New Jersey
Student Learning Assessment-Science (NJSLA-S)

## Score Interpretation Guide <br> For Educators

## Spring 2019



State of New Jersey
Department of Education

## 2019 NJSLA-S

# New Jersey Student Learning Assessment—Science 

# Score Interpretation Guide 

## For Educators

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### 1.0 Purpose of This Guide

This Score Interpretation Guide is a resource to use for interpreting and discussing the results of the 2019 spring administration of the New Jersey Student Learning Assessment-Science (NJSLA-S) for fifth-, eighth-, and eleventh-grade students. It is a tool 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.

Please note that reports with fictitious data appear in this guide for illustrative purposes only; they do not include actual data from any test administration.

### 1.1 New Jersey Student Learning Assessment for Science (NJSLA-S)

The NJSLA-S measures student proficiency in the New Jersey Student Learning Standards for Science. One of the primary purposes of the NJSLA-S is to identify areas of curricular strength and weakness by examining the extent to which students meet the established performance expectations in science. The first administration of the NJSLA-S was in the 2018-19 school year following a 2018 field test. The spring 2019 operational administration was the assessment's baseline year. The New Jersey Student Learning Assessments are part of an ongoing system of activities that provide evidence related to student learning. Data from the NJSLA-S and from students' daily interactions with teachers as well as from their performance on teacher and district-developed assessments combine to provide a complete picture of student achievement in science.

The NJSLA-S assesses students on their understanding and explanations of scientific phenomena and scenarios. It comprises two parts-the performance-based assessment (PBA) and the machine scorable assessment (MSA). The PBA contains one open-ended, constructedresponse item and between two and four technology-enhanced items (TEI). Examples of TEI may be viewed on the practice test, available at https://nj.testnav.com. The MSA contains a mixture of TEI and multiple-choice items.

All items are based on the standards of the grade band for which the assessment is developed:

- The grade 5 assessment contains items based on standards from grades 3 to 5 .
- The grade 8 assessment contains items based on all middle school standards.
- The grade 11 assessment contains items based on all high school standards.

The tests cover a range of the standards. To accomplish the necessary scope, each test item represents an interaction of disciplinary core ideas (DCIs—within the domains of physical, life, and earth/space science) and science and engineering practices (SEPs—investigating, sensemaking, or critiquing). Table 1.1 illustrates these SEPs. Every test item counts towards the students' performance in exactly one domain and one practice.

Table 1.1: Science and Engineering Practice (SEP) Reporting Groups

| Investigating Practices | Sensemaking Practices | Critiquing Practices |
| :---: | :---: | :---: |
| 1. Asking Questions and <br> Defining Problems | 1. Developing and Using <br> Models | 1. Engaging in Argument from <br> Evidence |
| 2. Planning and Carrying Out <br> Investigations | 2. Analyzing and Interpreting <br> Data | 2. Obtaining, Evaluating, and <br> Communicating Information |
| 3. Using Mathematical and <br> Computational Thinking | 3. Constructing Explanations <br> and Designing Solutions | N/A |

For more information on the NJLSLA-S, please visit the NJLSLA-S website at http://www.measinc.com/nj/science.

### 1.2 Confidentiality of Reporting Results

Individual student performance results are confidential and may be released only in accordance with a variety of federal laws: The 1946 Richard B. Russell National School Lunch Program Act, 1974 Family Educational Rights and Privacy Act (FERPA), and 1975 Individuals with Disabilities Education Act (IDEA). More specifically, in group assessment information reporting, data must be suppressed when it would otherwise be possible to infer the performance of individual students. To read additional material on the US Department of Education (USDOE) comprehensive security policy and procedures, please see the USDOE Student Privacy Policy page, https://www2.ed.gov/policy/gen/guid/fpco/index.html.

In practice, it is common to suppress numbers where a group size is equal to less than ten 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 to a level that has negative connotations associated with it. Suppressed numbers are replaced by other characters (NJDOE uses asterisks) to safeguard confidentiality. Whenever any data suppression measures are employed, a statement is needed explaining that it was done to protect student confidentiality. To find more information on access to public records, please see the Citizens Guide to OPRA, https://www.nj.gov/grc/public/citizens/, and the NJ School Performance Reports Reference Guide, https://rc.doe.state.nj.us/Documents/1718/ReferenceGuide.pdf.

