District Math Night

Middle School Math

Jennifer Goforth, Director of STEM
Mark Stulbaum, Renaissance MS Teacher
Steven Titus, Glenfield MS Teacher
Howard Dyckes-Bousel, Renaissance MS Teacher
Questions today?

Option 1: Use Google Q&A above.
Option 2: Use post-it note which we will collect.

We will address questions at the end of the presentation.

This presentation will be shared on our website.
Agenda

- Welcome, J Goforth
- 6-12 Pathways/Course Progressions, J Goforth
- Math Lab, H Bousel
- 6th Grade Math, S Titus
- Algebra Options/Placement Process, S Titus M Stulbaum
- How to Help Your Child at Home, M. Stulbaum
Middle School Math Course Sequence

Grade 6
- Algebra A Accelerated
- *Math 6

Grade 7
- Algebra B Accelerated
- Algebra A Accelerated
- *Algebra A

Grade 8
- Geometry
- Algebra B Accelerated Option w/Geo
- *Algebra B

*With Math Lab as needed
<table>
<thead>
<tr>
<th>Middle School</th>
<th>Grade 9</th>
<th>Grade 10</th>
<th>Grade 11</th>
<th>Grade 12</th>
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</thead>
<tbody>
<tr>
<td>Algebra B Accel. or Algebra B</td>
<td>Geometry H&lt;br&gt;or&lt;br&gt;Geometry</td>
<td>Algebra 2 H&lt;br&gt;or&lt;br&gt;Algebra 2</td>
<td>Trig/Calc. H&lt;br&gt;Pre-Calc. H&lt;br&gt;Pre-Calc.&lt;br&gt;** Prob &amp; Stats H&lt;br&gt;** Prob &amp; Stats</td>
<td>AP Calc. AB&lt;br&gt;Calc. H&lt;br&gt;AP Stats&lt;br&gt;Prob. &amp; Stats H&lt;br&gt;Prob. &amp; Stats</td>
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<td>Algebra B</td>
<td>Algebra I H&lt;br&gt;or&lt;br&gt;Algebra I</td>
<td>Geometry H&lt;br&gt;or&lt;br&gt;Geometry</td>
<td>Algebra 2 H&lt;br&gt;or&lt;br&gt;Algebra 2</td>
<td>Pre-Calc. or Prob. &amp; Stats</td>
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* Option to double in Geometry in 8th or 9th Grade to accelerate.
** Alternate option to Pre-Calculus or recommend taking Probability & Statistics after Pre-Calculus.
Results of Algebra for ALL 2018-2019

- A third (33%) students enter 9th grade above Geometry Honors (advanced path).
- A third (33%) students enter 9th grade with Geometry (accelerated path).
- A third (33%) students enter 9th grade with Algebra (traditional path).
  - Of these students 70% average are successful (75% or higher final grade) in 9th grade.
Math Lab is for Math Support!

Math Lab is a class taken in addition to the core math class that covers the following for students:

1. **Targeted math skills** (prior skills needed)
2. **Core math lessons** (current or upcoming lessons from core math class)
3. **Study skills** (how to learn math)

**Criteria for Placement:**
Low exam scores, low cumulative GPA, and teacher recommendation based on classroom performance.

**Exit Process:**
Teacher recommendation based on **progress** and **performance** in Math Lab and core math class.
Placement Process for incoming 6th Grade

1. All 5th graders take a District Placement Test at the end of school year.
   a. Placement for 6th grade Test covers: Math 5 and 6 standards, including ratio and proportional reasoning, operating with fractions, decimals and percents and signed numbers.

2. Criteria for placement:
   a. High average math grade
   b. High score on End of Year Grade 5 math test
   c. High average District Placement Test

3. Criteria for remaining in Accelerated Algebra A/B- Students must maintain above 87% average.

Math 6

Major Content Areas focus on:

- Ratio and Proportional Relationships
- Operating with fractions and rational numbers
- Integer operations
- Expressions and Equations
- Geometry
- Probability & Statistics

Benefits of taking Math 6:

- Students are able to acquire the skills needed to be successful in Algebra A/B
- Math 6 standards should be mastered prior to entry into Algebra
Algebra For All

**Algebra A & B covers:**
- Chapters 1-9 Algebra 1
- Geometry
- Probability & Statistics
- Course provides practice, repetition, and a moderate pace

**Algebra A & B Accelerated covers:**
- Chapters 1-11 Algebra 1
- Geometry, Prob & Stat
- Added topics, such as: Weighted Averages and complex numbers
- Faster pace
- Greater emphasis on critical-thinking skills and real world applications and problem-solving
Placement Process for incoming 7th Grade

1. All 6th graders take a District Placement Test at the end of school year.
   a. Placement Test covers: Math 6 and 7 standards, including ratio and proportional reasoning, operating with fractions, decimals and percents and signed numbers.

2. Criteria for placement:
   a. High average math grade
   b. High average Midterm & Final Exam Grades
   c. High average District Placement Test

3. Criteria for remaining in Accelerated Algebra A/B- Students must maintain above 87% average/80% Test Average

4. Reminder: Renaissance MS - All students take Accelerated Algebra A/B
Geometry

- MS Geometry follows the Honors Geometry at MHS curriculum.
- MS Geometry can be taken with Algebra B Accelerated if the student earned a high A average, and As on the midterm and final exam A in Algebra A Accelerated.
- Students are encouraged to **NOT** double up with Geometry and Algebra B or HS Algebra 1 to focus on Algebra which is the foundation for upper level math.
HOW TO HELP YOUR CHILD AT HOME:

Resources available for at-home use:
Go to WWW.CLEVER.COM for:
(Student login with district email and password, also linked on district website)

1) McGraw-Hill - 6th grade online textbook

2) Pearson Algebra I Common Core - Algebra A & B online textbook

3) www.khanacademy.org Online free support for all subjects

4) MobyMax - Online lessons and practice (material thru Pre-Algebra)
Useful Sites for Learning Math

- www.flippedmath.com - online courses (Algebra I thru Calc)
- YouTube, Google or www.Bing.com - Videos for any topic
- www.purplemath.com - online lessons
- https://www.mathsisfun.com/ - online games
- http://www.math-aids.com/ - online worksheets, games and more
- https://kahoot.it/ - self quizzing tool
NJ Digital Item Library - NJDOE resource

- Search by subject (ELA or Math) and Grade Level (Grades 3 and up)

- Lists sample questions by standard, including number and description

- Includes multiple choice questions as well as short answers with the equation editor
THANK YOU!

For additional information, please contact:

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