

# New York State Testing Program Common Core Mathematics Test

## *Understanding the Mathematics Individual Student Report*

In Spring 2013, New York State administered the first set of tests designed to assess student performance in accordance with the instructional shifts and the rigor demanded by the Common Core Learning Standards (CCLS). You can access your child's results on these tests via ARIS Parent Link (<https://arisparentlink.org/>) or by requesting an Individual Student Report (ISR) from your child's school.

This guide explains the components of the Mathematics ISR report using a Grade 3 report as an example. The Mathematics ISR report includes detailed information about your child's performance on the New York State Common Core Mathematics Test. We recommend that you focus first on your child's *Proficiency Rating* and next on how your child scored relative to other students in New York City (the *New York City Percentile Range*), which appear on page 1 of the report. We also encourage you to review *Additional information about your child's performance* on page 2 of the report to get information about the key skills assessed on this test and your child's strengths and areas of growth. It is this page that you will likely want to review with your child's teacher to discuss support and the work ahead.

## Page 1: Summary of Student Results

<p><b>Performance Level</b> New York State assigns Performance Levels 4, 3, 2, and 1 to scale scores on the test. Students can score a Level 4 through Level 1 on the test, depending on their scale score (see chart below). See the bottom of this page for definitions of each of the four Performance Levels.</p>	<p><b>NYS Level 3 Proficient</b></p>	<p>1</p>
<p><b>Proficiency Rating</b> The Proficiency Rating shows where a student falls within a particular Performance Level. Ratings range from 1.0 to 4.5.</p>	<p>3.5</p>	<p>2</p>
<p><b>Scale Score</b> Student performance on the test is translated into an overall Scale Score. Scale Scores range from 139 – 394.</p> <div style="border: 1px solid black; padding: 5px; margin: 10px auto; width: fit-content;"> <p style="text-align: center;">NYS Mathematics Grade 3 Scale Score Ranges</p> <p style="text-align: center;">Level 4: 394 - 340    Level 3: 339 - 314    Level 2: 313 - 285    Level 1: 284 - 139</p> </div>	<p>330</p>	<p>3</p>
<p><b>New York City Percentile Range</b> The percentile range is displayed in quartiles; it shows whether your child's performance falls in the bottom 25% (0-25%), between 26% and 50%, between 51% and 75%, or in the top 25% (76-100%) of all students in <i>New York City</i> in your child's grade level and on this test.</p>	<p>76-100%</p>	<p>4</p>
<p><b>Overall State Percentile Range</b> Same as above, except that this range shows how your child performed relative to all students in <i>New York State</i> in your child's grade level and on this test.</p>	<p>76-100%</p>	<p>5</p>

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### Performance Level

Students are assigned a *Performance Level* based on the Scale Score he or she earned on the test. There are four possible Performance Levels: NYS Level 4 (*above proficient*), NYS Level 3 (*proficient*), NYS Level 2 (*below proficient*), and NYS Level 1 (*well below proficient*). For a complete description of each Performance Level, please refer to the bottom of page 1 on the Individual Student Report. For a detailed description of the skills, knowledge, and practices that are typical of students at each Performance Level, please visit <http://www.engageny.org/resource/performance-level-descriptions-for-ela-and-mathematics>.

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### Proficiency Rating

The *Proficiency Rating* shows where a student falls within his or her Performance Level. The first digit of a Proficiency Rating corresponds to the student's Performance Level; the following digits indicate how close the student is to another proficiency level. For example, a Proficiency Rating of 2.5 indicates that a student score at Performance Level 2 with a Scale Score that is 50% of the way between the lowest Performance Level 2 score and the highest Performance Level 2 score. For Performance Level 4, the highest possible Proficiency Rating is 4.5.

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### Scale Score

The *Scale Score* is determined by the number of points a student earned on the test. The purpose of a Scale Score is to account for changes in tests from year to year. The higher the number of points your child earned, the higher his or her Scale Score. Scale Scores are associated with Performance Levels.

The table below provides the range of Scale Scores for each grade, as well as the Scale Score your child would need to meet the performance expectations of his or her grade level and to be on track for college and career readiness.

