

New Jersey

ASSESSMENT OF SKILLS AND KNOWLEDGE



2011

Score Interpretation Manual

Grades 3–8



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2011 NJ ASK

New Jersey Assessment of Skills and Knowledge

Score Interpretation Manual

Grades 3–8

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WHAT'S NEW IN THE 2011 EDITION

This year's manual contains revised information regarding the interpretation and use of test information, including the use of raw scores and scale scores for student assessment and program evaluation. Additionally, Part IV, Frequently Asked Questions and Answers (FAQs), has been expanded. Information has also been updated to reflect the 2011 administration. These updates include breakdowns of points possible by test/cluster and listings of relevant dates.

PART I: INTRODUCTION AND OVERVIEW OF THE ASSESSMENT PROGRAM

A. How to Use This Booklet

This Score Interpretation Manual provides a broad range of detailed information about how to interpret and use results of the Spring 2011 administration of the New Jersey Assessment of Skills and Knowledge for grades 3–8 (NJ ASK 3–8). It is organized as a resource for administrators and other school personnel who need to understand and discuss the score reports with others, such as parents/guardians, districts, or the media.

This manual is divided into the following parts:

Part I: Introduction and Overview of Assessment Program. This introductory section provides a description of the New Jersey assessment program in general, as well as a summary of the reporting process and each content area test: Language Arts Literacy, Mathematics, and Science (grades 4 and 8 only).

Part II: Information for School Administrators. This Score Interpretation Manual is primarily addressed to school administrators who are charged with understanding, using, and explaining the series of reports generated to communicate test results. Consequently, the information contained in Part II is detailed and technical.

- A. *Determining the Proficiency Levels*—addresses the procedures used to determine performance level descriptors (PLDs) and the associated score ranges for each of the proficiency levels.
- B. *Descriptions of the Scale Scores*—discusses the meaning and derivation of NJ ASK 3–8 scale scores.
- C. *Rescores*—describes automatic rescoring process serving as additional check on scoring.
- D. *Interpreting and Using Test Information*—provides information about assisting students who score below the minimum level of proficiency on one or more content area tests and suggestions for evaluating programs for potential curricular improvement.
- E. *Communicating Test Information*—provides guidelines for communicating test results and publicly releasing test information.

Part III: Sample Reports. In this section, we provide a definition of terms as used on the score reports, examples of each report, and explanations of the data included therein, using fictional data.

Part IV: Frequently Asked Questions. In addition to school administrators, other individuals who are curious about interpreting and using NJ ASK 3–8 test results may well be interested in consulting this Score Interpretation Manual. As such, this part is tailored to the presumed needs and questions of the public and is less detailed, though equally accurate and informative.

Appendix A: Glossary—lists and defines terms that are used in this booklet and on the score reports.

Appendix B: Scoring Rubrics—provides scoring rubrics for Language Arts Literacy, Mathematics, and Science (grades 4 and 8 only).

Appendix C: District Factor Groups (DFG)—explains the DFG designations and the underlying demographic variables.

Appendix D: Performance Level Descriptors—provides the full text of the approved PLDs for grades 3, 5, 6, and 7 in Language Arts Literacy and Mathematics and for grades 4 and 8 in Language Arts Literacy, Mathematics, and Science.

B. Test Security

While this Score Interpretation Manual does not include test material, the importance of keeping such material secure throughout the testing process cannot be overstated. Consequently, test security measures are reprinted here in order to ensure that they are fully understood and appreciated.

The test booklets and their contents are secure materials. They are not to be read or copied, wholly or in part, for any purpose without express written permission from the New Jersey Department of Education. It is the responsibility of the school districts to guarantee the security of the test materials. Security breaches may have financial consequences for the district, professional consequences for staff, and disciplinary consequences for students.

The items and passages contained in the test booklets must remain confidential because some of the items will appear in future versions of the test. This is done to maintain the stability of the test item pool over time from a technical perspective and to enable comparisons to be made from one year to the next.

Examiners, proctors, and other school personnel generally should not have access to and may not discuss or disclose any test items before, during, or after the test administration. All district and school personnel, including personnel not directly involved in administering the test, should be informed of the NJ ASK 3–8 security procedures prior to the test administration.

C. Reporting Process

The NJ ASK 3–8 program provides a variety of reports to help school personnel identify the needs of each student tested and to support the evaluation of school and district programs. This manual aims to assist in the analysis, interpretation, and use of these different types of reports. The data contained therein can help identify the types of instruction needed in the coming year for students whose results indicate the need for instructional intervention. In addition, these data will help both school and district personnel to identify and address curricular strengths and needs.

All aggregate reports are provided to the home/sending districts electronically by Measurement Incorporated (MI) via controlled secure web access. Receiving schools for out-of-residence or out-of-district students receive only the All Sections Roster in electronic form for the received

students. Using district specific passwords, district offices will download and distribute their own district and school reports. Schools can download reports specific to their school only. Individual Student Reports (ISRs) and Student Stickers are sent in hard copy to sending and receiving districts.

Reporting (late July through late August). Each district will be able to download a set of reports from www.measinc.com/njask including individual student results on rosters along with summary data for individual schools and districts. Districts will subsequently receive a set of Individual Student Reports (ISRs) and Student Stickers for each school in paper form. All reports will contain final results, including those produced through rescored papers. The data will be used by the Office of Student Achievement and Accountability for adequate yearly progress (AYP) calculations.

Districts are required to report test results to their boards of education and to the public within 30 days of receiving test reports. Parts II and III of this manual provide specific guidance and requirements regarding the use of the test information and the public release of test results.

State Summary. A State Summary will be completed and posted on the NJ DOE website before the end of the year. The State Summary data file, available in text and Excel formats, contains the same type of test results based on the Performance by Demographic Group report at the state, district, and school levels.

Table 1 lists reports distributed or available to districts during reporting. Table 2 summarizes critical events for the recipients of the score reports. This summary is a suggested reporting process; districts may have to modify the assignment of these tasks because of staffing or organizational characteristics.

Table 1: NJ ASK 3–8 Score Reports
<ul style="list-style-type: none">• Student Sticker (1 per student)• Individual Student Report (ISR) (2 per student)• All Sections Roster• Student Roster–Science (Grades 4 & 8 only)• Student Roster–Mathematics• Student Roster–Language Arts Literacy• Performance by Demographic Group–School• Performance by Demographic Group–District• Cluster Means Report• District Data File• Performance by Demographic Group–DFG• Performance by Demographic Group–Statewide

Table 2: Suggested NJ ASK 3–8 Report Delivery Responsibilities

Districts
<ul style="list-style-type: none"> • Receive Student Stickers and ISRs. • Deliver Student Stickers and ISRs to schools. • Review reports to determine program needs. • Prepare public reports. • Release information to the public. • Download and save:[*] <ul style="list-style-type: none"> ➤ All Sections Rosters ➤ Student Rosters ➤ Performance by Demographic Group–School, District, Statewide, and DFG ➤ Cluster Means ➤ District data files
Schools
<ul style="list-style-type: none"> • Receive Student Stickers and ISRs. • Deliver ISRs to teachers. • Retain and review ISRs. • Prepare parent letters. • Review reports to determine program needs. • File ISRs. • Attach Student Stickers to cumulative folders. • Download and save:[*] <ul style="list-style-type: none"> ➤ All Sections Rosters ➤ Student Rosters ➤ Performance by Demographic Group–School ➤ Cluster Means
Teachers
<ul style="list-style-type: none"> • Receive ISRs. • Review ISRs to determine instructional needs • Meet with students. • Send ISRs home with accompanying parent letters (see sample in Section II.E of this manual).

** Please remember to download and save these files from www.measinc.com/njask as soon as they become available; if you do not do so and need to subsequently order a CD from MI, you will incur a \$500 charge.*

D. History of the Statewide Assessment Program

New Jersey's state constitution authorizes "a thorough and efficient system of free public schools." In 1975, the New Jersey Legislature passed the Public School Education Act "to provide to all children in New Jersey, regardless of socioeconomic status or geographic location, the educational opportunity which will prepare them to function politically, economically and socially in a democratic society." An amendment to that act was signed in 1976, establishing uniform standards of minimum achievement in basic communication and computation skills. This amendment is the legal basis for the use of a test as a graduation requirement in New Jersey.

Beginning in 1981–1982, ninth-grade students were required to pass the Minimum Basic Skills Test (reading and mathematics) as one of the requirements for a high school diploma. Students who did not pass both parts of the test had to be retested on those parts.

In 1983, the grade 9 High School Proficiency Test (HSPT9), a more difficult test in reading, mathematics, and writing, was adopted to measure the basic skills achievements of ninth-grade students. The test was first administered as a graduation requirement in 1985–1986. In 1988, the New Jersey Legislature passed a law that moved the High School Proficiency Test from the ninth grade to the eleventh grade and added an early benchmark assessment with the grade 8 Early Warning Test (EWT). The grade 11 High School Proficiency Test (HSPT11) was to serve as a graduation requirement for all New Jersey public school students who entered the ninth grade on or after September 1, 1991.

In 1992, the New Jersey State Department of Education mandated the establishment and administration of a statewide fourth-grade test in N.J.A.C. 6:8-4.6(a)1. The elementary-level test was seen as a way to increase the effectiveness of instruction in New Jersey's elementary schools by providing an accurate measure of how elementary school students are progressing towards acquiring the knowledge and skills needed to graduate from high school and function politically, economically, and socially in a democratic society. The test also serves as a way to monitor school districts and schools to ensure that they are adequately educating their students.

In 1995, the state began the development of a fourth-grade assessment, to be aligned to new educational content standard intended to define the State's expectations for student learning. These standards, the New Jersey Core Curriculum Content Standards (NJ CCCS), were adopted in 1996 by the New Jersey State Board of Education. Along with their Cumulative Progress Indicators (CPIs), the CCCS define expected achievement in nine core content areas:

- visual and performing arts
- comprehensive health and physical education
- language arts literacy
- mathematics
- science
- social studies
- world languages
- technology
- career education and consumer, family and life skills

The NJ CCCS informed the development of three statewide assessments: (1) the fourth-grade Elementary School Proficiency Assessment (ESPA), which was administered from 1997–2002; (2) the Grade Eight Proficiency Assessment (GEPA), which replaced the EWT in 1998; and (3) the High School Proficiency Assessment (HSPA), which replaced the HSPT11 as the state’s graduation test in 2002 following three years of field testing.

State regulations (N.J.A.C. 6A8-2.1(a)5i) stipulate that the CCCS must be reviewed for possible revision every five years. Thus, the CCCS constitute a dynamic entity, not a fixed, final set of standards. Similarly, New Jersey’s assessments reflect continuous refinements and evolving understandings of the CCCS, while using assessment instruments that are highly standardized for the purposes of ensuring validity, reliability, and comparability. Revisions to the CCCS were completed in 2004.

The Elementary School Proficiency Assessment (ESPA) test specifications were aligned with the Core Curriculum Content Standards. In May 1997, and again in May 1998, a field test of the ESPA in Language Arts Literacy (Reading and Writing), Mathematics, and Science was administered to all fourth-grade students in New Jersey. In May 1999, the ESPA was administered for the first time as an operational assessment.

National trends in support of standards-based education and educational accountability led to the passage of the No Child Left Behind Act of 2001 (NCLB). NCLB required that every state establish standardized assessments in reading and mathematics, annually in grades 3 through 8 and once in high school, no later than 2005–2006, and in science at three benchmark grade levels no later than 2007–2008. As a result of these requirements, New Jersey established additional statewide assessments in grade 3 (starting in 2003) and in grades 5 through 7 (starting in 2006).

In response to NCLB requirements and to New Jersey’s own expectations that children be reading on grade level by the end of third grade, New Jersey revised its elementary assessment to develop a comprehensive, multi-grade testing program. In 2003, the New Jersey Assessment of Skills and Knowledge (NJ ASK 4) replaced the ESPA. From Spring 2004 through Spring 2008, all third and fourth graders took the New Jersey Assessment of Skills and Knowledge (NJ ASK 3&4) in Language Arts Literacy, Mathematics, and Science (grade 4 only).

In 2008, new tests in Language Arts Literacy and Mathematics were introduced under the umbrella name “NJ ASK” at grades 5–7; the grade 8 test, the GEPA, was also replaced with NJ ASK 8. In 2009, new tests in Language Arts Literacy and Mathematics were introduced at grades 3–4. The new NJ ASK tests had modified designs, consisting of greater numbers of items, thereby increasing the amount of information contained in the results. New Spanish language versions of the NJ ASK were also introduced in grades 5–8 in 2008 and in grades 3–4 in 2009. The NJ ASK tests in science, administered in grades 4 and 8, remained the same. As of 2010, the collection of assessments is referred to as the NJ ASK 3–8.

E. Overview of NJ ASK 3–8 Test Content

The NJ ASK 3–8 was designed to provide information about each student’s achievement in the areas required by New Jersey’s CCCS. The test serves as an indicator, therefore, that can be used to ensure that local instructional programs are aligned to those content standards and that students are mastering the knowledge and skills required by the end of each grade.

Table 3 illustrates the Spring 2011 test dates and the approximate testing times for NJ ASK 3–8.

Table 3: Test Dates and Approximate Testing Times, Spring 2011							
Grade	Test Dates		Testing ¹ Time (minutes)				
	<u>Regular testing</u>	<u>Make-up testing</u>	<u>LAL</u>		<u>Math</u>		<u>Science</u>
			<u>Day 1</u>	<u>Day 2</u>	<u>Day 1</u>	<u>Day 2</u>	
3	5/09/11–5/12/11	5/16/11–5/20/11	90	90	63	68	<i>N/A</i>
4	5/09/10–5/13/11	5/16/11–5/20/11	90	90	68	68	60
5	5/09/11–5/12/11	5/16/11–5/20/11	90	90	68	68	<i>N/A</i>
6	5/03/11–5/06/11	5/09/11–5/13/11	105	120–135	64	69	<i>N/A</i>
7	5/03/11–5/06/11	5/09/11–5/13/11	105	120–135	64	69	<i>N/A</i>
8	5/03/11–5/06/11	5/09/11–5/13/11	105	120–135	133	<i>N/A</i>	120

The 2011 Language Arts Literacy test consisted of reading passages, multiple-choice items, constructed-response items, and writing tasks. The Language Arts Literacy test was administered over two days for all six grades.

The 2011 Mathematics test consisted of multiple-choice, short and extended constructed-response items. Some of the multiple choice and extended constructed response items permitted the use of a calculator. The short constructed-response items had to be answered without the use of a calculator in grades 3–8. In grades 3 and 4, the use of calculators was permitted for one of the six parts of the test, while in grades 5–8, the use of calculators was permitted for three of the six parts of the test.

The 2011 Science test consisted of multiple-choice and constructed-response items. The Science test, applicable to grades 4 and 8 only, was administered over a one-day period.

Tables 4a–4c illustrate the total points possible on the NJ ASK 3–8, by content area cluster and grade. Each of these content area tests is described in more detail in the following sections.

¹ Does not include administrative time

Language Arts Literacy (LAL)

The Language Arts Literacy (LAL) test focuses on a student’s reading and writing knowledge and skills based on the NJ CCCS. The LAL score is reported in two content clusters: Reading (standard 3.1) and Writing (standard 3.2).

Reading (3.1)

Grades 3–8

- Working with or Interpreting Text
- Analyzing and Critiquing Text

Writing (3.2)

Grades 3–5

- Expository prompt
- Speculative prompt

Grades 6–8

- Persuasive prompt
- Explanatory prompt

Reading. The Reading cluster of the test requires that students read passages selected from previously published work and respond to related multiple-choice and constructed-response questions. The constructed-response questions are designed to measure a student’s comprehension of the reading selection/passage. Students are required to write their own response using examples and/or information from the reading.

In 2011, NJ ASK 3–5 tests included three operational reading passages at each grade level; NJ ASK 6-8 tests include four operational reading passages per grade level. Reading passages included literature as well as informational or “everyday” reading selections from a wide array of sources and genres.

- Narrative Reading
 - Literature written primarily to tell a story
 - Selections from previously published works
 - 500–1,000 words in length (approximate)
- Informational Reading
 - Nonfiction text written to convey information
 - Selections from previously published materials
 - 400–900 words in length (approximate)

The Reading cluster targets the following skill areas: Working with/Interpreting Text and Analyzing/Critiquing Text.

Working with/Interpreting Text involves strategies that interpret or reformulate meaning from text:

- Recognizing central idea or theme
- Recognizing supporting details
- Extrapolating information/following directions
- Paraphrasing/retelling (vocabulary)
- Recognizing text organization
- Recognizing a purpose for reading

Analyzing/Critiquing Text involves strategies to analyze and critique text:

- Questioning, clarifying, predicting
- Predicting tentative meanings
- Forming opinions about text and author’s techniques
- Making judgments/drawing conclusions
- Interpreting textual conventions and literary elements

Writing. All tasks in the Writing cluster require students to write a response that is subsequently scored using the NJ Registered Holistic Scoring Rubric (see Appendix B). In 2011, the Writing cluster consisted of writing tasks in response to two types of prompts, as indicated in Table 4a, depending on grade level.