### 1.3 Types of Scores on the NJSLA-S Score Reports

Student performance on the NJSLA-S is described using scale scores, performance levels, and domain and practice performance indicators. State, district, and school average results are included for comparison.

### 1.3.1 Scale Scores

The NJSLA-S reports scale scores to indicate a student's performance. A scale score is a conversion of the raw score (that is, the total number of points a student earned on the test as a whole), using a predetermined mathematical algorithm, to permit legitimate and meaningful comparisons over time and across grades. The total scores in Science are reported as scale scores with a range of 100 to 300 . For more information on scale scores, please see the Frequently Asked Questions.

### 1.3.2 Performance Levels

Based on test results, a student's performance is categorized as being at one of four performance levels, each of which is defined by a student's scale score and used to report overall student performance on the NJSLA-S. Grade-appropriate Performance Level Descriptors (PLDs) translate these performance levels into words. They describe the knowledge, skills, and practices that students should know and be able to demonstrate at each of the performance levels, Level 1 through Level 4. Please refer to Appendix A for a listing of the Performance Level Descriptors (PLDs).

Each performance level is associated with a range of scale scores:

Table 1.2: Proficiency Levels by Grade and Cut Score

| Grade | Level 1 | Level 2 | Level 3 | Level 4 |
| :---: | :---: | :---: | :---: | :---: |
| 5 | $100-149$ | $150-199$ | $200-242$ | $243-300$ |
| 8 | $100-149$ | $150-199$ | $200-230$ | $231-300$ |
| 11 | $100-157$ | $158-199$ | $200-249$ | $250-300$ |

Students performing at Level 3 and Level 4 are considered proficient and above; they demonstrate appropriate or exemplary understanding of the DCIs and SEPs. Students performing at Level 1 and Level 2 are considered to be below the state minimum level of proficiency. They demonstrate minimal or partial understanding of the DCIs and SEPs. Students at this performance level may need additional instructional support, which could be in the form of individual or programmatic intervention.

For example, students whose scale score places them in Level 3 are described as having "demonstrated appropriate grade-level understanding of the New Jersey Student Learning Standards-Science (NJSLS-S) by comprehending information from a variety of sources (e.g., text, charts, graphs, tables) and applying the knowledge gained from scientific investigation to develop accurate explanations and models of observed phenomena. The students often chose and used the appropriate tools to make observations and to gather, classify, and present data.

The students used both essential and non-essential information to recognize patterns and relationships between data and designed systems. The students were able to use information to make real-world connections and predictions." (Text is provided on the Individual Score Reports (ISRs), described in section 2.0 of this guide.)

### 1.3.3 Domain and Practice Performance

The reports also provide graphical representations of information about what students know and can do with respect to the domains and practices that comprise the NJSLA-S. For each of the domains and practices:

An exclamation point in a yellow diamond indicates that the student is performing Below Expectations-that is, the student's performance with respect to this domain or practice is statistically significantly below expectations, and the student is likely in significant need of instructional support.

A double tilde in a purple square indicates that the student is performing Near/Met Expectations-that is, the student's performance with respect to this domain or practice does not differ to a statistically significant extent from expectations, and the student may need some degree of instructional support.

A check mark in a green circle indicates that the student is performing Above Expectations-that is, the student's performance with respect to this domain or practice is statistically significantly above expectations, and the student is likely academically well prepared.

Although these graphical representations permit a more targeted view of a student's performance, it is important to keep in mind that both domain- and practice-level results are, by definition, based on smaller numbers of items than is the test as a whole. Consequently, data at this more granular level are less precise than are overall scale scores, and individual student-level inferences should be made with caution.

### 2.0 Understanding the NJSLA-S Student-Level Reports

The Individual Student Reports (ISRs), Student Labels, and Student Rosters described in this section provide data that may be used to help identify student strengths and needs. The NJSLA-S divides students into four performance levels. Students whose scale scores fall in Level 3 or Level 4 are considered proficient or above proficient, while students whose scale scores fall in Level 1 or Level 2 may need additional targeted instructional support.

### 2.1 Individual Student Report (ISR)

The ISR, a sample of which is depicted in Figures 1 through 4, is a two-sided report which presents a student's scale score and performance level, indicating their overall performance on the NJSLA-S and the extent to which they meet or do not meet the state standards. The ISR also provides more specific information on the student's performance with respect to the domains and practices that underly the NJSLA-S, described in Section 1.1. When applicable, the ISR also indicates why a student does not receive a scale score. A description of the different components of the ISR follows.

