

2018- 2019

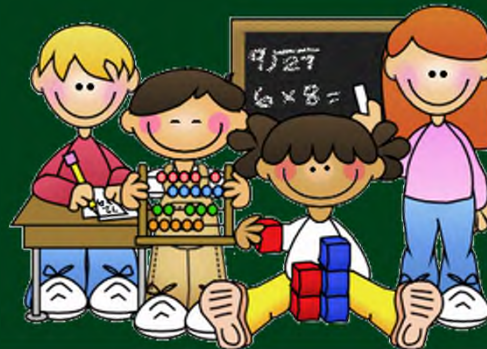
6th Grade Math & Science Program Informational Meeting

February 22, 2019

Mr. