2016 New York State Math & ELA* Testing Data-Tech Meeting
November 23, 2015 6:00 p.m.

* ELA=English Language Arts

Created and Presented by Ms. Koatz, PS196Q Assistant Principal
Agenda

• Why Test?
• All About the Common Core (CCLS)
• Testing Dates
• ELA & Math Test Design
• Sample Questions
• How Can You Help Your Child?
Why Test in Grades 3-8?

• Mandated by federal and state government

• Presents the opportunity to:
  – Annually evaluate the implementation of the learning standards
  – Measure student progress against the Common Core
  – Gather information about student readiness for study at the next level
What is the Common Core?

• States came together to develop common standards in literacy and math
• 42 states have signed on
• New York added a few standards (mostly for Pre-K) and called them the **Common Core Learning Standards** or **CCLS**
Where Can I find the CCLS?

- New York State has created a useful website, Engageny.org. You can find it at: http://engageny.org
- You can find all of the New York standards for Pre-K through high school in literacy and math at:

http://engageny.org/resource/new-york-state-p-12-common-core-learning-standards
Why Does Common Core Matter?

• This is the third year that all New York State exams will be based on the CCLS.

• In fact, as of September 2012, all instruction, in all grades, needed to be aligned with the Common Core Learning Standards.
Dates for the 2016 ELA Exams

All grades (3rd/4th/5th) will test on:
April 5th, 6th and 7th (Tues-Thurs)

Dates for the 2016 Math Exams

All grades (3rd/4th/5th) will test on:
April 13th, 14th and 15th (Wed-Fri)
Types of Questions

• **Multiple Choice**
  - choose an answer from 4 alternatives—*all* answers will be plausible
  - in math, many require multiple steps and are linked to more than one standard

• **Short-Response**
  - make a claim, take a position or draw a conclusion
  - give textual evidence (two pieces)
  - write in complete sentences (usually no more than 3)
  - in math, show work, multiple steps and linked to more than one standard

• **Extended-Response**
  - comprehension and analysis of one text (3rd grade) or paired passages (4th and 5th grade)—for paired, synthesize and use evidence from both texts
  - express a position; support it with text-based details
  - in math, show work, multiple steps, may assess student reasoning or ability to critique the arguments of others
## ELA Test Design—3rd Grade

<table>
<thead>
<tr>
<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
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<tbody>
<tr>
<td><strong>Book 1:</strong> 5 passages 30 multiple-choice questions</td>
<td><strong>Book 2:</strong> 1 <em>reading</em> passage 7 multiple-choice questions 2 <em>writing</em> passages 3 short-response questions 1 extended-response question</td>
<td><strong>Book 3:</strong> 3 passages 5 short-response questions 1 extended-response question</td>
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*Literary Passages (4-7); Informational Passages (4-7)*
# ELA Test Design—4th Grade

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<tr>
<th>Day 1</th>
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</table>
| **Book 1:**  
5 passages  
30 multiple-choice questions | **Book 2:**  
1 *reading* passage  
7 multiple-choice questions  
2 *writing* passages  
3 short-response questions  
1 extended-response questions | **Book 3:**  
3 passages  
5 short-response questions  
1 extended-response question |
| 70 minutes | 70 minutes | 70 minutes |

*Literary Passages (4-7); Informational Passages (4-7)* 

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*Note: The test design includes both literary and informational passages.*
## ELA Test Design—5th Grade

<table>
<thead>
<tr>
<th>Day 1</th>
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<tr>
<td><strong>Book 1:</strong></td>
<td><strong>Book 2:</strong></td>
<td><strong>Book 4:</strong></td>
</tr>
<tr>
<td>6 passages</td>
<td>1 <em>reading</em> passage</td>
<td>3 passages</td>
</tr>
<tr>
<td>42 multiple-choice questions</td>
<td>7 multiple-choice questions</td>
<td>5 short-response questions</td>
</tr>
<tr>
<td></td>
<td>2 <em>writing</em> passages</td>
<td>1 extended-response question</td>
</tr>
<tr>
<td></td>
<td>3 short-response questions</td>
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<td></td>
<td>1 extended-response questions</td>
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*Literary Passages (4-8); Informational Passages (4-8)*
Sample Grade 4 Multiple-Choice Question

Students read the article, “Bodies in Motion: Mountain Biking,” then answer questions, including:

20. How does the information in paragraphs 4 and 5 support a main idea of the article?

A. by explaining how to prepare for mountain biking
B. by giving details about the difficulty of mountain biking
C. by showing how mountain biking can be painful
D. by describing what muscles are used in mountain biking

Key: A
CCLS: RI.4.2:
Determine the main idea of a text and explain how it is supported by key details; summarize the text.

