ) in order to establish a linkage at the subtest level between Form A and Forms S/T/U. The linkage allowed for placing Forms C and D on the LAS Links English common scale for each domain (Listening, Speaking, Reading, and Writing).

Table 3.1 Forms C/D Field Test Sample Design, Grades K-1

| Grade | Design N | Form A |  | LAS Links Level 1 (Grades K-1) |  |  |  |  |  |  |  |  |  |  |  | LAS Links Level 2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Listening |  |  | Speaking |  |  | Reading |  |  | Writing |  |  | Listening | Speaking | Reading | Writing |
|  |  | L1 L/S | L1/RW | L1S | L1T | L1U | S1S | S1T | S1U | R1S | R1T | R1U | W1S | W1T | W1U | L2S | S2S | R2S | W2S |
| LAS Links Anchor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| K | 200 | 200 | 200 | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 200 | 200 | 200 | 150 |  |  | 150 |  |  |  |  |  |  |  |  | 50 | 50 |  |  |
| K | 200 | 200 | 200 |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |  |  |
| 1 | 200 | 200 | 200 |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |  |  |
| K | 200 | 200 | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |  |
| 1 | 200 | 200 | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |  |
| K | 200 | 200 | 200 | 200 |  |  |  |  |  | 200 |  |  |  |  |  |  |  |  |  |
| 1 | 200 | 200 | 200 | 150 |  |  |  |  |  | 150 |  |  |  |  |  | 50 |  | 50 |  |
| K | 200 | 200 | 200 |  | 200 |  |  |  |  |  | 200 |  |  |  |  |  |  |  |  |
| 1 | 200 | 200 | 200 |  | 200 |  |  |  |  |  | 200 |  |  |  |  |  |  |  |  |
| K | 200 | 200 | 200 |  |  | 200 |  |  |  |  |  | 200 |  |  |  |  |  |  |  |
| 1 | 200 | 200 | 200 |  |  | 200 |  |  |  |  |  | 200 |  |  |  |  |  |  |  |
| K | 200 | 200 | 200 |  |  |  | 200 |  |  |  |  |  | 200 |  |  |  |  |  |  |
| 1 | 200 | 200 | 200 |  |  |  | 150 |  |  |  |  |  | 150 |  |  |  | 50 |  | 50 |
| K | 200 | 200 | 200 |  |  |  |  | 200 |  |  |  |  |  | 200 |  |  |  |  |  |
| 1 | 200 | 200 | 200 |  |  |  |  | 200 |  |  |  |  |  | 200 |  |  |  |  |  |
| K | 200 | 200 | 200 |  |  |  |  |  | 200 |  |  |  |  |  | 200 |  |  |  |  |
| 1 | 200 | 200 | 200 |  |  |  |  |  | 200 |  |  |  |  |  |  |  |  |  |  |
| Total | 3600 | 3600 | 3600 | 700 | 800 | 800 | 700 | 800 | 800 | 350 | 400 | 400 | 350 | 400 | 400 | 100 | 100 | 50 | 50 |
| Total Battery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| K | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  |  |  |  |  |
| 1 | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  |  |  |  |  |
| K | 300 |  |  |  | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  |  |  |  |
| 1 | 300 |  |  |  | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  |  |  |  |
| K | 300 |  |  |  |  | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  |  |  |
|  | 300 |  |  |  |  | 300 |  |  | 300 |  |  | 300 |  |  | 300 |  |  |  |  |
| Total | 1800 |  |  | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 | 600 |  |  |  |  |
| Grand Total | 5400 | 3600 | 3600 | 1300 | 1400 | 1400 | 1300 | 1400 | 1400 | 950 | 1000 | 1000 | 950 | 1000 | 1000 | 100 | 100 | 50 | 50 |

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Table 3.2 Forms C/D Field Test Sample Design, Grades 2-3


Table 3.39 Forms C/D Field Test Sample Design, Grades 4-


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Table 3.40 Forms C/D Field Test Sample Design, Grades 6-


| Grade | Design N | Form A |  | LAS Links Level 4 (Grades 6-8) |  |  |  |  |  |  |  |  |  |  |  | LAS Links Level 5 |  |  |  | LAS Links Level 3 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Listening |  |  | Speaking |  |  | Reading |  |  | Writing |  |  | LI | SK | RD | WR | LI | SK | RD | WR |
|  |  | L4 L/S | L4/RW | L4S | L4T | L4U | S4S | S4T | S4U | R4S | R4T | R4U | W4S | W4T | W4U | L5S | S5S | R5S | W5S | L3S | S3S | R3S | W3S |
| 6 | 200 |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |
| 7 | 200 |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |
| 8 | 200 |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |  |
| 6 | 200 |  |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |
| 7 | 200 |  |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |
| 8 | 200 |  |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |  |  |  |
| Total | 1860 |  |  | 660 | 600 | 600 | 660 | 600 | 600 | 660 | 600 | 600 | 660 | 600 | 600 |  |  |  |  |  |  |  |  |
| Grand Total | 5640 | 3780 | 3780 | 1360 | 1440 | 1440 | 1360 | 1440 | 1440 | 1010 | 1020 | 1020 | 1010 | 1020 | 1020 | 80 | 80 | 40 | 40 | 60 | 60 | 30 | 30 |

Table 3.5 Forms C/D Field Test Sample Design, Grades 9-12

| Grade | Design N | Form A |  | LAS Links Level 5 (Grades 9-12) |  |  |  |  |  |  |  |  |  |  |  | LAS Links Level 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Listening |  |  | Speaking |  |  | Reading |  |  | Writing |  |  | LI | SK | RD | WR |
|  |  | L5 L/S | L5/RW | L5S | L5T | L5U | S5S | S5T | S5U | R5S | R5T | R5U | W5S | W5T | W5U | L4S | S4S | R4S | W4S |
| LAS Links Anchor |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | 100 | 100 | 100 | 90 |  |  | 90 |  |  |  |  |  |  |  |  | 10 | 10 |  |  |
| 10 | 100 | 100 | 100 | 90 |  |  | 90 |  |  |  |  |  |  |  |  | 10 | 10 |  |  |
| 11 | 100 | 100 | 100 | 90 |  |  | 90 |  |  |  |  |  |  |  |  | 10 | 10 |  |  |
| 12 | 100 | 100 | 100 | 90 |  |  | 90 |  |  |  |  |  |  |  |  | 10 | 10 |  |  |
| 9 | 100 | 100 | 100 |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |  |
| 10 | 100 | 100 | 100 |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |  |
| 11 | 100 | 100 | 100 |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |  |
| 12 | 100 | 100 | 100 |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |  |
| 9 | 100 | 100 | 100 |  |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |
| 10 | 100 | 100 | 100 |  |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |
| 11 | 100 | 100 | 100 |  |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |
| 12 | 100 | 100 | 100 |  |  | 100 |  |  | 100 |  |  |  |  |  |  |  |  |  |  |
| 9 | 100 | 100 | 100 | 90 |  |  |  |  |  | 90 |  |  |  |  |  | 10 |  | 10 |  |
| 10 | 100 | 100 | 100 | 90 |  |  |  |  |  | 90 |  |  |  |  |  | 10 |  | 10 |  |
| 11 | 100 | 100 | 100 | 90 |  |  |  |  |  | 90 |  |  |  |  |  | 10 |  | 10 |  |
| 12 | 100 | 100 | 100 | 90 |  |  |  |  |  | 90 |  |  |  |  |  | 10 |  | 10 |  |
| 9 | 100 | 100 | 100 |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |  |
| 10 | 100 | 100 | 100 |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |  |

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| Grade | Design N | Form A |  | LAS Links Level 5 (Grades 9-12) |  |  |  |  |  |  |  |  |  |  |  | LAS Links Level 4 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Listening |  |  | Speaking |  |  | Reading |  |  | Writing |  |  | LI | SK | RD | WR |
|  |  | L5 L/S | L5/RW | L5S | L5T | L5U | S5S | S5T | S5U | R5S | R5T | R5U | W5S | W5T | W5U | L4S | S4S | R4S | W4S |
| 11 | 100 | 100 | 100 |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |  |
| 12 | 100 | 100 | 100 |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |  |
| 9 | 100 | 100 | 100 |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |
| 10 | 100 | 100 | 100 |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |
| 11 | 100 | 100 | 100 |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |
| 12 | 100 | 100 | 100 |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |  |  |
| 9 | 100 | 100 | 100 |  |  |  | 90 |  |  |  |  |  | 90 |  |  |  | 10 |  | 10 |
| 10 | 100 | 100 | 100 |  |  |  | 90 |  |  |  |  |  | 90 |  |  |  | 10 |  | 10 |
| 11 | 100 | 100 | 100 |  |  |  | 90 |  |  |  |  |  | 90 |  |  |  | 10 |  | 10 |
| 12 | 100 | 100 | 100 |  |  |  | 90 |  |  |  |  |  | 90 |  |  |  | 10 |  | 10 |
| 9 | 100 | 100 | 100 |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |
| 10 | 100 | 100 | 100 |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |
| 11 | 100 | 100 | 100 |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |
| 12 | 100 | 100 | 100 |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |  |
| 9 | 100 | 100 | 100 |  |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |
| 10 | 100 | 100 | 100 |  |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |
| 11 | 100 | 100 | 100 |  |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |
| 12 | 100 | 100 | 100 |  |  |  |  |  | 100 |  |  |  |  |  | 100 |  |  |  |  |
| Total | 3600 | 3600 | 3600 | 720 | 800 | 800 | 720 | 800 | 800 | 360 | 400 | 400 | 360 | 400 | 400 | 80 | 80 | 40 | 40 |
| Total Battery |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 9 | 200 |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |
| 10 | 200 |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |
| 11 | 200 |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |
| 12 | 200 |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |  |
| 9 | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  |  |  |  |  |
| 10 | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  |  |  |  |  |
| 11 | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  |  |  |  |  |
| 12 | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  | 180 |  |  |  |  |  |  |
| 9 | 200 |  |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |
| 10 | 200 |  |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |
| 11 | 200 |  |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |
| 12 | 200 |  |  |  |  | 200 |  |  | 200 |  |  | 200 |  |  | 200 |  |  |  |  |
| Total | 2320 |  |  | 720 | 800 | 800 | 720 | 800 | 800 | 720 | 800 | 800 | 720 | 800 | 800 |  |  |  |  |
| Grand Total | 5920 | 3600 | 3600 | 1440 | 1600 | 1600 | 1440 | 1600 | 1600 | 1080 | 1200 | 1200 | 1080 | 1200 | 1200 | 80 | 80 | 40 | 40 |

## Total battery scenario

Students took all four subtests (Listening, Speaking, Reading, and Writing) of each field test form (S/T/U). This enhanced the field-testing design by providing additional student sample data to support empirical evaluation at the item- and form- levels.

## Vertical linking scenario

Under this scenario, subsets of field test forms were administered to groups of students from the highest grade of the lower level, for example, Grade 1 of Level 1 received Level 2 subtests, and to the lowest grade of the upper level, for example, Grade 2 of Level 2 received Level 1 subtests. The same design was implemented for all levels except for Level 1 and Level 5. For Level 1, only Grade 1 students were requested for the linking and they took Level 2 subtests. At Level 5, the linking students came from all available grades (Grades 9-12) and took Level 4 subtests only. The vertical linking scenario allowed for evaluation and enhancement of vertical linking across grade span levels for Forms C and D.

### 3.2 Sample Acquisition Operations

The design case count for the entire plan was around 3,600 cases per anchor scenario and 1,800 cases per total battery scenario per grade span level for a total of 27,760 cases. The sample acquisition efforts started in fall 2011 and lasted until summer 2012, with the majority of the sample obtained in 2012. The data came from CTB existing customers and new users across the nation. A total of around 26,000 cases were acquired to support psychometric analyses.

Test administrators and raters who participated in the field testing were required to receive training and be familiar with relevant test materials and test administration procedures prior to testing.

All test materials were shipped back to CTB for processing and scoring using the standardized methods and procedures developed for the LAS Links program. Raw scoring and editing of scanned data were performed in a client/server system, where a sophisticated system of edits were invoked to review the integrity of each batch scanned and to produce a list of error suspects. This system reduced editing time and provided a high degree of quality control. Online editing screens allowed an editor to focus on potential problems, and then he or she provided related information. The actual scanned documents were always available to the editor, and the software supported the review and correction of any field in the scanned record. Entry and verification of the necessary corrections were enhanced to ensure that each error was actually corrected. As batches were extracted for scoring, a final edit was performed to ensure that all requirements for scoring were met. This automated final edit flagged a batch for further editing if any error was
still detected. A batch containing errors was not allowed to be extracted for reporting. This ensured a high level of accuracy of the scored data.

Students' constructed-responses in the written format (for Reading and Writing constructedresponse items) were scored by human raters under the leadership of CTB's handscoring team. Prior to the actual scoring, CTB's handscoring team created training materials. The process included several presorting steps and subsequent iterative/consensus processes in order to achieve ever-increasing agreement and precision through a kind of "round robin" scoring, followed by discussion and selection. When all papers for a form were selected and assigned a status as good anchor, training, qualifying, or check-set papers, they were consolidated into training formats. Scoring Guides (consisting of rubrics, anchors, and annotations) served as a constant, setting the course for all subsequent training and scoring.

Qualification is a critical task in the assessment training process. It is the final determinant of reader readiness. All readers, including team leaders, must achieve a high level of exact agreement on the qualifying round following training. Those readers not validating on the first attempt received further training prior to taking an additional qualifying round. Only those who successfully validated were qualified as readers and allowed to score tests. Team leaders were required to complete one qualification round with satisfactory exact agreement.

Validity papers were used to provide consistent accurate scoring reflective of the scoring guides throughout the entire scoring session. Administering these pre-scored papers throughout scoring would determine whether the scoring teams/individuals were drifting from the original scoring criteria.

### 3.3 Student Samples

The Forms C and D field testing sample consisted of data from across the United States, including Arkansas, Arizona, California, Colorado, Connecticut, Illinois, Indiana, Louisiana, Nevada, New Mexico, New York, Ohio, Pennsylvania, Texas, Utah, and Washington. Over 75\% of the samples were English language learners from Title III programs, and the rest either spoke English as their home language or were proficient English language learners who had been exempted or exited from Title III programs. Detailed demographic frequencies on grade, gender, home language, and ethnicity for the field testing sample can be found in Appendix B.

The sample consisted of approximately 4,000 to 6,000 cases per grade span (K-1, 2-3, 4-5, 6-8, and 9-12). The gender distribution shows that the percentages of female students were about $44 \%$ to $48 \%$ and had slightly lower percentages than males. More than 60 languages were included in the sample, and among students who specified a home language in the sample, the majority
spoke Spanish at home. The sample included students from a diversity of race and ethnicity backgrounds, with around $50 \%$ to $71 \%$ reporting being Hispanic/Latino. The demographic distributions are generally similar across the three field test forms at each grade span level on grade, gender, home language, and ethnicity.

### 3.4 Quality Control Evidence

The field testing design was constructed and reviewed with careful considerations of the types of psychometric analyses to be supported and the feasibility factors in sample acquisition. Distributions of sample sizes across grades and regions were closely monitored during the sample acquisition process. Rigorous requirements were in place and training materials were provided to ensure standardized field test administrations and local scoring of the Speaking items. High-quality imaging equipment, software presentation system, and data management system were used to provide valid and reliable scoring. Systematic quality assurance checks were in place throughout the scoring process to ensure accuracy of the field testing data.

## CHAPTER IV SCALE DEVELOPMENT

Chapter 4 provides technical information regarding the psychometric models that were used in the scale development for Forms C and D, and the equating and scaling processes that were implemented. Similar to previous chapters, procedural evidence on quality control is also presented.

### 4.1 Psychometric Model

CTB/McGraw-Hill used Item Response Theory (IRT) techniques to calibrate and scale the LAS Links items. Since both multiple-choice (MC) and constructed-response (CR) items are included in the test, CTB/McGraw-Hill placed both item types on a single scale, using the three-parameter logistic (3PL) model (Lord \& Novick, 1968; Lord, 1980) and the two-parameter partial credit model (2PPC) (Muraki, 1992; Yen, 1993). CTB/McGraw-Hill calibrated and scaled MC items with the 3PL model because it estimates student guessing in addition to item location (difficulty) and allows for differences in item discrimination.

Under the 3PL model, the probability that a student with ability $\theta$ responds correctly to item $i$ is

$$
P_{i}(\theta)=c_{i}+\frac{1-c_{i}}{1+\exp \left\lceil\left\lfloor-1.7 a_{i}\left(\theta-b_{j}\right)\right\rceil\right.},
$$

where $a_{i}$ is the item discrimination, $b_{j}$ is the item difficulty, and $c_{i}$ is the probability of a correct response by a very low-scoring student.

For analysis of CR items, the 2PPC is used. The 2PPC model is a special case of Bock's (1972) nominal model. Bock's model states that the probability of an examinee with ability $\theta$ having a score at the $k$-th level of the $j$-th item is

$$
P\left(x_{j}=k-1 \theta\right)=\frac{\exp Z_{j k}}{\sum_{i-1}^{m i} \exp Z_{j i}}, k=1 \ldots m_{j},
$$

where

$$
Z_{j k}=A_{j k} \theta+C_{j k},
$$

and $A_{j k}$ is the slope of the $k$-th level and $C_{j k}$ is its intercept.

For the special case of the 2PPC model used here, the following constraints are used.

$$
A_{j k}=\alpha_{j}(k-1) \quad \text { and } \quad C_{j k}=-\sum_{i-0}^{k-1} \gamma_{j i}
$$

where $\gamma_{i_{0}}=0$ and $\alpha_{j}$ and $\gamma_{j i}$ are the free parameters to be estimated from the data. The first constraint implies that higher item scores reflect higher ability levels and that the items may vary in their discriminations. For the 2PPC model, each item consists of $m_{j-1}$ independent $\gamma_{j i}$ parameters and one $\alpha_{j}$ parameter; a total of $m_{j}$ individual item parameters are estimated for each item.

Goodness-of-fit statistics were computed for each item to examine how closely the item's data conform to the item response models. A procedure described by Yen (1981) was used to measure fit. In this procedure, students are rank ordered on the basis of their $\hat{\theta}$ values and sorted into ten cells with ten percent of the sample in each cell. Each item $j$ in each decile $i$ has a response from $N_{i j}$ examinees. The fitted IRT models are used to calculate an expected proportion $E_{i j k}$ of examinees who respond to item $j$ in category $k$. The observed proportion $O_{i j k}$ is also tabulated for each decile, and the approximate chi-square statistic

$$
Q_{1 j}=\sum \sum_{10} \frac{m_{j} N(O-E)^{2}}{E_{i j k}},
$$

$Q_{1 j}$ should be approximately chi-square distributed with degrees of freedom $(D F)$ equal to the number of "independent" cells, $10\left(m_{j}-1\right)$, minus the number of estimated parameters. The number of score levels for an item $j$ are represented by $m_{j}$, so for the 3 PL model $m_{j}=2$, and $D F=10(2-1)-3=7$. For the 2PPC model, $D F=10\left(m_{j}-1\right)-m_{j}=9 m_{j}-10$. Since $D F$ differs between multiple-choice and constructed-response items and between performance assessment (PA) items with different score levels $m_{j}, Q_{1 j}$ is transformed, yielding the test statistic

$$
Z_{j}=\frac{Q_{1 j}-D F}{\sqrt{2 D F}}
$$

The $Z$-statistic is useful for flagging items that fit relatively poorly. The statistic takes into account differing numbers of score levels as well as sample size. It is an index of the degree to which obtained proportions of students with each item score are close to the proportions that would be predicted by the estimated thetas and item parameters. Cutoff values for flagging an
item based on $Z_{j}$ have been developed and were used to identify items for the item review. The cut-off value is ( $\mathrm{N} / 1500 \times 4$ ) for a given test, where N is the sample size.

### 4.2 Calibration and Equating

Student responses collected from the Forms C and D field testing were used in IRT calibrations and scaling analyses in order to establish the item parameters for field test items and place them on the LAS Links English Common Scale.

### 4.2.1 Calibrations

The three-parameter logistic (3PL) model and the two-parameter partial credit (2PPC) model as described in the earlier section were applied to scale the MC items and CR items, respectively. Each of the four domains of Listening, Speaking, Reading, and Writing was calibrated separately, and the calibrations were performed for each of the five grade span levels (K-1, 2-3, 4-5, 6-8, and 9-12). Fit statistics were also obtained using the aforementioned methodology.

The two IRT models (3PL and 2PPC) were estimated using CTB/McGraw-Hill's PARDUX software (Burket, 2002). PARDUX estimates parameters simultaneously for dichotomous and polytomous items using marginal maximum likelihood procedures implemented via the Expectation Maximization (EM) Algorithm (Bock \& Aitkin, 1981; Thissen, 1982). Extensive simulation studies and comparisons between PARDUX and MULTILOG (Thissen, 1990), a program widely used for research purposes, have shown that PARDUX provides precise parameter and ability estimate, and it performs more efficiently than MULTILOG (Fitzpatrick, 1991).

Before running the calibrations, items demonstrating poor classical item statistics were removed. During the calibrations, items that did not converge and showed unsatisfactory fit statistics were also removed, and the calibrations were re-run with the updated set of field test items.

### 4.2.2 The LAS Links English Common Scale

Being able to demonstrate growth is a major advantage for an assessment. Similar to Forms A and B, Forms C and D provide scale scores at the domain and composite levels, in addition to proficiency level scores, to help educators track student growth on the LAS Links English common scale from year to year across Grades K-12.

With the common scale, students' original scale scores can be subtracted from their scores in subsequent years, yielding a measure of growth from one grade level to the next. A common scale allows for comparison of individual and groups of students within grades and across grade
spans and permits the monitoring of student performance across years. A common scale permits educators to interpret the improvement in student scores from one test administration to the next as evidence of student growth in English language proficiency across grades and years in the bilingual or ESL program. Additionally, common scaling provides a way for linking test forms built for students from different grade spans to a single underlying scale score metric. As separate test forms were built to be grade-span appropriate, linking these test forms allows for tracking progress of individual students as they move from one grade level to the next.

Note that the common scale as implemented in LAS Links does not assume that students in a higher grade level will have greater English language proficiency than those at lower grade levels. This differentiates the common scale from a true vertical scale, the more typical way of developing a test scale to measure growth but one that assumes students have acquired more knowledge and skills in the tested subject at higher grade levels. Since student demonstration of language proficiency is not dependent upon grade level but rather possibly upon the time spent in a quality language program, $\mathrm{CTB} / \mathrm{McGraw}-\mathrm{Hill}$ has used a common scale in the development of LAS Links instead of a vertical scale.

CTB used a sophisticated IRT-based approach to establishing a common scale for LAS Links in 2006. The LAS Links English common scaling employed a common-examinee design, where some groups of students received an on-level test; others in Grades 2, 4, 6, and 9 received an onlevel and a below-level test; and still others in Grades $1,3,5$, and 8 received an on-level and an above-level test. A concurrent calibration method that assumed separate ability distributions within a given level was then chosen for the common scale linking. This method estimated the mean and standard deviation of the ability distribution for each grade span along with the item parameters for all items across all levels. The middle grade span (Level 3) was assumed to have a mean of zero and standard deviation of one in order for the model to be identified. The concurrent calibration allowed the estimation of item parameters with higher precision for items taken by common examinees while maintaining unidimensionality within a level. A comparison of three vertical scaling methods on the same data set (Karkee, Wang, Green, \& Patz, 2006) and vertical scaling in common item design (Karkee, Lewis, Hoskens, Yao, \& Haug, 2003) showed that the concurrent method provides similar or in many circumstances better item parameter estimates and scaling results in terms of standard error of measurements, level-to-level growth, level-to-level variability, and separation of scores across grade levels. After the concurrent calibrations, the obtained theta scale was linearly transformed to a final scale score metric with a mean of 500 and a standard deviation of 50 .

### 4.2.3 Placing Forms C and D on the LAS Links English Common Scale

To place Forms C and D on the same LAS Links English common scale that was established in 2006, the scale for Forms C and D was linked to the corresponding scale for Forms A and B, given that Forms A and B were already placed on the LAS Links common scale. Due to limited samples acquired for the LAS Links anchor design scenario (see more information about the design in Chapter 3.1), additional data and student samples from customers were obtained to support a modified linking design, where the linking was performed per grade span level ( $\mathrm{K}-1$, $2-3,4-5,6-8$, and 9-12) per domain (Listening, Speaking, Reading, and Writing) using both the equivalent-sample and common-item approaches.

The equivalent-sample approach was taken as a first step, where test scores from equivalent customer samples obtained on the operational Form B and the operational Form C (which contains items evenly pulled from the three C and D field test forms) were used to find the linking function between Form B scale scores and Form C theta scores (on an arbitrary 0-1 theta metric).

During the linear transformation, the transformation constants $(A$ and $B)$ were set such that means and standard deviations (SDs) of the equivalent samples were the same on Form B and Form C for the same domain and grade-span level. The obtained transformation constants were then applied to convert the $0-1$ theta metric from each Form C domain and grade-span level to the scale score metric on the LAS Links English common scale. The item parameters of Form C were also converted to the scale score metric accordingly.

After placing the Form C item parameters on the LAS Links English common scale with the equivalent-sample approach, the common-item approach was taken, where the Form C items were used as the anchor items to help place all the items from the Forms C and D field test item pool on the LAS Links English common scale. The equating process was conducted using the Stocking-Lord procedure (Stocking \& Lord, 1983).

With all the Forms C and D field test items placed on the scale score metric, the resulting test characteristic curves (TCCs), standard error (SE) curves, and item characteristic curves (ICCs) for the Forms C and D field test forms, as well as for the C and D operational forms, were produced and inspected for reasonable performance through the test scale and across grade spans.

### 4.2.4 Lowest and Highest Obtainable Scale Scores

A maximum likelihood procedure cannot produce scale score estimates for students with perfect scores or scores below the level expected by guessing. Also, while maximum likelihood estimates are available for students with extreme scores other than zero or perfect scores,
occasionally these estimates have standard errors of measurement that are very large, and differences between these extreme values have little meaning. Therefore, scores are established for these students based on a rational but necessarily non-maximum likelihood procedure. These values are set separately by level and are called the lowest obtainable scale score (LOSS) and the highest obtainable scale score (HOSS). The same LOSS and HOSS values can be used for number-correct and item-pattern scoring.

After placing Forms C and D on the LAS Links English common scale and assembling the operational test forms (see information on form assembly in Chapter 2.4), the test scale bounds per domain and grade-span level were examined based on psychometric properties of the final C and D operational forms and adjusted when needed to optimize the locations for LOSS and HOSS.

Optimizing the LOSSs and HOSSs is valuable in defining scale bounds for more accurate and effective score estimates of students with extreme scores. To minimize impact on users who transition from LAS Links Forms A and B to Forms C and D, all adjustments were made upward so that students' scores would not be artificially lowered due to any change in the scale bounds across the two editions of test forms. The upward adjustment may also benefit high-ability students with additional room provided at the higher scale end to reduce potential ceiling effect.

The final LOSS and HOSS values for LAS Links Forms C and D by domain and grade span are presented in Table 4.1. The derived LOSSs and HOSSs for the five composite scales (Overall, Oral, Comprehension, Literacy, and Productive) are also provided in the table.

In Forms C and D, composite scores are calculated as the unweighted average of the student's scale scores from corresponding domains, and the results are then truncated to the integer part for reporting purposes (see more information on composite scores and their calculation in Chapter 6.2). Accordingly, the LOSSs and HOSSs for the composite scales were derived with the same calculation procedure as the truncated average of the LOSSs and HOSSs from corresponding domains.

Table 4.1 Forms C/D Lowest and Highest Obtainable Scale Score

| Part 1: Domain-Level Scales |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades | Speaking |  | Listening |  | Reading |  | Writing |  |
|  | LOSS | HOSS | LOSS | HOSS | LOSS | HOSS | LOSS | HOSS |
| K-1 | 300 | 580 | 300 | 530 | 240 | 550 | 200 | 630 |
| $2-3$ | 350 | 600 | 310 | 560 | 300 | 610 | 270 | 640 |
| $4-5$ | 360 | 635 | 350 | 640 | 360 | 680 | 290 | 680 |
| $6-8$ | 365 | 645 | 360 | 680 | 380 | 690 | 300 | 710 |
| $9-12$ | 370 | 650 | 370 | 730 | 390 | 715 | 310 | 720 |
| 51 |  |  |  |  |  |  |  |  |

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| Part 2: Composite Scales |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Grades | Overall |  | Oral |  | Comprehension |  | Literacy |  | Productive |  |
|  | LOSS | HOSS | LOSS | HOSS | LOSS | HOSS | LOSS | HOSS | LOSS | HOSS |
| K-1 | 260 | 572 | 300 | 555 | 270 | 540 | 220 | 590 | 250 | 605 |
| 2-3 | 307 | 602 | 330 | 580 | 305 | 585 | 285 | 625 | 310 | 620 |
| 4-5 | 340 | 658 | 355 | 637 | 355 | 660 | 325 | 680 | 325 | 657 |
| 6-8 | 351 | 681 | 362 | 662 | 370 | 685 | 340 | 700 | 332 | 677 |
| 9-12 | 360 | 703 | 370 | 690 | 380 | 722 | 350 | 717 | 340 | 685 |

### 4.3 Quality Control Evidence

By using LAS Links, customers benefit from the technical expertise that was utilized in the development of the test, such as the use of scale scores, a common scale to track growth, and the test form results based on calibration and scaling analyses with field test data from administration of LAS Links to a national reference group of around 26,000 students. The size of this reference group is important since many publishers of language proficiency assessments use a much smaller reference group and, therefore, do not have the wealth of data that CTB/McGraw-Hill has to support the calibration and scaling of its assessment using advanced psychometric models including 3PL and 2PPC IRT models. The accuracy of the underlying scale in determining student proficiency and measuring growth is enhanced by the quality of the information that has been used to calibrate those scores. This large sample and the use of common K-12 scale support accurate and reliable score results for measuring annual achievement objectives and progress across years.

The LAS Links comprehensive calibration and scaling procedures were evaluated by rigorous quality assurance procedures to facilitate the comparability of test scores and achievement levels across years. Because each of the four content domains-Listening, Speaking, Reading, and Writing-has been calibrated and scaled separately, the scale for each domain is unique, which means that students' scale scores on each domain can be subtracted from their scores in future years, yielding a comprehensive set of measures of growth from one grade level to the next across the four domains.

## CHAPTER V RECOMMENDATIONS FOR TEST OPERATIONS

A test is standardized when "directions to examinees, testing conditions, and scoring procedures follow the same detailed procedures" (AERA, APA, \& NCME, 1999, p. 61). By ensuring equal opportunities for examinees to demonstrate their ability, standardization supports accuracy of the assessment records, interpretability of the test scores, and fairness in score-based decisions. Test security measures also help to "ensure that no one has an unfair advantage" (p. 61) and therefore contribute to test reliability, validity, and test fairness.

Chapter 5 brings test users' attention to test operations of Forms C and D regarding the supporting administration materials to use, training activities to consider prior to test administration and scoring, familiarity with the test and test administration procedures, the types of test accommodations, and test security measures. Such information is provided with the purpose to inform users in preparing and implementing standardized test administrations in their local contexts.

### 5.1 Overview of Test Administration Materials

Test materials can be divided into two broad categories: testing materials and ancillary materials. Testing materials are comprised of test books and audio CDs used by students to take the test, whereas ancillary materials are aimed to train administrators and examiners to organize, deliver, and score the test, and to provide meaningful information on test results for scoring and interpretation.

Testing materials consist of the following:

- Audio Compact Discs (K-12), for use in the Listening test
- Student Content Books (4-12), nonscannable, for presenting test content
- Student Answer Books (4-12), scannable, for recording student responses
- Student Answer Books (K-1; 2-3), scannable, for both presenting test content and recording student responses-using only one test book reduces the cognitive and physical burden on young learners when taking a standardized assessment
- Speaking Cue Picture Books (K-1; 2-3), for use with the Student Answer Books in administration of the Speaking test to younger learners

Standard ancillary materials consist of the following:

- • Examiner's Guide, for test administrators
- • Interpretation Guide, for test users to interpret reported scores


### 5.2 Training Activities

Adequate familiarity with test materials, test administration procedures, and scoring rubrics is an important factor in maintaining standardized test administration and scoring across personnel, test sites, and test occasions. When possible, training opportunities are recommended to be made available to all test proctors and assessment coordinators for them to be instructed in standardized test administration and scoring procedures prior to the test administration.

The pre-administration training may take various formats, depending on the local contexts. Commonly observed training formats include on-site trainings, live and recorded online webinars, guided self-study, or any combination of them. On-site training typically has the advantage of being more adaptive and interactive between the trainer(s) and trainees. Live and recorded webinars may be favored when logistics for travelling to physical sites for training are formidable or when on-demand distance learning is more desirable to ensure training opportunities for all personnel. Guided self-study (with possible follow-up Question \& Answer activities) may be another alternative to consider especially for small-scoped test administrations.

Major aspects covered in pre-administration trainings usually include an introduction of the test materials to use, overall and subtest test administration procedures, materials handling, security, and Speaking scoring. The scoring component is important in the training because student responses in Speaking are locally scored by test proctors. To help with rater calibrations (or rater norming) to ensure inter-rater and intra-rater reliability, it is recommended that raters gain familiarity with the scoring rubrics and when possible, also receive opportunities to participate in mock scoring scenarios using representative student samples across task types and score levels.

When local scoring of student written responses is involved, similar rater training activities are recommended. When conditions allow, it is recommended that sample papers (or anchor papers) and their assigned scores be provided to raters for reference during the scoring event as well.

Additionally, test users may find it helpful to provide students opportunities prior to test administration to develop familiarity with any perceived new task types in the local educational context and with expectations from these task types on performance. This may help reduce language learner students' anxiety during the test and contribute to their optimal test performance.

### 5.3 Test Administration

All test sections are untimed to allow students every opportunity to demonstrate their English proficiency. For group tests, it is recommended to try to group students with similar linguistic competence and to keep groups small when most students are taking the test for the first time. In administering all sections of the test, it is always important that the testing area be quiet, comfortable, and without distractions or unusual interruptions.

The Speaking test is expected to be individually administered by a fluent English speaker. In Grades K-3, the examiner reads from the Student Answer Book and points to illustrations in the Speaking Cue Picture Book. In Grades 4-12, the examiner reads from the Student Answer Book and points to illustrations in the Student Content Book. The Speaking test consists of five subtests: Make Conversation, Use Academic Words, Describe and Request Information, Present and Explain Information, and Tell a Story. Kindergarten students take only the first set of questions in Present and Explain Information. All Speaking items are performance-based in format. They measure vocabulary and grammatically correct verbal expressions in social and academic language. Tasks in the Speaking subtest elicit the production of single-word responses as well as multiple sentences related to school-appropriate topics.

The Listening test is usually group-administered by a fluent English speaker using the audio CD. The examiner may not repeat practice items, listening passages, or test questions. The examiner reads aloud directions on how to answer practice questions and helps the students navigate through the test. Students listen to audio passages, such as an announcements, classroom directions, conversations, or discussions, on the audio CD. Questions and answer choices are also presented on the audio CD. The Listening test consists of two subtests: Listen for Information and Listen for Academic Instruction. All Listening items are multiple-choice in format.

The Reading test is expected to be administered to a group of students by a fluent English speaker who reads from the Examiner's Guide. The Reading test consists of three subtests in Grades K-3: Read Words, Read School Texts, and Read Academic Texts; and two subtests in Grades 4-12: Read School Texts and Read Academic Texts. Reading questions are multiplechoice in format with three answer choices (some picture-based and some text-based) in Grades K-3 and four text-based answer choices in Grades 4-12. In Grades $\mathrm{K}-1$, the student reads all prompts and answer choices, but the questions are read to the students by the examiner. Note that Kindergarten students do not take all of the questions in the Read School Texts subtest. A new feature of Read Academic Texts in Grades 4-12 is the inclusion of four constructed-response questions that require students to complete a table, time line, or illustration with text taken directly from an extended reading passage.

The Writing subtest is typically administered to a group of students by a fluent English speaker who reads from the Examiner's Guide. The subtest consists of four sections for Grades K-1: Start Writing, Write to Express Ideas, Write Academic Texts, and Use Grammar and Conventions (Note: Kindergarten students do not take the Write Academic Texts section). For Grades 2-12, there are three sections: Use Grammar and Conventions, Write Academic Texts, and Write to Express Ideas. The Writing subtest includes both multiple-choice and constructedresponse items that assess the student's knowledge of grammar, word order, and word choice and the student's ability to apply that knowledge to produce sentences and paragraphs that are commonly expected of students at their respective grade levels.

### 5.4 Test Accommodations

LAS Links $2^{\text {nd }}$ Edition offers both Large Print and Braille versions of the assessment. Large print testing materials are intended for students who are visually impaired and require visual testing accommodations. The Large Print version of the test covers all K-12 grade spans. The Braille test is available to students in Grades 2-12 identified as being blind or visually impaired and requiring an accommodated form to access the test.

The content of the Braille version of the test was based on LAS Links Form C. Following the same protocol as the regular print version of the test, all Braille items were reviewed internally by the Content Development team and externally by a Braille expert. Items that could not be Brailled were replaced with substitute items appropriate for students who are visually impaired. Picture-based items from the standard form were reviewed and substituted for better presentation of the measurement for visually impaired or blind students. Specifically, five item types were developed to replace picture-based items. The five substitute item types are listed below:

1. audio-based items
2. tactographic items
3. performance-based items, where students identify objects
4. performance-based items, where students manipulate objects or perform physical actions in response to directions heard
5. items with alternative text prompts

Item difficulty and linguistic complexity were carefully matched in the construction of substitute items. Both Large Print and Braille versions of the LAS Links $2^{\text {nd }}$ Edition assessment meet the industry standard specifications.

The listed accommodations for LAS Links are based on CTB/McGraw-Hill's research on accommodations published in the Assessment Accommodations Supplement for TerraNova,

Third Edition (CTB/McGraw-Hill, 2008). These accommodations are divided into three categories (Categories 1, 2, and 3). The categories are organized according to the potential effect of the accommodations on the appropriate interpretation of individual student results.

The list of accommodations is not intended to be exhaustive, nor are the classifications of accommodations intended to be definitive. The purpose is to provide an accommodationsclassification framework that can be viewed in light of local policies and used with thoughtful applications. Assessment accommodations must be used in accordance with state and/or district policies.

## Category 1 Accommodations

These accommodations are not expected to influence student performance in a way that alters the interpretation of either individual criterion- or norm-referenced test scores. An individual student's scores obtained using Category 1 accommodations should be interpreted in the same way as the scores of other students who take the test under default conditions. The scores of students using Category 1 accommodations may be included in summaries of results without notation of accommodation(s).

Examples of Category 1 accommodations include the following:

## Presentation (of test materials)

- Use visual magnifying equipment.
- Use Large Print edition of the test.
- Use audio amplification device or noise buffer.
- Use of marker to maintain place.
- Have directions read aloud (when not normally read by examiner).
- Use a recording of directions aloud (when not normally played by audio device).
- Have directions presented through sign language.
- Use directions that have been marked with highlighting.


## Response by student

- Mark responses in test booklet.
- Mark responses on Large Print Answer Book.
- For multiple-choice items, indicate responses to a scribe.
- Record responses on audio device (except for constructed-response writing tests).
- For multiple-choice items, use sign language to indicate response.
- Use a computer, typewriter, Braille writer, or other machine (e.g., communication board) to respond.
- Use a template to maintain place for responding.
- Indicate responses with other communication devices (e.g., speech synthesizer).
- Use a spell checker, except with a test for which spelling will be scored.


## Setting

- Take the test at home or in a care facility (e.g., hospital) with supervision.
- Use adaptive furniture.
- Use special lighting and/or acoustics.
- Have the format of the test clarified.
- Have directions explained/clarified in English.
- Have directions explained/clarified in native language.
- Have both oral and written directions provided in English.
- Have directions (including recorded directions) translated into native language.


## Category 2 Accommodations

These accommodations may have an effect on student performance, which should be considered when interpreting individual criterion- and norm-referenced test scores. In the absence of research demonstrating otherwise, scores and any consequences or decisions associated with them should be interpreted in light of the accommodation(s) used.

Examples of Category 2 accommodations include the following:

## Presentation (of test materials)

- Have stimulus material, questions, and/or answer choices read aloud, except for the listening or reading tests.
- Use a recording for stimulus material, questions, and/or answer choices, except for the reading tests, when not normally delivered via recording.
- Have stimulus material, questions, and/or answer choices presented through sign language, except for the listening and reading tests.
- Use communication devices (e.g., text-talk converter), except for the reading tests.


## Response by student

- For constructed-response items, indicate responses to a scribe, except for the writing tests.


## Category 3 Accommodations

These accommodations change what is being measured and are likely to have an effect that alters the interpretation of individual criterion- and norm-referenced scores. This occurs when the accommodation is strongly related to the knowledge, skill, or ability being measured (e.g., having a reading test read aloud). In the absence of research demonstrating otherwise, test scores and any consequences or decisions associated with them should be interpreted not only in light of the accommodation(s) used, but also in light of how the accommodation(s) may alter what is measured.

Examples of Category 3 accommodations include the following:

## Presentation (of test materials)

- Use Braille or other tactile form of print.
- On the listening and reading tests, have stimulus material, questions, and/or answer choices presented through sign language.
- On the reading tests, use a text-talk converter when the test taker is required to construct meaning and decode words from text.
- On the reading tests, use a recording of stimulus material, questions, and/or answer choices.
- Have directions, stimulus material, questions, and/or answer choices paraphrased.
- Use a dictionary when language conventions are assessed.


## Response by student

- For a constructed-response writing test, indicate responses to a scribe.
- Use spelling aids, such as spelling dictionaries (without definitions) or spell/grammar checkers, for a test for which spelling and grammar conventions will be scored.
- Use a dictionary to look up words on the writing tests.


### 5.5 Test Security

According to the Standards for Educational and Psychological Testing (1999), "Test users have the responsibility of protecting the security of test materials at all times." (p. 64) To avoid unintended exposure of test material content to teachers and students prior to testing, all test materials should be kept confidential and secure. No part of the test materials (e.g., Student Content Books, Student Answer Books, Cue Picture Books, audio CDs, and Examiner's Guide) may be reproduced.

Test security should be addressed with examiners and assessment coordinators before test administrations. It is recommended that directions be provided to relevant personnel regarding how to handle and maintain test materials and relevant documentation (such as confidential training materials) in a secure manner, and not to share them with students prior to testing.

## CHAPTER VI SCORING AND REPORTING

To inform users in their score interpretations and score uses, Chapter 6 presents the LAS Links English proficiency levels and related standard-setting process for Forms C and D. In addition to proficiency level scores, other major types of scores and reports offered by Forms C and D are also summarized in this chapter.

### 6.1 Proficiency Levels and Performance Standards

State ELP standards are often used to explain what should be taught and what should be tested. Performance standards, including cut scores and proficiency level descriptors (PLDs), are used by states to define how much of the tested content must be achieved for a student to meet the state's performance levels. In 2005, CTB/McGraw-Hill convened a national committee of ELL educators to establish five language proficiency levels for LAS Links using a modification of the Bookmark Standard Setting Procedure (Lewis, Mitzel, \& Green, 1996; Lewis, Mitzel, Mercado, \& Schulz, 2012).

Although the LAS Links Forms C and D assessments are on the same scale as the first generation of LAS Links Forms A and B assessments, and the two editions of LAS Links generally assess the same construct, CTB determined that the cut scores for LAS Links Forms C and D should be reviewed in light of modifications made to the test blueprint to augment the measurement of academic language.

CTB conducted a review of the performance standards to determine if the existing cut scores were still appropriate and valid for the new assessments. The cut score review process can be viewed as an extension of the 2005 standard setting process, extending the standard setting committee's work to the new version of LAS Links.

The cut score review for LAS Links $2^{\text {nd }}$ Edition convened a committee of ELL educators. These ELL educators reviewed the 2005 cut scores for LAS Links and found them to be applicable to Forms C and D. These educators also updated the PLDs to summarize the English-language skills that are held by students in each proficiency level as demonstrated in Forms C and D in light of the general LAS Links English proficiency level definitions.

The Bookmark Standard Setting Procedure is a widely used standard setting method to set cut scores for large-scale assessments in the United States. Accordingly, the performance standards established for LAS Links are defensible and should meet states' needs. A similar methodology was used to review cut scores and to revise PLDs for LAS Links Forms C and D.

### 6.1.1 Cut Score Review

The LAS Links English cut scores divide the scale into five proficiency levels: Beginning, Early Intermediate, Intermediate, Proficient, and Above Proficient. The proficiency level definitions use broad terms to define the types of English-language skills that students demonstrate to place in each proficiency level. The proficiency levels, proficiency level definitions, cut scores, and PLDs comprise the performance standards for LAS Links. States, school systems, educators, and stakeholders can use the LAS Links performance standards to present and to understand students' test results in a coherent manner.

The cut score review process comprised two phases:

- Phase 1: A committee of ELL educators engaged in a modified Bookmark Standard Setting Procedure to make judgments about the English-language skills that students are expected to have in each proficiency level.
- Phase 2: A subset of the committee of ELL educators worked in partnership with CTB Content Development and Research staff to review the cross-grade articulation of the cut scores to make policy-based decisions resulting in a coherent overall system of performance standards for LAS Links Forms C and D.

The two-phased cut score review enabled CTB/McGraw-Hill to obtain input on the reasonableness of the cut scores from a group of educators with experience teaching ELLs. In addition, CTB was able to support the consistency of the cut scores across all grades in the LAS Links assessment system. The following text describes both phases of the cut score review process. The final cut scores resulting from the cut score review are summarized in Table 6.1.

## Phase 1: Modified Bookmark Procedure

Staff from CTB/McGraw-Hill designed and conducted the LAS Links Forms C and D Cut Score Review in Monterey, California on July 8-11, 2013. A modified Bookmark Standard Setting Procedure was used to review cut scores for 20 grade and domain combinations: Kindergarten and Grades 2, 4, 7, and 11 in Listening, Speaking, Reading, and Writing. These were the same 20 grade and domain combinations considered by the original LAS Links standard setting committee in 2005. The cut scores for all other grades and composite scores were derived from the cut scores of these grades and domains.

The modified Bookmark Procedure consisted of training, orientation, proficiency level description (PLD) writing, and two rounds of discussion and decision-making. Participants were divided into two groups: one group focused on Speaking and Listening, and another group
focused on Reading and Writing. Each group was composed of four participants who worked individually and in concert to review the performance standards for LAS Links Forms C and D. CTB Content Development staff facilitated each group through the cut score review procedure. These facilitators had recent training in the cut score review methodology.

## Participants

CTB/McGraw-Hill turned to experienced teachers and curriculum specialists with expertise with English language learners to review the cut scores for LAS Links Forms C and D. CTB sought professionals with a deep understanding of the four domains and of the types of Englishlanguage skills that students should have in each grade level and invited eight participants to take part in the cut score review. Participants used their expertise and insight to recommend performance standards for LAS Links Forms C and D.

## Materials

The Bookmark Standard Setting Procedure, as implemented for the cut score review, relied on two key materials: ordered item books and item maps.

CTB developed an ordered item book for each of the 20 grade and domain combinations of Forms C and D cut score reviews. Each ordered item book comprised the multiple-choice and constructed-response items from Forms C and D. The items were ordered by difficulty based on the item response theory (IRT) parameters for the items. The test data used to create the ordereditem booklets were scored using 3PL and 2PPC IRT model to place multiple-choice and constructed-response items on the same test scale.

Item maps summarize the materials in the ordered item book and indicate each item's IRT scale location, the booklet number on the operational test, the correct answer, and the standard that the item measures. CTB created an item map to accompany each of the 20 ordered item books.

Each item map referenced the existing LAS Links cut scores. For each item map, the existing LAS Links cut scores were represented by bookmarks that showed the sets of items that students would be expected to master in each proficiency level. For example, a bookmark might indicate that students in the Early Intermediate proficiency level were expected to master the first 12 items on the item map.

## Methodology

The participants used the ordered item books and item maps to write new PLDs for LAS Links Forms C and D by (a) associating the items on the item map with the proficiency level the items best aligned to and (b) summarizing the English-language skills measured by the items associated with each proficiency level. For example, if the LAS Links cut scores indicated that

Early Intermediate students were expected to master the first 12 items on the item map, then participants summarized the English-language skills measured by the 12 items to create the Early Intermediate PLD. Other PLDs were created using a similar approach.

For each grade and domain combination, participants considered a key question: "Are the new PLDs comparable with the old PLDs in terms of the overall level of rigor?" Specifically, participants considered whether the PLDs they developed for LAS Links Forms C and D were consistent with the PLDs from the original edition of LAS Links. The phrase "overall level of rigor" refers to the overall level of the English-language skills expected of students in each proficiency level. Because the new PLDs were created by applying the existing cut scores to LAS Links Forms C and D, consistency between the two sets of PLDs would comprise evidence that the cut scores established during the 2005 standard setting were valid for use with LAS Links Forms C and D.

Participants understood that the newer forms measure English language proficiency somewhat differently from the older forms. Accordingly, CTB advised participants that the new PLDs could vary somewhat from the older ones on the surface.

The PLDs guided participants' cut score recommendations. If the new PLDs, written for LAS Links $2^{\text {nd }}$ Edition, were consistent with the older PLDs, then participants could recommend that the cut scores remain the same. However, if the PLDs were not consistent, then participants were instructed to recommend adjustments to the cut scores that would bring the new PLDs into line with the overall levels of language skills referenced by the older PLDs.

Participants considered the PLDs for each grade and domain combination. Working over two rounds of discussion and decision-making, participants made recommendations for each cut score. The committee recommended minor adjustments to some cut scores and no changes to others. CTB evaluated each of participants' recommendations during the second phase of the cut score review.

The first phase of the cut score review closed with a participant review of the PLDs for consistency across grade spans. This resulted in a system of PLDs that represented a specific, cohesive description of students' language abilities in English at each grade range and proficiency level in each of the four domains: Speaking, Listening, Reading, and Writing. These PLDs are designed to give teachers and stakeholders a useful profile of student's performance on LAS Links Forms C and D to support growth along the language continuum. See Appendix D for the PLDs by grade span and domain.

## Phase 2: Policy-Based Review of the Cut Scores

A subset of cut score review participants worked in partnership with CTB Content Development and Research staff to review the entire system of cut scores. The goals of this policy-based review were two-fold: to promote a cohesive system of well-articulated performance standards across grades; and to evaluate the differences in the cut scores, if any, between LAS Links $2^{\text {nd }}$ Edition and the original version of LAS Links.

The policy review committee found that participants' recommended cut scores were wellarticulated across grades, as were the original LAS Links cut scores. Moreover, the committee found that participants' recommended adjustments to the cut scores were generally minor: participants' recommended adjustments were typically well below one standard error of measurement (SEM) in magnitude.

To promote consistency with the original version of LAS Links, acknowledging that the recommended cut score adjustments were very minor, and honoring the voice of the national committee of ELL educators convened at the original LAS Links standard setting, the policy committee deemed participants' recommendations consistent with the original cut scores. The original cut scores may be applied to LAS Links Forms C and D without adjustment and are consistent with the judgments of both the 2005 standard setting committee and the 2013 cut score review committee.

### 6.1.2 Cut Score Results

The original cut scores established as part of the 2005 standard setting were validated by the 2013 cut score review process for use with LAS Links $2^{\text {nd }}$ Edition. Additionally, cut scores for the new composite scales of Productive (PR) and Literacy (LT) were derived as the truncated average of the cut scores from corresponding domains.

The final cut scores at both the domain- and composite-levels are presented in Table 6.1. Forms C and D Raw Score to Scale Score Tables with the cut scores applied are included in Appendix E.

Table 6.1 Forms C/D Final Cut Scores by Grade

| Proficiency Level Mastery | SK | LI | RD | WR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Kindergarten |  |  |  |  |  |  |  |  |  |
| 1 | 430 | 426 | 355 | 347 | 389 | 430 | 386 | 351 | 388 |
| 2 | 461 | 444 | 381 | 417 | 425 | 461 | 412 | 399 | 439 |
| 3 | 496 | 470 | 421 | 488 | 468 | 487 | 449 | 454 | 492 |
| 4 | 550 | 520 | 475 | 516 | 515 | 526 | 467 | 495 | 533 |
| Grade 1 |  |  |  |  |  |  |  |  |  |
| 1 | 432 | 432 | 360 | 355 | 394 | 432 | 390 | 357 | 393 |
| 2 | 462 | 450 | 385 | 435 | 433 | 463 | 416 | 410 | 448 |
| 3 | 496 | 476 | 423 | 489 | 471 | 490 | 452 | 456 | 492 |
| 4 | 551 | 521 | 479 | 535 | 521 | 530 | 486 | 507 | 543 |
| Grade 2 |  |  |  |  |  |  |  |  |  |
| 1 | 443 | 442 | 435 | 425 | 436 | 443 | 448 | 430 | 434 |
| 2 | 473 | 462 | 472 | 475 | 470 | 470 | 473 | 473 | 474 |
| 3 | 509 | 492 | 499 | 504 | 501 | 495 | 495 | 501 | 506 |
| 4 | 557 | 536 | 547 | 544 | 546 | 540 | 531 | 545 | 550 |
| Grade 3 |  |  |  |  |  |  |  |  |  |
| 1 | 443 | 447 | 436 | 428 | 438 | 444 | 452 | 432 | 435 |
| 2 | 474 | 468 | 474 | 484 | 475 | 471 | 482 | 479 | 479 |
| 3 | 509 | 504 | 504 | 529 | 511 | 505 | 500 | 516 | 519 |
| 4 | 558 | 546 | 549 | 560 | 553 | 548 | 533 | 554 | 559 |
| Grade 4 |  |  |  |  |  |  |  |  |  |
| 1 | 449 | 457 | 468 | 434 | 452 | 450 | 485 | 451 | 441 |
| 2 | 475 | 484 | 504 | 498 | 490 | 478 | 506 | 501 | 486 |
| 3 | 510 | 525 | 535 | 533 | 525 | 514 | 526 | 534 | 521 |
| 4 | 559 | 581 | 588 | 584 | 578 | 575 | 563 | 586 | 571 |
| Grade 5 |  |  |  |  |  |  |  |  |  |
| 1 | 449 | 458 | 470 | 435 | 453 | 452 | 491 | 452 | 442 |
| 2 | 475 | 490 | 505 | 499 | 492 | 485 | 509 | 502 | 487 |
| 3 | 511 | 528 | 536 | 538 | 528 | 516 | 531 | 537 | 524 |
| 4 | 559 | 584 | 590 | 585 | 579 | 580 | 573 | 587 | 572 |
| Grade 6 |  |  |  |  |  |  |  |  |  |
| 1 | 451 | 462 | 501 | 447 | 465 | 455 | 499 | 474 | 449 |
| 2 | 476 | 489 | 529 | 498 | 498 | 481 | 514 | 513 | 487 |
| 3 | 512 | 532 | 559 | 548 | 537 | 518 | 540 | 553 | 530 |
| 4 | 560 | 586 | 608 | 591 | 586 | 575 | 574 | 599 | 575 |
| Grade 7 |  |  |  |  |  |  |  |  |  |
| 1 | 451 | 463 | 502 | 447 | 465 | 460 | 500 | 474 | 449 |
| 2 | 477 | 492 | 530 | 498 | 499 | 485 | 517 | 514 | 487 |
| 3 | 513 | 533 | 560 | 548 | 538 | 521 | 546 | 554 | 530 |
| 4 | 560 | 588 | 608 | 592 | 587 | 580 | 576 | 600 | 576 |
| Grade 8 |  |  |  |  |  |  |  |  |  |
| 1 | 451 | 467 | 502 | 448 | 467 | 465 | 501 | 475 | 449 |
| 2 | 477 | 498 | 532 | 499 | 501 | 492 | 519 | 515 | 488 |


| Proficiency Level Mastery | SK | LI | RD | WR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 3 | 514 | 535 | 561 | 548 | 539 | 525 | 553 | 554 | 531 |
| 4 | 560 | 590 | 608 | 593 | 587 | 582 | 579 | 600 | 576 |
| Grade 9 |  |  |  |  |  |  |  |  |  |
| 1 | 452 | 471 | 507 | 449 | 469 | 465 | 512 | 478 | 450 |
| 2 | 478 | 509 | 545 | 500 | 508 | 490 | 534 | 522 | 489 |
| 3 | 515 | 546 | 581 | 549 | 547 | 525 | 567 | 565 | 532 |
| 4 | 560 | 625 | 632 | 594 | 602 | 561 | 597 | 613 | 577 |
| Grade 10 |  |  |  |  |  |  |  |  |  |
| 1 | 452 | 475 | 508 | 449 | 471 | 468 | 514 | 478 | 450 |
| 2 | 478 | 511 | 546 | 500 | 508 | 495 | 536 | 523 | 489 |
| 3 | 516 | 550 | 582 | 549 | 549 | 527 | 569 | 565 | 532 |
| 4 | 560 | 627 | 633 | 594 | 603 | 566 | 606 | 613 | 577 |
| Grade 11 |  |  |  |  |  |  |  |  |  |
| 1 | 452 | 480 | 509 | 450 | 472 | 471 | 515 | 479 | 451 |
| 2 | 479 | 516 | 547 | 501 | 510 | 497 | 540 | 524 | 490 |
| 3 | 517 | 555 | 583 | 550 | 551 | 530 | 575 | 566 | 533 |
| 4 | 560 | 630 | 634 | 595 | 604 | 567 | 608 | 614 | 577 |
| Grade 12 |  |  |  |  |  |  |  |  |  |
| 1 | 452 | 481 | 510 | 451 | 473 | 472 | 515 | 480 | 451 |
| 2 | 479 | 517 | 548 | 502 | 511 | 500 | 540 | 525 | 490 |
| 3 | 518 | 560 | 584 | 550 | 553 | 531 | 575 | 567 | 534 |
| 4 | 560 | 633 | 635 | 596 | 606 | 569 | 610 | 615 | 578 |

Note. $\mathrm{SK}=$ Speaking. $\mathrm{LI}=$ Listening. $\mathrm{RD}=$ Reading. WR=Writing. $\mathrm{OV}=$ Overall.
$\mathrm{OR}=$ Oral. $\mathrm{CO}=$ Comprehension. $\mathrm{LT}=$ Literacy. $\mathrm{PR}=$ Productive.

### 6.2 Types of Scores

To inform instructional decisions at various levels, LAS Links Forms C and D report five major types of scores based on observed student test performance: 1) scale scores, 2) proficiency level scores, 3) normative scores, 4) strand scores, and 5) Lexile ${ }^{\circledR}$ measures.

### 6.2.1 Scale Scores

Scale scores are units of a single equal-interval scale that is applied across all levels of a test regardless of grade or time of year of testing. Scale scores characterize proficiency in absolute terms without making comparisons to the proficiency or growth of students in a reference group. Higher scale scores indicate higher proficiency, and growth in scale score units indicates growth in proficiency. The equal-interval property of the scale makes scale scores especially appropriate for various statistical purposes. For example, scale scores can be added, subtracted, and averaged across test levels. Such computations permit direct comparisons of classes, schools, or entire districts.

LAS Links Forms C and D consist of four separately scaled sections: Listening, Speaking, Reading, and Writing. This allows for monitoring students' linguistic profiles across domains and tracking their growth in each domain. The base scales (Listening, Speaking, Reading, and Writing) are scored using raw-to-scale score tables (see the scoring tables in Appendix E). For each domain there is one table for each grade span per test form (C or D). The raw scores (RSs) for the tests are listed in the first column, their corresponding scale scores (SSs) in the second column, standard error of measurement in the third column, and proficiency level in the fourth column. To obtain the scale score that corresponds to a student's raw score on a test form, locate the corresponding table, find the raw score in the first column, and follow the row to the second column in the table.

In addition to the base scales, Forms C and D provide five composite scales: Overall, Oral, Comprehension, Literacy, and Productive. The composite scores are computed as the truncated average scale scores from corresponding base scales. Table 6.2 presents the correspondence between the composite scales and the four base scales.

Table 6.2 Correspondence Between Composite Scales and Base Scales

| Composite Scales | Base Scales |  |  |  |
| :--- | :---: | :---: | :---: | :---: |
|  | Listening | Speaking | Reading | Writing |
| Overall | X | X | X | X |
| Oral | X | X | X |  |
| Comprehension | X |  | X | X |
| Literacy |  | X | X |  |
| Productive |  |  |  |  |

## Overall (based on Listening, Speaking, Reading, and Writing)

By averaging scale scores across domains, the Overall score provides a composite index of language proficiency that reflects not only language ability that is important and transferrable across domains (e.g., grammar knowledge), but also proficiency that is domain-specific (e.g., processing audio input in Listening). Both the general and domain-specific components of language proficiency are important contributing factors to success in real-life communications.

## Oral (based on Listening and Speaking)

The Oral score, with a combination of the Speaking and Listening scores, demonstrates students' skills in a contextually appropriate approach. In the Listening section of the test, students listen to input, such as announcements or conversations, and then answer multiple-choice questions. Listening involves the receptive skills of making sense of sounds, stress patterns, words, phrases, and then interpreting meaning. The Speaking section of the test involves responding to information or interacting with another person by constructing meaning through sounds, words, phrases, stress patterns, and expressions of language. These skills are by no means an exhaustive
list, but they do show a close relationship of the two domains. Oral language is necessary for students to interact, collaborate, and participate in social and academic tasks and practices.

## Comprehension (based on Listening and Reading)

The Comprehension score, with a combination of the Listening and Reading scores, provides educators with an overview of students' understanding of spoken and written text. Comprehension is a necessary element of language learning and academic success. Students' comprehension skills in the Listening and Reading sections of the test involve skills that range from recognizing word and sound relationships and processing and developing vocabulary through context, to identifying patterns and analyzing, inferring, and connecting meaning or ideas. The comprehension score can help educators and other stakeholders track students' comprehension development. Once students begin to internalize the language that they hear or read, they will begin to build a foundation to learn a new language and support lifelong learning.

## Literacy (based on Reading and Writing)

The Literacy score, with a combination of the Reading and Writing scores, provides educators with an overview of students' ability to read and write for various purposes. Literacy can be traditionally defined as the process of gaining and conveying meaning from written text. Students taking the Reading and Writing tests engage in a range of complex reading processes, including word-sounds relationships, spelling, word and sentence structure, vocabulary, and comprehension, among other important skills. As student gain reading skills, they also begin to learn to compose written text.

## Productive (based on Speaking and Writing)

The Productive score, with a combination of the Speaking and Writing scores, provides educators with an overview of students' ability to produce language. Language production, whether in written or in spoken form, is about creating meaning to express oneself. Productive skills in the Speaking and Writing sections of the test include producing vocabulary, displaying knowledge of grammar usage, performing functions (e.g., requests, clarifications, directions, etc.), creating clear messages, and building coherent discourse. Measuring students' productive skills can help teachers understand students' skills and ability to interact and communicate in and out of the classroom.

### 6.2.2 Proficiency Level Scores

While the scale scores can be used to measure student growth from year to year and across grade spans, proficiency levels provide a broader categorization for the purposes of reporting. For each of the nine reported scales (Listening, Speaking, Reading, Writing, Overall, Oral, Comprehension, Literacy, and Productive), Forms C and D classify students into five LAS Links
proficiency levels: Beginning, Early Intermediate, Intermediate, Proficient, and Above Proficient. Such classification is based on the LAS Links Forms C and D cut scores, and the cut scores are scale- and grade- specific. A summary of the cut scores can be found in Table 6.1 of Chapter 6, and the correspondence among raw scores, scale scores, and proficiency levels per grade for each test form is presented in Appendix E.

The LAS Links Forms C and D proficiency level definitions and proficiency level descriptors (PLD) are provided to facilitate interpretation of the proficiency level scores. Proficiency level definitions define in broad terms what students are able to do at each corresponding proficiency level, and the PLDs are detailed explanations of what skills a student can be expected to demonstrate at each proficiency level, and are meant to give teachers a helpful profile of a student's performance with an eye toward the next steps along the language development continuum. The same information can also be given to parents, guardians, or other stakeholders so they have a clear understanding of what students have learned and what English-language skills are yet expected to be developed. The Forms C and D proficiency level definitions and PLDs can be found in Appendix D.