Figure 1. Sample Individual Student Report (ISR)


FIRSTNAME M. LASTNAME
Spring 2019 Grade: 5
SID: 0123456789 DOB: 01/01/9999 Local Student Identification: 0123456789 SAMPLE DISTRICT NAME SAMPLE SCHOOL NAME

## New Jersey Student Learning Assessment - Science (NJSLA-S) Individual Student Report

This report shows how FIRSTNAME performed on the [elementary/middle/high] school science assessment. This assessment is just one measure of how well your child is performing academically.

To learn more about the test and to view sample questions and practice tests, visit the Score Interpretation Guide (SIG) at
www.measinc.com/nj/science.

## How Can You Use This Report?

Ask your child's teachers:

- What do you see as my child's academic strengths and areas for improvement?
- How will you use these test results to help my child make progress this school year?

See side 2 of this report for specific information on your student's performance using domains and practices.
How did Firstname perform on the NJSLA-S?
Your student's score: 226
Performance: Level 3
Level $1(100-149)$
Level $2(150-199)$
Level $3(200-249)$
Level $4(250-300)$

Your student's score


## FIRSTNAME's score on the NJSLA-S indicates that your student is at Level 3.

Students who are at Level 3 demonstrated appropriate grade-level understanding of the New Jersey Student Learning Standards-Science (NJSLS-S) by comprehending information from a variety of sources (e.g., text, charts, graphs, tables) and applying the knowledge gained from scientific investigations to develop accurate explanations and models of observed phenomena. The students often chose and used the appropriate tools to make observations and to gather, classify, and present data. The students used both essential and non-essential information to recognize patterns and relationships between data and designed systems. The students were able to use information to make real-world connections and predictions.


Figure 1. Sample Individual Student Report (continued)
FIRSTNAME M. LASTNAME

## How did your student perform using the domains and practices?

The domains are the content components related to specific disciplines of science.

## Earth \& Space Science

Your student's performance is Below Expectations.
A student designated as Near/Met Expectations demonstrates knowledge of the processes that operate on and within the Earth and also its place in the solar system and galaxy.

## Life Science

Your student's performance is Above Expectations.
A student designated as Near/Met Expectations demonstrates knowledge of patterns, processes, and relationships of living organisms.

## Physical Science

Your student's performance is Above Expectations.
A student designated as Near/Met Expectations demonstrates knowledge of the mechanisms of cause and effect in all systems and processes that can be understood through a common set of physical and chemical processes.

The practices are methods by which scientists investigate and build models and theories about the world.

## $\sqrt{ }$ Investigating Practices

Your student's performance is Above Expectations.
A student designated as Near/Met Expectations asks questions, plans and carries out investigations based on observations of phenomena, and organizes the data effectively.

## Sensemaking Practices

Your student's performance is Below Expectations.
A student designated as Near/Met Expectations
recognizes patterns and relationships in data to develop explanations or models of the phenomena.

## Critiquing Practices <br> Your student's performance is Near/Met Expectations. <br> A student designated as Near/Met Expectations evaluates and creates arguments regarding different explanations and claims to convey a deeper understanding of the natural world.



How will my student's school use the test results?
Results from the test give your student's teacher information about his/her academic performance. The results also give your school and school district important information to make improvements to the education program and to teaching.

Learn more about the New Jersey Learning Standards
Explore your school website, or ask your principal, for information on your school's annual assessment schedule; the curriculum chosen by your district to give students more hands-on learning experiences that meet state standards; and to learn more about how test results contribute to school improvements. You can also learn more about New Jersey's K-12 standards at https://www.nj.gov/education/aps/cccs/science/.

Districts may assign Not Tested or Void codes for students that did not receive a scale score. For more information see the Score Interpretation Guide at www.measinc.com/nj/science.

Figure 2. ISR, Sections A-C



## A. Identification Information

In the upper right area of the page, this section provides identification information about the student (i.e., name, grade, date of birth, student identification number), the school district (or charter or Renaissance school), and the assessment year.

## B. Purpose of Report

To the left below the identification information is a general overview of the assessment and a link to the NJSLA-S website for sample questions and practice tests.