Table 4a: Total Points Possible on NJ ASK 3–8, by Content Area Cluster and Grade, Language Arts Literacy						
Grade	3	4	5	6	7	8
Cluster						
Writing	20	20	20	18	18	18
<i>Expository Task</i> ²	10	10	10			
<i>Speculative Task</i> ³	10	10	10			
<i>Persuasive Task</i> ⁴				12	12	12
<i>Explanatory Task</i> ⁵				6	6	6
Reading	30	36	42	52	52	52
<i>Working with Text</i>	12	14	17	21	20	23
<i>Analyzing Text</i>	18	22	25	31	32	29
Total Points Possible	50	56	62	70	70	70
Multiple Choice	18	24	30	36	36	36
Constructed Response ⁶	12	12	12	16	16	16

Expository prompt. In grades 3–5, there are two formats for assessing expository writing: one introduces a topic in a brief verbal prompt and asks students to develop a composition about that topic; the second format begins with a poem that introduces a topic. That topic is elaborated further by a brief verbal prompt that students use as a basis for writing their composition. The expository prompts are based on topics familiar to students and ask them to describe, discuss, explain, or analyze some aspect of the topic. Students draw on their own experience and what they know to develop their ideas for their composition. Students in grades 3–5 have 30 minutes within which to respond to the expository prompt.

² 1–5 points each, score doubled

³ 1–5 points each, score doubled

⁴ 1–6 points each, score doubled

⁵ 1–6 points each

⁶ 0–4 points each

Speculative prompt. The speculative prompt presents a brief scenario. Students use that scenario as a springboard for writing a story, drawing on stories they have read as well as their own experiences to develop ideas for their own stories. In grades 3–5, students have 30 minutes to plan and develop their story or composition.

Persuasive prompt. Persuasive writing prompts, which only apply to students in grades 6–8, elicit students’ points of view or opinions of a given controversy. The controversies presented can be interpersonal, school/community-related, or societal in nature. Students in grades 6–8 have 45 minutes within which to respond to the persuasive prompt.

Explanatory prompt. In grades 6-8, explanatory prompts present students with an essay topic based on a quotation or adage, or based on a familiar topic. Each is a springboard for the student to write a composition. Explanatory writing is used to share knowledge and to convey ideas and experience. In responding to the topic or quotation presented, students are asked to explain their points of view and to create original works. Explanatory writing may be based on the writer’s personal knowledge and experience or on information presented to the writer. Students in Grades 6-8 have 30 minutes within which to respond to the explanatory prompt.

A Writer’s Checklist is provided to all students during testing to encourage students to read, reread, revise, and edit their written work for all writing tasks.

Mathematics

The Mathematics test measures students’ ability to solve problems by applying mathematical concepts. The Mathematics component measures knowledge and skills in four clusters; numeric codes for the corresponding standards are indicated in parentheses:

- Number and Numerical Operations (4.1)
- Geometry and Measurement (4.2)
- Patterns and Algebra (4.3)
- Data Analysis, Probability, and Discrete Mathematics (4.4)

Mathematics contains both multiple-choice and constructed-response items. There are two types of constructed-response items: extended constructed-response (previously known as open-ended) and short constructed-response. The extended constructed-response items require students to solve a problem as well as explain their solution. The short constructed-response items only require an answer, not an explanation.

Some mathematics items are also classified and reported as Problem Solving, which means that the items require problem solving skills in applying mathematical concepts (for example: solving, applying, reasoning, communicating, modeling, constructing, etc.).

Problem Solving items are defined based on the Mathematical Processes standard of the NJ CCCS: “Problem posing and problem solving involve examining situations that arise in mathematics and other disciplines and in common experiences, describing these situations mathematically, formulating appropriate mathematical questions, and using a variety of

strategies to find solutions. Through problem solving, students experience the power and usefulness of mathematics. Problem solving is interwoven throughout the grades to provide a context for learning and applying mathematical ideas.” (For the full text of the NJ CCCS, please see www.nj.gov/education/cccs/.)

Table 4b: Total Points Possible on NJ ASK 3–8, by Content Area Cluster and Grade, Mathematics						
Grade	3	4	5	6	7	8
<u>Cluster</u>						
Number & Numerical Operations	20	20	18	13	13	13
Geometry & Measurement	11	11	16	14	14	14
Patterns & Algebra	11	11	8	14	14	14
Data Analysis, Probability, & Discrete Mathematics	8	8	8	8	8	8
<i>Problem Solving</i>	<i>14</i>	<i>20</i>	<i>22</i>	<i>29</i>	<i>27</i>	<i>34</i>
Total Points Possible	50	50	50	49	49	49
Multiple Choice	35	35	33	32	32	32
Short Constructed Response ⁷	6	6	8	8	8	8
Extended Constructed Response ⁸	9	9	9	9	9	9

⁷ 0–1 point each

⁸ 0–3 points each

Science

The Science test measures fourth and eighth grade students' ability to recall information and to solve problems by applying science concepts. The Science test assesses knowledge and application skills in three clusters; each cluster contains multiple-choice items and constructed-response items. The CCCS numbers corresponding to the three clusters are indicated in parentheses.

- **Life Science** (5.5, 5.10)

Matter, Energy, and Organization in Living Systems
 Diversity and Biological Evolution
 Reproduction and Heredity
 Natural Systems and Interactions
 Human Interactions and Impact

- **Physical Science** (5.6, 5.7)

Structure and Properties of Matter
 Chemical Reactions
 Motion and Forces
 Energy Transformations

- **Earth Science** (5.8, 5.9)

Earth's Properties and Materials
 Atmosphere and Weather
 Processes that Shape the Earth
 How We Study the Earth
 Earth, Moon, Sun System
 Solar System
 Stars
 Galaxies and Universe

Science items are also classified and reported as either

- Knowledge (Comprehension and Science, Society/Technology), or
- Application (Habits of Mind/Inquiry and Mathematics).

Table 4c: Total Points Possible on NJ ASK 3–8, by Content Area Cluster and Grade, Science						
Grade	3	4	5	6	7	8
<u>Cluster</u>						
Life Science		16				25
Physical Science		12				17
Earth Science		11				12
<i>Knowledge</i>		3				7
<i>Application</i>		36				47
Total Points Possible		39				54
Multiple Choice		33				48
Constructed Response ⁹		6				6

⁹ 0–3 points each

PART II: INFORMATION FOR SCHOOL ADMINISTRATORS

One of the primary purposes of the NJ ASK is to identify areas of curricular strength and weakness by examining the extent to which students meet the established performance expectations for each content area. Based on test results, a student's performance is categorized as being Partially Proficient, Proficient, or Advanced Proficient. Performance Level Descriptors (PLDs) translate these performance standards into words. They describe in qualitative and broad terms what it means to attain the levels, Proficient and Advanced Proficient, in each content area. The PLDs are stated in terms of the New Jersey Core Curriculum Content Standards (NJ CCCS) for Language Arts Literacy, Mathematics, and Science.

The PLDs and their relationship to specific scale scores are established through a standard setting process that is driven primarily by the work of New Jersey educators. In the standard setting year of a test (typically the first year), standard setting committees are put together consisting of New Jersey teachers nominated by their districts. The committees meet for several days in structured sessions facilitated by the test contractor, in conjunction with NJ DOE. Following standard industry-wide procedures, the committees determine the raw scores that identify a marginally proficient student (that is, the raw score that would convert to a scale score of 200) and a marginally advanced proficient student (the raw score that would convert to a scale score of 250). They establish these cut scores on the basis of the material on the tests, the published state curriculum standards, and their experience and expertise in working with students.

Using the proficient and advanced proficient cut scores and the statistics generated from the raw scores of all the students in the state, statisticians from the contractor then mathematically generate the rest of the distribution of scale scores. After a review by NJ DOE officials, and with the approval of the State Board of Education, the final cut scores are set.

In the years that follow, the scale scores are derived from an equating process through which the scale is made to consistently reflect the same levels of achievement as in the standard setting year.

The PLD development, standard setting, and equating procedures for the NJ ASK are described in detail below.

A. Determining the Proficiency Levels for the NJ ASK 3–8

New Jersey Department of Education (NJ DOE) staff, working with staff from Measurement Incorporated (MI), developed initial draft PLDs. On May 30, 2008, NJ DOE and MI staff presented draft PLDs for grades 5–8 to committees of New Jersey educators meeting in Princeton for further review and revision. Likewise, on May 28, 2010, New Jersey educators met to review and revise draft PLDs for grades 3 and 4. At these one-day meetings, participants made numerous suggestions for revisions, which NJ DOE staff collected and integrated into final PLDs. These final PLDs serve as descriptive benchmarks for subsequent standard setting committees, also comprising New Jersey educators, which establish the Proficient and Advanced Proficient performance cutoff scores for the base year, the year to which subsequent

administrations are ultimately equated, in each of the content areas. Districts may find the PLDs useful for relating test scores to curriculum content when interpreting test results.

The final NJ ASK 3–8 Performance Level Descriptors for Language Arts Literacy, Mathematics, and Science are attached as Appendix D and are available on the NJ DOE website, at www.nj.gov/education/assessment/descriptors/.

Setting NJ ASK standards. Prior to 2008, the performance standards in Language Arts Literacy (LAL) and Mathematics had been established across a range of years, as indicated below.

- Grade 4 math and grade 8 LAL and math: standards set in 1999
- Grade 4 LAL: standards set in 2001
- Grade 3 LAL and math: standards set in 2003
- Grades 5–7 LAL and math: standards set in 2006

With the introduction of new LAL and math tests in 2008 (grades 5–8) and in 2009 (grades 3–4), new standard setting meetings were conducted for each of these tests, respectively, for grades 5–8 June 24–27, 2008, in Trenton, New Jersey, and for grades 3–4 June 23–26, 2010, in East Windsor, New Jersey. The purpose of each meeting was to identify, at each of grades 3 through 8, the thresholds of performance, or minimum performance levels, on the NJ ASK Language Arts Literacy and Mathematics tests that are indicative of Partially Proficient, Proficient, and Advanced Proficient performance, as defined by the Proficiency Level Descriptors (PLDs). Based on the results of the standard-setting meeting, NJ DOE staff made recommendations to the Commissioner of Education and the New Jersey State Board of Education for the adoption of cut scores (i.e., proficiency levels) for the NJ ASK.

New Jersey teachers nominated by school districts across the state were invited to participate in the standard-setting meeting, based on their qualifications as judges of student performance and content expertise. Participants represented the general population of New Jersey. Participants took the test specific to their content area expertise, scored the tests, reviewed PLDs, and engaged in three rounds of test review using the Bookmark standard-setting procedure¹⁰.

Briefly, the Bookmark procedure entails panelists examining a booklet containing NJ ASK operational test items from the most recently administered test, ordered by difficulty and, for each item, determining whether a minimally Proficient or minimally Advanced Proficient student would have a 2/3 chance of answering the item correctly (for multiple-choice items) or obtain the given score point (for constructed-response items). The difficulty-ordered booklet consists of the items from the actual test, one item per page, arranged in order of difficulty, with the easiest item on the first page and the most difficult item on the last page.

Each page of the difficulty-ordered booklet contains not only the item, but also essential information about the item, including the achievement level (theta) required for a student to have a 2/3 chance of answering correctly or obtaining that point. These theta values are derived from a statistical analysis of actual student responses to the items using item response theory (IRT) procedures.

¹⁰ Cizek, G.J. and Bunch, M.B. (2007). *Standard setting: A guide to establishing and evaluating performance standards on tests*. Thousand Oaks, CA: Sage Publications, Inc.

The standard-setting panelists entered two bookmarks on a special form, one each for the last page they believe a minimally Proficient or minimally Advanced Proficient student would have a 2/3 chance of answering correctly. The page number is associated with a theta required for a 2/3 chance of answering correctly. These theta values were then averaged across all panelists, and the mean theta was next translated into a raw score using the IRT analysis (in this case, the one-parameter Rasch model) of the live test results.

To promote consensus, three rounds of bookmarking occurred involving the same items, with panelists working in small groups and having the opportunity to discuss their judgments with other members of their groups. Prior to the third and last round of bookmarking, panelists were given the opportunity to view impact data — that is, the actual percentage of New Jersey students that would be classified as Partially Proficient, Proficient, or Advanced Proficient — given these raw cut scores. Judgments regarding cut scores tended to converge with each round.

At the close of the standard-setting meeting, MI staff calculated final cut scores and reported them to NJ DOE.

For the present NJ ASK 3–8, as for previous tests, the recommendations of the standard setting committees were presented to NJ DOE senior staff and the Commissioner of Education for review. At this point, modifications may be made, but only within the statistical error range of the standard setting panel results. Subsequently, the Commissioner presents the results of this review to the State Board of Education for approval and adoption.

Equating. In order to ensure that the scale scores are meaningful, it is critical that, for each test, the same scale score be equally difficult to achieve from year to year. To that end, the test scores in each content area and at each grade level are statistically equated to previous year scores.

Each year, all the tests are constructed using items that were field tested, making it possible to estimate the difficulty of the test questions and the test as a whole. It is not possible, however, to anticipate the *precise* difficulty level of a test in advance. As a result of the small year-to-year variation that exists in the difficulty levels of the tests, the same level of knowledge and skill may produce slightly different raw scores from one year to the next. To compensate for this variation, raw scores are converted to equated scale scores. The equating process ensures that the same scale scores reflect equivalent levels of knowledge and skill from year to year; it enables us to say with confidence that any given scale score is equally difficult for students to attain on any given test in any given year.

For example, in years in which the test proves to be slightly more challenging, a given raw score will produce a higher scale score (because it is harder for a student to achieve the same raw score on a more challenging set of questions). In other words, a given raw score would be more difficult to achieve on a more difficult test and would, therefore, produce a higher scale score. The reverse is true when the test turns out to be a bit less challenging.

B. Descriptions of the NJ ASK 3–8 Scale Scores

The NJ ASK 3–8 reports both raw and scale scores. A raw score is the total number of points a student earns on a test. A scale score is simply a conversion of that raw score, using a predetermined mathematical algorithm, to permit legitimate and meaningful comparisons over time and across grades and content areas.

The total scores in Language Arts Literacy, Mathematics, and Science are reported as scale scores with a range of 100 to 300. The scale score for Language Arts Literacy is a total score based on a combination of the number of correct answers to multiple-choice items and the number of points earned for constructed-response items and writing tasks. The scale score for Mathematics is a total score based on a combination of the number of correct answers to multiple-choice items and the number of points received for constructed-response items. The scale score for Science is a total score based on a combination of correct answers to multiple-choice items and the number of points received for constructed-response items.

As noted above, New Jersey adopted a set of raw cut scores for the NJ ASK 3–8. (Language Arts Literacy and Mathematics only. Standard setting for grade 8 Science was conducted in 2000 and for grade 4 Science in 2004; raw cut scores were adopted at that time, and each subsequent test has been equated to that base year.) The conversion algorithm ensures that the raw cut score for Proficient performance translates to a scale score of 200 and that the raw cut score for Advanced Proficient performance translates to a scale score of 250. The score ranges for the proficiency levels are as follows:

Advanced Proficient	250–300
Proficient	200–249
Partially Proficient	100–199

Partially Proficient is considered to be below the state minimum level of proficiency. Students at this proficiency level may need additional instructional support, which could be in the form of individual or programmatic intervention.

C. Rescoring and Record Changes

Automatic rescoring. As part of the scoring process, rescoring is conducted automatically for any student who scores one raw score point below the proficient cut score. MI reviews writing and constructed-response items and verifies the original scores or makes changes, if warranted. *Scores are never lowered during the automatic rescoring process.* Districts do not need to request these rescoring.

Districts (not schools, parents, or students) may request that MI rescore a student’s responses on behalf of students scoring outside of the automatically eligible range for a fee of \$300 per student per content area. Districts must submit a purchase order to MI. If no score increase results, the district is responsible for paying for the cost. However, if a score increase results from the rescoring process, MI returns the district’s purchase order.

Record changes. A record change period allows the districts an opportunity to correct inaccurate student demographic information that the district provided for the assessment. Record changes are completed before reporting. Corrections to the student information are reflected in the reports.

D. Interpreting and Using Test Information

The raw scores and scale scores provide different sets of information that may be used for program-level and student-level evaluation. Equated across years that pass between standard settings, and only across those years, scale scores provide the opportunity to gauge long-term trends *within content areas and grade levels*. As such, they provide the best generalized information about overall performance.

Organized into clusters within content areas, raw scores permit a more targeted view of performance. While they provide more specific information, they do not accommodate cross-year comparisons. Nor do they permit cross-cluster comparisons. When comparisons of cluster results are made, they must be within-year and within-cluster.

Student-Level Evaluation

Scale scores. Individual Student Reports are provided to districts to help them evaluate student instructional needs. To an extent, students' proficiency levels can inform school and district decisions regarding instructional support.

- Scores indicative of Advanced Proficient performance reflect performance that has clearly met or exceeded state standards. It is rare for students falling in this range to be in need of instructional intervention.
- Scores indicative of Proficient performance reflect performance that generally has met the state standards. It is typically true that students falling in this range are not in need of instructional intervention, but one may wish to look more closely at students whose scores approach the lower end of this distribution to confirm that instructional intervention is in fact not needed.
- Scores indicative of Partially Proficient performance reflect performance that has not met the state standards. Students falling into this range are most likely to be in need of instructional support, particularly those lower in the range.

The issue of scale score reliability comes into play here. If it were possible to test a student a very large number of times, and if no learning were to take place between test administrations, some variability would nevertheless occur in the student's scale scores. That variability relates to the concept of test-retest reliability. Although the NJ ASK is designed to optimize scale score test-retest reliability, it is not possible to produce a test with scores that are 100% reliable. A student's NJ ASK score should, therefore, be considered an estimate of student performance level.