### 6.2.3 Normative Scores

LAS Links Forms C and D use reference group norms and provide two types of normative scores: percentile rank (PR) and normal curve equivalent (NCE). The reference group norms were derived using the scale score distributions of the LAS links Forms C and D field testing sample as described in Chapter 3. Summative scale score statistics of the standardized field testing sample which was used in the norming analyses are provided in Appendix C.

The PR and NCE scores are available for each of the nine LAS Links Forms C and D scales, namely, Listening, Speaking, Reading, Writing, Overall, Oral, Comprehension, Literacy, and Productive.

## Percentile rank

A percentile rank indicates the percentage of scores in a norm group that fall at or below a given student's score. For example, if a student's Speaking score converts to a percentile rank of 74, then the student scored higher than approximately $74 \%$ of the students in the LAS links normative group.

Note that a scale of percentile ranks is not composed of equivalent units; a given difference between two percentile ranks is larger in terms of the underlying scale score units usually near either end of the distribution than near the middle. For example, the Reading score difference at Grades 6-8 between percentile ranks of 96 and 92 is 23 (635-612), which is greater than the

Reading score difference between percentile ranks of 69 and 65, which is 7 (568-561). This characteristic makes percentile ranks unsuitable for computing means.

Percentile ranking was calculated using the following equation:

$$
P_{s s}=100 * \frac{\sum_{j=0}^{S S-1} N_{j}+0.5 * N_{s s}}{N}
$$

where $N_{j}$ is the number of students that have scale score $j$. The above formula gives the percentile rank of scale score ( $s s$ ).

To obtain the percentile rank for a student on a particular domain or composite scale, find the scale score (or scale score range) in the appropriate table and column in Appendix E and follow the row to find the corresponding percentile rank in the column labeled "PR".

## Normal curve equivalent

The NCEs have many characteristics in common with percentile ranks, but have the additional advantage of being based on an equal-interval scale. That is, the difference between consecutive scores on the scale has the same meaning throughout the scale. The normal curve is represented on a scale of 1 through 99 , with a mean of 50 and a standard deviation of approximately 21 . The use of NCEs allows meaningful comparisons between different assessment series and between different tests within the same assessment series. For example, if a student has NCE scores of 76 in Listening and 52 in Speaking, this student is well above average in Listening but slightly above average in Speaking. The NCEs obtained by different groups of students on the same test form may also be averaged for purposes of comparison.

The NCE is a transformation of the PR.

$$
N C E=\Phi_{50,21.063}^{-1}(p),
$$

where $p=$ percentile score (e.g., 0.5 ); $\Phi_{50,21.063}()$ is the distribution function of normal (50, 21.063). That is, the NCE is the quartile of distribution $N(50,21.063)$ for $p$.

Similar to looking up the PR values, to obtain the NCE for a student for a given domain or composite scale, locate the scale score (or scale score range) in the appropriate table and column in Appendix E and look across the row to find the corresponding NCE in the column labeled
"NCE."

### 6.2.4 Strand Scores

As noted in Chapter 2, four language context strands are interwoven through each core language domain in LAS Links Forms C and D. These strands include:

- Social, Intercultural, and Instructional Communication (SIIC)
- Language Arts, Social Studies, and History (LA/SS/H)
- Mathematics, Science, and Technical Subjects (MA/SC/TS)
- Foundational Skills (FS)

Based on various combinations of the four strands, a total of nine subskill score categories were selected for reporting in LAS Links Forms C and D. Those subskill score categories are listed in Table 6.3. Most of the subskill score categories have a total of six or more maximum possible score points. Any subskill categories with less than three maximum possible score points are excluded from reporting.

Note that the Social, Intercultural, and Instructional Communication (SIIC) strand is considered for a broader view of general language use at school and therefore is not included in any reported academic subskill categories that are directly related to engaging with academic content.

Table 6.3 List of Subskill Score Categories and Correspondence to the Four Strands

| Domain/Composite | Subskill Category | Corresponding Strands |
| :---: | :---: | :---: |
| Listening | Listening Academic | Listening: a) LA/SS/H; b) MA/SC/TS |
|  | Social, Intercultural, and Instructional Communication | Listening: SIIC |
|  | Language Arts, Social Studies, and History | Listening: LA/SS/H |
|  | Mathematics, Science, and Technical Subjects | Listening: MA/SC/TS |
| Speaking | Speaking Academic | Speaking: a) LA/SS/H; b) MA/SC/TS |
|  | Social, Intercultural, and Instructional Communication | Speaking: SIIC |
|  | Language Arts, Social Studies, and History | Speaking: LA/SS/H |
|  | Mathematics, Science, and Technical Subjects | Speaking: MA/SC/TS |
| Reading | Reading Academic | Reading: a) FS; b) LA/SS/H; c) MA/SC/TS |
|  | Foundational Reading | Reading: FS |
|  | Social, Intercultural, and Instructional Communication | Reading: SIIC |
|  | Language Arts, Social Studies, and History | Reading: LA/SS/H |
|  | Mathematics, Science, and Technical Subjects | Reading: MA/SC/TS |
| Writing | Writing Academic | Writing: a) FS; b) LA/SS/H; c) MA/SC/TS |
|  | Foundational Writing | Writing: FS |
|  | Social, Intercultural, and Instructional Communication | Writing: SIIC |
|  | Language Arts, Social Studies, and History | Writing: LA/SS/H |
|  | Mathematics, Science, and Technical Subjects | Writing: MA/SC/TS |
| Receptive | Receptive Academic | Listening: a) LA/SS/H; b) MA/SC/TS Reading: a) FS; b) LA/SS/H; c) MA/SC/TS |
| Productive | Productive Academic | Speaking: a) LA/SS/H; b) MA/SC/TS Writing: a) FS; b) LA/SS/H; c) MA/SC/TS |
| Oral | Oral Academic | Listening: a) LA/SS/H; b) MA/SC/TS Speaking: a) LA/SS/H; b) MA/SC/TS |
| Literacy | Literacy Academic | Reading: a) FS; b) LA/SS/H; c) MA/SC/TS <br> Writing: a) FS; b) LA/SS/H; c) MA/SC/TS |
| Social, Intercultural, and Instructional | Social, Intercultural, and Instructional Total | Listening: SIIC Speaking: SIIC <br> Reading: SIIC <br> Writing: SIIC |
| Language Arts, Social Studies, and History | Language Arts, Social Studies, and History Total | Listening: LA/SS/H Speaking: LA/SS/H Reading: LA/SS/H |


| Domain/Composite | Subskill Category | Corresponding Strands |
| :--- | :--- | :--- |
|  |  | Writing: LA/SS/H |
| Mathematics, Science, <br> and Technical Subjects | Mathematics, Science, and <br> Technical Subjects Total | Listening: MA/SC/TS <br> Speaking: MA/SC/TS <br> Reading: MA/SC/TS <br> Writing: MA/SC/TS |

It is worth noting that all these subskill categories use raw scores. Unlike scale scores, the raw scores can only be compared between students on the same test form for the same subskill category. As limited test items are available in each subskill category, it is highly recommended that users apply these scores primarily for low-stakes instructional decisions, and base their decisions on a triangulation of evidence from multiple sources, such as teacher classroom observations and student performance on assignments, in conjunction with the use of the reported subskill scores.

To facilitate interpretation and use of the subskill scores, LAS Links Forms C and D also provide users an opportunity to compare students' subskill scores against a fixed reference group index which is called reference group average (RGA). RGA is similar to the statistic of class average that has been typically used to interpret a student's relative raw-score performance in a given class. The major difference between the two indices is that the class average is dynamic and dependent on performance of the local class, whereas RGA is fixed and was derived based on performance from the LAS Links Forms $C$ and $D$ field testing sample. There is a fixed RGA value per subskill category for each grade span level (K, 1, 2-3, 4-5, 6-8, and 9-12). Teachers may use the RGA to compare a student's performance against the field testing sample (which serves as the reference group) to see if it is below or at/above the RGA on a given subskill category. Such information, in combination with that based on the class average, may provide teachers a more complete picture about a student's strengths and weaknesses on relevant subskills and help teachers target instruction accordingly. Similar to the class average, the RGA is intended for low-stakes formative uses only.

The RGA on each subskill category was obtained as the expected raw score mean of the reference group on the corresponding collection of test items. The expected raw score for an examinee with scale score $\theta$ is calculated using the following formula.

$$
X(\theta)=\sum_{i=1}^{n_{s}} P_{i}(\theta)+\sum_{j=1}^{n_{o r}} \sum_{k=1}^{m_{j}}(k-1) P_{j k}(\theta)
$$

where
$n_{s r}$ is the number of selected-response items in the item collection;
$n_{c r}$, the number of constructed-response items;
$m_{t}$, the number of score categories of each constructed-response item;
$P$, the probability of answering the item correctly (for selected-response items) or being assigned the particular score category (for constructed-response items), derived using the 3PL/ 2PPC IRT models, with provided IRT item parameters and scale score $\theta$.

### 6.2.5 Lexile ${ }^{\circledR}$ Measures

LAS Links Forms C and D provide users an option of reporting students’ Lexile ${ }^{\circledR}$ measures, Lexile ranges, and a list of books based on the students' Lexile ranges. A student's Lexile measure is derived dynamically based on the student's scale score on LAS Links Forms C and D Reading, using a pre-determined linear transformation function to statistically define the correspondence between the two types of scores (MetaMetrics, 2013).

The linear transformation function was obtained with a common-examinee approach, where students in the LAS Links Forms C and D field testing took both assigned Lexile Reading items and LAS Links Forms C and D field test Reading items.

To facilitate instructional uses, the reported Lexile measures are rounded to the nearest 0 or 5 and also have the lower and upper scale bounds imposed.

A student's Lexile range is computed as a range from 100 L below the reported Lexile measure to 50 L above the Lexile measure. For example, if a student's Lexile measure is 800 L , the student's Lexile range will be 700 L to 850 L . The student's Lexile range can then be used to match students with books at a level that provides challenges but not frustration.

### 6.3 Types of Reports

Score reports are an important vehicle for effectively communicating student test performance to stakeholders to inform their score-based decisions. In the design of LAS Links Forms C and D score reports, the five score types as described in Chapter 6.2 were carefully selected and organized into different score reports for each target group of stakeholders and reported at either the individual or group level depending on the intended purpose of the report. The major target groups of stakeholders in LAS Links Forms C and D reporting include students, parents/guardians, teachers, and administrators.

To provide flexibility and effectively address local educational needs, LAS Links Forms C and D offer four general channels of communication for reporting: a) paper-and-pencil, b) electronic (e.g., the PDF version of printed reports and electronically portable data files), c) online dynamic
reports that are generated through CTB facilities, and d) local reporting with CTB-provided templates for calculating and reporting scores.

## CHAPTER VII TEST EVALUATION

Evaluation of intended test uses is a dynamic local process, where judgments about the extent to which the intended uses of a given test are justified "may be influenced by a variety of contextual factors including but not limited to the types of stakeholders involved (e.g., test takers, parents, admission officers, and university professors), the stakes of the test, the priorities and regulations of the local educational institutions, the availability of resources, and the cultural, societal, and educational value systems of the stakeholders" (Wang, Choi, Schmidgall, \& Bachman, 2012, p. 604). The perceived impact of contextual factors on the judgments invite the test users' participation in evaluating and determining the degree of appropriate test use and interpretation for their specific setting, as suggested in Chapter 11 (The Responsibility of Test Users) of the Standards for Educational and Psychological Testing (1999).

Overall, this technical manual intends to provide a high-level guidance regarding the general types of intended uses of LAS Links Forms C and D and to serve as a documentation of the procedural and internal evidence regarding the test development and assembled test forms to support the test users' local evaluation and judgment of their substantiated local test uses. The test users are also encouraged to collect additional evidence pertinent to their evaluation, such as concurrent evidence that investigates the relationship between students' LAS Links test scores and scores on other locally-used language proficiency measures, and consequential evidence about the locally observed impact of the use of the test and test scores on school teaching and student learning.

The present chapter describes in Chapter 7.1 key statistics at the item- and test- levels based on data from the LAS Links Forms C and D field testing with the purpose to facilitate empirical evaluation of the test forms as part of the internal evidence. Furthermore, procedural and internal evidence that relates to test fairness as documented throughout this technical manual is summarized and presented in Chapter 7.2, which is followed by an overall summary and discussion of evidence on reliability and validity in Chapter 7.3.

### 7.1 Empirical Evidence from Field Testing

### 7.1.1 Item Difficulty and Discrimination Power

Item-level statistics such as $p$-value are useful in describing how items perform from a classical test theory approach. Such evidence may inform users of the test quality on an item-by-item basis from an empirical perspective.

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The $p$-value for a multiple-choice ( MC ) item represents the proportion of students who answered the item correctly. The $p$-value for a constructed-response (CR) item represents the mean raw score for the item divided by the maximum possible score for that item.

As an operational test form is typically assembled with items selected from a field-testing item pool, and students from the field testing seldom had the opportunity to take the entire set of items selected in the operational test form, it is difficult, if not improbable, to directly calculate $p$ values using student item-level scores observed from field testing. To still provide readers a general picture about the test-item performance, expected $p$-values were calculated and reported. In this approach, ability distributions of the field testing sample at each domain and grade span level were used, and item-level scores were estimated using the corresponding student ability score distribution and the IRT item parameters for the particular item.

Let $f(\hat{\theta})$ be the relative frequency of $\hat{\theta}$ in the normative distribution of interest for a test and level; it should be noted that $\hat{\theta}$ is a maximum likelihood estimate based on item-pattern scoring. The LOSS and the HOSS are defined as the lowest and highest obtainable scale scores, respectively, and they cover the range of scale scores obtainable for any given level of a test. The estimated proportion-correct score ( $p$-value) for the $i$-th selected-response item in a test is

$$
\hat{P_{i}}=\sum_{\hat{\theta}=\text { LOSS }}^{\text {Hoss }} \hat{P_{i}}(\hat{\theta}) f(\hat{\theta})
$$

The estimated percentage of maximum score ( $p$-value) for the $j$-th constructed-response item in a test is

$$
\hat{P}_{j}=\sum_{\hat{\theta}=\mathrm{LOSS}}^{\text {HOSS }} \hat{P_{i}}(\hat{\theta}) f(\hat{\theta}),
$$

where

$$
\hat{P_{j}}(\theta)=\frac{1}{m_{j}-1} \sum_{k=1}^{m}(k-1) P_{j k}(\theta) .
$$

The average $p$-value for an $n$-item test is

$$
P=\frac{1}{n}\left[\sum_{i=1}^{n_{s r}} P_{i}+\sum_{j=1}^{n_{c r}} P_{j}\right\rceil
$$

where $n_{s r}$ is the number of selected-response items, $n_{c r}$ is the number of constructed-response items, and $n=n_{s r}+n_{c r}$.

Appendix F presents item-level expected $p$-values for each domain and grade span level. When the test design specifies that kindergarten students should take a subset of the $\mathrm{K}-1$ test items, the $p$-values in the $\mathrm{K}-1$ test form are separately reported for kindergarten and Grade 1 . Summaries of the average $p$-values per domain and grade span level can be found in Appendix C under the raw-score statistics section.

It can be seen that the average $p$-values are in the typical difficulty range between 0.50 and 0.80 , which suggests that the test forms are generally not too hard or too easy for the target test population. The $p$-value ranges are very similar between Forms $C$ and D. Across grade span levels, the average $p$-values range from 0.63 to 0.79 for Listening, 0.71 to 0.82 for Speaking, 0.54 to 0.70 for Reading, and 0.55 to 0.77 for Writing. As expected, the items are slightly more difficult in Reading and Writing (literacy skills) than in Listening and Speaking (oral skills).

### 7.1.2 Raw Score Descriptive Statistics

Similar to the calculation of $p$-values, the student ability score distributions from the field testing and the IRT item parameters at the target domain and grade span level were used to obtain testlevel descriptive statistics for LAS Links Forms C and D.

For selected-response items, let $\hat{a_{i}}, \hat{b_{i}}$, and $\hat{c_{i}}$ be the item discrimination, item difficulty, and item lower asymptote, respectively, for the $i$-th item in a given $n$-item test. The probability that an examinee with scale score $\hat{\theta}$ will answer item $i$ correctly is

$$
P_{i}(\theta)=c+\frac{1-c_{i}}{1+\exp \left[-1.7 a_{i}\left(\theta-b_{i}\right)\right]} .
$$

For constructed-response items, the probability of an examinee with ability $\hat{\theta}$ having a score at the $k$-th level of the $j$-th item is

$$
P_{j k}(\theta)=P\left(x_{j}=k-1 \left\lvert\,(\theta)=\frac{\exp Z_{j k}}{\sum_{i=1}^{m_{j}} \exp Z_{i}}\right., k=1 \ldots m_{j},\right.
$$

where

$$
\hat{Z}_{j k}=\hat{A}_{j k} \hat{\theta}+\hat{C}_{j k} .
$$

For the special case of the 2PPC model used here, the following constraints were used:

$$
A_{j k}=\alpha_{j}(k-1), \text { and } \quad C_{j k}=-\sum_{i=0}^{k-1} \gamma_{j i},
$$

where

$$
\gamma_{j 0}=0 .
$$

The obtained expected test-level raw score statistics are presented in Appendix C. Summative statistics of the standardized field testing sample are expressed on the scale score metric and provided in the same appendix.

### 7.1.3 Internal Reliability

Reliability is an index of the consistency of test scores. A reliable test is one that produces scores that are expected to be relatively stable if the test is administered repeatedly under similar conditions.

Internal consistency reliability measures, such as Cronbach's (1951) coefficient alpha and standard error of measurement, consider the consistency (reliability) of performance over all test questions in a given form, the results of which imply how well the test items measure the intended construct and could continue to do so over repeated administrations. Internal consistency reliability coefficients, such as the coefficient alpha, may range from 0.00 to 1.00 , where 1.00 stands for a perfectly consistent test.

The coefficient alpha for the LAS Links C and D operational test forms was estimated per domain and grade span level for each test form, and the obtained values are presented in Appendix C, along with the expected test-level raw score descriptive statistics. The reported coefficient alpha values were produced using the following procedures:

The expected raw score for an examinee with scale score $\hat{\theta}$ is

$$
X(\theta)=\sum_{i=1}^{n_{s r}} P_{i}(\theta)+\sum_{j=1}^{n_{\sigma}} \sum_{k=1}^{m_{j}}(k-1) P_{j k}(\theta) .
$$

The expected raw score mean is obtained from

$$
\hat{\mu_{X}}=\sum_{\hat{\theta}=\mathrm{loss}}^{\text {hoss }} X(\hat{\theta}) f(\hat{\theta}) .
$$

An estimate of the variance of the true scores over examinees can be obtained from the following:

$$
\sigma_{T}^{2}=\sum_{\hat{\theta}=\mathrm{Loss}}^{\text {Hoss }} X^{2}(\hat{\theta}) f(\hat{\theta})-\mu_{\lambda}^{2} .
$$

The conditional item score variance for selected-response items is

$$
\sigma^{2}(X \mid \hat{\theta})=P(\hat{\theta}) Q_{i}(\hat{\theta})
$$

The conditional item score variance for constructed-response items is obtained from

$$
\sigma^{2}(X \mid \theta)=\sum_{k=1}^{m}(k-1)^{2} P_{j k}(\theta)-\left.\left\lceil\sum_{k=1}^{m_{i}}(k-1) P_{j k}(\theta)\right)^{2}\right|^{2} .
$$

Note that the variance of the observed scores conditioned on $\hat{\theta}$ is the error variance. Given the assumption of local item independence, the raw score error variance for an examinee with scale score $\hat{\theta}$ is

$$
\sigma_{E}^{2}(\hat{\theta})=\sum_{i=1}^{n_{s r}} \sigma^{2}\left(X_{i} \mid \hat{\theta}\right)+\sum_{j=1}^{n_{c r}} \sigma^{2}\left(X_{j} \mid \hat{\theta}\right) .
$$

The raw score error variance across all examinees can be expressed as

$$
\sigma_{E}^{2}=\sum_{\theta=\mathrm{Loss}}^{\text {Hoss }} \sigma_{A}^{2}(\hat{\theta}) f(\hat{\theta})
$$

The item score variance for selected-response item i (not conditioned on $\hat{\theta}$ ) can be obtained from

$$
\sigma_{i}^{2}=P_{i} Q .
$$

For constructed-response items, the item score variance is

$$
\sigma_{j}^{2}=\sum_{k=1}^{m_{i}}(k-1)^{2} P_{j k}-\left\lceil\sum_{k=1}^{m_{j}}(k-1) P_{j k}\right\rceil^{2} .
$$

The coefficient alpha value is obtained by the standard formula,

$$
C_{\alpha}=\frac{n}{n-1}\left|1-\frac{\sum_{i=1}^{n} \sigma^{2}}{\sigma_{X}^{2}}\right| \begin{aligned}
& \mid \\
& \lfloor
\end{aligned}
$$

where

$$
\sigma_{X}^{2}=\sigma_{T}^{2}+\sigma_{E}^{2} \text { and } n=\underset{s r}{n}+\underset{c r}{n} .
$$

High-stakes tests are typically considered to be of sound reliability when their reliability coefficients are in the range of 0.80 and above. It can be seen from relevant tables in Appendix C that most of the alpha values are greater than 0.80 . The exceptions generally occur in Listening, where the alpha values may fall in the range of 0.70 to 0.80 .

Another measure of internal consistency is the estimate of the degree of measurement error in students' total raw score on a test, or classical standard error of measurement (SEM). It represents the number of score points about which a given raw score can vary due to assessment errors from a classical test theory perspective. The classical SEM is dependent on the value of internal reliability and the standard deviation of the raw score distribution on the given test form. The value for the classical SEM is fixed once the internal reliability and standard deviation values are determined for a test form; unlike conditional SEMs, the value does not vary with the location of an individual student's obtained score point.

The classical SEMs for Forms C and D are reported in Appendix C, together with the test-level raw score descriptive statistics and estimated alpha coefficients. The observed SEMs were relatively small in comparison to the total length of the test scale and within one fourth to one half of the standard deviation. Conditional SEMs on scale scores based on Item Response Theory are discussed in the following section.
7.1.4 Test Characteristic Curves and Standard Error of Measurement

The resulting test characteristics curves (TCC) and standard error (SE) curves based on the final item parameters and the final LOSS and HOSS values for the LAS Links C and D operational test forms are presented for the four domains (Listening, Speaking, Reading, and Writing) across grade span levels in Figures 7.1 through 7.16.

In these figures, Level 00 represents the test form for kindergarten when only a subset of the $\mathrm{K}-1$ test form is administered to the kindergarten students by design. The test form for Grade 1 (where Grade 1 students take the entire $\mathrm{K}-1$ test form) is denoted by Level 01 in that scenario to be distinct from the kindergarten test form. When both the kindergarten and Grade 1 students take the entire K-1 test form, Level 10 is used instead. For the other grade span levels, Level 20 is used to denote the test form for Grades 2-3; Level 30, Grades 4-5; Level 40, Grades 6-8; and Level 50, Grades 9-12.

Figure 7.1 Form C Listening TCC


Figure 7.2 Form C Listening SEM Curve


Figure 7.3 Form C Speaking TCC


Figure 7.4 Form C Speaking SEM Curve


Figure 7.5 Form C Reading TCC


Figure 7.6 Form C Reading SEM Curve


Figure 7.7 Form C Writing TCC


Figure 7.8 Form C Writing SEM Curve


Figure 7.9 Form D Listening TCC


Figure 7.10 Form D Listening SEM Curve


Figure 7.11 Form D Speaking TCC


Figure 7.12 Form D Speaking SEM Curve


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Figure 7.13 Form D Reading TCC


Figure 7.14 Form D Reading SEM Curve


Figure 7.15 Form D Writing TCC


Figure 7.16 Form D Writing SEM Curve


In the TCCs, the $x$-axis represents the scale scores, with the $y$-axis representing the expected number correct or proportion of points correct. TCCs predict the total proportion of points in a whole test that an examinee at a given ability level will answer correctly. This expected number correct is simply the sum of the probabilities of answering each of the individual items correct. Therefore, the TCCs represent the relative difficulty of a given test form, with TCCs on the right representing more difficult test forms.

It can be seen that the difficulty of test form typically increases across grade span levels, and the exception mainly occurs with Grades $9-12$ (Level 50), where the TCC may be mostly or partly positioned to the left of that for Grades 6-8 (Level 40) in Speaking, Reading, and Writing. This exception is acceptable given that observations of empirical test data from the past show a tendency of high-school students having a wider range of ability distributions and similar (and sometimes lower) performance to middle-school students. This justifies a slightly easier (or partially easier) test form for the high-school grade level than that for middle school. Additionally, the TCCs for Grades 9-12 are generally close to the curves for Grades 6-8.

An important point to remember when scores are being analyzed and interpreted is that the results are only descriptions of a particular performance by the individual or group on the particular test administered. From these descriptions, inferences about the abilities of the students may be made. The fact that such inferences may not represent an individual's true status is taken into account by means of the conditional standard error of measurement (SEM). Figures 7.2, 7.4, $7.6,7.8,7.10,7.12,7.14$, and 7.16 , depict the conditional SEM associated with each TCC. In the SE curves, the $x$-axis represents the scale scores, with the $y$-axis representing the SEM. The lowest point on each of the curves is where the smallest amount of measurement error resides.

It is assumed that measurement error is associated with any test score. The conditional SEM is an estimate of the amount of error to be expected in a particular score from a particular test. This statistic provides a range within which a student's true score is likely to fall. Therefore, an obtained score should be regarded not as an absolute value but as a point within a range that probably includes a student's true score.

A student's true score is the hypothetical average score that would result if the test could be administered repeatedly without practice or fatigue effects. It is expected that 68 percent of the time a student's score obtained from a single testing would fall within one SEM of that student's true score and that 95 percent of the time the obtained score would fall within SEMs of the true score.

The SEM should be taken into account when test scores are being interpreted. The magnitude of the SEM varies from test to test; it also varies according to where a student's score falls within
the range of a specific test. If a score is near the floor or ceiling of the range of performance measured by a given test, the corresponding SEM will be much larger than it would have been if the score had been near the middle of the range. The smaller the SEM, the more accurate the test score. The standard errors associated with each test score appear in Appendix E.

### 7.1.5 Inter-Rater Reliability

Consistency across raters is another contributing factor to reliability of test scores. As described in Chapter 3, the read-behind procedure was implemented in Forms C and D field testing to monitor and control inter-rater reliability in scoring of written constructed-response (CR) items. Approximately $10 \%$ of the student responses for each item were scored by a second rater. The data from the read-behind procedure were used to estimate the degree of inter-rater agreement. Appendix G shows the obtained inter-rater agreement statistics for each testing grade span for all written CR items that were selected into the C and D operational test forms.

In the tables, intraclass correlation and weighted Kappa coefficients were calculated to measure reader agreement (Fleiss \& Cohen, 1973). The intraclass correlation does not consider chance agreement between two raters, but the weighted Kappa does take into account chance agreement. Therefore, in general, the weighted Kappa will have values equal to or smaller than the intraclass correlations. If agreement is perfect, then Kappa is +1 . In the situation when agreement is at chance levels, Kappa is 0 . Kappa values between 0.40 and 0.74 represent good agreement beyond chance, and values below 0.40 indicate poor agreement.

The obtained intraclass correlations and weighted Kappa values were uniformly high for all items of all levels and skill areas, which indicates good agreement between the first and second readers and provides evidence of high inter-rater reliability.

### 7.1.6 Classification Accuracy and Consistency

While it is always important to know the reliability of student scores in any assessment, it is also important to assess the reliability of the decisions based on these scores. A rigorous procedure for setting cut scores contributes to the accuracy of classifications, and details on the standard setting procedure for Forms C and D based on the LAS Links $2^{\text {nd }}$ Edition Proficiency Levels can be found in Chapter 6.1. Conditional SEMs at and around the target cut scores provide another means to inform stakeholders of the classification accuracy and consistency using the test form of interest. Conditional SEMs can be found in Appendix E.

As classification accuracy and consistency are sensitive to the locations of the cut scores and the ability distributions of the target test population in a local test use context, users are highly
recommended to empirically estimate the classification accuracy and consistency with operational data collected from their local context, when conditions allow.

### 7.2 Test Fairness

Test fairness is an important consideration in test evaluation, and courts have interpreted fairness as the demonstration of validity as defined by the Standards for Educational and Psychological Testing (1999). Tests should be as fair as possible for test takers of different races, gender, ethnic backgrounds, or disability status. Fairness permeates all aspects of testing. For example, the Code of Fair Testing Practices in Education (Joint Committee on Testing Practices [JCTP], 2004) provides guidelines in four critical areas:

- developing and selecting appropriate tests
- administering and scoring tests
- reporting and interpreting test results
- informing test takers about the nature of the test, test takers' rights and responsibilities, the appropriate use of scores, and procedures for resolving challenges to scores

In the development of LAS Links Forms C and D, substantial resources were devoted to help ensure that the tests are as fair and unbiased as possible with respect to ethnicity, disabilities, and gender. Throughout the development process, item developers paid careful editorial attention to ensure fairness. In addition, the test items went through extensive reviews by internal and external review panels for bias and sensitivity. Items and the overall tests were also reviewed for key elements of Universal Design for optimal accessibility to most users.

Additionally, differential item functioning (DIF) analyses were performed on all items on gender, ethnicity, and ELL status. The DIF studies included a systematic item analysis to determine whether examinees with the same underlying level of ability had the same probability of getting the item correct. The Mantel-Haenszel (M-H) procedure (Mantel \& Haenszel, 1959) was applied in the DIF analyses. The M-H procedure has been widely used in DIF studies. In this procedure, the focal and reference groups are matched on ability using a test score interval as a proxy.

Based on the DIF statistics, an item can be classified into one of three categories: A, B, or C. These categories stand for negligible, intermediate, and large DIF, respectively. The classification rules that were used in the evaluation are listed below. These rules align with those used in the National Assessment of Educational Progress (NAEP) to determine DIF (U.S. Department of Education, Office of Educational Research and Improvement, \& National Center for Education Statistics, 2001). Delta statistics for multiple-choice items were also considered with the criteria of $\mid$ Delta $\mid<1$ applied for Category A.

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- Category A. If either Mantel's chi-square is not significantly different from zero ( $\mathrm{p} \geq$ 0.05 ), or if the absolute value of the effect size is less than or equal to 0.17 .
- Category B. If Mantel's chi-square is significant and the absolute value of the effect size is over 0.17 and less than or equal to 0.25 .
- Category C. If Mantel's chi-square is significant and the absolute value of the effect size is over 0.25 .

Items flagged with Category B or Category C were then examined to determine whether item performance differences between identifiable subgroups of the population were due to extraneous or construct-irrelevant information, making the items unfairly difficult. The inclusion of items flagged with DIF was minimized in the test development process.

To support relevant evaluations, demographic distributions of the field testing sample, whose data were used in subsequent scale and item analyses, were examined prior to the analyses, and relevant distributional information is described in Chapter 3.

To support test fairness in test administration, accommodations, scoring, and reporting, relevant operational procedures were standardized and documented in detail in ancillary test materials such as the Examiner's Guide and the Interpretation Guide. It is also recommended that pre-test trainings be provided to examiners and administrators to support the standardization efforts. Regarding scoring of spoken and written constructed-response items, structured training and quality monitoring procedures are encouraged to be implemented to ensure intra-rater and interrater reliabilities.

Security of test materials and data confidentiality should also be assured by implementing rigorous procedures and security measures on test materials shipping, tracking, distributing, retrieval, and data analysis. It is suggested that test administrators who have access to test materials and scoring documents be adequately trained to guard against unapproved distributions or sharing of test materials and relevant test data.

### 7.3 Reliability and Validity

"Validity refers to the degree to which evidence and theory support the interpretations of test scores entailed by proposed uses of tests. Validity is, therefore, the most fundamental consideration in developing and evaluating tests. The process of validation involves accumulating evidence to provide a sound scientific basis for the proposed score interpretations" (AERA, APA, \& NCME, 1999, p. 9).

The purpose of test validation is not to validate the test itself but to validate interpretations of the test scores for particular purposes or uses. Validation is not a quantifiable property but an ongoing process or argument, beginning at initial conceptualization and continuing throughout the assessment process (Kane, 2006, pp. 131-152). Every aspect of an assessment may provide evidence in support of its validity (or evidence to the contrary), including but not limited to design, content specifications, item development, psychometric quality, and inferences based on the results.

Reliability is a necessary, but not sufficient, condition of validity. It refers to the consistency of students' test scores on parallel forms or administrations of a test. A reliable test is one that produces scores that are expected to be relatively stable if the test is administered repeatedly under similar conditions. Often, however, it is impractical to administer multiple forms of the test, and reliability is estimated on a single administration of the test. This type of reliability, known as internal consistency, provides an estimate of how consistently examinees perform across items within a test during a single test administration (Crocker \& Algina, 1986).

Reliability and validity evidence for LAS Links Forms C and D is described throughout this technical manual. A summary of such evidence is provided in this section with an emphasis on the following three aspects of validity, including reliability, as informed by the approach of an assessment use argument (AUA; Bachman \& Palmer, 2010).

- Consistency of test records. Measurement of a student's language ability should yield consistent results regardless of the testing location, proctor, test form, or test method.
- Appropriateness of score interpretations. Interpretations of the test scores should be substantially grounded, generalizable beyond the test to real-life language use domains, and impartial across subgroups.
- Fairness of decisions. Score-based decisions should be sensitive to existing educational and societal values and relevant legal requirements. The decisions should also be equitable.

Additionally, the intended test use and score-based decisions should lead to beneficial consequences, such as positive impact on learning and instruction. Consequences of test uses are often affected by a variety of social, cultural, and educational factors beyond content and psychometric properties of a test.

## Consistency of test records

Key evidence may come from four aspects: 1) standardized and consistently followed administration procedures for all test taker groups, 2) reliable scoring of MC and CR items, 3) internal consistency of the test, and 4) similar psychometric properties between Forms C and D.

For LAS Links Forms C and D, relevant administration and scoring procedures were standardized and documented in ancillary test materials, and trainings are suggested for test administration and scoring.

When scoring through the CTB facilities, MC items obtained from the paper-and-pencil scorable documents can be scanned and scored with high-quality equipment following standardized procedures, and written CR items can be scored by CTB's professional handscoring team. The observed rater agreement from the Forms $C$ and $D$ field testing on items selected for the operational test forms was consistently high, as reflected by the intraclass and Kappa coefficients.

The estimated internal consistency reliability coefficients were generally high, with the values around or above 0.80 across most domains and grade span levels. The observed classical SEMs for raw scores were relatively small and typically within one fourth to one half of the standard deviation.

Forms C and D apply the same types of scoring rubrics and scoring process for spoken and written constructed-response items. The two test forms have very similar $p$-values and alpha coefficients across grade spans and domains. Test characteristic curves and standard error curves of the two forms were also inspected and evaluated to support the construction of parallel forms during the test development.

Both the procedural and empirical evidence as described above supports consistency of the Forms C and D test records.

## Appropriateness of score interpretations

The summary of relevant evidence focuses on 1) test scores as an adequate indicator of the ability to be assessed, and 2) equally meaningful score interpretations across parallel test forms and across different groups of test takers.

The intended score interpretation is students' English language proficiency in the K-12 school context as reflected in the LAS Links 2012 Standards Framework. Alignment between each test item and the standards was systematically documented and closely monitored during the test development process. Adequate coverage of the test standards was reflected in the test design and adhered to in the test form assembly process. Considerable efforts were also made to
minimize construct-irrelevant factors during the process of test design, item development, item selection, and test materials construction.

Empirical item- and test- level statistics suggest that each test scale provides a reasonable range of item difficulty for the target test population. The generally high internal consistency reliability coefficients and relatively small magnitude of SEMs support validity of the score interpretations in the sense that construct-irrelevant factors were controlled and minimized.

The development of operational Forms C and D was based on the same test blueprint and item writing specifications. The items that were selected into Forms C and D came from the same Forms C and D field test item pool, where all items were calibrated and placed on the same scale. Such efforts support equally meaningful score interpretations across the test forms.

DIF analyses on gender, ethnicity and ELL status, subsequent item flagging and review, and minimizing DIF items during the test development contribute to measurement of the same construct across subgroups.

## Fairness of decisions

Major evidence in this aspect relates to two considerations: 1) Existing educational and societal values and relevant legal requirements are carefully considered in score-based decisions. 2) Cut scores are accurate and consistent.

When determining approaches for score-based decisions and the criteria to use in making such decisions, it is critical for the test vendor and test users to work collaboratively in reviewing and adhering to policy requirements and to be sensitive to educational preferences in the local test use context with the purpose to support fair score-based decisions.

The LAS Links program is committed to providing ongoing support and consultation to test users of the LAS Links assessment products, including LAS Links Forms C and D, to support such collaborations.

Regarding classification accuracy and consistency, evidence from the standard setting process based on the LAS Links $2^{\text {nd }}$ Edition Proficiency Levels is presented in Chapter 6.1. Estimates on conditional SEMs are available in Appendix E to inform users of the degree of classification dependability at and around the target cut scores. Additionally, empirical evaluations using operational test data are encouraged to provide estimates of classification accuracy and consistency that are sensitive to the intended cut scores and test taker groups in stakeholders’ particular local test use context.

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## Appendix A English Language Learner Advisory Panel (ELLAP) Members

Jamal Abedi is a professor at the School of Education of the University of California, Davis, and a research partner at the National Center for Research on Evaluation, Standards, and Student Testing (CRESST). Abedi's research interests include studies in the area of psychometrics and test and scale developments. His recent works include studies on the validity of assessments, accommodations and classification for English language learners (ELLs) and students with disabilities, issues concerning comparability of alternate assessments for students with significant cognitive disabilities, opportunities to learn for ELLs, and measurement of creativity.

Abedi is the recipient of the 2003 National Professional Service Award in recognition of his "Outstanding Contribution Relating Research to Practice" by the American Educational Research Association. He is also the recipient of the 2008 Lifetime Achievement Award by the California Educational Research Association. He holds a MA degree and a Ph.D. degree from Vanderbilt University in Psychometrics.

Lyle Bachman is a professor emeritus in the Department of Applied Linguistics at the University of California, Los Angeles. He is a past president of the American Association for Applied Linguistics and of the International Language Testing Association. Bachman has twice won the Kenneth Mildenberger Prize from the Modern Language Association of America. In 2004, he received the Lifetime Achievement Award from the International Language Testing Association, and in 2010, he received the Distinguished Scholarship and Service Award from the American Association for Applied Linguistics. He currently serves on the Board on Testing and Assessment of the National Research Council, and the Board of Directors of the Center for Applied Linguistics.

Bachman has published numerous articles and books, including Fundamental Considerations in Language Testing (Oxford University Press) and Language Testing in Practice (with Adrian Palmer, Oxford University Press), which are considered to be seminal works in the field. His publication Statistical Analyses for Language Assessment (Cambridge University Press) is widely used in language testing courses around the world. His most recent book, Language Assessment in Practice: Developing Language Assessments and Justifying their Use in the Real World (with Adrian Palmer, Oxford University Press) was published in 2010.

Bachman also teaches courses and conducts practitioner training workshops in language assessment and serves as a consultant to universities and government agencies around the world. His current research interests include validation theory, epistemological issues in Applied Linguistics research, issues in assessing the academic achievement and academic English of English language learners in schools, and the interface between language testing research and second language acquisition research.

Lynne Díaz-Rico is a professor of Education at California State University, San Bernardino, where she coordinates the M.A. in Education, Teaching English to Speakers of Other Languages program. She began her career in ESL as a high school teacher in Puerto Rico. After completing a B.A. in philosophy at the University of Pittsburgh, Dr. Diaz-Rico obtained an M.A. in Education from Arizona State University and the Ed.D. degree from InterAmerican University in Puerto Rico.

In 2000, and currently, Dr. Díaz-Rico has served as Coordinator of the Intercultural Communication Interest Group (ICIG) of California Teachers of English to Speakers of Other Languages (CATESOL), submitting ICIG articles to The CATESOL Journal and CATESOL News. She is a well-known presenter at CATESOL regional and state conferences. She served as president of CATESOL from 2009-2010.

Alison Bailey is a professor and a former Division Head of the Psychological Studies in Education program of the Department of Education, University of California, Los Angeles, in addition to being a faculty associate researcher at the National Center for Research on Evaluation, Standards and Student Testing (CRESST).

A graduate of Harvard University, Dr. Bailey's research focuses primarily on language and literacy development, English language development in young second-language learners, and language and literacy assessment. She serves on the advisory boards of the California Department of Education, the consortia of numerous other states, and commercial publishers developing language and literacy assessments for English language learners.

Dr. Bailey is editor and contributing author to The Language Demands of School: Putting Academic English to the Test, (Yale University Press, 2007), co-author with Margaret Heritage of Formative Assessment for Literacy K-6: Building Reading and Academic Language Skills across the Curriculum, (Corwin/Sage Press, 2008), and co-editor with Allyssa McCabe and Gigliana Melzi and contributing author to Spanish-Language Narration and Literacy: Culture, Cognition, and Emotion, (Cambridge University Press, 2008).

Her most recent research is as Co-Principal Investigator on a five-state Enhanced Assessment Grant from the USDOE for Evaluating the Validity of English Language Assessments. When she has time, she spends it in Pre-K and K classrooms in downtown Los Angeles, where she and her graduate students learn what matters most to teachers and young children acquiring English.

Charlene Rivera is a research professor in The George Washington University's (GW) Graduate School of Education and Executive Director and founder of The George Washington University Center for Equity and Excellence in Education (GW-CEEE). For 20 years, Rivera has served as the principal investigator for GW-CEEE's technical assistance projects, and policy and evaluation studies for clients in state education agencies, school districts, schools, foundations, and federal agencies. Rivera's areas of expertise include assessment, evaluation design, national standards, literacy, and state assessment policies and practices for high-needs students.

Her research interests include inclusion and accommodation issues impacting the assessment of English language learners, standards and accountability, and reading development. Rivera has published extensively and recently co-authored Test Accommodations for English Language Learners: A Meta-Analysis of Experimental Studies for Educational Measurement: Issues and Practices. Rivera serves on several boards and technical working groups such as the Teacher Education Accreditation Council (TEAC) Board of Directors, National Academies of Education Panel to Review Alternative Data Sources for Funding States in serving English language learners under Title III of the Elementary Secondary Education Act, the National Assessment Governing Board's Technical Advisory Panel for Uniform National Rules for NAEP Testing of English language learners, and multiple state assessment technical advisory committees. She has recently been named a member of the Gordon Commission: a Commission on the Future of Assessment in K-12 Education. Rivera is one of 20 of the most distinguished scholars in the fields of education sciences, psychometrics, and public policy selected for the committee.

John Schmidt majored in Spanish Education and Ibero-American Studies as an undergraduate at the University of Wisconsin. He began his career in foreign language instruction as a Spanish teacher in an elementary school and a high school in Wisconsin. He went on to teach and supervise Spanish courses at the University of Illinois as a graduate teaching assistant. A Fulbright scholar studying Romance Linguistics at the Universitat de Barcelona in Spain, Dr. Schmidt taught English there before transferring to the University of Texas at Austin to pursue a doctorate in Foreign Language Education. His dissertation at the University of Texas was a criterion-related predictive validity study to determine predictor variables of university performance for 1,500 Malaysian students on a Texas International Education Consortium (TIEC)-affiliated campus near Kuala Lumpur.

Dr. Schmidt's interest and experience in assessment date back to his work at the University of Illinois as a supervisor and test developer of department-wide oral and written Spanish exams. In Austin, he has taught and administered English as a Second Language courses at the Texas Intensive English Program (TIEP) of the Texas International Education Consortium (TIEC). As part of his work, he has been regularly involved in placement testing and in the development of tests for all levels and subjects to assess students' English proficiency. He also supervises and conducts oral assessments of prospective international teaching assistants of the University of Texas aspiring to teach at the University.

As part of a TIEC project sponsored by the Korean Fulbright Commission in Seoul, Dr. Schmidt developed an English-proficiency assessment measure and trained a team of

American teachers of English to test secondary students in Korea. In addition to assessment work in South Korea, he has conducted language testing in Mexico, Malaysia, and Qatar. In his role as an Academic Coordinator at TIEC/TIEC, Dr. Schmidt supervises Academic Program courses. Additionally, he has also developed and implemented more than fifty special short-term programs for both students and for teachers of English. The teachers in the courses that he administers and instructs come from Japan, South Korea, India, and Latin American countries.

Professionally, Dr. Schmidt has lectured, trained teachers, and undertaken project development work in three dozen countries on five continents. His volunteer work for humanitarian organizations has focused on Latin America and the Caribbean. He has served as the President of Texas Partners of the Americas, in collaboration with Compañeros de las Américas in Peru and in Mexico, and as the Vice President of the U.S.-Latin American Medical Aid Foundation, affiliated with hospitals and medical organizations in Cuba. His service work within the profession has included TEXTESOL III affiliate officer roles, including the presidency, as well as committee work for TESOL (Teachers of English to Speakers of Other Languages) and three years on the TESOL Board of Directors. He has since taken on the role of Associate Chair of the TESOL 2012 Convention in Philadelphia.

Charles W. Stansfield is an authority on second language testing. During his 40-year career, he has been a secondary school teacher of Spanish, a teacher of ESL, a tenured professor of Spanish at the University of Colorado, where he trained teachers of ESL, bilingual education, and foreign languages in language testing, a test program administrator at Educational Testing Service, director of the ERIC Clearinghouse on Languages and Linguistics, and director of the Division of Foreign Language Education and Testing at the Center for Applied Linguistics in Washington, D.C.

He has developed and published proficiency tests in English as a second language and in 15 other languages. Under contracts with different government agencies, he has developed tests of all four skills as well as tests of languages for specific purposes. He is currently working on tests of speaking skills in American Indian languages for the Bureau of Indian Education. He is the author or editor of over a dozen books and research monographs and 50 research articles published in professional journals. He has served on the editorial boards of Language Testing, the Journal of Second Language Writing, TESOL Quarterly, and others. He is President of Second Language Testing, Inc. (SLTI), and since 1994, when SLTI was founded, Dr. Stansfield has devoted himself full-time to the management of SLTI test development projects.

## Appendix B Student Sample Demographic Frequencies

Table B. 1 Forms C/D Student Grade

| Level | Grade | $\mathbf{N}$ | $\mathbf{\%}$ |
| :---: | ---: | ---: | ---: |
| 1 | $\mathbf{K - 1}$ | $\mathbf{6 0 7 1}$ |  |
|  | K | 2885 | 47.52 |
|  | 1 | 3139 | 51.70 |
|  | 2 | 45 | 0.74 |
|  | Not Provided | 2 | 0.03 |
| 2 | $\mathbf{2 - 3}$ | $\mathbf{6 1 3 7}$ |  |
|  | 2 | 3019 | 49.19 |
|  | 3 | 3109 | 50.66 |
|  | Not Provided | 9 | 0.15 |
| 3 | $\mathbf{4 - 5}$ | $\mathbf{5 6 7 4}$ |  |
|  | 4 | 2947 | 51.94 |
|  | 5 | 2710 | 47.76 |
|  | 6 | 11 | 0.19 |
|  | Not Provided | 6 | 0.11 |
| 4 | $\mathbf{6 - 8}$ | $\mathbf{4 3 0 4}$ |  |
|  | 6 | 1404 | 32.62 |
|  | 7 | 1380 | 32.06 |
|  | 8 | 1509 | 35.06 |
|  | 9 | 11 | 0.26 |
| 5 | $\mathbf{9 - 1 2}$ | $\mathbf{3 8 9 9}$ |  |
|  | 9 | 1273 | 32.65 |
|  | 10 | 887 | 22.75 |
|  | 11 | 935 | 23.98 |
|  | 12 | 804 | 20.62 |

Table B. 2 Forms C/D Student Gender

| Gender | K-1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% | N | \% | N | \% |
| Female | 2896 | 47.70 | 2902 | 47.29 | 2622 | 46.21 | 1898 | 44.10 | 1743 | 44.70 |
| Male | 3109 | 51.21 | 3176 | 51.75 | 3003 | 52.93 | 2314 | 53.76 | 2047 | 52.50 |
| Not Provided | 66 | 1.09 | 59 | 0.96 | 49 | 0.86 | 92 | 2.14 | 109 | 2.80 |
| Total | 6071 | 100.00 | 6137 | 100.00 | 5674 | 100.00 | 4304 | 100.00 | 3899 | 100.00 |

Table B. 3 Forms C/D Student Home Language

| Home Language | K-1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% | N | \% | N | \% |
| Albanian | 273 | 4.50 | 365 | 5.95 | 310 | 5.46 | 132 | 3.07 | 23 | 0.59 |
| Amharic | 33 | 0.54 | 44 | 0.72 | 29 | 0.51 | 30 | 0.70 | 43 | 1.10 |
| Arabic | 50 | 0.82 | 51 | 0.83 | 30 | 0.53 | 42 | 0.98 | 82 | 2.10 |
| Armenian | 1 | 0.02 | 1 | 0.02 | 7 | 0.12 |  |  | 1 | 0.03 |
| Assyrian |  |  |  |  | 5 | 0.09 |  |  |  |  |
| Bengali | 17 | 0.28 | 15 | 0.24 | 7 | 0.12 | 3 | 0.07 | 4 | 0.10 |
| Bosnian | 5 | 0.08 | 2 | 0.03 | 5 | 0.09 | 5 | 0.12 | 4 | 0.10 |
| Burmese | 2 | 0.03 | 15 | 0.24 | 7 | 0.12 | 7 | 0.16 | 17 | 0.44 |
| Cantonese | 40 | 0.66 | 45 | 0.73 | 25 | 0.44 | 14 | 0.33 | 30 | 0.77 |
| Cebuano <br> (Visayan) | 1 | 0.02 |  |  |  |  | 1 | 0.02 | 2 | 0.05 |
| Chaldean |  |  |  |  |  |  |  |  | 6 | 0.15 |
| Chamorro (Guamanian) | 1 | 0.02 | 2 | 0.03 | 2 | 0.04 | 4 | 0.09 | 3 | 0.08 |
| Chaozhou (Chaochow) | 1 | 0.02 |  |  |  |  |  |  | 1 | 0.03 |
| Croatian | 5 | 0.08 | 13 | 0.21 | 9 | 0.16 | 2 | 0.05 |  |  |
| Dutch | 6 | 0.10 |  |  | 1 | 0.02 | 1 | 0.02 | 1 | 0.03 |
| English | 551 | 9.08 | 551 | 8.98 | 517 | 9.11 | 68 | 1.58 | 36 | 0.92 |
| $\begin{gathered} \text { Farsi } \\ \text { (Persian) } \end{gathered}$ | 5 | 0.08 | 4 | 0.07 |  |  | 8 | 0.19 | 8 | 0.21 |
| Filipino (Pilipino or |  |  |  |  |  |  |  |  |  |  |
| (Pilipino or Tagalog) | 34 | 0.56 | 81 | 1.32 | 50 | 0.88 | 42 | 0.98 | 47 | 1.21 |
| French | 8 | 0.13 | 14 | 0.23 | 26 | 0.46 | 19 | 0.44 | 16 | 0.41 |
| French Creole | 13 | 0.21 | 12 | 0.20 | 10 | 0.18 | 9 | 0.21 | 6 | 0.15 |
| German | 3 | 0.05 | 2 | 0.03 | 3 | 0.05 | 5 | 0.12 | 3 | 0.08 |
| Greek | 1 | 0.02 |  |  | 1 | 0.02 | 1 | 0.02 |  |  |
| Gujarati | 9 | 0.15 | 9 | 0.15 | 14 | 0.25 | 4 | 0.09 | 3 | 0.08 |
| Hebrew | 4 | 0.07 | 3 | 0.05 | 2 | 0.04 |  |  | 1 | 0.03 |
| Hindi | 22 | 0.36 | 12 | 0.20 | 4 | 0.07 | 2 | 0.05 | 6 | 0.15 |
| Hmong | 4 | 0.07 | 7 | 0.11 | 3 | 0.05 | 3 | 0.07 |  |  |
| Hungarian | 1 | 0.02 | 3 | 0.05 | 1 | 0.02 | 1 | 0.02 |  |  |
| Ilocano |  |  | 1 | 0.02 | 1 | 0.02 |  |  |  |  |
| Indonesian | 3 | 0.05 | 1 | 0.02 | 1 | 0.02 | 2 | 0.05 | 4 | 0.10 |
| Italian | 1 | 0.02 |  |  |  |  |  |  | 2 | 0.05 |
| Japanese | 17 | 0.28 | 21 | 0.34 | 23 | 0.41 | 17 | 0.39 | 7 | 0.18 |

Table B. 3 Forms C/D Student Home Language (continued)

| Home Language | K-1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% | N | \% | N | \% |
| Khmer (Cambodian) | 18 | 0.30 | 16 | 0.26 | 11 | 0.19 | 22 | 0.51 | 18 | 0.46 |
| Korean | 29 | 0.48 | 25 | 0.41 | 28 | 0.49 | 28 | 0.65 | 51 | 1.31 |
| Kurdish | 2 | 0.03 | 5 | 0.08 | 2 | 0.04 | 1 | 0.02 | 1 | 0.03 |
| Lao | 6 | 0.10 | 8 | 0.13 | 6 | 0.11 | 9 | 0.21 | 5 | 0.13 |
| Mai Mai | 3 | 0.05 | 3 | 0.05 | 5 | 0.09 | 2 | 0.05 |  |  |
| Mandarin (Putonghua) | 30 | 0.49 | 30 | 0.49 | 13 | 0.23 | 23 | 0.53 | 43 | 1.10 |
| Marshallese | 16 | 0.26 | 11 | 0.18 | 19 | 0.33 | 13 | 0.30 | 33 | 0.85 |
| $\begin{aligned} & \text { Mien } \\ & \text { (Yao) } \end{aligned}$ | 1 | 0.02 | 2 | 0.03 | 2 | 0.04 |  |  | 1 | 0.03 |
| Mixteco | 3 | 0.05 | 5 | 0.08 | 6 | 0.11 | 19 | 0.44 | 18 | 0.46 |
| Pashto | 1 | 0.02 |  |  |  |  | 3 | 0.07 | 1 | 0.03 |
| Polish | 9 | 0.15 | 9 | 0.15 | 4 | 0.07 | 2 | 0.05 | 5 | 0.13 |
| Portuguese | 8 | 0.13 | 9 | 0.15 | 6 | 0.11 | 4 | 0.09 | 4 | 0.10 |
| Punjabi | 24 | 0.40 | 11 | 0.18 | 18 | 0.32 | 8 | 0.19 | 29 | 0.74 |
| Rumanian | 13 | 0.21 | 7 | 0.11 | 8 | 0.14 | 6 | 0.14 | 9 | 0.23 |
| Russian | 113 | 1.86 | 99 | 1.61 | 78 | 1.37 | 65 | 1.51 | 60 | 1.54 |
| Samoan | 11 | 0.18 | 14 | 0.23 | 19 | 0.33 | 17 | 0.39 | 15 | 0.38 |
| Serbo-Croatian (Serbian) | 1 | 0.02 | 2 | 0.03 |  |  | 2 | 0.05 |  |  |
| Somali | 47 | 0.77 | 52 | 0.85 | 59 | 1.04 | 55 | 1.28 | 92 | 2.36 |
| Spanish | 3452 | 56.86 | 3386 | 55.17 | 3178 | 56.01 | 2013 | 46.77 | 1624 | 41.65 |
| Taiwanese | 1 | 0.02 |  |  |  |  | 2 | 0.05 |  |  |
| Thai | 5 | 0.08 | 5 | 0.08 | 9 | 0.16 | 7 | 0.16 | 14 | 0.36 |
| Tigrinya | 10 | 0.16 | 13 | 0.21 | 9 | 0.16 |  | 0.16 | 21 | 0.54 |
| Toishanese | 1 | 0.02 | 3 | 0.05 | 2 | 0.04 | 3 | 0.07 | 9 | 0.23 |
| Tongan |  |  | 1 | 0.02 | 1 | 0.02 |  |  | 1 | 0.03 |
| Turkish | 6 | 0.10 | 6 | 0.10 | 4 | 0.07 | 5 | 0.12 | 12 | 0.31 |
| Ukrainian | 43 | 0.71 | 46 | 0.75 | 36 | 0.63 | 32 | 0.74 | 25 | 0.64 |
| Urdu | 10 | 0.16 | 11 | 0.18 | 8 | 0.14 | 3 | 0.07 | 6 | 0.15 |
| Vietnamese | 117 | 1.93 | 106 | 1.73 | 79 | 1.39 | 65 | 1.51 | 122 | 3.13 |
| Others | 137 | 2.26 | 111 | 1.81 | 112 | 1.97 | 140 | 3.25 | 215 | 5.51 |
| Not Provided | 843 | 13.89 | 867 | 14.13 | 859 | 15.14 | 1326 | 30.81 | 1109 | 28.44 |
| Total | 6071 | 100.00 | 6137 | 100.00 | 5674 | 100.00 | 4304 | 100.00 | 3899 | 100.00 |

Table B. 4 Forms C/D Student Ethnicity

| Ethnicity | K-1 |  | 2-3 |  | 4-5 |  | 6-8 |  | 9-12 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | N | \% | N | \% | N | \% | N | \% | N | \% |
| Hispanic/ Latino | 4306 | 70.93 | 4226 | 68.86 | 3917 | 69.03 | 2545 | 59.13 | 1947 | 49.94 |
| Not Hispanic/ Latino | 1352 | 22.27 | 1390 | 22.65 | 1307 | 23.03 | 1555 | 36.13 | 1407 | 36.09 |
| Not Provided | 413 | 6.80 | 521 | 8.49 | 450 | 7.93 | 204 | 4.74 | 545 | 13.98 |
| Total | 6071 | 100.00 | 6137 | 100.00 | 5674 | 100.00 | 4304 | 100.00 | 3899 | 100.00 |

## Appendix C Score Descriptive Statistics

## Raw Score Descriptive Statistics

## Form C

Table C. 1 Form C Speaking Raw Score Statistics

|  | Grade Span |  |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Statistics | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |  |
| Total Score Points | 28 | 40 | 41 | 41 | 40 | 41 |  |
| Mean | 17.99 | 30.97 | 33.49 | 30.92 | 28.69 | 32.76 |  |
| SD | 7.29 | 8.05 | 7.63 | 7.91 | 8.79 | 7.83 |  |
| Average Difficulty | 0.71 | 0.81 | 0.81 | 0.78 | 0.72 | 0.77 |  |
| Alpha | 0.90 | 0.91 | 0.92 | 0.90 | 0.92 | 0.93 |  |
| SEM | 2.36 | 2.48 | 2.21 | 2.48 | 2.53 | 2.15 |  |

Table C. 2 Form C Listening Raw Score Statistics

|  | Grade Span |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Statistics | K-1 | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| Total Score Points | 20 | 20 | 20 | 23 | 23 |
| Mean | 14.23 | 15.43 | 13.35 | 15.70 | 14.39 |
| SD | 4.22 | 3.20 | 3.46 | 3.86 | 3.72 |
| Average Difficulty | 0.71 | 0.77 | 0.67 | 0.68 | 0.63 |
| Alpha | 0.83 | 0.75 | 0.70 | 0.73 | 0.68 |
| SEM | 1.76 | 1.62 | 1.91 | 1.99 | 2.09 |

Table C. 3 Form C Reading Raw Score Statistics

| Statistics | Grade Span |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| Total Score Points | 26 | 30 | 30 | 30 | 30 | 30 |
| Mean | 14.66 | 20.46 | 18.73 | 16.55 | 16.65 | 17.58 |
| SD | 5.31 | 6.38 | 6.67 | 6.55 | 6.15 | 6.11 |
| Average Difficulty | 0.56 | 0.68 | 0.62 | 0.55 | 0.56 | 0.59 |
| Alpha | 0.83 | 0.89 | 0.88 | 0.87 | 0.85 | 0.85 |
| SEM | 2.22 | 2.15 | 2.31 | 2.37 | 2.37 | 2.39 |

Table C. 4 Form C Writing Raw Score Statistics

| Statistics | Grade Span |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| Total Score Points | 20 | 32 | 32 | 32 | 32 | 32 |
| Mean | 10.78 | 22.88 | 21.67 | 20.03 | 17.25 | 19.94 |
| SD | 4.14 | 7.05 | 6.58 | 5.98 | 6.18 | 5.53 |
| Average Difficulty | 0.56 | 0.75 | 0.64 | 0.69 | 0.58 | 0.64 |
| Alpha | 0.77 | 0.85 | 0.85 | 0.84 | 0.85 | 0.81 |
| SEM | 1.99 | 2.69 | 2.57 | 2.38 | 2.41 | 2.40 |

## Form D

## Table C. 5 Form D Speaking Raw Score Statistics

| Statistics | Grade Span |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| Total Score Points | 29 | 41 | 41 | 41 | 41 | 41 |
| Mean | 18.67 | 31.27 | 33.55 | 30.85 | 29.75 | 31.32 |
| SD | 7.76 | 8.43 | 7.47 | 7.84 | 9.10 | 8.64 |
| Average Difficulty | 0.71 | 0.81 | 0.82 | 0.76 | 0.75 | 0.76 |
| Alpha | 0.90 | 0.91 | 0.91 | 0.91 | 0.92 | 0.92 |
| SEM | 2.40 | 2.51 | 2.24 | 2.36 | 2.59 | 2.38 |

Table C. 6 Form D Listening Raw Score Statistics

|  | Grade Span |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: |
| Statistics | K-1 | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| Total Score Points | 20 | 19 | 20 | 23 | 23 |
| Mean | 14.13 | 14.98 | 13.75 | 15.57 | 14.41 |
| SD | 4.22 | 3.24 | 3.59 | 4.25 | 4.16 |
| Average Difficulty | 0.71 | 0.79 | 0.69 | 0.68 | 0.63 |
| Alpha | 0.82 | 0.77 | 0.74 | 0.78 | 0.76 |
| SEM | 1.79 | 1.57 | 1.82 | 1.98 | 2.04 |

Table C. 7 Form D Reading Raw Score Statistics

| Statistics | Grade Span |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| Total Score Points | 26 | 30 | 30 | 30 | 29 | 30 |
| Mean | 15.08 | 20.85 | 18.32 | 16.28 | 16.47 | 17.65 |
| SD | 5.27 | 6.27 | 6.80 | 6.28 | 6.10 | 6.84 |
| Average Difficulty | 0.58 | 0.70 | 0.61 | 0.54 | 0.57 | 0.59 |
| Alpha | 0.81 | 0.88 | 0.88 | 0.86 | 0.86 | 0.88 |
| SEM | 2.27 | 2.20 | 2.34 | 2.32 | 2.28 | 2.36 |

Table C. 8 Form D Writing Raw Score Statistics

|  | Grade Span |  |  |  |  |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: |
| Statistics | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| Total Score Points | 20 | 32 | 32 | 32 | 32 | 32 |
| Mean | 11.00 | 23.54 | 22.10 | 19.61 | 18.87 | 19.07 |
| SD | 4.19 | 7.05 | 6.61 | 6.20 | 6.53 | 5.68 |
| Average Difficulty | 0.58 | 0.77 | 0.68 | 0.67 | 0.65 | 0.61 |
| Alpha | 0.77 | 0.86 | 0.85 | 0.85 | 0.88 | 0.82 |
| SEM | 2.02 | 2.68 | 2.59 | 2.39 | 2.27 | 2.44 |

## Scale Score Descriptive Statistics

Table C. 9 Forms C/D Speaking Scale Score Descriptive Statistics

| Grades | Mean | SD | Median |
| :---: | :---: | :---: | :---: |
| K | 465 | 44.97 | 464 |
| 1 | 484 | 39.53 | 483 |
| $2-3$ | 513 | 41.26 | 505 |
| $4-5$ | 528 | 44.94 | 522 |
| $6-8$ | 530 | 46.43 | 523 |
| $9-12$ | 537 | 47.17 | 530 |

Table C. 10 Forms C/D Listening Scale Score Descriptive Statistics

| Grades | Mean | SD | Median |
| :---: | :---: | :---: | :---: |
| K-1 | 445 | 38.16 | 445 |
| $2-3$ | 482 | 37.76 | 481 |
| $4-5$ | 514 | 46.94 | 514 |
| $6-8$ | 530 | 53.73 | 530 |
| $9-12$ | 535 | 55.79 | 536 |

## Table C. 11 Forms C/D Reading Scale Score Descriptive Statistics

| Grades | Mean | SD | Median |
| :---: | :---: | :---: | :---: |
| K | 368 | 52.02 | 366 |
| 1 | 421 | 48.41 | 417 |
| $2-3$ | 469 | 56.95 | 471 |
| $4-5$ | 517 | 57.63 | 519 |
| $6-8$ | 540 | 55.29 | 542 |
| $9-12$ | 543 | 55.09 | 544 |