## C. Uses of Report

To the right is a section providing guidance for how parents/guardians can use the report to start a discussion with their child's teacher(s). Parents can use the information in the report to understand their child's strengths and needs and to work with educators to identify resources to support their education.

## D. Scale Score and Performance Level

Section D, below sections B and C, identifies the student's scale score and associated performance level. As noted, each performance level is a broad categorical level defined by student scale scores and used to report performance with respect to grade level expectations. (Unlike the scale score ranges shown on the sample ISR, the actual scale score ranges associated with each of the four NJSLA-S performance levels are indicated in Table 1.2; for statistical reasons, the ranges differ slightly at each of the grade levels.)

Figure 3. ISR, Sections D-H


## E. Graphical Representation of Performance: Scale Score

The shaded horizontal bar in the middle of the page shows the four performance levels, and the black inverted triangle positioned along the bar indicates the point along the continuum that corresponds to the student's score.

## F. Description of Level

Below the graphic representation of the scale score is a brief description of that score's meaning within the context of the associated performance level.

## G. Mean Scores

The black horizontal bars at the bottom left of the page, placed above a smaller graphical representation of the performance levels, indicate the average (mean) scores of the school, district, and state, enabling comparisons to one another and with respect to the performance levels.

## H. Performance Level Percentages

To the right of the mean score section, the four vertical bars indicate the percentages of students in the state whose scores fell into each of the performance levels.

## I. Descriptions of Domains

This section at the top left of page two provides a very brief definition of the domains as a preface to indicators of the student's domain performance.

## J. Descriptions of Practices

This section at the top right of page two provides a very brief definition of the practices as a preface to indicators of the student's practice performance.

## K. Performance by Domain and Practice

This section, below Sections I and J, describes the student's performance by domain and practice through the use of graphical indicators. Again, the domains are the overarching scientific fields of study within which fall the disciplinary core ideas, while the practices refer to the techniques and procedures that cut across all the domains. The domains form subjects of separate courses in science; the practices are the methodologies applied to those subjects. Every test item is designed to measure two pieces of information, one drawn from a domain and one from a practice.

## L. Description of Domain and Practice Indicator Graphics

As noted earlier in this document, the three symbols shown on page 7 are used to identify the three broad categories of student performance with respect to expectations:

## M. Additional Information

Section M of the ISR, at the bottom of page two, provides a brief explanation of the how students' results may be used by teachers, schools, and/or districts to make instructional adjustments and improvements. In addition, students and their families are encouraged to learn more about the assessment and associated standards by referencing appropriate weblinks.

Figure 4. ISR, Sections I-M

will my student's school use the test results?
s from the test give your student's teacher information about his/her academic performance. The results also give school and school district important information to make improvements to the education program and to teaching.

Learn more about the New Jersey Learning Standards
Explore your school website, or ask your principal, for information on your school's annual assessment schedule; the curriculum chosen by your district to give students more hands-on learning experiences that meet state standards; and to learn more about how test results contribute to school improvements. You can also learn more about New Jersey's K-12 standards at https://www.nj.gov/education/aps/cces/science/.

Districts may assign Not Tested or Void codes for students that did not receive a scale score. For more information see the Score Interpretation Guide at www.measinc.com/nj/science.

### 2.2 Student Label

Figure 5. Sample Student Label


Adhesive student labels are provided for use in identifying hard copy files that are maintained in student records. The labels contain the following information, from top to bottom:

- Student name
- Test name, term in which it was administered, and grade level
- State student identifier (SID) and date of birth
- Local ID (If provided to the state), special education, and English language learner information
- District (or charter/Renaissance/school) name and code
- School name and code

Student performance level and scale score

### 2.3 Student Roster

The Student Roster is produced at the school level to provide a method of reviewing the test results of all students within a given school. Figures 6 through 8 provide a sample Student Roster, and a description of the various components of the report follows.

Figure 6. Sample Student Roster


Figure 7. Student Roster Sections, Sections A-D


## A. Identification Information

Student Roster Reports at the top right of the page list the grade level, school name, district name, and state and identify the assessment year.

## B. Assessment Information

This section at the top left provides the name of the assessment, identifying the content area (Science), and reiterates the grade level.

## C. Roster of Students

The far left column of the Student Roster Report identifies the state, the district, and the school before listing, in alphabetical order, student name, date of birth, Special Education classification, and English Language Learner status.