The accuracy of a score is also affected somewhat by its location on the scale. Scores on the NJ ASK tend to be more precise in the general area of the cut score and less precise at the extremes, so the accuracy of score differences in the vicinity of 200 tends to be greater than in the lower

part of the partially proficient range or the advanced proficient range. This point is of particular significance for the use of scale scores to identify students for placement into advanced or honors classes, as more latitude and flexibility is called for in interpreting scores in that part of the score distribution.

As one encounters scores that fall lower in the partially proficient range, one faces an increasing need for a more thorough diagnosis of potential achievement deficits, as one often encounters not only less precision in the scores, but also a paucity of information regarding the specific nature of student needs, given the likely prevalence of incorrect responses across skill areas.

In all cases, however, some amount of additional assessment, formal or informal, must be conducted when formulating an instructional plan. Further examination of a student's knowledge and skill should include the student's whole profile. Decisions about appropriate instructional placement should be based on an examination of a student's classroom test results, grades, anecdotal records, portfolios, checklists, school-level results, and other measures of performance.

Raw scores. NJ ASK Score Reports include information specific to content clusters within each content area. While they do not provide information at a skill-specific level, cluster-level data can provide some general clues regarding student knowledge and skill. In using cluster data to evaluate individual student performance, one must keep the following limitations in mind.

Cluster difficulty. As indicated above, inasmuch as the NJ ASK is equated at the test level only, it is inappropriate to compare cluster means or raw scores across years. Since the same cluster may vary in difficulty level from year to year, cluster performance should not be directly compared across multiple test administrations.

Additionally, in any given year, not all clusters can be assumed to be equally difficult; consequently, comparing the score in one cluster to the score in another cluster is not meaningful. For each year, a useful benchmark is provided by each cluster's just proficient mean (JPM), the mean score in that cluster obtained by students statewide with scale scores of 200. The JPM provides an index to which all students' scores in that same cluster can be compared, as it allows one to view how a student performs relative to the profile of the borderline proficient student.

Cluster reliability. All other factors being equal, the reliability (stability) of scores decreases as the number of items decreases. Consequently, the reliability of cluster scores is generally lower than the reliability of the test as a whole and, among clusters, reliability is generally lower in clusters that have smaller numbers of items. Put differently, equal differences in cluster scores are commonly less interpretable for clusters that contain fewer items.

While the interpretation of scores is dependent upon the amount of potential error one is willing to tolerate, a general rule is that conclusions regarding the relative performance of individual students are risky when based upon cluster differences of one or two points, particularly for clusters containing few items. As in shades of grey, the greater the differences in the cluster performance of individual students, the more likely they are significant.

Program-Level Evaluation

Scale scores. Performance by Demographic Group Reports, containing school-level and district-level information, are provided to districts to help them evaluate the effectiveness of the instructional program for the full district or school population, as well as for program and demographic groups. The data facilitate cross-group as well as cross-year comparisons. Additionally, comparisons of performance, within and across years, can be drawn among different schools within the district and between school or district performance and the performance of the state or the district factor group (DFG), the latter comprised of districts at approximately the same socioeconomic level.

Group-level scale score data, whether percentages of students falling into various proficiency ranges or mean scale scores, are well suited to graphic representation, which often makes trends and differences more evident. Scale scores may be readily used for statistical analysis to study the effectiveness of instructional programs and methodologies. When comparing groups statistically, as the performance levels between groups become increasingly different, and as the performance levels of individuals within each of the groups become increasingly similar, the results of the group comparisons become increasingly significant. The important caveat to keep in mind is that, all things being equal, the larger the group, the more significant the results.

Raw scores. As in the interpretation of student-level raw score data, group-level raw scores cannot be compared from year to year or from cluster to cluster. In group-level data, however, there is less of the random error that impairs the interpretation of individual-level results. In general, the larger the group, the more this error is reduced, as the errors in individual scores tend to balance out.

While fairly large differences are needed to draw inferences at the individual level regarding cluster performance, smaller differences at the group-level may be meaningful and may provide useful information for establishing instructional priorities. As a result, where a relatively small difference in cluster scores may be meaningless when comparing the performance of two students, or when comparing one student against the just proficient mean, it may be significant when comparing *groups* or when making a comparison between a *group* and the just proficient mean. The data in the Cluster Means Report can, therefore, provide meaningful comparisons of cluster performance among schools and between schools or districts and the DFG or the state, including the just proficient mean.

Suggested Procedures for Interpreting School and District Reports

An analysis and interpretation of School and District Reports can help identify areas of curriculum that may need modification in order to help students meet the State Core Curriculum Content Standards. The procedure suggested below is intended to serve as a guide in this process.

Establishing interpretation committees. Interpretation committees should be established for each content-area test. Committees may be district-wide or they may be created at the school level. Committee members should:

- be familiar with the appropriate curriculum in grades K–12
- be responsible for instruction in grades K–12
- be familiar with special programs in the particular discipline (remedial, advanced placement, etc.)
- represent Language Arts Literacy, Mathematics, and Science
- represent schools or districts responsible for instruction in grades K–12
- represent staff responsible for remediation in grades 1 through 12. In districts that do not span the complete K–12 range, an effort should be made to involve staff from the upper-graded districts that accept your students.

The committees should include representation from programs of grades K-12 because the skills assessed are not limited to those taught in just grades 3 through 8. Staff from disciplines other than Language Arts, Mathematics, and Science should be involved because the assessed skills have applications in a variety of content areas. In addition, the composition of the committees should foster articulation and collaboration among schools and across grade levels.

District-level committees should include staff who are involved in interpreting the school reports, educators who provide the students’ instructional program, as well as the chief school administrator and other appropriate central office staff.

Suggested interpretation procedure. Using the interpretation procedure described below, committees should focus on performance relative to the district’s expectations and identify factors that have contributed to less than satisfactory performance (as defined by the district), overall and on each cluster. In general, committees should analyze the means (overall and for each cluster), comparing the cluster means first to determine those for which overall student performance was poorest or those that are viewed as falling below local expectations. The following specific steps are recommended.

1. Orient the committees to their task by reviewing the following:
 - the procedure that will be used to analyze the reports, including information about the types of analyses that are to be done;
 - the format and content of the reports to ensure that all members understand the reports (using the information in this booklet as a primary source);
 - the limitations of the test data, to ensure that appropriate interpretations are made of the results; and
 - the schedule for completing the task.
2. The committees may begin by comparing:
 - this year’s school cluster means with this year’s district cluster means;
 - this year’s district cluster means with DFG cluster means; and
 - this year’s school and district cluster means with this year’s Just Proficient Means.

3. Using all of the available information, the committees may determine, for each cluster, if there is a level of performance that is minimally acceptable for the school or district.
4. If minimum performance standards are established for the clusters, the committees should use them to create a list of clusters on which the performance of the target group was significantly below or above the performance of the comparison group.
5. For each cluster included on the lists that result from Number 4 above, the committees should identify which differences seem to result from local actions or circumstances.
6. The committees can then develop a summary of the overall performance of the target group, including statements of strengths and needs, if any have been identified, along with a description of plans for addressing the needs.

Program evaluation based on cluster analysis may indicate the need to:

- More closely align the skills taught in school with the current Core Curriculum Content Standards;
- Provide instruction on the skills covered in those clusters for which student performance was low relative to district expectations;
- Examine test item format and compare it with teacher-designed test items used to assess ongoing instruction and use various test item formats as part of the ongoing evaluation, and
- Share the analysis and recommendations with all staff, regardless of content area.

In summary, the performance analysis should be focused primarily on the information the results provide about the strengths and needs of your programs. Districts should be looking at how and when the assessed skills are presented in the curricular scope and sequence. Skills should be reviewed and reinforced across several grade levels and in all content areas, including those other than Language Arts Literacy, Mathematics, and Science. While articulation and collaboration may be easier to achieve in K–12 districts, they must also be initiated in receiving and regional districts.

Making Group Comparisons

The school and district reports allow for a relatively large number of group comparisons; the most meaningful comparisons are those made of similar groups on similar tasks. Consequently, committees are advised:

- (1) whenever possible, to compare groups with similar characteristics;
- (2) to compare performance on similar tasks (for example, the same cluster within the same content area); and
- (3) not to compare cluster scores from year to year.

Narrative Reports

Some districts develop narrative reports to accompany their school and district report interpretations. Although such reports are optional, a narrative summary could be valuable when used as the basis for your testing report to your board of education and to the public. Any such reports should also be shared and discussed with the appropriate district personnel. Guidelines for communicating test information to parents/guardians, districts, and the media appear in a subsequent section of this manual; below, however, we offer a sample report outline, should a district opt to develop a written narrative.

- I. Background Information
 - A. Briefly describe the nature and purpose of the NJ ASK 3–8.
 - B. Discuss the population of students who did and did not participate in the test.
- II. Cluster or Skill Narratives
 - A. Summarize strengths, weaknesses, and other comments from the completed interpretations.
 - B. Complete these summaries for each content area.
- III. Summative Narratives
 - A. Synthesize cluster narratives for each content area. Include statements about general strengths and identified needs.
 - B. Compare NJ ASK 3–8 results to other local test results in an effort to identify possible trends in student performance.
- IV. Recommendations
 - A. Prepare a list of recommendations that includes a statement of the needs and possible plans to address them.
 - B. Develop a list of short- and long-range objectives for a total skills program (developmental and preventive/remedial).

NOTE: *Staff familiar with the test results and the interpretation process should be present when test results are presented to the public to answer questions and avoid misunderstandings or misinterpretations.*

Protecting Student Confidentiality

A number of federal laws protect student confidentiality in the reporting of data to the public.

- The 1974 Family Educational Rights and Privacy Act, administered by the U.S. Department of Education (USDOE), limits the release of student information.
- The Individuals with Disabilities Education Act (amended 2004), also administered by the USDOE, limits the reporting of information specific to students with disabilities.
- The 1994 Richard B. Russell National School Lunch Program Act, administered by the U.S. Department of Agriculture, limits the use of free and reduced lunch student information in the reporting of data.

In the reporting of group assessment summary data, the intent is to protect student privacy through procedures that systematically prevent members of the public from discerning student identity. While confidentiality policy decisions related to reporting are largely left to states (for state reports) and to school districts (for school and district reports), complaints pertaining to the release of information are investigated by the USDOE, which has the power to withhold funding where privacy violations are found to exist. Additional penalties (including fines and/or imprisonment) for privacy violations in the release of economic status information may be assessed under the National School Lunch Program Act.

Guidelines provided by the Federal government state that in the reporting of assessment results, suppression of numbers should occur in categories where the counts are low, making it otherwise possible to infer the results of individuals. Additionally, data should be suppressed in any category where it is possible to infer individual results through subtraction or other simple mathematical deductions.

In practice, it is common to suppress numbers where a group size is equal to ten or less and to suppress totals when it is possible to calculate back to the results of two students. Precautions are also taken when it is possible to infer individual information because all the students in a district, school, or a population group fall into a category or level that has negative connotations associated with it. Suppressed numbers in reports are often replaced by asterisks (or comparable symbols) or by statements such as “greater than” (or “less than”) some percentage. Where any of these devices are used, there should also be some statement that the numbers are suppressed to protect student privacy. District policies regarding data suppression should be written and made available to the public.

E. Communicating Test Information

Analysis and interpretation of the NJ ASK 3–8 reports are required by the New Jersey Administrative Code (N.J.A.C. 6A:8-4.3(a)). Within 30 days of receipt of the reports, an analysis must be completed by the district and the summary report made available to the public.

Appropriate confidentiality safeguards must be implemented to protect individual students. Individual student data must never be released to the public.

This section provides guidelines communicating test results to parents/guardians, the district, the state, and the media. **Individual and roster reports should not be released to the public because they list students’ names and are, therefore, not in the public domain.**

To the Parent/Guardian

To help explain to parents and guardians both the purpose of the NJ ASK 3–8 and the information provided on the Individual Student Report, a sample form letter to the parent/guardian of a grade 6 student is included (Figure 1) that can be adapted, signed, photocopied, and sent home with each student along with his/her Individual Student Report.

To the District

Districts are required to make available to the public “the number of pupils tested and the percentage of pupils at or above the established levels of pupil proficiency.” When the number of students is large enough (more than 10 students), the results may be considered sufficiently meaningful to report. The Performance by Demographic Group reports contain information that can be used to prepare a public statement.

To the Media

Release information to the media only after having prepared to answer questions either in person or on the telephone. Be sure to analyze the data beforehand; understand and be able to clearly explain the various types of scores. It is recommended that any comparison among schools/districts be avoided.

Figure 1—Sample Parent/Guardian (Grade 6) Form Letter—NJ ASK 3–8

Test Title: New Jersey Assessment of Skills and Knowledge
Test Dates: May 3–9, 2011 (regular) May 9–13, 2011 (make-up)
Test Report: Individual Student Report

Dear Parent/Guardian:

Your child’s Individual Student Report for the 2011 New Jersey Assessment of Skills and Knowledge (NJ ASK 3–8) is attached. The NJ ASK was administered over a four-day period within a two-week window for grades 3–8 in May 2011. This report presents your child’s Language Arts Literacy and Mathematics scores on this test. The NJ ASK Language Arts Literacy and Mathematics scores are reported as scale scores with a range of 100 to 300. Scores at or above 250 indicate “Advanced Proficient” performance. Scores from 200 to 249 indicate “Proficient” performance. If your child is in the “Advanced Proficient” or “Proficient” level, he/she has met the state standards for that content area. Scores below 200 indicate your child performed at the “Partially Proficient” level and has not met the state minimum level of proficiency, based on this test administration, and may need some type of additional instructional support.

This report is available only to parents, guardians, and authorized school officials. If you have any questions about the report, you should contact your child’s teacher or principal. They can help you interpret the information on the score report and can explain what the instructional staff is doing—and what you can do—to help your child master the skills measured on the test.

PART III: SAMPLE REPORTS

Assessment results are most useful when they are reported in a way that allows educators to focus on pertinent information. The NJ ASK 3–8 reports are designed to communicate results in ways that provide information to educators and parents for program and individual student planning.

The reporting formats are identical across grades 3, 5, and 7; grades 4 and 8 reports differ only in that they include Science test data. Figures 2–9 show examples of the various reports slightly reduced in size. All names and data are fictional.

A. Terms and Definitions

The following terms and definitions apply across all NJ ASK score reports. Appendix A: Glossary provides additional definitions and explanations of codes.

- **APA:** indicates whether a student takes the Alternate Proficiency Assessment in a particular content area and is thus exempt from taking the NJ ASK 3–8 in that content area. On the Performance by Demographic Group report, these students are grouped in the “APA Students” column.
- **Enrolled or Students Processed:** number of unique students for whom used test booklets (grades 3–4) or answer folders (grade 5–8) were returned, plus the number of students added during the record change period. Includes students who took any form, including the braille, large print, Spanish and alternate form. Equal to the sum of the APA Students, Not Present, Voids, and Valid Scale Scores columns on the Performance by Demographic Group report.
- **Not Present:** indicates that a student did not participate in a particular content area of the NJ ASK 3–8, and was not coded APA, void, medical emergency or LEP exempt (LAL only). On the Performance by Demographic Group report, these students are grouped in the “Not Present” column.
- **Scale Score:** a transformation of the raw score attained in any tested content area, by a student who participated in the test and who was not coded “void.” On the Performance by Demographic Group report, all students who received a scale score are grouped in the “Valid Scale Scores” column. This column includes students who took any form, including the braille, large print, Spanish and alternate form.
- **Void:** indicates that a student was coded void. See Appendix A for specific codes. On the Performance by Demographic Group report, these students are grouped together in the “Voids” column, along with students with a medical emergency and students coded LEP Exempt (LAL only).

B. Student-Level

Student Stickers

The Student Stickers (Figure 2) are sorted and printed by grade and alphabetically by last name; stickers for students who are designated Out-of-District or Out-of-Residence (see below), however, appear at the end of each grade. For these students, one sticker is sent to both the sending and the receiving school. It is a peel-off label, designed to be easily attached to the student's permanent record. For all other students, one sticker is provided to the school.

Figure 2—Sample Student Sticker

Test Date: SPRING 2011	New Jersey Assessment of Skills and Knowledge	
County: 88 ANY COUNTY		
District: 7777 ANY DISTRICT		
School: 666 ANY SCHOOL		
Student Name: CHEN, HIRAL		
NJ ASK ID No.: 7110004970	SID: 0000011791	
Grade: 7	LEP:	T-I:
DOB: 03/22/95	SE:	APA:
Sex: F		District / School ID No.:
Language Arts Literacy: 261		ADVANCED PROFICIENT
Mathematics: 240		PROFICIENT

Each sticker is divided into three sections:

1. The top section includes the names and codes of the county, district, and school. Some students will be classified as Out-of-Residence or Out-of-District placements. Out-of-Residence and Out-of-District students are affiliated with two different schools, a sending and receiving school. The sending school is the one in which the student is registered because it is his/her home school; the receiving school is the one that administers the test to the student. For these student stickers, the top section provides county, district, and school names for both the sending and the receiving school/district.
2. The middle section contains student-specific identifying information, including Name, NJ ASK ID number, Student ID (SID), Grade, Date of Birth (DOB), Sex, LEP status, SE status, T-I status, APA classification, and District/School ID No.
3. The bottom section displays the student's scale score in each of the content areas, along with the associated proficiency level. If a student did not receive a scale score for any reason, such reason will be noted here. (For a description of reason codes, please see Appendix A.)