Table C. 12 Forms C/D Writing Scale Score Descriptive Statistics

| Grades | Mean | SD | Median |
| :---: | :---: | :---: | :---: |
| K | 333 | 78.67 | 333 |
| 1 | 418 | 75.44 | 414 |
| $2-3$ | 480 | 59.79 | 480 |
| $4-5$ | 522 | 53.80 | 525 |
| $6-8$ | 533 | 54.65 | 539 |
| $9-12$ | 545 | 51.99 | 548 |

## Appendix D Proficiency Level Definitions and Proficiency Level Descriptors

## LAS Links 2nd Edition Proficiency Level Definitions

## Table D. 1 LAS Links 2nd Edition Proficiency Level Definitions

| Above | Level 5 students communicate effectively in English, with few if any errors, across a <br> wide range of grade-level-appropriate language demands in social, school, and <br> academic contexts. The students command a high degree of productive and receptive <br> control of lexical, syntactic, phonological, and discourse features when addressing new <br> or familiar topics. |
| :---: | :--- |
| Proficient | Level 5 students apply their language mastery to critically evaluate and synthesize <br> written and oral information and to formulate hypotheses. Their facility with language <br> allows them to analyze information, draw sophisticated inferences, and explain their <br> reasoning. They skillfully organize information for presentations and can express <br> subtle nuances of meaning. They apply literary techniques such as identifying author <br> tone and point of view and can tailor language to a particular purpose and audience. |
| $\mathbf{4}$ | Level 4 students communicate effectively in English, but with some errors, across a <br> range of grade-level-appropriate language demands in social, school, and academic <br> contexts. The students exhibit productive and receptive control of lexical, syntactic, <br> phonological, and discourse features when addressing new or familiar topics. |
| Proficient | Level 4 students interpret, analyze, and evaluate written and oral information, basing <br> their responses on implicit and explicit context clues and information from personal <br> and academic experiences. They adequately express themselves and organize their <br> responses in logical and sequenced order. They distinguish nuances of meaning and <br> incorporate idiomatic expressions and academic vocabulary. |


| Intermediate | Level 3 students communicate in English across a range of grade-level-appropriate <br> language demands in social, school, and academic contexts. However, errors interfere <br> with their communication and comprehension. Repetition and clarification are often <br> needed. The students exhibit a limited range of productive and receptive control of <br> lexical, syntactic, phonological, and discourse features when addressing new or <br> familiar topics. |
| :---: | :--- |
| Level 3 students use limited vocabulary when defining concepts across and within <br> academic disciplines. They can compare, contrast, summarize, and relate text to <br> graphic organizers. They decode words, apply grammar conventions, and use context <br> clues to identify word meanings. They identify proper and improper use of basic <br> grammar. Although their language is generally coherent, it lacks significant <br> elaboration or detail. |  |
| $\mathbf{2}$ | Level 2 students are developing the ability to communicate in English in social, <br> school, and academic contexts. Errors frequently impede basic communication and <br> comprehension. Their receptive and productive control of lexical, syntactic, <br> phonological, and discourse features of English is emerging. |
| Entermediate | Early Intermediate students have minimal vocabulary and grammar skills. They <br> identify, describe, and discuss simple pictorial or text prompts. Students interpret <br> language related to familiar social, school, and academic topics. They draw simple <br> inferences and make simple comparisons. They restate rather than create original <br> expressions. Restricted vocabulary and rudimentary grammar limit their expression <br> and comprehension. |
| $\mathbf{1}$ | Leginning <br> Level 1 students are starting to develop receptive and productive uses of English in <br> nonverbally or through their native language rather than in English. |

## Grade Span Level Proficiency Level Descriptors

Table D. 2 Proficiency Level Descriptors, Kindergarten
 and may not be noted in the higher-level descriptors for a grade or grade range.

| Kindergarten | Speaking | Listening | Reading | Writing |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ \text { Beginning } \end{gathered}$ | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. |
| $\mathbf{2}$ Early Intermediate | Early Intermediate students typically use basic vocabulary and simple phrases to name or describe common objects and express opinions or preferences in social and academic situations. They narrate a story related to a sequence of pictures about school-related activities using basic vocabulary. Restricted vocabulary and developing grammar limit expression. Errors frequently impede communication. | Early Intermediate students typically follow some simple oral directions using knowledge of everyday tasks and basic academic vocabulary. They identify common shapes, letters, numbers, and familiar locations. They identify details in simple oral stories. Their restricted vocabulary and developing grammar limit comprehension. Errors frequently impede communication and comprehension. | Early Intermediate students typically identify capital and lowercase letters in isolation and identify beginning, middle, and ending sounds. They identify main ideas and details in simple text, match text to pictures, and apply lettersound relationships. Their restricted vocabulary and developing grammar limit comprehension. Errors frequently impede comprehension. | Early Intermediate students copy simple words and sentences that describe pictures or respond to other prompts. Errors frequently impede communication. |
| $3$ <br> Intermediate | Intermediate students typically use appropriate words and phrases when conducting transactions, making requests, and asking for clarification in social and academic settings. They narrate a story related to a sequence of pictures about schoolrelated activities using mostly accurate, although limited, vocabulary. They provide mostly clear information although errors interfere with communication. | Intermediate students typically follow simple oral directions and identify locations. They identify main ideas and make some inferences in simple oral stories. Errors interfere with communication and comprehension. | Intermediate students typically decode words with short vowel sounds, match text to pictures, and recall details and main ideas in short passages. Students make simple inferences and recognize words that relate to spatial relationships. Errors interfere with comprehension. | Intermediate students typically write one or more words to describe a picture or respond to other prompts. Students are beginning to recognize correct sentence format. Errors interfere with communication. |
| $4$ <br> Proficient | Proficient students typically produce simple and accurate sentences when making requests and asking for clarifications. They use appropriate words and phrases to label and describe the purpose of less common objects. They narrate a story related to a sequence of pictures about school-related activities using accurate vocabulary. Minor errors do not interfere with communication. | Proficient students typically follow oral directions to distinguish the location of an object in relation to another object, recall details in an oral story, and make inferences. They identify main ideas in more complex stories. | Proficient students typically identify rhyming words, match words to definitions or descriptions, make inferences, recall events from short passages, and read simple sentences independently. Errors do not interfere with comprehension. | Proficient students typically use correct basic grammar, capitalize the beginning of a sentence, and use correct ending punctuation in declarative, interrogative, and imperative sentences. They identify standard sentence structure and generate descriptive and explanatory sentences. Errors do not interfere with communication. |
| 5 <br> Above <br> Proficient | Above Proficient students typically produce simple sentences and use correct grammar when making requests, asking for clarification, and describing situations. They narrate a story with extensive and accurate vocabulary and grammar appropriate to their age. | Above Proficient students typically recall details and sequence of events, and determine main ideas in oral stories that have advanced vocabulary. | Above Proficient students typically use context clues to determine meanings of words and recall subtle details. They identify sequence in short passages and recognize words that relate to spatial relationships. | Above Proficient students typically write a complete sentence to describe a picture or respond to other prompts. They form regular plural nouns and possessive pronouns, and choose correct sentence-ending punctuation. Communication is clear and complete, although content may contain minor errors. |

Table D. 3 Proficiency Level Descriptors, Grade 1
 and may not be noted in the higher-level descriptors for a grade or grade range.

| Grade 1 | Speaking | Listening | Reading | Writing |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ \text { Beginning } \end{gathered}$ | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. |
| $\mathbf{2}$ Early Intermediate | Early Intermediate students typically use basic vocabulary and simple phrases to name or describe common objects and express opinions or preferences in social and academic situations. They narrate a story related to a sequence of pictures about school-related activities using basic vocabulary. Restricted vocabulary and developing grammar limit expression. Errors frequently impede communication. | Early Intermediate students typically follow some simple oral directions using knowledge of everyday tasks and basic academic vocabulary. They identify common shapes, letters, numbers, and familiar locations. They identify details in simple oral stories. Their restricted vocabulary and developing grammar limit comprehension. Errors frequently impede communication and comprehension. | Early Intermediate students typically identify capital and lowercase letters in isolation, identify beginning, middle, and ending sounds, and recall main ideas and important details in simple text. They apply letter-sound relationships. Their restricted vocabulary and developing grammar limit comprehension. Errors frequently impede comprehension. | Early Intermediate students typically copy simple sentences and write one or more words to describe or explain a picture. They select grammatically correct sentences from a set of choices. Their restricted vocabulary and developing grammar limit expression. Errors frequently impede communication. |
| 3 <br> Intermediate | Intermediate students typically use appropriate words and phrases when conducting transactions, making requests, and asking for clarification in social and academic settings. They narrate a story related to a sequence of pictures about school-related activities using mostly accurate, although limited, vocabulary. They provide mostly clear information although errors interfere with communication. | Intermediate students typically follow simple oral directions and identify locations. They identify main ideas and draw simple inferences in simple oral stories. Errors interfere with communication and comprehension. | Intermediate students typically decode basic words and match text to pictures. Students make simple inferences and recognize words related to spatial relationships. Errors interfere with comprehension. | Intermediate students typically write words, phrases, or sentences that attempt to describe or explain a picture. They are beginning to recognize sentences illustrating correct grammar, proper subject/verb agreement, and correct pluralization and capitalization. They have limited range of vocabulary knowledge. Errors interfere with communication. |
| 4 <br> Proficient | Proficient students typically produce simple and accurate sentences when making requests and asking for clarifications. They use appropriate words and phrases to label and describe the purpose of less common objects. They narrate a story related to a sequence of pictures about school-related activities using accurate vocabulary. Minor errors do not interfere with communication. | Proficient students typically follow oral directions to distinguish the location of an object in relation to another object, recall details in an oral story, and draw inferences. They identify main ideas in more complex stories. | Proficient students typically identify rhyming words, match basic text to pictures, make inferences, recall details and main ideas in short passages, and read simple sentences independently. Errors do not interfere with comprehension. | Proficient students typically use correct basic grammar, capitalize the beginning of a sentence, and use correct ending punctuation in declarative, interrogative, and imperative sentences. They identify standard sentence structure and generate descriptive and explanatory sentences. Errors do not interfere with communication. |
| 5 Above Proficient | Above Proficient students typically produce simple sentences and use correct grammar when making requests and conducting transactions in the classroom or describing familiar social situations or a process. They narrate a story with extensive and accurate vocabulary and grammar appropriate to their age. | Above Proficient students typically recall details and the sequence of events, and determine main ideas in oral stories that have advanced vocabulary. | Above Proficient students use context clues to determine meanings of words, recall subtle details, and determine sequence in short passages. They use interpretation and inference to comprehend a story. Students recognize words that relate to spatial relationships. | Above Proficient students typically write a complete sentence to describe a picture or respond to other prompts. They form regular plural nouns and possessive pronouns, and choose correct sentence-ending punctuation. Communication is clear and complete, although content may contain minor errors. |

## Table D. 4 Proficiency Level Descriptors, Grades 2-3

 and may not be noted in the higher-level descriptors for a grade or grade range.

| Grades 2-3 | Speaking | Listening | Reading | Writing |
| :---: | :---: | :---: | :---: | :---: |
| 1 <br> Beginning | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. |
| $\mathbf{2}$ Early Intermediate | Early Intermediate students typically use basic vocabulary and grammar, and simple phrases or sentences to make requests or comparisons, ask questions, express opinions or preferences, or describe a sequence of pictures about familiar events and situations. Errors frequently impede communication. | Early Intermediate students typically follow simple oral directions and identify highfrequency vocabulary. They identify a few details and draw simple inferences in oral stories. Errors frequently impede communication and comprehension. | Early Intermediate students typically understand word meanings and synonyms, possess basic knowledge of morphemes and syllables, identify one-syllable words, recognize simple rhyming words, and make simple inferences. Errors frequently impede comprehension. | Early Intermediate students typically describe, explain, or express ideas in sentences. They make simple comparisons. Students demonstrate basic vocabulary knowledge and grammar skills such as use of auxiliary verbs, verb tenses, and conjunctions. Errors frequently impede communication. |
| 3 <br> Intermediate | Intermediate students typically use appropriate words and phrases when expressing a preference, asking questions, providing information and explanations, naming common objects, and describing common functions. They produce mostly accurate sentences when narrating simple stories about familiar events and situations. Errors interfere with communication. | Intermediate students typically understand a limited range of vocabulary. They recall details, identify main ideas, and draw inferences in more complex oral stories. Errors interfere with communication and comprehension. | Intermediate students typically match words to definitions or descriptions, interpret words and basic phrases, and apply knowledge of morphemes and syllables. They recall stated details and main ideas, make inferences, and determine characters' feelings. Errors interfere with comprehension. | Intermediate students typically respond to various prompts or pictures using multiple sentences. Students make simple predictions and express some opinions in response to pictures. Meaning is somewhat clear although vocabulary may be limited. They identify appropriate verb forms and articles based on contextual clues. Errors interfere with communication. |
| $4$ <br> Proficient | Proficient students typically produce complete sentences with few grammatical and vocabulary errors when describing situations, explaining their reasoning, or narrating a story. They use broad vocabulary to accurately express opinions or preferences and ask appropriate questions. Minor errors do not interfere with communication. | Proficient students typically understand academic vocabulary and follow some complex directions. They recall subtle details, determine main ideas, and identify speaker purpose. | Proficient students typically identify synonyms of social and academic vocabulary and interpret words and phrases. They use context clues to determine meaning, recall implicit details and main ideas, draw complex inferences, identify literary features, and transfer concepts to new situations. Errors do not interfere with comprehension. | Proficient students typically make predictions and express opinions in response to pictures using complete sentences. They use correct auxiliary verb forms and verb tenses and correctly use writing conventions such as capitalization and punctuation. They organize and write responses in logical and sequential order. Errors do not interfere with communication. |
| 5 <br> Above <br> Proficient | Above Proficient students typically produce sentences with sophisticated vocabulary and correct grammar when providing information, describing situations, or explaining their reasoning. | Above Proficient students typically recall details and sequence of events, and determine main ideas in oral stories that have advanced vocabulary. | Above Proficient students typically identify two-syllable words and rhyming words written with digraphs, use common multiple-meaning words, and recognize synonyms. They determine story sequence and details of fictional and academic texts, make generalizations, and use self-monitoring techniques to check for understanding. | Above Proficient students typically write fluently to a variety of pictures, prompts, or purposes with precise vocabulary and ease of expression. They use correct verb tenses and subject/verb agreement, appropriate articles and punctuation. Responses contain few digressions or repetitions. Communication is clear and complete, though it may contain minor errors. |

## Table D. 5 Proficiency Level Descriptors, Grades 4-5

 and may not be noted in the higher-level descriptors for a grade or grade range.

| Grades 4-5 | Speaking | Listening | Reading | Writing |
| :---: | :---: | :---: | :---: | :---: |
| $\begin{gathered} 1 \\ \text { Beginning } \end{gathered}$ | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. |
| $\mathbf{2}$ Early Intermediate | Early Intermediate students typically use basic vocabulary and grammar and simple sentences to identify common objects and describe their function, provide basic information, make requests, ask questions, and express opinions or preferences. They construct a narrative from a sequence of pictures about familiar events and school-related activities and compare and contrast information found in texts and graphic organizers using basic vocabulary. Errors frequently impede communication. | Early Intermediate students typically follow some simple oral directions and understand common vocabulary and idiomatic expressions. They identify details. Errors frequently impede communication and comprehension. | Early Intermediate students typically interpret basic words and phrases and identify some main ideas and details in simple text. Errors frequently impede comprehension. | Early Intermediate students typically write sentences using basic vocabulary and grammar to describe and discuss text, interpret graphic organizers, and compare and contrast information. Errors in organization, grammar, word choice, and mechanics frequently impede communication. |
| 3 <br> Intermediate | Intermediate students typically use appropriate words and phrases and complete sentences when making requests, expressing opinions or preferences, providing information, and describing locations. They construct a narrative from a sequence of pictures and compare and contrast information found in texts and graphic organizers using mostly accurate, although limited, vocabulary. Errors interfere with communication. | Intermediate students typically follow oral directions and interpret both basic vocabulary and idiomatic expressions. They identify some main ideas and make simple inferences from passages and understand details within graphic organizers. Errors interfere with communication and comprehension. | Intermediate students typically use knowledge of high-frequency affixes to determine word meanings. They recall main ideas and stated details in text, and interpret simple words and phrases. Errors interfere with comprehension. | Intermediate students typically respond appropriately to various verbal prompts or graphic organizers by using complete sentences that exhibit correct basic grammar. Meaning is somewhat clear, although vocabulary may be limited. They demonstrate a grasp of pronouns, prepositions, auxiliary verbs and verb tenses. Errors in organization, grammar, word choice, and mechanics interfere with communication. |
| 4 <br> Proficient | Proficient students typically produce complete sentences when providing information, asking questions, explaining a process, expressing an opinion, and narrating a story. They organize responses in logical and sequential order. They accurately identify and compare and contrast features of less common objects. Minor errors do not interfere with communication | Proficient students typically follow multistep directions using academic vocabulary, recall details, identify main ideas, and determine sequence of steps in classroom discussions and lessons. They draw inferences from more complex oral stories and interpret tables and other graphic organizers. | Proficient students typically use knowledge of more advanced affixes to determine word meanings. They identify synonyms, use context clues to determine word meanings, and interpret slightly complex words and phrases. They read for specific information in graphic organizers, infer information, and draw conclusions. Errors do not interfere with comprehension. | Proficient students typically write complete sentences with mostly accurate vocabulary and grammar that demonstrates appropriate use of punctuation, prepositional phrases, and other conventions. They summarize passages; interpret, compare, and contrast information from graphic organizers and from implicit and explicit context clues; and organize and write responses to openended questions in logical and sequential order. Errors do not interfere with communication. |
| 5 <br> Above <br> Proficient | Above Proficient students typically produce sentences with sophisticated vocabulary and correct grammar when providing information, describing situations, asking questions, expressing opinions and subtle nuances of meanings, and explaining processes and their reasoning. They create a detailed and structured narrative. | Above Proficient students typically follow directions that use verb phrases and determine key information to summarize a task. They recall subtle details, identify main ideas and speaker purpose, and draw sophisticated inferences from classroom discussions and lessons. | Above Proficient students typically identify synonyms and antonyms of less familiar words and interpret complex words and phrases. They use prediction, determine story sequence, and use selfmonitoring techniques to check for understanding. | Above Proficient students typically write fluently in response to a variety of prompts and purposes. They skillfully organize, interpret, summarize, and evaluate information from texts and graphic organizers. Communication is clear and complete, though it may contain minor errors. |

## Table D. 6 Proficiency Level Descriptors, Grades 6-8

Please note that the performance level descriptors represent a progression of skills and abilities. Skills and abilities specified in lower-performance levels are likely demonstrated by students in the higher-performance levels and may not be noted in the higher-level descriptors for a grade or grade range.

| Grades 6-8 | Speaking | Listening | Reading | Writing |
| :---: | :---: | :---: | :---: | :---: |
| $\stackrel{1}{\text { Beginning }}$ | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. |
| 2 <br> Early <br> Intermediate | Early Intermediate students typically produce simple sentences using basic vocabulary and grammar when describing social situations, giving instructions, and identifying locations. They construct a narrative from a sequence of pictures about familiar events and schoolrelated activities and compare and contrast information found in texts and graphic organizers. Errors frequently impede communication. | Early Intermediate students typically follow simple oral directions and understand common vocabulary and idiomatic expressions. They identify details. Errors frequently impede communication and comprehension. | Early Intermediate students typically follow simple oral directions and understand common vocabulary and idiomatic expressions. They identify some details. Errors frequently impede comprehension. | Early Intermediate students typically write complete sentences using basic vocabulary and grammar to describe, explain, or compare verbal or graphic prompts. They respond to simple open-ended questions and summarize simple passages. Errors in organization, grammar, word choice, and mechanics frequently impede communication. |
| 3 <br> Intermediate | Intermediate students typically use appropriate words and phrases and complete sentences when expressing opinions, providing information, conducting transactions, or describing common functions. They describe common social situations and narrate simple stories. Grammatical or vocabulary errors interfere with communication, but the intended meaning is somewhat clear. | Intermediate students typically follow multistep directions that use academic vocabulary. They recall details from class discussions or short oral stories and identify the main purpose of conversation. They interpret graphic organizers and extrapolate conclusions from discussions. Errors interfere with communication and comprehension. | Intermediate students identify synonyms of familiar social and academic vocabulary and interpret common idioms using context clues. They distinguish main ideas from supporting details and draw inferences from clues in text. Errors interfere with comprehension. | Intermediate students typically write complete sentences to describe, explain, or compare or contrast verbal or graphic prompts. They write responses to open-ended questions and summarize passages. They use sentence-ending punctuation, pronouns, prepositional phrases, auxiliary verbs, and verb tenses. Responses have limited range of vocabulary. Errors in organization, grammar, word choice, and mechanics interfere with communication. |
| $\begin{gathered} 4 \\ \text { Proficient } \end{gathered}$ | Proficient students typically produce complete sentences to express opinions, provide information, conduct transactions, make a request, explain processes, give instructions, and describe social situations. They produce generally fluent narratives with some hesitations or self-corrections that do not obscure meaning. They organize responses in logical and sequential order and incorporate idiomatic expressions. Speech is coherent and clear but lacks elaboration or detail. | Proficient students typically follow complex multistep directions. They determine main ideas, infer directions, draw simple conclusions and predict logical outcomes in oral stories. They understand metaphorical language and uncommon idiomatic expressions, and recognize technical academic vocabulary. | Proficient students interpret idioms and determine synonyms of gradelevel words. They recall stated and implicit details in a variety of genres, identify specific information in graphic organizers, and determine main ideas in fiction and academic texts. They analyze the structure of texts and identify literary techniques. Errors do not interfere with comprehension. | Proficient students typically write logicallysequenced responses that incorporate idiomatic expressions and convey original thought in response to open-ended prompts. They accurately interpret pictures or graphical information. They use correct verb tense and agreement, subordinating conjunctions, capitalization, punctuation, and adjective and adverb placement. Errors do not interfere with communication. |
| $\begin{gathered} \mathbf{5} \\ \text { Above } \\ \text { Proficient } \end{gathered}$ | Above Proficient students typically produce sentences with sophisticated vocabulary and correct grammar and subtle nuances of meaning, when expressing opinions, providing information, making requests, identifying and describing objects, and explaining processes and their reasoning. They produce detailed narratives of complex structure and skillfully organize information for presentations. | Above Proficient students typically follow complex instructions, recall subtle details, determine and evaluate key information to summarize a task, and make sophisticated inferences and predictions from classroom discussions or lengthy oral stories. They understand increasingly abstract idiomatic expressions, locate new information in a wider context, and distinguish relevant from extraneous information. | Above Proficient students typically identify synonyms and antonyms, interpret less familiar idioms, apply word definitions, and restate meanings in variant language. They prioritize main and supporting details, and read closely to make logical inferences. They use prediction to read fluently and to identify author's purpose and literary techniques. | Above Proficient students typically craft original responses to prompts, fluently conveying sequenced logical exposition. Students respond to open-ended questions requiring them to extrapolate from information indicated in prompts, interpret and synthesize complex information from graphic organizers, draw sophisticated inferences, explain reasoning, and express and support opinions. Minor errors are possible, but generally negligible. |

Table D. 7 Proficiency Level Descriptors, Grades 9-12

 | and may not be noted in the higher-level descriptors for a grade or grade range. |
| :--- |
| Grades 9-12 |

| Grades 9-12 | Speaking | Listening | Reading | Writing |
| :---: | :---: | :---: | :---: | :---: |
| 1 <br> Beginning | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. | Beginning students are starting to develop receptive and productive skills in English. |
| $\mathbf{2}$ Early Intermediate | Early Intermediate students typically produce simple sentences using basic vocabulary and grammar when interpreting language related to social, school, and academic contexts, explaining personal preferences or describing a sequence of pictures about familiar events and social situations. Minimal vocabulary and grammar knowledge and errors frequently impede communication. | Early Intermediate students typically follow multistep directions. They identify main ideas and draw simple inferences and conclusions. Errors frequently impede communication and comprehension. | Early intermediate students recall simple information from text, identify main ideas and supporting details, and make simple inferences. They identify common idiomatic expressions and paraphrase passages. Errors frequently impede comprehension. | Early Intermediate students typically write complete sentences using basic vocabulary and grammar to express ideas. They compare and summarize information found in texts or graphic organizers. They demonstrate a basic knowledge of auxiliary verbs, pronouns, and conjunctions. Errors in organization, grammar, word choice, and mechanics frequently impede communication. |
| 3 <br> Intermediate | Intermediate students typically use appropriate words and phrases and complete sentences when providing information, expressing preferences, conducting transactions, and describing personal experiences. They describe social situations, give instructions, and narrate a simple story. Intended meaning is mostly clear, but sometimes requires comprehension-check questions. They are capable of communicating some nuances of meaning. Grammatical or vocabulary errors interfere with communication, but the intended meaning is somewhat clear. | Intermediate students typically interpret simple academic vocabulary and idiomatic expressions. They extrapolate logical outcomes, place new information in a broader context, and recall details from classroom discussions or oral stories. Errors interfere with communication and comprehension. | Intermediate students typically use knowledge of high-frequency affixes and context clues to determine word meanings and identify synonyms of high-frequency social and academic vocabulary. From a simple narrative, they recall stated and implicit details, distinguish main ideas, compare and contrast information, draw conclusions, and make some inferences. Errors interfere with comprehension. | Intermediate students typically use correct basic grammar and begin to demonstrate use of conjunctions in compound sentences. They summarize texts and analyze information in graphic organizers. Meaning is somewhat clear, although vocabulary may be limited. Errors interfere with communication. |
| 4 <br> Proficient | Proficient students typically use complete sentences to express opinions, explain processes, conduct transactions, and describe personal experiences. They use accurate vocabulary and grammar to describe the purpose of less common objects and fluently narrate stories with creative detail. They organize responses in logical and sequential order and incorporate idiomatic expressions. They convey subtle distinctions through rich, specific, and varied vocabulary. | Proficient students typically interpret idiomatic expressions and complex academic vocabulary and concepts. They distinguish essential details and nuances of meaning, synthesize answers from fragmentary information, and determine key information to summarize a task from complex narratives and discussions. | Proficient students typically draw complex conclusions from lengthy passages and distinguish nuances of meanings. They interpret alternate expressions of ideas, analyze the organization of passages, and identify theme, tone, and author purpose. Errors do not interfere with comprehension. | Proficient students typically write fluently, using complete sentences with accurate vocabulary to interpret texts and graphical information, while distinguishing nuances of meaning. They incorporate idiomatic expressions and produce responses to open-ended questions and write summaries and comparisons that correctly use verb forms, capitalization, punctuation, and advanced grammar. Responses exhibit minor errors in grammar and content organization that do not interfere with communication. |
| Above <br> Proficient | Above Proficient students typically produce complex sentences with sophisticated and precise vocabulary and correct grammar. They convey detailed academic content and expressive nuances of meaning and skillfully organize information for presentations. | Above Proficient students typically interpret more complex grammar and academic vocabulary to follow complex instructions. They use context clues to interpret new vocabulary and draw conclusions about characters in oral stories. They distinguish subtleties of tone and point of view, recall extensive details, grasp abstract and uncommon idiomatic expressions, and analyze the structure of oral passages. | Above Proficient students recognize uncommon synonyms, subtle gradations of meanings using context clues, and unfamiliar idioms. They use prediction to read fluently, make inferences from challenging texts, synthesize text, recognize literary techniques, and use self-monitoring techniques to check for understanding. | Above Proficient students typically write using precise, sophisticated, and varied vocabulary. They demonstrate fluent and varied expression, express subtle nuances of meaning, and expand responses to prompts using related background knowledge. Minor errors are possible, but generally negligible. |

## Appendix E Scoring Tables

## Form C

Table E. 1 Form C Kindergarten Scoring Table


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Table E. 2 Form C Grade 1 Scoring Table

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 300 | 58 |  |
| 1 | 343 | 30 |  |
| 2 | 367 | 21 |  |
| 3 | 382 | 16 |  |
| 4 | 392 | 14 |  |
| 5 | 400 | 12 |  |
| 6 | 406 | 10 | 1 |
| 7 | 411 | 9 | 1 |
| 8 | 415 | 9 |  |
| 9 | 419 | 8 |  |
| 10 | 422 | 8 |  |
| 11 | 425 | 8 |  |
| 12 | 428 | 7 |  |
| 13 | 431 | 7 |  |
| 14 | 433 | 7 |  |
| 15 | 436 | 7 |  |
| 16 | 438 | 7 |  |
| 17 | 441 | 7 |  |
| 18 | 443 | 7 |  |
| 19 | 445 | 7 |  |
| 20 | 447 | 7 | 2 |
| 21 | 450 | 7 |  |
| 22 | 452 | 7 |  |
| 23 | 454 | 7 |  |
| 24 | 456 | 7 |  |
| 25 | 459 | 7 |  |
| 26 | 461 | 7 |  |
| 27 | 464 | 7 |  |
| 28 | 466 | 7 |  |
| 29 | 469 | 7 |  |
| 30 | 472 | 8 |  |
| 31 | 475 | 8 | 3 |
| 32 | 479 | 8 |  |
| 33 | 482 | 9 |  |
| 34 | 486 | 9 |  |
| 35 | 491 | 10 |  |
| 36 | 497 | 11 |  |
| 37 | 504 | 12 |  |
| 38 | 513 | 15 |  |
| 39 | 528 | 20 |  |
| 40 | 580 | 72 | 5 |
|  |  |  |  |
|  |  |  |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 300 | 117 |  | 0 | 240 | 120 |  |
| 1 | 300 | 117 |  | 1 | 240 | 120 |  |
| 2 | 300 | 117 |  | 2 | 240 | 120 |  |
| 3 | 300 | 117 |  | 3 | 240 | 120 |  |
| 4 | 300 | 117 |  | 4 | 240 | 120 |  |
| 5 | 300 | 117 |  | 5 | 240 | 120 |  |
| 6 | 368 | 49 | 1 | 6 | 240 | 120 |  |
| 7 | 391 | 26 |  | 7 | 240 | 120 | 1 |
| 8 | 402 | 18 |  | 8 | 257 | 103 |  |
| 9 | 410 | 15 |  | 9 | 301 | 59 |  |
| 10 | 416 | 13 |  | 10 | 321 | 39 |  |
| 11 | 422 | 12 |  | 11 | 334 | 26 |  |
| 12 | 427 | 11 |  | 12 | 343 | 20 |  |
| 13 | 433 | 11 |  | 13 | 350 | 17 |  |
| 14 | 439 | 12 | 2 | 14 | 357 | 16 |  |
| 15 | 445 | 13 |  | 15 | 363 | 15 |  |
| 16 | 453 | 14 | 3 | 16 | 369 | 14 |  |
| 17 | 463 | 16 | 3 | 17 | 374 | 14 | 2 |
| 18 | 476 | 20 | 4 | 18 | 380 | 14 |  |
| 19 | 500 | 32 | 4 | 19 | 386 | 13 |  |
| 20 | 530 | 52 | 5 | 20 | 391 | 13 |  |
|  |  |  |  | 21 | 397 | 13 | 3 |
|  |  |  |  | 22 | 403 | 13 | 3 |
|  |  |  |  | 23 | 410 | 13 |  |
|  |  |  |  | 24 | 416 | 13 |  |
|  |  |  |  | 25 | 423 | 13 |  |
|  |  |  |  | 26 | 431 | 14 |  |
|  |  |  |  | 27 | 440 | 15 | 4 |
|  |  |  |  | 28 | 451 | 17 |  |
|  |  |  |  | 29 | 469 | 24 |  |
|  |  |  |  | 30 | 550 | 105 | 5 |

Writing

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | 200 | 64 |  |
| 1 | 200 | 64 |  |
| 2 | 200 | 64 |  |
| 3 | 200 | 64 |  |
| 4 | 200 | 64 |  |
| 5 | 200 | 64 |  |
| 6 | 218 | 59 |  |
| 7 | 247 | 51 | 1 |
| 8 | 270 | 42 |  |
| 9 | 289 | 35 |  |
| 10 | 304 | 29 |  |
| 11 | 317 | 26 |  |
| 12 | 328 | 23 |  |
| 13 | 337 | 22 |  |
| 14 | 346 | 20 |  |
| 15 | 354 | 19 |  |
| 16 | 362 | 19 |  |
| 17 | 369 | 18 |  |
| 18 | 376 | 17 |  |
| 19 | 382 | 17 |  |
| 20 | 388 | 17 |  |
| 21 | 395 | 17 | 2 |
| 22 | 401 | 17 |  |
| 23 | 407 | 17 |  |
| 24 | 413 | 17 |  |
| 25 | 420 | 18 |  |
| 26 | 427 | 19 |  |
| 27 | 436 | 20 |  |
| 28 | 446 | 23 |  |
| 29 | 459 | 27 | 3 |
| 30 | 478 | 35 |  |
| 31 | 516 | 58 | 4 |
| 32 | 630 | 172 | 5 |
|  |  |  |  |

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Table E. 124 Form C Grade 2 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | PL |  |  |
| 0 | 350 | 72 |  |
| 1 | 405 | 17 |  |
| 2 | 417 | 12 |  |
| 3 | 425 | 10 | 1 |
| 4 | 431 | 9 | 1 |
| 5 | 435 | 8 |  |
| 6 | 439 | 7 |  |
| 7 | 442 | 7 |  |
| 8 | 445 | 6 |  |
| 9 | 447 | 6 |  |
| 10 | 450 | 6 |  |
| 11 | 452 | 6 |  |
| 12 | 454 | 5 |  |
| 13 | 456 | 5 |  |
| 14 | 458 | 5 |  |
| 15 | 460 | 5 | 2 |
| 16 | 461 | 5 |  |
| 17 | 463 | 5 |  |
| 18 | 465 | 5 |  |
| 19 | 467 | 5 |  |
| 20 | 469 | 5 |  |
| 21 | 470 | 5 |  |
| 22 | 472 | 5 |  |
| 23 | 474 | 5 |  |
| 24 | 476 | 5 |  |
| 25 | 478 | 5 |  |
| 26 | 480 | 5 |  |
| 27 | 482 | 5 |  |
| 28 | 484 | 5 |  |
| 29 | 486 | 6 | 3 |
| 30 | 488 | 6 |  |
| 31 | 490 | 6 |  |
| 32 | 493 | 6 |  |
| 33 | 496 | 6 |  |
| 34 | 499 | 7 |  |
| 35 | 502 | 7 |  |
| 36 | 505 | 8 |  |
| 37 | 510 | 8 |  |
| 38 | 515 | 10 | 4 |
| 39 | 523 | 12 |  |
| 40 | 535 | 17 |  |
| 41 | 600 | 82 | 5 |
|  |  |  |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 310 | 122 |  |
| 1 | 310 | 122 |  |
| 2 | 310 | 122 |  |
| 3 | 310 | 122 |  |
| 4 | 310 | 122 |  |
| 5 | 368 | 64 | 1 |
| 6 | 398 | 34 |  |
| 7 | 411 | 21 |  |
| 8 | 420 | 16 |  |
| 9 | 427 | 14 |  |
| 10 | 433 | 13 |  |
| 11 | 439 | 13 |  |
| 12 | 446 | 13 |  |
| 13 | 453 | 14 | 2 |
| 14 | 460 | 15 |  |
| 15 | 470 | 17 | 3 |
| 16 | 481 | 20 |  |
| 17 | 495 | 23 | 4 |
| 18 | 513 | 25 | 4 |
| 19 | 538 | 30 | 5 |
| 20 | 560 | 39 | 5 |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | 300 | PL |  |
| 1 | 300 | 129 |  |
| 2 | 300 | 129 |  |
| 3 | 300 | 129 |  |
| 4 | 300 | 129 |  |
| 5 | 300 | 129 |  |
| 6 | 300 | 129 | 1 |
| 7 | 309 | 120 | 1 |
| 8 | 369 | 60 |  |
| 9 | 390 | 39 |  |
| 10 | 403 | 29 |  |
| 11 | 413 | 24 |  |
| 12 | 422 | 21 |  |
| 13 | 430 | 19 |  |
| 14 | 437 | 18 |  |
| 15 | 443 | 17 |  |
| 16 | 450 | 17 | 2 |
| 17 | 456 | 17 |  |
| 18 | 463 | 16 |  |
| 19 | 469 | 16 |  |
| 20 | 476 | 16 |  |
| 21 | 483 | 17 |  |
| 22 | 490 | 17 | 3 |
| 23 | 498 | 17 |  |
| 24 | 507 | 18 |  |
| 25 | 516 | 18 | 4 |
| 26 | 526 | 19 |  |
| 27 | 538 | 21 |  |
| 28 | 553 | 24 |  |
| 29 | 579 | 35 | 5 |
| 30 | 610 | 56 |  |
|  |  |  |  |

Writing

| RS |  | SS | SEM |  | PL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 270 | 80 |  |  |  |
| 1 | 270 | 80 |  |  |  |
| 2 | 270 | 80 |  |  |  |
| 3 | 270 | 80 |  |  |  |
| 4 | 276 | 74 |  |  |  |
| 5 | 310 | 46 |  |  |  |
| 6 | 332 | 37 |  |  |  |
| 7 | 349 | 33 | 1 |  |  |
| 8 | 364 | 30 |  |  |  |
| 9 | 377 | 28 |  |  |  |
| 10 | 388 | 26 |  |  |  |
| 11 | 399 | 24 |  |  |  |
| 12 | 408 | 22 |  |  |  |
| 13 | 417 | 21 |  |  |  |
| 14 | 424 | 19 |  |  |  |
| 15 | 432 | 18 |  |  |  |
| 16 | 438 | 18 |  |  |  |
| 17 | 445 | 17 |  |  |  |
| 18 | 451 | 17 | 2 |  |  |
| 19 | 457 | 17 |  |  |  |
| 20 | 463 | 17 |  |  |  |
| 21 | 470 | 17 |  |  |  |
| 22 | 476 | 17 |  |  |  |
| 23 | 483 | 18 |  |  |  |
| 24 | 490 | 18 | 3 |  |  |
| 25 | 498 | 19 |  |  |  |
| 26 | 507 | 20 |  |  |  |
| 27 | 518 | 22 | 4 |  |  |
| 28 | 530 | 24 |  |  |  |
| 29 | 546 | 28 |  |  |  |
| 30 | 567 | 34 | 5 |  |  |
| 31 | 603 | 49 |  |  |  |
| 32 | 640 | 75 |  |  |  |
|  |  |  |  |  |  |

Table E. 125 Form C Grade 3 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | 350 | PL |  |
| 1 | 405 | 17 |  |
| 2 | 417 | 12 |  |
| 3 | 425 | 10 | 1 |
| 4 | 431 | 9 | 1 |
| 5 | 435 | 8 |  |
| 6 | 439 | 7 |  |
| 7 | 442 | 7 |  |
| 8 | 445 | 6 |  |
| 9 | 447 | 6 |  |
| 10 | 450 | 6 |  |
| 11 | 452 | 6 |  |
| 12 | 454 | 5 |  |
| 13 | 456 | 5 |  |
| 14 | 458 | 5 |  |
| 15 | 460 | 5 | 2 |
| 16 | 461 | 5 |  |
| 17 | 463 | 5 |  |
| 18 | 465 | 5 |  |
| 19 | 467 | 5 |  |
| 20 | 469 | 5 |  |
| 21 | 470 | 5 |  |
| 22 | 472 | 5 |  |
| 23 | 474 | 5 |  |
| 24 | 476 | 5 |  |
| 25 | 478 | 5 |  |
| 26 | 480 | 5 |  |
| 27 | 482 | 5 |  |
| 28 | 484 | 5 |  |
| 29 | 486 | 6 | 3 |
| 30 | 488 | 6 |  |
| 31 | 490 | 6 |  |
| 32 | 493 | 6 |  |
| 33 | 496 | 6 |  |
| 34 | 499 | 7 |  |
| 35 | 502 | 7 |  |
| 36 | 505 | 8 |  |
| 37 | 510 | 8 |  |
| 38 | 515 | 10 | 4 |
| 39 | 523 | 12 |  |
| 40 | 535 | 17 |  |
| 41 | 600 | 82 | 5 |
|  |  |  |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 310 | 122 |  |
| 1 | 310 | 122 |  |
| 2 | 310 | 122 |  |
| 3 | 310 | 122 |  |
| 4 | 310 | 122 |  |
| 5 | 368 | 64 |  |
| 6 | 398 | 34 | 1 |
| 7 | 411 | 21 |  |
| 8 | 420 | 16 |  |
| 9 | 427 | 14 |  |
| 10 | 433 | 13 |  |
| 11 | 439 | 13 |  |
| 12 | 446 | 13 |  |
| 13 | 453 | 14 |  |
| 14 | 460 | 15 | 2 |
| 15 | 470 | 17 |  |
| 16 | 481 | 20 | 3 |
| 17 | 495 | 23 |  |
| 18 | 513 | 25 | 4 |
| 19 | 538 | 30 |  |
| 20 | 560 | 39 | 5 |

Reading

| RS |  | SS | SEM |  | PL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 300 | 129 |  |  |  |
| 1 | 300 | 129 |  |  |  |
| 2 | 300 | 129 |  |  |  |
| 3 | 300 | 129 |  |  |  |
| 4 | 300 | 129 |  |  |  |
| 5 | 300 | 129 |  |  |  |
| 6 | 300 | 129 | 1 |  |  |
| 7 | 309 | 120 | 1 |  |  |
| 8 | 369 | 60 |  |  |  |
| 9 | 390 | 39 |  |  |  |
| 10 | 403 | 29 |  |  |  |
| 11 | 413 | 24 |  |  |  |
| 12 | 422 | 21 |  |  |  |
| 13 | 430 | 19 |  |  |  |
| 14 | 437 | 18 |  |  |  |
| 15 | 443 | 17 |  |  |  |
| 16 | 450 | 17 | 2 |  |  |
| 17 | 456 | 17 |  |  |  |
| 18 | 463 | 16 |  |  |  |
| 19 | 469 | 16 |  |  |  |
| 20 | 476 | 16 |  |  |  |
| 21 | 483 | 17 |  |  |  |
| 22 | 490 | 17 | 3 |  |  |
| 23 | 498 | 17 |  |  |  |
| 24 | 507 | 18 |  |  |  |
| 25 | 516 | 18 | 4 |  |  |
| 26 | 526 | 19 |  |  |  |
| 27 | 538 | 21 |  |  |  |
| 28 | 553 | 24 |  |  |  |
| 29 | 579 | 35 | 5 |  |  |
| 30 | 610 | 56 |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 270 | 80 |  |
| 1 | 270 | 80 |  |
| 2 | 270 | 80 |  |
| 3 | 270 | 80 |  |
| 4 | 276 | 74 |  |
| 5 | 310 | 46 |  |
| 6 | 332 | 37 |  |
| 7 | 349 | 33 | 1 |
| 8 | 364 | 30 |  |
| 9 | 377 | 28 |  |
| 10 | 388 | 26 |  |
| 11 | 399 | 24 |  |
| 12 | 408 | 22 |  |
| 13 | 417 | 21 |  |
| 14 | 424 | 19 |  |
| 15 | 432 | 18 |  |
| 16 | 438 | 18 |  |
| 17 | 445 | 17 |  |
| 18 | 451 | 17 |  |
| 19 | 457 | 17 | 2 |
| 20 | 463 | 17 |  |
| 21 | 470 | 17 |  |
| 22 | 476 | 17 |  |
| 23 | 483 | 18 |  |
| 24 | 490 | 18 |  |
| 25 | 498 | 19 | 3 |
| 26 | 507 | 20 | 3 |
| 27 | 518 | 22 |  |
| 28 | 530 | 24 | 4 |
| 29 | 546 | 28 | 4 |
| 30 | 567 | 34 |  |
| 31 | 603 | 49 | 5 |
| 32 | 640 | 75 |  |
|  |  |  |  |

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Table E. 126 Form C Grade 126 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | PL |  |  |
| 0 | 360 | 37 |  |
| 1 | 366 | 33 |  |
| 2 | 391 | 23 |  |
| 3 | 405 | 18 |  |
| 4 | 416 | 15 | 1 |
| 5 | 424 | 14 | 1 |
| 6 | 430 | 13 |  |
| 7 | 436 | 11 |  |
| 8 | 441 | 11 |  |
| 9 | 446 | 10 |  |
| 10 | 450 | 10 |  |
| 11 | 453 | 9 |  |
| 12 | 457 | 9 |  |
| 13 | 461 | 9 | 2 |
| 14 | 464 | 8 | 2 |
| 15 | 467 | 8 |  |
| 16 | 470 | 8 |  |
| 17 | 473 | 8 |  |
| 18 | 476 | 8 |  |
| 19 | 479 | 8 |  |
| 20 | 482 | 8 |  |
| 21 | 485 | 8 |  |
| 22 | 488 | 8 |  |
| 23 | 491 | 7 |  |
| 24 | 494 | 7 | 3 |
| 25 | 497 | 7 |  |
| 26 | 500 | 7 |  |
| 27 | 503 | 7 |  |
| 28 | 506 | 8 |  |
| 29 | 509 | 8 |  |
| 30 | 513 | 8 |  |
| 31 | 516 | 8 |  |
| 32 | 520 | 8 |  |
| 33 | 523 | 8 |  |
| 34 | 527 | 9 | 4 |
| 35 | 532 | 9 |  |
| 36 | 536 | 10 |  |
| 37 | 542 | 11 |  |
| 38 | 549 | 12 |  |
| 39 | 558 | 15 |  |
| 40 | 575 | 23 |  |
| 41 | 635 | 83 |  |
|  |  |  |  |

Listening

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 350 | 127 |  |
| 1 | 350 | 127 |  |
| 2 | 350 | 127 |  |
| 3 | 350 | 127 |  |
| 4 | 350 | 127 | 1 |
| 5 | 350 | 127 |  |
| 6 | 368 | 109 |  |
| 7 | 416 | 61 |  |
| 8 | 439 | 40 |  |
| 9 | 456 | 32 |  |
| 10 | 470 | 29 | 2 |
| 11 | 483 | 26 | 2 |
| 12 | 495 | 25 |  |
| 13 | 508 | 25 | 3 |
| 14 | 521 | 25 |  |
| 15 | 534 | 26 |  |
| 16 | 550 | 28 | 4 |
| 17 | 569 | 31 |  |
| 18 | 593 | 36 |  |
| 19 | 631 | 49 | 5 |
| 20 | 640 | 54 |  |

Reading

| RS |  |  |  |
| :---: | :---: | :---: | :---: |
| SS | SEM |  | PL |
| 0 | 360 | 117 |  |
| 1 | 360 | 117 |  |
| 2 | 360 | 117 |  |
| 3 | 360 | 117 |  |
| 4 | 360 | 117 | 1 |
| 5 | 360 | 117 | 1 |
| 6 | 395 | 82 |  |
| 7 | 427 | 50 |  |
| 8 | 445 | 35 |  |
| 9 | 458 | 28 |  |
| 10 | 469 | 24 |  |
| 11 | 478 | 22 |  |
| 12 | 486 | 20 | 2 |
| 13 | 494 | 19 |  |
| 14 | 502 | 18 |  |
| 15 | 509 | 18 |  |
| 16 | 516 | 17 | 3 |
| 17 | 523 | 17 |  |
| 18 | 529 | 17 |  |
| 19 | 536 | 17 |  |
| 20 | 543 | 17 |  |
| 21 | 551 | 17 |  |
| 22 | 559 | 18 | 4 |
| 23 | 567 | 18 |  |
| 24 | 576 | 19 |  |
| 25 | 586 | 21 |  |
| 26 | 598 | 23 |  |
| 27 | 612 | 26 |  |
| 28 | 633 | 33 | 5 |
| 29 | 669 | 51 |  |
| 30 | 680 | 59 |  |
|  |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 290 | 122 |  |
| 1 | 290 | 122 |  |
| 2 | 290 | 122 |  |
| 3 | 338 | 74 |  |
| 4 | 372 | 43 | 1 |
| 5 | 392 | 32 |  |
| 6 | 406 | 26 |  |
| 7 | 418 | 23 |  |
| 8 | 428 | 21 |  |
| 9 | 437 | 20 |  |
| 10 | 445 | 19 |  |
| 11 | 453 | 18 |  |
| 12 | 460 | 18 |  |
| 13 | 467 | 18 | 2 |
| 14 | 475 | 18 |  |
| 15 | 482 | 18 |  |
| 16 | 489 | 18 |  |
| 17 | 497 | 18 |  |
| 18 | 504 | 18 |  |
| 19 | 512 | 18 | 3 |
| 20 | 520 | 18 | 3 |
| 21 | 528 | 18 |  |
| 22 | 536 | 19 |  |
| 23 | 544 | 19 |  |
| 24 | 553 | 19 | 4 |
| 25 | 562 | 20 |  |
| 26 | 571 | 20 |  |
| 27 | 582 | 21 |  |
| 28 | 594 | 23 |  |
| 29 | 609 | 26 |  |
| 30 | 628 | 31 | 5 |
| 31 | 661 | 45 |  |
| 32 | 680 | 56 |  |
|  |  |  |  |

Table E. 127 Form C Grade 127 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | 360 | 37 | PL |
| 1 | 366 | 33 |  |
| 2 | 391 | 23 |  |
| 3 | 405 | 18 |  |
| 4 | 416 | 15 | 1 |
| 5 | 424 | 14 | 1 |
| 6 | 430 | 13 |  |
| 7 | 436 | 11 |  |
| 8 | 441 | 11 |  |
| 9 | 446 | 10 |  |
| 10 | 450 | 10 |  |
| 11 | 453 | 9 |  |
| 12 | 457 | 9 |  |
| 13 | 461 | 9 | 2 |
| 14 | 464 | 8 |  |
| 15 | 467 | 8 |  |
| 16 | 470 | 8 |  |
| 17 | 473 | 8 |  |
| 18 | 476 | 8 |  |
| 19 | 479 | 8 |  |
| 20 | 482 | 8 |  |
| 21 | 485 | 8 |  |
| 22 | 488 | 8 |  |
| 23 | 491 | 7 |  |
| 24 | 494 | 7 | 3 |
| 25 | 497 | 7 |  |
| 26 | 500 | 7 |  |
| 27 | 503 | 7 |  |
| 28 | 506 | 8 |  |
| 29 | 509 | 8 |  |
| 30 | 513 | 8 |  |
| 31 | 516 | 8 |  |
| 32 | 520 | 8 |  |
| 33 | 523 | 8 |  |
| 34 | 527 | 9 | 4 |
| 35 | 532 | 9 | 4 |
| 36 | 536 | 10 |  |
| 37 | 542 | 11 |  |
| 38 | 549 | 12 |  |
| 39 | 558 | 15 |  |
| 40 | 575 | 23 |  |
| 41 | 635 | 83 |  |
|  |  |  |  |

Listening

| RS |  |  |  |
| :---: | :---: | :---: | :---: |
| SS | SEM | PL |  |
| 0 | 350 | 127 |  |
| 1 | 350 | 127 |  |
| 2 | 350 | 127 |  |
| 3 | 350 | 127 |  |
| 4 | 350 | 127 |  |
| 5 | 350 | 127 |  |
| 6 | 368 | 109 |  |
| 7 | 416 | 61 |  |
| 8 | 439 | 40 |  |
| 9 | 456 | 32 |  |
| 10 | 470 | 29 | 2 |
| 11 | 483 | 26 | 2 |
| 12 | 495 | 25 |  |
| 13 | 508 | 25 | 3 |
| 14 | 521 | 25 |  |
| 15 | 534 | 26 |  |
| 16 | 550 | 28 | 4 |
| 17 | 569 | 31 |  |
| 18 | 593 | 36 |  |
| 19 | 631 | 49 | 5 |
| 20 | 640 | 54 |  |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | PL |  |  |
| 1 | 360 | 117 |  |
| 2 | 360 | 117 |  |
| 3 | 360 | 117 | 117 |
| 4 | 360 | 117 |  |
| 5 | 360 | 117 | 1 |
| 6 | 395 | 82 |  |
| 7 | 427 | 50 |  |
| 8 | 445 | 35 |  |
| 9 | 458 | 28 |  |
| 10 | 469 | 24 |  |
| 11 | 478 | 22 |  |
| 12 | 486 | 20 | 2 |
| 13 | 494 | 19 | 2 |
| 14 | 502 | 18 |  |
| 15 | 509 | 18 |  |
| 16 | 516 | 17 | 3 |
| 17 | 523 | 17 | 3 |
| 18 | 529 | 17 |  |
| 19 | 536 | 17 |  |
| 20 | 543 | 17 |  |
| 21 | 551 | 17 |  |
| 22 | 559 | 18 | 4 |
| 23 | 567 | 18 |  |
| 24 | 576 | 19 |  |
| 25 | 586 | 21 |  |
| 26 | 598 | 23 |  |
| 27 | 612 | 26 |  |
| 28 | 633 | 33 | 5 |
| 29 | 669 | 51 |  |
| 30 | 680 | 59 |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 290 | 122 |  |
| 1 | 290 | 122 |  |
| 2 | 290 | 122 |  |
| 3 | 338 | 74 |  |
| 4 | 372 | 43 | 1 |
| 5 | 392 | 32 |  |
| 6 | 406 | 26 |  |
| 7 | 418 | 23 |  |
| 8 | 428 | 21 |  |
| 9 | 437 | 20 |  |
| 10 | 445 | 19 |  |
| 11 | 453 | 18 |  |
| 12 | 460 | 18 |  |
| 13 | 467 | 18 | 2 |
| 14 | 475 | 18 |  |
| 15 | 482 | 18 |  |
| 16 | 489 | 18 |  |
| 17 | 497 | 18 |  |
| 18 | 504 | 18 |  |
| 19 | 512 | 18 |  |
| 20 | 520 | 18 | 3 |
| 21 | 528 | 18 |  |
| 22 | 536 | 19 |  |
| 23 | 544 | 19 |  |
| 24 | 553 | 19 |  |
| 25 | 562 | 20 | 4 |
| 26 | 571 | 20 |  |
| 27 | 582 | 21 |  |
| 28 | 594 | 23 |  |
| 29 | 609 | 26 |  |
| 30 | 628 | 31 | 5 |
| 31 | 661 | 45 |  |
| 32 | 680 | 56 |  |
|  |  |  |  |

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## Table E. 128 Form C Grade 128 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 365 | 51 |  |
| 1 | 365 | 51 |  |
| 2 | 403 | 31 |  |
| 3 | 423 | 21 | 1 |
| 4 | 435 | 16 |  |
| 5 | 444 | 13 |  |
| 6 | 450 | 11 |  |
| 7 | 455 | 10 |  |
| 8 | 459 | 9 |  |
| 9 | 463 | 9 |  |
| 10 | 467 | 8 | 2 |
| 11 | 470 | 8 |  |
| 12 | 473 | 7 |  |
| 13 | 475 | 7 |  |
| 14 | 478 | 7 |  |
| 15 | 481 | 7 |  |
| 16 | 483 | 7 |  |
| 17 | 486 | 7 |  |
| 18 | 488 | 7 |  |
| 19 | 491 | 7 |  |
| 20 | 493 | 7 | 3 |
| 21 | 496 | 7 |  |
| 22 | 498 | 7 |  |
| 23 | 501 | 7 |  |
| 24 | 503 | 7 |  |
| 25 | 506 | 7 |  |
| 26 | 509 | 7 |  |
| 27 | 512 | 7 |  |
| 28 | 515 | 7 |  |
| 29 | 518 | 7 |  |
| 30 | 521 | 8 |  |
| 31 | 524 | 8 |  |
| 32 | 528 | 8 | 4 |
| 33 | 532 | 8 |  |
| 34 | 536 | 9 |  |
| 35 | 541 | 10 |  |
| 36 | 547 | 11 |  |
| 37 | 554 | 14 |  |
| 38 | 567 | 21 |  |
| 39 | 592 | 37 | 5 |
| 40 | 645 | 89 |  |
|  |  |  |  |

Listening

| RS |  |  |  |
| :---: | :---: | :---: | :---: |
| SS | SEM | PL |  |
| 0 | 360 | 115 |  |
| 1 | 360 | 115 |  |
| 2 | 360 | 115 |  |
| 3 | 360 | 115 |  |
| 4 | 360 | 115 |  |
| 5 | 360 | 115 | 1 |
| 6 | 360 | 115 |  |
| 7 | 385 | 90 |  |
| 8 | 422 | 53 |  |
| 9 | 441 | 36 |  |
| 10 | 455 | 30 |  |
| 11 | 468 | 27 | 2 |
| 12 | 479 | 27 | 2 |
| 13 | 491 | 27 |  |
| 14 | 504 | 27 | 3 |
| 15 | 517 | 28 |  |
| 16 | 530 | 28 |  |
| 17 | 545 | 29 |  |
| 18 | 561 | 30 | 4 |
| 19 | 579 | 32 |  |
| 20 | 601 | 35 |  |
| 21 | 627 | 38 |  |
| 22 | 665 | 48 | 5 |
| 23 | 680 | 55 |  |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | 380 | 113 |  |
| 1 | 380 | 113 |  |
| 2 | 380 | 113 |  |
| 3 | 380 | 113 |  |
| 4 | 380 | 113 |  |
| 5 | 380 | 113 |  |
| 6 | 414 | 79 | 1 |
| 7 | 445 | 48 |  |
| 8 | 462 | 35 |  |
| 9 | 476 | 28 |  |
| 10 | 487 | 25 |  |
| 11 | 496 | 24 |  |
| 12 | 506 | 22 |  |
| 13 | 514 | 21 | 2 |
| 14 | 522 | 20 |  |
| 15 | 530 | 20 |  |
| 16 | 538 | 19 | 3 |
| 17 | 545 | 19 | 3 |
| 18 | 553 | 19 |  |
| 19 | 561 | 18 |  |
| 20 | 568 | 18 |  |
| 21 | 576 | 18 |  |
| 22 | 584 | 19 | 4 |
| 23 | 593 | 19 |  |
| 24 | 602 | 19 |  |
| 25 | 612 | 20 |  |
| 26 | 623 | 20 |  |
| 27 | 635 | 21 | 5 |
| 28 | 651 | 24 |  |
| 29 | 676 | 35 |  |
| 30 | 690 | 43 |  |
|  |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 300 | 152 |  |
| 1 | 300 | 152 |  |
| 2 | 300 | 152 |  |
| 3 | 382 | 70 | 1 |
| 4 | 413 | 39 |  |
| 5 | 431 | 29 |  |
| 6 | 444 | 24 |  |
| 7 | 455 | 21 |  |
| 8 | 464 | 20 |  |
| 9 | 472 | 19 | 2 |
| 10 | 480 | 18 | 2 |
| 11 | 487 | 18 |  |
| 12 | 494 | 18 |  |
| 13 | 502 | 18 |  |
| 14 | 509 | 18 |  |
| 15 | 516 | 18 |  |
| 16 | 524 | 18 | 3 |
| 17 | 531 | 18 |  |
| 18 | 539 | 18 |  |
| 19 | 547 | 18 |  |
| 20 | 555 | 18 |  |
| 21 | 563 | 18 |  |
| 22 | 572 | 18 | 4 |
| 23 | 580 | 18 |  |
| 24 | 589 | 18 |  |
| 25 | 599 | 19 |  |
| 26 | 609 | 20 |  |
| 27 | 620 | 21 |  |
| 28 | 633 | 22 | 5 |
| 29 | 648 | 25 |  |
| 30 | 669 | 31 |  |
| 31 | 702 | 44 |  |
| 32 | 710 | 47 |  |
|  |  |  |  |

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Table E. 129 Form C Grade 129 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| PL |  |  |  |
| 0 | 365 | 51 |  |
| 1 | 365 | 51 |  |
| 2 | 403 | 31 |  |
| 3 | 423 | 21 | 1 |
| 4 | 435 | 16 |  |
| 5 | 444 | 13 |  |
| 6 | 450 | 11 |  |
| 7 | 455 | 10 |  |
| 8 | 459 | 9 |  |
| 9 | 463 | 9 |  |
| 10 | 467 | 8 | 2 |
| 11 | 470 | 8 |  |
| 12 | 473 | 7 |  |
| 13 | 475 | 7 |  |
| 14 | 478 | 7 |  |
| 15 | 481 | 7 |  |
| 16 | 483 | 7 |  |
| 17 | 486 | 7 |  |
| 18 | 488 | 7 |  |
| 19 | 491 | 7 |  |
| 20 | 493 | 7 |  |
| 21 | 496 | 7 | 3 |
| 22 | 498 | 7 |  |
| 23 | 501 | 7 |  |
| 24 | 503 | 7 |  |
| 25 | 506 | 7 |  |
| 26 | 509 | 7 |  |
| 27 | 512 | 7 |  |
| 28 | 515 | 7 |  |
| 29 | 518 | 7 |  |
| 30 | 521 | 8 |  |
| 31 | 524 | 8 |  |
| 32 | 528 | 8 | 4 |
| 33 | 532 | 8 | 4 |
| 34 | 536 | 9 |  |
| 35 | 541 | 10 |  |
| 36 | 547 | 11 |  |
| 37 | 554 | 14 |  |
| 38 | 567 | 21 |  |
| 39 | 592 | 37 | 5 |
| 40 | 645 | 89 |  |
|  |  |  |  |

Listening

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 360 | 115 |  |
| 1 | 360 | 115 |  |
| 2 | 360 | 115 |  |
| 3 | 360 | 115 |  |
| 4 | 360 | 115 |  |
| 5 | 360 | 115 | 1 |
| 6 | 360 | 115 |  |
| 7 | 385 | 90 |  |
| 8 | 422 | 53 |  |
| 9 | 441 | 36 |  |
| 10 | 455 | 30 |  |
| 11 | 468 | 27 |  |
| 12 | 479 | 27 | 2 |
| 13 | 491 | 27 |  |
| 14 | 504 | 27 |  |
| 15 | 517 | 28 | 3 |
| 16 | 530 | 28 |  |
| 17 | 545 | 29 |  |
| 18 | 561 | 30 | 4 |
| 19 | 579 | 32 |  |
| 20 | 601 | 35 |  |
| 21 | 627 | 38 |  |
| 22 | 665 | 48 | 5 |
| 23 | 680 | 55 |  |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | 380 | 113 |  |
| 1 | 380 | 113 |  |
| 2 | 380 | 113 |  |
| 3 | 380 | 113 |  |
| 4 | 380 | 113 |  |
| 5 | 380 | 113 | 1 |
| 6 | 414 | 79 | 1 |
| 7 | 445 | 48 |  |
| 8 | 462 | 35 |  |
| 9 | 476 | 28 |  |
| 10 | 487 | 25 |  |
| 11 | 496 | 24 |  |
| 12 | 506 | 22 |  |
| 13 | 514 | 21 | 2 |
| 14 | 522 | 20 |  |
| 15 | 530 | 20 |  |
| 16 | 538 | 19 | 3 |
| 17 | 545 | 19 |  |
| 18 | 553 | 19 |  |
| 19 | 561 | 18 |  |
| 20 | 568 | 18 |  |
| 21 | 576 | 18 |  |
| 22 | 584 | 19 | 4 |
| 23 | 593 | 19 |  |
| 24 | 602 | 19 |  |
| 25 | 612 | 20 |  |
| 26 | 623 | 20 |  |
| 27 | 635 | 21 | 5 |
| 28 | 651 | 24 |  |
| 29 | 676 | 35 |  |
| 30 | 690 | 43 |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 300 | 152 |  |
| 1 | 300 | 152 |  |
| 2 | 300 | 152 |  |
| 3 | 382 | 70 | 1 |
| 4 | 413 | 39 |  |
| 5 | 431 | 29 |  |
| 6 | 444 | 24 |  |
| 7 | 455 | 21 |  |
| 8 | 464 | 20 |  |
| 9 | 472 | 19 | 2 |
| 10 | 480 | 18 | 2 |
| 11 | 487 | 18 |  |
| 12 | 494 | 18 |  |
| 13 | 502 | 18 |  |
| 14 | 509 | 18 |  |
| 15 | 516 | 18 |  |
| 16 | 524 | 18 | 3 |
| 17 | 531 | 18 |  |
| 18 | 539 | 18 |  |
| 19 | 547 | 18 |  |
| 20 | 555 | 18 |  |
| 21 | 563 | 18 |  |
| 22 | 572 | 18 | 4 |
| 23 | 580 | 18 |  |
| 24 | 589 | 18 |  |
| 25 | 599 | 19 |  |
| 26 | 609 | 20 |  |
| 27 | 620 | 21 |  |
| 28 | 633 | 22 | 5 |
| 29 | 648 | 25 |  |
| 30 | 669 | 31 |  |
| 31 | 702 | 44 |  |
| 32 | 710 | 47 |  |
|  |  |  |  |