## D. Scale Score

To the right of the information identifying the entity for which scores are reported is a column showing average scale scores for the state, district, and school and individual scale scores for each student, along with color blocks reflecting the performance levels associated with those scores. (Instead of individual scale scores, some students are designated as being Not Tested or Void. Please see Frequently Asked Questions for an explanation of these categories.)

## E. Domains and Practices

In the far right column, this section identifies the three domains (earth and space science, life science, physical science) and the three practices (investigating, sensemaking, critiquing).

## F. Percentages of Students

Below the Domains and Practices, this section provides the percentage of students at the state, district, and school level whose domain and practice performance was categorized as Near/Met Expectations or Above Expectations. (Once again, it should be noted here that, at the domain and practice level, student performance falls into one of only three categories. The two highest are combined here, indicating the extent to which students neared, met, or exceeded expectations for each domain and practice.)

## G. Individual Student Performance Indicators

Below the Percentages of Students, this section provides an indication of domain and practice performance for each student with respect to expectations, using the three symbols described earlier in this guide.

Figure 8. Student Roster Sections, Sections E-I


## H. Performance Level Graphics

In this section at the bottom left, the shaded horizontal bar shows the four performance levels and the scale scores associated with each.

## I. Domain and Practice Performance Indicator Graphics

This section is at the bottom right. As noted earlier in this document, the three symbols are used to identify the three broad categories of student performance with respect to expectations. Both domain- and practice-level results are, by definition, based on smaller numbers of items than is the test as a whole. Consequently, data at this more granular level are less precise than are overall scale scores, and inferences should be made with caution.

### 3.0 Understanding the NJSLA-S School- and District-Level Reports

NJSLA-S school- and district-level reports include the following:

- School Performance Summary: Domains and Practices Report
- District Performance Summary: Domains and Practices Report
- School Performance Level Summary
- District Performance Level Summary


### 3.1 School and District Performance Summary: Domains and Practices Reports

The School and District Performance Summary: Domains and Practices Reports contain summary data at the state, district, and school levels, providing a snapshot of domain and practice performance at each of these levels. The school version of this report shows the performance for a single school within the district, in comparison to the state and district performance levels. The district version of this report shows the performance for all schools within the district, in comparison to the state and district performance levels. Figures 9 through 12 depict sample versions of these reports.

Figure 9. Sample School Performance Summary: Domains and Practices Report


Figure 10. Sample District Performance Summary: Domains and Practices Report


Figure 11. District Performance Summary Report, Sections A-C


Figure 12. District Performance Summary Report, Sections D-F


## A. Identification Information

This section at the top right provides grade level, district name, and assessment year.

## B. Assessment Information

This section at the top left provides the name of the assessment, the content area, and the grade level.

## C. Number of Valid Scores

The information in this column, located to the right of the Roster of Schools—District Level, shows-for the state, district, and individual school (school-level) or schools (district-level) within the district-the number of students who took the test and completed a sufficient number of items for the test to be scored.

## D. Roster of Schools-District Level

The far left column of the District Performance Summary identifies the state and the district before listing, in alphabetical order, the names of the schools within the district.

## E. Domains and Practices

On the right of the page, the three domains (earth and space science, life science, physical science) and the three practices (investigating, sensemaking, critiquing) are identified in this section. The data in each of the six columns correspond to the percentage of students whose domain and practice performance fell into each of the three categories: Below Expectations (yellow), Near/Met Expectations (purple), and Above Expectations (green).

## F. Domain and Practice Performance Indicator Graphics

At the bottom right of the page, the three symbols are used to identify the three broad categories of student performance with respect to expectations.

### 3.2 School and District Performance Level Summary Reports

The School and District Performance Level Summary Reports, samples of which are provided in Figures 13 through 15, offer an overall picture of student performance in a school or district by demographic group. Groups reported include:

- Gender (Male, Female)
- Ethnicity (Hispanic or Latino, American Indian or Alaska Native, Asian, Black or African-American, Native Hawaiian or Other Pacific Islander, White, Two or more races, Not Indicated)
- Students with Disabilities (IEP, 504)
- English Language Learner (Current EL, Former EL)
- Other (Economically Disadvantaged, Homeless, Migrant)

A description of the individual report components follows.

Figure 13. Sample School Performance Level Summary


Figure 14. Sample District Performance Level Summary


Figure 15. Sample School Performance Level Summary, Sections A-E


## A. Identification Information

This section at the top right provides the school and/or district name, grade level, and assessment year.

## B. Assessment Information

This section at the top left provides the name of the assessment, the content area, and the grade level.

## C. Summarized Groups

The far left column at the left of the chart contains the listing of demographic groups for which performance level information is summarized. The top three rows pertain to all students in the state, the district, and/or the school. The rows that follow pertain to each of the demographic groups for which data are reported.

## D. Group Counts and Means

In the center column, this section displays, for each of the entities listed:

- Total Number of Student Records (i.e., the number of students registered for the test)
- No Scores Reported (i.e., the number of students who were designated Not Tested or Void)
- Number of Students with Valid Scores (i.e., the number of students who took the test and completed enough items for the test to be scored)
- Average Scale Score (of those students with valid scale scores)


## E. Group Performance

In the far right column, this section of the report contains total performance level data for students with valid scale scores in the state, district, and/or school, and for each demographic group. Displayed are both the number and percentage of students at each performance level. The final two columns on the right indicate the number and percentage of students with scale scores falling into the two levels that, when combined, indicate proficiency-that is, Level 3 and Level 4.

### 4.0 Frequently Asked Questions

Q: How are the tests designed?
A: The process begins with the development of test questions that are aligned to NJSLA-S standards. 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 NJSLA-S. 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 are scale scores and why use them?
A: The first step in creating scale scores consists of totaling 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). NJSLA-S scale scores are created when these totals are statistically converted to a scale running from 100 to 300 . In any year, the test may be a bit more or a bit less challenging 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 conclude, for example, that a scale score of 200 is always associated with Level 3.

Q: How do we know the level into which a given score falls?
The tests administered in the 2018-19 year represented the first year of the present science test. As occurs in the first year of a test, a special standard setting procedure was used to determine how to place student performance into performance levels.

Cut scores defining each of four performance levels were set by three committees of 12-15 volunteer teachers and administrators from New Jersey schools, one committee each for grades 5, 8, and 11. These individuals came from schools in every county of the state serving regular and special education populations at a variety of income levels in regular, charter, local, regional and, at the high school level, vocational schools. Committees worked together for two days to determine how well students needed to perform to reach each of the four levels. The scale scores within these performance levels were then filled in mathematically.

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 must perform to meet performance expectations of the subject matter, but the difficulty of the test itself is determined by the nature of the test questions.

Q: Why doesn't the NJSLA-S 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. The purpose of the NJSLA-S is to provide information about student achievement in terms of the requirements associated with the standards in Science. The NJSLA-S is, therefore, a criterion-referenced assessment, addressing achievement in terms of content 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: The state tests are designed to make wider use of the score scale. Questions are drawn from a broad range of difficulty levels, and percentages do not account for variation in the difficulty of questions from test to test. Tests comprising questions at a variety of difficulty levels spread the scores more fully, providing more points to use where the bulk of student performance falls, thereby permitting the attainment of finer distinctions among levels of performance.
Q: How can mean scale score be used?
A: Means are 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 various performance level categories. They can therefore be used for supplementing the interpretation of results in curriculum planning.

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.

A: Districts are generally advised that results based upon the performance of one to nine 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 1.2 of this booklet.

Q: What does it mean when a student receives a Not Tested or Void code?
A: A Not Tested code is assigned to a student when the student did not access the test. There are three categories for Not Tested:

- Not Tested code 1-Absent
- Not Tested code 2 - Medical Emergency
- Not Tested code 3 - Other (including parental refusal to begin a test)

A Void code is assigned when a student started testing but did not complete the test. There are four categories for voids:

- Void code 1 - Student Cheating or otherwise engaging in inappropriate test taking behavior
- Void code 2 - Security Breach
- Void code 3 - Other (including parental refusals to complete a test, off-grade level testing, student not receiving appropriate accessibility features or testing accommodations, student received inappropriate accessibility features or testing accommodations)
- Void code 9 - Student attempted less than $20 \%$ of the test items

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, but errors of this sort should be detected on the Pearson website and corrected during a broad demographic data cleanup period before scores are produced. In doing so, it is important to verify that the students are not out-of-district students from your district whom you failed to recognize. Unfortunately, once the scores are produced and finalized, it is too late to modify information.

Q: The numbers for some of the variables in the assessment information do not match their counterparts in other New Jersey reports. How can that be?

A: There are two major reasons for differences between the numbers in the assessment reports and those in some other reports produced by the state: changes that occur over the course of the school year and differences in the definitions of the reporting categories. Student counts vary over time throughout the school term and there are changes in student status, most notably in special education classification and economic level.

### 5.0 For Further Assistance

- If you have questions related to school accountability under Federal ESEA requirements, please contact the Office of Supplemental Educational Services, on the web at http://www.state.nj.us/education/title1/, by email at titleone@doe.nj.gov, or by telephone at (609) 376-9080.
- If you are a county/district test coordinator, chief school administrator, or executive county superintendent, and have specific questions regarding accessing score reports in PearsonAccess ${ }^{\text {Next }}$ (PAN), https://nj.pearsonaccessnext.com, score reporting schedules, or UPS distribution and tracking of score reports, please contact NJSLA-Science Customer Support directly at (888) 705-9416 (Monday through Friday, 6:30 a.m. to 7:30 p.m. ET, except holidays). Select 1 for Science, and follow the prompts for 'Online Testing' to speak with Pearson support. You may also contact NJSLA-Science Customer Support via web form or online chat within PAN. Users must be logged into PAN to use online chat.
- If you have questions regarding the NJSLA-S, please contact the following individuals:
- For grades 3-8, contact Mr. Orlando Vadel, Program Coordinator, at (609) 376-3470.
- For high school grades, contact Dr. Timothy Steele-Dadzie, Manager, at (609) 376-3469.

The following websites provide additional information relevant to the NJSLA-S:

New Jersey Department of Education www.state.nj.us/education/
$\qquad$ www.state.nj.us/education/assessment/

New Jersey Student Learning Standards $\qquad$ www.state.nj.us/education/cccs/

## Common Core State Standards

$\qquad$ www.corestandards.org/

New Jersey Comprehensive Support Network $\qquad$ www.state.nj.us/education/csn/

National Assessment of Education Progress (NAEP) Frameworks ..........................www.nagb.org/
Measurement Incorporated (NJSLA-S contractor) $\qquad$ www.measinc.com/nj/

## Appendix A

## Performance Level Descriptors (PLDs)

## Level 1

Students who are at Level 1 demonstrated a minimal understanding of the New Jersey Student Learning Standards-Science (NJSLS-S) by misinterpreting information from a variety of sources (e.g., text, charts, graphs, tables) and inconsistently applying the knowledge gained from scientific investigations to develop incorrect explanations or models of observed phenomena. The students had difficulty choosing and using, even with significant scaffolding, the appropriate tools to make observations and to gather, classify, and present data. The students struggled to use essential information to recognize patterns and relationships between data and designed systems. The students seldom used information to make real-world connections or predictions.

## Level 2

Students who are at Level 2 demonstrated a limited grade-level understanding of the NJSLS-S by partially interpreting information from a variety of sources (e.g., text, charts, graphs, tables) and inconsistently applying the knowledge gained from scientific investigations to develop incomplete explanations or models of observed phenomena. The students had some difficulty choosing and using the appropriate tools to make observations and to gather, classify, and present data. The students may be able to use essential information to recognize patterns and relationships between data and designed systems. The students inconsistently used information to make real-world connections and predictions.

## Level 3

Students who are at Level 3 demonstrated appropriate grade-level understanding of the NJSLS-S by comprehending information from a variety of sources (e.g., text, charts, graphs, tables) and applying the knowledge gained from scientific investigations to develop accurate explanations and models of observed phenomena. The students often chose and used the appropriate tools to make observations and to gather, classify, and present data. The students used both essential and non-essential information to recognize patterns and relationships between data and designed systems. The students were able to use information to make realworld connections and predictions.

## Level 4

Students who are at Level 4 demonstrate advanced understanding of the NJSLS-S by integrating information from a variety of sources (e.g., text, charts, graphs, tables) and analyzing the knowledge gained from scientific investigations to develop sophisticated explanations and models of observed phenomena. The students consistently chose and used the appropriate tools to make observations and to gather, classify, and present relevant data. The students considered both essential and non-essential information to explain patterns and relationships between data and designed systems. The students regularly used information and provided supporting explanations in making real-world connections and predictions.