The Individual Student Reports and Student Rosters described in this section provide data that may be used to help identify student strengths and needs. As discussed earlier, the NJ ASK divides students into three performance levels: Partially Proficient, Proficient, and Advanced Proficient. Students whose scores indicate Advanced Proficient performance have clearly met and exceeded the state standards. Students whose scores indicate Proficient performance have also met the state standards, while students whose scores indicate Partially Proficient performance have not met the state standards and may need additional targeted instructional support.

Individual Student Report (ISR)

The ISR is a two-sided report, produced in grade and alphabetical sequence for students within a school. ISRs for students who are designated Out-of-District or Out-of-Residence, however, appear at the end of each grade. For these students, two ISRs are sent to both the sending and the receiving school. An ISR is produced for every student record; Figure 4 shows a sample 2011 ISR. Two ISRs are printed and shipped to the home/sending district for each student record: one for the student’s permanent folder after the results are analyzed, and the other for the student’s parent/guardian to be shared in a manner determined by the local district. If a student takes the Spanish version of the NJ ASK, four copies will be provided: two in English and two in Spanish. (See section II.E for suggestions about communicating test results to parents/guardians.)

The ISR presents a student’s performance in each content area, indicating the extent to which the student meets or does not meet the State proficiency standards. Scores are provided for each cluster to identify particular areas of strength or areas in which the student needs improvement. When applicable, the ISR will also indicate why a student does not receive a scale score for a content area. For a description of reason codes in such cases, please see Appendix A.

At the top of the ISR, you will find the date of test administration as well as the date the report itself was printed. The substance of the ISR follows and is divided into three sections—two on the front of the ISR and one on the back.

1. The first section, “Student/School Information,” is similar to the student sticker in the identifying information it provides. Specifically, in this section are:

- Student name
- Student ID (SID)
- NJ ASK ID number
- Local District/School ID number
- Answer folder number
- Date of birth
- Grade
- Gender (Sex)
- County (code and name)
- District (code and name)
- School (code and name)
- Other student information, including any Limited English Proficient, Special Education, Title I, Out-of-Residence, Out-of-District classifications, or braille, large-print, Spanish, or alternate form use (see Appendix A)

Figure 3–Sample Individual Student Report

New Jersey Assessment of Skills and Knowledge Individual Student Report


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TEST DATE: SPRING 2011
REPORT PRINTED: 7/15/2011

Student/School Information						
<p>ESPINOZA, JACLYN M State Student ID: 0000023249 NJ ASK ID Number: 4110006972 Local District/School ID Number: 136861444 Test Booklet Number: 12132 Date of Birth: 05/11/92 Grade: 4 Sex: F</p> <p>Your child attends: COUNTY: 88 ANY COUNTY DISTRICT: 7777 ANY DISTRICT SCHOOL: 666 ANY SCHOOL</p>						
Overall Performance						
<p>This report contains information from the Spring 2011 administration of the New Jersey Assessment of Skills and Knowledge (NJ ASK) Grade 4. This test is designed to measure achievement of the New Jersey Core Curriculum Content Standards (CCCS) for Language Arts Literacy, Mathematics, and Science.</p> <p>In this report, you will find:</p> <ul style="list-style-type: none"> ● Your child's overall score and overall proficiency level in Language Arts Literacy, Mathematics, and Science ● Your child's performance in each of the clusters on the tests: A cluster is a set of knowledge and skills within each subject. <p>About Scale Scores and Proficiency Levels A scale score is a common measure of achievement in a subject area at a grade level across years, districts, and schools. Your child's scale scores on the NJ ASK are presented below. The scale scores are based on the number of correct answers to multiple-choice questions and the number of points earned for responses to constructed response items and the writing tasks.</p> <p>The possible scale scores for each subject are 100 to 300. If the scale score is below 200, your child scored "Partially Proficient" in that subject. If the scale score is between 200 and 249, your child scored "Proficient" in that subject. If the scale score is at or above 250, your child scored "Advanced Proficient" in that subject. The Scale Score Mean allows you to compare your child's score with that of other children throughout the state.</p> <p>For more information about state assessments, including sample test questions, writing tasks, and proficiency level definitions, consult the New Jersey Department of Education web site: http://www.nj.gov/education/assessment/.</p>						
Subject	Your Child's Scale Score	Your Child's Proficiency Level			Description	Statewide Scale Score Mean
		Partially Proficient (100 - 199)	Proficient (200 - 249)	Advanced Proficient (250 - 300)		
Language Arts Literacy	178	✓			The Language Arts Literacy test measures reading comprehension and writing skills.	206.5
Mathematics	260			✓	The Mathematics test measures knowledge and skills in areas such as numerical operations, geometry, probability, data analysis, and patterns and algebra.	221.5
Science	245		✓		The Science test measures the student's ability to recall information and solve problems by applying science concepts in the Life, Physical, and Earth Sciences.	234.3

Figure 3—Sample Individual Student Report (cont'd)

Cluster Information				
About Cluster Information				
The tables on this page show how your child performed on each cluster in Language Arts Literacy, Mathematics, and Science. For each cluster, the tables show the number of points earned by your child out of the total number of points possible. The points needed to be proficient and the points needed to be advanced proficient are also shown for each test. The tables also show subtotals in each subject for multiple-choice questions and questions requiring a written response (constructed response). Your child's total raw scores for each subject are converted to the scale scores shown on the previous page. If your child did not receive a scale score in a subject, no data will appear in that table.				
Language Arts Literacy				
Cluster	Your Child's Points	Total Points Possible	Points Needed to be Proficient	Points Needed to be Adv. Proficient
Writing	8.0	20.0		
Expository Task	4.0	10.0		
Speculative Task	4.0	10.0		
Reading	18.0	36.0		
Working with Text	10.0	14.0		
Analyzing Text	8.0	22.0		
Total Points	26.0	56.0	32.0	44.0
Multiple Choice	15.0	24.0		
Constructed Response *	11.0	32.0		
Mathematics				
Cluster	Your Child's Points	Total Points Possible	Points Needed to be Proficient	Points Needed to be Adv. Proficient
Number & Numerical Operations	17.0	20.0		
Geometry & Measurement	10.0	11.0		
Patterns & Algebra	9.0	11.0		
Data Analysis, Probability & Discrete Mathematics	5.0	8.0		
Problem Solving	16.0	20.0		
Total Points	41.0	50.0	24.0	39.0
Multiple Choice	29.0	35.0		
Constructed Response	12.0	15.0		
Science				
Cluster	Your Child's Points	Total Points Possible	Points Needed to be Proficient	Points Needed to be Adv. Proficient
Life Science	12.0	16.0		
Physical Science	8.0	12.0		
Earth Science	6.0	11.0		
Knowledge	1.0	3.0		
Application	25.0	36.0		
Total Points	26.0	39.0	16.0	27.0
Multiple Choice	24.0	33.0		
Constructed Response	2.0	6.0		

The Language Arts Literacy Writing cluster consists of two writing tasks or prompts. An expository prompt requires students to compose an essay that explains a topic. The speculative task presents a brief scenario which students will use as a springboard for writing a story, drawing on stories they have read as well as their own experiences.

The Reading cluster targets two skill areas, Working with Text and Analyzing Text. Working with Text involves interpretive strategies such as recognizing the central theme, recognizing supporting details, and paraphrasing or retelling. Analyzing Text involves evaluative strategies such as critiquing text, forming judgments, drawing conclusions, and understanding textual conventions used by the author. There are two types of reading passages, narrative and informational.

The Mathematics test measures knowledge and skills in four clusters. Some mathematics questions are also classified as Problem Solving because they require multiple steps and reasoning.

Science consists of three clusters: Life, Physical, and Earth science. In addition, Knowledge focuses on comprehension, society, and technology. Science questions may also be classified as Application when they assess the student's inquiry skills, habits of mind, and mathematics skills.

* Includes Writing Tasks

2. The second section, “Overall Performance,” provides a summary explanation of the scale score and proficiency level meaning as well as a table indicating the student’s scale score and proficiency level for each applicable content area. For comparison purposes, the table also offers the statewide scale score mean (i.e., the average scale score for all New Jersey students taking the NJ ASK) for each content area. In addition, the table presents a brief description of the skills each content area test measures. Finally, if a student did not receive a scale score in a content area, this second section will explain why.
3. On the back of the ISR is the third section, “Cluster Scores.” Here the ISR provides a skill-specific view of a student’s performance in each content area. This section presents a breakdown of points earned (raw score) and points possible for each content area cluster and by item type (i.e., multiple-choice and constructed response questions). Note that not all clusters can be assumed to be of equal difficulty level; consequently, comparing one cluster score to another is not a meaningful analysis.

For comparison, this section also provides the number of raw score points a student would have to have earned in order to be classified as Proficient or Advanced Proficient in a given content area.

C. School- and District-Level

Score report information is used for district monitoring and to identify curricular program strengths and needs. With the adoption of the Core Curriculum Content Standards in May 1996, all districts were required to implement standards-based instruction. Test results displayed in school-level and district-level reports can provide meaningful information for educational program reviews. Districts should document when program revisions appear necessary.

Student Rosters

Depending on grade level, either two (LAL and Mathematics) or three (LAL, Mathematics, and Science) content area-specific student rosters are produced and distributed. These reports provide a means of reviewing the test results of all students within a given school. For each content area, the Student Roster lists the names of the students (last name first), arranged by scale score in descending order. Thus, the first students listed on a student roster are those students with the highest scale scores in that content area. Students are listed alphabetically by last name when more than one student has achieved the same score. Students whose test booklets (grades 3–4) or answer folders (grades 5–8) were voided, students coded APA or LEP-exempt, and students who were reported as “Not Present” or “Medical Emergency” are listed at the end of the roster.

The following information appears at the top of each Student Roster:

- School name and code
- District name and code
- County name and code
- Number of student records processed

Below the school identification information, the Student Rosters provide the following information, in tabular form, for each student:

- Student name (last name first)
- NJ ASK ID number and SID
- Date of birth
- Gender (Sex)
- Ethnic code
- Limited English Proficient status (if applicable)
- Special education status (if applicable)
- Title I status (if applicable)
- Section 504 status (if applicable)
- Accommodations (if applicable)
- Out-of-district status (if applicable)
- Out-of-residence status (if applicable)
- Special form designation (if applicable)
- Content area scale score
- Raw score points earned, by cluster and in total

Raw score points are reported for each content area cluster. To provide a context for comparison, the headings of the cluster columns indicate both the number of raw score points possible for that cluster and the statewide raw score cluster means associated with a scale score of 200.

General scoring rubrics for each content area are presented in Appendix B.

Figure 4—Sample Student Roster—Language Arts Literacy



**New Jersey Assessment of Skills and Knowledge
Student Roster - Language Arts Literacy
Grade 6**

TEST DATE: SPRING 2011
REPORT PRINTED: 9/21/2011

COUNTY: 88 ANY COUNTY
DISTRICT: 7777 ANY DISTRICT
SCHOOL: 666 ANY SCHOOL

STUDENTS PROCESSED: 35

POINTS EARNED BY CLUSTER ³

STUDENT NAME NJASK ID NUMBER / SID	DOB	SEX	LEP	SE	TITLE I	504	ACCOM	OUT OF DIST	OUT OF RES	SPEC. FORM	SCALE SCORE	WRITING	PERSUASIVE TASK	EXPLANATORY TASK	READING	WORKING WITH TEXT	ANALYZING TEXT	TOTAL	
												¹	²						
HILL, FRANCISCO 6111039480 / 0000012001	04/01/95	M									215	18.0	12.0	6.0	52.0	21.0	31.0	70.0	
MITCHELL, HIRAN 6111039522 / 0000012007	10/02/96	M	3								215	11.0	8.0	3.0	34.0	16.0	18.0	45.0	
AGUIJEGBO, ERIC G 6110891097 / 0000012389	03/18/96	M									213	10.0	6.0	4.0	34.0	14.0	20.0	44.0	
AMADI, RUSTY 6110691162 / 0000012476	02/10/96	M									213	10.0	6.0	4.0	34.0	14.0	20.0	44.0	
BERRY, DANIEL 6110607170 / 0000012040	04/05/96	M									210	10.0	6.0	4.0	33.0	14.0	19.0	43.0	
MURAD, LUIS 6111039514 / 0000012005	08/13/96	M									210	9.0	6.0	3.0	34.0	18.0	16.0	43.0	
BROOME, WILLIAM 6111039431 / 0000011993	06/21/95	M		14			AB				208	11.0	8.0	3.0	31.0	14.0	17.0	42.0	
KRAYEM, TIEANDRAL 6110115992 / 0000012046	06/04/96	F	F								208	8.0	4.0	4.0	34.0	18.0	16.0	42.0	
ALHARAZIM, SILENY 6110891154 / 0000012475	11/06/96	F	1								196	9.0	6.0	3.0	28.0	13.0	15.0	37.0	
GARDNER, JODY 6110057697 / 0000012047	08/18/95	F									194	10.0	6.0	4.0	26.0	13.0	13.0	36.0	

¹ The numbers in this row are the number of possible raw score points for students who were scored on the full set of regular items.
² The numbers in this row are the statewide raw score means for students whose scale score is 200 and who were scored on the full set of regular items.
³ A letter code appears for writing tasks that could not be scored for one of the following reasons:
 FR = Fragment, NE = Not English, NR = No Response, OT = Off Topic.

Figure 5–Sample Student Roster–Mathematics



**New Jersey Assessment of Skills and Knowledge
Student Roster - Mathematics
Grade 5**

TEST DATE: SPRING 2011
REPORT PRINTED: 7/15/2011

COUNTY: 88 ANY COUNTY
DISTRICT: 7777 ANY DISTRICT
SCHOOL: 666 ANY SCHOOL

STUDENTS PROCESSED: 90

POINTS EARNED BY CLUSTER

STUDENT NAME NJASK ID NUMBER / SID	DOB	SEX	LEP	SE	TITLE	504	ACCOM	OUT OF DIST	OUT OF RES	SPEC. FORM	SCALE SCORE	NUMBER & NUMERICAL OPERATIONS	GEOMETRY & MEASUREMENT	PATTERNS & ALGEBRA	DATA ANALYSIS, PROBABILITY & DISCRETE MATHEMATICS	PROBLEM SOLVING	TOTAL
STUDENT N, CHANEL 5110005971 / 0000011787	01/ /96	F									256	18.0 ¹	16.0	8.0	8.0	22.0	50.0
STUDENT O, RENAN 5110005682 / 0000011812	01/12/96	M									256	9.5 ²	8.0	4.5	4.0	11.0	23.0
STUDENT K, JEANNETTE 5111008545 / 0000011983	08/10/97	F									252	16.0	12.0	6.0	6.0	16.0	40.0
STUDENT Q, SHANTAE 5110005997 / 0000011769	06/18/96	F									252	15.0	14.0	5.0	6.0	19.0	40.0
LIMON, KEITH 5110005526 / 0000011883	01/29/96	M									250	14.0	10.0	7.0	8.0	18.0	39.0
SACKEY, GREGORY 5110006102 / 0000011759	11/27/95	F	1	14			AB D				250	13.0	14.0	6.0	6.0	17.0	39.0
STUDENT W, TRISTIN 5110005740 / 0000013595	01/31/95	M									250	14.0	15.0	3.0	6.0	15.0	38.0
PAYARES, ROBERT 5110892980 / 0000011746	07/09/96	M									244	12.0	12.0	7.0	5.0	15.0	37.0
PERSON, ALMIR 5110005542 / 0000011841	06/07/97	M									244	14.0	12.0	5.0	6.0	18.0	37.0
SCOTT, JAVIN 5110005922 / 0000011775	08/09/97	M									244	14.0	11.0	6.0	6.0	15.0	37.0

¹ The numbers in this row are the number of possible raw score points for students who were scored on the full set of regular items.

² The numbers in this row are the statewide raw score means for students whose scale score is 200 and who were scored on the full set of regular items.

Figure 6–Sample Student Roster–Science



**New Jersey Assessment of Skills and Knowledge
Student Roster - Science
Grade 4**

TEST DATE: SPRING 2011
REPORT PRINTED: 7/15/2011

COUNTY: 88 ANY COUNTY
DISTRICT: 7777 ANY DISTRICT
SCHOOL: 666 ANY SCHOOL

STUDENTS PROCESSED: 70

POINTS EARNED BY CLUSTER

STUDENT NAME NJASK ID NUMBER / SID	DOB	SEX	LEP	SE	TITLE I	504	ACCOM	OUT OF DIST	OUT OF RES	SPEC. FORM	SCALE SCORE	LIFE SCIENCE	PHYSICAL SCIENCE	EARTH SCIENCE	KNOWLEDGE	APPLICATION	TOTAL
CUNHA, ALBERTO 41100071457/0000039256	01/03/89	M									222	10.0	5.0	6.0	1.0	20.0	21.0
NIKOLIC, KEITH D 41100068167/0000023246	01/07/91	M									222	10.0	5.0	6.0	2.0	19.0	21.0
STUDENT P, THERESA 4110006741/0000040957	10/18/91	F									222	7.0	7.0	7.0	2.0	19.0	21.0
SEARS, ELVIRA 41100067337/0000038195	02/23/92	F									217	9.0	5.0	6.0	2.0	18.0	20.0
STUDENT O, TAMER M 41100066187/0000013150	11/30/89	M									217	9.0	7.0	4.0	1.0	19.0	20.0
YOUNGMAN, CARL T 41100071947/0000025994	04/02/91	M									213	8.0	6.0	5.0	1.0	18.0	19.0
SARNA, JESSICA 41100068087/0000040547	01/06/90	F				Y					209	8.0	6.0	4.0	2.0	16.0	18.0
ZAPATA, DORJEN 41100068577/0000038189	02/24/90	M									209	10.0	2.0	6.0	2.0	16.0	18.0
MCCABE, JOAO V 41110472567/0000032822	01/17/90	M	2								191	4.0	5.0	5.0	1.0	13.0	14.0
GARAY, NASSAR K 41100068407/0000040588	02/18/91	M									181	6.0	5.0	1.0	1.0	11.0	12.0

88-7777-666

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¹ The numbers in this row are the number of possible raw score points for students who were scored on the full set of regular items.