Table E. 130 Form C Grade 130 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| PL |  |  |  |
| 0 | 365 | 51 |  |
| 1 | 365 | 51 |  |
| 2 | 403 | 31 |  |
| 3 | 423 | 21 | 1 |
| 4 | 435 | 16 |  |
| 5 | 444 | 13 |  |
| 6 | 450 | 11 |  |
| 7 | 455 | 10 |  |
| 8 | 459 | 9 |  |
| 9 | 463 | 9 |  |
| 10 | 467 | 8 | 2 |
| 11 | 470 | 8 |  |
| 12 | 473 | 7 |  |
| 13 | 475 | 7 |  |
| 14 | 478 | 7 |  |
| 15 | 481 | 7 |  |
| 16 | 483 | 7 |  |
| 17 | 486 | 7 |  |
| 18 | 488 | 7 |  |
| 19 | 491 | 7 |  |
| 20 | 493 | 7 |  |
| 21 | 496 | 7 | 3 |
| 22 | 498 | 7 |  |
| 23 | 501 | 7 |  |
| 24 | 503 | 7 |  |
| 25 | 506 | 7 |  |
| 26 | 509 | 7 |  |
| 27 | 512 | 7 |  |
| 28 | 515 | 7 |  |
| 29 | 518 | 7 |  |
| 30 | 521 | 8 |  |
| 31 | 524 | 8 |  |
| 32 | 528 | 8 | 4 |
| 33 | 532 | 8 | 4 |
| 34 | 536 | 9 |  |
| 35 | 541 | 10 |  |
| 36 | 547 | 11 |  |
| 37 | 554 | 14 |  |
| 38 | 567 | 21 |  |
| 39 | 592 | 37 | 5 |
| 40 | 645 | 89 |  |
|  |  |  |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 360 | 115 |  |
| 1 | 360 | 115 |  |
| 2 | 360 | 115 |  |
| 3 | 360 | 115 |  |
| 4 | 360 | 115 |  |
| 5 | 360 | 115 | 1 |
| 6 | 360 | 115 |  |
| 7 | 385 | 90 |  |
| 8 | 422 | 53 |  |
| 9 | 441 | 36 |  |
| 10 | 455 | 30 |  |
| 11 | 468 | 27 |  |
| 12 | 479 | 27 | 2 |
| 13 | 491 | 27 |  |
| 14 | 504 | 27 |  |
| 15 | 517 | 28 | 3 |
| 16 | 530 | 28 |  |
| 17 | 545 | 29 |  |
| 18 | 561 | 30 | 4 |
| 19 | 579 | 32 |  |
| 20 | 601 | 35 |  |
| 21 | 627 | 38 | 5 |
| 22 | 665 | 48 | 5 |
| 23 | 680 | 55 |  |


| Reading |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | 380 | PL |  |
| 1 | 380 | 113 |  |
| 2 | 380 | 113 |  |
| 3 | 380 | 113 |  |
| 4 | 380 | 113 |  |
| 5 | 380 | 113 | 1 |
| 6 | 414 | 79 | 1 |
| 7 | 445 | 48 |  |
| 8 | 462 | 35 |  |
| 9 | 476 | 28 |  |
| 10 | 487 | 25 |  |
| 11 | 496 | 24 |  |
| 12 | 506 | 22 |  |
| 13 | 514 | 21 | 2 |
| 14 | 522 | 20 |  |
| 15 | 530 | 20 |  |
| 16 | 538 | 19 |  |
| 17 | 545 | 19 | 3 |
| 18 | 553 | 19 |  |
| 19 | 561 | 18 |  |
| 20 | 568 | 18 |  |
| 21 | 576 | 18 |  |
| 22 | 584 | 19 | 4 |
| 23 | 593 | 19 |  |
| 24 | 602 | 19 |  |
| 25 | 612 | 20 |  |
| 26 | 623 | 20 |  |
| 27 | 635 | 21 | 5 |
| 28 | 651 | 24 |  |
| 29 | 676 | 35 |  |
| 30 | 690 | 43 |  |
|  |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 300 | 152 |  |
| 1 | 300 | 152 |  |
| 2 | 300 | 152 |  |
| 3 | 382 | 70 | 1 |
| 4 | 413 | 39 |  |
| 5 | 431 | 29 |  |
| 6 | 444 | 24 |  |
| 7 | 455 | 21 |  |
| 8 | 464 | 20 |  |
| 9 | 472 | 19 | 2 |
| 10 | 480 | 18 | 2 |
| 11 | 487 | 18 |  |
| 12 | 494 | 18 |  |
| 13 | 502 | 18 |  |
| 14 | 509 | 18 |  |
| 15 | 516 | 18 |  |
| 16 | 524 | 18 | 3 |
| 17 | 531 | 18 |  |
| 18 | 539 | 18 |  |
| 19 | 547 | 18 |  |
| 20 | 555 | 18 |  |
| 21 | 563 | 18 |  |
| 22 | 572 | 18 | 4 |
| 23 | 580 | 18 |  |
| 24 | 589 | 18 |  |
| 25 | 599 | 19 |  |
| 26 | 609 | 20 |  |
| 27 | 620 | 21 |  |
| 28 | 633 | 22 | 5 |
| 29 | 648 | 25 |  |
| 30 | 669 | 31 |  |
| 31 | 702 | 44 |  |
| 32 | 710 | 47 |  |
|  |  |  |  |

Table E. 131 Form C Grade 131 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 370 | 54 |  |
| 1 | 409 | 22 |  |
| 2 | 425 | 15 |  |
| 3 | 434 | 12 | 1 |
| 4 | 441 | 10 |  |
| 5 | 446 | 9 |  |
| 6 | 451 | 8 |  |
| 7 | 455 | 8 |  |
| 8 | 458 | 7 |  |
| 9 | 461 | 7 |  |
| 10 | 463 | 6 |  |
| 11 | 466 | 6 | 2 |
| 12 | 468 | 6 | 2 |
| 13 | 471 | 6 |  |
| 14 | 473 | 6 |  |
| 15 | 475 | 6 |  |
| 16 | 477 | 5 |  |
| 17 | 479 | 5 |  |
| 18 | 481 | 5 |  |
| 19 | 483 | 5 |  |
| 20 | 485 | 5 |  |
| 21 | 488 | 6 |  |
| 22 | 490 | 6 |  |
| 23 | 492 | 6 |  |
| 24 | 494 | 6 | 3 |
| 25 | 497 | 6 |  |
| 26 | 499 | 6 |  |
| 27 | 502 | 6 |  |
| 28 | 505 | 7 |  |
| 29 | 508 | 7 |  |
| 30 | 511 | 7 |  |
| 31 | 514 | 7 |  |
| 32 | 517 | 7 |  |
| 33 | 521 | 7 |  |
| 34 | 525 | 7 |  |
| 35 | 529 | 8 | 4 |
| 36 | 533 | 8 |  |
| 37 | 539 | 10 |  |
| 38 | 547 | 14 |  |
| 39 | 562 | 22 |  |
| 40 | 592 | 41 | 5 |
| 41 | 650 | 78 |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 370 | 121 |  | 0 | 390 | 105 |  |
| 1 | 370 | 121 |  | 1 | 390 | 105 |  |
| 2 | 370 | 121 |  | 2 | 390 | 105 |  |
| 3 | 370 | 121 |  | 3 | 390 | 105 |  |
| 4 | 370 | 121 |  | 4 | 390 | 105 |  |
| 5 | 370 | 121 | 1 | 5 | 390 | 105 |  |
| 6 | 370 | 121 |  | 6 | 392 | 103 | 1 |
| 7 | 391 | 100 |  | 7 | 436 | 59 |  |
| 8 | 429 | 62 |  | 8 | 457 | 39 |  |
| 9 | 452 | 44 |  | 9 | 471 | 31 |  |
| 10 | 470 | 37 |  | 10 | 483 | 26 |  |
| 11 | 485 | 33 | 2 | 11 | 492 | 24 |  |
| 12 | 499 | 31 | 2 | 12 | 501 | 22 |  |
| 13 | 513 | 31 |  | 13 | 509 | 20 |  |
| 14 | 527 | 32 | 3 | 14 | 517 | 19 |  |
| 15 | 542 | 33 |  | 15 | 524 | 19 | 2 |
| 16 | 559 | 34 |  | 16 | 531 | 18 |  |
| 17 | 577 | 36 | 4 | 17 | 539 | 18 |  |
| 18 | 596 | 36 | 4 | 18 | 546 | 18 |  |
| 19 | 614 | 29 |  | 19 | 553 | 18 |  |
| 20 | 634 | 32 |  | 20 | 561 | 19 | 3 |
| 21 | 665 | 52 |  | 21 | 569 | 19 |  |
| 22 | 724 | 78 | 5 | 22 | 578 | 20 |  |
| 23 | 730 | 82 |  | 23 | 587 | 21 |  |
|  |  |  |  | 24 | 597 | 22 | 4 |
|  |  |  |  | 25 | 608 | 24 |  |
|  |  |  |  | 26 | 622 | 26 |  |
|  |  |  |  | 27 | 640 | 31 |  |
|  |  |  |  | 28 | 665 | 40 | 5 |
|  |  |  |  | 29 | 709 | 60 | 5 |
|  |  |  |  | 30 | 715 | 64 |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 121 |  |
| 1 | 310 | 121 |  |
| 2 | 310 | 121 |  |
| 3 | 356 | 75 |  |
| 4 | 390 | 41 | 1 |
| 5 | 409 | 30 |  |
| 6 | 423 | 25 |  |
| 7 | 434 | 23 |  |
| 8 | 443 | 21 |  |
| 9 | 452 | 20 |  |
| 10 | 460 | 20 |  |
| 11 | 468 | 20 | 2 |
| 12 | 476 | 20 | 2 |
| 13 | 485 | 20 |  |
| 14 | 493 | 20 |  |
| 15 | 501 | 20 |  |
| 16 | 510 | 20 |  |
| 17 | 518 | 20 | 3 |
| 18 | 526 | 19 | 3 |
| 19 | 535 | 19 |  |
| 20 | 543 | 19 |  |
| 21 | 551 | 19 |  |
| 22 | 560 | 19 |  |
| 23 | 569 | 20 | 4 |
| 24 | 578 | 20 |  |
| 25 | 587 | 21 |  |
| 26 | 597 | 22 |  |
| 27 | 609 | 23 |  |
| 28 | 623 | 26 |  |
| 29 | 639 | 29 | 5 |
| 30 | 662 | 37 |  |
| 31 | 704 | 57 |  |
| 32 | 720 | 68 |  |
|  |  |  |  |

Table E. 132 Form C Grade 132 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 370 | 54 |  |
| 1 | 409 | 22 |  |
| 2 | 425 | 15 |  |
| 3 | 434 | 12 | 1 |
| 4 | 441 | 10 |  |
| 5 | 446 | 9 |  |
| 6 | 451 | 8 |  |
| 7 | 455 | 8 |  |
| 8 | 458 | 7 |  |
| 9 | 461 | 7 |  |
| 10 | 463 | 6 |  |
| 11 | 466 | 6 | 2 |
| 12 | 468 | 6 | 2 |
| 13 | 471 | 6 |  |
| 14 | 473 | 6 |  |
| 15 | 475 | 6 |  |
| 16 | 477 | 5 |  |
| 17 | 479 | 5 |  |
| 18 | 481 | 5 |  |
| 19 | 483 | 5 |  |
| 20 | 485 | 5 |  |
| 21 | 488 | 6 |  |
| 22 | 490 | 6 |  |
| 23 | 492 | 6 |  |
| 24 | 494 | 6 | 3 |
| 25 | 497 | 6 |  |
| 26 | 499 | 6 |  |
| 27 | 502 | 6 |  |
| 28 | 505 | 7 |  |
| 29 | 508 | 7 |  |
| 30 | 511 | 7 |  |
| 31 | 514 | 7 |  |
| 32 | 517 | 7 |  |
| 33 | 521 | 7 |  |
| 34 | 525 | 7 |  |
| 35 | 529 | 8 | 4 |
| 36 | 533 | 8 |  |
| 37 | 539 | 10 |  |
| 38 | 547 | 14 |  |
| 39 | 562 | 22 |  |
| 40 | 592 | 41 | 5 |
| 41 | 650 | 78 |  |
|  |  |  |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 370 | 121 |  | 0 | 390 | 105 |  |
| 1 | 370 | 121 |  | 1 | 390 | 105 |  |
| 2 | 370 | 121 |  | 2 | 390 | 105 |  |
| 3 | 370 | 121 |  | 3 | 390 | 105 |  |
| 4 | 370 | 121 |  | 4 | 390 | 105 |  |
| 5 | 370 | 121 | 1 | 5 | 390 | 105 |  |
| 6 | 370 | 121 |  | 6 | 392 | 103 | 1 |
| 7 | 391 | 100 |  | 7 | 436 | 59 |  |
| 8 | 429 | 62 |  | 8 | 457 | 39 |  |
| 9 | 452 | 44 |  | 9 | 471 | 31 |  |
| 10 | 470 | 37 |  | 10 | 483 | 26 |  |
| 11 | 485 | 33 |  | 11 | 492 | 24 |  |
| 12 | 499 | 31 | 2 | 12 | 501 | 22 |  |
| 13 | 513 | 31 |  | 13 | 509 | 20 |  |
| 14 | 527 | 32 | 3 | 14 | 517 | 19 |  |
| 15 | 542 | 33 |  | 15 | 524 | 19 | 2 |
| 16 | 559 | 34 |  | 16 | 531 | 18 |  |
| 17 | 577 | 36 | 4 | 17 | 539 | 18 |  |
| 18 | 596 | 36 | 4 | 18 | 546 | 18 |  |
| 19 | 614 | 29 |  | 19 | 553 | 18 |  |
| 20 | 634 | 32 |  | 20 | 561 | 19 | 3 |
| 21 | 665 | 52 |  | 21 | 569 | 19 |  |
| 22 | 724 | 78 | 5 | 22 | 578 | 20 |  |
| 23 | 730 | 82 |  | 23 | 587 | 21 |  |
|  |  |  |  | 24 | 597 | 22 | 4 |
|  |  |  |  | 25 | 608 | 24 |  |
|  |  |  |  | 26 | 622 | 26 |  |
|  |  |  |  | 27 | 640 | 31 |  |
|  |  |  |  | 28 | 665 | 40 | 5 |
|  |  |  |  | 29 | 709 | 60 | 5 |
|  |  |  |  | 30 | 715 | 64 |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 121 |  |
| 1 | 310 | 121 |  |
| 2 | 310 | 121 |  |
| 3 | 356 | 75 |  |
| 4 | 390 | 41 | 1 |
| 5 | 409 | 30 |  |
| 6 | 423 | 25 |  |
| 7 | 434 | 23 |  |
| 8 | 443 | 21 |  |
| 9 | 452 | 20 |  |
| 10 | 460 | 20 |  |
| 11 | 468 | 20 | 2 |
| 12 | 476 | 20 |  |
| 13 | 485 | 20 |  |
| 14 | 493 | 20 |  |
| 15 | 501 | 20 |  |
| 16 | 510 | 20 |  |
| 17 | 518 | 20 | 3 |
| 18 | 526 | 19 |  |
| 19 | 535 | 19 |  |
| 20 | 543 | 19 |  |
| 21 | 551 | 19 |  |
| 22 | 560 | 19 |  |
| 23 | 569 | 20 | 4 |
| 24 | 578 | 20 |  |
| 25 | 587 | 21 |  |
| 26 | 597 | 22 |  |
| 27 | 609 | 23 |  |
| 28 | 623 | 26 |  |
| 29 | 639 | 29 | 5 |
| 30 | 662 | 37 |  |
| 31 | 704 | 57 |  |
| 32 | 720 | 68 |  |
|  |  |  |  |

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Table E. 133 Form C Grade 133 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | PL |  |  |
| 0 | 370 | 54 |  |
| 1 | 409 | 22 |  |
| 2 | 425 | 15 |  |
| 3 | 434 | 12 | 1 |
| 4 | 441 | 10 |  |
| 5 | 446 | 9 |  |
| 6 | 451 | 8 |  |
| 7 | 455 | 8 |  |
| 8 | 458 | 7 |  |
| 9 | 461 | 7 |  |
| 10 | 463 | 6 |  |
| 11 | 466 | 6 | 2 |
| 12 | 468 | 6 | 2 |
| 13 | 471 | 6 |  |
| 14 | 473 | 6 |  |
| 15 | 475 | 6 |  |
| 16 | 477 | 5 |  |
| 17 | 479 | 5 |  |
| 18 | 481 | 5 |  |
| 19 | 483 | 5 |  |
| 20 | 485 | 5 |  |
| 21 | 488 | 6 |  |
| 22 | 490 | 6 |  |
| 23 | 492 | 6 |  |
| 24 | 494 | 6 | 3 |
| 25 | 497 | 6 |  |
| 26 | 499 | 6 |  |
| 27 | 502 | 6 |  |
| 28 | 505 | 7 |  |
| 29 | 508 | 7 |  |
| 30 | 511 | 7 |  |
| 31 | 514 | 7 |  |
| 32 | 517 | 7 |  |
| 33 | 521 | 7 |  |
| 34 | 525 | 7 |  |
| 35 | 529 | 8 | 4 |
| 36 | 533 | 8 |  |
| 37 | 539 | 10 |  |
| 38 | 547 | 14 |  |
| 39 | 562 | 22 |  |
| 40 | 592 | 41 | 5 |
| 41 | 650 | 78 |  |
|  |  |  |  |

Listening

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| PL |  |  |  |
| 0 | 370 | 121 |  |
| 1 | 370 | 121 |  |
| 2 | 370 | 121 |  |
| 3 | 370 | 121 |  |
| 4 | 370 | 121 |  |
| 5 | 370 | 121 | 1 |
| 6 | 370 | 121 |  |
| 7 | 391 | 100 |  |
| 8 | 429 | 62 |  |
| 9 | 452 | 44 |  |
| 10 | 470 | 37 |  |
| 11 | 485 | 33 |  |
| 12 | 499 | 31 | 2 |
| 13 | 513 | 31 |  |
| 14 | 527 | 32 | 3 |
| 15 | 542 | 33 | 3 |
| 16 | 559 | 34 |  |
| 17 | 577 | 36 | 4 |
| 18 | 596 | 36 |  |
| 19 | 614 | 29 |  |
| 20 | 634 | 32 |  |
| 21 | 665 | 52 |  |
| 22 | 724 | 78 | 5 |
| 23 | 730 | 82 |  |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
|  | PL |  |  |
| 0 | 390 | 105 |  |
| 1 | 390 | 105 |  |
| 2 | 390 | 105 |  |
| 3 | 390 | 105 |  |
| 4 | 390 | 105 |  |
| 5 | 390 | 105 |  |
| 6 | 392 | 103 | 1 |
| 7 | 436 | 59 |  |
| 8 | 457 | 39 |  |
| 9 | 471 | 31 |  |
| 10 | 483 | 26 |  |
| 11 | 492 | 24 |  |
| 12 | 501 | 22 |  |
| 13 | 509 | 20 |  |
| 14 | 517 | 19 |  |
| 15 | 524 | 19 | 2 |
| 16 | 531 | 18 | 2 |
| 17 | 539 | 18 |  |
| 18 | 546 | 18 |  |
| 19 | 553 | 18 |  |
| 20 | 561 | 19 | 3 |
| 21 | 569 | 19 |  |
| 22 | 578 | 20 |  |
| 23 | 587 | 21 |  |
| 24 | 597 | 22 | 4 |
| 25 | 608 | 24 |  |
| 26 | 622 | 26 |  |
| 27 | 640 | 31 |  |
| 28 | 665 | 40 | 5 |
| 29 | 709 | 60 |  |
| 30 | 715 | 64 |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 121 |  |
| 1 | 310 | 121 |  |
| 2 | 310 | 121 |  |
| 3 | 356 | 75 |  |
| 4 | 390 | 41 | 1 |
| 5 | 409 | 30 |  |
| 6 | 423 | 25 |  |
| 7 | 434 | 23 |  |
| 8 | 443 | 21 |  |
| 9 | 452 | 20 |  |
| 10 | 460 | 20 |  |
| 11 | 468 | 20 | 2 |
| 12 | 476 | 20 | 2 |
| 13 | 485 | 20 |  |
| 14 | 493 | 20 |  |
| 15 | 501 | 20 |  |
| 16 | 510 | 20 |  |
| 17 | 518 | 20 | 3 |
| 18 | 526 | 19 |  |
| 19 | 535 | 19 |  |
| 20 | 543 | 19 |  |
| 21 | 551 | 19 |  |
| 22 | 560 | 19 |  |
| 23 | 569 | 20 | 4 |
| 24 | 578 | 20 |  |
| 25 | 587 | 21 |  |
| 26 | 597 | 22 |  |
| 27 | 609 | 23 |  |
| 28 | 623 | 26 |  |
| 29 | 639 | 29 | 5 |
| 30 | 662 | 37 |  |
| 31 | 704 | 57 |  |
| 32 | 720 | 68 |  |
|  |  |  |  |

Table E. 134 Form C Grade 134 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | PL |  |  |
| 0 | 370 | 54 |  |
| 1 | 409 | 22 |  |
| 2 | 425 | 15 |  |
| 3 | 434 | 12 | 1 |
| 4 | 441 | 10 |  |
| 5 | 446 | 9 |  |
| 6 | 451 | 8 |  |
| 7 | 455 | 8 |  |
| 8 | 458 | 7 |  |
| 9 | 461 | 7 |  |
| 10 | 463 | 6 |  |
| 11 | 466 | 6 | 2 |
| 12 | 468 | 6 |  |
| 13 | 471 | 6 |  |
| 14 | 473 | 6 |  |
| 15 | 475 | 6 |  |
| 16 | 477 | 5 |  |
| 17 | 479 | 5 |  |
| 18 | 481 | 5 |  |
| 19 | 483 | 5 |  |
| 20 | 485 | 5 |  |
| 21 | 488 | 6 |  |
| 22 | 490 | 6 |  |
| 23 | 492 | 6 |  |
| 24 | 494 | 6 |  |
| 25 | 497 | 6 | 3 |
| 26 | 499 | 6 |  |
| 27 | 502 | 6 |  |
| 28 | 505 | 7 |  |
| 29 | 508 | 7 |  |
| 30 | 511 | 7 |  |
| 31 | 514 | 7 |  |
| 32 | 517 | 7 |  |
| 33 | 521 | 7 |  |
| 34 | 525 | 7 |  |
| 35 | 529 | 8 | 4 |
| 36 | 533 | 8 |  |
| 37 | 539 | 10 |  |
| 38 | 547 | 14 |  |
| 39 | 562 | 22 |  |
| 40 | 592 | 41 | 5 |
| 41 | 650 | 78 |  |
|  |  |  |  |
|  |  |  |  |

Listening

| RS |  | SS | SEM |
| :---: | :---: | :---: | :---: |
| PL |  |  |  |
| 0 | 370 | 121 |  |
| 1 | 370 | 121 |  |
| 2 | 370 | 121 |  |
| 3 | 370 | 121 |  |
| 4 | 370 | 121 |  |
| 5 | 370 | 121 | 1 |
| 6 | 370 | 121 |  |
| 7 | 391 | 100 |  |
| 8 | 429 | 62 |  |
| 9 | 452 | 44 |  |
| 10 | 470 | 37 |  |
| 11 | 485 | 33 |  |
| 12 | 499 | 31 | 2 |
| 13 | 513 | 31 |  |
| 14 | 527 | 32 |  |
| 15 | 542 | 33 | 3 |
| 16 | 559 | 34 |  |
| 17 | 577 | 36 |  |
| 18 | 596 | 36 | 4 |
| 19 | 614 | 29 |  |
| 20 | 634 | 32 |  |
| 21 | 665 | 52 |  |
| 22 | 724 | 78 | 5 |
| 23 | 730 | 82 |  |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | PL |  |  |
| 1 | 390 | 105 |  |
| 2 | 390 | 105 |  |
| 3 | 390 | 105 |  |
| 4 | 390 | 105 |  |
| 5 | 390 | 105 |  |
| 6 | 392 | 103 | 1 |
| 7 | 436 | 59 | 1 |
| 8 | 457 | 39 |  |
| 9 | 471 | 31 |  |
| 10 | 483 | 26 |  |
| 11 | 492 | 24 |  |
| 12 | 501 | 22 |  |
| 13 | 509 | 20 |  |
| 14 | 517 | 19 |  |
| 15 | 524 | 19 |  |
| 16 | 531 | 18 | 2 |
| 17 | 539 | 18 |  |
| 18 | 546 | 18 |  |
| 19 | 553 | 18 |  |
| 20 | 561 | 19 | 3 |
| 21 | 569 | 19 |  |
| 22 | 578 | 20 |  |
| 23 | 587 | 21 |  |
| 24 | 597 | 22 | 4 |
| 25 | 608 | 24 |  |
| 26 | 622 | 26 |  |
| 27 | 640 | 31 |  |
| 28 | 665 | 40 | 5 |
| 29 | 709 | 60 |  |
| 30 | 715 | 64 |  |
|  |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 121 |  |
| 1 | 310 | 121 |  |
| 2 | 310 | 121 |  |
| 3 | 356 | 75 |  |
| 4 | 390 | 41 | 1 |
| 5 | 409 | 30 |  |
| 6 | 423 | 25 |  |
| 7 | 434 | 23 |  |
| 8 | 443 | 21 |  |
| 9 | 452 | 20 |  |
| 10 | 460 | 20 |  |
| 11 | 468 | 20 |  |
| 12 | 476 | 20 | 2 |
| 13 | 485 | 20 |  |
| 14 | 493 | 20 |  |
| 15 | 501 | 20 |  |
| 16 | 510 | 20 |  |
| 17 | 518 | 20 |  |
| 18 | 526 | 19 | 3 |
| 19 | 535 | 19 |  |
| 20 | 543 | 19 |  |
| 21 | 551 | 19 |  |
| 22 | 560 | 19 |  |
| 23 | 569 | 20 | 4 |
| 24 | 578 | 20 |  |
| 25 | 587 | 21 |  |
| 26 | 597 | 22 |  |
| 27 | 609 | 23 |  |
| 28 | 623 | 26 |  |
| 29 | 639 | 29 | 5 |
| 30 | 662 | 37 |  |
| 31 | 704 | 57 |  |
| 32 | 720 | 68 |  |
|  |  |  |  |

Table E. 14 Form C Kindergarten Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-310 | 1-362 | 1-311 | 1-231 | 1-287 | 30 | 364-365 | 425-426 | 374-375 | 294-295 | 349-350 |
| 2 | 311-312 | 363-364 | 312-314 | 232-233 | 288-289 | 31 | 366 | 427 | 376-377 | 296-298 | 351-353 |
| 3 | 313-314 | 365-367 | 315-316 | 234-235 | 290-293 | 32 | 367-368 | 428-429 | 378-379 | 299-300 | 354-355 |
| 4 | 315-316 | 368-369 | 317-318 | 236-237 | 294-295 | 33 | 369-370 | 430-431 | 380 | 301-303 | 356-357 |
| 5 | 317-319 | 370-373 | 319-321 | 238-240 | 296-298 | 34 | 371-372 | 432 | 381 | 304-306 | 358-359 |
| 6 | 320-321 | 374 | 322-323 | 241-243 | 299-300 | 35 | 373-374 | 433-434 | 382-383 | 307-309 | 360-362 |
| 7 | 322-323 | 375-377 | 324-325 | 244-245 | 301-302 | 36 | 375 | 435 | 384 | 310-311 | 363-364 |
| 8 | 324 | 378-381 | 326-327 | 246-247 | 303-305 | 37 | 376-377 | 436 | 385-386 | 312-314 | 365-367 |
| 9 | 325-326 | 382-384 | 328-329 | 248-250 | 306-307 | 38 | 378-379 | 437-438 | 387 | 315-317 | 368-369 |
| 10 | 327 | 385-387 | 330-331 | 251-253 | 308-309 | 39 | 380-381 | 439 | 388-389 | 318-319 | 370-371 |
| 11 | 328-329 | 388-390 | 332-333 | 254-255 | 310 | 40 | 382 | 440-441 | 390-391 | 320-322 | 372-373 |
| 12 | 330-331 | 391 | 334-336 | 256-257 | 311-312 | 41 | 383-384 | 442 | 392 | 323-325 | 374-376 |
| 13 | 332-333 | 392-393 | 337-338 | 258-259 | 313-314 | 42 | 385-386 | 443-444 | 393-394 | 326-328 | 377-378 |
| 14 | 334-335 | 394-395 | 339-340 | 260-261 | 315-317 | 43 | 387-388 | 445 | 395 | 329-330 | 379-380 |
| 15 | 336-337 | 396-398 | 341-343 | 262 | 318-319 | 44 | 389-390 | 446 | 396-397 | 331-333 | 381-382 |
| 16 | 338-339 | 399-400 | 344-346 | 263-264 | 320-321 | 45 | 391-392 | 447-448 | 398 | 334-335 | 383-385 |
| 17 | 340 | 401-402 | 347 | 265-266 | 322-323 | 46 | 393-394 | 449 | 399 | 336-338 | 386-388 |
| 18 | 341-342 | 403-404 | 348-351 | 267-268 | 324-325 | 47 | 395 | 450 | 400-401 | 339-340 | 389-390 |
| 19 | 343-344 | 405-406 | 352-353 | 269-270 | 326-328 | 48 | 396-397 | 451-452 | 402 | 341-343 | 391-393 |
| 20 | 345-346 | 407-408 | 354-355 | 271-272 | 329-330 | 49 | 398-399 | 453-454 | 403-404 | 344-346 | 394-395 |
| 21 | 347-348 | 409-410 | 356-358 | 273-274 | 331 | 50 | 400-401 | 455 | 405 | 347-349 | 396-398 |
| 22 | 349-350 | 411-413 | 359-360 | 275-276 | 332-333 | 51 | 402-403 | 456 | 406-407 | 350-351 | 399-400 |
| 23 | 351-352 | 414-415 | 361-362 | 277-278 | 334-335 | 52 | 404-405 | 457-458 | 408 | 352-354 | 401-403 |
| 24 | 353 | 416 | 363-364 | 279-280 | 336-337 | 53 | 406-407 | 459 | 409-410 | 355-356 | 404-405 |
| 25 | 354-355 | 417-418 | 365-366 | 281-282 | 338-339 | 54 | 408 | 460 | 411 | 357-359 | 406-408 |
| 26 | 356-357 | 419 | 367-368 | 283-285 | 340-342 | 55 | 409-410 | 461-462 | 412-413 | 360-361 | 409-410 |
| 27 | 358-359 | 420-421 | 369-370 | 286-287 | 343-344 | 56 | 411-412 | 463 | 414 | 362-363 | 411-412 |
| 28 | 360-361 | 422 | 371 | 288-290 | 345-346 | 57 | 413-414 | 464-465 | 415-416 | 364-365 | 413-414 |
| 29 | 362-363 | 423-424 | 372-373 | 291-293 | 347-348 | 58 | 415-416 | 466 | 417 | 366-367 | 415-416 |

Table E. 14 Form C Kindergarten Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 417-418 | 467 | 418-419 | 368-370 | 417-418 | 88 | 477-478 | 522-523 | 470-472 | 448-451 | 491-493 |
| 60 | 419 | 468-469 | 420 | 371-373 | 419-421 | 89 | 479 | 524 | 473-475 | 452-455 | 494-497 |
| 61 | 420-421 | 470 | 421-422 | 374-375 | 422-423 | 90 | 480-481 | 525-527 | 476 | 456-459 | 498-500 |
| 62 | 422-423 | 471-472 | 423 | 376-378 | 424-425 | 91 | 482-484 | 528 | 477-478 | 460-464 | 501-504 |
| 63 | 424-425 | 473-474 | 424-425 | 379-380 | 426-427 | 92 | 485-486 | 529-530 | 479-480 | 465-469 | 505-510 |
| 64 | 426-427 | 475 | 426-427 | 381-382 | 428-429 | 93 | 487-489 | 531-532 | 481-484 | 470-474 | 511-515 |
| 65 | 428-429 | 476-477 | 428-429 | 383-385 | 430-432 | 94 | 490-492 | 533 | 485-488 | 475-481 | 516-517 |
| 66 | 430-431 | 478-479 | 430 | 386-387 | 433-434 | 95 | 493-495 | 534 | 489-493 | 482-491 | 518-522 |
| 67 | 432-433 | 480 | 431-432 | 388-390 | 435-436 | 96 | 496-500 | 535 | 494 | 492-499 | 523-527 |
| 68 | 434-435 | 481-482 | 433-434 | 391-392 | 437-438 | 97 | 501-503 | 536-537 | 495-498 | 500-505 | 528-533 |
| 69 | 436-437 | 483 | 435-436 | 393-394 | 439-440 | 98 | 504-505 | 538-540 | 499-503 | 506-511 | 534-546 |
| 70 | 438-439 | 484-485 | 437-438 | 395-396 | 441-443 | 99 | 506-999 | 541-999 | 504-999 | 512-999 | 547-999 |
| 71 | 440-441 | 486-487 | 439 | 397-399 | 444-446 |  |  |  |  |  |  |
| 72 | 442-443 | 488-489 | 440-441 | 400-401 | 447-448 |  |  |  |  |  |  |
| 73 | 444-445 | 490-491 | 442-443 | 402-404 | 449-450 |  |  |  |  |  |  |
| 74 | 446-447 | 492-493 | 444 | 405-406 | 451-452 |  |  |  |  |  |  |
| 75 | 448-449 | 494-495 | 445-446 | 407-409 | 453-455 |  |  |  |  |  |  |
| 76 | 450-451 | 496-498 | 447-448 | 410-412 | 456-457 |  |  |  |  |  |  |
| 77 | 452-454 | 499-500 | 449 | 413-415 | 458-460 |  |  |  |  |  |  |
| 78 | 455-456 | 501-502 | 450-451 | 416-418 | 461-463 |  |  |  |  |  |  |
| 79 | 457-458 | 503-505 | 452 | 419-420 | 464-465 |  |  |  |  |  |  |
| 80 | 459-460 | 506-507 | 453-455 | 421-423 | 466-468 |  |  |  |  |  |  |
| 81 | 461-463 | 508-509 | 456-457 | 424-426 | 469-471 |  |  |  |  |  |  |
| 82 | 464-465 | 510 | 458 | 427-429 | 472-474 |  |  |  |  |  |  |
| 83 | 466-467 | 511-513 | 459-460 | 430-432 | 475-478 |  |  |  |  |  |  |
| 84 | 468-469 | 514-515 | 461-462 | 433-435 | 479-481 |  |  |  |  |  |  |
| 85 | 470-471 | 516-517 | 463-465 | 436-439 | 482-484 |  |  |  |  |  |  |
| 86 | 472-474 | 518-519 | 466-467 | 440-444 | 485-488 |  |  |  |  |  |  |
| 87 | 475-476 | 520-521 | 468-469 | 445-447 | 489-490 |  |  |  |  |  |  |

Table E. 15 Form C Grade 1 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-342 | 1-372 | 1-323 | 1-272 | 1-331 | 30 | 401-402 | 438-439 | 387-388 | 360-361 | 412-413 |
| 2 | 343-344 | 373 | 324-326 | 273-276 | 332 | 31 | 403-404 | 440-441 | 389 | 362-363 | 414 |
| 3 | 345 | 374-376 | 327 | 277-279 | 333-334 | 32 | 405-406 | 442 | 390-391 | 364-365 | 415-416 |
| 4 | 346-347 | 377-379 | 328-330 | 280-282 | 335-337 | 33 | 407-408 | 443 | 392 | 366-368 | 417-418 |
| 5 | 348-349 | 380-382 | 331-332 | 283 | 338-341 | 34 | 409 | 444-445 | 393-394 | 369-371 | 419-420 |
| 6 | 350-351 | 383-385 | 333-334 | 284-286 | 342-344 | 35 | 410-411 | 446 | 395-396 | 372-373 | 421 |
| 7 | 352-353 | 386-388 | 335-338 | 287-289 | 345-347 | 36 | 412-413 | 447 | 397-398 | 374-376 | 422-423 |
| 8 | 354-355 | 389-392 | 339-342 | 290-292 | 348-351 | 37 | 414 | 448-449 | 399-400 | 377-378 | 424-425 |
| 9 | 356-358 | 393-395 | 343 | 293-295 | 352-354 | 38 | 415-416 | 450 | 401 | 379-380 | 426-427 |
| 10 | 359-361 | 396-400 | 344-347 | 296-300 | 355-357 | 39 | 417 | 451 | 402-403 | 381-382 | 428-429 |
| 11 | 362-364 | 401-404 | 348-350 | 301-303 | 358-361 | 40 | 418-419 | 452 | 404-405 | 383-384 | 430-431 |
| 12 | 365-366 | 405-408 | 351-353 | 304-306 | 362-366 | 41 | 420-421 | 453 | 406 | 385-386 | 432-433 |
| 13 | 367-368 | 409-410 | 354-356 | 307-309 | 367-369 | 42 | 422 | 454-455 | 407-408 | 387-389 | 434-435 |
| 14 | 369-371 | 411-412 | 357-358 | 310-313 | 370-372 | 43 | 423-424 | 456 | 409-410 | 390-391 | 436 |
| 15 | 372 | 413-414 | 359-360 | 314-316 | 373-376 | 44 | 425 | 457 | 411 | 392-393 | 437-438 |
| 16 | 373-375 | 415-416 | 361-362 | 317-321 | 377-378 | 45 | 426-427 | 458 | 412-413 | 394-396 | 439 |
| 17 | 376-377 | 417-418 | 363-364 | 322-323 | 379-381 | 46 | 428 | 459 | 414-415 | 397-398 | 440-441 |
| 18 | 378-379 | 419 | 365-366 | 324-326 | 382-383 | 47 | 429-430 | 460-461 | 416 | 399-400 | 442-443 |
| 19 | 380-381 | 420-422 | 367-369 | 327-330 | 384-386 | 48 | 431 | 462 | 417-418 | 401-402 | 444-445 |
| 20 | 382-383 | 423-424 | 370 | 331-333 | 387-389 | 49 | 432-433 | 463 | 419-420 | 403-404 | 446 |
| 21 | 384 | 425 | 371-372 | 334-336 | 390-393 | 50 | 434-435 | 464 | 421 | 405-406 | 447-448 |
| 22 | 385-387 | 426-427 | 373-374 | 337-339 | 394-396 | 51 | 436 | 465-466 | 422-423 | 407-408 | 449-450 |
| 23 | 388-389 | 428 | 375-376 | 340-342 | 397-398 | 52 | 437-438 | 467 | 424-425 | 409-410 | 451-452 |
| 24 | 390-391 | 429-430 | 377-378 | 343-346 | 399-401 | 53 | 439-440 | 468 | 426-427 | 411-413 | 453-454 |
| 25 | 392-393 | 431-432 | 379-380 | 347-349 | 402-403 | 54 | 441-442 | 469 | 428 | 414-415 | 455-456 |
| 26 | 394-395 | 433 | 381 | 350-351 | 404-405 | 55 | 443 | 470-471 | 429-430 | 416-417 | 457-458 |
| 27 | 396-397 | 434-435 | 382-383 | 352-354 | 406-407 | 56 | 444-445 | 472 | 431-432 | 418-420 | 459-460 |
| 28 | 398-399 | 436 | 384 | 355-357 | 408-409 | 57 | 446-447 | 473 | 433 | 421-422 | 461-462 |
| 29 | 400 | 437 | 385-386 | 358-359 | 410-411 | 58 | 448-449 | 474 | 434-435 | 423-424 | 463-464 |

Table E. 15 Form C Grade 1 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 450-451 | 475-476 | 436 | 425-427 | 465-466 | 88 | 521-522 | 523 | 500-502 | 538-543 | 572-574 |
| 60 | 452-453 | 477 | 437-438 | 428-429 | 467 | 89 | 523-524 | 524-525 | 503-505 | 544-545 | 575 |
| 61 | 454-455 | 478-479 | 439-440 | 430-432 | 468-470 | 90 | 525-526 | 526-527 | 506-508 | 546-549 | 576-577 |
| 62 | 456 | 480 | 441-442 | 433-434 | 471-472 | 91 | 527-530 | 528-529 | 509-511 | 550-552 | 578 |
| 63 | 457-459 | 481 | 443 | 435-437 | 473-474 | 92 | 531 | 530 | 512 | 553-555 | 579 |
| 64 | 460-461 | 482-483 | 444-445 | 438-440 | 475 | 93 | 532-534 | 531-533 | 513-515 | 556-558 | 580-581 |
| 65 | 462-463 | 484 | 446-447 | 441-443 | 476-477 | 94 | 535-536 | 534-535 | 516-517 | 559-560 | 582-583 |
| 66 | 464-465 | 485-486 | 448-449 | 444-447 | 478-479 | 95 | 537-539 | 536 | 518-520 | 561-564 | 584-585 |
| 67 | 466-467 | 487 | 450-451 | 448-450 | 480-482 | 96 | 540-542 | 537-538 | 521-523 | 565-566 | 586 |
| 68 | 468-470 | 488-489 | 452-453 | 451-453 | 483-485 | 97 | 543 | 539-540 | 524-526 | 567-570 | 587 |
| 69 | 471-472 | 490-491 | 454-455 | 454-456 | 486-487 | 98 | 544 | 541-542 | 527-528 | 571-572 | 588 |
| 70 | 473-474 | 492-493 | 456-457 | 457-460 | 488-490 | 99 | 545-999 | 543-999 | 529-999 | 573-999 | 589-999 |
| 71 | 475-476 | 494 | 458-459 | 461-464 | 491-493 |  |  |  |  |  |  |
| 72 | 477-479 | 495-496 | 460-461 | 465-468 | 494-497 |  |  |  |  |  |  |
| 73 | 480-481 | 497-498 | 462-463 | 469-473 | 498-500 |  |  |  |  |  |  |
| 74 | 482-484 | 499 | 464-465 | 474-477 | 501-505 |  |  |  |  |  |  |
| 75 | 485-487 | 500-501 | 466-467 | 478-482 | 506-509 |  |  |  |  |  |  |
| 76 | 488-490 | 502-503 | 468-470 | 483-487 | 510-513 |  |  |  |  |  |  |
| 77 | 491-493 | 504 | 471-472 | 488-492 | 514-518 |  |  |  |  |  |  |
| 78 | 494-496 | 505-506 | 473-475 | 493-497 | 519-524 |  |  |  |  |  |  |
| 79 | 497-499 | 507-508 | 476-477 | 498-503 | 525-531 |  |  |  |  |  |  |
| 80 | 500-502 | 509 | 478-480 | 504-509 | 532-543 |  |  |  |  |  |  |
| 81 | 503-504 | 510-511 | 481-484 | 510-513 | 544-552 |  |  |  |  |  |  |
| 82 | 505-507 | 512-513 | 485-486 | 514-517 | 553-556 |  |  |  |  |  |  |
| 83 | 508-510 | 514-515 | 487-488 | 518-521 | 557-559 |  |  |  |  |  |  |
| 84 | 511-513 | 516-517 | 489-492 | 522-526 | 560-563 |  |  |  |  |  |  |
| 85 | 514-515 | 518-519 | 493-494 | 527-530 | 564-565 |  |  |  |  |  |  |
| 86 | 516-518 | 520 | 495-497 | 531-534 | 566-568 |  |  |  |  |  |  |
| 87 | 519-520 | 521-522 | 498-499 | 535-537 | 569-571 |  |  |  |  |  |  |

Table E. 16 Form C Grades 2-3 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-392 | 1-420 | 1-323 | 1-329 | 1-380 | 30 | 450-451 |  | 387-388 | 427-428 | 461-462 |
| 2 | 393 | 421-425 | 324-327 | 330-336 | 381-382 | 31 | 452-453 | 471-472 | 389-390 | 429-431 | 463 |
| 3 | 394-398 | 426-427 | 328-330 | 337-341 | 383-386 | 32 | 454-455 | 473 | 391-392 | 432-433 | 464-465 |
| 4 | 399-400 | 428-430 | 331-332 | 342-344 | 387-391 | 33 | 456 | 474 | 393 | 434-435 | 466-467 |
| 5 | 401-402 | 431-433 | 333-334 | 345-349 | 392-395 | 34 | 457-458 | 475 | 394-395 | 436-437 | 468-469 |
| 6 | 403-404 | 434-436 | 335-336 | 350-352 | 396-402 | 35 | 459-460 | 476 | 396-397 | 438-440 | 470 |
| 7 | 405-406 | 437-439 | 337-340 | 353-355 | 403-407 | 36 | 461-462 | 477 | 398 | 441-443 | 471-472 |
| 8 | 407 | 440-441 | 341-342 | 356-359 | 408-411 | 37 | 463-464 | 478 | 399-400 | 444-446 | 473 |
| 9 | 408-410 | 442-443 | 343-344 | 360-363 | 412-415 | 38 | 465-466 | 479 | 401-402 | 447-448 | 474-475 |
| 10 | 411-412 | 444-446 | 345-347 | 364-366 | 416-418 | 39 | 467 | 480 | 403 | 449-450 | 476 |
| 11 | 413-414 | 447 | 348-350 | 367-370 | 419-421 | 40 | 468-469 | 481 | 404-405 | 451-453 | 477-478 |
| 12 | 415-416 | 448-449 | 351-353 | 371-374 | 422-424 | 41 | 470-471 | 482 | 406 | 454-455 | 479-480 |
| 13 | 417-418 | 450 | 354-356 | 375-378 | 425-426 | 42 | 472 | 483-484 | 407-408 | 456-457 | 481 |
| 14 | 419-420 | 451-452 | 357-358 | 379-381 | 427-429 | 43 | 473-474 | 485 | 409 | 458-459 | 482-483 |
| 15 | 421-422 | 453 | 359-361 | 382-385 | 430-432 | 44 | 475 | 486 | 410-411 | 460-462 | 484-485 |
| 16 | 423-425 | 454 | 362 | 386-390 | 433-434 | 45 | 476-477 | 487 | 412-413 | 463-464 | 486 |
| 17 | 426 | 455 | 363-365 | 391-393 | 435-436 | 46 | 478-479 | 488 | 414 | 465-466 | 487-488 |
| 18 | 427-428 | 456 | 366-367 | 394-397 | 437-438 | 47 | 480 | 489-490 | 415-416 | 467-469 | 489 |
| 19 | 429-430 | 457-458 | 368 | 398-400 | 439-441 | 48 | 481-482 | 491 | 417 | 470-472 | 490-491 |
| 20 | 431-433 | 459 | 369-370 | 401-402 | 442-443 | 49 | 483-484 | 492 | 418-419 | 473-474 | 492 |
| 21 | 434-435 | 460 | 371-372 | 403-405 | 444-445 | 50 | 485 | 493 | 420-421 | 475-477 | 493-494 |
| 22 | 436 | 461 | 373-374 | 406-407 | 446-447 | 51 | 486-487 | 494 | 422 | 478-479 | 495-496 |
| 23 | 437-438 | 462 | 375-376 | 408-409 | 448-449 | 52 | 488-489 | 495-496 | 423-424 | 480-481 | 497 |
| 24 | 439-441 | 463-464 | 377-378 | 410-412 | 450-451 | 53 | 490-491 | 497 | 425-426 | 482-484 | 498-499 |
| 25 | 442 | 465 | 379 | 413-414 | 452 | 54 | 492 | 498 | 427-428 | 485-486 | 500 |
| 26 | 443-444 | 466 | 380-381 | 415-417 | 453-454 | 55 | 493-494 | 499-500 | 429-430 | 487-488 | 501-502 |
| 27 | 445-446 | 467 | 382 | 418-420 | 455-456 | 56 | 495-496 | 501 | 431 | 489-491 | 503-504 |
| 28 | 447-448 | 468 | 383-384 | 421-423 | 457-458 | 57 | 497 | 502 | 432-433 | 492-493 | 505-506 |
| 29 | 449 | 469-470 | 385-386 | 424-426 | 459-460 | 58 | 498-499 | 503-504 | 434-435 | 494-495 | 507-508 |

Table E. 16 Form C Grades 2-3 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 500-501 | 505 | 436-437 | 496-497 | 509 | 88 | 552-553 | 558-560 | 500-505 | 566-568 | 576-577 |
| 60 | 502 | 506 | 438-439 | 498-500 | 510-511 | 89 | 554 | 561 | 506-507 | 569-572 | 578-579 |
| 61 | 503-504 | 507-508 | 440-441 | 501-502 | 512-513 | 90 | 555-556 | 562-564 | 508-509 | 573-575 | 580-582 |
| 62 | 505-506 | 509 | 442-443 | 503-505 | 514-515 | 91 | 557 | 565-566 | 510-511 | 576-579 | 583-584 |
| 63 | 507-508 | 510-511 | 444 | 506-507 | 516-517 | 92 | 558-559 | 567 | 512-514 | 580-581 | 585-587 |
| 64 | 509-510 | 512 | 445-446 | 508-509 | 518-519 | 93 | 560-561 | 568 | 515-518 | 582-584 | 588 |
| 65 | 511 | 513-514 | 447-448 | 510-512 | 520 | 94 | 562-563 | 569 | 519-520 | 585-586 | 589-590 |
| 66 | 512-513 | 515-516 | 449-450 | 513-514 | 521-522 | 95 | 564-565 | 570-571 | 521-523 | 587-590 | 591 |
| 67 | 514-515 | 517-518 | 451-452 | 515-516 | 523-524 | 96 | 566-568 | 572 | 524-525 | 591-592 | 592-593 |
| 68 | 516 | 519-520 | 453 | 517-518 | 525-527 | 97 | 569-572 | 573 | 526-527 | 593-595 | 594-595 |
| 69 | 517-518 | 521-522 | 454-455 | 519-521 | 528-529 | 98 | 573 | 574-576 | 528-530 | 596-597 | 596-597 |
| 70 | 519-520 | 523-524 | 456-457 | 522 | 530-531 | 99 | 574-999 | 577-999 | 531-999 | 598-999 | 598-999 |
| 71 | 521-522 | 525-526 | 458-459 | 523-524 | 532-533 |  |  |  |  |  |  |
| 72 | 523-525 | 527-529 | 460-461 | 525-526 | 534-535 |  |  |  |  |  |  |
| 73 | 526-527 | 530-531 | 462-463 | 527-529 | 536-538 |  |  |  |  |  |  |
| 74 | 528-529 | 532-533 | 464-465 | 530-531 | 539-540 |  |  |  |  |  |  |
| 75 | 530 | 534-535 | 466-467 | 532-533 | 541-543 |  |  |  |  |  |  |
| 76 | 531-532 | 536-537 | 468-469 | 534-536 | 544-546 |  |  |  |  |  |  |
| 77 | 533 | 538-539 | 470-471 | 537-538 | 547-548 |  |  |  |  |  |  |
| 78 | 534-535 | 540-541 | 472-474 | 539-541 | 549-551 |  |  |  |  |  |  |
| 79 | 536-537 | 542-543 | 475-476 | 542-543 | 552-554 |  |  |  |  |  |  |
| 80 | 538-539 | 544-545 | 477-479 | 544-546 | 555-557 |  |  |  |  |  |  |
| 81 | 540-541 | 546-547 | 480-481 | 547-548 | 558-560 |  |  |  |  |  |  |
| 82 | 542 | 548-549 | 482-483 | 549-551 | 561-562 |  |  |  |  |  |  |
| 83 | 543-544 | 550-551 | 484-486 | 552-553 | 563-565 |  |  |  |  |  |  |
| 84 | 545-546 | 552 | 487-489 | 554-556 | 566-567 |  |  |  |  |  |  |
| 85 | 547-548 | 553-554 | 490-493 | 557-558 | 568-570 |  |  |  |  |  |  |
| 86 | 549-550 | 555-556 | 494-497 | 559-562 | 571-572 |  |  |  |  |  |  |
| 87 | 551 | 557 | 498-499 | 563-565 | 573-575 |  |  |  |  |  |  |

Table E. 17 Form C Grades 4-5 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-419 | 1-423 | 1-368 | 1-384 | 1-400 | 30 | 482-483 | 487 | 437-439 | 474-476 | 490-491 |
| 2 | 420-422 | 424-426 | 369-370 | 385 | 401-403 | 31 | 484-485 | 488-489 | 440-441 | 477-478 | 492-493 |
| 3 | 423-424 | 427-429 | 371-372 | 386-390 | 404-407 | 32 | 486-488 | 490-491 | 442-443 | 479-481 | 494-495 |
| 4 | 425-426 | 430-432 | 373-374 | 391-392 | 408-413 | 33 | 489 | 492 | 444-445 | 482-483 | 496-497 |
| 5 | 427-429 | 433-437 | 375-378 | 393-396 | 414-423 | 34 | 490-491 | 493-494 | 446 | 484-486 | 498-499 |
| 6 | 430-431 | 438-439 | 379-380 | 397-401 | 424-432 | 35 | 492-493 | 495-496 | 447-448 | 487-488 | 500 |
| 7 | 432-434 | 440-441 | 381-383 | 402-407 | 433-436 | 36 | 494-495 | 497 | 449-450 | 489-490 | 501-502 |
| 8 | 435-436 | 442-443 | 384-387 | 408-411 | 437-443 | 37 | 496-497 | 498-499 | 451-452 | 491-492 | 503-504 |
| 9 | 437-439 | 444 | 388-390 | 412-413 | 444-446 | 38 | 498-499 | 500 | 453-454 | 493-495 | 505 |
| 10 | 440-441 | 445-446 | 391-393 | 414-416 | 447-448 | 39 | 500-501 | 501-502 | 455 | 496-497 | 506-507 |
| 11 | 442-444 | 447-449 | 394-395 | 417-420 | 449-450 | 40 | 502-503 | 503 | 456-457 | 498-499 | 508 |
| 12 | 445-446 | 450-451 | 396-398 | 421-424 | 451-453 | 41 | 504-505 | 504 | 458-460 | 500-502 | 509-510 |
| 13 | 447-448 | 452-455 | 399-401 | 425-426 | 454-455 | 42 | 506 | 505-506 | 461-462 | 503-504 | 511-512 |
| 14 | 449-450 | 456-457 | 402-403 | 427-429 | 456-457 | 43 | 507-508 | 507-508 | 463-464 | 505-506 | 513 |
| 15 | 451-452 | 458-459 | 404-406 | 430-433 | 458-460 | 44 | 509-510 | 509 | 465 | 507-509 | 514-515 |
| 16 | 453-454 | 460-462 | 407-409 | 434-436 | 461-463 | 45 | 511-512 | 510-511 | 466-467 | 510-511 | 516 |
| 17 | 455-456 | 463-464 | 410-411 | 437-438 | 464-466 | 46 | 513-514 | 512 | 468-470 | 512-514 | 517-518 |
| 18 | 457-458 | 465-466 | 412-414 | 439-441 | 467-468 | 47 | 515-516 | 513-514 | 471 | 515 | 519 |
| 19 | 459-460 | 467-469 | 415-416 | 442-445 | 469-470 | 48 | 517 | 515-516 | 472-473 | 516-518 | 520-521 |
| 20 | 461-462 | 470-471 | 417-418 | 446-448 | 471-472 | 49 | 518-519 | 517 | 474-475 | 519-520 | 522 |
| 21 | 463-464 | 472-473 | 419-421 | 449-451 | 473-474 | 50 | 520-521 | 518-519 | 476-477 | 521-522 | 523-524 |
| 22 | 465-467 | 474-475 | 422 | 452-453 | 475-476 | 51 | 522-523 | 520-521 | 478-479 | 523-524 | 525 |
| 23 | 468-469 | 476-477 | 423-425 | 454-457 | 477-478 | 52 | 524-525 | 522 | 480 | 525-526 | 526-527 |
| 24 | 470-471 | 478 | 426-427 | 458-459 | 479-480 | 53 | 526-527 | 523-524 | 481-482 | 527-529 | 528-529 |
| 25 | 472-473 | 479-480 | 428-429 | 460-462 | 481 | 54 | 528 | 525 | 483-484 | 530-531 | 530 |
| 26 | 474-475 | 481 | 430-431 | 463-465 | 482-484 | 55 | 529-530 | 526-527 | 485-486 | 532-533 | 531-532 |
| 27 | 476-477 | 482-483 | 432 | 466-468 | 485-486 | 56 | 531-532 | 528-529 | 487-488 | 534-535 | 533-534 |
| 28 | 478-480 | 484 | 433-434 | 469-471 | 487-488 | 57 | 533-534 | 530 | 489-490 | 536-537 | 535 |
| 29 | 481 | 485-486 | 435-436 | 472-473 | 489 | 58 | 535 | 531-532 | 491-492 | 538-539 | 536 |

Table E. 17 Form C Grades 4-5 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 536-537 | 533 | 493-494 | 540-541 | 537-538 | 88 | 591-592 | 595-596 | 545-546 | 602-604 | 601-602 |
| 60 | 538-539 | 534-535 | 495 | 542-543 | 539-540 | 89 | 593-594 | 597-598 | 547-548 | 605-606 | 603 |
| 61 | 540-541 | 536-537 | 496-497 | 544-546 | 541 | 90 | 595-596 | 599-600 | 549-551 | 607-608 | 604-605 |
| 62 | 542 | 538-539 | 498-499 | 547-548 | 542-543 | 91 | 597-598 | 601 | 552 | 609-610 | 606-607 |
| 63 | 543-544 | 540-541 | 500 | 549-550 | 544-545 | 92 | 599-600 | 602-603 | 553-554 | 611-613 | 608-609 |
| 64 | 545-546 | 542-543 | 501-502 | 551-552 | 546-547 | 93 | 601 | 604 | 555-556 | 614-616 | 610 |
| 65 | 547 | 544-545 | 503-504 | 553-554 | 548 | 94 | 602 | 605-607 | 557-558 | 617 | 611 |
| 66 | 548-549 | 546-547 | 505-506 | 555-556 | 549-550 | 95 | 603-604 | 608-609 | 559 | 618-619 | 612-613 |
| 67 | 550-551 | 548-549 | 507-508 | 557-558 | 551-552 | 96 | 605 | 610-612 | 560-561 | 620 | 614-615 |
| 68 | 552-553 | 550-551 | 509 | 559-560 | 553-554 | 97 | 606 | 613-615 | 562 | 621 | 616-617 |
| 69 | 554-555 | 552-553 | 510-511 | 561-563 | 555-556 | 98 | 607-609 | 616-617 | 563-564 | 622 | 618 |
| 70 | 556-557 | 554-556 | 512-513 | 564 | 557-558 | 99 | 610-999 | 618-999 | 565-999 | 623-999 | 619-999 |
| 71 | 558 | 557-558 | 514-515 | 565-567 | 559-561 |  |  |  |  |  |  |
| 72 | 559-560 | 559-560 | 516 | 568-569 | 562-563 |  |  |  |  |  |  |
| 73 | 561-562 | 561-562 | 517-518 | 570-571 | 564-565 |  |  |  |  |  |  |
| 74 | 563-564 | 563-565 | 519-520 | 572-573 | 566-568 |  |  |  |  |  |  |
| 75 | 565 | 566-567 | 521 | 574-575 | 569-570 |  |  |  |  |  |  |
| 76 | 566-567 | 568-570 | 522-523 | 576-577 | 571-572 |  |  |  |  |  |  |
| 77 | 568-569 | 571-572 | 524-525 | 578-579 | 573-574 |  |  |  |  |  |  |
| 78 | 570-571 | 573-574 | 526-527 | 580-581 | 575-576 |  |  |  |  |  |  |
| 79 | 572-573 | 575-577 | 528-529 | 582-583 | 577-579 |  |  |  |  |  |  |
| 80 | 574-575 | 578-579 | 530-531 | 584-585 | 580-582 |  |  |  |  |  |  |
| 81 | 576-578 | 580-581 | 532 | 586-587 | 583-585 |  |  |  |  |  |  |
| 82 | 579-580 | 582-584 | 533-534 | 588-590 | 586-587 |  |  |  |  |  |  |
| 83 | 581-582 | 585-586 | 535-536 | 591-592 | 588-590 |  |  |  |  |  |  |
| 84 | 583-584 | 587-588 | 537 | 593-594 | 591-592 |  |  |  |  |  |  |
| 85 | 585-586 | 589-590 | 538-540 | 595-596 | 593-595 |  |  |  |  |  |  |
| 86 | 587-588 | 591-592 | 541-542 | 597-599 | 596-597 |  |  |  |  |  |  |
| 87 | 589-590 | 593-594 | 543-544 | 600-601 | 598-600 |  |  |  |  |  |  |

Table E. 18 Form C Grades 6-8 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-433 | 1-424 | 1-398 | 1-401 | 1-408 | 30 | 495-496 | 491-493 | 472-473 | 495-496 | 496-497 |
| 2 | 434 | 425-427 | 399-401 | 402-406 | 409-415 | 31 | 497-498 | 494-495 | 474-475 | 497-499 | 498 |
| 3 | 435-438 | 428-432 | 402-405 | 407-410 | 416-420 | 32 | 499-500 | 496 | 476-478 | 500-501 | 499-500 |
| 4 | 439-440 | 433-434 | 406 | 411-414 | 421-426 | 33 | 501-502 | 497-498 | 479 | 502-504 | 501 |
| 5 | 441-442 | 435-438 | 407-410 | 415-419 | 427-432 | 34 | 503-504 | 499-500 | 480-482 | 505-506 | 502-503 |
| 6 | 443 | 439-443 | 411-413 | 420-422 | 433-437 | 35 | 505-506 | 501-502 | 483-484 | 507-508 | 504-505 |
| 7 | 444-445 | 444 | 414-417 | 423-428 | 438-440 | 36 | 507-509 | 503 | 485-486 | 509-511 | 506-507 |
| 8 | 446-447 | 445-447 | 418 | 429-432 | 441-444 | 37 | 510 | 504-506 | 487-488 | 512-513 | $508$ |
| 9 | 448-449 | 448-450 | 419-420 | 433-434 | 445-447 | 38 | 511-512 | 507-508 | 489-491 | 514-515 | 509-510 |
| 10 | 450-453 | 451-453 | 421-424 | 435-438 | 448-450 | 39 | 513-514 | 509 | 492-493 | 516-517 | 511 |
| 11 | 454-455 | 454-455 | 425-426 | 439-441 | 451-453 | 40 | 515-516 | 510-511 | 494-495 | 518-519 | 512-513 |
| 12 | 456-458 | 456-457 | 427-428 | 442-445 | 454-455 | 41 | 517-518 | 512-513 | 496-497 | 520-521 | 514-515 |
| 13 | 459-460 | 458-459 | 429-431 | 446-448 | 456-458 | 42 | $519$ | 514-515 | 498-499 | 522-524 | 516-517 |
| 14 | 461-462 | 460-461 | 432-435 | 449-451 | 459-461 | 43 | 520-521 | 516-517 | 500-502 | 525-526 | 518 |
| 15 | 463-464 | 462-463 | 436-437 | 452-454 | 462-465 | 44 | 522-523 | 518-519 | 503-504 | 527-528 | 519-520 |
| 16 | 465-468 | 464-465 | 438-439 | 455-458 | 466-467 | 45 | 524-525 | 520-521 | 505-506 | 529-530 | 521-522 |
| 17 | 469-470 | 466-467 | 440-442 | 459-462 | 468-469 | 46 | 526 | 522 | 507-508 | 531-533 | 523 |
| 18 | 471-472 | 468-469 | 443-444 | 463-465 | 470-471 | 47 | 527-528 | 523-524 | 509-511 | 534-535 | 524-525 |
| 19 | 473-474 | 470-471 | 445-447 | 466-468 | 472-474 | 48 | 529-531 | 525-526 | 512-513 | 536-537 | 526-527 |
| 20 | 475-476 | 472 | 448-450 | 469-470 | 475-476 | 49 | 532 | 527-528 | 514-515 | 538-539 | 528-529 |
| 21 | 477-478 | 473-474 | 451-452 | 471-472 | 477-478 | 50 | 533-534 | 529 | 516-518 | 540-541 | 530-531 |
| 22 | 479-480 | 475 | 453-454 | 473-475 | 479-480 | 51 | 535-536 | 530-531 | 519-520 | 542-543 | 532 |
| 23 | 481-482 | 476-477 | 455-458 | 476-478 | 481-482 | 52 | 537-538 | 532-533 | 521-522 | 544-545 | 533-534 |
| 24 | 483-484 | 478-479 | 459-460 | 479-481 | 483-484 | 53 | 539-540 | 534-535 | 523-524 | 546-547 | 535 |
| 25 | 485-486 | 480-482 | 461-462 | 482-484 | 485-487 | 54 | 541-542 | 536-537 | 525-526 | 548-549 | 536-537 |
| 26 | 487-488 | 483-484 | 463-464 | 485-487 | 488-489 | 55 | 543-544 | 538 | 527-528 | 550-551 | 538 |
| 27 | 489 | 485-487 | 465-466 | 488-490 | 490-491 | 56 | 545-546 | 539-541 | 529-530 | 552-553 | 539-540 |
| 28 | 490-492 | 488 | 467-468 | 491-492 | 492-493 | 57 | 547-548 | 542 | 531-532 | 554-555 | 541-542 |
| 29 | 493-494 | 489-490 | 469-471 | 493-494 | 494-495 | 58 | 549-550 | 543-544 | 533-534 | 556-557 | 543 |

