## 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


*With Math Lab as needed

| Middle School | Grade 9 | Grade 10 | Grade 11 | Grade 12 |
| :---: | :---: | :---: | :---: | :---: |
| Geometry <br> (*Opt Alg B Accel with Geometry) | Algebra 2/Trig H <br> Algebra 2 H <br> (*Opt Geo. H) | Trig/Calc. H or Pre-Calc. H | AP Calc. BC AP Calc. AB Calc. H | Calc. III HH <br> AP Calc. BC <br> AP Calc. AB <br> AP Statistics |
| Algebra B Accel. or Algebra B | Geometry H or Geometry | Algebra 2 H or Algebra 2 | Trig/Calc. H <br> Pre-Calc. H <br> Pre-Calc. <br> ** Prob \& Stats H <br> ** Prob \& Stats | AP Calc. AB Calc. H AP Stats Prob. \& Stats H Prob. \& Stats |
| Algebra B | Algebra I H or Algebra I | Geometry H or Geometry | Algebra 2 H or Algebra 2 | Pre-Calc. or Prob. \& Stats |

* 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 $9^{\text {th }}$ grade above Geometry Honors (advanced path).
- A third (33\%) students enter $9^{\text {th }}$ grade with Geometry (accelerated path).
- A third (33\%) students enter $9^{\text {th }}$ grade with Algebra (traditional path).
- Of these students $70 \%$ average are successful (75\% or higher final grade ) in $9^{\text {th }}$ 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.
4. Renaissance MS - All students take Math 6. Students who place in Algebra A Accelerated take during enrichment time in addition to Math 6.

## 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:
(Students 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 coursed (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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