² The numbers in this row are the statewide raw score means for students whose scale score is 200 and who were scored on the full set of regular items.

All Sections Roster

The All Sections Roster (Figure 8) provides a convenient method for reviewing students' complete test results. The report provides an overview of individual performance for all students in a particular school. Student names are listed in alphabetical order (last name first); out-of-residence and out-of-district students are listed at the end of the roster. Users of this report can quickly determine how a particular student performed in all content areas: Language Arts Literacy, Mathematics, and Science (grades 4 and 8 only).

The following information appears at the top of the All Sections Roster:

- School name and code
- District name and code
- County name and code
- Number of student records processed

Below the school identification information, the All Sections Roster provides the following information, in tabular form, for each student:

- Student name (last name first)
- NJ ASK ID number and SID
- Date of birth
- Gender (Sex)
- Ethnic code
- Limited English Proficient status (if applicable)
- Special education status (if applicable)
- Title I status (if applicable)
- Economically disadvantaged status (if applicable)
- Migrant status (if applicable)
- Out-of-district status (if applicable)
- Out-of-residence status (if applicable)
- Time in district less than 1 year (if applicable)
- Time in school less than 1 year (if applicable)
- Alternate Proficiency Assessment (APA) classification (if applicable)
- Science scale score and proficiency level (grades 4 and 8 only); Mathematics scale score and proficiency level; Language Arts Literacy scale score and proficiency level. If a student did not receive a scale score, the reason will appear in this space. For a description of all codes, please see Appendix A.

Figure 7–Sample All Sections Roster



**New Jersey Assessment of Skills and Knowledge
All Sections Roster
Grade 8**

TEST DATE: SPRING 2011
REPORT PRINTED: 7/18/2011

COUNTY: 88 ANY COUNTY
DISTRICT: 7777 ANY DISTRICT
SCHOOL: 666 ANY SCHOOL

STUDENTS PROCESSED: 62

STUDENT NAME NJ ASK ID NUMBER / SID	DOB	SEX	ETHNIC CODES	LEP	SE	TITLE I	ED	MI	OUT OF DIST	OUT OF RES	TID <1	TIS <1	APA	LANGUAGE ARTS LITERACY		MATHEMATICS		SCIENCE	
														SCALE SCORE	PROF. LEVEL	SCALE SCORE	PROF. LEVEL	SCALE SCORE	PROF. LEVEL
AL YESSIRI, MOHAMMED 8110005363 / 0000001585	07/04/92	M	B											233	PROF.	187	PART. PROF.	262	ADV. PROF.
AREVALO, LEIGH 8110005405 / 0000001587	02/22/93	F	H		06		Y							230	PROF.	194	PART. PROF.	232	PROF.
BENJAMIN, WILLIAM 8110005025 / 0000001601	11/03/93	F	A				Y							253	ADV. PROF.	265	ADV. PROF.	262	ADV. PROF.
BOUKNIGHT, JOSHUA 8110004929 / 0000001600	03/21/93	M	A				Y							193	PART. PROF.	212	PROF.	194	PART. PROF.
BROWN, DENVER 8110005314 / 0000001580	03/18/93	M	B				Y							242	PROF.	233	PROF.	257	ADV. PROF.
CASTILLO, DIPAMKUMA H. 8110005041 / 0000012874	11/25/91	M	A										1	192	PART. PROF.	194	PART. PROF.	186	PART. PROF.
CHAVEZ, COLTON 8110005330 / 0000001583	09/15/92	M	H				Y				Y	Y		227	PROF.	244	PROF.	250	ADV. PROF.
COHEN, ANDREA 8110980250 / 0000001598	09/02/92	F	B								Y	Y		209	PROF.	200	PROF.	208	PROF.
CUBERO, AMY 8110005033 / 0000001602	01/31/93	F	H				Y				Y	Y		180	PART. PROF.	153	PART. PROF.	189	PART. PROF.
DIBARTOLO, NILESH 8110004937 / 0000012013	10/10/92	M	A		14									261	ADV. PROF.	265	ADV. PROF.	262	ADV. PROF.

Performance by Demographic Group Reports: School, District, DFG, and Statewide

The Performance by Demographic Group (PDG) report summarizes student performance by total students, education program, and student demographic groups: Total, General Education (GE), Special Education (SE), Limited English Proficient status (LEP), Gender (Sex), Migrant status, Ethnicity, and Economic status (disadvantaged vs. not disadvantaged). LEP students are reported in two subgroups: current LEP and former LEP (see Appendix A). The PDG reports provide additional summary views of student performance that can be used to make adjustments to curricula that may better serve these student subgroups.

The PDG is a multiple page report, one content area per page. Students may receive a scale score in one content area but not in others. The PDG reports are produced at the district, school, state, and district factor group (DFG) levels.

The district level report presents summary data for the district. The school level report shows school data. They are distinguished by report title. If a district has only one school in which the test was administered, the summary data will be identical in both the district report and the school report.

The number of students taking the APA, number of students not present, number of voids, and number of students with valid scale scores should sum to the total number of students enrolled. The percentage of students who fall into each of the three proficiency levels includes only students with valid scale scores. The percentages of students for the three proficiency levels may not total to one hundred due to rounding.

PDGs are content area-specific. School name and code, district name and code, and county name and code all appear at the top of each PDG. For each grade and content area, the PDG provides the following information in tabular form, by demographic group:

- Number of students enrolled
- Number of students taking the APA instead of NJ ASK in this content area
- Number of students not present for the NJ ASK in this content area
- Number of students receiving voids
- Number of students with valid scale scores for this content area
- Number and percentage of students at each proficiency level
- Scale score mean for this content area

Figure 8—Sample Performance by Demographic Group Report



**New Jersey Assessment of Skills and Knowledge
Performance By Demographic Group
School - Grade 8**

LANGUAGE ARTS LITERACY

TEST DATE: SPRING 2011
REPORT PRINTED: 7/15/2011

COUNTY: 88 ANY COUNTY
DISTRICT: 7777 ANY DISTRICT
SCHOOL: 666 ANY SCHOOL

Demographic Group	Enrolled	APA ¹ Students	Not Present	Voids ²	Valid Scale Scores	Performance Data for Students with Valid Scale Scores ³						Scale Score Mean
						Partially Proficient		Proficient		Advanced Proficient		
						Number	Percent	Number	Percent	Number	Percent	
Total Students ⁴	337	2	1	7	327	71	21.7	233	71.3	23	7.0	216.9
General Education ⁵	246	0	0	1	245	19	7.8	203	82.9	23	9.4	224.7
Special Education	81	2	1	3	75	46	61.3	29	38.7	0	0.0	194.0
Limited English Proficient ⁶	13	0	0	4	9	6	66.7	3	33.3	0	0.0	197.4
Current LEP	11	0	0	4	7	6	85.7	1	14.3	0	0.0	188.4
Former LEP	2	0	0	0	2	0	0.0	2	100.0	0	0.0	229.0
Gender ⁷												
Female	158	0	1	2	155	29	18.7	116	74.8	10	6.5	218.6
Male	177	2	0	4	171	41	24.0	117	68.4	13	7.6	215.5
Ethnicity												
White	216	1	1	2	212	32	15.1	162	76.4	18	8.5	220.7
Black or African American	65	0	0	0	65	25	38.5	39	60.0	1	1.5	206.8
Asian	32	0	0	3	29	4	13.8	21	72.4	4	13.8	222.7
Pacific Islander	0	0	0	0	0	0	0.0	0	0.0	0	0.0	0.0
Hispanic or Latino ⁸	22	0	0	1	21	10	47.6	11	52.4	0	0.0	202.0
Amer. Indian/AK Native	0	0	0	0	0	0	0.0	0	0.0	0	0.0	0.0
Other ⁹	2	1	0	1	0	0	0.0	0	0.0	0	0.0	0.0
Economic Status												
Econ. Disadvantaged	66	0	0	0	66	27	40.9	39	59.1	0	0.0	204.1
Non-Econ. Disadvantaged	271	2	1	7	261	44	16.9	194	74.3	23	8.8	220.1
Migrant Status												
Migrant	0	0	0	0	0	0	0.0	0	0.0	0	0.0	0.0
Non-Migrant	337	2	1	7	327	71	21.7	233	71.3	23	7.0	216.9

¹ These students are required to take the Alternate Proficiency Assessment (APA) instead of NJ ASK.
² Includes students coded LEP Exempt (LAL only) and students coded Medical Emergency.
³ Percentages may not total 100 due to rounding.
⁴ Students are included in Total Students only once, but they appear in all other categories that apply.
⁵ Includes students coded Former LEP who are not Special Education.
⁶ Includes students coded Current and Former LEP.
⁷ Excludes students who did not have Gender coded.
⁸ Includes Students coded Hispanic and/or Hispanic with other ethnic affiliations.
⁹ Students who did not have Ethnicity coded and students with multiple non-Hispanic Ethnicities coded.

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Cluster Means Report

The Cluster Means for Students with Valid Scale Scores reports provide a way to look at the content cluster performance of a particular school as compared to the district, DFG, and state means, as well as to the Just Proficient Mean (the statewide raw score means for students with a scale score of 200). Where the PDGs offer scale score summary information, the Cluster Means reports provide raw score data.

The Cluster Means reports are provided at the school level, by grade and content area. Districts and schools will have access to the Cluster Means reports. The Cluster Means Report consists of multiple pages, one content area per page.

The following information appears at the top of each Cluster Means report:

- School name and code
- District name and code
- County name and code

Cluster Means reports are content area-specific, one content area per page, and provide information for: all students (Total), general education (GE) students, special education (SE) students, and LEP (current and former) students. For each grade and content area, the Cluster Means report provides the following information in tabular form, by content cluster:

- School raw score mean
- District raw score mean
- DFG raw score mean
- State raw score mean
- Total number of raw score points possible
- Just Proficient Mean (state)

The Just Proficient Mean (JPM) for each cluster is the statewide mean cluster score produced by statewide population of students with a scale score of 200 (the lowest Proficient scale score).

It is important to note that the clusters are not additive—that is, one cannot sum the total points possible for each cluster to derive the total number of points possible on the test as a whole. The degree to which clusters overlap or are mutually exclusive varies by content area:

- In **Language Arts Literacy**, there are two distinct content clusters; the total possible points in each of these sums to the total number of points on the test:
 - Writing
 - Reading

Within each content cluster, items are further divided into two categories, as described earlier in this manual. Reading passage items can be classified as either Working with Text or Analyzing Text. Writing tasks can be Expository, Speculative, Explanatory or Persuasive, depending on the grade.

- In **Mathematics**, there are four distinct content clusters; the total points possible in each of these sums to the total number of points on the test:
 - Number and Numerical Operations
 - Geometry and Measurement
 - Patterns and Algebra
 - Data Analysis, Probability, and Discrete Mathematics

Some items, however, are also categorized as Problem Solving; the raw score means for this group of items is provided as well.

- In **Science**, there are three distinct content clusters; the total points possible in each of these sums to the total number of points on the test:
 - Life Science
 - Physical Science
 - Earth Science

In addition, items are separated into two different skill categories, the total points for which also sum to the total number of points on the test: Knowledge and Application.

Figure 9–Sample Cluster Means Report

TEST DATE: SPRING 2011
 REPORT PRINTED: 7/18/2011

**New Jersey Assessment of Skills and Knowledge
 Cluster Means for Students with Valid Scale Scores ¹
 Grade 8 - Language Arts Literacy**



COUNTY: 88 ANY COUNTY
 DISTRICT: 7777 ANY DISTRICT
 SCHOOL: 666 ANY SCHOOL

	SCHOOL MEAN	DISTRICT MEAN	SPECIAL NEEDS MEAN	NON-SPECIAL NEEDS MEAN	DFG A MEAN	STATE MEAN	TOTAL POINTS POSSIBLE	JUST PROFICIENT MEAN ²
Writing							18	10.0
Total Students ³	10.1	9.9	9.7	11.1	9.6	10.8		
General Education ⁴	10.8	10.5	10.4	11.5	10.4	11.3		
Special Education	7.4	7.4	7.3	9.1	7.1	8.7		
Limited English Proficient ⁵	8.7	10.1	9.0	9.2	9.0	9.1		
Current LEP	0.0	10.2	8.7	8.6	8.6	8.7		
Former LEP	8.7	9.7	9.9	10.4	9.8	10.1		
Persuasive Task							12	7.0
Total Students ³	6.7	6.7	6.6	7.5	6.5	7.3		
General Education ⁴	7.2	7.2	7.1	7.8	7.1	7.7		
Special Education	4.9	4.8	4.8	6.1	4.7	5.8		
Limited English Proficient ⁵	6.0	6.8	6.0	6.2	6.0	6.1		
Current LEP	0.0	6.9	5.8	5.8	5.7	5.8		
Former LEP	6.0	6.6	6.8	7.2	6.7	6.9		
Explanatory Task							6	3.0
Total Students ³	3.3	3.2	3.1	3.6	3.1	3.5		
General Education ⁴	3.5	3.4	3.3	3.7	3.3	3.6		
Special Education	2.6	2.6	2.5	3.0	2.4	2.9		
Limited English Proficient ⁵	2.7	3.3	3.0	3.0	2.9	3.0		
Current LEP	0.0	3.4	2.9	2.8	2.9	2.9		
Former LEP	2.7	3.1	3.1	3.3	3.1	3.2		
Reading							52	26.0
Total Students ³	28.1	25.3	26.3	34.0	26.1	32.7		
General Education ⁴	30.5	27.9	28.7	35.7	28.5	34.6		
Special Education	18.3	18.9	18.8	26.0	18.8	24.5		
Limited English Proficient ⁵	22.0	21.6	21.8	24.1	21.8	22.9		
Current LEP	0.0	21.7	20.7	22.0	20.6	21.3		
Former LEP	22.0	21.3	24.9	29.1	24.8	26.9		
Working with Text							23	12.0
Total Students ³	10.0	9.2	9.9	13.2	9.8	12.6		
General Education ⁴	10.9	10.2	10.8	13.9	10.7	13.3		
Special Education	6.6	7.1	7.1	9.9	7.1	9.3		
Limited English Proficient ⁵	8.0	7.4	8.0	9.1	8.0	8.5		
Current LEP	0.0	7.5	7.6	8.3	7.6	7.9		
Former LEP	8.0	7.1	9.2	11.0	9.1	10.0		
Analyzing Text							29	14.0
Total Students ³	18.1	16.1	16.4	20.9	16.3	20.1		
General Education ⁴	19.6	17.8	17.9	21.9	17.8	21.2		
Special Education	11.7	11.9	11.7	16.1	11.7	15.2		
Limited English Proficient ⁵	14.0	14.2	13.8	15.0	13.8	14.4		
Current LEP	0.0	14.2	13.1	13.7	13.0	13.4		
Former LEP	14.0	14.2	15.7	18.2	15.7	16.9		

¹ Excludes students who did not receive a scale score based on the full set of regular items in this content area.
² The numbers in this column are the statewide raw score means for students whose scale score is 200.
³ Students are included in Total Students only once, but they appear in all other categories that apply.
⁴ Includes students coded Former LEP who are not Special Education.
⁵ Includes students coded Current and Former LEP.

PART IV: FREQUENTLY ASKED QUESTIONS AND ANSWERS (FAQ)

Q: How are the tests designed in the first place?

A: The process begins with the development of test questions that are aligned to curriculum content standards down to the levels of strand and cumulative performance indicator (CPI). These questions must pass several rounds of review and subsequent field testing. Through field testing, statistics are generated and test questions are again reviewed to ensure that they relate appropriately to other test questions, are at acceptable difficulty levels, and are not systematically biased with respect to gender or major ethnic group. Throughout all reviews, New Jersey teacher committees are involved, and their approval is required for any question to be used on the NJ ASK. The questions are subsequently placed onto tests in ways that ensure a broad sampling of knowledge and skills at a balance of grade appropriate levels of difficulty.

Q: What is the difference between raw scores and scale scores, and why use scale scores?

A: A total raw score consists of the total of all the points assigned to the test questions for which a student receives credit (i.e., the number of points a student earned on the test as a whole). NJ ASK scale scores are created when raw scores are statistically converted to a scale running from 100 to 300. In any year, a given raw score may be a bit more or a bit less difficult to attain than in another year, because it is not possible to guarantee that each year's test will be at exactly the same difficulty level. However, at any grade level and in any content area, the same scale score represents the same level of performance from year to year, statistically adjusting for slight differences in test difficulty. It is, therefore, possible to say that a scale score of 200 always lies at the beginning of the proficient range, and a scale score of 250 always lies at the beginning of the advanced proficient range. Please see Section II.A of this booklet for a description of how the equating process results in the statistical equivalence of scale scores from year to year.

Q: How do you decide what constitutes “proficient” performance and what constitutes “advanced proficient” performance?

A: This decision is made in year one of a given test through a standard setting process based primarily upon the work of teachers drawn from districts throughout the state. In subsequent years, an equating process is used to ensure that, at each grade level and for each content area, tests are statistically equivalent from year to year. Please see Section II.A of this booklet for a description of the standard setting process that is used to make decisions regarding the levels of achievement necessary to attain proficient and advanced proficient status.

Q: By participating in standard setting, are the teachers, in effect, determining the difficulty level of the test?

A: The teachers involved in standard setting play the primary role in determining how well a student has to perform to achieve proficient or advanced proficient status, but the difficulty of the test itself is determined by the nature of the test questions. It stands to reason that

students at any given proficiency level will achieve higher raw scores on tests with less difficult questions and lower raw scores on tests with more difficult questions. If a test is a relatively easy one, one would expect the teachers engaged in standard setting to compensate by selecting high raw scores as the performance standards for reaching proficient and advanced proficient status. For a difficult test, the opposite would hold; one would expect the standard setting participants to set the bar at lower raw scores.

Q: Why aren't standards set every year?

A: Once the standards for a test are set, the scores in subsequent years can be statistically equated to adjust for the small differences that may occur in the difficulty levels of the tests. If it turns out that a test is more difficult in one year, the equating process lowers the raw score needed to become proficient and/or advanced proficient. If the test turns out to be less difficult, the equating process moves the required raw score(s) up. Since questions are field tested before being placed on operational tests, it is possible to anticipate difficulty levels, to some extent, in the construction of the tests and to keep them reasonably consistent in terms of difficulty from year to year. As a result, the change in difficulty level—and the resulting shifting of the raw score bar—is typically small.

Q: Why doesn't the NJ ASK report percentiles?

A: Percentile rankings are meaningful on **norm-referenced** assessments, when a student's performance is measured in comparison to the performance of other students. Because the purpose of the NJ ASK is to provide information about student achievement in the areas required by New Jersey's Core Curriculum Content Standards, the NJ ASK is a **criterion-referenced** assessment, addressing these curriculum content standards rather than norms.

Q: Why not simply use a percentage scale where 90% or better equals a grade of A, 80% to 89% equals a grade of B, and so on?

A: Apart from the fact that percentages are based on raw scores which do not account for variation in the difficulty of questions from test to test, they also use just a small part of the scale to separate the various levels of proficiency. Commonly, scores from 70 to 100 differentiate among levels of satisfactory to excellent performance that are achieved by a majority of students, while scores from 0 to 69 fall into a low achievement range occupied by a minority of students. Test developers are generally more comfortable with questions at a variety of difficulty levels that spread the scores more fully, providing more points to use where the bulk of the students fall, thereby permitting finer distinctions in the way they perform.

Q: Test clusters are pretty general. Why don't the tests provide more specific information?

A: The tests are not long enough to provide detailed diagnostic information. More test items and more time would be needed to generate results at a detailed level of specificity. Additional information regarding cluster scores may be found in section II.D of this booklet.

Q: Why can't we compare cluster scores from year to year?

A: Cluster scores are raw scores, so they are influenced by year-to-year differences in test difficulty level. Unlike total raw scores, they are not converted to a scale. While it is true that, for the test as a whole, year-to-year changes in difficulty level—and, consequently, in total raw score—are generally not dramatic, year-to-year raw score variation at the cluster level can be considerably more pronounced. Year-to-year raw score comparisons can, therefore, be particularly misleading at the cluster level.

Q: How, then, can I interpret cluster scores?

A: For any single year, cluster scores can be compared to the state and DFG cluster means; school cluster means can be compared to district cluster means; school cluster means can be compared to one another. Furthermore, inasmuch as the just proficient mean (JPM) is the mean cluster score of students with a total test scale score of 200, the JPM allows a comparison to the profile of the prototypical student who falls right at the proficient border.

Q: What use does a mean scale score have?

A: Means are more effective for use in certain kinds of statistical analysis. They are also influenced by score changes that occur not only between, but also within, the partially proficient, proficient, and advanced proficient categories. They can, therefore, be used for supplementing the interpretation of results in curriculum planning.

Q: How do we find out more about the performance of the tests themselves?

A: During the winter the NJ ASK Technical Report is produced and posted on the Department of Education website (www.state.nj.us/education/). This report examines various statistics related to test item performance, scoring, equating, scaling, reliability and other topics related to test design, administration and reporting.

Q: We are advised not to report the results of small groups because they are statistically unstable and not to report group results that violate student confidentiality. If we don't report the results of small groups, don't we automatically protect confidentiality?

A: Districts are generally advised that results based upon the performance of one to ten students are statistically unstable, and that it is unwise to report results that lack minimal stability. However, districts must also be careful not to report numbers that members of the public might use to infer, through simple calculations, the performance of one or two students. Additional information regarding confidentiality may be found in section II.E of this booklet.

Q: We received roster information for a student whose name we do not recognize. What's going on?

A: Situations of this sort are not common, and naturally errors should be reported to the NJ DOE Office of Student Learning Assessments and to Measurement Incorporated as soon as possible. But before doing so, it is important to verify that the students are not out-of-district students from your district whom you failed to recognize. In the unlikely event that the students in question were included on the roster erroneously, please keep in mind that such an error probably could have been detected and corrected during record changes.

APPENDIX A: Glossary

ACCOMMODATIONS: Students with disabilities eligible for special education and related services and those students eligible under Section 504 of the Rehabilitation Act of 1973 may have accommodations and/or modifications during the administration of the statewide assessments. The Individualized Education Program (IEP) or the 504 team makes decisions about accommodations/modifications and documents those decisions in the IEP or the 504 plan. There are four possible codes:

- A = Setting Accommodations
- B = Scheduling Accommodations
- C = Test Materials Modifications
- D = Test Procedure Modifications

ALTERNATE PROFICIENCY ASSESSMENT: The Alternate Proficiency Assessment (APA) is a portfolio assessment designed to measure progress toward achieving New Jersey’s state educational standards for those students with the most significant cognitive disabilities who are unable to participate in general statewide assessment. The APA classification indicates whether a student takes the Alternate Proficiency Assessment in a particular content area and is thus exempt from taking the NJ ASK 3–8 in that content area. On the Performance by Demographic Group report, these students are grouped in the “APA Students” column.

CLUSTER: A cluster is a group of items that measures similar skills. The skills in a given cluster are typically taught together to allow students to make appropriate connections.

DISTRICT FACTOR GROUP (DFG): The DFG is a measure of the socioeconomic status of the population residing in each district based upon United States Census data. These groups are labeled from A (lowest) to J (highest). Additional DFGs are designated for special groups that are not defined geographically (e.g., charter schools). See Appendix C for details related to current DFG designations.

ECONOMICALLY DISADVANTAGED (ED): An ED student is one who is eligible for free or reduced-price lunch.

ETHNICITY: There are six codes for ethnicity categories. The categories are:

- W = White
- B = Black or African-American
- A = Asian
- P = Native Hawaiian or other Pacific Islander
- H = Hispanic or Latino
- I = American Indian or Alaska Native

In addition, on Performance by Demographic Group (PDG) reports, “O” is defined as missing or multiple codes.

ENROLLED OR STUDENTS PROCESSED: This is the number of unique students for whom used test booklets (grades 3–4) or answer folders (grades 5–8) were returned, plus the number of students added during the record change period. Includes students who took any form, including the braille, large print, Spanish and alternate form. Equal to the sum of the APA Students, Not Present, Voids, and Valid Scale Scores columns on the Performance by Demographic Group report.

FORMER LIMITED ENGLISH PROFICIENT (FLEP): A Former Limited English Proficient student is a student who was removed from a language assistance program within the current or previous two school years.

HOMELESS (H): A student who is homeless is defined as a child or youth who lacks a fixed, regular and adequate residence, pursuant to N.J.S.A. 18A:17B-12 and N.J.A.C. 6A:17-2.3.

INDIVIDUALIZED EDUCATION PROGRAM (IEP): The Individualized Education Program (IEP) is a written plan that is developed by members of the local school district child study team, a teacher who has knowledge of the child, and the parent/guardian. It describes how a child currently performs in school, specifies his/her educational needs, includes goals and objectives the parents and staff believe he/she can achieve during the school year, details his/her special education program, specifies why the child is receiving these special education services, and provides an organized way for school staff and parents to conduct an appropriate educational program for the child. The special education and related services are provided for the child after the parent and the school staff determine his/her needs (N.J.A.C. 6:28:3.6).

JUST PROFICIENT MEAN: The Just Proficient Mean is a statewide average (mean) of scores attained on each cluster by all students in the state who attained a scale score of 200. Students who did not receive a scale score based on the full set of regular items, or who took an alternate test form in the content area were excluded from these means.

LIMITED ENGLISH PROFICIENT (LEP): A Limited English Proficient student is a student whose native language is other than English. This student has sufficient difficulty speaking, reading, writing, or understanding the English language, as measured by an English language proficiency test, so as to be denied the opportunity to learn successfully in the classroom where the language of instruction is English. A student who exited a language assistance program before July 1, 2007, may not be coded LEP.

There are six LEP codes:

< = LEP student entered a language assistance program ON OR AFTER July 1, 2010, and is currently enrolled in the program (see LEP-X)

1 = LEP student entered a language assistance program BETWEEN July 1, 2009, and June 30, 2010, and is currently enrolled in the program

2 = LEP student entered a language assistance program BETWEEN July 1, 2008, and June 30, 2009, and is currently enrolled in the program

3 = LEP student entered a language assistance program BEFORE July 1, 2008, and is currently enrolled in the program

F1 = Former LEP student exited a language assistance program BETWEEN July 1, 2009, and the current test administration dates and is NO longer enrolled in the program

F2 = Former LEP student exited a language assistance program BETWEEN July 1, 2008, and June 30, 2009, and is NO longer enrolled in the program

LIMITED ENGLISH PROFICIENT EXEMPT (LEP-X): A student with an LEP-X code is a Limited English Proficient student who is exempt from participating in the Language Arts Literacy section of the test. LEP-X students are those who entered the United States and a language assistance program on or after July 1, 2010.

MEDICAL EMERGENCY (ME): A student is identified as having had a medical emergency if a severe medical or psychiatric condition or episode occurred which required medical attention or supervision, during which time the student was not able to participate in the NJ ASK 3–8. These students are not classified as Not Present.

MIGRANT (M): An eligible migrant student is defined as a student who:

1. is—or whose parent, spouse, or guardian is—a migratory agricultural worker a migratory dairy worker, or a migratory fisher; and
2. has moved from one school district to another in the preceding 36 months, in order to obtain—or accompany such parent, spouse or guardian in order to obtain—temporary or seasonal employment in agricultural or fishing work.

NOT PRESENT: A Not Present designation indicates that a student did not participate in a particular content area of the NJ ASK 3–8, and was not coded APA, void, medical emergency or LEP exempt (LAL only). On the Performance by Demographic Group report, these students are grouped in the “Not Present” column.

OUT-OF-RESIDENCE PLACEMENT (ORP): Out-of-residence students are affiliated with two different schools within the same district, a sending and receiving school. The sending school is the one in which the student is registered because it is his/her home school; the receiving school is the one that administers the test to the student.

OUT-OF-DISTRICT PLACEMENT (ODP): Out-of-district students are affiliated with two different schools in different districts, a sending and receiving school. The sending school is the one in which the student is registered because it is his/her home school; the receiving school is the one that administers the test to the student.

PERFORMANCE LEVELS: The Proficient and Advanced Proficient performance levels, or cut scores, for the base year in each content area were determined with respect to the Performance Level Descriptors (see below). Student scores that are below the Proficient performance level (i.e., below a scale score of 200) are considered to be below the state minimum level of proficiency. These students may need additional instructional support, which could be in the form of individual or programmatic intervention.

PERFORMANCE LEVEL DESCRIPTORS (PLDs): PLDs describe in qualitative and broad terms what it means to attain (or not attain) the performance levels, Proficient and Advanced Proficient, in each content area. The PLDs are stated in terms of the state content standards for Language Arts Literacy, Mathematics, and Science (the NJ CCCS).

RAW SCORE: A raw score is the total number of points a student earns on a test.

SCALE SCORE: The scale score in any tested content area is a standard mathematical transformation of the raw score attained in that content area by a student who participated in the test and who was not coded “void.” On the Performance by Demographic Group report, all students who received a scale score are grouped in the “Valid Scale Scores” column. This column includes students who took any form, including the braille, large print, and alternate forms, as well as students who received special scaling due to the invalidation of one or more items.

SPECIAL EDUCATION (SE): There are 16 codes for Special Education classifications:

- 01 Auditorily Impaired (Auditorily Handicapped)
- 02 Autistic
- 03 Cognitively Impaired–Mild
- 04 Cognitively Impaired–Moderate
- 05 Cognitively Impaired–Severe
- 06 Communication Impaired
- 07 Emotionally Impaired
- 08 Multiply Disabled
- 09 Deaf-Blindness
- 10 Orthopedically Impaired
- 11 Other Health Impaired
- 13 Social Maladjustment
- 14 Specific Learning Disability
- 15 Traumatic Brain Injury
- 16 Visually-Impaired
- 17 Eligible for Speech-Language Services
- 99 Unknown or multiple (assigned during data processing)

TEST SPECIFICATIONS: Test specifications for the NJ ASK 3–8 include the definition of Language Arts Literacy, Mathematics, and Science clusters that are measured in the assessment, as well as the testing conditions. The clusters and conditions were identified by committees of New Jersey teachers and administrators.

TIME IN DISTRICT (TID < 1): A student coded as TID < 1 has been enrolled in his or her home district for less than one academic year (i.e., the student first enrolled in the district after July 1, 2010).

TIME IN SCHOOL (TIS < 1): A student coded as TID < 1 has been enrolled in his or her home school less than one academic year (i.e., the student first enrolled in the school after July 1, 2010).

TITLE I (T-I): A Title I student is a student who lives in an eligible attendance area, who fits the criteria for selection to participate in the federal Title I program, and who is receiving federal Title I services.

VALID SCALE SCORES: Valid scale scores appear on aggregate reports and indicate scores attained in any tested content area by participating students whose test booklets (grades 3–4) or answer folders (grades 5–8) were not coded “void.”

VOID: One or more content areas can be voided for any of the following reasons:

- 1 = A student became ill during testing.
- 2 = A student refused to test or engaged in behavior inappropriate for testing.
- 3 = A student was tested out of grade level, took the test section twice during this administration, or was not a New Jersey public school student.
- 4 = A student responded to at least one but fewer than 20% of the items.
- 5 = A breach of test security occurred, or improper procedures were followed.
- 6 = A student did not complete a test (content area) because he or she withdrew from the district or moved during the administration of the test. (Only the content area that was not completed is voided.)

On the Performance by Demographic Group report, these students are grouped together in the “Voids” column, along with students with a medical emergency and students coded LEP Exempt (LAL only).

APPENDIX B: NJ ASK 3–8 Scoring Rubrics

NEW JERSEY REGISTERED HOLISTIC SCORING RUBRIC

In scoring, consider the grid of written language Score	Inadequate Command	Limited Command	Partial Command	Adequate Command	Strong Command	Superior Command
	1	2	3	4	5	6
Content and Organization	<ul style="list-style-type: none"> May lack opening and/or closing Minimal response to topic; uncertain focus No planning evident; disorganized Details random, inappropriate, or barely apparent No apparent control Severe/numerous errors 	<ul style="list-style-type: none"> May lack opening and/or closing Attempts to focus May drift or shift focus Attempts organization Few, if any, transitions between ideas Details lack elaboration, i.e., highlight paper Numerous errors Excessive monotony/same structure Numerous errors Numerous serious errors 	<ul style="list-style-type: none"> May lack opening and/or closing Usually has single focus Some lapses or flaws in organization May lack some transitions between ideas Repetitious details Several unelaborated details Errors/patterns of errors may be evident Little variety in syntax Some errors Patterns of errors evident 	<ul style="list-style-type: none"> Generally has opening and/or closing Single focus Ideas loosely connected Transitions evident Uneven development of details Some errors that do not interfere with meaning Some variety Generally correct No consistent pattern of errors Some errors that do not interfere with meaning 	<ul style="list-style-type: none"> Opening and closing Single focus Sense of unity and coherence Key ideas developed Logical progression of ideas Moderately fluent Attempts compositional risks Details appropriate and varied Few errors Variety in syntax appropriate and effective Few errors Few errors 	<ul style="list-style-type: none"> Opening and closing Single, distinct focus Unified and coherent Well-developed Logical progression of ideas Fluent, cohesive Compositional risks successful Details effective, vivid, explicit, and/or pertinent Very few, if any, errors Precision and/or sophistication Very few, if any, errors Very few, if any, errors
	Usage					
Sentence Construction	<ul style="list-style-type: none"> Errors so severe they detract from meaning 					
Mechanics						

	Content/Organization	Usage	Sentence Construction	Mechanics
NON-SCORABLE RESPONSES	<ul style="list-style-type: none"> Communicates intended message to intended audience Relates to topic Opening and closing Focused Logical progression of ideas Transitions Appropriate details and information 	<ul style="list-style-type: none"> Tense formation Subject-verb agreement Pronoun usage/agreement Word choice/meaning Proper Modifiers 	<ul style="list-style-type: none"> Variety of type, structure, and length Correct construction 	<ul style="list-style-type: none"> Spelling Capitalization Punctuation
FR = Fragment	Student wrote too little to allow a reliable judgement of his/her writing.			
OT = Off Topic/ Off Task	Student did not write on the assigned topic/task.			
NE = Not English	Student wrote in a language other than English.			
NR = No Response	Blank			

Note: All unscorable responses (NSRs), with the exception of NR, must be coded by the Scoring Director.

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OPEN-ENDED SCORING RUBRIC

Points	Criteria
4	A 4-point response clearly demonstrates understanding of the task, completes all requirements, and provides a clear and focused explanation/opinion that links to or extends aspects of the text.
3	A 3-point response demonstrates an understanding of the task, addresses all requirements, and provides some explanation/opinion using situations or ideas from the text as support.
2	A 2-point response may address all of the requirements, but demonstrates a partial understanding of the task, and uses text incorrectly or with limited success resulting in an inconsistent or flawed explanation.
1	A 1-point response demonstrates minimal understanding of the task, does not address part of the requirements, and provides only a vague reference to or no use of the text.
0	A 0-point response is irrelevant or off-topic.

Mathematics

3-Point Response

The response shows complete understanding of the problem's essential mathematical concepts. The student executes procedures completely and gives relevant responses to all parts of the task. The response contains few minor errors, if any. The response contains a clear, effective explanation detailing how the problem was solved so that the reader does not need to infer how and why decisions were made.

2-Point Response

The response shows nearly complete understanding of the problem's essential mathematical concepts. The student executes nearly all procedures and gives relevant responses to most parts of the task. The response may have minor errors. The explanation detailing how the problem was solved may not be clear, causing the reader to make some inferences.

1-Point Response

The response shows limited understanding of the problem's essential mathematical concepts. The response and procedures may be incomplete and/or may contain major errors. An incomplete explanation of how the problem was solved may contribute to questions as to how and why decisions were made.

0-Point Response

The response shows insufficient understanding of the problem's essential mathematical concepts. The procedures, if any, contain major errors. There may be no explanation of the solution or the reader may not be able to understand the explanation. The reader may not be able to understand how and why decisions were made.

Science

The zero-to-three point generic scoring rubric below was created to help readers score open-ended responses consistently. In scoring, the reader should accept the use of appropriate diagrams, charts, formulas, and/or symbols that are part of a correct answer even when the question does not specifically request their use.

3-point response: Student response is reasonably complete, clear and satisfactory.

2-point response: Student response has minor omissions and/or some incorrect or non-relevant information.

1-point response: Student response includes some correct information, but most information included in the response is either incorrect or not relevant.

0-point response: Student attempts the task but the response is incorrect, irrelevant, or inappropriate.

APPENDIX C: District Factor Groups (DFGs)

The District Factor Group (DFG) is an indicator of the socioeconomic status of citizens in each district and has been useful for the comparative reporting of test results from New Jersey's statewide testing programs. The measure was first developed in 1974 using demographic variables from the 1970 United States Census. A revision was made in 1984 to take into account new data from the 1980 United States Census. The DFG designations were updated again in 1992 after the 1990 census. The current DFG designations are based upon the 2000 census, using the following demographic variables.

A. Percentage of adult residents who failed to complete high school

B. Percentage of adult residents who attended college

C. Occupational status of adult household members:

1 = laborers

2 = service workers (except private and protective)

3 = farm workers

4 = operatives and kindred workers

5 = protective service workers

6 = sales workers

7 = clerical and kindred workers

8 = craftsmen, foremen, and kindred workers

9 = quasi-professionals

10 = managers, officials, and proprietors

11 = old and new professionals

D. Population Density:

Persons per square mile

E. Income:

Median family income

F. Unemployment:

Percentage of those in the work force who received some unemployment compensation

G. Poverty:

Percentage of residents below the poverty level

Additional DFGs are defined for special groups whose socioeconomic make-up does not reflect their geographic location:

O. Private schools for the handicapped, Department of Corrections, Department of Children and Families, Department of Human Services and Juvenile Justice Commission (Department of Law and Public Safety)

R. Charter schools

S. Special services district, educational services commission, and state-run schools for the handicapped

V. Vocational school districts

Some school districts might not be reported with the DFG that was assigned to them based on the 2000 census. These districts do not have a student population that is representative of the residents in their geographic area. These are reported with a DFG of:

N. None

The variables described above were combined using a statistical technique called principal components analysis, which resulted in a single measure of socioeconomic status for each district. Districts were then ranked according to their score on this measure and divided into eight groups based on the score interval in which their scores were located. Eight DFGs have been created based on the 2000 United States Census data. They range from A (lowest socioeconomic districts) to J (highest socioeconomic districts) and are labeled as follows: A, B, CD, DE, FG, GH, I, J. Updating the DFGs has not changed any district's designation as Special Needs or not Special Needs.

Whereas the DFGs based on the 1980 United States Census resulted in 10 groups containing approximately equal numbers of districts, the DFGs based on the 2000 United States Census resulted in eight groups of different sizes depending on their score. The number of districts administering the NJ ASK in each DFG is now as follows:

<u>DFG Number of Districts*</u>	
A	39
B	64
CD	64
DE	77
FG	87
GH	66
I	97
J	23

Additionally, the NJ ASK is now administered to students enrolled in 64 charter schools.

* Includes all New Jersey public school districts administering the NJ ASK, regardless of school configuration or grade levels served.

APPENDIX D: Performance Level Descriptors

Language Arts Literacy

Grade 3

Partially Proficient

Reading. A student performing at the Partially Proficient level demonstrates **limited** ability to employ strategies needed to understand a variety of texts on a literal level. S/he **may** demonstrate **some** understanding of the central idea, supporting details, purpose, and organization of text, and **may** express **some** understanding of the text in written responses. A student at this level demonstrates **inconsistent** ability, however, to connect ideas, summarize relevant details, make inferences, and draw appropriate conclusions about the text in written responses.

Writing. A student performing at the Partially Proficient level **may** develop a single focus and **may attempt** to organize his/her writing using some supporting details that connect to the topic. S/he **inconsistently** follows the conventions of written language and demonstrates **limited** word choice and sentence structure in developing text. The student at this level **may not** sustain a purpose for writing and **may not** elaborate on ideas.

Proficient

Reading. A student performing at the Proficient level **demonstrates** the ability to employ strategies to comprehend a variety of texts literally and inferentially and to express understanding of the text in written responses. As a proficient reader, the student **recognizes** the central idea, supporting details, purpose, and organization of the text as well as some literary devices. The proficient student **can make connections** to the text, form opinions, and draw conclusions. The proficient reader **is able to synthesize** ideas from the reading and to use these to analyze and extend the meaning of the text in written responses.

Writing. A proficient writer uses a **repertoire of strategies** that enables him/her to accomplish the task of communicating a **clear and cohesive** message. The student **establishes and sustains** a purpose for writing and elaborates on information with specific details as s/he develops the text. The student connects ideas in a **logical progression**, provides support for opinions and conclusions, and generally uses transitions and the conventions of written language as well as varied sentence structures and word choice in his/her writing. S/he may take compositional risks.

Advanced Proficient

Reading. In addition to demonstrating the skills outlined for the proficient student, the Advanced Proficient reader **clearly and consistently** demonstrates the ability to synthesize, analyze, and extend the meaning of the text. In addition, the Advanced Proficient reader **interacts** with the text and makes meaningful connections in order to generate and extend ideas in written responses.

Writing. In addition to consistently demonstrating the skills outlined for the Proficient student, the Advanced Proficient writer **establishes and sustains** a single focus, organizes and connects ideas with **effective** transitions, and elaborates with **vivid** supporting details. The student at this level varies sentence structures, chooses **precise** words to convey meaning and message, and **consistently** uses the conventions of written language. S/he may take compositional risks.

Language Arts Literacy Grade 4

Partially Proficient

Reading. A student performing at the Partially Proficient level demonstrates **limited** ability to construct meaning from texts or to employ the strategies needed to analyze and critique a variety of texts. S/he **may** demonstrate **some** understanding of the central idea, supporting details, purpose, and organization of text, and **may** express **some** understanding of the text in written responses. A student at this level demonstrates **inconsistent** ability, however, to connect ideas, summarize relevant details, make inferences, draw appropriate conclusions, and express opinions about the text in written responses.

Writing. A student performing at the Partially Proficient level **may** develop a single focus and **may** attempt to organize his/her writing using some details that connect to the topic. S/he **inconsistently** follows the conventions of written language and demonstrates **limited** word choice and sentence structure in developing text. The student at this level **may not** sustain a purpose for writing and **may not** elaborate on ideas.

Proficient

Reading. A student performing at the Proficient level **constructs** meaning by employing a variety of strategies to synthesize, analyze, and critique text. As a proficient reader, the student **recognizes** the central idea, supporting details, purpose, and organization of the text. The proficient reader **demonstrates** the ability to comprehend a variety of texts literally and inferentially, make connections to the text, and understand the function of some literary devices. The student **is able to use relevant** details to support opinions and conclusions and to use these to analyze ideas and extend the meaning of the text in written responses.

Writing. A proficient writer uses a **repertoire of strategies** that enable him/her to accomplish the task of communicating a **clear and cohesive** message. The proficient writer **establishes and sustains** a single focus for the writing, generally organizes and connects ideas in a **logical progression**, and includes relevant supporting details that elaborate on ideas. The student demonstrates **some fluency** as a writer with his/her use of transitions, varied sentence structure, precise word choice, and the conventions of written language. The student may also attempt compositional risks.

Advanced Proficient

Reading. In addition to demonstrating the skills outlined for the Proficient student, the Advanced Proficient reader **clearly and consistently** demonstrates the ability to synthesize, analyze, and extend the meaning of the text. In addition, the Advanced Proficient reader **interacts** with the text and makes meaningful connections in order to generate and extend ideas in written responses.

Writing. In addition to **consistently** demonstrating the skills outlined for the Proficient student, the Advanced Proficient writer **establishes and sustains** a single focus, organizes and connects ideas with **effective** transitions, and elaborates with **vivid** supporting details. The student varies sentence structure, chooses **precise** words to convey meaning and message, and **consistently** uses the conventions of written language. S/he may take compositional risks.

Language Arts Literacy Grade 5

Partially Proficient

Reading. Students performing at the partially proficient level construct meaning by using reading strategies to comprehend on a literal level, make some connections to the text, and provide limited support for opinions and conclusions. They demonstrate limited understanding of text structures and literary elements, and attempt to use context clues to determine the meaning of unknown words.

Writing. As partially proficient writers, these students may develop a single focus and attempt to organize and connect ideas with relevant details. These students use limited word choice and sentence structure, and incorporate basic writing mechanics.

Proficient

Reading. Students performing at the proficient level construct meaning by using reading strategies to comprehend literally and inferentially. Proficient students synthesize details and analyze text. These students identify and explain literary elements, figurative language, and text structures. Proficient fifth grade students make connections, draw conclusions, and identify author's purpose, views, or beliefs. These students determine meaning of words and phrases by applying knowledge of word structure and using context clues.

Writing. As proficient writers, these students develop and maintain a single focus by organizing and connecting ideas with relevant details. Proficient students exhibit some variety in word choice and sentence structure, attempt writing techniques and use some transitions while incorporating basic writing mechanics.

Advanced Proficient

Reading. As readers, students performing at the advanced level of proficiency consistently demonstrate the skills outlined for proficient performance. In addition, the advanced proficient students extend meaning by making connections, generating new ideas, and making sound judgments about text.

Writing. As writers, students performing at the advanced level of proficiency consistently demonstrate the skills outlined for proficient performance. In addition, these students also use supporting details to convey and elaborate ideas. Advanced proficient students use fluid transitions, strong and appropriate word choice and sentence variety to purposefully engage the reader.

Language Arts Literacy Grade 6

Partially Proficient

Reading. Students performing at the partially proficient level construct meaning by using reading strategies for literal and limited inferential comprehension, make connections with the text and provide some support for opinions and conclusions. They demonstrate some understanding of text structures and literary elements, and use word structure and context clues to determine the meaning of unknown words.

Writing. As partially proficient writers, these students develop a single focus and organize and connect ideas with some supporting details. They write for a limited variety of purposes, attempt to provide support for opinions and conclusions, and incorporate basic writing mechanics.

Proficient

Reading. Students performing at the proficient level construct meaning by using reading strategies to comprehend literally and inferentially. Students at this level identify the central idea, relevant and essential details, and textual conventions. Proficient students are able to analyze and evaluate organizational structures and literary elements and devices. Proficient sixth grade students make connections and inferences, and identify author's purpose, views or beliefs. These students determine meaning of words and phrases by applying knowledge of word structure and using context clues.

Writing. As proficient writers, these students develop and maintain a single focus and supporting details within a clear and appropriate organizational structure. Proficient students write for a variety of purposes while keeping their audience in mind. Students provide support for opinions and conclusions, and attempt to use literary devices.

Advanced Proficient

Reading. As readers, students performing at the advanced level of proficiency consistently demonstrate the skills outlined for proficient performance. In addition, students demonstrate comprehension and extend meaning by making connections, generating new ideas, and making insightful judgments about text.

Writing. As writers, students performing at the advanced level of proficiency consistently demonstrate the skills outlined for proficient performance. In addition, the advanced proficient students develop a logical progression of ideas with style, voice, and precise word choice. Students at this level apply appropriate compositional risks.

Language Arts Literacy Grade 7

Partially Proficient

Reading. Seventh grade students performing at the partially proficient level construct meaning by using reading strategies for literal and inferential comprehension, and make connections with the text. They identify the central idea or theme, demonstrate some understanding of text structures and literary elements and provide limited support for opinions and conclusions. These students use word structure and context clues to determine the meaning of unknown words.

Writing. Seventh grade students partially proficient in writing develop a single focus and organize and connect ideas with some supporting details. They may establish a purpose for writing and provide limited support for opinions and conclusions. These students demonstrate some control of Standard English conventions.

Proficient

Reading. Seventh grade students performing at the proficient level demonstrate an understanding of a variety of texts. Proficient students identify the author's purpose, tone, and central idea or theme. They recognize the main idea and support it with evidence. Students use the organizational structure of text to construct meaning. They use word and sentence structure as well as context clues to determine the meaning of unknown words and phrases. Students interpret, extrapolate, and synthesize information.

Writing. Seventh grade students proficient in writing are able to develop a single focus and supply supporting details in a variety of organizational structures. Students at this level establish a purpose for writing and provide support for opinions and conclusions. Proficient students demonstrate control of Standard English conventions.

Advanced Proficient

Reading. In addition to demonstrating the skills outlined for proficient students, advanced proficient students infer themes or central ideas while analyzing and evaluating texts. Advanced students make connections to extend understanding and critically respond to a variety of texts.

Writing. As writers, students performing at the advanced level of proficiency consistently demonstrate the skills outlined for proficient performance. In addition, the advanced proficient students create a clear and unified composition by developing a central theme, supporting details and appropriate organizational structure. They demonstrate sophisticated use of literary elements as well as a precise vocabulary. Advanced students apply compositional risks.

Language Arts Literacy Grade 8

Partially Proficient

Reading. Eighth grade students performing at the partially proficient level construct meaning by using reading strategies for literal and inferential comprehension, and make connections with the text. They identify the central idea or theme, demonstrate some understanding of text structures and literary elements, and provide some support for opinions and conclusions. These students use word structure and context clues to determine the meaning of unknown words, and attempt to interpret, extrapolate, and synthesize information.

Writing. Eighth grade students partially proficient in writing develop a single focus and organize and connect ideas with supporting details. They establish a purpose for writing and provide limited support for opinions and conclusions. These students demonstrate some control of Standard English conventions.

Proficient

Reading. Eighth grade students performing at the proficient level show an overall understanding of a variety of texts at literal and inferential levels. They make connections while interpreting and analyzing text. Proficient students recognize the author's purpose and respond critically to central themes, supporting details, and organizational structures of text. They interpret, extrapolate and synthesize information. Students support opinions and conclusions with evidence from the text.

Writing. Eighth grade students proficient in writing develop and sustain a single focus, include and elaborate supporting details, and use a variety of organizational structures. They establish a purpose for writing and elaborate on ideas. Students at this level provide support for opinions and conclusions while demonstrating control of Standard English conventions.

Advanced Proficient

Reading. In addition to demonstrating the skills outlined for proficient students, advanced proficient students show a sophisticated understanding of abstract themes and ideas. They make insightful connections while interacting with, interpreting, analyzing, and critiquing text. The advanced students synthesize, analyze, and evaluate written text.

Writing. As writers, students performing at the advanced level of proficiency consistently demonstrate the skills outlined for proficient performance. The advanced proficient students, in addition to developing a central theme, supporting details and organizational structure, demonstrate sophisticated use of literary elements and vivid vocabulary. Advanced students show a high degree of sustained control over textual conventions and apply compositional risks.

Mathematics

Grade 3

Partially Proficient

Students performing at the Partially Proficient level have **limited** recall, recognition and application of basic facts and informational concepts.

- Partially Proficient students perform **simple routine** procedures such as computing a sum, difference or product, and can use a specified procedure with some accuracy. These students have **limited ability to demonstrate** number sense by using place value concepts and fractions. Partially proficient students **may have difficulty with determining the appropriate operation** for a given situation and with estimating their results.
- Partially Proficient students can **apply basic concepts** of geometry and measurement. These students have a **basic working knowledge** of spatial sense, geometric properties and geometric relationships. Partially proficient students can **sometimes use** appropriate measurement tools accurately.
- Partially Proficient students have a **basic understanding** of how quantities are related to one another and how algebra can be used to concisely represent and analyze those relationships. These students can recognize, describe, extend, and create **simple patterns** as well as solve **simple problems** involving functions.
- Partially Proficient students have a **basic understanding** of how to apply the concepts and methods of data analysis, probability, and discrete mathematics. These students are able to read a graph, table, or chart.
- Partially Proficient students can **identify and use basic mathematical terms** as well as apply some reasoning methods to solve simple problems.