Table E. 18 Form C Grades 6-8 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 551-552 | 545-546 | 535-536 | 558-560 | 544-545 | 88 | 607 | 609-610 | 595-597 | 620-621 | 605-607 |
| 60 | 553 | 547-548 | 537-538 | 561 | 546-547 | 89 | 608-609 | 611-612 | 598-599 | 622-624 | 608-609 |
| 61 | 554-555 | 549-550 | 539-540 | 562-563 | 548 | 90 | 610-612 | 613-614 | 600-602 | 625-626 | 610-611 |
| 62 | 556-557 | 551-552 | 541-542 | 564-565 | 549-550 | 91 | 613 | 615-616 | 603-604 | 627-629 | 612-613 |
| 63 | 558-559 | 553-554 | 543-544 | 566-567 | 551-552 | 92 | 614-615 | 617-619 | 605-606 | 630-631 | 614-616 |
| 64 | 560-561 | 555-556 | 545-546 | 568-569 | 553-554 | 93 | 616 | 620 | 607-608 | 632-634 | 617-618 |
| 65 | 562-563 | 557-558 | 547-548 | 570-572 | 555 | 94 | 617-618 | 621-622 | 609-611 | 635-636 | 619-620 |
| 66 | 564-565 | 559-560 | 549-550 | 573-574 | 556-557 | 95 | 619-621 | 623-624 | 612-614 | 637-639 | 621-623 |
| 67 | 566-567 | 561-562 | 551-552 | 575-576 | 558-559 | 96 | 622 | 625-627 | 615-618 | 640-642 | 624-626 |
| 68 | 568-569 | 563-564 | 553-554 | 577-578 | 560 | 97 | 623-625 | 628 | 619-620 | 643-644 | $627$ |
| 69 | 570-571 | 565-566 | 555-556 | 579-580 | 561-562 | 98 | 626-627 | 629-630 | 621-623 | 645-646 | 628 |
| 70 | 572-573 | 567-568 | 557-559 | 581-582 | 563-564 | 99 | 628-999 | 631-999 | 624-999 | 647-999 | 629-999 |
| 71 | 574-575 | 569-570 | 560-561 | 583-585 | 565-566 |  |  |  |  |  |  |
| 72 | 576-577 | 571-572 | 562-563 | 586-587 | 567-568 |  |  |  |  |  |  |
| 73 | 578 | 573-574 | 564-565 | 588-589 | 569-570 |  |  |  |  |  |  |
| 74 | 579-581 | 575-577 | 566-567 | 590 | 571-572 |  |  |  |  |  |  |
| 75 | 582-583 | 578-579 | 568-569 | 591-592 | 573-574 |  |  |  |  |  |  |
| 76 | 584-585 | 580-581 | 570-571 | 593-594 | 575-576 |  |  |  |  |  |  |
| 77 | 586-587 | 582-583 | 572-574 | 595-597 | 577-578 |  |  |  |  |  |  |
| 78 | 588-589 | 584-586 | 575-576 | 598-599 | 579-581 |  |  |  |  |  |  |
| 79 | 590-591 | 587-588 | 577-578 | 600-601 | 582-584 |  |  |  |  |  |  |
| 80 | 592-593 | 589-590 | 579-580 | 602-603 | 585-586 |  |  |  |  |  |  |
| 81 | 594 | 591-593 | 581-583 | 604-605 | 587-588 |  |  |  |  |  |  |
| 82 | 595-597 | 594-595 | 584-585 | 606-608 | 589-591 |  |  |  |  |  |  |
| 83 | 598 | 596-598 | 586-587 | 609-610 | 592-594 |  |  |  |  |  |  |
| 84 | 599-600 | 599-600 | 588-589 | 611-612 | 595-597 |  |  |  |  |  |  |
| 85 | 601-602 | 601-603 | 590-591 | 613-615 | 598-600 |  |  |  |  |  |  |
| 86 | 603-604 | 604-605 | 592-593 | 616-617 | 601-602 |  |  |  |  |  |  |
| 87 | 605-606 | 606-608 | 594 | 618-619 | 603-604 |  |  |  |  |  |  |

Table E. 19 Form C Grades 9-12 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-433 | 1-432 | 1-415 | 1-403 | 1-410 | 30 | 500-501 | 498 | 491-492 | 499-500 | 507 |
| 2 | 434-438 | 433 | 416-418 | 404-407 | 411-416 | 31 | 502-503 | 499-500 | 493-495 | 501-503 | 508-509 |
| 3 | 439-440 | 434-436 | 419-420 | 408-412 | 417-422 | 32 | 504-505 | 501 | 496-498 | 504-505 | 510-511 |
| 4 | 441-443 | 437-441 | 421-423 | 413-416 | 423-429 | 33 | 506-507 | 502-503 | 499-500 | 506-508 | 512-513 |
| 5 | 444-447 | 442-443 | 424-426 | 417-422 | 430-435 | 34 | 508-509 | 504 | 501-502 | 509-510 | 514-515 |
| 6 | 448-449 | 444-445 | 427-428 | 423-426 | 436-438 | 35 | 510-511 | 505-506 | 503-504 | 511-513 | 516 |
| 7 | 450-452 | 446-448 | 429-430 | 427-430 | 439-441 | 36 | 512-513 | 507-508 | 505-506 | 514-515 | 517-518 |
| 8 | 453-454 | 449-451 | 431-433 | 431-434 | 442-444 | 37 | 514-515 | $509$ | 507-508 | 516-517 | $519$ |
| 9 | 455-456 | 452-454 | 434-436 | 435-438 | 445-449 | 38 | 516-517 | 510-511 | 509-510 | 518-519 | 520-521 |
| 10 | 457-458 | 455-456 | 437-440 | 439-442 | 450-454 | 39 | 518-519 | 512-513 | 511-512 | 520-522 | 522-523 |
| 11 | 459-460 | 457-458 | 441-442 | 443-447 | 455-461 | 40 | 520 | 514 | 513-515 | 523-524 | 524 |
| 12 | 461-462 | 459-461 | 443-445 | 448-450 | 462-464 | 41 | 521-522 | 515-516 | 516-517 | 525-526 | 525-526 |
| 13 | 463-464 | 462-464 | 446-448 | 451-454 | 465-468 | 42 | 523-524 | 517-518 | 518-519 | 527-528 | $527$ |
| 14 | 465-467 | 465-466 | 449-450 | 455-457 | 469-471 | 43 | 525-526 | 519-520 | 520-521 | 529-530 | 528 |
| 15 | 468-469 | 467-468 | 451-452 | 458-459 | 472-476 | 44 | 527-528 | 521 | 522-524 | 531-532 | 529-530 |
| 16 | 470-472 | 469-471 | 453-456 | 460-462 | 477-479 | 45 | 529 | 522-523 | 525-526 | 533-534 | 531 |
| 17 | 473-474 | 472-473 | 457-458 | 463-465 | 480-482 | 46 | 530-531 | 524 | 527-528 | 535-536 | 532-533 |
| 18 | 475-476 | 474-475 | 459-460 | 466-469 | 483-484 | 47 | 532-533 | 525-526 | 529-530 | 537-538 | 534-535 |
| 19 | 477-478 | 476-477 | 461-463 | 470-472 | 485-487 | 48 | 534-535 | 527-528 | 531-532 | 539-540 | 536 |
| 20 | 479-481 | 478-479 | 464-466 | 473-475 | 488-489 | 49 | 536 | 529-530 | 533-534 | 541-542 | 537-538 |
| 21 | 482 | 480-481 | 467-469 | 476-478 | 490-491 | 50 | 537-538 | 531 | 535-537 | 543-544 | 539 |
| 22 | 483-485 | 482-483 | 470-472 | 479-481 | 492-493 | 51 | 539-540 | 532-533 | 538-539 | 545-546 | 540 |
| 23 | 486-487 | 484-486 | 473-474 | 482-484 | 494 | 52 | 541-542 | 534-535 | 540-542 | 547-549 | 541-542 |
| 24 | 488-489 | 487-488 | 475-477 | 485-486 | 495-496 | 53 | 543 | 536-537 | 543-544 | 550-551 | 543 |
| 25 | 490-491 | 489-490 | 478-479 | 487-488 | 497-498 | 54 | 544-545 | 538 | 545-546 | 552 | 544-545 |
| 26 | 492-493 | 491-492 | 480-481 | 489-490 | 499-500 | 55 | 546-547 | 539-541 | 547-548 | 553-554 | 546 |
| 27 | 494-495 | 493 | 482-484 | 491-493 | 501-502 | 56 | 548-549 | 542 | 549-550 | 555-557 | 547-548 |
| 28 | 496-497 | 494-495 | 485-488 | 494-495 | 503-504 | 57 | 550-551 | 543-544 | 551-552 | 558-559 | 549 |
| 29 | 498-499 | 496-497 | 489-490 | 496-498 | 505-506 | 58 | 552-553 | 545-546 | 553-554 | 560-561 | 550-551 |

Table E.19 Form C Grades 9-12 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | $\mathrm{CO}$ | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 554-555 | 547 | 555-556 | 562 | 552 | 88 | 610-612 | 611-612 | 621-622 | 625-626 | 611-612 |
| 60 | 556-557 | 548-549 | 557-559 | 563-565 | 553-554 | 89 | 613 | 613-615 | 623-624 | 627-628 | 613-615 |
| 61 | 558-559 | 550-551 | 560-561 | 566-567 | 555 | 90 | 614 | 616-619 | 625-627 | 629-630 | 616 |
| 62 | 560-561 | 552-553 | 562-563 | 568-569 | 556-557 | 91 | 615-617 | 620-622 | 628-629 | 631-633 | 617-618 |
| 63 | 562 | 554-555 | 564-566 | 570-571 | 558-559 | 92 | 618-619 | 623-625 | 630-632 | 634-635 | 619-620 |
| 64 | 563-564 | 556-557 | 567-568 | 572-573 | 560 | 93 | 620-622 | 626-628 | 633-634 | 636 | 621-622 |
| 65 | 565-566 | 558-559 | 569-570 | 574-575 | 561-562 | 94 | 623 | 629 | 635-636 | 637-638 | 623-624 |
| 66 | 567-568 | 560-561 | 571-572 | 576-577 | 563-564 | 95 | $624-626$ | $630-634$ | 637-639 | $639-640$ | $625$ |
| 67 | 569 | 562-563 | 573-574 | 578-579 | 565-566 | 96 | 627 | 635-636 | 640-642 | 641-646 | 626-627 |
| 68 | 570-571 | 564-565 | 575-576 | 580-581 | 567-568 | 97 | 628-629 | 637 | 643-645 | 647-649 | $628$ |
| 69 | 572-573 | 566-567 | 577-578 | 582-583 | 569-570 | 98 | 630-632 | 638-640 | 646-647 | 650-652 | 629 |
| 70 | 574-575 | 568-569 | 579-580 | 584-585 | 571 | 99 | 633-999 | 641-999 | 648-999 | 653-999 | 630-999 |
| 71 | 576 | 570-571 | 581-583 | 586-587 | 572-573 |  |  |  |  |  |  |
| 72 | 577-578 | 572-573 | 584-585 | 588-589 | 574-576 |  |  |  |  |  |  |
| 73 | 579-580 | 574-576 | 586-588 | 590-592 | 577-578 |  |  |  |  |  |  |
| 74 | 581-582 | 577-578 | 589-590 | 593-594 | 579-581 |  |  |  |  |  |  |
| 75 | 583-584 | 579-581 | 591-592 | 595-596 | 582-583 |  |  |  |  |  |  |
| 76 | 585-586 | 582-583 | 593-594 | 597-598 | 584-585 |  |  |  |  |  |  |
| 77 | 587-588 | 584-585 | 595-596 | 599-600 | 586-588 |  |  |  |  |  |  |
| 78 | 589-590 | 586-588 | 597-599 | 601-602 | 589-590 |  |  |  |  |  |  |
| 79 | 591-592 | 589-591 | 600-602 | 603-604 | 591-592 |  |  |  |  |  |  |
| 80 | 593 | 592-593 | 603-604 | 605-606 | 593-595 |  |  |  |  |  |  |
| 81 | 594-595 | 594-595 | 605-606 | 607-608 | 596-598 |  |  |  |  |  |  |
| 82 | 596-597 | $596-597$ | 607-608 | 609-611 | 599-600 |  |  |  |  |  |  |
| 83 | 598-600 | 598-599 | 609-611 | 612-613 | 601-602 |  |  |  |  |  |  |
| 84 | 601-602 | 600-602 | 612-613 | 614-616 | 603 |  |  |  |  |  |  |
| 85 | 603-604 | 603-604 | 614-616 | 617-618 | 604-606 |  |  |  |  |  |  |
| 86 | 605-607 | 605-607 | 617-618 | 619-620 | 607-608 |  |  |  |  |  |  |
| 87 | 608-609 | 608-610 | 619-620 | 621-624 | 609-610 |  |  |  |  |  |  |

Table E. 20 Form C Kindergarten Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-316 | 1-368 | 1-317 | 1-236 | 1-295 | 30 | 380 | 439 | 389 | 318-319 | 370 |
| 2 | 317-325 | 369-382 | 318-327 | 237-248 | 296-305 | 31 | 381 | 440 | 390 | 320 | 371-372 |
| 3 | 326-330 | 383-390 | 328-334 | 249-255 | 306-311 | 32 | 382 | 441 |  | 321-322 | 373 |
| 4 | 331-335 | 391-395 | 335-339 | 256-260 | 312-316 | 33 | 383 |  | 391 | 323 | 374 |
| 5 | 336-338 | 396-400 | 340-345 | 261-264 | 317-321 | 34 | 384-385 | 442 | 392 | 324-325 | 375-376 |
| 6 | 339-341 | 401-403 | 346-350 | 265-267 | 322-325 | 35 | 386 | 443 | 393 | 326-327 | 377 |
| 7 | 342-344 | 404-406 | 351-353 | 268-270 | 326-328 | 36 | 387 | 444 | 394 | 328 | 378 |
| 8 | 345-347 | 407-409 | 354-357 | 271-274 | 329-331 | 37 | 388 | 445 | 395 | 329-330 | 379-380 |
| 9 | 348-349 | 410-413 | 358-360 | 275-276 | 332-333 | 38 | 389 | 446 | 396 | 331 | 381 |
| 10 | 350-352 | 414-415 | 361-362 | 277-278 | 334-335 | 39 | 390 |  |  | 332 | 382 |
| 11 | 353-354 | 416-417 | 363-364 | 279-281 | 336-338 | 40 | 391 | 447 | 397 | 333-334 | 383-384 |
| 12 | 355-356 | 418 | 365-366 | 282-283 | 339-340 | 41 | 392 | 448 | 398 | 335 | 385 |
| 13 | 357-358 | 419-420 | 367-368 | 284-285 | 341-342 | 42 | 393 |  | 399 | 336-337 | 386-387 |
| 14 | 359 | 421 | 369-370 | 286-288 | 343-344 | 43 | 394 | 449 |  | 338 | 388 |
| 15 | 360-361 | 422-423 | 371-372 | 289-291 | 345-346 | 44 | 395 | 450 | 400 | 339 | 389 |
| 16 | 362-363 | 424 | 373 | 292-293 | 347-348 | 45 | 396 | 451 | 401 | 340-341 | 390-391 |
| 17 | 364 | 425 | 374-375 | 294-295 | 349-350 | 46 | 397 | 452 | 402 | 342 | 392 |
| 18 | 365-366 | 426-427 | 376 | 296-297 | 351-352 | 47 | 398 |  | 403 | 343-344 | 393 |
| 19 | 367 | 428 | 377-378 | 298-299 | 353 | 48 | 399 | 453 |  | 345 | 394 |
| 20 | 368 | 429 | 379 | 300-301 | 354-355 | 49 | 400 | 454 | 404 | 346-347 | 395-396 |
| 21 | 369 | 430 | 380 | 302-303 | 356 | 50 | 401 | 455 | 405 | 348 | 397 |
| 22 | 370-371 | 431-432 | 381 | 304-305 | 357-358 | 51 | 402 |  | 406 | 349 | 398 |
| 23 | 372 | 433 | 382 | 306 | 359-360 | 52 | 403 | 456 | 407 | 350-351 | 399-400 |
| 24 | 373-374 | 434 | 383 | 307-309 | 361-362 | 53 | 404 | 457 |  | 352 | 401 |
| 25 | 375 | 435 | 384 | 310 | 363-364 | 54 | 405 | 458 | 408 | 353 | 402 |
| 26 | 376 |  | 385 | 311-312 | 365 | 55 | 406 |  | 409 | 354-355 | 403-404 |
| 27 | 377 | 436 | 386 | 313 | 366 | 56 | 407 | 459 | 410 | 356 | 405 |
| 28 | 378 | 437 | 387 | 314-316 | 367-368 | 57 | 408 | 460 | 411 | 357 | 406 |
| 29 | 379 | 438 | 388 | 317 | 369 | 58 |  |  |  | 358-359 | 407-408 |

Table E.20 Form C Kindergarten Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 409 | 461 | 412 | 360 | 409 | 88 | 448-449 | 494-495 | 445-446 | 407-409 | 453-454 |
| 60 | 410 | 462 | 413 | 361 | 410 | 89 | 450-451 | 496-498 | 447-448 | 410-412 | 455-457 |
| 61 | 411 | 463 | 414 | 362-363 | 411 | 90 | 452-454 | 499-500 | 449-450 | 413-415 | 458-460 |
| 62 | 412 | 464 | 415 | 364 | 412 | 91 | 455-457 | 501-503 | 451 | 416-419 | 461-464 |
| 63 | 413 |  |  | 365 | 413-414 | 92 | 458-460 | 504-506 | 452-454 | 420-423 | 465-468 |
| 64 | 414-415 | 465 | 416 | 366 | 415 | 93 | 461-463 | 507-509 | 455-458 | 424-427 | 469-472 |
| 65 | 416 | 466 | 417 | 367 | 416 | 94 | 464-467 | 510-513 | 459-460 | 428-432 | 473-479 |
| 66 | 417 | 467 | 418 | 368-369 | 417 | 95 | 468-471 | 514-518 | 461-465 | 433-440 | 480-485 |
| 67 | 418 |  | 419 | 370 | 418-419 | 96 | 472-477 | 519-522 | 466-471 | 441-449 | 486-492 |
| 68 | 419 | 468 | 420 | 371-372 | 420 | 97 | 478-483 | 523-528 | 472-478 | 450-462 | 493-503 |
| 69 | 420 | 469 | 421 | 373 | 421 | 98 | 484-496 | 529-534 | 479-493 | 463-493 | 504-523 |
| 70 | 421 | 470 | 422 | 374-375 | 422-423 | 99 | 497-999 | 535-999 | 494-999 | 494-999 | 524-999 |
| 71 | 422 | 471 |  | 376 | 424 |  |  |  |  |  |  |
| 72 | 423 | 472 | 423-424 | 377-378 | 425 |  |  |  |  |  |  |
| 73 | 424-425 | 473 | 425 | 379 | 426 |  |  |  |  |  |  |
| 74 | 426 | 474 | 426 | 380-381 | 427-428 |  |  |  |  |  |  |
| 75 | 427 | 475 | 427 | 382 | 429-430 |  |  |  |  |  |  |
| 76 | 428 | 476-477 | 428 | 383-384 | 431 |  |  |  |  |  |  |
| 77 | 429-430 | 478 | 429 | 385-386 | 432-433 |  |  |  |  |  |  |
| 78 | 431 | 479 | 430-431 | 387-388 | 434 |  |  |  |  |  |  |
| 79 | 432-433 | 480 | 432 | 389-390 | 435-436 |  |  |  |  |  |  |
| 80 | 434 | 481 | 433 | 391 | 437 |  |  |  |  |  |  |
| 81 | 435-436 | 482 | 434-435 | 392-393 | 438-439 |  |  |  |  |  |  |
| 82 | 437 | 483-484 | 436 | 394 | 440-441 |  |  |  |  |  |  |
| 83 | 438-439 | 485 | 437-438 | 395-396 | 442-443 |  |  |  |  |  |  |
| 84 | 440-441 | 486-487 | 439 | 397-399 | 444-445 |  |  |  |  |  |  |
| 85 | 442 | 488-489 | 440 | 400-401 | 446-447 |  |  |  |  |  |  |
| 86 | 443-444 | 490-491 | 441-442 | 402-403 | 448-449 |  |  |  |  |  |  |
| 87 | 445-447 | 492-493 | 443-444 | 404-406 | 450-452 |  |  |  |  |  |  |

Table E. 21 Form C Grade 1 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-347 | 1-379 | 1-330 | 1-281 | 1-336 | 30 | 417 | 451 | 403 | 381-382 | 429 |
| 2 | 348-356 | 380-393 | 331-342 | 282-293 | 337-352 | 31 | 418 |  | 404 | 383 | 430 |
| 3 | 357-365 | 394-406 | 343-351 | 294-304 | 353-363 | 32 | 419 | 452 | 405 | 384 | 431 |
| 4 | 366-371 | 407-412 | 352-358 | 305-312 | 364-371 | 33 | 420 | 453 |  | 385 | 432 |
| 5 | 372-374 | 413-416 | 359-362 | 313-320 | 372-378 | 34 | 421 |  | 406 | 386-387 | 433 |
| 6 | 375-378 | 417-419 | 363-365 | 321-324 | 379-382 | 35 | 422 | 454 | 407 | 388 | 434 |
| 7 | 379-381 | 420-422 | 366-369 | 325-330 | 383-386 | 36 |  | 455 | 408 | 389 | 435 |
| 8 | 382-384 | 423-425 | 370-372 | 331-335 | 387-392 | 37 | 423 | 456 | 409 | 390 | 436 |
| 9 | 385-386 | 426-427 | 373-374 | 336-339 | 393-395 | 38 | 424 |  | 410 | 391-392 | 437 |
| 10 | 387-389 | 428-429 | 375-376 | 340-343 | 396-398 | 39 | 425 | 457 | 411 | 393 | 438 |
| 11 | 390-391 | 430 | 377-378 | 344-346 | 399-401 | 40 | 426 | 458 | 412 | 394 | 439 |
| 12 | 392-394 | 431-432 | 379-380 | 347-349 | 402-403 | 41 | 427 |  | 413 | 395-396 |  |
| 13 | 395 | 433 | 381-382 | 350-352 | 404-405 | 42 | 428 | 459 | 414 | 397 | 440 |
| 14 | 396-397 | 434-435 | 383 | 353-355 | 406-408 | 43 | 429 |  | 415 | 398 | 441 |
| 15 | 398-399 | 436 | 384-385 | 356-357 | 409 | 44 |  | 460 | 416 | 399 | 442 |
| 16 | 400 | 437 | 386 | 358-359 | 410-411 | 45 | 430 | 461 | 417 | 400 | 443 |
| 17 | 401-402 | 438-439 | 387 | 360 | 412 | 46 | 431 |  | 418 | 401 | 444 |
| 18 | 403 | 440 | 388-389 | 361-362 | 413-414 | 47 | 432 | 462 | 419 | 402 | 445 |
| 19 | 404-405 | 441 | 390 | 363-364 | 415 | 48 | 433 | 463 |  | 403-404 | 446 |
| 20 | 406 | 442 | 391 | 365-366 | 416 | 49 |  |  | 420 | 405 | 447 |
| 21 | 407 | 443 | 392 | 367 | 417-418 | 50 | 434 | 464 | 421 | 406 | 448 |
| 22 | 408-409 | 444 | 393 | 368-370 | 419 | 51 | 435 | 465 | 422 | 407 |  |
| 23 | 410 | 445 | 394-395 | 371 | 420 | 52 | 436 |  | 423 | 408 | 449-450 |
| 24 | 411 | 446 | 396 | 372-373 | 421 | 53 | 437 | 466 | 424 | 409 | 451 |
| 25 | 412 | 447 | 397 | 374-375 | 422 | 54 | 438 | 467 |  | 410 | 452 |
| 26 | 413 | 448 | 398-399 | 376 | 423-424 | 55 | 439 |  | 425 | 411 | 453 |
| 27 | 414 |  | 400 | 377-378 | 425 | 56 | 440 | 468 | 426 | 412-413 | 454 |
| 28 | 415 | 449 | 401 | 379 | 426-427 | 57 | 441 | 469 | 427 | 414 | 455 |
| 29 | 416 | 450 | 402 | 380 | 428 | 58 | 442 |  | 428 | 415 | 456 |

Table E. 21 Form C Grade 1 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 |  | 470 | 429 | 416 | 457 |
| 60 | 443 | 471 | 430 | $417-418$ | 458 |
| 61 | 444 |  | 431 | 419 | 459 |
| 62 | 445 | 472 | 432 | 420 | 460 |
| 63 | $446-447$ | 473 | 433 | 421 | $461-462$ |
| 64 | 448 |  | 434 | $422-423$ | 463 |
| 65 | 449 | 474 | 435 | 424 | 464 |
| 66 | 450 | 475 | 436 | $425-426$ | 465 |
| 67 | 451 | 476 | 437 | 427 | 466 |
| 68 | 452 | 477 | 438 | 428 | 467 |
| 69 | 453 |  | 439 | $429-430$ | 468 |
| 70 | 454 | 478 | 440 | $431-432$ | 469 |
| 71 | 455 | 479 | 441 | 433 | $470-471$ |
| 72 | $456-457$ | 480 | 442 | $434-435$ | 472 |
| 73 | 458 | 481 | 443 | $436-437$ | 473 |
| 74 | $459-460$ | 482 | 444 | $438-439$ | 474 |
| 75 | 461 | 483 | 445 | $440-441$ | 475 |
| 76 | 462 | 484 | $446-447$ | 442 | $476-477$ |
| 77 | 463 | 485 | 448 | $443-445$ | 478 |
| 78 | $464-465$ | 486 | $449-450$ | $446-447$ | $479-480$ |
| 79 | $466-467$ | 487 | 451 | $448-449$ | $481-482$ |
| 80 | $468-469$ | 488 | $452-453$ | $450-452$ | $483-484$ |
| 81 | 470 | $489-490$ | 454 | $453-454$ | $485-486$ |
| 82 | $471-472$ | 491 | $455-456$ | $455-456$ | $487-488$ |
| 83 | $473-474$ | $492-493$ | 457 | $457-460$ | $489-490$ |
| 84 | $475-476$ | 494 | $458-459$ | $461-463$ | $491-493$ |
| 85 | $477-478$ | $495-496$ | $460-461$ | $464-467$ | $494-496$ |
| 86 | $479-481$ | 497 | $462-463$ | $468-471$ | $497-499$ |
| 87 | $482-484$ | $498-499$ | $464-465$ | $472-476$ | $500-503$ |
|  |  |  |  |  |  |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $485-486$ | $500-501$ | $466-467$ | $477-481$ | $504-508$ |
| 89 | $487-490$ | $502-503$ | $468-470$ | $482-486$ | $509-513$ |
| 90 | $491-493$ | 504 | $471-473$ | $487-492$ | $514-519$ |
| 91 | $494-497$ | $505-507$ | $474-476$ | $493-500$ | $520-526$ |
| 92 | $498-501$ | $508-509$ | $477-480$ | $501-507$ | $527-540$ |
| 93 | $502-505$ | $510-512$ | $481-484$ | $508-515$ | $541-554$ |
| 94 | $506-510$ | $513-515$ | $485-489$ | $516-521$ | $555-560$ |
| 95 | $511-515$ | $516-519$ | $490-495$ | $522-531$ | $561-565$ |
| 96 | $516-522$ | $520-523$ | $496-500$ | $532-542$ | $566-573$ |
| 97 | $523-529$ | $524-529$ | $501-510$ | $543-551$ | $574-578$ |
| 98 | $530-540$ | $530-537$ | $511-520$ | $552-564$ | $579-585$ |
| 99 | $541-999$ | $538-999$ | $521-999$ | $565-999$ | $586-999$ |

Table E. 22 Form C Grades 2-3 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-400 | 1-429 | 1-332 | 1-344 | 1-389 | 30 | 467 | 480 | 403 | 449-450 | 476 |
| 2 | 401-408 | 430-441 | 333-343 | 345-359 | 390-412 | 31 | 468 | 481 | 404 | 451 | 477 |
| 3 | 409-414 | 442-448 | 344-351 | 360-372 | 413-422 | 32 | 469 |  |  | 452 | 478 |
| 4 | 415-420 | 449-452 | 352-357 | 373-381 | 423-429 | 33 | 470 | 482 | 405 | 453-454 | 479 |
| 5 | 421-424 | 453-454 | 358-362 | 382-389 | 430-434 | 34 | 471 | 483 | 406-407 | 455 | 480 |
| 6 | 425-428 | 455-456 | 363-366 | 390-395 | 435-438 | 35 | 472 |  |  | 456 | 481 |
| 7 | 429-431 | 457-458 | 367-369 | 396-401 | 439-441 | 36 | 473 | 484 | 408 | 457-458 |  |
| 8 | 432-434 | 459 | 370-371 | 402-404 | 442-444 | 37 | 474 | 485 | 409 | 459 | 482 |
| 9 | 435-436 | 460-461 | 372-374 | 405-406 | 445-447 | 38 |  |  | 410 | 460 | 483 |
| 10 | 437-439 | 462-463 | 375-377 | 407-409 | 448-449 | 39 | 475 | 486 | 411 | 461-462 | 484 |
| 11 | 440-441 | 464 | 378 | 410-412 | 450-451 | 40 | 476 | 487 | 412 | 463 | 485 |
| 12 | 442-443 | 465 | 379-380 | 413-415 | 452-453 | 41 | 477 |  | 413 | 464 | 486 |
| 13 | 444 | 466 | 381 | 416-418 | 454 | 42 | 478 | 488 | 414 | 465 | 487 |
| 14 | 445-446 | 467 | 382-383 | 419-421 | 455-456 | 43 | 479 |  |  | 466-467 | 488 |
| 15 | 447-448 | 468 | 384 | 422-423 | 457-458 | 44 | 480 | 489 | 415 | 468 | 489 |
| 16 | 449 | 469-470 | 385-386 | 424-426 | 459-460 | 45 | 481 | 490 | 416 | 469 |  |
| 17 | 450 |  | 387 | 427-428 | 461 | 46 |  |  | 417 | 470-471 | 490 |
| 18 | 451-452 | 471 | 388-389 | 429-430 | 462 | 47 | 482 | 491 | 418 | 472 | 491 |
| 19 | 453-454 | 472 | 390-391 | 431 | 463-464 | 48 | 483 | 492 | 419 | 473 | 492 |
| 20 | 455 | 473 | 392 | 432-433 | 465 | 49 | 484 |  |  | 474-475 | 493 |
| 21 | 456 |  | 393 | 434-435 | 466-467 | 50 | 485 | 493 | 420 | 476 |  |
| 22 | 457-458 | 474 | 394 | 436 | 468 | 51 | 486 |  | 421 | 477-478 | 494 |
| 23 | 459 | 475 | 395 | 437-438 | 469 | 52 | 487 | 494 | 422 | 479 | 495 |
| 24 | 460 | 476 | 396-397 | 439-440 | 470 | 53 | 488 | 495 | 423 | 480 | 496 |
| 25 | 461 |  | 398 | 441-442 | 471 | 54 | 489 |  | 424 | 481 | 497 |
| 26 | 462 | 477 | 399 | 443 | 472 | 55 | 490 | 496 | 425 | 482 | 498 |
| 27 | 463-464 | 478 | 400 | 444-445 | 473 | 56 | 491 | 497 | 426 | 483 | 499 |
| 28 | 465 | 479 | 401 | 446-447 | 474 | 57 |  |  | 427 | 484-485 | 500 |
| 29 | 466 |  | 402 | 448 | 475 | 58 | 492 | 498 | 428 | 486 |  |

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Table E.22 Form C Grades 2-3 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 493 | 499 | 429 | 487 | 501 |
| 60 | 494 | 500 | 430 | 488 | 502 |
| 61 | 495 |  | 431 | $489-490$ | 503 |
| 62 | 496 | 501 | 432 | 491 | 504 |
| 63 | 497 | 502 | 433 | 492 | 505 |
| 64 | 498 | 503 | 434 | $493-494$ | 506 |
| 65 | 499 |  | 435 | 495 | 507 |
| 66 | 500 | 504 | 436 | 496 | 508 |
| 67 | 501 | 505 | 437 | 497 | 509 |
| 68 | 502 | 506 | 438 | $498-499$ | $510-511$ |
| 69 | 503 |  | $439-440$ | $500-501$ | 512 |
| 70 | 504 | $507-508$ | 441 | 502 | 513 |
| 71 | 505 |  | 442 | $503-504$ | 514 |
| 72 | 506 | 509 | 443 | 505 | 515 |
| 73 | 507 | 510 | 444 | 506 | 516 |
| 74 | 508 | $511-512$ | 445 | $507-508$ | $517-518$ |
| 75 | $509-510$ |  | 446 | 509 | 519 |
| 76 | 511 | $513-514$ | 447 | $510-511$ | 520 |
| 77 | 512 | 515 | $448-449$ | 512 | 521 |
| 78 | 513 | 516 | 450 | $513-514$ | $522-523$ |
| 79 | 514 | $517-518$ | 451 | $515-516$ | 524 |
| 80 | $515-516$ | 519 | $452-453$ | 517 | $525-526$ |
| 81 | 517 | $520-521$ | 454 | $518-519$ | $527-528$ |
| 82 | 518 | 522 | $455-456$ | $520-521$ | $529-530$ |
| 83 | $519-520$ | $523-524$ | 457 | 522 | 531 |
| 84 | $521-522$ | $525-526$ | $458-459$ | $523-524$ | $532-533$ |
| 85 | $523-524$ | $527-528$ | $460-461$ | $525-526$ | $534-535$ |
| 86 | $525-526$ | $529-530$ | $462-463$ | $527-528$ | $536-537$ |
| 87 | $527-528$ | $531-533$ | $464-465$ | $529-530$ | $538-539$ |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $529-530$ | $534-535$ | $466-467$ | $531-533$ | $540-542$ |
| 89 | $531-532$ | $536-537$ | $468-469$ | $534-535$ | $543-546$ |
| 90 | 533 | $538-539$ | $470-472$ | $536-539$ | $547-549$ |
| 91 | $534-536$ | $540-542$ | $473-475$ | $540-542$ | $550-552$ |
| 92 | $537-538$ | $543-545$ | $476-478$ | $543-545$ | $553-557$ |
| 93 | $539-541$ | $546-548$ | $479-482$ | $546-549$ | $558-561$ |
| 94 | $542-544$ | $549-551$ | $483-487$ | $550-554$ | $562-565$ |
| 95 | $545-549$ | $552-554$ | $488-494$ | $555-559$ | $566-571$ |
| 96 | $550-552$ | $555-559$ | $495-504$ | $560-567$ | $572-576$ |
| 97 | $553-557$ | $560-565$ | $505-511$ | $568-578$ | $577-583$ |
| 98 | $558-566$ | $566-571$ | $512-523$ | $579-590$ | $584-591$ |
| 99 | $567-999$ | $572-999$ | $524-999$ | $591-999$ | $592-999$ |

Table E. 23 Form C Grades 4-5 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-426 | 1-430 | 1-373 | 1-392 | 1-412 | 30 | 500-501 | 502 | 455 | 496 | 506 |
| 2 | 427-437 | 431-443 | 374-388 | 393-411 | 413-443 | 31 | 502 |  | 456 | 497-498 | 507 |
| 3 | 438-445 | 444-450 | 389-396 | 412-421 | 444-450 | 32 | 503 | 503 | 457 | 499 | 508 |
| 4 | 446-449 | 451-457 | 397-403 | 422-429 | 451-457 | 33 | 504 | 504 | 458-459 | 500-501 | 509 |
| 5 | 450-453 | 458-461 | 404-408 | 430-435 | 458-462 | 34 | 505 | 505 | 460 | 502 | 510 |
| 6 | 454-457 | 462-465 | 409-413 | 436-440 | 463-467 | 35 | 506 | 506 | 461 | 503 | 511 |
| 7 | 458-460 | 466-469 | 414-417 | 441-445 | 468-470 | 36 | 507 | 507 | 462 | 504 | 512 |
| 8 | 461-463 | 470-473 | 418-420 | 446-450 | 471-473 | 37 | 508 |  | 463 | 505-506 | 513 |
| 9 | 464-466 | 474-475 | 421-422 | 451-453 | 474-476 | 38 | 509 | 508 | 464 | 507 | 514 |
| 10 | 467-469 | 476-477 | 423-425 | 454-457 | 477-478 | 39 | 510 | 509 | 465 | 508 | 515 |
| 11 | 470-471 | 478 | 426-427 | 458-460 | 479-480 | 40 | 511 | 510 | 466 | 509-510 |  |
| 12 | 472-474 | 479-480 | 428-429 | 461-463 | 481-482 | 41 | 512 | 511 | 467 | 511 | 516 |
| 13 | 475-476 | 481-482 | 430-431 | 464-466 | 483-484 | 42 | 513 | 512 | 468-469 | 512 | 517 |
| 14 | 477-478 | 483 | 432-433 | 467-468 | 485-486 | 43 | 514 |  | 470 | 513-514 | 518 |
| 15 | 479-480 | 484-485 | 434 | 469-471 | 487-488 | 44 | 515 | 513 | 471 | 515 | 519 |
| 16 | 481 | 486 | 435-436 | 472-473 | 489 | 45 | 516 | 514 |  | 516 |  |
| 17 | 482-483 | 487 | 437-438 | 474-475 | 490-491 | 46 | 517 | 515 | 472 | 517 | 520 |
| 18 | 484-485 | 488 | 439-440 | 476-477 | 492-493 | 47 | 518 | 516 | 473 | 518 | 521 |
| 19 | 486 | 489-490 | 441-442 | 478-479 | 494 | 48 | 519 | 517 | 474 | 519 | 522 |
| 20 | 487-488 | 491 | 443 | 480-481 | 495 | 49 | 520 | 518 | 475 | 520 | 523 |
| 21 | 489 | 492 | 444 | 482-483 | 496-497 | 50 | 521 | 519 | 476 | 521-522 | 524 |
| 22 | 490-491 | 493 | 445-446 | 484-485 | 498 | 51 | 522 | 520 | 477 | 523 |  |
| 23 | 492 | 494-495 | 447 | 486 | 499 | 52 | 523 |  | 478 | 524 | 525 |
| 24 | 493 | 496 | 448 | 487-488 | 500 | 53 | 524 | 521 | 479 | 525 | 526 |
| 25 | 494 | 497 | 449 | 489-490 | 501 | 54 | 525 | 522 | 480 | 526 | 527 |
| 26 | 495-496 | 498 | 450-451 | 491 | 502 | 55 | 526 | 523 | 481 | 527 | 528 |
| 27 | 497 | 499 | 452 | 492 | 503 | 56 |  | 524 | 482 | 528-529 | 529 |
| 28 | 498 | 500 | 453 | 493-494 | 504 | 57 | 527 |  | 483 | 530 |  |
| 29 | 499 | 501 | 454 | 495 | 505 | 58 | 528 | 525 | 484 | 531 | 530 |

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Table E. 23 Form C Grades 4-5 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 529 | 526 | 485 | 532 | 531 |
| 60 | 530 | 527 | 486 | 533 | 532 |
| 61 | 531 | 528 | 487 | 534 | 533 |
| 62 | 532 | 529 | 488 | 535 | 534 |
| 63 | 533 | 530 | 489 | $536-537$ | 535 |
| 64 | 534 | 531 | 490 | 538 | 536 |
| 65 | 535 | 532 | $491-492$ | 539 |  |
| 66 | 536 | 533 | 493 | 540 | 537 |
| 67 | 537 |  | 494 | 541 | 538 |
| 68 | 538 | 534 | 495 | $542-543$ | 539 |
| 69 | 539 | $535-536$ | 496 | 544 | 540 |
| 70 | 540 | 537 | 497 | 545 | 541 |
| 71 | 541 | 538 | 498 | 546 | 542 |
| 72 | 542 | 539 | 499 | $547-548$ | 543 |
| 73 | 543 | 540 | 500 | 549 | 544 |
| 74 | 544 | $541-542$ | 501 | 550 | 545 |
| 75 | $545-546$ | 543 | 502 | $551-552$ | $546-547$ |
| 76 | 547 | $544-545$ | 503 | 553 | 548 |
| 77 | 548 | 546 | $504-505$ | $554-555$ | 549 |
| 78 | 549 | 547 | 506 | 556 | $550-551$ |
| 79 | $550-551$ | $548-549$ | 507 | 557 | 552 |
| 80 | 552 | 550 | $508-509$ | $558-559$ | 553 |
| 81 | $553-554$ | $551-552$ | 510 | $560-561$ | $554-555$ |
| 82 | 555 | $553-554$ | $511-512$ | $562-563$ | $556-557$ |
| 83 | $556-557$ | $555-556$ | 513 | $564-565$ | $558-559$ |
| 84 | 558 | 557 | $514-515$ | 566 | 560 |
| 85 | $559-560$ | $558-559$ | 516 | $567-569$ | $561-562$ |
| 86 | 561 | $560-562$ | $517-518$ | 570 | $563-564$ |
| 87 | $562-563$ | $563-564$ | 519 | $571-573$ | $565-567$ |
|  |  |  |  |  |  |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $564-565$ | $565-567$ | $520-521$ | $574-575$ | $568-569$ |
| 89 | $566-567$ | $568-569$ | $522-523$ | $576-577$ | $570-572$ |
| 90 | $568-570$ | $570-572$ | $524-525$ | $578-579$ | $573-574$ |
| 91 | $571-572$ | $573-575$ | $526-527$ | $580-582$ | $575-577$ |
| 92 | $573-575$ | $576-579$ | $528-530$ | $583-585$ | $578-581$ |
| 93 | $576-579$ | $580-582$ | $531-533$ | $586-588$ | $582-586$ |
| 94 | $580-583$ | $583-586$ | $534-536$ | $589-592$ | $587-590$ |
| 95 | $584-587$ | $587-590$ | $537-540$ | $593-597$ | $591-596$ |
| 96 | $588-591$ | $591-595$ | $541-545$ | $598-603$ | $597-601$ |
| 97 | $592-598$ | $596-601$ | $546-552$ | $604-610$ | $602-607$ |
| 98 | $599-604$ | $602-610$ | $553-560$ | $611-619$ | $608-613$ |
| 99 | $605-999$ | $611-999$ | $561-999$ | $620-999$ | $614-999$ |

Table E. 24 Form C Grades 6-8 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-440 | 1-433 | 1-406 | 1-412 | 1-425 | 30 | 514 | 509 | 492 | 517 | 511 |
| 2 | 441-448 | 434-448 | 407-419 | 413-433 | 426-445 | 31 | 515 | 510 | 493-494 | 518 | 512 |
| 3 | 449-456 | 449-456 | 420-427 | 434-443 | 446-453 | 32 | 516 | 511 | 495 | 519 | 513 |
| 4 | 457-461 | 457-460 | 428-434 | 444-450 | 454-461 | 33 | 517 | 512 | 496 | 520 | 514 |
| 5 | 462-467 | 461-465 | 435-439 | 451-457 | 462-467 | 34 | 518 | 513 | 497-498 | 521-522 | 515 |
| 6 | 468-471 | 466-468 | 440-443 | 458-464 | 468-471 | 35 | 519 | 514-515 | 499 | 523 | 516 |
| 7 | 472-475 | 469-471 | 444-447 | 465-468 | 472-474 | 36 | 520 | 516 | 500 | 524 | 517 |
| 8 | 476-477 | 472-473 | 448-451 | 469-471 | 475-477 | 37 | 521 | 517 | 501 | 525-526 | 518 |
| 9 | 478-480 | 474-475 | 452-454 | 472-475 | 478-480 | 38 | 522 | 518 | 502-503 | 527 | 519 |
| 10 | 481-482 | 476-477 | 455-458 | 476-479 | 481-482 | 39 | 523 | 519 | 504 | 528 | 520 |
| 11 | 483-484 | 478-480 | 459-461 | 480-482 | 483-485 | 40 | 524 |  | 505 | 529 | 521 |
| 12 | 485-486 | 481-482 | 462-463 | 483-484 | 486-487 | 41 | 525 | 520-521 | 506 | 530 | 522 |
| 13 | 487-488 | 483-485 | 464 | 485-487 | 488-489 | 42 |  | 522 | 507 | 531-532 | 523 |
| 14 | 489-490 | 486-487 | 465-466 | 488-490 | 490-491 | 43 | 526 |  | 508-509 | 533 |  |
| 15 | 491-492 | 488-489 | 467-468 | 491-492 | 492-493 | 44 | 527 | 523 | 510 | 534 | 524 |
| 16 | 493-494 | 490 | 469-471 | 493-494 | 494-495 | 45 | 528 | 524 | 511 | 535 | 525 |
| 17 | 495-496 | 491-492 | 472-473 | 495-496 | 496 | 46 | 529-530 | 525 | 512 | 536 | 526 |
| 18 | 497 | 493-494 | 474 | 497-498 | 497-498 | 47 | 531 | 526 | 513-514 | 537 | 527 |
| 19 | 498-499 | 495 | 475-476 | 499-500 | 499 | 48 | 532 | 527 | 515 | 538-539 | 528 |
| 20 | 500 | 496-497 | 477-478 | 501 | 500 | 49 | 533 | 528 | 516 | 540 | 529 |
| 21 | 501-502 | 498 | 479 | 502-503 | 501 | 50 | 534 | 529 | 517 | 541 | 530 |
| 22 | 503 | 499 | 480-481 | 504-505 | 502 | 51 | 535 | 530 | 518 | 542 | 531 |
| 23 | 504-505 | 500-501 | 482 | 506-507 | 503-504 | 52 | 536 | 531 | 519-520 | 543 | 532 |
| 24 | 506 | 502 | 483-484 | 508 | 505 | 53 | 537 |  | 521 | 544 | 533 |
| 25 | 507-508 | 503 | 485 | 509-510 | 506 | 54 | 538 | 532 | 522 | 545 | 534 |
| 26 | 509 | 504 | 486-487 | 511 | 507 | 55 | 539 | 533-534 | 523 | 546 |  |
| 27 | 510 | 505 | 488 | 512-513 | 508 | 56 | 540 | 535 |  | 547 | 535 |
| 28 | 511 | 506-507 | 489-490 | 514 | 509 | 57 | 541 | 536 | 524-525 | 548 | 536 |
| 29 | 512-513 | 508 | 491 | 515-516 | 510 | 58 | 542 | 537 | 526 | 549 | 537 |

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Table E. 24 Form C Grades 6-8 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 543 | 538 | 527 | 550 | 538 |
| 60 | 544 | 539 | 528 | 551 | 539 |
| 61 | 545 | 540 | $529-530$ | $552-553$ | 540 |
| 62 | 546 | 541 | 531 | 554 | 541 |
| 63 | 547 | 542 | 532 | 555 |  |
| 64 | $548-549$ | 543 | 533 | 556 | 542 |
| 65 | 550 | 544 | 534 | 557 | 543 |
| 66 | 551 | 545 | 535 | 558 | 544 |
| 67 | 552 | 546 | 536 | $559-560$ | 545 |
| 68 | 553 | 547 | 537 | 561 | 546 |
| 69 | 554 | 548 | 538 | 562 | 547 |
| 70 | 555 | 549 | $539-540$ | 563 | 548 |
| 71 | 556 | $550-551$ | 541 | 564 | 549 |
| 72 | $557-558$ | 552 | 542 | 565 | 550 |
| 73 | 559 | 553 | 543 | $566-567$ | $551-552$ |
| 74 | 560 | $554-555$ | $544-545$ | 568 | 553 |
| 75 | 561 | 556 | 546 | $569-570$ | 554 |
| 76 | 562 | 557 | 547 | 571 | 555 |
| 77 | $563-564$ | 558 | $548-549$ | 572 | 556 |
| 78 | 565 | $559-560$ | 550 | $573-574$ | 557 |
| 79 | 566 | $561-562$ | $551-552$ | 575 | $558-559$ |
| 80 | $567-568$ | 563 | 553 | $576-578$ | 560 |
| 81 | 569 | $564-565$ | $554-555$ | 579 | 561 |
| 82 | $570-571$ | 566 | $556-557$ | $580-581$ | 562 |
| 83 | $572-573$ | $567-568$ | $558-559$ | 582 | $563-564$ |
| 84 | $574-575$ | $569-570$ | 560 | $583-584$ | $565-566$ |
| 85 | 576 | $571-572$ | $561-563$ | $585-586$ | $567-568$ |
| 86 | $577-578$ | $573-574$ | $564-565$ | $587-588$ | $569-570$ |
| 87 | $579-580$ | $575-576$ | $566-567$ | $589-590$ | 571 |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $581-582$ | $577-579$ | $568-569$ | $591-592$ | $572-573$ |
| 89 | $583-585$ | $580-581$ | $570-571$ | $593-594$ | $574-576$ |
| 90 | $586-588$ | $582-583$ | $572-574$ | $595-597$ | $577-578$ |
| 91 | $589-590$ | $584-587$ | $575-577$ | $598-600$ | $579-582$ |
| 92 | $591-593$ | $588-590$ | $578-580$ | $601-603$ | $583-585$ |
| 93 | $594-595$ | $591-594$ | $581-583$ | $604-606$ | $586-589$ |
| 94 | $596-599$ | $595-599$ | $584-587$ | $607-610$ | $590-594$ |
| 95 | $600-602$ | $600-604$ | $588-592$ | $611-615$ | $595-600$ |
| 96 | $603-607$ | $605-609$ | $593-596$ | $616-620$ | $601-605$ |
| 97 | $608-613$ | $610-616$ | $597-604$ | $621-628$ | $606-613$ |
| 98 | $614-621$ | $617-624$ | $605-615$ | $629-640$ | $614-624$ |
| 99 | $622-999$ | $625-999$ | $616-999$ | $641-999$ | $625-999$ |

Table E. 25 Form C Grades 9-12 Percentile Ranking Norming Table for Composites

| PR | OV | OR | $\mathrm{CO}$ | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-442 | 1-440 | 1-422 | 1-415 | 1-426 | 30 | 518 | 512 | 511-512 | 521 | 522 |
| 2 | 443-454 | 441-452 | 423-434 | 416-435 | 427-445 | 31 | 519 | 513 | 513 | 522 | 523 |
| 3 | 455-460 | 453-459 | 435-443 | 436-448 | 446-463 | 32 | 520 | 514 | 514-515 | 523 | 524 |
| 4 | 461-467 | 460-466 | 444-450 | 449-456 | 464-471 | 33 | 521 | 515 | 516 | 524-525 | 525 |
| 5 | 468-472 | 467-471 | 451-455 | 457-462 | 472-478 | 34 | 522 | 516 | 517 | 526 | 526 |
| 6 | 473-475 | 472-475 | 456-459 | 463-467 | 479-483 | 35 | 523 | 517 | 518 | 527 | 527 |
| 7 | 476-479 | 476-478 | 460-463 | 468-473 | 484-487 | 36 | 524 | 518 | 519-520 | 528 |  |
| 8 | 480-482 | 479-480 | 464-468 | 474-477 | 488-490 | 37 | 525 | 519 | 521 | 529 | 528 |
| 9 | 483-485 | 481-483 | 469-471 | 478-481 | 491-492 | 38 | 526 | 520 | 522 | 530-531 | 529 |
| 10 | 486-488 | 484-486 | 472-474 | 482-484 | 493-495 | 39 | 527 | 521 | 523-524 | 532 | $530$ |
| 11 | 489 | 487-488 | 475-477 | 485-486 | 496-497 | 40 | 528 | 522 | 525 | 533 | 531 |
| 12 | 490-492 | 489-490 | 478-480 | 487-488 | 498-499 | 41 | 529 | 523 | 526 | $534$ |  |
| 13 | 493-494 | 491-492 | 481-482 | 489-491 | 500-501 | 42 | $530$ | $524$ | 527 | $535$ | 532 |
| 14 | 495-496 | 493-494 | 483-485 | 492-494 | 502 | 43 | 531 |  | 528 | 536 | 533 |
| 15 | 497 | $495$ | 486-488 | 495-496 | 503-504 | 44 | 532 | 525-526 | 529 | 537 | 534 |
| 16 | 498-499 | 496-497 | 489-490 | 497-498 | 505-506 | 45 | 533 |  | 530 | 538 | 535 |
| 17 | 500-501 | 498 | 491-492 | 499-500 | 507 | $46$ | $534$ | 527 | $531$ | $539$ | 536 |
| 18 | 502-503 | 499 | 493-494 | 501-502 | 508-509 | 47 | 535 | 528 | $532-533$ | 540 |  |
| 19 | $504$ | $500$ | 495-496 | 503-504 | 510 | $48$ | $536$ | $529$ | $534$ | $541$ | $537$ |
| 20 | 505 | 501-502 | 497-498 | 505-506 | $511$ | 49 | 537 | 530 | 535 | 542 | 538 |
| 21 | 506-507 | 503 | 499 | 507-508 | 512-513 | 50 | 538 | 531 | 536 | 543-544 | 539 |
| 22 | $508$ | $504$ | 500-501 | $509$ | $514$ | $51$ | $539$ | $532$ | $537$ | $545$ | 540 |
| 23 | $509$ | 505 | $502$ | 510-511 | 515 | $52$ | 540 | 533 | 538-539 | 546 |  |
| 24 | 510-511 | 506 | 503-504 | 512-513 | $516$ | $53$ |  | 534 | 540 | 547 | 541 |
| 25 | 512 | 507 | 505 | 514 | 517 | 54 | 541 | 535 | 541 | 548 | 542 |
| 26 | 513 | 508 | 506 | 515 | 518 | 55 | 542 | 536 | 542-543 | 549 | 543 |
| 27 | $514-515$ | 509 | 507-508 | $516-517$ | $519$ | $56$ | $543$ | $537$ | $544$ | $550$ |  |
| 28 | 516 | 510 | 509 | 518 | 520 | 57 | 544 | 538 | 545 | 551 | 544 |
| 29 | 517 | 511 | 510 | 519-520 | 521 | 58 | 545 | 539 | 546 | 552 | 545 |

Table E. 25 Form C Grades 9-12 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 546 | 540 | 547 | $553-554$ | 546 |
| 60 | 547 | 541 | 548 | 555 | 547 |
| 61 | 548 | 542 | 549 | 556 |  |
| 62 | 549 | 543 | 550 | 557 | 548 |
| 63 | 550 | 544 | $551-552$ | 558 | 549 |
| 64 | $551-552$ | 545 | 553 | 559 | 550 |
| 65 |  |  | 554 | 560 | 551 |
| 66 | 553 | 546 | 555 | $561-562$ | 552 |
| 67 | $554-555$ | 547 | $556-557$ | 563 |  |
| 68 | 556 | $548-549$ | 558 | 564 | 553 |
| 69 | 557 |  | 559 | 565 | 554 |
| 70 | 558 | 550 | $560-561$ | 566 | 555 |
| 71 | $559-560$ | 551 | 562 | $567-568$ | 556 |
| 72 | 561 | $552-553$ | $563-564$ | 569 | 557 |
| 73 | 562 | 554 | 565 | 570 | 558 |
| 74 | 563 | 555 | 566 | $571-572$ | 559 |
| 75 | 564 | $556-557$ | $567-568$ | 573 | 560 |
| 76 | 565 | 558 | $569-570$ | $574-575$ | $561-562$ |
| 77 | $566-567$ | 559 | 571 | 576 | 563 |
| 78 | 568 | $560-561$ | $572-573$ | 577 | 564 |
| 79 | 569 | $562-563$ | 574 | $578-579$ | 565 |
| 80 | 570 | 564 | $575-576$ | 580 | $566-567$ |
| 81 | $571-572$ | $565-566$ | 577 | $581-582$ | 568 |
| 82 | 573 | 567 | $578-579$ | 583 | $569-570$ |
| 83 | $574-575$ | $568-569$ | 580 | $584-585$ | 571 |
| 84 | 576 | $570-571$ | $581-582$ | $586-587$ | $572-573$ |
| 85 | $577-578$ | $572-573$ | $583-585$ | $588-589$ | $574-575$ |
| 86 | 579 | $574-575$ | $586-587$ | $590-591$ | $576-577$ |
| 87 | $580-581$ | $576-577$ | $588-589$ | $592-593$ | $578-580$ |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $582-583$ | $578-580$ | $590-591$ | $594-595$ | $581-582$ |
| 89 | $584-585$ | $581-583$ | $592-594$ | $596-598$ | $583-585$ |
| 90 | $586-588$ | $584-586$ | $595-597$ | $599-600$ | $586-588$ |
| 91 | $589-591$ | $587-589$ | $598-601$ | $601-603$ | $589-591$ |
| 92 | $592-593$ | $590-592$ | $602-604$ | $604-606$ | $592-595$ |
| 93 | $594-596$ | $593-596$ | $605-607$ | $607-609$ | $596-599$ |
| 94 | $597-601$ | $597-599$ | $608-612$ | $610-614$ | $600-602$ |
| 95 | $602-605$ | $600-605$ | $613-617$ | $615-618$ | $603-606$ |
| 96 | $606-611$ | $606-611$ | $618-621$ | $619-625$ | $607-611$ |
| 97 | $612-617$ | $612-621$ | $622-628$ | $626-633$ | $612-618$ |
| 98 | $618-626$ | $622-634$ | $629-640$ | $634-641$ | $619-625$ |
| 99 | $627-999$ | $635-999$ | $641-999$ | $642-999$ | $626-999$ |

## Form D

Table E. 26 Form D Kindergarten Scoring Table
Speaking

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | PL |  |  |
| 1 | 300 | 87 |  |
| 2 | 382 | 22 |  |
| 3 | 393 | 12 |  |
| 4 | 400 | 11 |  |
| 5 | 407 | 10 | 1 |
| 6 | 412 | 10 |  |
| 7 | 417 | 9 |  |
| 8 | 421 | 9 |  |
| 9 | 425 | 8 |  |
| 10 | 429 | 8 |  |
| 11 | 433 | 8 |  |
| 12 | 436 | 8 |  |
| 13 | 440 | 8 |  |
| 14 | 443 | 8 |  |
| 15 | 446 | 8 | 2 |
| 16 | 449 | 8 |  |
| 17 | 453 | 8 |  |
| 18 | 456 | 8 |  |
| 19 | 460 | 8 |  |
| 20 | 463 | 8 |  |
| 21 | 467 | 9 |  |
| 22 | 471 | 9 |  |
| 23 | 476 | 9 | 3 |
| 24 | 481 | 10 |  |
| 25 | 487 | 11 |  |
| 26 | 494 | 12 |  |
| 27 | 503 | 14 | 4 |
| 28 | 518 | 20 | 4 |
| 29 | 580 | 82 | 5 |

Listening

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | 300 | 116 | PL |
| 1 | 300 | 116 |  |
| 2 | 300 | 116 |  |
| 3 | 300 | 116 |  |
| 4 | 300 | 116 |  |
| 5 | 308 | 108 | 1 |
| 6 | 379 | 37 | 1 |
| 7 | 394 | 22 |  |
| 8 | 403 | 16 |  |
| 9 | 410 | 14 |  |
| 10 | 416 | 13 |  |
| 11 | 422 | 12 |  |
| 12 | 427 | 12 |  |
| 13 | 433 | 12 | 2 |
| 14 | 439 | 13 |  |
| 15 | 446 | 14 |  |
| 16 | 455 | 15 | 3 |
| 17 | 465 | 17 |  |
| 18 | 478 | 20 | 4 |
| 19 | 499 | 26 | 4 |
| 20 | 530 | 47 | 5 |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | 240 | PL |  |
| 1 | 240 | 121 |  |
| 2 | 240 | 121 |  |
| 3 | 240 | 121 |  |
| 4 | 240 | 121 |  |
| 5 | 240 | 121 |  |
| 6 | 240 | 121 | 1 |
| 7 | 240 | 121 |  |
| 8 | 275 | 86 |  |
| 9 | 311 | 50 |  |
| 10 | 329 | 32 |  |
| 11 | 340 | 23 |  |
| 12 | 348 | 18 |  |
| 13 | 355 | 16 |  |
| 14 | 362 | 15 |  |
| 15 | 368 | 14 | 2 |
| 16 | 374 | 14 |  |
| 17 | 380 | 14 |  |
| 18 | 386 | 14 |  |
| 19 | 392 | 14 |  |
| 20 | 399 | 14 | 3 |
| 21 | 406 | 14 |  |
| 22 | 414 | 15 |  |
| 23 | 424 | 18 |  |
| 24 | 439 | 24 | 4 |
| 25 | 470 | 49 |  |
| 26 | 550 | 129 | 5 |

Writing

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| PL |  |  |  |
| 0 | 200 | 68 |  |
| 1 | 200 | 68 |  |
| 2 | 200 | 68 |  |
| 3 | 200 | 68 |  |
| 4 | 200 | 68 |  |
| 5 | 200 | 68 | 1 |
| 6 | 223 | 63 | 1 |
| 7 | 255 | 54 |  |
| 8 | 282 | 45 |  |
| 9 | 304 | 38 |  |
| 10 | 322 | 33 |  |
| 11 | 338 | 29 |  |
| 12 | 353 | 27 |  |
| 13 | 366 | 25 |  |
| 14 | 379 | 24 | 2 |
| 15 | 392 | 24 |  |
| 16 | 406 | 26 |  |
| 17 | 422 | 29 | 3 |
| 18 | 444 | 37 | 3 |
| 19 | 488 | 55 | 4 |
| 20 | 630 | 203 | 5 |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |
|  |  |  |  |