Percentage of Students Statewide Who Answered Correctly: 66%
Sample Grade 4 Multiple-Choice Question

Only 42% of students Statewide answered this question correctly, even though it was in response to the same text, and testing the same Common Core Learning Standard:

24 Which sentence from the text best summarizes a main idea of the article?

A “Check with friends who already take part in the sport.” (paragraph 4)
B “Ask questions at bike stores, but remember, they want to sell you a bike, so think carefully about what they tell you.” (paragraph 5)
C “Maneuvering your bike on off-road trails calls for skills not usually used around your neighborhood.” (paragraph 6)
D “The winner is the first to make it through a tough course filled with obstacles like sharp turns, logs, rocks, streams, and jumps.” (paragraph 11)

Key: C
CCLS: RI.4.2:
Determine the main idea of a text and explain how it is supported by key details; summarize the text.
Percentage of Students Statewide Who Answered Correctly: 42%
Sample Grade 3 Short-Response Question

Students read the article, “The Aurora Borealis,” then answer questions, including: Why does the author ask questions throughout “The Aurora Borealis”? Use two details from the article to support your response.

The author asks questions throughout the article to get you want to learn more and to get you curious about the aurora borealis. For example it says “what makes the different colors?” It also says “why can they only be seen a night.”

Score Point 2 (out of 2 points)

This response makes a valid inference from the text to explain why the author asks questions throughout “The Aurora Borealis” (to get you want to learn more and to get you curious). The response provides a sufficient number of concrete details from the text for support as required by the prompt (what makes the different colors? and why can they only be seen a night). This response includes complete sentences where errors do not impact readability.
Sample Grade 5 Extended-Response Question

Students read two passages, “Roy’s Secret” and “Cesca’s Reward.” They answered several short response questions, then this extended response:

In both “Cesca’s Reward” and “Roy’s Secret,” the main characters learn lessons. What do Cesca and Roy learn from the adults in the stories? How do Cesca and Roy show that they have learned these lessons? Use details from both stories to support your response.

In your response, be sure to
• explain what Cesca and Roy learn from the adults in the stories
• describe how Cesca and Roy show that they have learned these lessons
• use details from both stories to support your response
Where Can I See More Sample Questions?

Again, Engageny.org is the place to go. You can see Common Core Sample questions in both literacy and mathematics (for grades 3-8, including details from the State about why answers received particular scores) at:


You can also find them on our blog: https://ps196q.edublogs.org
## Math Test Design—3rd Grade

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<tr>
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<th>Day 1</th>
<th>Day 2</th>
<th>Day 3</th>
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<tbody>
<tr>
<td>Book 1:</td>
<td>24 multiple-choice questions</td>
<td>Book 2: 24 multiple-choice questions</td>
<td>Book 3: 5 short-response questions</td>
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<td>3 extended-response question</td>
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<tr>
<td>Time</td>
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# Math Test Design—4th Grade

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<tr>
<th>Day 1</th>
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<tbody>
<tr>
<td><strong>Book 1:</strong> 24 multiple-choice questions</td>
<td><strong>Book 2:</strong> 25 multiple-choice questions</td>
<td><strong>Book 3:</strong> 6 short-response questions, 4 extended-response question</td>
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<td>60 minutes</td>
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Math Test Design—5th Grade

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<th>Day 1</th>
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<tbody>
<tr>
<td>Book 1</td>
<td>24 multiple-choice questions</td>
<td>Book 2: 25 multiple-choice questions</td>
<td>Book 3: 6 short-response questions</td>
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<td>4 extended-response question</td>
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Sample Grade 3 Multiple-Choice Question

17. The picture below shows that one box is heavier than 5 identical cans.

The box has a mass of 40 kilograms. What could be the mass, in kilograms, of 1 can?

A 40  
B 10  
C 8  
D 6

Key: D
Primary CCLS: 3.MD.2
Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l). Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.

Secondary CCLS: None
Percentage of Students Statewide Who Answered Correctly: 43%
Sample Grade 4 Multiple-Choice Question

A rectangle has a width of 9 inches. The area of the rectangle is 648 square inches. What is the length, in inches, of the rectangle?

A  36  
B  72  
C  162 
D  315 

Key: B  
Primary CCLS: 3.MD,7,d  
Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real world problems.  
Secondary CCLS: None  
Percentage of Students Statewide Who Answered Correctly: 66%
Sample Grade 5 Multiple-Choice Question

19. Barbara filled a box with layers of unit cubes. The box had a volume of 125 cubic units. Which sentence about the box must be true?

A. There were 125 unit cubes in the bottom layer.
B. The box was filled with exactly 125 unit cubes.
C. There were 125 unit cubes in each layer.
D. The box was filled with less than 125 unit cubes.