*Range and Proficiency Level of Scale Scores Across Grades*

Grade						
	3	4	5	6	7	8
Range of Scale Scores	139–394	126–402	126–406	119–399	133–401	119–403
Scale Scores Greater than or Equal to this Value are Proficient (Performance Levels 3 & 4)	314	314	319	318	322	322

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**New York City Percentile Range**

The *New York City Percentile Range* shows how a student performed on the test relative to other students who took that test in the same grade level and subject area in New York City public schools. The percentile range is displayed in quartiles. This means that it shows whether your child’s performance falls in the bottom quartile (0-25%), between 26% and 50%, 51% and 75%, or the top quartile (76-100%) of all students in New York City in that grade level and subject area. For example, if your child scored in the third Citywide quartile (51%-75%), that means that he or she scored the same as or higher than 51% and up to 75% of students in New York City.

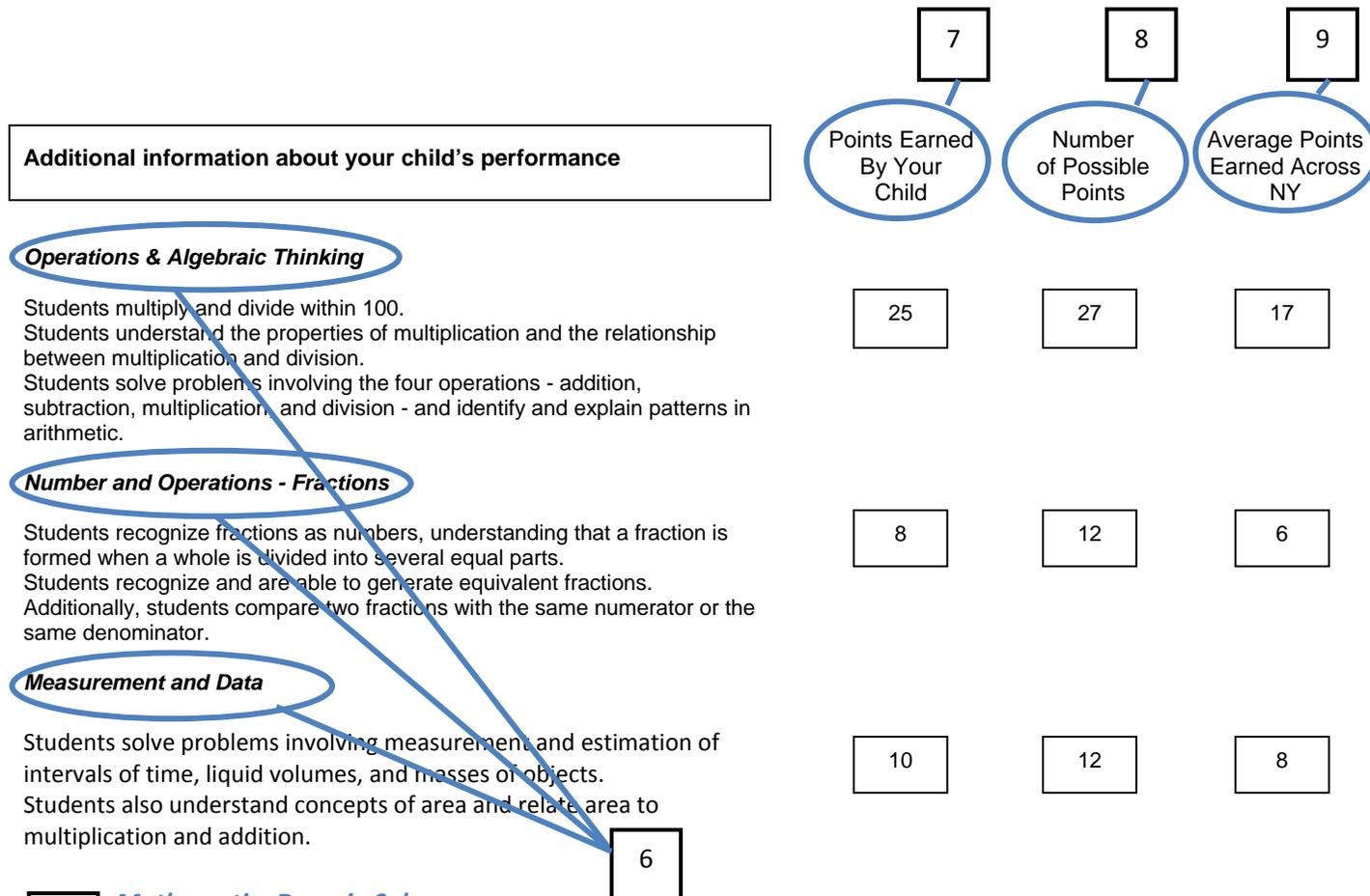
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**Overall State Percentile Range**

The *Overall State Percentile Range* shows how a student performed on the test relative to other students who took that test in the same grade level and subject area throughout New York State. This information is displayed in quartiles. For additional information about these quartiles, please refer to the description of the New York City Percentile Range.

## Page 2: Additional Information

A **Grade 3 score report is provided as an example.** Because the score reports for all grades on the Mathematics assessment present the same information, these interpretations apply to grades 3 – 8.



### Operations & Algebraic Thinking

Students multiply and divide within 100. Students understand the properties of multiplication and the relationship between multiplication and division. Students solve problems involving the four operations - addition, subtraction, multiplication, and division - and identify and explain patterns in arithmetic.

### Number and Operations - Fractions

Students recognize fractions as numbers, understanding that a fraction is formed when a whole is divided into several equal parts. Students recognize and are able to generate equivalent fractions. Additionally, students compare two fractions with the same numerator or the same denominator.

### Measurement and Data

Students solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects. Students also understand concepts of area and relate area to multiplication and addition.

### 6 Mathematics Domain Subscores

The points from the Mathematics test are divided into three reported subscores. These subscores measure major content areas for the grade, which are organized by domains (e.g., Operations and Algebraic Thinking). Domain subscores are calculated based on points earned on groups of questions that assess major content areas. These subscores differ by grade because of the differences in the knowledge and skills students are required to demonstrate at each grade. Please see below for the reported domains in each grade.

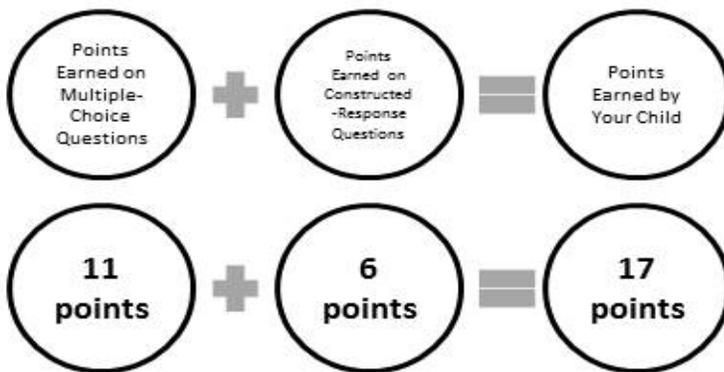
Grade	Reporting Categories		
	Domain 1	Domain 2	Domain 3
3	Operations and Algebraic Thinking	Number and Operations— Fractions	Measurement and Data
4	Operations and Algebraic Thinking	Number and Operations in Base Ten	Number and Operations— Fractions
5	Number and Operations in Base Ten	Number and Operations— Fractions	Measurement and Data
6	Ratios and Proportional Relationships	The Number System	Expressions and Equations
7	Ratios and Proportional Relationships	The Number System	Expressions and Equations
8	Expressions and Equations	Functions	Geometry

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### Points Earned By Your Child on Domain Subscores

*Points Earned By Your Child on Domain Subscores* represents the number of **points earned** by your child on questions measuring that specific domain (e.g., Operations and Algebraic Thinking). Your child earns one point for each multiple choice question that he or she answered correctly. Your child may earn multiple points for each constructed-response question.

There are two types of constructed-response questions: short-response (maximum of 2 points) and extended-response (maximum of 3 points). Teachers rate each student's response to these questions. The points earned on the constructed-response questions are added to the number of multiple-choice questions answered correctly to equal the Points Earned By Your Child on the Domain Subscores. See the example below.



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### Number of Possible Points on Domain Subscores

*Number of Possible Points on Domain Subscores* describes the **total** number of points measuring that specific domain. This includes all possible points from both multiple-choice and constructed-response questions in that domain. This number can be compared with Points Earned By Your Child on Domain Subscores. For example, if the Number of Possible Points for Operations and Algebraic thinking is 27 and your child earned 25 points from questions measuring that domain (score of 25 on Points Earned by Your Child), then he or she did not earn a total of 2 points in the Operations and Algebraic Thinking domain.

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### Average Points Earned Across NY

The *Average Points Earned Across NY* on domain subscores reports the **average** number of points earned by students throughout New York State. This number can be used to compare your child's performance to that of all other students in the same grade throughout the State who took the Mathematics test. For example, if your child earned 25 points in Operations and Algebraic Thinking, he or she has earned eight more points in Operations and Algebraic Thinking than the average student in the state since the Average Points Earned Across NY on Writing from Sources in that grade is 17. Please note that a student may earn more points than the average in a particular domain and still be considered not proficient.