Table E. 27 Form D Grade 1 Scoring Table

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 300 | 85 |  |
| 1 | 363 | 22 |  |
| 2 | 380 | 15 |  |
| 3 | 389 | 12 |  |
| 4 | 397 | 11 |  |
| 5 | 402 | 10 |  |
| 6 | 407 | 9 | 1 |
| 7 | 412 | 8 | 1 |
| 8 | 415 | 8 |  |
| 9 | 419 | 8 |  |
| 10 | 422 | 7 |  |
| 11 | 425 | 7 |  |
| 12 | 428 | 7 |  |
| 13 | 431 | 7 |  |
| 14 | 433 | 7 |  |
| 15 | 436 | 7 |  |
| 16 | 438 | 7 |  |
| 17 | 441 | 7 |  |
| 18 | 443 | 6 |  |
| 19 | 445 | 6 |  |
| 20 | 448 | 6 | 2 |
| 21 | 450 | 6 |  |
| 22 | 452 | 6 |  |
| 23 | 455 | 6 |  |
| 24 | 457 | 7 |  |
| 25 | 460 | 7 |  |
| 26 | 462 | 7 |  |
| 27 | 464 | 7 |  |
| 28 | 467 | 7 |  |
| 29 | 470 | 7 |  |
| 30 | 472 | 7 |  |
| 31 | 475 | 7 | 3 |
| 32 | 478 | 7 |  |
| 33 | 482 | 8 |  |
| 34 | 485 | 8 |  |
| 35 | 489 | 9 |  |
| 36 | 493 | 9 |  |
| 37 | 499 | 10 |  |
| 38 | 505 | 11 | 4 |
| 39 | 514 | 14 |  |
| 40 | 527 | 19 |  |
| 41 | 580 | 72 | 5 |
|  |  |  |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 300 | 116 |  | 0 | 240 | 122 |  |
| 1 | 300 | 116 |  | 1 | 240 | 122 |  |
| 2 | 300 | 116 |  | 2 | 240 | 122 |  |
| 3 | 300 | 116 |  | 3 | 240 | 122 |  |
| 4 | 300 | 116 |  | 4 | 240 | 122 |  |
| 5 | 308 | 108 |  | 5 | 240 | 122 |  |
| 6 | 379 | 37 | 1 | 6 | 240 | 122 |  |
| 7 | 394 | 22 |  | 7 | 240 | 122 | 1 |
| 8 | 403 | 16 |  | 8 | 240 | 122 |  |
| 9 | 410 | 14 |  | 9 | 274 | 88 |  |
| 10 | 416 | 13 |  | 10 | 310 | 52 |  |
| 11 | 422 | 12 |  | 11 | 328 | 34 |  |
| 12 | 427 | 12 |  | 12 | 339 | 24 |  |
| 13 | 433 | 12 |  | 13 | 347 | 19 |  |
| 14 | 439 | 13 | 2 | 14 | 354 | 17 |  |
| 15 | 446 | 14 |  | 15 | 361 | 15 |  |
| 16 | 455 | 15 |  | 16 | 366 | 14 |  |
| 17 | 465 | 17 | 3 | 17 | 372 | 14 | 2 |
| 18 | 478 | 20 | 4 | 18 | 377 | 14 |  |
| 19 | 499 | 26 | 4 | 19 | 383 | 13 |  |
| 20 | 530 | 47 | 5 | 20 | 388 | 13 |  |
|  |  |  |  | 21 | 394 | 13 |  |
|  |  |  |  | 22 | 399 | 13 |  |
|  |  |  |  | 23 | 405 | 13 | 3 |
|  |  |  |  | 24 | 412 | 14 |  |
|  |  |  |  | 25 | 419 | 14 |  |
|  |  |  |  | 26 | 427 | 16 |  |
|  |  |  |  | 27 | 438 | 19 | 4 |
|  |  |  |  | 28 | 453 | 25 |  |
|  |  |  |  | 29 | 485 | 47 |  |
|  |  |  |  | 30 | 550 | 112 | 5 |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 200 | 63 |  |
| 1 | 200 | 63 |  |
| 2 | 200 | 63 |  |
| 3 | 200 | 63 |  |
| 4 | 200 | 63 |  |
| 5 | 200 | 63 |  |
| 6 | 216 | 58 |  |
| 7 | 245 | 49 | 1 |
| 8 | 268 | 41 | 1 |
| 9 | 286 | 34 |  |
| 10 | 302 | 29 |  |
| 11 | 314 | 26 |  |
| 12 | 325 | 24 |  |
| 13 | 335 | 21 |  |
| 14 | 343 | 20 |  |
| 15 | 351 | 19 |  |
| 16 | 358 | 18 |  |
| 17 | 365 | 17 |  |
| 18 | 371 | 16 |  |
| 19 | 377 | 16 |  |
| 20 | 382 | 16 |  |
| 21 | 388 | 16 |  |
| 22 | 394 | 16 | 2 |
| 23 | 400 | 16 |  |
| 24 | 406 | 17 |  |
| 25 | 412 | 17 |  |
| 26 | 419 | 18 |  |
| 27 | 428 | 20 |  |
| 28 | 438 | 23 |  |
| 29 | 451 | 27 | 3 |
| 30 | 470 | 34 |  |
| 31 | 504 | 51 | 4 |
| 32 | 630 | 177 | 5 |
|  |  |  |  |

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Table E. 161 Form D Grade 2 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 350 | 72 |  |
| 1 | 406 | 16 |  |
| 2 | 418 | 11 |  |
| 3 | 424 | 9 | 1 |
| 4 | 430 | 8 | 1 |
| 5 | 434 | 7 |  |
| 6 | 437 | 7 |  |
| 7 | 440 | 7 |  |
| 8 | 443 | 6 |  |
| 9 | 446 | 6 |  |
| 10 | 448 | 6 |  |
| 11 | 450 | 6 |  |
| 12 | 452 | 6 |  |
| 13 | 454 | 5 |  |
| 14 | 456 | 5 |  |
| 15 | 458 | 5 | 2 |
| 16 | 460 | 5 |  |
| 17 | 462 | 5 |  |
| 18 | 464 | 5 |  |
| 19 | 466 | 5 |  |
| 20 | 468 | 5 |  |
| 21 | 470 | 5 |  |
| 22 | 471 | 5 |  |
| 23 | 473 | 5 |  |
| 24 | 475 | 5 |  |
| 25 | 477 | 5 |  |
| 26 | 479 | 5 |  |
| 27 | 481 | 6 |  |
| 28 | 483 | 6 |  |
| 29 | 485 | 6 | 3 |
| 30 | 488 | 6 |  |
| 31 | 490 | 6 |  |
| 32 | 493 | 6 |  |
| 33 | 495 | 7 |  |
| 34 | 498 | 7 |  |
| 35 | 502 | 7 |  |
| 36 | 506 | 8 |  |
| 37 | 510 | 9 |  |
| 38 | 516 | 10 | 4 |
| 39 | 524 | 13 |  |
| 40 | 538 | 19 |  |
| 41 | 600 | 81 | 5 |
|  |  |  |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 310 | 124 |  | 0 | 300 | 142 |  |
| 1 | 310 | 124 |  | 1 | 300 | 142 |  |
| 2 | 310 | 124 |  | 2 | 300 | 142 |  |
| 3 | 310 | 124 |  | 3 | 300 | 142 |  |
| 4 | 310 | 124 |  | 4 | 300 | 142 |  |
| 5 | 359 | 75 | 1 | 5 | 300 | 142 |  |
| 6 | 398 | 36 |  | 6 | 300 | 142 | 1 |
| 7 | 412 | 22 |  | 7 | 300 | 142 |  |
| 8 | 421 | 17 |  | 8 | 355 | 87 |  |
| 9 | 429 | 15 |  | 9 | 390 | 52 |  |
| 10 | 436 | 14 |  | 10 | 407 | 35 |  |
| 11 | 443 | 14 |  | 11 | 419 | 27 |  |
| 12 | 450 | 14 | 2 | 12 | 429 | 22 |  |
| 13 | 458 | 15 |  | 13 | 437 | 19 |  |
| 14 | 466 | 15 |  | 14 | 443 | 18 |  |
| 15 | 475 | 16 | 3 | 15 | 450 | 16 | 2 |
| 16 | 485 | 17 |  | 16 | 456 | 16 | 2 |
| 17 | 498 | 19 | 4 | 17 | 462 | 15 |  |
| 18 | 517 | 23 | 4 | 18 | 468 | 15 |  |
| 19 | 560 | 57 | 5 | 19 | 474 | 15 |  |
|  |  |  |  | 20 | 480 | 15 | 3 |
|  |  |  |  | 21 | 486 | 15 | 3 |
|  |  |  |  | 22 | 493 | 15 |  |
|  |  |  |  | 23 | 500 | 16 |  |
|  |  |  |  | 24 | 508 | 16 |  |
|  |  |  |  | 25 | 516 | 17 | 4 |
|  |  |  |  | 26 | 526 | 18 |  |
|  |  |  |  | 27 | 537 | 21 |  |
|  |  |  |  | 28 | 553 | 25 |  |
|  |  |  |  | 29 | 580 | 36 | 5 |
|  |  |  |  | 30 | 610 | 55 |  |

Writing

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | 270 | 71 |  |
| 1 | 270 | 71 |  |
| 2 | 270 | 71 |  |
| 3 | 270 | 71 |  |
| 4 | 270 | 71 |  |
| 5 | 292 | 57 |  |
| 6 | 319 | 45 |  |
| 7 | 340 | 39 | 1 |
| 8 | 357 | 34 |  |
| 9 | 372 | 30 |  |
| 10 | 384 | 27 |  |
| 11 | 395 | 25 |  |
| 12 | 405 | 23 |  |
| 13 | 414 | 21 |  |
| 14 | 422 | 20 |  |
| 15 | 429 | 19 |  |
| 16 | 436 | 18 |  |
| 17 | 443 | 18 |  |
| 18 | 449 | 17 | 2 |
| 19 | 455 | 17 |  |
| 20 | 462 | 17 |  |
| 21 | 468 | 17 |  |
| 22 | 474 | 17 |  |
| 23 | 481 | 17 |  |
| 24 | 487 | 17 | 3 |
| 25 | 494 | 18 |  |
| 26 | 502 | 19 |  |
| 27 | 511 | 20 |  |
| 28 | 521 | 22 | 4 |
| 29 | 535 | 26 |  |
| 30 | 554 | 33 |  |
| 31 | 590 | 49 | 5 |
| 32 | 640 | 77 |  |
|  |  |  |  |

Table E. 162 Form D Grade 3 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 350 | 72 |  |
| 1 | 406 | 16 |  |
| 2 | 418 | 11 |  |
| 3 | 424 | 9 | 1 |
| 4 | 430 | 8 | 1 |
| 5 | 434 | 7 |  |
| 6 | 437 | 7 |  |
| 7 | 440 | 7 |  |
| 8 | 443 | 6 |  |
| 9 | 446 | 6 |  |
| 10 | 448 | 6 |  |
| 11 | 450 | 6 |  |
| 12 | 452 | 6 |  |
| 13 | 454 | 5 |  |
| 14 | 456 | 5 |  |
| 15 | 458 | 5 |  |
| 16 | 460 | 5 | 2 |
| 17 | 462 | 5 |  |
| 18 | 464 | 5 |  |
| 19 | 466 | 5 |  |
| 20 | 468 | 5 |  |
| 21 | 470 | 5 |  |
| 22 | 471 | 5 |  |
| 23 | 473 | 5 |  |
| 24 | 475 | 5 |  |
| 25 | 477 | 5 |  |
| 26 | 479 | 5 |  |
| 27 | 481 | 6 |  |
| 28 | 483 | 6 |  |
| 29 | 485 | 6 |  |
| 30 | 488 | 6 | 3 |
| 31 | 490 | 6 |  |
| 32 | 493 | 6 |  |
| 33 | 495 | 7 |  |
| 34 | 498 | 7 |  |
| 35 | 502 | 7 |  |
| 36 | 506 | 8 |  |
| 37 | 510 | 9 |  |
| 38 | 516 | 10 | 4 |
| 39 | 524 | 13 |  |
| 40 | 538 | 19 |  |
| 41 | 600 | 81 | 5 |
|  |  |  |  |

Listening

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 124 |  |
| 1 | 310 | 124 |  |
| 2 | 310 | 124 |  |
| 3 | 310 | 124 |  |
| 4 | 310 | 124 |  |
| 5 | 359 | 75 | 1 |
| 6 | 398 | 36 | 1 |
| 7 | 412 | 22 |  |
| 8 | 421 | 17 |  |
| 9 | 429 | 15 |  |
| 10 | 436 | 14 |  |
| 11 | 443 | 14 |  |
| 12 | 450 | 14 |  |
| 13 | 458 | 15 | 2 |
| 14 | 466 | 15 |  |
| 15 | 475 | 16 |  |
| 16 | 485 | 17 | 3 |
| 17 | 498 | 19 |  |
| 18 | 517 | 23 | 4 |
| 19 | 560 | 57 | 5 |

Reading

| RS |  |  |  |
| :---: | :---: | :---: | :---: |
| SS | SEM |  | PL |
| 0 | 300 | 142 |  |
| 1 | 300 | 142 |  |
| 2 | 300 | 142 |  |
| 3 | 300 | 142 |  |
| 4 | 300 | 142 |  |
| 5 | 300 | 142 |  |
| 6 | 300 | 142 | 1 |
| 7 | 300 | 142 |  |
| 8 | 355 | 87 |  |
| 9 | 390 | 52 |  |
| 10 | 407 | 35 |  |
| 11 | 419 | 27 |  |
| 12 | 429 | 22 |  |
| 13 | 437 | 19 |  |
| 14 | 443 | 18 |  |
| 15 | 450 | 16 | 2 |
| 16 | 456 | 16 | 2 |
| 17 | 462 | 15 |  |
| 18 | 468 | 15 |  |
| 19 | 474 | 15 |  |
| 20 | 480 | 15 |  |
| 21 | 486 | 15 | 3 |
| 22 | 493 | 15 |  |
| 23 | 500 | 16 |  |
| 24 | 508 | 16 |  |
| 25 | 516 | 17 | 4 |
| 26 | 526 | 18 |  |
| 27 | 537 | 21 |  |
| 28 | 553 | 25 |  |
| 29 | 580 | 36 | 5 |
| 30 | 610 | 55 |  |

Writing

| RS |  | SS | SEM |  | PL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 270 | 71 |  |  |  |
| 1 | 270 | 71 |  |  |  |
| 2 | 270 | 71 |  |  |  |
| 3 | 270 | 71 |  |  |  |
| 4 | 270 | 71 |  |  |  |
| 5 | 292 | 57 |  |  |  |
| 6 | 319 | 45 |  |  |  |
| 7 | 340 | 39 | 1 |  |  |
| 8 | 357 | 34 |  |  |  |
| 9 | 372 | 30 |  |  |  |
| 10 | 384 | 27 |  |  |  |
| 11 | 395 | 25 |  |  |  |
| 12 | 405 | 23 |  |  |  |
| 13 | 414 | 21 |  |  |  |
| 14 | 422 | 20 |  |  |  |
| 15 | 429 | 19 |  |  |  |
| 16 | 436 | 18 |  |  |  |
| 17 | 443 | 18 |  |  |  |
| 18 | 449 | 17 |  |  |  |
| 19 | 455 | 17 | 2 |  |  |
| 20 | 462 | 17 |  |  |  |
| 21 | 468 | 17 |  |  |  |
| 22 | 474 | 17 |  |  |  |
| 23 | 481 | 17 |  |  |  |
| 24 | 487 | 17 |  |  |  |
| 25 | 494 | 18 |  |  |  |
| 26 | 502 | 19 | 3 |  |  |
| 27 | 511 | 20 |  |  |  |
| 28 | 521 | 22 |  |  |  |
| 29 | 535 | 26 | 4 |  |  |
| 30 | 554 | 33 | 4 |  |  |
| 31 | 590 | 49 | 5 |  |  |
| 32 | 640 | 77 | 5 |  |  |
|  |  |  |  |  |  |

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## Table E. 163 Form D Grade 163 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 360 | 36 |  |
| 1 | 376 | 26 |  |
| 2 | 395 | 19 |  |
| 3 | 406 | 16 |  |
| 4 | 415 | 15 |  |
| 5 | 423 | 13 | 1 |
| 6 | 429 | 12 |  |
| 7 | 435 | 11 |  |
| 8 | 440 | 11 |  |
| 9 | 444 | 10 |  |
| 10 | 448 | 10 |  |
| 11 | 452 | 9 |  |
| 12 | 456 | 9 |  |
| 13 | 460 | 8 |  |
| 14 | 463 | 8 | 2 |
| 15 | 467 | 8 |  |
| 16 | 470 | 8 |  |
| 17 | 473 | 7 |  |
| 18 | 476 | 7 |  |
| 19 | 479 | 7 |  |
| 20 | 482 | 7 |  |
| 21 | 485 | 7 |  |
| 22 | 488 | 7 |  |
| 23 | 491 | 7 | 3 |
| 24 | 494 | 7 |  |
| 25 | 497 | 7 |  |
| 26 | 500 | 7 |  |
| 27 | 504 | 7 |  |
| 28 | 507 | 7 |  |
| 29 | 510 | 7 |  |
| 30 | 513 | 7 |  |
| 31 | 517 | 8 |  |
| 32 | 521 | 8 |  |
| 33 | 524 | 8 |  |
| 34 | 528 | 8 | 4 |
| 35 | 532 | 8 |  |
| 36 | 537 | 9 |  |
| 37 | 542 | 10 |  |
| 38 | 549 | 11 |  |
| 39 | 558 | 15 |  |
| 40 | 575 | 25 | 5 |
| 41 | 635 | 85 |  |
|  |  |  |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 350 | 125 |  | 0 | 360 | 115 |  |
| 1 | 350 | 125 |  | 1 | 360 | 115 |  |
| 2 | 350 | 125 |  | 2 | 360 | 115 |  |
| 3 | 350 | 125 |  | 3 | 360 | 115 |  |
| 4 | 350 | 125 |  | 4 | 360 | 115 |  |
| 5 | 350 | 125 | 1 | 5 | 360 | 115 | 1 |
| 6 | 379 | 96 |  | 6 | 397 | 78 |  |
| 7 | 420 | 55 |  | 7 | 428 | 47 |  |
| 8 | 441 | 36 |  | 8 | 445 | 35 |  |
| 9 | 456 | 29 |  | 9 | 458 | 28 |  |
| 10 | 469 | 25 | 2 | 10 | 469 | 24 |  |
| 11 | 481 | 24 | 2 | 11 | 478 | 22 |  |
| 12 | 492 | 23 |  | 12 | 487 | 20 | 2 |
| 13 | 503 | 22 | 3 | 13 | 495 | 19 |  |
| 14 | 514 | 21 |  | 14 | 502 | 18 |  |
| 15 | 526 | 21 |  | 15 | 509 | 18 |  |
| 16 | 539 | 23 | 4 | 16 | 516 | 18 |  |
| 17 | 556 | 26 | 4 | 17 | 524 | 18 | 3 |
| 18 | 579 | 33 |  | 18 | 531 | 18 |  |
| 19 | 613 | 43 |  | 19 | 539 | 18 |  |
| 20 | 640 | 58 | 5 | 20 | 547 | 19 |  |
|  |  |  |  | 21 | 555 | 19 |  |
|  |  |  |  | 22 | 565 | 20 | 4 |
|  |  |  |  | 23 | 575 | 20 |  |
|  |  |  |  | 24 | 585 | 20 |  |
|  |  |  |  | 25 | 596 | 20 |  |
|  |  |  |  | 26 | 608 | 20 |  |
|  |  |  |  | 27 | 622 | 23 | 5 |
|  |  |  |  | 28 | 641 | 29 | 5 |
|  |  |  |  | 29 | 676 | 47 |  |
|  |  |  |  | 30 | 680 | 50 |  |

Writing

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | PL |  |  |
| 0 | 290 | 131 |  |
| 1 | 290 | 131 |  |
| 2 | 290 | 131 |  |
| 3 | 338 | 83 | 1 |
| 4 | 375 | 46 | 1 |
| 5 | 397 | 34 |  |
| 6 | 412 | 27 |  |
| 7 | 424 | 24 |  |
| 8 | 434 | 22 |  |
| 9 | 443 | 20 |  |
| 10 | 451 | 19 |  |
| 11 | 459 | 18 |  |
| 12 | 467 | 18 | 2 |
| 13 | 474 | 17 |  |
| 14 | 481 | 17 |  |
| 15 | 488 | 17 |  |
| 16 | 495 | 17 |  |
| 17 | 502 | 17 |  |
| 18 | 509 | 17 |  |
| 19 | 516 | 17 | 3 |
| 20 | 523 | 17 |  |
| 21 | 531 | 17 |  |
| 22 | 538 | 17 |  |
| 23 | 546 | 18 |  |
| 24 | 554 | 18 | 4 |
| 25 | 562 | 19 |  |
| 26 | 572 | 20 |  |
| 27 | 582 | 21 |  |
| 28 | 594 | 23 |  |
| 29 | 608 | 26 |  |
| 30 | 628 | 32 | 5 |
| 31 | 662 | 47 |  |
| 32 | 680 | 57 |  |
|  |  |  |  |

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## Table E. 164 Form D Grade 164 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 360 | 36 |  |
| 1 | 376 | 26 |  |
| 2 | 395 | 19 |  |
| 3 | 406 | 16 |  |
| 4 | 415 | 15 |  |
| 5 | 423 | 13 | 1 |
| 6 | 429 | 12 |  |
| 7 | 435 | 11 |  |
| 8 | 440 | 11 |  |
| 9 | 444 | 10 |  |
| 10 | 448 | 10 |  |
| 11 | 452 | 9 |  |
| 12 | 456 | 9 |  |
| 13 | 460 | 8 |  |
| 14 | 463 | 8 | 2 |
| 15 | 467 | 8 |  |
| 16 | 470 | 8 |  |
| 17 | 473 | 7 |  |
| 18 | 476 | 7 |  |
| 19 | 479 | 7 |  |
| 20 | 482 | 7 |  |
| 21 | 485 | 7 |  |
| 22 | 488 | 7 |  |
| 23 | 491 | 7 |  |
| 24 | 494 | 7 | 3 |
| 25 | 497 | 7 |  |
| 26 | 500 | 7 |  |
| 27 | 504 | 7 |  |
| 28 | 507 | 7 |  |
| 29 | 510 | 7 |  |
| 30 | 513 | 7 |  |
| 31 | 517 | 8 |  |
| 32 | 521 | 8 |  |
| 33 | 524 | 8 |  |
| 34 | 528 | 8 | 4 |
| 35 | 532 | 8 |  |
| 36 | 537 | 9 |  |
| 37 | 542 | 10 |  |
| 38 | 549 | 11 |  |
| 39 | 558 | 15 |  |
| 40 | 575 | 25 |  |
| 41 | 635 | 85 |  |
|  |  |  |  |

Listening

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 350 | 125 |  |
| 1 | 350 | 125 |  |
| 2 | 350 | 125 |  |
| 3 | 350 | 125 |  |
| 4 | 350 | 125 | 1 |
| 5 | 350 | 125 |  |
| 6 | 379 | 96 |  |
| 7 | 420 | 55 |  |
| 8 | 441 | 36 |  |
| 9 | 456 | 29 |  |
| 10 | 469 | 25 | 2 |
| 11 | 481 | 24 | 2 |
| 12 | 492 | 23 |  |
| 13 | 503 | 22 | 3 |
| 14 | 514 | 21 |  |
| 15 | 526 | 21 |  |
| 16 | 539 | 23 |  |
| 17 | 556 | 26 | 4 |
| 18 | 579 | 33 |  |
| 19 | 613 | 43 | 5 |
| 20 | 640 | 58 |  |

Reading

| RS |  | SS | SEM |  | PL |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 0 | 360 | 115 |  |  |  |
| 1 | 360 | 115 |  |  |  |
| 2 | 360 | 115 |  |  |  |
| 3 | 360 | 115 |  |  |  |
| 4 | 360 | 115 |  |  |  |
| 5 | 360 | 115 | 1 |  |  |
| 6 | 397 | 78 |  |  |  |
| 7 | 428 | 47 |  |  |  |
| 8 | 445 | 35 |  |  |  |
| 9 | 458 | 28 |  |  |  |
| 10 | 469 | 24 |  |  |  |
| 11 | 478 | 22 |  |  |  |
| 12 | 487 | 20 | 2 |  |  |
| 13 | 495 | 19 |  |  |  |
| 14 | 502 | 18 |  |  |  |
| 15 | 509 | 18 |  |  |  |
| 16 | 516 | 18 | 3 |  |  |
| 17 | 524 | 18 |  |  |  |
| 18 | 531 | 18 |  |  |  |
| 19 | 539 | 18 |  |  |  |
| 20 | 547 | 19 |  |  |  |
| 21 | 555 | 19 |  |  |  |
| 22 | 565 | 20 | 4 |  |  |
| 23 | 575 | 20 |  |  |  |
| 24 | 585 | 20 |  |  |  |
| 25 | 596 | 20 |  |  |  |
| 26 | 608 | 20 |  |  |  |
| 27 | 622 | 23 | 5 |  |  |
| 28 | 641 | 29 |  |  |  |
| 29 | 676 | 47 |  |  |  |
| 30 | 680 | 50 |  |  |  |
|  |  |  |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 290 | 131 |  |
| 1 | 290 | 131 |  |
| 2 | 290 | 131 |  |
| 3 | 338 | 83 |  |
| 4 | 375 | 46 | 1 |
| 5 | 397 | 34 |  |
| 6 | 412 | 27 |  |
| 7 | 424 | 24 |  |
| 8 | 434 | 22 |  |
| 9 | 443 | 20 |  |
| 10 | 451 | 19 |  |
| 11 | 459 | 18 |  |
| 12 | 467 | 18 | 2 |
| 13 | 474 | 17 |  |
| 14 | 481 | 17 |  |
| 15 | 488 | 17 |  |
| 16 | 495 | 17 |  |
| 17 | 502 | 17 |  |
| 18 | 509 | 17 |  |
| 19 | 516 | 17 | 3 |
| 20 | 523 | 17 |  |
| 21 | 531 | 17 |  |
| 22 | 538 | 17 |  |
| 23 | 546 | 18 |  |
| 24 | 554 | 18 | 4 |
| 25 | 562 | 19 |  |
| 26 | 572 | 20 |  |
| 27 | 582 | 21 |  |
| 28 | 594 | 23 |  |
| 29 | 608 | 26 |  |
| 30 | 628 | 32 | 5 |
| 31 | 662 | 47 |  |
| 32 | 680 | 57 |  |
|  |  |  |  |

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## Table E. 165 Form D Grade 165 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 365 | 43 |  |
| 1 | 386 | 30 |  |
| 2 | 408 | 21 |  |
| 3 | 421 | 17 | 1 |
| 4 | 431 | 14 | 1 |
| 5 | 438 | 12 |  |
| 6 | 445 | 11 |  |
| 7 | 450 | 10 |  |
| 8 | 455 | 9 |  |
| 9 | 459 | 9 |  |
| 10 | 463 | 8 | 2 |
| 11 | 466 | 8 | 2 |
| 12 | 469 | 8 |  |
| 13 | 473 | 7 |  |
| 14 | 476 | 7 |  |
| 15 | 478 | 7 |  |
| 16 | 481 | 7 |  |
| 17 | 484 | 7 |  |
| 18 | 487 | 7 |  |
| 19 | 489 | 7 |  |
| 20 | 492 | 7 |  |
| 21 | 495 | 7 | 3 |
| 22 | 497 | 7 |  |
| 23 | 500 | 7 |  |
| 24 | 502 | 7 |  |
| 25 | 505 | 7 |  |
| 26 | 507 | 7 |  |
| 27 | 510 | 7 |  |
| 28 | 513 | 7 |  |
| 29 | 515 | 7 |  |
| 30 | 518 | 7 |  |
| 31 | 521 | 7 |  |
| 32 | 524 | 7 |  |
| 33 | 527 | 7 | 4 |
| 34 | 530 | 7 | 4 |
| 35 | 534 | 8 |  |
| 36 | 538 | 8 |  |
| 37 | 542 | 9 |  |
| 38 | 549 | 12 |  |
| 39 | 557 | 15 |  |
| 40 | 574 | 25 | 5 |
| 41 | 645 | 96 |  |
|  |  |  |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | 360 | 118 |  |
| 1 | 360 | 118 |  |
| 2 | 360 | 118 |  |
| 3 | 360 | 118 |  |
| 4 | 360 | 118 |  |
| 5 | 360 | 118 | 1 |
| 6 | 360 | 118 |  |
| 7 | 411 | 67 |  |
| 8 | 436 | 42 |  |
| 9 | 452 | 32 |  |
| 10 | 465 | 28 |  |
| 11 | 477 | 26 | 2 |
| 12 | 488 | 25 |  |
| 13 | 499 | 24 |  |
| 14 | 510 | 24 | 3 |
| 15 | 521 | 23 |  |
| 16 | 532 | 23 |  |
| 17 | 544 | 24 | 4 |
| 18 | 556 | 24 | 4 |
| 19 | 570 | 25 |  |
| 20 | 587 | 27 |  |
| 21 | 607 | 31 |  |
| 22 | 640 | 43 | 5 |
| 23 | 680 | 68 |  |

Reading

| RS |  |  |  |
| :---: | :---: | :---: | :---: |
| SS | SEM |  | PL |
| 0 | 380 | 114 |  |
| 1 | 380 | 114 |  |
| 2 | 380 | 114 |  |
| 3 | 380 | 114 |  |
| 4 | 380 | 114 |  |
| 5 | 380 | 114 |  |
| 6 | 425 | 69 |  |
| 7 | 450 | 44 |  |
| 8 | 467 | 33 |  |
| 9 | 480 | 27 |  |
| 10 | 490 | 24 |  |
| 11 | 499 | 21 |  |
| 12 | 508 | 20 |  |
| 13 | 516 | 19 | 2 |
| 14 | 523 | 18 |  |
| 15 | 531 | 18 |  |
| 16 | 538 | 18 | 3 |
| 17 | 545 | 18 | 3 |
| 18 | 553 | 18 |  |
| 19 | 561 | 18 |  |
| 20 | 569 | 18 |  |
| 21 | 577 | 18 |  |
| 22 | 585 | 18 | 4 |
| 23 | 595 | 19 |  |
| 24 | 605 | 20 |  |
| 25 | 616 | 21 |  |
| 26 | 629 | 23 |  |
| 27 | 647 | 27 | 5 |
| 28 | 675 | 38 |  |
| 29 | 690 | 47 |  |
|  |  |  |  |

Writing

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| PL |  |  |  |
| 0 | 300 | 148 |  |
| 1 | 300 | 148 |  |
| 2 | 300 | 148 |  |
| 3 | 385 | 63 | 1 |
| 4 | 414 | 36 |  |
| 5 | 430 | 27 |  |
| 6 | 443 | 22 |  |
| 7 | 452 | 20 |  |
| 8 | 460 | 18 |  |
| 9 | 467 | 17 |  |
| 10 | 474 | 16 | 2 |
| 11 | 480 | 15 |  |
| 12 | 487 | 15 |  |
| 13 | 493 | 15 |  |
| 14 | 499 | 15 |  |
| 15 | 505 | 15 |  |
| 16 | 511 | 15 |  |
| 17 | 518 | 15 | 3 |
| 18 | 524 | 15 |  |
| 19 | 532 | 15 |  |
| 20 | 539 | 16 |  |
| 21 | 547 | 16 |  |
| 22 | 555 | 16 |  |
| 23 | 564 | 17 | 4 |
| 24 | 572 | 17 |  |
| 25 | 582 | 17 |  |
| 26 | 591 | 18 |  |
| 27 | 602 | 19 |  |
| 28 | 613 | 20 |  |
| 29 | 627 | 22 | 5 |
| 30 | 645 | 27 |  |
| 31 | 673 | 38 |  |
| 32 | 710 | 62 |  |
|  |  |  |  |

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## Table E. 166 Form D Grade 166 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 365 | 43 |  |
| 1 | 386 | 30 |  |
| 2 | 408 | 21 |  |
| 3 | 421 | 17 | 1 |
| 4 | 431 | 14 | 1 |
| 5 | 438 | 12 |  |
| 6 | 445 | 11 |  |
| 7 | 450 | 10 |  |
| 8 | 455 | 9 |  |
| 9 | 459 | 9 |  |
| 10 | 463 | 8 |  |
| 11 | 466 | 8 | 2 |
| 12 | 469 | 8 |  |
| 13 | 473 | 7 |  |
| 14 | 476 | 7 |  |
| 15 | 478 | 7 |  |
| 16 | 481 | 7 |  |
| 17 | 484 | 7 |  |
| 18 | 487 | 7 |  |
| 19 | 489 | 7 |  |
| 20 | 492 | 7 |  |
| 21 | 495 | 7 | 3 |
| 22 | 497 | 7 |  |
| 23 | 500 | 7 |  |
| 24 | 502 | 7 |  |
| 25 | 505 | 7 |  |
| 26 | 507 | 7 |  |
| 27 | 510 | 7 |  |
| 28 | 513 | 7 |  |
| 29 | 515 | 7 |  |
| 30 | 518 | 7 |  |
| 31 | 521 | 7 |  |
| 32 | 524 | 7 |  |
| 33 | 527 | 7 | 4 |
| 34 | 530 | 7 | 4 |
| 35 | 534 | 8 |  |
| 36 | 538 | 8 |  |
| 37 | 542 | 9 |  |
| 38 | 549 | 12 |  |
| 39 | 557 | 15 |  |
| 40 | 574 | 25 | 5 |
| 41 | 645 | 96 |  |
|  |  |  |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 360 | 118 |  |
| 1 | 360 | 118 |  |
| 2 | 360 | 118 |  |
| 3 | 360 | 118 |  |
| 4 | 360 | 118 | 1 |
| 5 | 360 | 118 | 1 |
| 6 | 360 | 118 |  |
| 7 | 411 | 67 |  |
| 8 | 436 | 42 |  |
| 9 | 452 | 32 |  |
| 10 | 465 | 28 |  |
| 11 | 477 | 26 | 2 |
| 12 | 488 | 25 |  |
| 13 | 499 | 24 |  |
| 14 | 510 | 24 | 3 |
| 15 | 521 | 23 |  |
| 16 | 532 | 23 |  |
| 17 | 544 | 24 |  |
| 18 | 556 | 24 | 4 |
| 19 | 570 | 25 |  |
| 20 | 587 | 27 |  |
| 21 | 607 | 31 |  |
| 22 | 640 | 43 | 5 |
| 23 | 680 | 68 |  |
|  |  |  |  |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | PL |  |  |
| 1 | 380 | 114 |  |
| 2 | 380 | 114 |  |
| 3 | 380 | 114 |  |
| 4 | 380 | 114 |  |
| 5 | 380 | 114 | 1 |
| 6 | 425 | 69 | 1 |
| 7 | 450 | 44 |  |
| 8 | 467 | 33 |  |
| 9 | 480 | 27 |  |
| 10 | 490 | 24 |  |
| 11 | 499 | 21 |  |
| 12 | 508 | 20 |  |
| 13 | 516 | 19 | 2 |
| 14 | 523 | 18 |  |
| 15 | 531 | 18 |  |
| 16 | 538 | 18 | 3 |
| 17 | 545 | 18 |  |
| 18 | 553 | 18 |  |
| 19 | 561 | 18 |  |
| 20 | 569 | 18 |  |
| 21 | 577 | 18 |  |
| 22 | 585 | 18 | 4 |
| 23 | 595 | 19 |  |
| 24 | 605 | 20 |  |
| 25 | 616 | 21 |  |
| 26 | 629 | 23 |  |
| 27 | 647 | 27 | 5 |
| 28 | 675 | 38 |  |
| 29 | 690 | 47 |  |
|  |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 300 | 148 |  |
| 1 | 300 | 148 |  |
| 2 | 300 | 148 |  |
| 3 | 385 | 63 | 1 |
| 4 | 414 | 36 |  |
| 5 | 430 | 27 |  |
| 6 | 443 | 22 |  |
| 7 | 452 | 20 |  |
| 8 | 460 | 18 |  |
| 9 | 467 | 17 |  |
| 10 | 474 | 16 | 2 |
| 11 | 480 | 15 |  |
| 12 | 487 | 15 |  |
| 13 | 493 | 15 |  |
| 14 | 499 | 15 |  |
| 15 | 505 | 15 |  |
| 16 | 511 | 15 |  |
| 17 | 518 | 15 | 3 |
| 18 | 524 | 15 |  |
| 19 | 532 | 15 |  |
| 20 | 539 | 16 |  |
| 21 | 547 | 16 |  |
| 22 | 555 | 16 |  |
| 23 | 564 | 17 |  |
| 24 | 572 | 17 | 4 |
| 25 | 582 | 17 |  |
| 26 | 591 | 18 |  |
| 27 | 602 | 19 |  |
| 28 | 613 | 20 |  |
| 29 | 627 | 22 | 5 |
| 30 | 645 | 27 |  |
| 31 | 673 | 38 |  |
| 32 | 710 | 62 |  |
|  |  |  |  |

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## Table E. 167 Form D Grade 167 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 365 | 43 |  |
| 1 | 386 | 30 |  |
| 2 | 408 | 21 |  |
| 3 | 421 | 17 | 1 |
| 4 | 431 | 14 | 1 |
| 5 | 438 | 12 |  |
| 6 | 445 | 11 |  |
| 7 | 450 | 10 |  |
| 8 | 455 | 9 |  |
| 9 | 459 | 9 |  |
| 10 | 463 | 8 |  |
| 11 | 466 | 8 | 2 |
| 12 | 469 | 8 |  |
| 13 | 473 | 7 |  |
| 14 | 476 | 7 |  |
| 15 | 478 | 7 |  |
| 16 | 481 | 7 |  |
| 17 | 484 | 7 |  |
| 18 | 487 | 7 |  |
| 19 | 489 | 7 |  |
| 20 | 492 | 7 |  |
| 21 | 495 | 7 |  |
| 22 | 497 | 7 | 3 |
| 23 | 500 | 7 |  |
| 24 | 502 | 7 |  |
| 25 | 505 | 7 |  |
| 26 | 507 | 7 |  |
| 27 | 510 | 7 |  |
| 28 | 513 | 7 |  |
| 29 | 515 | 7 |  |
| 30 | 518 | 7 |  |
| 31 | 521 | 7 |  |
| 32 | 524 | 7 |  |
| 33 | 527 | 7 |  |
| 34 | 530 | 7 | 4 |
| 35 | 534 | 8 |  |
| 36 | 538 | 8 |  |
| 37 | 542 | 9 |  |
| 38 | 549 | 12 |  |
| 39 | 557 | 15 |  |
| 40 | 574 | 25 | 5 |
| 41 | 645 | 96 |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 360 | 118 |  |
| 1 | 360 | 118 |  |
| 2 | 360 | 118 |  |
| 3 | 360 | 118 |  |
| 4 | 360 | 118 |  |
| 5 | 360 | 118 | 1 |
| 6 | 360 | 118 |  |
| 7 | 411 | 67 |  |
| 8 | 436 | 42 |  |
| 9 | 452 | 32 |  |
| 10 | 465 | 28 |  |
| 11 | 477 | 26 | 2 |
| 12 | 488 | 25 | 2 |
| 13 | 499 | 24 |  |
| 14 | 510 | 24 | 3 |
| 15 | 521 | 23 |  |
| 16 | 532 | 23 |  |
| 17 | 544 | 24 |  |
| 18 | 556 | 24 | 4 |
| 19 | 570 | 25 |  |
| 20 | 587 | 27 |  |
| 21 | 607 | 31 |  |
| 22 | 640 | 43 | 5 |
| 23 | 680 | 68 |  |

Reading

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| 0 | PL |  |  |
| 1 | 380 | 114 |  |
| 2 | 380 | 114 |  |
| 3 | 380 | 114 |  |
| 4 | 380 | 114 |  |
| 5 | 380 | 114 |  |
| 6 | 425 | 69 | 1 |
| 7 | 450 | 44 |  |
| 8 | 467 | 33 |  |
| 9 | 480 | 27 |  |
| 10 | 490 | 24 |  |
| 11 | 499 | 21 |  |
| 12 | 508 | 20 |  |
| 13 | 516 | 19 | 2 |
| 14 | 523 | 18 |  |
| 15 | 531 | 18 |  |
| 16 | 538 | 18 |  |
| 17 | 545 | 18 | 3 |
| 18 | 553 | 18 |  |
| 19 | 561 | 18 |  |
| 20 | 569 | 18 |  |
| 21 | 577 | 18 |  |
| 22 | 585 | 18 | 4 |
| 23 | 595 | 19 |  |
| 24 | 605 | 20 |  |
| 25 | 616 | 21 |  |
| 26 | 629 | 23 |  |
| 27 | 647 | 27 | 5 |
| 28 | 675 | 38 |  |
| 29 | 690 | 47 |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 300 | 148 |  |
| 1 | 300 | 148 |  |
| 2 | 300 | 148 |  |
| 3 | 385 | 63 | 1 |
| 4 | 414 | 36 |  |
| 5 | 430 | 27 |  |
| 6 | 443 | 22 |  |
| 7 | 452 | 20 |  |
| 8 | 460 | 18 |  |
| 9 | 467 | 17 |  |
| 10 | 474 | 16 | 2 |
| 11 | 480 | 15 |  |
| 12 | 487 | 15 |  |
| 13 | 493 | 15 |  |
| 14 | 499 | 15 |  |
| 15 | 505 | 15 |  |
| 16 | 511 | 15 |  |
| 17 | 518 | 15 | 3 |
| 18 | 524 | 15 |  |
| 19 | 532 | 15 |  |
| 20 | 539 | 16 |  |
| 21 | 547 | 16 |  |
| 22 | 555 | 16 |  |
| 23 | 564 | 17 |  |
| 24 | 572 | 17 | 4 |
| 25 | 582 | 17 |  |
| 26 | 591 | 18 |  |
| 27 | 602 | 19 |  |
| 28 | 613 | 20 |  |
| 29 | 627 | 22 | 5 |
| 30 | 645 | 27 |  |
| 31 | 673 | 38 |  |
| 32 | 710 | 62 |  |
|  |  |  |  |

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## Table E. 168 Form D Grade 168 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM |  |
| 0 | PL |  |  |
| 0 | 370 | 44 |  |
| 1 | 404 | 22 |  |
| 2 | 422 | 16 | 1 |
| 3 | 433 | 13 | 1 |
| 4 | 441 | 11 |  |
| 5 | 448 | 10 |  |
| 6 | 453 | 9 |  |
| 7 | 457 | 8 |  |
| 8 | 461 | 8 |  |
| 9 | 464 | 7 | 2 |
| 10 | 467 | 7 | 2 |
| 11 | 470 | 7 |  |
| 12 | 473 | 7 |  |
| 13 | 476 | 6 |  |
| 14 | 478 | 6 |  |
| 15 | 481 | 6 |  |
| 16 | 483 | 6 |  |
| 17 | 486 | 6 |  |
| 18 | 488 | 6 |  |
| 19 | 490 | 6 |  |
| 20 | 493 | 6 |  |
| 21 | 495 | 6 | 3 |
| 22 | 497 | 6 |  |
| 23 | 500 | 6 |  |
| 24 | 502 | 6 |  |
| 25 | 505 | 6 |  |
| 26 | 507 | 6 |  |
| 27 | 510 | 6 |  |
| 28 | 512 | 6 |  |
| 29 | 515 | 6 |  |
| 30 | 518 | 6 |  |
| 31 | 521 | 7 |  |
| 32 | 524 | 7 |  |
| 33 | 527 | 7 | 4 |
| 34 | 531 | 7 |  |
| 35 | 535 | 7 |  |
| 36 | 539 | 8 |  |
| 37 | 544 | 9 |  |
| 38 | 550 | 11 |  |
| 39 | 560 | 15 |  |
| 40 | 581 | 29 | 5 |
| 41 | 650 | 97 |  |
|  |  |  |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 370 | 120 | 1 | 0 | 390 | 111 | 1 |
| 1 | 370 | 120 |  | 1 | 390 | 111 |  |
| 2 | 370 | 120 |  | 2 | 390 | 111 |  |
| 3 | 370 | 120 |  | 3 | 390 | 111 |  |
| 4 | 370 | 120 |  | 4 | 390 | 111 |  |
| 5 | 370 | 120 |  | 5 | 390 | 111 |  |
| 6 | 370 | 120 |  | 6 | 424 | 77 |  |
| 7 | 415 | 75 |  | 7 | 453 | 48 |  |
| 8 | 444 | 46 |  | 8 | 470 | 34 |  |
| 9 | 462 | 34 |  | 9 | 483 | 26 |  |
| 10 | 477 | 31 | 2 | 10 | 492 | 23 |  |
| 11 | 491 | 32 |  | 11 | 501 | 20 |  |
| 12 | 505 | 32 |  | 12 | 508 | 19 | 2 |
| 13 | 519 | 31 |  | 13 | 515 | 17 |  |
| 14 | 533 | 29 | 3 | 14 | 522 | 16 |  |
| 15 | 546 | 26 | 4 | 15 | 528 | 16 |  |
| 16 | 559 | 23 |  | 16 | 534 | 16 |  |
| 17 | 570 | 21 |  | 17 | 540 | 15 |  |
| 18 | 581 | 20 |  | 18 | 545 | 15 | 3 |
| 19 | 592 | 19 |  | 19 | 551 | 15 |  |
| 20 | 605 | 22 |  | 20 | 558 | 15 |  |
| 21 | 624 | 32 |  | 21 | 564 | 16 |  |
| 22 | 661 | 54 | 5 | 22 | 571 | 16 |  |
| 23 | 730 | 104 |  | 23 | 578 | 16 |  |
|  |  |  |  | 24 | 586 | 17 | 4 |
|  |  |  |  | 25 | 594 | 18 |  |
|  |  |  |  | 26 | 604 | 19 |  |
|  |  |  |  | 27 | 617 | 22 |  |
|  |  |  |  | 28 | 633 | 26 | 5 |
|  |  |  |  | 29 | 660 | 38 |  |
|  |  |  |  |  |  | 80 |  |

Writing

| RS | SS | SEM |  |
| :---: | :---: | :---: | :---: |
| PL |  |  |  |
| 0 | 310 | 125 |  |
| 1 | 310 | 125 |  |
| 2 | 310 | 125 |  |
| 3 | 362 | 73 | 1 |
| 4 | 396 | 45 | 1 |
| 5 | 417 | 34 |  |
| 6 | 432 | 29 |  |
| 7 | 444 | 26 |  |
| 8 | 455 | 23 |  |
| 9 | 464 | 22 |  |
| 10 | 473 | 20 | 2 |
| 11 | 481 | 20 | 2 |
| 12 | 488 | 19 |  |
| 13 | 496 | 19 |  |
| 14 | 503 | 18 |  |
| 15 | 511 | 18 |  |
| 16 | 518 | 18 | 3 |
| 17 | 526 | 18 |  |
| 18 | 533 | 19 |  |
| 19 | 541 | 19 |  |
| 20 | 550 | 19 |  |
| 21 | 558 | 20 |  |
| 22 | 567 | 20 | 4 |
| 23 | 576 | 21 |  |
| 24 | 585 | 21 |  |
| 25 | 595 | 22 |  |
| 26 | 606 | 22 |  |
| 27 | 618 | 23 |  |
| 28 | 631 | 25 | 5 |
| 29 | 647 | 27 |  |
| 30 | 667 | 33 |  |
| 31 | 701 | 47 |  |
| 32 | 720 | 57 |  |
|  |  |  |  |

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Table E. 169 Form D Grade 169 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 370 | 44 |  |
| 1 | 404 | 22 |  |
| 2 | 422 | 16 | 1 |
| 3 | 433 | 13 | 1 |
| 4 | 441 | 11 |  |
| 5 | 448 | 10 |  |
| 6 | 453 | 9 |  |
| 7 | 457 | 8 |  |
| 8 | 461 | 8 |  |
| 9 | 464 | 7 | 2 |
| 10 | 467 | 7 | 2 |
| 11 | 470 | 7 |  |
| 12 | 473 | 7 |  |
| 13 | 476 | 6 |  |
| 14 | 478 | 6 |  |
| 15 | 481 | 6 |  |
| 16 | 483 | 6 |  |
| 17 | 486 | 6 |  |
| 18 | 488 | 6 |  |
| 19 | 490 | 6 |  |
| 20 | 493 | 6 |  |
| 21 | 495 | 6 |  |
| 22 | 497 | 6 | 3 |
| 23 | 500 | 6 |  |
| 24 | 502 | 6 |  |
| 25 | 505 | 6 |  |
| 26 | 507 | 6 |  |
| 27 | 510 | 6 |  |
| 28 | 512 | 6 |  |
| 29 | 515 | 6 |  |
| 30 | 518 | 6 |  |
| 31 | 521 | 7 |  |
| 32 | 524 | 7 |  |
| 33 | 527 | 7 |  |
| 34 | 531 | 7 | 4 |
| 35 | 535 | 7 |  |
| 36 | 539 | 8 |  |
| 37 | 544 | 9 |  |
| 38 | 550 | 11 |  |
| 39 | 560 | 15 |  |
| 40 | 581 | 29 | 5 |
| 41 | 650 | 97 |  |
|  |  |  |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 370 | 120 |  |
| 1 | 370 | 120 |  |
| 2 | 370 | 120 |  |
| 3 | 370 | 120 |  |
| 4 | 370 | 120 | 1 |
| 5 | 370 | 120 | 1 |
| 6 | 370 | 120 |  |
| 7 | 415 | 75 |  |
| 8 | 444 | 46 |  |
| 9 | 462 | 34 |  |
| 10 | 477 | 31 |  |
| 11 | 491 | 32 | 2 |
| 12 | 505 | 32 |  |
| 13 | 519 | 31 |  |
| 14 | 533 | 29 | 3 |
| 15 | 546 | 26 |  |
| 16 | 559 | 23 |  |
| 17 | 570 | 21 |  |
| 18 | 581 | 20 | 4 |
| 19 | 592 | 19 |  |
| 20 | 605 | 22 |  |
| 21 | 624 | 32 |  |
| 22 | 661 | 54 |  |
| 23 | 730 | 104 |  |


| Reading |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 390 | 111 |  |
| 1 | 390 | 111 |  |
| 2 | 390 | 111 |  |
| 3 | 390 | 111 |  |
| 4 | 390 | 111 |  |
| 5 | 390 | 111 | 1 |
| 6 | 424 | 77 | 1 |
| 7 | 453 | 48 |  |
| 8 | 470 | 34 |  |
| 9 | 483 | 26 |  |
| 10 | 492 | 23 |  |
| 11 | 501 | 20 |  |
| 12 | 508 | 19 |  |
| 13 | 515 | 17 |  |
| 14 | 522 | 16 |  |
| 15 | 528 | 16 | 2 |
| 16 | 534 | 16 |  |
| 17 | 540 | 15 |  |
| 18 | 545 | 15 |  |
| 19 | 551 | 15 |  |
| 20 | 558 | 15 |  |
| 21 | 564 | 16 | 3 |
| 22 | 571 | 16 |  |
| 23 | 578 | 16 |  |
| 24 | 586 | 17 |  |
| 25 | 594 | 18 | 4 |
| 26 | 604 | 19 |  |
| 27 | 617 | 22 |  |
| 28 | 633 | 26 |  |
| 29 | 660 | 38 | 5 |
| 30 | 715 | 80 |  |
|  |  |  |  |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 125 |  |
| 1 | 310 | 125 |  |
| 2 | 310 | 125 |  |
| 3 | 362 | 73 | 1 |
| 4 | 396 | 45 | 1 |
| 5 | 417 | 34 |  |
| 6 | 432 | 29 |  |
| 7 | 444 | 26 |  |
| 8 | 455 | 23 |  |
| 9 | 464 | 22 |  |
| 10 | 473 | 20 | 2 |
| 11 | 481 | 20 |  |
| 12 | 488 | 19 |  |
| 13 | 496 | 19 |  |
| 14 | 503 | 18 |  |
| 15 | 511 | 18 |  |
| 16 | 518 | 18 | 3 |
| 17 | 526 | 18 | 3 |
| 18 | 533 | 19 |  |
| 19 | 541 | 19 |  |
| 20 | 550 | 19 |  |
| 21 | 558 | 20 |  |
| 22 | 567 | 20 | 4 |
| 23 | 576 | 21 |  |
| 24 | 585 | 21 |  |
| 25 | 595 | 22 |  |
| 26 | 606 | 22 |  |
| 27 | 618 | 23 |  |
| 28 | 631 | 25 | 5 |
| 29 | 647 | 27 |  |
| 30 | 667 | 33 |  |
| 31 | 701 | 47 |  |
| 32 | 720 | 57 |  |
|  |  |  |  |

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Table E. 170 Form D Grade 170 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 370 | 44 |  |
| 1 | 404 | 22 |  |
| 2 | 422 | 16 | 1 |
| 3 | 433 | 13 | 1 |
| 4 | 441 | 11 |  |
| 5 | 448 | 10 |  |
| 6 | 453 | 9 |  |
| 7 | 457 | 8 |  |
| 8 | 461 | 8 |  |
| 9 | 464 | 7 |  |
| 10 | 467 | 7 | 2 |
| 11 | 470 | 7 |  |
| 12 | 473 | 7 |  |
| 13 | 476 | 6 |  |
| 14 | 478 | 6 |  |
| 15 | 481 | 6 |  |
| 16 | 483 | 6 |  |
| 17 | 486 | 6 |  |
| 18 | 488 | 6 |  |
| 19 | 490 | 6 |  |
| 20 | 493 | 6 |  |
| 21 | 495 | 6 |  |
| 22 | 497 | 6 | 3 |
| 23 | 500 | 6 |  |
| 24 | 502 | 6 |  |
| 25 | 505 | 6 |  |
| 26 | 507 | 6 |  |
| 27 | 510 | 6 |  |
| 28 | 512 | 6 |  |
| 29 | 515 | 6 |  |
| 30 | 518 | 6 |  |
| 31 | 521 | 7 |  |
| 32 | 524 | 7 |  |
| 33 | 527 | 7 |  |
| 34 | 531 | 7 | 4 |
| 35 | 535 | 7 |  |
| 36 | 539 | 8 |  |
| 37 | 544 | 9 |  |
| 38 | 550 | 11 |  |
| 39 | 560 | 15 |  |
| 40 | 581 | 29 | 5 |
| 41 | 650 | 97 |  |


| Listening |  |  |  | Reading |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL | RS | SS | SEM | PL |
| 0 | 370 | 120 |  | 0 | 390 | 111 |  |
| 1 | 370 | 120 |  | 1 | 390 | 111 |  |
| 2 | 370 | 120 |  | 2 | 390 | 111 |  |
| 3 | 370 | 120 |  | 3 | 390 | 111 |  |
| 4 | 370 | 120 |  | 4 | 390 | 111 |  |
| 5 | 370 | 120 | 1 | 5 | 390 | 111 |  |
| 6 | 370 | 120 |  | 6 | 424 | 77 | 1 |
| 7 | 415 | 75 |  | 7 | 453 | 48 |  |
| 8 | 444 | 46 |  | 8 | 470 | 34 |  |
| 9 | 462 | 34 |  | 9 | 483 | 26 |  |
| 10 | 477 | 31 |  | 10 | 492 | 23 |  |
| 11 | 491 | 32 |  | 11 | 501 | 20 |  |
| 12 | 505 | 32 | 2 | 12 | 508 | 19 |  |
| 13 | 519 | 31 |  | 13 | 515 | 17 |  |
| 14 | 533 | 29 | 3 | 14 | 522 | 16 |  |
| 15 | 546 | 26 |  | 15 | 528 | 16 | 2 |
| 16 | 559 | 23 |  | 16 | 534 | 16 | 2 |
| 17 | 570 | 21 |  | 17 | 540 | 15 |  |
| 18 | 581 | 20 | 4 | 18 | 545 | 15 |  |
| 19 | 592 | 19 | 4 | 19 | 551 | 15 |  |
| 20 | 605 | 22 |  | 20 | 558 | 15 |  |
| 21 | 624 | 32 |  | 21 | 564 | 16 | 3 |
|  | 661 | 54 |  | 22 | 571 | 16 |  |
| 23 | 730 | 104 | 5 | 23 | 578 | 16 |  |
|  |  |  |  | 24 | 586 | 17 |  |
|  |  |  |  | 25 | 594 | 18 |  |
|  |  |  |  | 26 | 604 | 19 | 4 |
|  |  |  |  | 27 | 617 | 22 |  |
|  |  |  |  | 28 | 633 | 26 |  |
|  |  |  |  | 29 | 660 | 38 |  |
|  |  |  |  |  | 715 | 80 | 5 |

Writing

| RS | SS | SEM | PL |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 125 |  |
| 1 | 310 | 125 |  |
| 2 | 310 | 125 |  |
| 3 | 362 | 73 | 1 |
| 4 | 396 | 45 | 1 |
| 5 | 417 | 34 |  |
| 6 | 432 | 29 |  |
| 7 | 444 | 26 |  |
| 8 | 455 | 23 |  |
| 9 | 464 | 22 |  |
| 10 | 473 | 20 | 2 |
| 11 | 481 | 20 |  |
| 12 | 488 | 19 |  |
| 13 | 496 | 19 |  |
| 14 | 503 | 18 |  |
| 15 | 511 | 18 |  |
| 16 | 518 | 18 | 3 |
| 17 | 526 | 18 | 3 |
| 18 | 533 | 19 |  |
| 19 | 541 | 19 |  |
| 20 | 550 | 19 |  |
| 21 | 558 | 20 |  |
| 22 | 567 | 20 | 4 |
| 23 | 576 | 21 |  |
| 24 | 585 | 21 |  |
| 25 | 595 | 22 |  |
| 26 | 606 | 22 |  |
| 27 | 618 | 23 |  |
| 28 | 631 | 25 | 5 |
| 29 | 647 | 27 | 5 |
| 30 | 667 | 33 |  |
| 31 | 701 | 47 |  |
| 32 | 720 | 57 |  |
|  |  |  |  |

Table E. 171 Form D Grade 171 Scoring

| Speaking |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 370 | 44 |  |
| 1 | 404 | 22 |  |
| 2 | 422 | 16 | 1 |
| 3 | 433 | 13 | 1 |
| 4 | 441 | 11 |  |
| 5 | 448 | 10 |  |
| 6 | 453 | 9 |  |
| 7 | 457 | 8 |  |
| 8 | 461 | 8 |  |
| 9 | 464 | 7 |  |
| 10 | 467 | 7 | 2 |
| 11 | 470 | 7 |  |
| 12 | 473 | 7 |  |
| 13 | 476 | 6 |  |
| 14 | 478 | 6 |  |
| 15 | 481 | 6 |  |
| 16 | 483 | 6 |  |
| 17 | 486 | 6 |  |
| 18 | 488 | 6 |  |
| 19 | 490 | 6 |  |
| 20 | 493 | 6 |  |
| 21 | 495 | 6 |  |
| 22 | 497 | 6 | 3 |
| 23 | 500 | 6 |  |
| 24 | 502 | 6 |  |
| 25 | 505 | 6 |  |
| 26 | 507 | 6 |  |
| 27 | 510 | 6 |  |
| 28 | 512 | 6 |  |
| 29 | 515 | 6 |  |
| 30 | 518 | 6 |  |
| 31 | 521 | 7 |  |
| 32 | 524 | 7 |  |
| 33 | 527 | 7 |  |
| 34 | 531 | 7 | 4 |
| 35 | 535 | 7 |  |
| 36 | 539 | 8 |  |
| 37 | 544 | 9 |  |
| 38 | 550 | 11 |  |
| 39 | 560 | 15 |  |
| 40 | 581 | 29 | 5 |
| 41 | 650 | 97 |  |


| Listening |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 370 | 120 |  |
| 1 | 370 | 120 |  |
| 2 | 370 | 120 |  |
| 3 | 370 | 120 |  |
| 4 | 370 | 120 |  |
| 5 | 370 | 120 | 1 |
| 6 | 370 | 120 |  |
| 7 | 415 | 75 |  |
| 8 | 444 | 46 |  |
| 9 | 462 | 34 |  |
| 10 | 477 | 31 |  |
| 11 | 491 | 32 | 2 |
| 12 | 505 | 32 | 2 |
| 13 | 519 | 31 |  |
| 14 | 533 | 29 | 3 |
| 15 | 546 | 26 |  |
| 16 | 559 | 23 |  |
| 17 | 570 | 21 |  |
| 18 | 581 | 20 |  |
| 19 | 592 | 19 | 4 |
| 20 | 605 | 22 |  |
| 21 | 624 | 32 |  |
| 22 | 661 | 54 |  |
| 23 | 730 | 104 |  |


| Reading |  |  |  |
| :---: | :---: | :---: | :---: |
| RS | SS | SEM | PL |
| 0 | 390 | 111 |  |
| 1 | 390 | 111 |  |
| 2 | 390 | 111 |  |
| 3 | 390 | 111 |  |
| 4 | 390 | 111 |  |
| 5 | 390 | 111 |  |
| 6 | 424 | 77 | 1 |
| 7 | 453 | 48 |  |
| 8 | 470 | 34 |  |
| 9 | 483 | 26 |  |
| 10 | 492 | 23 |  |
| 11 | 501 | 20 |  |
| 12 | 508 | 19 |  |
| 13 | 515 | 17 |  |
| 14 | 522 | 16 |  |
| 15 | 528 | 16 | 2 |
| 16 | 534 | 16 | 2 |
| 17 | 540 | 15 |  |
| 18 | 545 | 15 |  |
| 19 | 551 | 15 |  |
| 20 | 558 | 15 |  |
| 21 | 564 | 16 | 3 |
| 22 | 571 | 16 |  |
| 23 | 578 | 16 |  |
| 24 | 586 | 17 |  |
| 25 | 594 | 18 |  |
| 26 | 604 | 19 | 4 |
| 27 | 617 | 22 |  |
| 28 | 633 | 26 |  |
| 29 | 660 | 38 | 5 |
| 30 | 715 | 80 | 5 |
|  |  |  |  |

Writing

| RS |  | SS | SEM |
| :---: | :---: | :---: | :---: |
| 0 | 310 | 125 |  |
| 1 | 310 | 125 |  |
| 2 | 310 | 125 |  |
| 3 | 362 | 73 | 1 |
| 4 | 396 | 45 | 1 |
| 5 | 417 | 34 |  |
| 6 | 432 | 29 |  |
| 7 | 444 | 26 |  |
| 8 | 455 | 23 |  |
| 9 | 464 | 22 |  |
| 10 | 473 | 20 | 2 |
| 11 | 481 | 20 | 2 |
| 12 | 488 | 19 |  |
| 13 | 496 | 19 |  |
| 14 | 503 | 18 |  |
| 15 | 511 | 18 |  |
| 16 | 518 | 18 | 3 |
| 17 | 526 | 18 | 3 |
| 18 | 533 | 19 |  |
| 19 | 541 | 19 |  |
| 20 | 550 | 19 |  |
| 21 | 558 | 20 |  |
| 22 | 567 | 20 |  |
| 23 | 576 | 21 | 4 |
| 24 | 585 | 21 |  |
| 25 | 595 | 22 |  |
| 26 | 606 | 22 |  |
| 27 | 618 | 23 |  |
| 28 | 631 | 25 |  |
| 29 | 647 | 27 | 5 |
| 30 | 667 | 33 |  |
| 31 | 701 | 47 |  |
| 32 | 720 | 57 |  |
|  |  |  |  |

Table E. 39 Form D Kindergarten Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-310 | 1-362 | 1-311 | 1-231 | 1-287 | 30 | 364-365 | 425-426 | 374-375 | 294-295 | 349-350 |
| 2 | 311-312 | 363-364 | 312-314 | 232-233 | 288-289 | 31 | 366 | 427 | 376-377 | 296-298 | 351-353 |
| 3 | 313-314 | 365-367 | 315-316 | 234-235 | 290-293 | 32 | 367-368 | 428-429 | 378-379 | 299-300 | 354-355 |
| 4 | 315-316 | 368-369 | 317-318 | 236-237 | 294-295 | 33 | 369-370 | 430-431 | 380 | 301-303 | 356-357 |
| 5 | 317-319 | 370-373 | 319-321 | 238-240 | 296-298 | 34 | 371-372 | 432 | 381 | 304-306 | 358-359 |
| 6 | 320-321 | 374 | 322-323 | 241-243 | 299-300 | 35 | 373-374 | 433-434 | 382-383 | 307-309 | 360-362 |
| 7 | 322-323 | 375-377 | 324-325 | 244-245 | 301-302 | 36 | 375 | 435 | 384 | 310-311 | 363-364 |
| 8 | 324 | 378-381 | 326-327 | 246-247 | 303-305 | 37 | 376-377 | 436 | 385-386 | 312-314 | 365-367 |
| 9 | 325-326 | 382-384 | 328-329 | 248-250 | 306-307 | 38 | 378-379 | 437-438 | 387 | 315-317 | 368-369 |
| 10 | 327 | 385-387 | 330-331 | 251-253 | 308-309 | 39 | 380-381 | 439 | 388-389 | 318-319 | 370-371 |
| 11 | 328-329 | 388-390 | 332-333 | 254-255 | 310 | 40 | 382 | 440-441 | 390-391 | 320-322 | 372-373 |
| 12 | 330-331 | 391 | 334-336 | 256-257 | 311-312 | 41 | 383-384 | 442 | 392 | 323-325 | 374-376 |
| 13 | 332-333 | 392-393 | 337-338 | 258-259 | 313-314 | 42 | 385-386 | 443-444 | 393-394 | 326-328 | 377-378 |
| 14 | 334-335 | 394-395 | 339-340 | 260-261 | 315-317 | 43 | 387-388 | 445 | 395 | 329-330 | 379-380 |
| 15 | 336-337 | 396-398 | 341-343 | 262 | 318-319 | 44 | 389-390 | 446 | 396-397 | 331-333 | 381-382 |
| 16 | 338-339 | 399-400 | 344-346 | 263-264 | 320-321 | 45 | 391-392 | 447-448 | 398 | 334-335 | 383-385 |
| 17 | 340 | 401-402 | 347 | 265-266 | 322-323 | 46 | 393-394 | 449 | 399 | 336-338 | 386-388 |
| 18 | 341-342 | 403-404 | 348-351 | 267-268 | 324-325 | 47 | 395 | 450 | 400-401 | 339-340 | 389-390 |
| 19 | 343-344 | 405-406 | 352-353 | 269-270 | 326-328 | 48 | 396-397 | 451-452 | 402 | 341-343 | 391-393 |
| 20 | 345-346 | 407-408 | 354-355 | 271-272 | 329-330 | 49 | 398-399 | 453-454 | 403-404 | 344-346 | 394-395 |
| 21 | 347-348 | 409-410 | 356-358 | 273-274 | 331 | 50 | 400-401 | 455 | 405 | 347-349 | 396-398 |
| 22 | 349-350 | 411-413 | 359-360 | 275-276 | 332-333 | 51 | 402-403 | 456 | 406-407 | 350-351 | 399-400 |
| 23 | 351-352 | 414-415 | 361-362 | 277-278 | 334-335 | 52 | 404-405 | 457-458 | 408 | 352-354 | 401-403 |
| 24 | 353 | 416 | 363-364 | 279-280 | 336-337 | 53 | 406-407 | 459 | 409-410 | 355-356 | 404-405 |
| 25 | 354-355 | 417-418 | 365-366 | 281-282 | 338-339 | 54 | 408 | 460 | 411 | 357-359 | 406-408 |
| 26 | 356-357 | 419 | 367-368 | 283-285 | 340-342 | 55 | 409-410 | 461-462 | 412-413 | 360-361 | 409-410 |
| 27 | 358-359 | 420-421 | 369-370 | 286-287 | 343-344 | 56 | 411-412 | 463 | 414 | 362-363 | 411-412 |
| 28 | 360-361 | 422 | 371 | 288-290 | 345-346 | 57 | 413-414 | 464-465 | 415-416 | 364-365 | 413-414 |
| 29 | 362-363 | 423-424 | 372-373 | 291-293 | 347-348 | 58 | 415-416 | 466 | 417 | 366-367 | 415-416 |

Table E. 39 Form D Kindergarten Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 417-418 | 467 | 418-419 | 368-370 | 417-418 | 88 | 477-478 | 522-523 | 470-472 | 448-451 | 491-493 |
| 60 | 419 | 468-469 | 420 | 371-373 | 419-421 | 89 | 479 | 524 | 473-475 | 452-455 | 494-497 |
| 61 | 420-421 | 470 | 421-422 | 374-375 | 422-423 | 90 | 480-481 | 525-527 | 476 | 456-459 | 498-500 |
| 62 | 422-423 | 471-472 | 423 | 376-378 | 424-425 | 91 | 482-484 | 528 | 477-478 | 460-464 | 501-504 |
| 63 | 424-425 | 473-474 | 424-425 | 379-380 | 426-427 | 92 | 485-486 | 529-530 | 479-480 | 465-469 | 505-510 |
| 64 | 426-427 | 475 | 426-427 | 381-382 | 428-429 | 93 | 487-489 | 531-532 | 481-484 | 470-474 | 511-515 |
| 65 | 428-429 | 476-477 | 428-429 | 383-385 | 430-432 | 94 | 490-492 | 533 | 485-488 | 475-481 | 516-517 |
| 66 | 430-431 | 478-479 | 430 | 386-387 | 433-434 | 95 | 493-495 | 534 | 489-493 | 482-491 | 518-522 |
| 67 | 432-433 | 480 | 431-432 | 388-390 | 435-436 | 96 | 496-500 | 535 | 494 | 492-499 | 523-527 |
| 68 | 434-435 | 481-482 | 433-434 | 391-392 | 437-438 | 97 | 501-503 | 536-537 | 495-498 | 500-505 | 528-533 |
| 69 | 436-437 | 483 | 435-436 | 393-394 | 439-440 | 98 | 504-505 | 538-540 | 499-503 | 506-511 | 534-546 |
| 70 | 438-439 | 484-485 | 437-438 | 395-396 | 441-443 | 99 | 506-999 | 541-999 | 504-999 | 512-999 | 547-999 |
| 71 | 440-441 | 486-487 | 439 | 397-399 | 444-446 |  |  |  |  |  |  |
| 72 | 442-443 | 488-489 | 440-441 | 400-401 | 447-448 |  |  |  |  |  |  |
| 73 | 444-445 | 490-491 | 442-443 | 402-404 | 449-450 |  |  |  |  |  |  |
| 74 | 446-447 | 492-493 | 444 | 405-406 | 451-452 |  |  |  |  |  |  |
| 75 | 448-449 | 494-495 | 445-446 | 407-409 | 453-455 |  |  |  |  |  |  |
| 76 | 450-451 | 496-498 | 447-448 | 410-412 | 456-457 |  |  |  |  |  |  |
| 77 | 452-454 | 499-500 | 449 | 413-415 | 458-460 |  |  |  |  |  |  |
| 78 | 455-456 | 501-502 | 450-451 | 416-418 | 461-463 |  |  |  |  |  |  |
| 79 | 457-458 | 503-505 | 452 | 419-420 | 464-465 |  |  |  |  |  |  |
| 80 | 459-460 | 506-507 | 453-455 | 421-423 | 466-468 |  |  |  |  |  |  |
| 81 | 461-463 | 508-509 | 456-457 | 424-426 | 469-471 |  |  |  |  |  |  |
| 82 | 464-465 | 510 | 458 | 427-429 | 472-474 |  |  |  |  |  |  |
| 83 | 466-467 | 511-513 | 459-460 | 430-432 | 475-478 |  |  |  |  |  |  |
| 84 | 468-469 | 514-515 | 461-462 | 433-435 | 479-481 |  |  |  |  |  |  |
| 85 | 470-471 | 516-517 | 463-465 | 436-439 | 482-484 |  |  |  |  |  |  |
| 86 | 472-474 | 518-519 | 466-467 | 440-444 | 485-488 |  |  |  |  |  |  |
| 87 | 475-476 | 520-521 | 468-469 | 445-447 | 489-490 |  |  |  |  |  |  |

Table E.40 Form D Grade 1 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-342 | 1-372 | 1-323 | 1-272 | 1-331 | 30 | 401-402 | 438-439 | 387-388 | 360-361 | 412-413 |
| 2 | 343-344 | 373 | 324-326 | 273-276 | 332 | 31 | 403-404 | 440-441 | 389 | 362-363 | 414 |
| 3 | 345 | 374-376 | 327 | 277-279 | 333-334 | 32 | 405-406 | 442 | 390-391 | 364-365 | 415-416 |
| 4 | 346-347 | 377-379 | 328-330 | 280-282 | 335-337 | 33 | 407-408 | 443 | 392 | 366-368 | 417-418 |
| 5 | 348-349 | 380-382 | 331-332 | 283 | 338-341 | 34 | 409 | 444-445 | 393-394 | 369-371 | 419-420 |
| 6 | 350-351 | 383-385 | 333-334 | 284-286 | 342-344 | 35 | 410-411 | 446 | 395-396 | 372-373 | 421 |
| 7 | 352-353 | 386-388 | 335-338 | 287-289 | 345-347 | 36 | 412-413 | 447 | 397-398 | 374-376 | 422-423 |
| 8 | 354-355 | 389-392 | 339-342 | 290-292 | 348-351 | 37 | 414 | 448-449 | 399-400 | 377-378 | 424-425 |
| 9 | 356-358 | 393-395 | 343 | 293-295 | 352-354 | 38 | 415-416 | 450 | 401 | 379-380 | 426-427 |
| 10 | 359-361 | 396-400 | 344-347 | 296-300 | 355-357 | 39 | 417 | 451 | 402-403 | 381-382 | 428-429 |
| 11 | 362-364 | 401-404 | 348-350 | 301-303 | 358-361 | 40 | 418-419 | 452 | 404-405 | 383-384 | 430-431 |
| 12 | 365-366 | 405-408 | 351-353 | 304-306 | 362-366 | 41 | 420-421 | 453 | 406 | 385-386 | 432-433 |
| 13 | 367-368 | 409-410 | 354-356 | 307-309 | 367-369 | 42 | 422 | 454-455 | 407-408 | 387-389 | 434-435 |
| 14 | 369-371 | 411-412 | 357-358 | 310-313 | 370-372 | 43 | 423-424 | 456 | 409-410 | 390-391 | 436 |
| 15 | 372 | 413-414 | 359-360 | 314-316 | 373-376 | 44 | 425 | 457 | 411 | 392-393 | 437-438 |
| 16 | 373-375 | 415-416 | 361-362 | 317-321 | 377-378 | 45 | 426-427 | 458 | 412-413 | 394-396 | 439 |
| 17 | 376-377 | 417-418 | 363-364 | 322-323 | 379-381 | 46 | 428 | 459 | 414-415 | 397-398 | 440-441 |
| 18 | 378-379 | 419 | 365-366 | 324-326 | 382-383 | 47 | 429-430 | 460-461 | 416 | 399-400 | 442-443 |
| 19 | 380-381 | 420-422 | 367-369 | 327-330 | 384-386 | 48 | 431 | 462 | 417-418 | 401-402 | 444-445 |
| 20 | 382-383 | 423-424 | 370 | 331-333 | 387-389 | 49 | 432-433 | 463 | 419-420 | 403-404 | 446 |
| 21 | 384 | 425 | 371-372 | 334-336 | 390-393 | 50 | 434-435 | 464 | 421 | 405-406 | 447-448 |
| 22 | 385-387 | 426-427 | 373-374 | 337-339 | 394-396 | 51 | 436 | 465-466 | 422-423 | 407-408 | 449-450 |
| 23 | 388-389 | 428 | 375-376 | 340-342 | 397-398 | 52 | 437-438 | 467 | 424-425 | 409-410 | 451-452 |
| 24 | 390-391 | 429-430 | 377-378 | 343-346 | 399-401 | 53 | 439-440 | 468 | 426-427 | 411-413 | 453-454 |
| 25 | 392-393 | 431-432 | 379-380 | 347-349 | 402-403 | 54 | 441-442 | 469 | 428 | 414-415 | 455-456 |
| 26 | 394-395 | 433 | 381 | 350-351 | 404-405 | 55 | 443 | 470-471 | 429-430 | 416-417 | 457-458 |
| 27 | 396-397 | 434-435 | 382-383 | 352-354 | 406-407 | 56 | 444-445 | 472 | 431-432 | 418-420 | 459-460 |
| 28 | 398-399 | 436 | 384 | 355-357 | 408-409 | 57 | 446-447 | 473 | 433 | 421-422 | 461-462 |
| 29 | 400 | 437 | 385-386 | 358-359 | 410-411 | 58 | 448-449 | 474 | 434-435 | 423-424 | 463-464 |

Table E. 40 Form D Grade 1 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 450-451 | 475-476 | 436 | 425-427 | 465-466 | 88 | 521-522 | 523 | 500-502 | 538-543 | 572-574 |
| 60 | 452-453 | 477 | 437-438 | 428-429 | 467 | 89 | 523-524 | 524-525 | 503-505 | 544-545 | 575 |
| 61 | 454-455 | 478-479 | 439-440 | 430-432 | 468-470 | 90 | 525-526 | 526-527 | 506-508 | 546-549 | 576-577 |
| 62 | 456 | 480 | 441-442 | 433-434 | 471-472 | 91 | 527-530 | 528-529 | 509-511 | 550-552 | 578 |
| 63 | 457-459 | 481 | 443 | 435-437 | 473-474 | 92 | 531 | 530 | 512 | 553-555 | 579 |
| 64 | 460-461 | 482-483 | 444-445 | 438-440 | 475 | 93 | 532-534 | 531-533 | 513-515 | 556-558 | 580-581 |
| 65 | 462-463 | 484 | 446-447 | 441-443 | 476-477 | 94 | 535-536 | 534-535 | 516-517 | 559-560 | 582-583 |
| 66 | 464-465 | 485-486 | 448-449 | 444-447 | 478-479 | 95 | 537-539 | 536 | 518-520 | 561-564 | 584-585 |
| 67 | 466-467 | 487 | 450-451 | 448-450 | 480-482 | 96 | 540-542 | 537-538 | 521-523 | 565-566 | 586 |
| 68 | 468-470 | 488-489 | 452-453 | 451-453 | 483-485 | 97 | 543 | 539-540 | 524-526 | 567-570 | 587 |
| 69 | 471-472 | 490-491 | 454-455 | 454-456 | 486-487 | 98 | 544 | 541-542 | 527-528 | 571-572 | 588 |
| 70 | 473-474 | 492-493 | 456-457 | 457-460 | 488-490 | 99 | 545-999 | 543-999 | 529-999 | 573-999 | 589-999 |
| 71 | 475-476 | 494 | 458-459 | 461-464 | 491-493 |  |  |  |  |  |  |
| 72 | 477-479 | 495-496 | 460-461 | 465-468 | 494-497 |  |  |  |  |  |  |
| 73 | 480-481 | 497-498 | 462-463 | 469-473 | 498-500 |  |  |  |  |  |  |
| 74 | 482-484 | 499 | 464-465 | 474-477 | 501-505 |  |  |  |  |  |  |
| 75 | 485-487 | 500-501 | 466-467 | 478-482 | 506-509 |  |  |  |  |  |  |
| 76 | 488-490 | 502-503 | 468-470 | 483-487 | 510-513 |  |  |  |  |  |  |
| 77 | 491-493 | 504 | 471-472 | 488-492 | 514-518 |  |  |  |  |  |  |
| 78 | 494-496 | 505-506 | 473-475 | 493-497 | 519-524 |  |  |  |  |  |  |
| 79 | 497-499 | 507-508 | 476-477 | 498-503 | 525-531 |  |  |  |  |  |  |
| 80 | 500-502 | 509 | 478-480 | 504-509 | 532-543 |  |  |  |  |  |  |
| 81 | 503-504 | 510-511 | 481-484 | 510-513 | 544-552 |  |  |  |  |  |  |
| 82 | 505-507 | 512-513 | 485-486 | 514-517 | 553-556 |  |  |  |  |  |  |
| 83 | 508-510 | 514-515 | 487-488 | 518-521 | 557-559 |  |  |  |  |  |  |
| 84 | 511-513 | 516-517 | 489-492 | 522-526 | 560-563 |  |  |  |  |  |  |
| 85 | 514-515 | 518-519 | 493-494 | 527-530 | 564-565 |  |  |  |  |  |  |
| 86 | 516-518 | 520 | 495-497 | 531-534 | 566-568 |  |  |  |  |  |  |
| 87 | 519-520 | 521-522 | 498-499 | 535-537 | 569-571 |  |  |  |  |  |  |

Table E. 41 Form D Grades 2-3 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-392 | 1-420 | 1-323 | 1-329 | 1-380 | 30 | 450-451 |  | 387-388 | 427-428 | 461-462 |
| 2 | 393 | 421-425 | 324-327 | 330-336 | 381-382 | 31 | 452-453 | 471-472 | 389-390 | 429-431 | 463 |
| 3 | 394-398 | 426-427 | 328-330 | 337-341 | 383-386 | 32 | 454-455 | 473 | 391-392 | 432-433 | 464-465 |
| 4 | 399-400 | 428-430 | 331-332 | 342-344 | 387-391 | 33 | 456 | 474 | 393 | 434-435 | 466-467 |
| 5 | 401-402 | 431-433 | 333-334 | 345-349 | 392-395 | 34 | 457-458 | 475 | 394-395 | 436-437 | 468-469 |
| 6 | 403-404 | 434-436 | 335-336 | 350-352 | 396-402 | 35 | 459-460 | 476 | 396-397 | 438-440 | 470 |
| 7 | 405-406 | 437-439 | 337-340 | 353-355 | 403-407 | 36 | 461-462 | 477 | 398 | 441-443 | 471-472 |
| 8 | 407 | 440-441 | 341-342 | 356-359 | 408-411 | 37 | 463-464 | 478 | 399-400 | 444-446 | 473 |
| 9 | 408-410 | 442-443 | 343-344 | 360-363 | 412-415 | 38 | 465-466 | 479 | 401-402 | 447-448 | 474-475 |
| 10 | 411-412 | 444-446 | 345-347 | 364-366 | 416-418 | 39 | 467 | 480 | 403 | 449-450 | 476 |
| 11 | 413-414 | 447 | 348-350 | 367-370 | 419-421 | 40 | 468-469 | 481 | 404-405 | 451-453 | 477-478 |
| 12 | 415-416 | 448-449 | 351-353 | 371-374 | 422-424 | 41 | 470-471 | 482 | 406 | 454-455 | 479-480 |
| 13 | 417-418 | 450 | 354-356 | 375-378 | 425-426 | 42 | 472 | 483-484 | 407-408 | 456-457 | 481 |
| 14 | 419-420 | 451-452 | 357-358 | 379-381 | 427-429 | 43 | 473-474 | 485 | 409 | 458-459 | 482-483 |
| 15 | 421-422 | 453 | 359-361 | 382-385 | 430-432 | 44 | 475 | 486 | 410-411 | 460-462 | 484-485 |
| 16 | 423-425 | 454 | 362 | 386-390 | 433-434 | 45 | 476-477 | 487 | 412-413 | 463-464 | 486 |
| 17 | 426 | 455 | 363-365 | 391-393 | 435-436 | 46 | 478-479 | 488 | 414 | 465-466 | 487-488 |
| 18 | 427-428 | 456 | 366-367 | 394-397 | 437-438 | 47 | 480 | 489-490 | 415-416 | 467-469 | 489 |
| 19 | 429-430 | 457-458 | 368 | 398-400 | 439-441 | 48 | 481-482 | 491 | 417 | 470-472 | 490-491 |
| 20 | 431-433 | 459 | 369-370 | 401-402 | 442-443 | 49 | 483-484 | 492 | 418-419 | 473-474 | 492 |
| 21 | 434-435 | 460 | 371-372 | 403-405 | 444-445 | 50 | 485 | 493 | 420-421 | 475-477 | 493-494 |
| 22 | 436 | 461 | 373-374 | 406-407 | 446-447 | 51 | 486-487 | 494 | 422 | 478-479 | 495-496 |
| 23 | 437-438 | 462 | 375-376 | 408-409 | 448-449 | 52 | 488-489 | 495-496 | 423-424 | 480-481 | 497 |
| 24 | 439-441 | 463-464 | 377-378 | 410-412 | 450-451 | 53 | 490-491 | 497 | 425-426 | 482-484 | 498-499 |
| 25 | 442 | 465 | 379 | 413-414 | 452 | 54 | 492 | 498 | 427-428 | 485-486 | 500 |
| 26 | 443-444 | 466 | 380-381 | 415-417 | 453-454 | 55 | 493-494 | 499-500 | 429-430 | 487-488 | 501-502 |
| 27 | 445-446 | 467 | 382 | 418-420 | 455-456 | 56 | 495-496 | 501 | 431 | 489-491 | 503-504 |
| 28 | 447-448 | 468 | 383-384 | 421-423 | 457-458 | 57 | 497 | 502 | 432-433 | 492-493 | 505-506 |
| 29 | 449 | 469-470 | 385-386 | 424-426 | 459-460 | 58 | 498-499 | 503-504 | 434-435 | 494-495 | 507-508 |

Table E.41 Form D Grades 2-3 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 500-501 | 505 | 436-437 | 496-497 | 509 | 88 | 552-553 | 558-560 | 500-505 | 566-568 | 576-577 |
| 60 | 502 | 506 | 438-439 | 498-500 | 510-511 | 89 | 554 | 561 | 506-507 | 569-572 | 578-579 |
| 61 | 503-504 | 507-508 | 440-441 | 501-502 | 512-513 | 90 | 555-556 | 562-564 | 508-509 | 573-575 | 580-582 |
| 62 | 505-506 | 509 | 442-443 | 503-505 | 514-515 | 91 | 557 | 565-566 | 510-511 | 576-579 | 583-584 |
| 63 | 507-508 | 510-511 | 444 | 506-507 | 516-517 | 92 | 558-559 | 567 | 512-514 | 580-581 | 585-587 |
| 64 | 509-510 | 512 | 445-446 | 508-509 | 518-519 | 93 | 560-561 | 568 | 515-518 | 582-584 | 588 |
| 65 | 511 | 513-514 | 447-448 | 510-512 | 520 | 94 | 562-563 | 569 | 519-520 | 585-586 | 589-590 |
| 66 | 512-513 | 515-516 | 449-450 | 513-514 | 521-522 | 95 | 564-565 | 570-571 | 521-523 | 587-590 | 591 |
| 67 | 514-515 | 517-518 | 451-452 | 515-516 | 523-524 | 96 | 566-568 | 572 | 524-525 | 591-592 | 592-593 |
| 68 | 516 | 519-520 | 453 | 517-518 | 525-527 | 97 | 569-572 | 573 | 526-527 | 593-595 | 594-595 |
| 69 | 517-518 | 521-522 | 454-455 | 519-521 | 528-529 | 98 | 573 | 574-576 | 528-530 | 596-597 | 596-597 |
| 70 | 519-520 | 523-524 | 456-457 | 522 | 530-531 | 99 | 574-999 | 577-999 | 531-999 | 598-999 | 598-999 |
| 71 | 521-522 | 525-526 | 458-459 | 523-524 | 532-533 |  |  |  |  |  |  |
| 72 | 523-525 | 527-529 | 460-461 | 525-526 | 534-535 |  |  |  |  |  |  |
| 73 | 526-527 | 530-531 | 462-463 | 527-529 | 536-538 |  |  |  |  |  |  |
| 74 | 528-529 | 532-533 | 464-465 | 530-531 | 539-540 |  |  |  |  |  |  |
| 75 | 530 | 534-535 | 466-467 | 532-533 | 541-543 |  |  |  |  |  |  |
| 76 | 531-532 | 536-537 | 468-469 | 534-536 | 544-546 |  |  |  |  |  |  |
| 77 | 533 | 538-539 | 470-471 | 537-538 | 547-548 |  |  |  |  |  |  |
| 78 | 534-535 | 540-541 | 472-474 | 539-541 | 549-551 |  |  |  |  |  |  |
| 79 | 536-537 | 542-543 | 475-476 | 542-543 | 552-554 |  |  |  |  |  |  |
| 80 | 538-539 | 544-545 | 477-479 | 544-546 | 555-557 |  |  |  |  |  |  |
| 81 | 540-541 | 546-547 | 480-481 | 547-548 | 558-560 |  |  |  |  |  |  |
| 82 | 542 | 548-549 | 482-483 | 549-551 | 561-562 |  |  |  |  |  |  |
| 83 | 543-544 | 550-551 | 484-486 | 552-553 | 563-565 |  |  |  |  |  |  |
| 84 | 545-546 | 552 | 487-489 | 554-556 | 566-567 |  |  |  |  |  |  |
| 85 | 547-548 | 553-554 | 490-493 | 557-558 | 568-570 |  |  |  |  |  |  |
| 86 | 549-550 | 555-556 | 494-497 | 559-562 | 571-572 |  |  |  |  |  |  |
| 87 | 551 | 557 | 498-499 | 563-565 | 573-575 |  |  |  |  |  |  |

Table E.42 Form D Grades 4-5 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-419 | 1-423 | 1-368 | 1-384 | 1-400 | 30 | 482-483 | 487 | 437-439 | 474-476 | 490-491 |
| 2 | 420-422 | 424-426 | 369-370 | 385 | 401-403 | 31 | 484-485 | 488-489 | 440-441 | 477-478 | 492-493 |
| 3 | 423-424 | 427-429 | 371-372 | 386-390 | 404-407 | 32 | 486-488 | 490-491 | 442-443 | 479-481 | 494-495 |
| 4 | 425-426 | 430-432 | 373-374 | 391-392 | 408-413 | 33 | 489 | 492 | 444-445 | 482-483 | 496-497 |
| 5 | 427-429 | 433-437 | 375-378 | 393-396 | 414-423 | 34 | 490-491 | 493-494 | 446 | 484-486 | 498-499 |
| 6 | 430-431 | 438-439 | 379-380 | 397-401 | 424-432 | 35 | 492-493 | 495-496 | 447-448 | 487-488 | 500 |
| 7 | 432-434 | 440-441 | 381-383 | 402-407 | 433-436 | 36 | 494-495 | 497 | 449-450 | 489-490 | 501-502 |
| 8 | 435-436 | 442-443 | 384-387 | 408-411 | 437-443 | 37 | 496-497 | 498-499 | 451-452 | 491-492 | 503-504 |
| 9 | 437-439 | 444 | 388-390 | 412-413 | 444-446 | 38 | 498-499 | 500 | 453-454 | 493-495 | 505 |
| 10 | 440-441 | 445-446 | 391-393 | 414-416 | 447-448 | 39 | 500-501 | 501-502 | 455 | 496-497 | 506-507 |
| 11 | 442-444 | 447-449 | 394-395 | 417-420 | 449-450 | 40 | 502-503 | 503 | 456-457 | 498-499 | 508 |
| 12 | 445-446 | 450-451 | 396-398 | 421-424 | 451-453 | 41 | 504-505 | 504 | 458-460 | 500-502 | 509-510 |
| 13 | 447-448 | 452-455 | 399-401 | 425-426 | 454-455 | 42 | 506 | 505-506 | 461-462 | 503-504 | 511-512 |
| 14 | 449-450 | 456-457 | 402-403 | 427-429 | 456-457 | 43 | 507-508 | 507-508 | 463-464 | 505-506 | 513 |
| 15 | 451-452 | 458-459 | 404-406 | 430-433 | 458-460 | 44 | 509-510 | 509 | 465 | 507-509 | 514-515 |
| 16 | 453-454 | 460-462 | 407-409 | 434-436 | 461-463 | 45 | 511-512 | 510-511 | 466-467 | 510-511 | 516 |
| 17 | 455-456 | 463-464 | 410-411 | 437-438 | 464-466 | 46 | 513-514 | 512 | 468-470 | 512-514 | 517-518 |
| 18 | 457-458 | 465-466 | 412-414 | 439-441 | 467-468 | 47 | 515-516 | 513-514 | 471 | 515 | 519 |
| 19 | 459-460 | 467-469 | 415-416 | 442-445 | 469-470 | 48 | 517 | 515-516 | 472-473 | 516-518 | 520-521 |
| 20 | 461-462 | 470-471 | 417-418 | 446-448 | 471-472 | 49 | 518-519 | 517 | 474-475 | 519-520 | 522 |
| 21 | 463-464 | 472-473 | 419-421 | 449-451 | 473-474 | 50 | 520-521 | 518-519 | 476-477 | 521-522 | 523-524 |
| 22 | 465-467 | 474-475 | 422 | 452-453 | 475-476 | 51 | 522-523 | 520-521 | 478-479 | 523-524 | 525 |
| 23 | 468-469 | 476-477 | 423-425 | 454-457 | 477-478 | 52 | 524-525 | 522 | 480 | 525-526 | 526-527 |
| 24 | 470-471 | 478 | 426-427 | 458-459 | 479-480 | 53 | 526-527 | 523-524 | 481-482 | 527-529 | 528-529 |
| 25 | 472-473 | 479-480 | 428-429 | 460-462 | 481 | 54 | 528 | 525 | 483-484 | 530-531 | 530 |
| 26 | 474-475 | 481 | 430-431 | 463-465 | 482-484 | 55 | 529-530 | 526-527 | 485-486 | 532-533 | 531-532 |
| 27 | 476-477 | 482-483 | 432 | 466-468 | 485-486 | 56 | 531-532 | 528-529 | 487-488 | 534-535 | 533-534 |
| 28 | 478-480 | 484 | 433-434 | 469-471 | 487-488 | 57 | 533-534 | 530 | 489-490 | 536-537 | 535 |
| 29 | 481 | 485-486 | 435-436 | 472-473 | 489 | 58 | 535 | 531-532 | 491-492 | 538-539 | 536 |

Table E. 42 Form D Grades 4-5 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 536-537 | 533 | 493-494 | 540-541 | 537-538 | 88 | 591-592 | 595-596 | 545-546 | 602-604 | 601-602 |
| 60 | 538-539 | 534-535 | 495 | 542-543 | 539-540 | 89 | 593-594 | 597-598 | 547-548 | 605-606 | 603 |
| 61 | 540-541 | 536-537 | 496-497 | 544-546 | 541 | 90 | 595-596 | 599-600 | 549-551 | 607-608 | 604-605 |
| 62 | 542 | 538-539 | 498-499 | 547-548 | 542-543 | 91 | 597-598 | 601 | 552 | 609-610 | 606-607 |
| 63 | 543-544 | 540-541 | 500 | 549-550 | 544-545 | 92 | 599-600 | 602-603 | 553-554 | 611-613 | 608-609 |
| 64 | 545-546 | 542-543 | 501-502 | 551-552 | 546-547 | 93 | 601 | 604 | 555-556 | 614-616 | 610 |
| 65 | 547 | 544-545 | 503-504 | 553-554 | 548 | 94 | 602 | 605-607 | 557-558 | 617 | 611 |
| 66 | 548-549 | 546-547 | 505-506 | 555-556 | 549-550 | 95 | 603-604 | 608-609 | 559 | 618-619 | 612-613 |
| 67 | 550-551 | 548-549 | 507-508 | 557-558 | 551-552 | 96 | 605 | 610-612 | 560-561 | 620 | 614-615 |
| 68 | 552-553 | 550-551 | 509 | 559-560 | 553-554 | 97 | 606 | 613-615 | 562 | 621 | 616-617 |
| 69 | 554-555 | 552-553 | 510-511 | 561-563 | 555-556 | 98 | 607-609 | 616-617 | 563-564 | 622 | 618 |
| 70 | 556-557 | 554-556 | 512-513 | 564 | 557-558 | 99 | 610-999 | 618-999 | 565-999 | 623-999 | 619-999 |
| 71 | 558 | 557-558 | 514-515 | 565-567 | 559-561 |  |  |  |  |  |  |
| 72 | 559-560 | 559-560 | 516 | 568-569 | 562-563 |  |  |  |  |  |  |
| 73 | 561-562 | 561-562 | 517-518 | 570-571 | 564-565 |  |  |  |  |  |  |
| 74 | 563-564 | 563-565 | 519-520 | 572-573 | 566-568 |  |  |  |  |  |  |
| 75 | 565 | 566-567 | 521 | 574-575 | 569-570 |  |  |  |  |  |  |
| 76 | 566-567 | 568-570 | 522-523 | 576-577 | 571-572 |  |  |  |  |  |  |
| 77 | 568-569 | 571-572 | 524-525 | 578-579 | 573-574 |  |  |  |  |  |  |
| 78 | 570-571 | 573-574 | 526-527 | 580-581 | 575-576 |  |  |  |  |  |  |
| 79 | 572-573 | 575-577 | 528-529 | 582-583 | 577-579 |  |  |  |  |  |  |
| 80 | 574-575 | 578-579 | 530-531 | 584-585 | 580-582 |  |  |  |  |  |  |
| 81 | 576-578 | 580-581 | 532 | 586-587 | 583-585 |  |  |  |  |  |  |
| 82 | 579-580 | 582-584 | 533-534 | 588-590 | 586-587 |  |  |  |  |  |  |
| 83 | 581-582 | 585-586 | 535-536 | 591-592 | 588-590 |  |  |  |  |  |  |
| 84 | 583-584 | 587-588 | 537 | 593-594 | 591-592 |  |  |  |  |  |  |
| 85 | 585-586 | 589-590 | 538-540 | 595-596 | 593-595 |  |  |  |  |  |  |
| 86 | 587-588 | 591-592 | 541-542 | 597-599 | 596-597 |  |  |  |  |  |  |
| 87 | 589-590 | 593-594 | 543-544 | 600-601 | 598-600 |  |  |  |  |  |  |

Table E.43 Form D Grades 6-8 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-433 | 1-424 | 1-398 | 1-401 | 1-408 | 30 | 495-496 | 491-493 | 472-473 | 495-496 | 496-497 |
| 2 | 434 | 425-427 | 399-401 | 402-406 | 409-415 | 31 | 497-498 | 494-495 | 474-475 | 497-499 | 498 |
| 3 | 435-438 | 428-432 | 402-405 | 407-410 | 416-420 | 32 | 499-500 | 496 | 476-478 | 500-501 | 499-500 |
| 4 | 439-440 | 433-434 | 406 | 411-414 | 421-426 | 33 | 501-502 | 497-498 | 479 | 502-504 | 501 |
| 5 | 441-442 | 435-438 | 407-410 | 415-419 | 427-432 | 34 | 503-504 | 499-500 | 480-482 | 505-506 | 502-503 |
| 6 | 443 | 439-443 | 411-413 | 420-422 | 433-437 | 35 | 505-506 | 501-502 | 483-484 | 507-508 | 504-505 |
| 7 | 444-445 | 444 | 414-417 | 423-428 | 438-440 | 36 | 507-509 | 503 | 485-486 | 509-511 | 506-507 |
| 8 | 446-447 | 445-447 | 418 | 429-432 | 441-444 | 37 | 510 | 504-506 | 487-488 | 512-513 | 508 |
| 9 | 448-449 | 448-450 | 419-420 | 433-434 | 445-447 | 38 | 511-512 | 507-508 | 489-491 | 514-515 | 509-510 |
| 10 | 450-453 | 451-453 | 421-424 | 435-438 | 448-450 | 39 | 513-514 | 509 | 492-493 | 516-517 | 511 |
| 11 | 454-455 | 454-455 | 425-426 | 439-441 | 451-453 | 40 | 515-516 | 510-511 | 494-495 | 518-519 | 512-513 |
| 12 | 456-458 | 456-457 | 427-428 | 442-445 | 454-455 | 41 | 517-518 | 512-513 | 496-497 | 520-521 | 514-515 |
| 13 | 459-460 | 458-459 | 429-431 | 446-448 | 456-458 | 42 | $519$ | 514-515 | 498-499 | 522-524 | 516-517 |
| 14 | 461-462 | 460-461 | 432-435 | 449-451 | 459-461 | 43 | 520-521 | 516-517 | 500-502 | 525-526 | 518 |
| 15 | 463-464 | 462-463 | 436-437 | 452-454 | 462-465 | 44 | 522-523 | 518-519 | 503-504 | 527-528 | 519-520 |
| 16 | 465-468 | 464-465 | 438-439 | 455-458 | 466-467 | 45 | 524-525 | 520-521 | 505-506 | 529-530 | 521-522 |
| 17 | 469-470 | 466-467 | 440-442 | 459-462 | 468-469 | 46 | 526 | 522 | 507-508 | 531-533 | 523 |
| 18 | 471-472 | 468-469 | 443-444 | 463-465 | 470-471 | 47 | 527-528 | 523-524 | 509-511 | 534-535 | 524-525 |
| 19 | 473-474 | 470-471 | 445-447 | 466-468 | 472-474 | 48 | 529-531 | 525-526 | 512-513 | 536-537 | 526-527 |
| 20 | 475-476 | 472 | 448-450 | 469-470 | 475-476 | 49 | 532 | 527-528 | 514-515 | 538-539 | 528-529 |
| 21 | 477-478 | 473-474 | 451-452 | 471-472 | 477-478 | 50 | 533-534 | 529 | 516-518 | 540-541 | 530-531 |
| 22 | 479-480 | 475 | 453-454 | 473-475 | 479-480 | 51 | 535-536 | 530-531 | 519-520 | 542-543 | 532 |
| 23 | 481-482 | 476-477 | 455-458 | 476-478 | 481-482 | 52 | 537-538 | 532-533 | 521-522 | 544-545 | 533-534 |
| 24 | 483-484 | 478-479 | 459-460 | 479-481 | 483-484 | 53 | 539-540 | 534-535 | 523-524 | 546-547 | 535 |
| 25 | 485-486 | 480-482 | 461-462 | 482-484 | 485-487 | 54 | 541-542 | 536-537 | 525-526 | 548-549 | 536-537 |
| 26 | 487-488 | 483-484 | 463-464 | 485-487 | 488-489 | 55 | 543-544 | 538 | 527-528 | 550-551 | 538 |
| 27 | 489 | 485-487 | 465-466 | 488-490 | 490-491 | 56 | 545-546 | 539-541 | 529-530 | 552-553 | 539-540 |
| 28 | 490-492 | 488 | 467-468 | 491-492 | 492-493 | 57 | 547-548 | 542 | 531-532 | 554-555 | 541-542 |
| 29 | 493-494 | 489-490 | 469-471 | 493-494 | 494-495 | 58 | 549-550 | 543-544 | 533-534 | 556-557 | 543 |

Table E. 43 Form D Grades 6-8 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 551-552 | 545-546 | 535-536 | 558-560 | 544-545 | 88 | 607 | 609-610 | 595-597 | 620-621 | 605-607 |
| 60 | 553 | 547-548 | 537-538 | 561 | 546-547 | 89 | 608-609 | 611-612 | 598-599 | 622-624 | 608-609 |
| 61 | 554-555 | 549-550 | 539-540 | 562-563 | 548 | 90 | 610-612 | 613-614 | 600-602 | 625-626 | 610-611 |
| 62 | 556-557 | 551-552 | 541-542 | 564-565 | 549-550 | 91 | 613 | 615-616 | 603-604 | 627-629 | 612-613 |
| 63 | 558-559 | 553-554 | 543-544 | 566-567 | 551-552 | 92 | 614-615 | 617-619 | 605-606 | 630-631 | 614-616 |
| 64 | 560-561 | 555-556 | 545-546 | 568-569 | 553-554 | 93 | 616 | 620 | 607-608 | 632-634 | 617-618 |
| 65 | 562-563 | 557-558 | 547-548 | 570-572 | 555 | 94 | 617-618 | 621-622 | 609-611 | 635-636 | 619-620 |
| 66 | 564-565 | 559-560 | 549-550 | 573-574 | 556-557 | 95 | 619-621 | 623-624 | 612-614 | 637-639 | 621-623 |
| 67 | 566-567 | 561-562 | 551-552 | 575-576 | 558-559 | 96 | 622 | 625-627 | 615-618 | 640-642 | 624-626 |
| 68 | 568-569 | 563-564 | 553-554 | 577-578 | 560 | 97 | 623-625 | 628 | 619-620 | 643-644 | 627 |
| 69 | 570-571 | 565-566 | 555-556 | 579-580 | 561-562 | 98 | 626-627 | 629-630 | 621-623 | 645-646 | 628 |
| 70 | 572-573 | 567-568 | 557-559 | 581-582 | 563-564 | 99 | 628-999 | 631-999 | 624-999 | 647-999 | 629-999 |
| 71 | 574-575 | 569-570 | 560-561 | 583-585 | 565-566 |  |  |  |  |  |  |
| 72 | 576-577 | 571-572 | 562-563 | 586-587 | 567-568 |  |  |  |  |  |  |
| 73 | 578 | 573-574 | 564-565 | 588-589 | 569-570 |  |  |  |  |  |  |
| 74 | 579-581 | 575-577 | 566-567 | 590 | 571-572 |  |  |  |  |  |  |
| 75 | 582-583 | 578-579 | 568-569 | 591-592 | 573-574 |  |  |  |  |  |  |
| 76 | 584-585 | 580-581 | 570-571 | 593-594 | 575-576 |  |  |  |  |  |  |
| 77 | 586-587 | 582-583 | 572-574 | 595-597 | 577-578 |  |  |  |  |  |  |
| 78 | 588-589 | 584-586 | 575-576 | 598-599 | 579-581 |  |  |  |  |  |  |
| 79 | 590-591 | 587-588 | 577-578 | 600-601 | 582-584 |  |  |  |  |  |  |
| 80 | 592-593 | 589-590 | 579-580 | 602-603 | 585-586 |  |  |  |  |  |  |
| 81 | 594 | 591-593 | 581-583 | 604-605 | 587-588 |  |  |  |  |  |  |
| 82 | 595-597 | 594-595 | 584-585 | 606-608 | 589-591 |  |  |  |  |  |  |
| 83 | 598 | 596-598 | 586-587 | 609-610 | 592-594 |  |  |  |  |  |  |
| 84 | 599-600 | 599-600 | 588-589 | 611-612 | 595-597 |  |  |  |  |  |  |
| 85 | 601-602 | 601-603 | 590-591 | 613-615 | 598-600 |  |  |  |  |  |  |
| 86 | 603-604 | 604-605 | 592-593 | 616-617 | 601-602 |  |  |  |  |  |  |
| 87 | 605-606 | 606-608 | 594 | 618-619 | 603-604 |  |  |  |  |  |  |

Table E.44 Form D Grades 9-12 Normal Curve Equivalent Norming Table for Composites

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-433 | 1-432 | 1-415 | 1-403 | 1-410 | 30 | 500-501 | 498 | 491-492 | 499-500 | 507 |
| 2 | 434-438 | 433 | 416-418 | 404-407 | 411-416 | 31 | 502-503 | 499-500 | 493-495 | 501-503 | 508-509 |
| 3 | 439-440 | 434-436 | 419-420 | 408-412 | 417-422 | 32 | 504-505 | 501 | 496-498 | 504-505 | 510-511 |
| 4 | 441-443 | 437-441 | 421-423 | 413-416 | 423-429 | 33 | 506-507 | 502-503 | 499-500 | 506-508 | 512-513 |
| 5 | 444-447 | 442-443 | 424-426 | 417-422 | 430-435 | 34 | 508-509 | 504 | 501-502 | 509-510 | 514-515 |
| 6 | 448-449 | 444-445 | 427-428 | 423-426 | 436-438 | 35 | 510-511 | 505-506 | 503-504 | 511-513 | 516 |
| 7 | 450-452 | 446-448 | 429-430 | 427-430 | 439-441 | 36 | 512-513 | 507-508 | 505-506 | 514-515 | 517-518 |
| 8 | 453-454 | 449-451 | 431-433 | 431-434 | 442-444 | 37 | 514-515 | $509$ | 507-508 | 516-517 | $519$ |
| 9 | 455-456 | 452-454 | 434-436 | 435-438 | 445-449 | 38 | 516-517 | 510-511 | 509-510 | 518-519 | 520-521 |
| 10 | 457-458 | 455-456 | 437-440 | 439-442 | 450-454 | 39 | 518-519 | 512-513 | 511-512 | 520-522 | 522-523 |
| 11 | 459-460 | 457-458 | 441-442 | 443-447 | 455-461 | 40 | 520 | $514$ | 513-515 | 523-524 | 524 |
| 12 | 461-462 | 459-461 | 443-445 | 448-450 | 462-464 | 41 | 521-522 | 515-516 | 516-517 | 525-526 | 525-526 |
| 13 | 463-464 | 462-464 | 446-448 | 451-454 | 465-468 | 42 | 523-524 | 517-518 | 518-519 | 527-528 | $527$ |
| 14 | 465-467 | 465-466 | 449-450 | 455-457 | 469-471 | 43 | 525-526 | 519-520 | 520-521 | 529-530 | 528 |
| 15 | 468-469 | 467-468 | 451-452 | 458-459 | 472-476 | 44 | 527-528 | 521 | 522-524 | 531-532 | 529-530 |
| 16 | 470-472 | 469-471 | 453-456 | 460-462 | 477-479 | 45 | 529 | 522-523 | 525-526 | 533-534 | 531 |
| 17 | 473-474 | 472-473 | 457-458 | 463-465 | 480-482 | 46 | 530-531 | 524 | 527-528 | 535-536 | 532-533 |
| 18 | 475-476 | 474-475 | 459-460 | 466-469 | 483-484 | 47 | 532-533 | 525-526 | 529-530 | 537-538 | 534-535 |
| 19 | 477-478 | 476-477 | 461-463 | 470-472 | 485-487 | 48 | 534-535 | 527-528 | 531-532 | 539-540 | 536 |
| 20 | 479-481 | 478-479 | 464-466 | 473-475 | 488-489 | 49 | $536$ | 529-530 | 533-534 | 541-542 | 537-538 |
| 21 | 482 | 480-481 | 467-469 | 476-478 | 490-491 | 50 | 537-538 | 531 | 535-537 | 543-544 | 539 |
| 22 | 483-485 | 482-483 | 470-472 | 479-481 | 492-493 | 51 | 539-540 | 532-533 | 538-539 | 545-546 | 540 |
| 23 | 486-487 | 484-486 | 473-474 | 482-484 | 494 | 52 | 541-542 | 534-535 | 540-542 | 547-549 | 541-542 |
| 24 | 488-489 | 487-488 | 475-477 | 485-486 | 495-496 | 53 | 543 | 536-537 | 543-544 | 550-551 | 543 |
| 25 | 490-491 | 489-490 | 478-479 | 487-488 | 497-498 | 54 | 544-545 | 538 | 545-546 | 552 | 544-545 |
| 26 | 492-493 | 491-492 | 480-481 | 489-490 | 499-500 | 55 | 546-547 | 539-541 | 547-548 | 553-554 | 546 |
| 27 | 494-495 | 493 | 482-484 | 491-493 | 501-502 | 56 | 548-549 | 542 | 549-550 | 555-557 | 547-548 |
| 28 | 496-497 | 494-495 | 485-488 | 494-495 | 503-504 | 57 | 550-551 | 543-544 | 551-552 | 558-559 | 549 |
| 29 | 498-499 | 496-497 | 489-490 | 496-498 | 505-506 | 58 | 552-553 | 545-546 | 553-554 | 560-561 | 550-551 |

Table E. 44 Form D Grades 9-12 Normal Curve Equivalent Norming Table for Composites (continued)

| NCE | OV | OR | CO | LT | PR | NCE | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 554-555 | 547 | 555-556 | 562 | 552 | 88 | 610-612 | 611-612 | 621-622 | 625-626 | 611-612 |
| 60 | 556-557 | 548-549 | 557-559 | 563-565 | 553-554 | 89 | 613 | 613-615 | 623-624 | 627-628 | 613-615 |
| 61 | 558-559 | 550-551 | 560-561 | 566-567 | 555 | 90 | 614 | 616-619 | 625-627 | 629-630 | 616 |
| 62 | 560-561 | 552-553 | 562-563 | 568-569 | 556-557 | 91 | 615-617 | 620-622 | 628-629 | 631-633 | 617-618 |
| 63 | 562 | 554-555 | 564-566 | 570-571 | 558-559 | 92 | 618-619 | 623-625 | 630-632 | 634-635 | 619-620 |
| 64 | 563-564 | 556-557 | 567-568 | 572-573 | 560 | 93 | 620-622 | 626-628 | 633-634 | 636 | 621-622 |
| 65 | 565-566 | 558-559 | 569-570 | 574-575 | 561-562 | 94 | 623 | 629 | 635-636 | 637-638 | 623-624 |
| 66 | 567-568 | 560-561 | 571-572 | 576-577 | 563-564 | 95 | 624-626 | 630-634 | 637-639 | 639-640 | 625 |
| 67 | 569 | 562-563 | 573-574 | 578-579 | 565-566 | 96 | 627 | 635-636 | 640-642 | 641-646 | 626-627 |
| 68 | 570-571 | 564-565 | 575-576 | 580-581 | 567-568 | 97 | 628-629 | 637 | 643-645 | 647-649 | 628 |
| 69 | 572-573 | 566-567 | 577-578 | 582-583 | 569-570 | 98 | 630-632 | 638-640 | 646-647 | 650-652 | 629 |
| 70 | 574-575 | 568-569 | 579-580 | 584-585 | 571 | 99 | 633-999 | 641-999 | 648-999 | 653-999 | 630-999 |
| 71 | 576 | 570-571 | 581-583 | 586-587 | 572-573 |  |  |  |  |  |  |
| 72 | 577-578 | 572-573 | 584-585 | 588-589 | 574-576 |  |  |  |  |  |  |
| 73 | 579-580 | 574-576 | 586-588 | 590-592 | 577-578 |  |  |  |  |  |  |
| 74 | 581-582 | 577-578 | 589-590 | 593-594 | 579-581 |  |  |  |  |  |  |
| 75 | 583-584 | 579-581 | 591-592 | 595-596 | 582-583 |  |  |  |  |  |  |
| 76 | 585-586 | 582-583 | 593-594 | 597-598 | 584-585 |  |  |  |  |  |  |
| 77 | 587-588 | 584-585 | 595-596 | 599-600 | 586-588 |  |  |  |  |  |  |
| 78 | 589-590 | 586-588 | 597-599 | 601-602 | 589-590 |  |  |  |  |  |  |
| 79 | 591-592 | 589-591 | 600-602 | 603-604 | 591-592 |  |  |  |  |  |  |
| 80 | 593 | 592-593 | 603-604 | 605-606 | 593-595 |  |  |  |  |  |  |
| 81 | 594-595 | 594-595 | 605-606 | 607-608 | 596-598 |  |  |  |  |  |  |
| 82 | 596-597 | 596-597 | 607-608 | 609-611 | 599-600 |  |  |  |  |  |  |
| 83 | 598-600 | 598-599 | 609-611 | 612-613 | 601-602 |  |  |  |  |  |  |
| 84 | 601-602 | 600-602 | 612-613 | 614-616 | 603 |  |  |  |  |  |  |
| 85 | 603-604 | 603-604 | 614-616 | 617-618 | 604-606 |  |  |  |  |  |  |
| 86 | 605-607 | 605-607 | 617-618 | 619-620 | 607-608 |  |  |  |  |  |  |
| 87 | 608-609 | 608-610 | 619-620 | 621-624 | 609-610 |  |  |  |  |  |  |

Table E. 45 Form D Kindergarten Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-316 | 1-368 | 1-317 | 1-236 | 1-295 | 30 | 380 | 439 | 389 | 318-319 | 370 |
| 2 | 317-325 | 369-382 | 318-327 | 237-248 | 296-305 | 31 | 381 | 440 | 390 | 320 | 371-372 |
| 3 | 326-330 | 383-390 | 328-334 | 249-255 | 306-311 | 32 | 382 | 441 |  | 321-322 | 373 |
| 4 | 331-335 | 391-395 | 335-339 | 256-260 | 312-316 | 33 | 383 |  | 391 | 323 | 374 |
| 5 | 336-338 | 396-400 | 340-345 | 261-264 | 317-321 | 34 | 384-385 | 442 | 392 | 324-325 | 375-376 |
| 6 | 339-341 | 401-403 | 346-350 | 265-267 | 322-325 | 35 | 386 | 443 | 393 | 326-327 | 377 |
| 7 | 342-344 | 404-406 | 351-353 | 268-270 | 326-328 | 36 | 387 | 444 | 394 | 328 | 378 |
| 8 | 345-347 | 407-409 | 354-357 | 271-274 | 329-331 | 37 | 388 | 445 | 395 | 329-330 | 379-380 |
| 9 | 348-349 | 410-413 | 358-360 | 275-276 | 332-333 | 38 | 389 | 446 | 396 | 331 | 381 |
| 10 | 350-352 | 414-415 | 361-362 | 277-278 | 334-335 | 39 | 390 |  |  | 332 | 382 |
| 11 | 353-354 | 416-417 | 363-364 | 279-281 | 336-338 | 40 | 391 | 447 | 397 | 333-334 | 383-384 |
| 12 | 355-356 | 418 | 365-366 | 282-283 | 339-340 | 41 | 392 | 448 | 398 | 335 | 385 |
| 13 | 357-358 | 419-420 | 367-368 | 284-285 | 341-342 | 42 | 393 |  | 399 | 336-337 | 386-387 |
| 14 | 359 | 421 | 369-370 | 286-288 | 343-344 | 43 | 394 | 449 |  | 338 | 388 |
| 15 | 360-361 | 422-423 | 371-372 | 289-291 | 345-346 | 44 | 395 | 450 | 400 | 339 | 389 |
| 16 | 362-363 | 424 | 373 | 292-293 | 347-348 | 45 | 396 | 451 | 401 | 340-341 | 390-391 |
| 17 | 364 | 425 | 374-375 | 294-295 | 349-350 | 46 | 397 | 452 | 402 | 342 | 392 |
| 18 | 365-366 | 426-427 | 376 | 296-297 | 351-352 | 47 | 398 |  | 403 | 343-344 | 393 |
| 19 | 367 | 428 | 377-378 | 298-299 | 353 | 48 | 399 | 453 |  | 345 | 394 |
| 20 | 368 | 429 | 379 | 300-301 | 354-355 | 49 | 400 | 454 | 404 | 346-347 | 395-396 |
| 21 | 369 | 430 | 380 | 302-303 | 356 | 50 | 401 | 455 | 405 | 348 | 397 |
| 22 | 370-371 | 431-432 | 381 | 304-305 | 357-358 | 51 | 402 |  | 406 | 349 | 398 |
| 23 | 372 | 433 | 382 | 306 | 359-360 | 52 | 403 | 456 | 407 | 350-351 | 399-400 |
| 24 | 373-374 | 434 | 383 | 307-309 | 361-362 | 53 | 404 | 457 |  | 352 | 401 |
| 25 | 375 | 435 | 384 | 310 | 363-364 | 54 | 405 | 458 | 408 | 353 | 402 |
| 26 | 376 |  | 385 | 311-312 | 365 | 55 | 406 |  | 409 | 354-355 | 403-404 |
| 27 | 377 | 436 | 386 | 313 | 366 | 56 | 407 | 459 | 410 | 356 | 405 |
| 28 | 378 | 437 | 387 | 314-316 | 367-368 | 57 | 408 | 460 | 411 | 357 | 406 |
| 29 | 379 | 438 | 388 | 317 | 369 | 58 |  |  |  | 358-359 | 407-408 |

Table E. 45 Form D Kindergarten Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 409 | 461 | 412 | 360 | 409 | 88 | 448-449 | 494-495 | 445-446 | 407-409 | 453-454 |
| 60 | 410 | 462 | 413 | 361 | 410 | 89 | 450-451 | 496-498 | 447-448 | 410-412 | 455-457 |
| 61 | 411 | 463 | 414 | 362-363 | 411 | 90 | 452-454 | 499-500 | 449-450 | 413-415 | 458-460 |
| 62 | 412 | 464 | 415 | 364 | 412 | 91 | 455-457 | 501-503 | 451 | 416-419 | 461-464 |
| 63 | 413 |  |  | 365 | 413-414 | 92 | 458-460 | 504-506 | 452-454 | 420-423 | 465-468 |
| 64 | 414-415 | 465 | 416 | 366 | 415 | 93 | 461-463 | 507-509 | 455-458 | 424-427 | 469-472 |
| 65 | 416 | 466 | 417 | 367 | 416 | 94 | 464-467 | 510-513 | 459-460 | 428-432 | 473-479 |
| 66 | 417 | 467 | 418 | 368-369 | 417 | 95 | 468-471 | 514-518 | 461-465 | 433-440 | 480-485 |
| 67 | 418 |  | 419 | 370 | 418-419 | 96 | 472-477 | 519-522 | 466-471 | 441-449 | 486-492 |
| 68 | 419 | 468 | 420 | 371-372 | 420 | 97 | 478-483 | 523-528 | 472-478 | 450-462 | 493-503 |
| 69 | 420 | 469 | 421 | 373 | 421 | 98 | 484-496 | 529-534 | 479-493 | 463-493 | 504-523 |
| 70 | 421 | 470 | 422 | 374-375 | 422-423 | 99 | 497-999 | 535-999 | 494-999 | 494-999 | 524-999 |
| 71 | 422 | 471 |  | 376 | 424 |  |  |  |  |  |  |
| 72 | 423 | 472 | 423-424 | 377-378 | 425 |  |  |  |  |  |  |
| 73 | 424-425 | 473 | 425 | 379 | 426 |  |  |  |  |  |  |
| 74 | 426 | 474 | 426 | 380-381 | 427-428 |  |  |  |  |  |  |
| 75 | 427 | 475 | 427 | 382 | 429-430 |  |  |  |  |  |  |
| 76 | 428 | 476-477 | 428 | 383-384 | 431 |  |  |  |  |  |  |
| 77 | 429-430 | 478 | 429 | 385-386 | 432-433 |  |  |  |  |  |  |
| 78 | 431 | 479 | 430-431 | 387-388 | 434 |  |  |  |  |  |  |
| 79 | 432-433 | 480 | 432 | 389-390 | 435-436 |  |  |  |  |  |  |
| 80 | 434 | 481 | 433 | 391 | 437 |  |  |  |  |  |  |
| 81 | 435-436 | 482 | 434-435 | 392-393 | 438-439 |  |  |  |  |  |  |
| 82 | 437 | 483-484 | 436 | 394 | 440-441 |  |  |  |  |  |  |
| 83 | 438-439 | 485 | 437-438 | 395-396 | 442-443 |  |  |  |  |  |  |
| 84 | 440-441 | 486-487 | 439 | 397-399 | 444-445 |  |  |  |  |  |  |
| 85 | 442 | 488-489 | 440 | 400-401 | 446-447 |  |  |  |  |  |  |
| 86 | 443-444 | 490-491 | 441-442 | 402-403 | 448-449 |  |  |  |  |  |  |
| 87 | 445-447 | 492-493 | 443-444 | 404-406 | 450-452 |  |  |  |  |  |  |

Table E. 46 Form D Grade 1 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-347 | 1-379 | 1-330 | 1-281 | 1-336 | 30 | 417 | 451 | 403 | 381-382 | 429 |
| 2 | 348-356 | 380-393 | 331-342 | 282-293 | 337-352 | 31 | 418 |  | 404 | 383 | 430 |
| 3 | 357-365 | 394-406 | 343-351 | 294-304 | 353-363 | 32 | 419 | 452 | 405 | 384 | 431 |
| 4 | 366-371 | 407-412 | 352-358 | 305-312 | 364-371 | 33 | 420 | 453 |  | 385 | 432 |
| 5 | 372-374 | 413-416 | 359-362 | 313-320 | 372-378 | 34 | 421 |  | 406 | 386-387 | 433 |
| 6 | 375-378 | 417-419 | 363-365 | 321-324 | 379-382 | 35 | 422 | 454 | 407 | 388 | 434 |
| 7 | 379-381 | 420-422 | 366-369 | 325-330 | 383-386 | 36 |  | 455 | 408 | 389 | 435 |
| 8 | 382-384 | 423-425 | 370-372 | 331-335 | 387-392 | 37 | 423 | 456 | 409 | 390 | 436 |
| 9 | 385-386 | 426-427 | 373-374 | 336-339 | 393-395 | 38 | 424 |  | 410 | 391-392 | 437 |
| 10 | 387-389 | 428-429 | 375-376 | 340-343 | 396-398 | 39 | 425 | 457 | 411 | 393 | 438 |
| 11 | 390-391 | 430 | 377-378 | 344-346 | 399-401 | 40 | 426 | 458 | 412 | 394 | 439 |
| 12 | 392-394 | 431-432 | 379-380 | 347-349 | 402-403 | 41 | 427 |  | 413 | 395-396 |  |
| 13 | 395 | 433 | 381-382 | 350-352 | 404-405 | 42 | 428 | 459 | 414 | 397 | 440 |
| 14 | 396-397 | 434-435 | 383 | 353-355 | 406-408 | 43 | 429 |  | 415 | 398 | 441 |
| 15 | 398-399 | 436 | 384-385 | 356-357 | 409 | 44 |  | 460 | 416 | 399 | 442 |
| 16 | 400 | 437 | 386 | 358-359 | 410-411 | 45 | 430 | 461 | 417 | 400 | 443 |
| 17 | 401-402 | 438-439 | 387 | 360 | 412 | 46 | 431 |  | 418 | 401 | 444 |
| 18 | 403 | 440 | 388-389 | 361-362 | 413-414 | 47 | 432 | 462 | 419 | 402 | 445 |
| 19 | 404-405 | 441 | 390 | 363-364 | 415 | 48 | 433 | 463 |  | 403-404 | 446 |
| 20 | 406 | 442 | 391 | 365-366 | 416 | 49 |  |  | 420 | 405 | 447 |
| 21 | 407 | 443 | 392 | 367 | 417-418 | 50 | 434 | 464 | 421 | 406 | 448 |
| 22 | 408-409 | 444 | 393 | 368-370 | 419 | 51 | 435 | 465 | 422 | 407 |  |
| 23 | 410 | 445 | 394-395 | 371 | 420 | 52 | 436 |  | 423 | 408 | 449-450 |
| 24 | 411 | 446 | 396 | 372-373 | 421 | 53 | 437 | 466 | 424 | 409 | 451 |
| 25 | 412 | 447 | 397 | 374-375 | 422 | 54 | 438 | 467 |  | 410 | 452 |
| 26 | 413 | 448 | 398-399 | 376 | 423-424 | 55 | 439 |  | 425 | 411 | 453 |
| 27 | 414 |  | 400 | 377-378 | 425 | 56 | 440 | 468 | 426 | 412-413 | 454 |
| 28 | 415 | 449 | 401 | 379 | 426-427 | 57 | 441 | 469 | 427 | 414 | 455 |
| 29 | 416 | 450 | 402 | 380 | 428 | 58 | 442 |  | 428 | 415 | 456 |

Table E. 46 Form D Grade 1 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 |  | 470 | 429 | 416 | 457 |
| 60 | 443 | 471 | 430 | $417-418$ | 458 |
| 61 | 444 |  | 431 | 419 | 459 |
| 62 | 445 | 472 | 432 | 420 | 460 |
| 63 | $446-447$ | 473 | 433 | 421 | $461-462$ |
| 64 | 448 |  | 434 | $422-423$ | 463 |
| 65 | 449 | 474 | 435 | 424 | 464 |
| 66 | 450 | 475 | 436 | $425-426$ | 465 |
| 67 | 451 | 476 | 437 | 427 | 466 |
| 68 | 452 | 477 | 438 | 428 | 467 |
| 69 | 453 |  | 439 | $429-430$ | 468 |
| 70 | 454 | 478 | 440 | $431-432$ | 469 |
| 71 | 455 | 479 | 441 | 433 | $470-471$ |
| 72 | $456-457$ | 480 | 442 | $434-435$ | 472 |
| 73 | 458 | 481 | 443 | $436-437$ | 473 |
| 74 | $459-460$ | 482 | 444 | $438-439$ | 474 |
| 75 | 461 | 483 | 445 | $440-441$ | 475 |
| 76 | 462 | 484 | $446-447$ | 442 | $476-477$ |
| 77 | 463 | 485 | 448 | $443-445$ | 478 |
| 78 | $464-465$ | 486 | $449-450$ | $446-447$ | $479-480$ |
| 79 | $466-467$ | 487 | 451 | $448-449$ | $481-482$ |
| 80 | $468-469$ | 488 | $452-453$ | $450-452$ | $483-484$ |
| 81 | 470 | $489-490$ | 454 | $453-454$ | $485-486$ |
| 82 | $471-472$ | 491 | $455-456$ | $455-456$ | $487-488$ |
| 83 | $473-474$ | $492-493$ | 457 | $457-460$ | $489-490$ |
| 84 | $475-476$ | 494 | $458-459$ | $461-463$ | $491-493$ |
| 85 | $477-478$ | $495-496$ | $460-461$ | $464-467$ | $494-496$ |
| 86 | $479-481$ | 497 | $462-463$ | $468-471$ | $497-499$ |
| 87 | $482-484$ | $498-499$ | $464-465$ | $472-476$ | $500-503$ |
|  |  |  |  |  |  |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $485-486$ | $500-501$ | $466-467$ | $477-481$ | $504-508$ |
| 89 | $487-490$ | $502-503$ | $468-470$ | $482-486$ | $509-513$ |
| 90 | $491-493$ | 504 | $471-473$ | $487-492$ | $514-519$ |
| 91 | $494-497$ | $505-507$ | $474-476$ | $493-500$ | $520-526$ |
| 92 | $498-501$ | $508-509$ | $477-480$ | $501-507$ | $527-540$ |
| 93 | $502-505$ | $510-512$ | $481-484$ | $508-515$ | $541-554$ |
| 94 | $506-510$ | $513-515$ | $485-489$ | $516-521$ | $555-560$ |
| 95 | $511-515$ | $516-519$ | $490-495$ | $522-531$ | $561-565$ |
| 96 | $516-522$ | $520-523$ | $496-500$ | $532-542$ | $566-573$ |
| 97 | $523-529$ | $524-529$ | $501-510$ | $543-551$ | $574-578$ |
| 98 | $530-540$ | $530-537$ | $511-520$ | $552-564$ | $579-585$ |
| 99 | $541-999$ | $538-999$ | $521-999$ | $565-999$ | $586-999$ |