Proficient

Students performing at the proficient level demonstrate recall, recognition and application of facts and informational concepts.

- Proficient students **perform routine procedures** such as computing a sum, difference or product, and can use a specified procedure with accuracy. These students are able to demonstrate number sense by using place value concepts and fractions. Proficient students **determine the appropriate operation** for a given situation and can use estimation appropriately.
- Proficient students **understand and apply concepts** of geometry and measurement. These students can **demonstrate a working knowledge** of spatial sense, geometric properties and geometric relationships. Proficient students can use appropriate measurement tools accurately.

Mathematics

Grade 3 (cont'd)

- Proficient students **demonstrate an understanding** of how quantities are related to one another and how algebra can be used to concisely represent and analyze those relationships. These students can recognize, describe, extend, and create patterns as well as solve problems involving functions.
- Proficient students **understand and apply** the concepts and methods of data analysis, probability, and discrete mathematics. These students are able to read, interpret, and represent information in a graph, table, or chart.
- Proficient students **use various forms** of representation to illustrate steps to a solution and **effectively communicate** a variety of reasoning methods to solve multi-step problems. Proficient students can explain steps and procedures for finding solutions, as well as check the reasonableness of their results.

Advanced Proficient

Students performing at the Advanced Proficient level demonstrate the qualities outlined for Proficient performance. In addition, these students determine strategies and procedures to solve **routine and non-routine** problems. An Advanced Proficient student draws appropriate inferences and provides explanations that are **consistently clear and thorough**. These students **consistently** demonstrate the ability to abstract relevant information, use **multiple strategies** and/or reasoning methods, and use various forms of representations to solve challenging problems. These students demonstrate an understanding of the reasonableness of their answers.

Mathematics

Grade 4

Partially Proficient

Students performing at the Partially Proficient level have **limited** recall, recognition and application of basic mathematical concepts, skills, and vocabulary to solve problems involving real world situations.

- Partially Proficient students understand and perform **simple routine** numerical operations of whole numbers. The students have **limited ability to demonstrate** number sense by using place value concepts, fractions and decimals. Partially Proficient students can compute **simple** sums and differences of fractions and decimals. These students have difficulty with determining the appropriate operation for a given situation and with estimating their results.
- Partially proficient students **understand and apply basic concepts** of geometry and measurement. These students demonstrate a **basic working knowledge** of spatial sense, geometric properties, and geometric relationships. Partially Proficient students **can use** appropriate measurement tools accurately to solve simple problems involving perimeter, area, and volume. These students have a **basic understanding** of coordinate geometry and lines of symmetry.
- Partially Proficient students have a **basic understanding** of how quantities are related to one another and how to represent and analyze those relationships using algebraic concepts. These students can recognize, describe, extend, and create **simple patterns**, as well as solve **simple problems** involving functions.
- Partially Proficient students have a **basic understanding** of the concepts and methods of data analysis, probability, and discrete mathematics. These students can read, interpret and construct simple graphs, tables, and/or charts, but often find it difficult to predict or make an informed decision based on information retrieved from a variety of sources. Partially Proficient students demonstrate limited skills using tools and strategies for representing, organizing, and interpreting data. These students can solve simple problems involving mean, median, and mode.
- Partially Proficient students can **identify and use basic mathematical terms** and apply some reasoning methods to solve simple problems.

Proficient

Students performing at the proficient level demonstrate recall, recognition and application of mathematical concepts, skills, and vocabulary to solve problems involving real world situations.

- Proficient students **understand and perform** numerical operations of whole numbers and can use a specified procedure with **accuracy**. These students demonstrate number sense by using place value concepts, fractions, and decimals. Proficient students can compute sums and differences of fractions and decimals. These students **determine the appropriate operation** for a given situation and can use estimation appropriately.

Mathematics

Grade 4 (cont'd)

- Proficient students **understand and apply concepts** of geometry and measurement. These students **demonstrate a working knowledge** of spatial sense, geometric properties and geometric relationships. Proficient students can use appropriate measurement tools accurately to solve problems involving perimeter, area and volume. These students understand and apply concepts of coordinate geometry as well as identify lines of symmetry.
- Proficient students **demonstrate an understanding** how quantities are related to one another and how to represent and analyze those relationships using algebraic concepts. These students can recognize, describe, extend, and create patterns as well as solve functions for a given variable, including inverse relationships. Proficient students can understand, name, and apply properties of operations and numbers.
- Proficient students have an **understanding of how to apply** the concepts and techniques of data analysis, probability, and discrete mathematics. These students can read, interpret and construct graphs, tables and/or charts as well as predict or make an informed decision based on information retrieved from a variety of sources. Proficient students demonstrate skills using tools and strategies for representing, organizing, and interpreting data as well as solve problems involving mean, median, and mode.
- Proficient students **use various forms** of representation to illustrate steps to a solution and **effectively communicate** a variety of reasoning methods to solve multi-step problems. These students can explain steps and procedures for finding solutions as well as check the reasonableness of their results.

Advanced Proficient

Students performing at the Advanced Proficient level **clearly and consistently demonstrate** the qualities outlined for Proficient performance. These students **clearly and consistently demonstrate** thorough conceptual understanding of procedural and analytical skills. In addition, Advanced Proficient students demonstrate the use of **abstract thinking** and provide explanations that are **consistently clear and thorough**. These students use both inductive and deductive reasoning to solve non-routine problems as well as consistently demonstrate the ability to abstract relevant information, use multiple strategies and/or reasoning methods, and use various forms of representations to solve complex problems. Advanced Proficient students demonstrate an understanding of the reasonableness of their answers.

Mathematics

Grade 5

Partially Proficient

Students performing at the partially proficient level have limited recognition and understanding of and inconsistently apply basic mathematical concepts, skills, and vocabulary to theoretical and real world situations.

- These students may understand that a quantity can be represented numerically in various ways. Partially proficient students perform basic computational procedures with inconsistent accuracy.
- Partially proficient students struggle to apply geometric properties and comprehend spatial relationships.
- Partially proficient students have difficulty using informal algebraic concepts and processes.
- Partially proficient students inconsistently read, construct, and interpret data and graphs. They inconsistently apply the concepts and methods of discrete mathematics.

These students will occasionally infer, reason and estimate while problem solving. Partially proficient students are frequently ineffectual in selecting a successful process or strategy. These students have difficulty demonstrating a basic understanding of mathematical concepts through written expression and/or symbolic representation.

Proficient

Students performing at the proficient level recognize and understand basic mathematical concepts, skills, and vocabulary and apply them to theoretical and real world situations.

- Proficient students understand that a quantity can be represented numerically in various ways. These students perform basic computational procedures.
- Proficient students apply geometric properties and spatial relationships.
- Proficient students use informal algebraic concepts and processes.
- Proficient students read, construct, and interpret data and graphs. They apply the concepts and methods of discrete mathematics.

These students infer, reason, and estimate while problem solving. Proficient students are flexible in selecting a successful process or strategy. These students demonstrate a basic understanding of mathematical concepts through written expression and/or symbolic representation.

Advanced Proficient

Students performing at the advanced proficient level consistently demonstrate the qualities outlined for proficient performance. In addition, advanced proficient students analyze methods for appropriateness, synthesize processes, and evaluate mathematical relationships. Advanced proficient students demonstrate conceptual understanding by consistently providing clear and complete explanations. These students demonstrate the ability to transfer mathematical concepts to other applications and successfully form conjectures.

Mathematics

Grade 6

Partially Proficient

Sixth grade students performing at the partially proficient level in mathematics demonstrate limited evidence of and/or an inability to communicate conceptual understanding of procedural and analytical skills. Partially proficient students inconsistently apply mathematical skills and knowledge to theoretical and real world situations. These students struggle to integrate skills across the four mathematical content standards.

- Partially proficient students may demonstrate some understanding of but inconsistently apply appropriate standard numerical operations. These students may determine the reasonableness of an answer.
- Partially proficient students have difficulty understanding and applying geometric concepts including properties, measurement, and special relationships.
- Partially proficient students may inconsistently use simple algebraic concepts and processes.
- They inconsistently read, construct, and interpret data and graphs, determine probabilities of events, and may misapply the concepts and methods of discrete mathematics.

Proficient

Sixth grade students performing at the proficient level in mathematics demonstrate evidence of and communicate conceptual understanding of procedural and analytical skills. Proficient students apply mathematical skills and knowledge to theoretical and real world situations. In addition, these students integrate skills across the four mathematical content standards.

- Proficient students understand and apply appropriate standard numerical operations: an understanding for problem solving in practical situations. These students can determine the reasonableness of an answer.
- Proficient students understand and apply geometric concepts including properties, measurement, and special relationships.
- Proficient students use simple algebraic concepts and processes.
- Proficient students read, construct, and interpret data and graphs, determine probabilities of events, and apply the concepts and methods of discrete mathematics.

Advanced Proficient

Sixth grade students performing at the advanced proficient level in mathematics consistently demonstrate the qualities for proficient performance. In addition, these students demonstrate the use of abstract thinking and mathematical fluency to provide explanations that are consistently clear and thorough. Advanced proficient students support logical, efficient methods in solving problems. These students consistently make accurate inferences and predictions. Advanced proficient students may support responses with appropriate mathematical explanation. These students successfully analyze and draw appropriate inferences from data. They demonstrate the ability to transfer mathematical concepts to other applications and successfully form conjectures.

Mathematics

Grade 7

Partially Proficient

Seventh grade students performing at the partially proficient level demonstrate limited evidence of conceptual understanding of mathematical knowledge, procedures, skills, and processes across the four content standards. A partially proficient student inconsistently demonstrates the ability to:

- identify, recognize and compare different representations of numbers. They demonstrate a limited understanding of the meanings and uses of numerical operations.
- identify, describe, and classify two- and three-dimensional shapes, apply geometric properties, and solve problems involving geometry, spatial sense, and measurement.
- recognize, evaluate and identify algebraic representations and simple patterns of theoretical and real-world problems, including the extension of simple patterns.
- model situations, solve problems, and analyze, and draw appropriate inferences from data. They have difficulty understanding and interpreting the fundamental concepts of probability, and inconsistently apply concepts of discrete mathematics to solve problems.

Partially proficient students comprehend some mathematical vocabulary and communicate their reasoning ineffectually.

Proficient

Seventh grade students performing at the proficient level demonstrate evidence of conceptual understanding of mathematical knowledge, procedures, skills, and processes across the four content standards.

- Proficient students identify, recognize and compare different representations of numbers and demonstrate an understanding of the meanings and uses of numerical operations.
- Proficient students identify, describe, and classify two- and three-dimensional shapes, apply geometric properties, and solve problems involving geometry, spatial sense, and measurement.
- Proficient students recognize, evaluate and identify algebraic representations and simple patterns of theoretical and real-world problems, including the extension of simple patterns.
- Proficient students model situations, solve problems, and analyze, and draw appropriate inferences from data. They understand and interpret the fundamental concepts of probability and apply concepts of discrete mathematics to solve problems.

Proficient students are mathematically literate in their ability to comprehend vocabulary, understand appropriate context and communicate their reasoning.

Advanced Proficient

Advanced proficient students demonstrate the qualities outlined for proficient performance. Additionally, they use abstract reasoning and demonstrate mathematical fluency through problem solving and assess the reasonableness of their solution. Advanced proficient students extrapolate information and form and support conclusions through clear and thorough explanations.

Mathematics

Grade 8

Partially Proficient

Eighth grade students performing at the partially proficient level demonstrate limited evidence of conceptual and analytical understanding of mathematical knowledge, procedures, skills and processes across and within the four content standards. A partially proficient student inconsistently demonstrates the ability to:

- identify, recognize and compare different representations of numbers. They demonstrate a limited understanding of the meanings and uses of numerical operations and number systems.
- apply geometrical concepts; identify, describe, and classify two- and three-dimensional shapes; and solve problems involving geometry, spatial sense and measurement.
- represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes. Students have difficulty modeling situations algebraically, symbolically and graphically.
- analyze, interpret, and make predictions based on appropriate representations for sets of data. They are limited in applying and interpreting the concepts of probability and discrete mathematics to solve problems.

Partially proficient students comprehend some mathematical vocabulary and communicate their reasoning ineffectually within and among the mathematical content areas.

Proficient

Eighth grade students performing at the proficient level demonstrate evidence of conceptual and analytical understanding of mathematical knowledge, procedures, skills and processes across and within the four content standards.

- Proficient students identify, recognize and compare different representations of numbers and demonstrate an understanding of the meanings and uses of numerical operations and number systems.
- Proficient students apply geometrical concepts; identify, describe, and classify two- and three-dimensional shapes; and solve problems involving geometry, spatial sense and measurement.
- Proficient students will represent and analyze relationships among variable quantities and solve problems involving patterns, functions, and algebraic concepts and processes. Students will model situations algebraically, symbolically and graphically.
- Proficient students analyze, interpret, and make predictions based on appropriate representations for sets of data. They apply and interpret the concepts of probability and discrete mathematics to solve problems.

Proficient students are mathematically literate in their ability to comprehend vocabulary, understand appropriate context and communicate their reasoning within and among the mathematical content areas.

Mathematics
Grade 8 (cont'd)

Advanced Proficient

Advanced proficient students demonstrate the qualities outlined for the proficient student. Additionally, advanced proficient students use inductive and deductive reasoning as well as demonstrate mathematical fluency. Students performing at the advanced proficient level demonstrate clear and thorough conceptual understanding. They are able to extrapolate information to form and support conclusions through clear and thorough explanations as well as assess the reasonableness of their solution.

Science

Grade 4

Proficient

A fourth grade student performing at the proficient level demonstrates grade level comprehension of written material (i.e., text, charts, graphs, tables). The proficient student applies the knowledge gained from scientific investigations in developing adept habits of mind. The student often chooses and uses the appropriate tools to make observations and to gather, classify, and present data. The student will use both essential and non-essential information to recognize patterns and relationships between data and designed systems. The student will occasionally use information to make real world connections to classroom activities.

Advanced Proficient

In addition to consistently demonstrating the skills outlined for the proficient student, the advanced proficient student demonstrates a clear and concise communication of ideas using specific scientific terms. The advanced proficient student uses prior scientific knowledge to make judgments and draw conclusions. The student will classify according to a variety of criteria and differentiate between essential and non-essential information. The student will apply the scientific method to analyze information; predict outcomes and trends; and generate numerous solutions to scientific problems. The student will be able to analyze information to make inferences from data collected and analyze systemic relationships.

Science
Grade 8
ASK 8 and Grade Eight Proficiency Assessment (GEPA)
(Proficient and Advanced Proficient)

Proficient

The Proficient student can recognize the structural levels of living things. This student knows that some traits of organisms are beneficial and some detrimental. This student can interpret visual and textual data to understand the relationship within a food web and the interdependence of living and nonliving systems.

The proficient student can recognize the effect force has on an object, trace the flow of energy through a system, and use the properties of matter to identify and separate materials. This student can understand different types of energy and use information from data charts to interpret relationships and predict outcomes.

The proficient student can recognize the existence of a relationship between the moon and tides, recognize the different characteristics of the planets in the solar system, and understand the natural forces that change the surface of the Earth, including chemical and physical weathering.

Advanced Proficient

The advanced proficient student can support scientific conclusions with valid contextual and visual data and make predictions based on the interactions of living things. This student is able to use interpretive skills to analyze visual and textual data in order to solve problems dealing with the application of force and energy. The advanced proficient student understands the difference between types of energy waves and can recognize and apply experimental principles and empirical data. The advanced proficient student can recognize the nature of the tides' relationship to Earth, Sun, and moon; interpret topographical maps; and identify the steps in the process of weathering and erosion.

FOR ASSISTANCE

- If you have questions regarding Adequate Yearly Progress (AYP), please contact the Office of Student Achievement and Accountability (www.nj.gov/education/title1/accountability) at titleone@doe.state.nj.us or (609) 943-4283.
- If you have questions regarding report schedules or distribution, please contact customer service for NJ ASK 3–8 at Measurement Incorporated (MI) at (866) 783-2280.
- If you have questions regarding the administration of the NJ ASK for grades 3–5, please contact Mr. Orlando Vadel, NJ ASK 3–5 Program Coordinator, at (609) 341-3456.
- If you have questions regarding the administration of the NJ ASK for grades 6–8, please contact Ms. JoAnne Tubman, NJ ASK 6–8 Program Coordinator, at (609) 777-2087.
- If you have questions about score interpretation for NJ ASK 3–8, please call Dr. Don White, measurement specialist, New Jersey Department of Education, at (609) 777-2051.
- For more information regarding New Jersey’s Core Curriculum Content Standards, which form the basis for the NJ ASK 3–8, please see www.nj.gov/education/cccs/

The following websites provide additional information relevant to the NJ ASK 3–8:

New Jersey Department of Education.....	www.state.nj.us/education/
Office of Student Learning Assessments.....	www.nj.gov/education/assessment/
Office of Academic and Professional Standards	www.nj.gov/education/aps
New Jersey Core Curriculum Content Standards	www.nj.gov/education/cccs/
National Assessment of Educational Progress (NAEP) Frameworks.....	www.nagb.org/
Measurement Incorporated (NJ ASK 3–8 contractor).....	www.measinc.com/njask