Key: B
Primary CCLS: 5.MD.3,b
A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units.

Secondary CCLS: 5.MD.3,a
Percentage of Students Statewide Who Answered Correctly: 75%
Sample Grade 5 Short-Response Question

Tony began putting together a rectangular puzzle. He completed the top edge and left edge of the puzzle, as shown below. Each piece is a square that has a side length of $2\frac{1}{2}$ centimeters.

What is the total area, in square centimeters, of the completed puzzle?

*Show your work.*

Primary CCLS: 5.NF.4,b
Find the area of a rectangle with fractional side lengths by tiling it with unit squares of the appropriate unit fraction side lengths, and show that the area is the same as would be found by multiplying the side lengths. Multiply fractional side lengths to find areas of rectangles, and represent fraction products as rectangular areas.

Secondary CCLS: 5.NF.4,a
Statewide Average Points Earned: 0.53 out of 2
Tony began putting together a rectangular puzzle. He completed the top edge and left edge of the puzzle, as shown below. Each piece is a square that has a side length of $2\frac{1}{2}$ centimeters.

What is the total area, in square centimeters, of the completed puzzle?

**Show your work.**

\[
\begin{align*}
7 \times 2\frac{1}{2} & = 17\frac{1}{2} \\
6 \times 2\frac{1}{2} & = 15 \\
14 + 3\frac{1}{2} & = 17\frac{1}{2} \\
& \text{(Correct)}
\end{align*}
\]

**Answer** $262\frac{1}{2}$ square centimeters

**Score Point 2 (out of 2 points)**

This response demonstrates a thorough understanding of the concepts in the task. The response shows work for finding the length ($17\frac{1}{2}$) and width (15) of the puzzle in square centimeters. The products are then multiplied together to find the correct total area ($262\frac{1}{2}$) of the completed puzzle.
Andrea bought a bucket of colored chalk. The list below shows the fraction of each color of chalk in the bucket.

- $\frac{2}{6}$ are yellow
- $\frac{5}{12}$ are blue
- $\frac{3}{12}$ are green

Which is greater, the amount of yellow chalk in the bucket or the amount of green chalk in the bucket?

**Show your work.**

**Answer**

Andrea told Michelle that less than $\frac{1}{2}$ the chalk in the bucket is blue.

Michelle said she is mistaken. Who is correct? Explain why you chose your answer.

**Primary CCLS: 4.NF.2**

Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as 1/2. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols $>$, $=$, or $<$, and justify the conclusions, e.g., by using a visual fraction model.

**Secondary CCLS: None**

Statewide Average Points Earned: 1.48 out of 3
Andrea bought a bucket of colored chalk. The list below shows the fraction of each color of chalk in the bucket.

- \( \frac{2}{6} \) are yellow
- \( \frac{3}{12} \) are blue
- \( \frac{1}{3} \) are green

Which is greater, the amount of yellow chalk in the bucket or the amount of green chalk in the bucket?

Show your work.  

\[
\begin{array}{cccc}
1&y&y&g \\
2&y&g&b \\
3&y&b&b \\
4&g&b&b \\
5&b&b&b \\
\end{array}
\]

Answer

yellow is greater

Andrea told Michelle that less than \( \frac{1}{2} \) the chalk in the bucket is blue.

Michelle said she is mistaken. Who is correct? Explain why you chose your answer.

Andrea is correct. I chose my answer because \( \frac{1}{2} \) of 12 is 6, and only 5 pieces of chalk are blue.

Score Point 3 (out of 3 points)

This response demonstrates a thorough understanding of the mathematical concepts in the task. The first part contains a correct solution (yellow chalk), and the visual representation used to compare the fractional values of the three colors of chalk in the bucket is clear and complete. This approach simplifies the process so that the segments representing each color are easily counted to compare values. The solution in the second section is correct (Andrea is correct), and the explanation in which the numerator is related to the denominator is clear and correct (\( \frac{1}{2} \) of 12 is 6, and only 5 pieces of chalk are blue). While there appears to be an assumption that the bucket only includes 12 pieces of chalk, thus the numerator represents the total pieces of chalk in each color, this is an acceptable approach to use to compare the fractions. The task has been completed correctly using mathematically sound procedures.
How Can You Help Your Child?

• Trust that your child is being well prepared by her/his teachers.

• *Do not use key words* when working on math word problems. Read for understanding.

• Read together! Talk about literature. Have your child *defend* his/her position.

• Use the CCLS sample questions from Engageny.org, or the Common Core-aligned skills books.

• Download and review the CCLS for your child’s grade (go to engageny.org).

• Always ask your child to defend his/her opinion.

• Relax! Stress is not a good motivator.