Table E. 47 Form D Grades 2-3 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-400 | 1-429 | 1-332 | 1-344 | 1-389 | 30 | 467 | 480 | 403 | 449-450 | 476 |
| 2 | 401-408 | 430-441 | 333-343 | 345-359 | 390-412 | 31 | 468 | 481 | 404 | 451 | 477 |
| 3 | 409-414 | 442-448 | 344-351 | 360-372 | 413-422 | 32 | 469 |  |  | 452 | 478 |
| 4 | 415-420 | 449-452 | 352-357 | 373-381 | 423-429 | 33 | 470 | 482 | 405 | 453-454 | 479 |
| 5 | 421-424 | 453-454 | 358-362 | 382-389 | 430-434 | 34 | 471 | 483 | 406-407 | 455 | 480 |
| 6 | 425-428 | 455-456 | 363-366 | 390-395 | 435-438 | 35 | 472 |  |  | 456 | 481 |
| 7 | 429-431 | 457-458 | 367-369 | 396-401 | 439-441 | 36 | 473 | 484 | 408 | 457-458 |  |
| 8 | 432-434 | 459 | 370-371 | 402-404 | 442-444 | 37 | 474 | 485 | 409 | 459 | 482 |
| 9 | 435-436 | 460-461 | 372-374 | 405-406 | 445-447 | 38 |  |  | 410 | 460 | 483 |
| 10 | 437-439 | 462-463 | 375-377 | 407-409 | 448-449 | 39 | 475 | 486 | 411 | 461-462 | 484 |
| 11 | 440-441 | 464 | 378 | 410-412 | 450-451 | 40 | 476 | 487 | 412 | 463 | 485 |
| 12 | 442-443 | 465 | 379-380 | 413-415 | 452-453 | 41 | 477 |  | 413 | 464 | 486 |
| 13 | 444 | 466 | 381 | 416-418 | 454 | 42 | 478 | 488 | 414 | 465 | 487 |
| 14 | 445-446 | 467 | 382-383 | 419-421 | 455-456 | 43 | 479 |  |  | 466-467 | 488 |
| 15 | 447-448 | 468 | 384 | 422-423 | 457-458 | 44 | 480 | 489 | 415 | 468 | 489 |
| 16 | 449 | 469-470 | 385-386 | 424-426 | 459-460 | 45 | 481 | 490 | 416 | 469 |  |
| 17 | 450 |  | 387 | 427-428 | 461 | 46 |  |  | 417 | 470-471 | 490 |
| 18 | 451-452 | 471 | 388-389 | 429-430 | 462 | 47 | 482 | 491 | 418 | 472 | 491 |
| 19 | 453-454 | 472 | 390-391 | 431 | 463-464 | 48 | 483 | 492 | 419 | 473 | 492 |
| 20 | 455 | 473 | 392 | 432-433 | 465 | 49 | 484 |  |  | 474-475 | 493 |
| 21 | 456 |  | 393 | 434-435 | 466-467 | 50 | 485 | 493 | 420 | 476 |  |
| 22 | 457-458 | 474 | 394 | 436 | 468 | 51 | 486 |  | 421 | 477-478 | 494 |
| 23 | 459 | 475 | 395 | 437-438 | 469 | 52 | 487 | 494 | 422 | 479 | 495 |
| 24 | 460 | 476 | 396-397 | 439-440 | 470 | 53 | 488 | 495 | 423 | 480 | 496 |
| 25 | 461 |  | 398 | 441-442 | 471 | 54 | 489 |  | 424 | 481 | 497 |
| 26 | 462 | 477 | 399 | 443 | 472 | 55 | 490 | 496 | 425 | 482 | 498 |
| 27 | 463-464 | 478 | 400 | 444-445 | 473 | 56 | 491 | 497 | 426 | 483 | 499 |
| 28 | 465 | 479 | 401 | 446-447 | 474 | 57 |  |  | 427 | 484-485 | 500 |
| 29 | 466 |  | 402 | 448 | 475 | 58 | 492 | 498 | 428 | 486 |  |

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Table E. 47 Form D Grades 2-3 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 493 | 499 | 429 | 487 | 501 |
| 60 | 494 | 500 | 430 | 488 | 502 |
| 61 | 495 |  | 431 | $489-490$ | 503 |
| 62 | 496 | 501 | 432 | 491 | 504 |
| 63 | 497 | 502 | 433 | 492 | 505 |
| 64 | 498 | 503 | 434 | $493-494$ | 506 |
| 65 | 499 |  | 435 | 495 | 507 |
| 66 | 500 | 504 | 436 | 496 | 508 |
| 67 | 501 | 505 | 437 | 497 | 509 |
| 68 | 502 | 506 | 438 | $498-499$ | $510-511$ |
| 69 | 503 |  | $439-440$ | $500-501$ | 512 |
| 70 | 504 | $507-508$ | 441 | 502 | 513 |
| 71 | 505 |  | 442 | $503-504$ | 514 |
| 72 | 506 | 509 | 443 | 505 | 515 |
| 73 | 507 | 510 | 444 | 506 | 516 |
| 74 | 508 | $511-512$ | 445 | $507-508$ | $517-518$ |
| 75 | $509-510$ |  | 446 | 509 | 519 |
| 76 | 511 | $513-514$ | 447 | $510-511$ | 520 |
| 77 | 512 | 515 | $448-449$ | 512 | 521 |
| 78 | 513 | 516 | 450 | $513-514$ | $522-523$ |
| 79 | 514 | $517-518$ | 451 | $515-516$ | 524 |
| 80 | $515-516$ | 519 | $452-453$ | 517 | $525-526$ |
| 81 | 517 | $520-521$ | 454 | $518-519$ | $527-528$ |
| 82 | 518 | 522 | $455-456$ | $520-521$ | $529-530$ |
| 83 | $519-520$ | $523-524$ | 457 | 522 | 531 |
| 84 | $521-522$ | $525-526$ | $458-459$ | $523-524$ | $532-533$ |
| 85 | $523-524$ | $527-528$ | $460-461$ | $525-526$ | $534-535$ |
| 86 | $525-526$ | $529-530$ | $462-463$ | $527-528$ | $536-537$ |
| 87 | $527-528$ | $531-533$ | $464-465$ | $529-530$ | $538-539$ |
|  |  |  |  |  |  |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $529-530$ | $534-535$ | $466-467$ | $531-533$ | $540-542$ |
| 89 | $531-532$ | $536-537$ | $468-469$ | $534-535$ | $543-546$ |
| 90 | 533 | $538-539$ | $470-472$ | $536-539$ | $547-549$ |
| 91 | $534-536$ | $540-542$ | $473-475$ | $540-542$ | $550-552$ |
| 92 | $537-538$ | $543-545$ | $476-478$ | $543-545$ | $553-557$ |
| 93 | $539-541$ | $546-548$ | $479-482$ | $546-549$ | $558-561$ |
| 94 | $542-544$ | $549-551$ | $483-487$ | $550-554$ | $562-565$ |
| 95 | $545-549$ | $552-554$ | $488-494$ | $555-559$ | $566-571$ |
| 96 | $550-552$ | $555-559$ | $495-504$ | $560-567$ | $572-576$ |
| 97 | $553-557$ | $560-565$ | $505-511$ | $568-578$ | $577-583$ |
| 98 | $558-566$ | $566-571$ | $512-523$ | $579-590$ | $584-591$ |
| 99 | $567-999$ | $572-999$ | $524-999$ | $591-999$ | $592-999$ |

Table E. 48 Form D Grades 4-5 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-426 | 1-430 | 1-373 | 1-392 | 1-412 | 30 | 500-501 | 502 | 455 | 496 | 506 |
| 2 | 427-437 | 431-443 | 374-388 | 393-411 | 413-443 | 31 | 502 |  | 456 | 497-498 | 507 |
| 3 | 438-445 | 444-450 | 389-396 | 412-421 | 444-450 | 32 | 503 | 503 | 457 | 499 | 508 |
| 4 | 446-449 | 451-457 | 397-403 | 422-429 | 451-457 | 33 | 504 | 504 | 458-459 | 500-501 | 509 |
| 5 | 450-453 | 458-461 | 404-408 | 430-435 | 458-462 | 34 | 505 | 505 | 460 | 502 | 510 |
| 6 | 454-457 | 462-465 | 409-413 | 436-440 | 463-467 | 35 | 506 | 506 | 461 | 503 | 511 |
| 7 | 458-460 | 466-469 | 414-417 | 441-445 | 468-470 | 36 | 507 | 507 | 462 | 504 | 512 |
| 8 | 461-463 | 470-473 | 418-420 | 446-450 | 471-473 | 37 | 508 |  | 463 | 505-506 | 513 |
| 9 | 464-466 | 474-475 | 421-422 | 451-453 | 474-476 | 38 | 509 | 508 | 464 | 507 | 514 |
| 10 | 467-469 | 476-477 | 423-425 | 454-457 | 477-478 | 39 | 510 | 509 | 465 | 508 | 515 |
| 11 | 470-471 | 478 | 426-427 | 458-460 | 479-480 | 40 | 511 | 510 | 466 | 509-510 |  |
| 12 | 472-474 | 479-480 | 428-429 | 461-463 | 481-482 | 41 | 512 | 511 | 467 | 511 | 516 |
| 13 | 475-476 | 481-482 | 430-431 | 464-466 | 483-484 | 42 | 513 | 512 | 468-469 | 512 | 517 |
| 14 | 477-478 | 483 | 432-433 | 467-468 | 485-486 | 43 | 514 |  | 470 | 513-514 | 518 |
| 15 | 479-480 | 484-485 | 434 | 469-471 | 487-488 | 44 | 515 | 513 | 471 | 515 | 519 |
| 16 | 481 | 486 | 435-436 | 472-473 | 489 | 45 | 516 | 514 |  | 516 |  |
| 17 | 482-483 | 487 | 437-438 | 474-475 | 490-491 | 46 | 517 | 515 | 472 | 517 | 520 |
| 18 | 484-485 | 488 | 439-440 | 476-477 | 492-493 | 47 | 518 | 516 | 473 | 518 | 521 |
| 19 | 486 | 489-490 | 441-442 | 478-479 | 494 | 48 | 519 | 517 | 474 | 519 | 522 |
| 20 | 487-488 | 491 | 443 | 480-481 | 495 | 49 | 520 | 518 | 475 | 520 | 523 |
| 21 | 489 | 492 | 444 | 482-483 | 496-497 | 50 | 521 | 519 | 476 | 521-522 | 524 |
| 22 | 490-491 | 493 | 445-446 | 484-485 | 498 | 51 | 522 | 520 | 477 | 523 |  |
| 23 | 492 | 494-495 | 447 | 486 | 499 | 52 | 523 |  | 478 | 524 | 525 |
| 24 | 493 | 496 | 448 | 487-488 | 500 | 53 | 524 | 521 | 479 | 525 | 526 |
| 25 | 494 | 497 | 449 | 489-490 | 501 | 54 | 525 | 522 | 480 | 526 | 527 |
| 26 | 495-496 | 498 | 450-451 | 491 | 502 | 55 | 526 | 523 | 481 | 527 | 528 |
| 27 | 497 | 499 | 452 | 492 | 503 | 56 |  | 524 | 482 | 528-529 | 529 |
| 28 | 498 | 500 | 453 | 493-494 | 504 | 57 | 527 |  | 483 | 530 |  |
| 29 | 499 | 501 | 454 | 495 | 505 | 58 | 528 | 525 | 484 | 531 | 530 |

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Table E. 48 Form D Grades 4-5 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | $\mathrm{CO}$ | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 529 | 526 | 485 | 532 | 531 | 88 | 564-565 | 565-567 | 520-521 | 574-575 | 568-569 |
| 60 | 530 | 527 | 486 | 533 | 532 | 89 | 566-567 | 568-569 | 522-523 | 576-577 | 570-572 |
| 61 | 531 | 528 | 487 | 534 | 533 | 90 | 568-570 | 570-572 | 524-525 | 578-579 | 573-574 |
| 62 | 532 | 529 | 488 | $535$ | 534 | 91 | 571-572 | 573-575 | 526-527 | 580-582 | 575-577 |
| 63 | 533 | $530$ | $489$ | 536-537 | $535$ | 92 | 573-575 | 576-579 | 528-530 | 583-585 | 578-581 |
| 64 | 534 | 531 | 490 | 538 | 536 | 93 | 576-579 | 580-582 | 531-533 | 586-588 | 582-586 |
| 65 | 535 | $532$ | 491-492 | 539 |  | 94 | 580-583 | 583-586 | 534-536 | 589-592 | 587-590 |
| 66 | $536$ | $533$ | $493$ | $540$ | 537 | $95$ | 584-587 | $587-590$ | 537-540 | 593-597 | 591-596 |
| 67 | 537 |  | 494 | 541 | 538 | 96 | 588-591 | 591-595 | 541-545 | 598-603 | 597-601 |
| 68 | 538 | 534 | $495$ | 542-543 | $539$ | 97 | 592-598 | 596-601 | 546-552 | 604-610 | 602-607 |
| 69 | 539 | 535-536 | 496 | 544 | 540 | 98 | 599-604 | 602-610 | 553-560 | 611-619 | 608-613 |
| 70 | $540$ | $537$ | $497$ | 545 | 541 | 99 | 605-999 | 611-999 | 561-999 | 620-999 | 614-999 |
| 71 | 541 | 538 | 498 | 546 | 542 |  |  |  |  |  |  |
| 72 | 542 | 539 | $499$ | 547-548 | $543$ |  |  |  |  |  |  |
| 73 | $543$ | $540$ | $500$ | $549$ | $544$ |  |  |  |  |  |  |
| 74 | 544 | 541-542 | $501$ | $550$ | $545$ |  |  |  |  |  |  |
| 75 | 545-546 | $543$ | $502$ | 551-552 | 546-547 |  |  |  |  |  |  |
| 76 | 547 | $544-545$ | 503 | 553 | 548 |  |  |  |  |  |  |
| 77 | 548 | 546 | $504-505$ | 554-555 | $549$ |  |  |  |  |  |  |
| 78 | $549$ | $547$ | $506$ | $556$ | $550-551$ |  |  |  |  |  |  |
| 79 | 550-551 | 548-549 | $507$ | $557$ | $552$ |  |  |  |  |  |  |
| 80 | 552 | 550 | 508-509 | 558-559 | 553 |  |  |  |  |  |  |
| 81 | 553-554 | 551-552 | $510$ | $560-561$ | 554-555 |  |  |  |  |  |  |
| 82 | $555$ | 553-554 | $511-512$ | $562-563$ | 556-557 |  |  |  |  |  |  |
| 83 | 556-557 | 555-556 | $513$ | 564-565 | 558-559 |  |  |  |  |  |  |
| 84 | $558$ | $557$ | 514-515 | $566$ | $560$ |  |  |  |  |  |  |
| 85 | 559-560 | 558-559 | $516$ | 567-569 | 561-562 |  |  |  |  |  |  |
| 86 | 561 | 560-562 | 517-518 | $570$ | 563-564 |  |  |  |  |  |  |
| 87 | 562-563 | 563-564 | 519 | 571-573 | 565-567 |  |  |  |  |  |  |

Table E. 49 Form D Grades 6-8 Percentile Ranking Norming Table for Composites

| PR | OV | OR | CO | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-440 | 1-433 | 1-406 | 1-412 | 1-425 | 30 | 514 | 509 | 492 | 517 | 511 |
| 2 | 441-448 | 434-448 | 407-419 | 413-433 | 426-445 | 31 | 515 | 510 | 493-494 | 518 | 512 |
| 3 | 449-456 | 449-456 | 420-427 | 434-443 | 446-453 | 32 | 516 | 511 | 495 | 519 | 513 |
| 4 | 457-461 | 457-460 | 428-434 | 444-450 | 454-461 | 33 | 517 | 512 | 496 | 520 | 514 |
| 5 | 462-467 | 461-465 | 435-439 | 451-457 | 462-467 | 34 | 518 | 513 | 497-498 | 521-522 | 515 |
| 6 | 468-471 | 466-468 | 440-443 | 458-464 | 468-471 | 35 | 519 | 514-515 | 499 | 523 | 516 |
| 7 | 472-475 | 469-471 | 444-447 | 465-468 | 472-474 | 36 | 520 | 516 | 500 | 524 | 517 |
| 8 | 476-477 | 472-473 | 448-451 | 469-471 | 475-477 | 37 | 521 | 517 | 501 | 525-526 | 518 |
| 9 | 478-480 | 474-475 | 452-454 | 472-475 | 478-480 | 38 | 522 | 518 | 502-503 | 527 | 519 |
| 10 | 481-482 | 476-477 | 455-458 | 476-479 | 481-482 | 39 | 523 | 519 | 504 | 528 | 520 |
| 11 | 483-484 | 478-480 | 459-461 | 480-482 | 483-485 | 40 | 524 |  | 505 | 529 | 521 |
| 12 | 485-486 | 481-482 | 462-463 | 483-484 | 486-487 | 41 | 525 | 520-521 | 506 | 530 | 522 |
| 13 | 487-488 | 483-485 | 464 | 485-487 | 488-489 | 42 |  | 522 | 507 | 531-532 | 523 |
| 14 | 489-490 | 486-487 | 465-466 | 488-490 | 490-491 | 43 | 526 |  | 508-509 | 533 |  |
| 15 | 491-492 | 488-489 | 467-468 | 491-492 | 492-493 | 44 | 527 | 523 | 510 | 534 | 524 |
| 16 | 493-494 | 490 | 469-471 | 493-494 | 494-495 | 45 | 528 | 524 | 511 | 535 | 525 |
| 17 | 495-496 | 491-492 | 472-473 | 495-496 | 496 | 46 | 529-530 | 525 | 512 | 536 | 526 |
| 18 | 497 | 493-494 | 474 | 497-498 | 497-498 | 47 | 531 | 526 | 513-514 | 537 | 527 |
| 19 | 498-499 | 495 | 475-476 | 499-500 | 499 | 48 | 532 | 527 | 515 | 538-539 | 528 |
| 20 | 500 | 496-497 | 477-478 | 501 | 500 | 49 | 533 | 528 | 516 | 540 | 529 |
| 21 | 501-502 | 498 | 479 | 502-503 | 501 | 50 | 534 | 529 | 517 | 541 | 530 |
| 22 | 503 | 499 | 480-481 | 504-505 | 502 | 51 | 535 | 530 | 518 | 542 | 531 |
| 23 | 504-505 | 500-501 | 482 | 506-507 | 503-504 | 52 | 536 | 531 | 519-520 | 543 | 532 |
| 24 | 506 | 502 | 483-484 | 508 | 505 | 53 | 537 |  | 521 | 544 | 533 |
| 25 | 507-508 | 503 | 485 | 509-510 | 506 | 54 | 538 | 532 | 522 | 545 | 534 |
| 26 | 509 | 504 | 486-487 | 511 | 507 | 55 | 539 | 533-534 | 523 | 546 |  |
| 27 | 510 | 505 | 488 | 512-513 | 508 | 56 | 540 | 535 |  | 547 | 535 |
| 28 | 511 | 506-507 | 489-490 | 514 | 509 | 57 | 541 | 536 | 524-525 | 548 | 536 |
| 29 | 512-513 | 508 | 491 | 515-516 | 510 | 58 | 542 | 537 | 526 | 549 | 537 |

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Table E. 49 Form D Grades 6-8 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 543 | 538 | 527 | 550 | 538 |
| 60 | 544 | 539 | 528 | 551 | 539 |
| 61 | 545 | 540 | $529-530$ | $552-553$ | 540 |
| 62 | 546 | 541 | 531 | 554 | 541 |
| 63 | 547 | 542 | 532 | 555 |  |
| 64 | $548-549$ | 543 | 533 | 556 | 542 |
| 65 | 550 | 544 | 534 | 557 | 543 |
| 66 | 551 | 545 | 535 | 558 | 544 |
| 67 | 552 | 546 | 536 | $559-560$ | 545 |
| 68 | 553 | 547 | 537 | 561 | 546 |
| 69 | 554 | 548 | 538 | 562 | 547 |
| 70 | 555 | 549 | $539-540$ | 563 | 548 |
| 71 | 556 | $550-551$ | 541 | 564 | 549 |
| 72 | $557-558$ | 552 | 542 | 565 | 550 |
| 73 | 559 | 553 | 543 | $566-567$ | $551-552$ |
| 74 | 560 | $554-555$ | $544-545$ | 568 | 553 |
| 75 | 561 | 556 | 546 | $569-570$ | 554 |
| 76 | 562 | 557 | 547 | 571 | 555 |
| 77 | $563-564$ | 558 | $548-549$ | 572 | 556 |
| 78 | 565 | $559-560$ | 550 | $573-574$ | 557 |
| 79 | 566 | $561-562$ | $551-552$ | 575 | $558-559$ |
| 80 | $567-568$ | 563 | 553 | $576-578$ | 560 |
| 81 | 569 | $564-565$ | $554-555$ | 579 | 561 |
| 82 | $570-571$ | 566 | $556-557$ | $580-581$ | 562 |
| 83 | $572-573$ | $567-568$ | $558-559$ | 582 | $563-564$ |
| 84 | $574-575$ | $569-570$ | 560 | $583-584$ | $565-566$ |
| 85 | 576 | $571-572$ | $561-563$ | $585-586$ | $567-568$ |
| 86 | $577-578$ | $573-574$ | $564-565$ | $587-588$ | $569-570$ |
| 87 | $579-580$ | $575-576$ | $566-567$ | $589-590$ | 571 |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $581-582$ | $577-579$ | $568-569$ | $591-592$ | $572-573$ |
| 89 | $583-585$ | $580-581$ | $570-571$ | $593-594$ | $574-576$ |
| 90 | $586-588$ | $582-583$ | $572-574$ | $595-597$ | $577-578$ |
| 91 | $589-590$ | $584-587$ | $575-577$ | $598-600$ | $579-582$ |
| 92 | $591-593$ | $588-590$ | $578-580$ | $601-603$ | $583-585$ |
| 93 | $594-595$ | $591-594$ | $581-583$ | $604-606$ | $586-589$ |
| 94 | $596-599$ | $595-599$ | $584-587$ | $607-610$ | $590-594$ |
| 95 | $600-602$ | $600-604$ | $588-592$ | $611-615$ | $595-600$ |
| 96 | $603-607$ | $605-609$ | $593-596$ | $616-620$ | $601-605$ |
| 97 | $608-613$ | $610-616$ | $597-604$ | $621-628$ | $606-613$ |
| 98 | $614-621$ | $617-624$ | $605-615$ | $629-640$ | $614-624$ |
| 99 | $622-999$ | $625-999$ | $616-999$ | $641-999$ | $625-999$ |

Table E.50 Form D Grades 9-12 Percentile Ranking Norming Table for Composites

| PR | OV | OR | $\mathrm{CO}$ | LT | PR | PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1 | 1-442 | 1-440 | 1-422 | 1-415 | 1-426 | 30 | 518 | 512 | 511-512 | 521 | 522 |
| 2 | 443-454 | 441-452 | 423-434 | 416-435 | 427-445 | 31 | 519 | 513 | 513 | 522 | 523 |
| 3 | 455-460 | 453-459 | 435-443 | 436-448 | 446-463 | 32 | 520 | 514 | 514-515 | 523 | 524 |
| 4 | 461-467 | 460-466 | 444-450 | 449-456 | 464-471 | 33 | 521 | 515 | 516 | 524-525 | 525 |
| 5 | 468-472 | 467-471 | 451-455 | 457-462 | 472-478 | 34 | 522 | 516 | 517 | 526 | 526 |
| 6 | 473-475 | 472-475 | 456-459 | 463-467 | 479-483 | 35 | 523 | 517 | 518 | 527 | 527 |
| 7 | 476-479 | 476-478 | 460-463 | 468-473 | 484-487 | 36 | 524 | 518 | 519-520 | 528 |  |
| 8 | 480-482 | 479-480 | 464-468 | 474-477 | 488-490 | 37 | 525 | 519 | 521 | 529 | 528 |
| 9 | 483-485 | 481-483 | 469-471 | 478-481 | 491-492 | 38 | 526 | 520 | 522 | 530-531 | 529 |
| 10 | 486-488 | 484-486 | 472-474 | 482-484 | 493-495 | 39 | 527 | 521 | 523-524 | 532 | $530$ |
| 11 | 489 | 487-488 | 475-477 | 485-486 | 496-497 | 40 | 528 | 522 | 525 | 533 | 531 |
| 12 | 490-492 | 489-490 | 478-480 | 487-488 | 498-499 | 41 | 529 | 523 | 526 | $534$ |  |
| 13 | 493-494 | 491-492 | 481-482 | 489-491 | 500-501 | 42 | $530$ | $524$ | 527 | $535$ | 532 |
| 14 | 495-496 | 493-494 | 483-485 | 492-494 | 502 | 43 | 531 |  | 528 | 536 | 533 |
| 15 | 497 | $495$ | 486-488 | 495-496 | 503-504 | 44 | 532 | 525-526 | 529 | 537 | 534 |
| 16 | 498-499 | 496-497 | 489-490 | 497-498 | 505-506 | 45 | 533 |  | 530 | 538 | 535 |
| 17 | 500-501 | 498 | 491-492 | 499-500 | 507 | $46$ | $534$ | 527 | $531$ | $539$ | 536 |
| 18 | 502-503 | 499 | 493-494 | 501-502 | 508-509 | 47 | 535 | 528 | $532-533$ | 540 |  |
| 19 | $504$ | $500$ | 495-496 | 503-504 | 510 | $48$ | $536$ | $529$ | $534$ | $541$ | $537$ |
| 20 | 505 | 501-502 | 497-498 | 505-506 | $511$ | 49 | 537 | 530 | 535 | 542 | 538 |
| 21 | 506-507 | 503 | 499 | 507-508 | 512-513 | 50 | 538 | 531 | 536 | 543-544 | 539 |
| 22 | $508$ | $504$ | 500-501 | $509$ | $514$ | $51$ | $539$ | $532$ | $537$ | $545$ | 540 |
| 23 | $509$ | 505 | $502$ | 510-511 | 515 | $52$ | 540 | 533 | 538-539 | 546 |  |
| 24 | 510-511 | 506 | 503-504 | 512-513 | $516$ | $53$ |  | 534 | 540 | 547 | 541 |
| 25 | 512 | 507 | 505 | 514 | 517 | 54 | 541 | 535 | 541 | 548 | 542 |
| 26 | 513 | 508 | 506 | 515 | 518 | 55 | 542 | 536 | 542-543 | 549 | 543 |
| 27 | $514-515$ | 509 | 507-508 | $516-517$ | $519$ | $56$ | $543$ | $537$ | $544$ | $550$ |  |
| 28 | 516 | 510 | 509 | 518 | 520 | 57 | 544 | 538 | 545 | 551 | 544 |
| 29 | 517 | 511 | 510 | 519-520 | 521 | 58 | 545 | 539 | 546 | 552 | 545 |

Table E.50 Form D Grades 9-12 Percentile Ranking Table for Composites (continued)

| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 59 | 546 | 540 | 547 | $553-554$ | 546 |
| 60 | 547 | 541 | 548 | 555 | 547 |
| 61 | 548 | 542 | 549 | 556 |  |
| 62 | 549 | 543 | 550 | 557 | 548 |
| 63 | 550 | 544 | $551-552$ | 558 | 549 |
| 64 | $551-552$ | 545 | 553 | 559 | 550 |
| 65 |  |  | 554 | 560 | 551 |
| 66 | 553 | 546 | 555 | $561-562$ | 552 |
| 67 | $554-555$ | 547 | $556-557$ | 563 |  |
| 68 | 556 | $548-549$ | 558 | 564 | 553 |
| 69 | 557 |  | 559 | 565 | 554 |
| 70 | 558 | 550 | $560-561$ | 566 | 555 |
| 71 | $559-560$ | 551 | 562 | $567-568$ | 556 |
| 72 | 561 | $552-553$ | $563-564$ | 569 | 557 |
| 73 | 562 | 554 | 565 | 570 | 558 |
| 74 | 563 | 555 | 566 | $571-572$ | 559 |
| 75 | 564 | $556-557$ | $567-568$ | 573 | 560 |
| 76 | 565 | 558 | $569-570$ | $574-575$ | $561-562$ |
| 77 | $566-567$ | 559 | 571 | 576 | 563 |
| 78 | 568 | $560-561$ | $572-573$ | 577 | 564 |
| 79 | 569 | $562-563$ | 574 | $578-579$ | 565 |
| 80 | 570 | 564 | $575-576$ | 580 | $566-567$ |
| 81 | $571-572$ | $565-566$ | 577 | $581-582$ | 568 |
| 82 | 573 | 567 | $578-579$ | 583 | $569-570$ |
| 83 | $574-575$ | $568-569$ | 580 | $584-585$ | 571 |
| 84 | 576 | $570-571$ | $581-582$ | $586-587$ | $572-573$ |
| 85 | $577-578$ | $572-573$ | $583-585$ | $588-589$ | $574-575$ |
| 86 | 579 | $574-575$ | $586-587$ | $590-591$ | $576-577$ |
| 87 | $580-581$ | $576-577$ | $588-589$ | $592-593$ | $578-580$ |


| PR | OV | OR | CO | LT | PR |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 88 | $582-583$ | $578-580$ | $590-591$ | $594-595$ | $581-582$ |
| 89 | $584-585$ | $581-583$ | $592-594$ | $596-598$ | $583-585$ |
| 90 | $586-588$ | $584-586$ | $595-597$ | $599-600$ | $586-588$ |
| 91 | $589-591$ | $587-589$ | $598-601$ | $601-603$ | $589-591$ |
| 92 | $592-593$ | $590-592$ | $602-604$ | $604-606$ | $592-595$ |
| 93 | $594-596$ | $593-596$ | $605-607$ | $607-609$ | $596-599$ |
| 94 | $597-601$ | $597-599$ | $608-612$ | $610-614$ | $600-602$ |
| 95 | $602-605$ | $600-605$ | $613-617$ | $615-618$ | $603-606$ |
| 96 | $606-611$ | $606-611$ | $618-621$ | $619-625$ | $607-611$ |
| 97 | $612-617$ | $612-621$ | $622-628$ | $626-633$ | $612-618$ |
| 98 | $618-626$ | $622-634$ | $629-640$ | $634-641$ | $619-625$ |
| 99 | $627-999$ | $635-999$ | $641-999$ | $642-999$ | $626-999$ |

## Appendix F Item Difficulty Tables

## Form C

Table F. 1 Form C Speaking Item Difficulty

| Item | Grade Span |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.82 | 0.93 | 0.93 | 0.96 | 0.97 | 0.94 |
| 2 | 0.86 | 0.92 | 0.62 | 0.99 | 0.94 | 0.98 |
| 3 |  |  | 0.98 | 0.91 |  | 0.88 |
| 4 | 0.94 | 0.97 | 0.71 | 0.89 | 0.69 | 0.86 |
| 5 | 0.93 | 0.97 | 0.84 | 0.89 | 0.66 | 0.30 |
| 6 | 0.82 | 0.94 | 0.74 | 0.61 | 0.58 | 0.60 |
| 7 | 0.79 | 0.87 | 0.71 | 0.80 | 0.43 | 0.31 |
| 8 | 0.65 | 0.81 | 0.88 | 0.88 | 0.82 | 0.89 |
| 9 | 0.55 | 0.71 | 0.91 | 0.91 | 0.85 | 0.93 |
| 10 | 0.59 | 0.74 | 0.87 | 0.58 | 0.66 | 0.78 |
| 11 | 0.57 | 0.74 | 0.83 | 0.62 | 0.67 | 0.78 |
| 12 | 0.59 | 0.76 | 0.78 | 0.68 | 0.65 | 0.78 |
| 13 | 0.66 | 0.81 | 0.78 | 0.61 | 0.78 | 0.86 |
| 14 |  | 0.82 | 0.84 | 0.71 | 0.66 | 0.80 |
| 15 |  | 0.77 | 0.85 | 0.73 | 0.68 | 0.80 |
| 16 |  | 0.76 | 0.82 | 0.76 | 0.73 | 0.79 |
| 17 |  | 0.68 | 0.79 | 0.85 | 0.77 | 0.86 |
| 18 | 0.50 | 0.64 | 0.73 | 0.73 | 0.65 | 0.77 |

Table F. 2 Form C Listening Item Difficulty

| Item | Grade Span |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{K - 1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.80 | 0.95 | 0.47 | 0.90 | 0.83 |
| 2 | 0.67 | 0.81 | 0.70 | 0.75 | 0.68 |
| 3 | 0.59 | 0.69 | 0.65 | 0.76 | 0.49 |
| 4 | 0.72 | 0.89 | 0.93 | 0.78 | 0.55 |
| 5 | 0.62 | 0.91 | 0.71 | 0.91 | 0.40 |
| 6 | 0.89 | 0.95 | 0.82 | 0.81 | 0.72 |
| 7 | 0.75 | 0.76 | 0.78 | 0.92 | 0.58 |
| 8 | 0.79 | 0.91 | 0.81 | 0.58 | 0.45 |
| 9 | 0.88 | 0.87 | 0.58 | 0.77 | 0.64 |
| 10 | 0.80 | 0.53 | 0.68 | 0.84 | 0.68 |
| 11 | 0.74 | 0.75 | 0.83 | 0.60 | 0.52 |
| 12 | 0.79 | 0.92 | 0.65 | 0.70 | 0.74 |
| 13 | 0.72 | 0.87 | 0.66 | 0.55 | 0.84 |
| 14 | 0.70 | 0.75 | 0.49 | 0.47 | 0.72 |
| 15 | 0.73 | 0.73 | 0.64 | 0.49 | 0.84 |
| 16 | 0.63 | 0.43 | 0.81 | 0.59 | 0.72 |
| 17 | 0.83 | 0.36 | 0.75 | 0.77 | 0.73 |
| 18 | 0.60 | 0.74 | 0.42 | 0.47 | 0.58 |
| 19 | 0.63 | 0.91 | 0.51 | 0.44 | 0.65 |
| 20 | 0.37 | 0.70 | 0.47 | 0.49 | 0.44 |
| 21 |  |  |  | 0.58 | 0.19 |
| 22 |  |  |  | 0.81 | 0.85 |
| 23 |  |  |  | 0.74 | 0.58 |

Table F. 3 Form C Reading Item Difficulty

| Item | Grade Span |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.47 | 0.56 | 0.68 | 0.77 | 0.72 | 0.79 |
| 2 | 0.87 | 0.93 | 0.66 | 0.81 | 0.78 | 0.69 |
| 3 | 0.76 | 0.82 | 0.83 | 0.67 | 0.52 | 0.49 |
| 4 | 0.68 | 0.82 | 0.56 | 0.44 | 0.52 | 0.41 |
| 5 | 0.69 | 0.80 | 0.66 | 0.58 | 0.62 | 0.77 |
| 6 | 0.63 | 0.81 | 0.75 | 0.61 | 0.48 | 0.56 |
| 7 | 0.61 | 0.80 | 0.76 | 0.50 | 0.72 | 0.51 |
| 8 | 0.66 | 0.83 | 0.65 | 0.47 | 0.40 | 0.69 |
| 9 | 0.57 | 0.78 | 0.58 | 0.62 | 0.57 | 0.41 |
| 10 | 0.51 | 0.72 | 0.76 | 0.77 | 0.69 | 0.47 |
| 11 | 0.56 | 0.75 | 0.77 | 0.51 | 0.52 | 0.71 |
| 12 | 0.55 | 0.75 | 0.74 | 0.56 | 0.82 | 0.77 |
| 13 | 0.77 | 0.85 | 0.48 | 0.68 | 0.88 | 0.70 |
| 14 | 0.59 | 0.75 | 0.74 | 0.56 | 0.73 | 0.57 |
| 15 | 0.57 | 0.73 | 0.69 | 0.53 | 0.29 | 0.51 |
| 16 | 0.65 | 0.77 | 0.73 | 0.55 | 0.42 | 0.44 |
| 17 | 0.53 | 0.69 | 0.59 | 0.34 | 0.48 | 0.62 |
| 18 | 0.75 | 0.86 | 0.41 | 0.52 | 0.53 | 0.50 |
| 19 | 0.41 | 0.58 | 0.65 | 0.68 | 0.61 | 0.42 |
| 20 | 0.20 | 0.31 | 0.58 | 0.49 | 0.46 | 0.53 |
| 21 | 0.27 | 0.43 | 0.60 | 0.56 | 0.53 | 0.52 |
| 22 | 0.41 | 0.55 | 0.47 | 0.77 | 0.44 | 0.46 |
| 23 |  | 0.59 | 0.40 | 0.50 | 0.41 | 0.72 |
| 24 |  | 0.54 | 0.42 | 0.37 | 0.65 | 0.82 |
| 25 |  | 0.45 | 0.48 | 0.47 | 0.53 | 0.48 |
| 26 |  | 0.43 | 0.60 | 0.64 | 0.66 | 0.46 |
| 27 | 0.55 | 0.72 | 0.62 | 0.67 | 0.26 | 0.54 |
| 28 | 0.53 | 0.67 | 0.66 | 0.30 | 0.46 | 0.49 |
| 29 | 0.45 | 0.61 | 0.58 | 0.24 | 0.32 | 0.77 |
| 30 | 0.44 | 0.59 | 0.66 | 0.41 | 0.61 | 0.77 |

Table F. 4 Form C Writing Item Difficulty

| Item | Grade Span |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.92 | 0.98 | 0.67 | 0.88 | 0.74 | 0.88 |
| 2 | 0.92 | 0.99 | 0.57 | 0.78 | 0.79 | 0.74 |
| 3 | 0.67 | 0.84 | 0.61 | 0.80 | 0.73 | 0.67 |
| 4 | 0.79 | 0.94 | 0.55 | 0.73 | 0.65 | 0.42 |
| 5 | 0.63 | 0.83 | 0.57 | 0.91 | 0.63 | 0.71 |
| 6 | 0.45 | 0.83 | 0.57 | 0.79 | 0.67 | 0.91 |
| 7 | 0.31 | 0.65 | 0.72 | 0.67 | 0.59 | 0.87 |
| 8 | 0.44 | 0.80 | 0.54 | 0.88 | 0.63 | 0.50 |
| 9 | 0.47 | 0.86 | 0.41 | 0.90 | 0.59 | 0.49 |
| 10 | 0.22 | 0.58 | 0.63 | 0.59 | 0.55 | 0.43 |
| 11 |  | 0.62 | 0.79 | 0.53 | 0.55 | 0.47 |
| 12 |  | 0.67 | 0.78 | 0.63 | 0.38 | 0.65 |
| 13 |  | 0.63 | 0.75 | 0.48 | 0.41 | 0.54 |
| 14 |  | 0.56 | 0.77 | 0.52 | 0.46 | 0.62 |
| 15 | 0.46 | 0.60 | 0.67 | 0.52 | 0.50 | 0.61 |
| 16 | 0.48 | 0.56 | 0.60 | 0.47 | 0.39 | 0.54 |
| 17 | 0.54 | 0.81 | 0.70 | 0.65 | 0.65 | 0.76 |
| 18 | 0.69 | 0.87 |  |  |  |  |
| 19 | 0.56 | 0.82 |  |  |  |  |
| 20 | 0.47 | 0.68 |  |  |  |  |

## Form D

Table F. 5 Form D Speaking Item Difficulty

| Item | Grade Span |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.86 | 0.94 | 0.97 | 1.00 | 0.97 | 0.95 |
| 2 | 0.66 | 0.80 | 0.82 | 0.90 | 0.98 | 0.93 |
| 3 | 0.80 | 0.92 | 0.95 | 0.97 | 0.92 | 0.99 |
| 4 | 0.94 | 0.98 | 0.86 | 0.86 | 0.85 | 0.99 |
| 5 | 0.92 | 0.97 | 0.52 | 0.55 | 0.79 | 0.40 |
| 6 | 0.90 | 0.95 | 0.94 | 0.77 | 0.62 | 0.73 |
| 7 | 0.82 | 0.93 | 0.67 | 0.54 | 0.60 | 0.27 |
| 8 | 0.63 | 0.79 | 0.83 | 0.91 | 0.78 | 0.91 |
| 9 | 0.52 | 0.70 | 0.76 | 0.94 | 0.82 | 0.92 |
| 10 | 0.62 | 0.79 | 0.90 | 0.67 | 0.71 | 0.77 |
| 11 | 0.63 | 0.80 | 0.91 | 0.69 | 0.70 | 0.78 |
| 12 | 0.56 | 0.72 | 0.80 | 0.70 | 0.74 | 0.76 |
| 13 | 0.56 | 0.73 | 0.80 | 0.73 | 0.75 | 0.66 |
| 14 | 0.55 | 0.77 | 0.81 | 0.66 | 0.60 | 0.68 |
| 15 |  | 0.69 | 0.81 | 0.65 | 0.60 | 0.69 |
| 16 |  | 0.67 | 0.82 | 0.68 | 0.70 | 0.70 |
| 17 |  | 0.69 | 0.79 | 0.73 | 0.65 | 0.70 |
| 18 |  | 0.70 | 0.79 | 0.79 | 0.72 | 0.84 |

Table F. 6 Form D Listening Item Difficulty

| Item | Grade Span |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{K - 1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.82 | 0.85 | 0.85 | 0.72 | 0.85 |
| 2 | 0.73 | 0.52 | 0.70 | 0.81 | 0.84 |
| 3 | 0.49 | 0.86 | 0.65 | 0.36 | 0.78 |
| 4 | 0.73 | 0.93 | 0.89 | 0.62 | 0.59 |
| 5 | 0.58 | 0.86 | 0.75 | 0.84 | 0.72 |
| 6 | 0.85 | 0.94 | 0.88 | 0.51 | 0.61 |
| 7 | 0.81 | 0.93 | 0.90 | 0.92 | 0.92 |
| 8 | 0.56 | 0.91 | 0.82 | 0.73 | 0.77 |
| 9 | 0.90 | 0.95 | 0.84 | 0.57 | 0.92 |
| 10 | 0.84 | 0.72 | 0.27 | 0.72 | 0.63 |
| 11 | 0.75 | 0.71 | 0.57 | 0.52 | 0.52 |
| 12 | 0.71 | 0.59 | 0.76 | 0.63 | 0.76 |
| 13 | 0.73 | 0.84 | 0.61 | 0.42 | 0.55 |
| 14 | 0.70 | 0.77 | 0.64 | 0.85 | 0.41 |
| 15 | 0.68 | 0.71 | 0.73 | 0.79 | 0.38 |
| 16 | 0.67 | 0.84 | 0.52 | 0.69 | 0.36 |
| 17 | 0.74 | 0.65 | 0.42 | 0.67 | 0.53 |
| 18 | 0.65 | 0.69 | 0.63 | 0.55 | 0.56 |
| 19 | 0.67 | 0.71 | 0.71 | 0.71 | 0.49 |
| 20 | 0.55 |  | 0.63 | 0.51 | 0.38 |
| 21 |  |  |  | 0.71 | 0.71 |
| 22 |  |  |  | 0.86 | 0.56 |
| 23 |  |  |  | 0.88 | 0.57 |
|  |  |  |  |  |  |

Table F. 7 Form D Reading Item Difficulty

|  | Grade Span |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Item | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.47 | 0.66 | 0.68 | 0.73 | 0.86 | 0.69 |
| 2 | 0.81 | 0.91 | 0.79 | 0.88 | 0.66 | 0.71 |
| 3 | 0.73 | 0.82 | 0.72 | 0.71 | 0.81 | 0.74 |
| 4 | 0.59 | 0.75 | 0.67 | 0.65 | 0.75 | 0.78 |
| 5 | 0.62 | 0.73 | 0.62 | 0.80 | 0.61 | 0.63 |
| 6 | 0.66 | 0.83 | 0.69 | 0.55 | 0.32 | 0.66 |
| 7 | 0.63 | 0.82 | 0.75 | 0.56 | 0.52 | 0.57 |
| 8 | 0.59 | 0.77 | 0.67 | 0.55 | 0.78 | 0.65 |
| 9 | 0.57 | 0.76 | 0.63 | 0.62 | 0.68 | 0.59 |
| 10 | 0.61 | 0.80 | 0.43 | 0.50 | 0.69 | 0.40 |
| 11 | 0.64 | 0.79 | 0.74 | 0.56 | 0.79 | 0.52 |
| 12 | 0.60 | 0.74 | 0.69 | 0.75 | 0.54 | 0.69 |
| 13 | 0.55 | 0.71 | 0.56 | 0.69 | 0.68 | 0.62 |
| 14 | 0.54 | 0.71 | 0.66 | 0.62 | 0.26 | 0.70 |
| 15 | 0.57 | 0.70 | 0.57 | 0.53 | 0.28 | 0.69 |
| 16 | 0.47 | 0.62 | 0.62 | 0.47 | 0.39 | 0.49 |
| 17 | 0.46 | 0.52 | 0.56 | 0.67 | 0.38 | 0.59 |
| 18 | 0.55 | 0.73 | 0.42 | 0.21 | 0.64 | 0.43 |
| 19 | 0.43 | 0.61 | 0.48 | 0.43 | 0.64 | 0.46 |
| 20 | 0.57 | 0.70 | 0.48 | 0.58 | 0.45 | 0.67 |
| 21 | 0.46 | 0.63 | 0.56 | 0.63 | 0.60 | 0.47 |
| 22 | 0.36 | 0.54 | 0.64 | 0.44 | 0.81 | 0.43 |
| 23 | 0.72 | 0.58 | 0.56 | 0.56 | 0.49 | 0.55 |
| 24 | 0.64 | 0.50 | 0.45 | 0.16 | 0.55 | 0.57 |
| 25 | 0.46 | 0.47 | 0.67 | 0.52 | 0.56 | 0.42 |
| 26 | 0.79 | 0.52 | 0.76 | 0.63 | 0.49 | 0.52 |
| 27 |  | 0.79 | 0.46 | 0.38 | 0.45 | 0.61 |
| 28 |  | 0.73 | 0.54 | 0.28 | 0.26 | 0.65 |
| 29 |  | 0.62 | 0.51 | 0.51 | 0.56 | 0.61 |
| 30 |  | 0.84 | 0.75 | 0.10 |  | 0.55 |

Table F. 8 Form D Writing Item Difficulty

| Item | Grade Span |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\mathbf{K}$ | $\mathbf{1}$ | $\mathbf{2 - 3}$ | $\mathbf{4 - 5}$ | $\mathbf{6 - 8}$ | $\mathbf{9 - 1 2}$ |
| 1 | 0.93 | 0.98 | 0.76 | 0.82 | 0.86 | 0.85 |
| 2 | 0.92 | 0.99 | 0.64 | 0.91 | 0.80 | 0.88 |
| 3 | 0.64 | 0.82 | 0.88 | 0.86 | 0.74 | 0.82 |
| 4 | 0.86 | 0.96 | 0.55 | 0.65 | 0.76 | 0.83 |
| 5 | 0.70 | 0.92 | 0.32 | 0.85 | 0.71 | 0.28 |
| 6 | 0.58 | 0.89 | 0.86 | 0.75 | 0.74 | 0.23 |
| 7 | 0.31 | 0.68 | 0.75 | 0.70 | 0.80 | 0.72 |
| 8 | 0.41 | 0.81 | 0.71 | 0.67 | 0.67 | 0.79 |
| 9 | 0.29 | 0.66 | 0.58 | 0.65 | 0.70 | 0.66 |
| 10 | 0.25 | 0.65 | 0.54 | 0.80 | 0.76 | 0.44 |
| 11 | 0.61 | 0.71 | 0.74 | 0.50 | 0.61 | 0.46 |
| 12 | 0.44 | 0.61 | 0.68 | 0.48 | 0.44 | 0.59 |
| 13 | 0.59 | 0.62 | 0.61 | 0.47 | 0.43 | 0.50 |
| 14 | 0.64 | 0.66 | 0.80 | 0.50 | 0.57 | 0.57 |
| 15 | 0.55 | 0.75 | 0.82 | 0.65 | 0.43 | 0.52 |
| 16 | 0.52 | 0.57 | 0.76 | 0.50 | 0.41 | 0.58 |
| 17 |  | 0.84 | 0.57 | 0.66 | 0.68 | 0.73 |
| 18 |  | 0.83 |  |  |  |  |
| 19 |  | 0.77 |  |  |  |  |
| 20 |  | 0.71 |  |  |  |  |

## Appendix G Inter-Rater Statistics

## Form C

Table G. 1 Form C Writing Grades K-1 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass Correlation | Weighted Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 1 | 1 | 0.85 | 0.01 | 0.00 | 0.14 | 0.98 | 0.96 | 0.81 | 156 |
| 2 | 1 | 0.74 | 0.00 | 0.00 | 0.26 | 1.01 | 1.00 | 0.72 | 98 |
| 3 | 3 | 0.73 | 0.19 | 0.03 | 0.06 | 0.94 | 0.88 | 2.07 | 135 |
| 4 | 1 | 0.79 | 0.01 | 0.01 | 0.19 | 0.98 | 0.95 | 0.73 | 156 |
| 5 | 1 | 0.66 | 0.03 | 0.00 | 0.31 | 0.98 | 0.94 | 0.55 | 98 |
| 6 | 1 | 0.86 | 0.06 | 0.00 | 0.08 | 0.94 | 0.88 | 0.60 | 135 |
| 7 | 1 | 0.82 | 0.06 | 0.02 | 0.10 | 0.94 | 0.88 | 0.48 | 135 |
| 8 | 1 | 0.82 | 0.09 | 0.00 | 0.09 | 0.91 | 0.82 | 0.59 | 135 |
| 9 | 1 | 0.65 | 0.02 | 0.01 | 0.32 | 0.98 | 0.96 | 0.52 | 98 |
| 10 | 3 | 0.44 | 0.20 | 0.13 | 0.23 | 0.95 | 0.90 | 1.05 | 135 |
| 11 | 3 | 0.39 | 0.12 | 0.04 | 0.45 | 0.98 | 0.95 | 1.06 | 135 |
| 12 | 3 | 0.43 | 0.07 | 0.03 | 0.47 | 0.98 | 0.96 | 1.09 | 135 |
| 13 | 3 | 0.28 | 0.12 | 0.01 | 0.59 | 0.98 | 0.94 | 0.77 | 98 |
| 14 | 3 | 0.27 | 0.04 | 0.04 | 0.65 | 0.98 | 0.95 | 0.61 | 98 |

Table G. 2 Form C Writing Grades 2-3 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted <br> Kappa | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 11 | 3 | 0.70 | 0.19 | 0.05 | 0.06 | 0.92 | 0.83 | 2.08 | 131 |
| 12 | 3 | 0.72 | 0.21 | 0.02 | 0.06 | 0.93 | 0.86 | 2.10 | 131 |
| 13 | 3 | 0.67 | 0.21 | 0.03 | 0.08 | 0.94 | 0.88 | 2.02 | 131 |
| 14 | 3 | 0.83 | 0.07 | 0.02 | 0.07 | 0.96 | 0.91 | 2.31 | 211 |
| 15 | 3 | 0.62 | 0.23 | 0.08 | 0.07 | 0.86 | 0.71 | 1.98 | 103 |
| 16 | 3 | 0.68 | 0.18 | 0.04 | 0.10 | 0.93 | 0.85 | 1.79 | 103 |
| 17 | 4 | 0.72 | 0.18 | 0.03 | 0.06 | 0.96 | 0.91 | 2.74 | 211 |

Table G. 3 Form C Reading Grades 4-5 Inter-Rater Reliability

|  |  | Percentage Absolute Difference |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum |  |  |  |  |  |  |  |  |  |
| Intraclass |  |  |  |  |  |  |  |  |  |  |
| Item | Score | Perfect | Adjacent | Discrepant | Codes | Correlation | Kappa | Mean | N |  |
| 23 | 1 | 0.91 | 0.04 | 0.00 | 0.04 | 0.96 | 0.91 | 0.58 | 112 |  |
| 24 | 1 | 0.95 | 0.01 | 0.00 | 0.04 | 1.00 | 0.98 | 0.45 | 112 |  |
| 29 | 1 | 0.87 | 0.01 | 0.01 | 0.11 | 1.00 | 0.98 | 0.28 | 157 |  |
| 30 | 1 | 0.87 | 0.01 | 0.01 | 0.11 | 1.00 | 0.99 | 0.45 | 157 |  |

Table G.4 Form C Writing Grades 4-5 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted <br> Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 11 | 3 | 0.57 | 0.27 | 0.04 | 0.12 | 0.86 | 0.71 | 1.23 | 157 |
| 12 | 3 | 0.68 | 0.15 | 0.06 | 0.11 | 0.92 | 0.84 | 1.71 | 157 |
| 13 | 3 | 0.64 | 0.18 | 0.06 | 0.12 | 0.91 | 0.81 | 1.26 | 157 |
| 14 | 3 | 0.50 | 0.41 | 0.06 | 0.03 | 0.82 | 0.64 | 1.60 | 112 |
| 15 | 3 | 0.81 | 0.13 | 0.03 | 0.03 | 0.91 | 0.81 | 1.63 | 112 |
| 16 | 3 | 0.61 | 0.33 | 0.02 | 0.04 | 0.84 | 0.67 | 1.47 | 112 |
| 17 | 4 | 0.54 | 0.29 | 0.12 | 0.05 | 0.88 | 0.76 | 2.39 | 112 |

Table G. 5 Form C Reading Grades 6-8 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted Карра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 23 | 1 | 0.76 | 0.02 | 0.00 | 0.22 | 0.99 | 0.96 | 0.43 | 50 |
| 24 | 1 | 0.72 | 0.04 | 0.00 | 0.24 | 0.97 | 0.92 | 0.52 | 50 |
| 29 | 1 | 0.87 | 0.01 | 0.01 | 0.12 | 1.00 | 0.98 | 0.37 | 130 |
| 30 | 1 | 0.85 | 0.02 | 0.01 | 0.12 | 0.99 | 0.97 | 0.57 | 130 |

Table G.6 Form C Writing Grades 6-8 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 11 | 3 | 0.70 | 0.16 | 0.00 | 0.14 | 0.95 | 0.89 | 1.52 | 50 |
| 12 | 3 | 0.66 | 0.10 | 0.08 | 0.16 | 0.96 | 0.90 | 1.11 | 50 |
| 13 | 3 | 0.70 | 0.06 | 0.02 | 0.22 | 0.99 | 0.95 | 0.89 | 50 |
| 14 | 3 | 0.48 | 0.25 | 0.03 | 0.23 | 0.91 | 0.81 | 1.28 | 130 |
| 15 | 3 | 0.52 | 0.28 | 0.01 | 0.19 | 0.94 | 0.87 | 1.52 | 130 |
| 16 | 3 | 0.58 | 0.18 | 0.01 | 0.23 | 0.93 | 0.85 | 1.04 | 130 |
| 17 | 4 | 0.57 | 0.16 | 0.02 | 0.25 | 0.98 | 0.95 | 2.09 | 56 |

Table G. 7 Form C Reading Grades 9-12 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 23 | 1 | 0.88 | 0.00 | 0.00 | 0.13 | 1.01 | 1.00 | 0.66 | 64 |
| 24 | 1 | 0.86 | 0.00 | 0.00 | 0.14 | 1.01 | 1.00 | 0.73 | 64 |
| 29 | 1 | 0.70 | 0.00 | 0.00 | 0.30 | 1.01 | 1.00 | 0.59 | 61 |
| 30 | 1 | 0.72 | 0.00 | 0.00 | 0.28 | 1.01 | 1.00 | 0.57 | 61 |

Table G. 8 Form C Writing Grades 9-12 Inter-Rater Reliability

|  |  | Percentage Absolute Difference |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum |  |  |  |  |  |  |  |  |  |
| Intraclass |  |  |  |  |  |  |  |  |  |  |
| Item | Score | Perfect | Adjacent | Discrepant | Codes |  | Correlation | Kappa | Mean | N |
| 11 | 3 | 0.59 | 0.17 | 0.08 | 0.16 | 0.88 | 0.74 | 1.16 | 64 |  |
| 12 | 3 | 0.63 | 0.20 | 0.02 | 0.16 | 0.95 | 0.89 | 1.61 | 64 |  |
| 13 | 3 | 0.53 | 0.25 | 0.03 | 0.19 | 0.91 | 0.81 | 1.36 | 64 |  |
| 14 | 3 | 0.51 | 0.15 | 0.07 | 0.28 | 0.92 | 0.83 | 1.23 | 61 |  |
| 15 | 3 | 0.64 | 0.08 | 0.03 | 0.25 | 0.97 | 0.92 | 1.33 | 61 |  |
| 16 | 3 | 0.34 | 0.33 | 0.03 | 0.30 | 0.92 | 0.82 | 1.16 | 61 |  |
| 17 | 4 | 0.40 | 0.19 | 0.0 | 0.40 | 0.99 | 0.97 | 1.84 | 47 |  |

## Form D

Table G. 9 Form D Writing Grades K-1 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted Kappa | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 1 | 1 | 0.92 | 0.01 | 0.00 | 0.07 | 0.97 | 0.93 | 0.89 | 135 |
| 2 | 1 | 0.72 | 0.02 | 0.00 | 0.26 | 0.98 | 0.95 | 0.71 | 98 |
| 3 | 3 | 0.62 | 0.11 | 0.00 | 0.27 | 0.99 | 0.96 | 1.59 | 98 |
| 4 | 1 | 0.82 | 0.02 | 0.01 | 0.15 | 0.97 | 0.94 | 0.80 | 156 |
| 5 | 1 | 0.67 | 0.03 | 0.01 | 0.29 | 0.96 | 0.91 | 0.61 | 98 |
| 6 | 1 | 0.79 | 0.06 | 0.01 | 0.14 | 0.93 | 0.86 | 0.67 | 156 |
| 7 | 1 | 0.77 | 0.06 | 0.01 | 0.16 | 0.94 | 0.87 | 0.48 | 156 |
| 8 | 1 | 0.64 | 0.03 | 0.01 | 0.32 | 0.97 | 0.94 | 0.47 | 98 |
| 9 | 1 | 0.76 | 0.13 | 0.01 | 0.10 | 0.87 | 0.73 | 0.44 | 135 |
| 10 | 3 | 0.41 | 0.07 | 0.05 | 0.47 | 0.99 | 0.97 | 1.02 | 98 |
| 11 | 3 | 0.44 | 0.05 | 0.04 | 0.47 | 0.97 | 0.93 | 1.23 | 135 |
| 12 | 3 | 0.41 | 0.06 | 0.05 | 0.48 | 0.97 | 0.93 | 1.02 | 135 |
| 13 | 3 | 0.33 | 0.05 | 0.03 | 0.59 | 0.98 | 0.95 | 0.71 | 98 |
| 14 | 3 | 0.31 | 0.02 | 0.02 | 0.65 | 1.00 | 0.99 | 0.72 | 98 |

Table G. 10 Form D Writing Grades 2-3 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 11 | 3 | 0.82 | 0.11 | 0.01 | 0.06 | 0.97 | 0.93 | 2.22 | 211 |
| 12 | 3 | 0.73 | 0.15 | 0.02 | 0.11 | 0.95 | 0.90 | 1.95 | 103 |
| 13 | 3 | 0.68 | 0.18 | 0.03 | 0.11 | 0.94 | 0.87 | 1.74 | 103 |
| 14 | 3 | 0.75 | 0.19 | 0.01 | 0.05 | 0.94 | 0.88 | 2.23 | 131 |
| 15 | 3 | 0.83 | 0.10 | 0.00 | 0.07 | 0.97 | 0.94 | 2.41 | 211 |
| 16 | 3 | 0.82 | 0.10 | 0.00 | 0.08 | 0.97 | 0.94 | 2.22 | 211 |
| 17 | 4 | 0.58 | 0.26 | 0.08 | 0.08 | 0.92 | 0.83 | 2.18 | 103 |

Table G. 11 Form D Reading Grades 4-5 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass Correlation | Weighted Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 23 | 1 | 0.91 | 0.04 | 0.00 | 0.04 | 0.96 | 0.91 | 0.57 | 112 |
| 24 | 1 | 0.93 | 0.00 | 0.01 | 0.06 | 1.01 | 1.00 | 0.14 | 112 |
| 29 | 1 | 0.90 | 0.00 | 0.00 | 0.10 | 1.00 | 1.00 | 0.52 | 157 |
| 30 | 1 | 0.89 | 0.01 | 0.01 | 0.10 | 0.98 | 0.96 | 0.09 | 157 |

Table G. 12 Form D Writing Grades 4-5 Inter-Rater Reliability

|  |  | Percentage Absolute Difference |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Maximum |  |  |  |  |  |  |  |  |  |
| Intraclass |  |  |  |  |  |  |  |  |  |  |
| Item | Score | Perfect | Adjacent | Discrepant | Weighted |  |  |  |  |  |
| Codes |  |  |  |  |  |  |  |  |  |  |
| 11 | 3 | 0.55 | 0.29 | 0.08 | 0.08 | 0.86 | 0.72 | 1.49 | 112 |  |
| 12 | 3 | 0.77 | 0.16 | 0.02 | 0.05 | 0.95 | 0.89 | 1.45 | 112 |  |
| 13 | 3 | 0.60 | 0.27 | 0.06 | 0.07 | 0.86 | 0.71 | 1.42 | 112 |  |
| 14 | 3 | 0.55 | 0.27 | 0.06 | 0.13 | 0.85 | 0.70 | 1.25 | 157 |  |
| 15 | 3 | 0.63 | 0.24 | 0.03 | 0.10 | 0.91 | 0.82 | 1.73 | 157 |  |
| 16 | 3 | 0.62 | 0.24 | 0.04 | 0.10 | 0.91 | 0.81 | 1.30 | 157 |  |
| 17 | 4 | 0.68 | 0.17 | 0.01 | 0.14 | 0.97 | 0.93 | 2.40 | 106 |  |

Table G. 13 Form D Reading Grades 6-8 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass Correlation | Weighted Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 23 | 1 | 0.88 | 0.02 | 0.00 | 0.10 | 0.98 | 0.96 | 0.76 | 130 |
| 24 | 1 | 0.87 | 0.03 | 0.00 | 0.10 | 0.97 | 0.94 | 0.45 | 130 |
| 29 | 1 | 0.70 | 0.00 | 0.00 | 0.30 | 1.01 | 1.00 | 0.20 | 50 |
| 30 | 1 | 0.68 | 0.02 | 0.00 | 0.30 | 0.99 | 0.96 | 0.39 | 50 |

Table G. 14 Form D Writing Grades 6-8 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass <br> Correlation | Weighted <br> Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 11 | 3 | 0.58 | 0.20 | 0.03 | 0.19 | 0.94 | 0.86 | 1.62 | 130 |
| 12 | 3 | 0.58 | 0.21 | 0.02 | 0.19 | 0.91 | 0.80 | 1.17 | 130 |
| 13 | 3 | 0.45 | 0.36 | 0.00 | 0.19 | 0.89 | 0.77 | 1.21 | 130 |
| 14 | 3 | 0.70 | 0.12 | 0.04 | 0.14 | 0.94 | 0.87 | 1.62 | 50 |
| 15 | 3 | 0.64 | 0.12 | 0.04 | 0.20 | 0.94 | 0.87 | 1.09 | 50 |
| 16 | 3 | 0.56 | 0.22 | 0.04 | 0.18 | 0.94 | 0.85 | 1.11 | 50 |
| 17 | 4 | 0.60 | 0.14 | 0.02 | 0.25 | 0.99 | 0.97 | 2.29 | 130 |

Table G. 15 Form D Reading Grades 9-12 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass Correlation | Weighted Карра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 23 | 1 | 0.74 | 0.04 | 0.02 | 0.19 | 0.95 | 0.87 | 0.48 | 47 |
| 24 | 1 | 0.79 | 0.02 | 0.02 | 0.17 | 0.99 | 0.96 | 0.61 | 47 |
| 29 | 1 | 0.75 | 0.06 | 0.00 | 0.19 | 0.94 | 0.87 | 0.59 | 64 |
| 30 | 1 | 0.80 | 0.00 | 0.00 | 0.20 | 1.01 | 1.00 | 0.47 | 64 |

Table G.16 Form D Writing Grades 9-12 Inter-Rater Reliability

| Item | Maximum Score | Percentage Absolute Difference |  |  |  | Intraclass Correlation | Weighted Kарра | Mean | N |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Perfect | Adjacent | Discrepant | Codes |  |  |  |  |
| 11 | 3 | 0.47 | 0.15 | 0.02 | 0.36 | 0.97 | 0.91 | 0.98 | 47 |
| 12 | 3 | 0.43 | 0.23 | 0.04 | 0.30 | 0.92 | 0.83 | 1.25 | 47 |
| 13 | 3 | 0.53 | 0.09 | 0.02 | 0.36 | 0.97 | 0.91 | 0.92 | 47 |
| 14 | 3 | 0.53 | 0.23 | 0.06 | 0.17 | 0.91 | 0.82 | 1.39 | 64 |
| 15 | 3 | 0.61 | 0.16 | 0.03 | 0.20 | 0.93 | 0.85 | 1.23 | 64 |
| 16 | 3 | 0.47 | 0.23 | 0.00 | 0.30 | 0.96 | 0.91 | 1.27 | 64 |
| 17 | 4 | 0.48 | 0.17 | 0.02 | 0.33 | 0.98 | 0.94 | 2.00 | 64 |

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## Technical Manual

## Forms C \& D

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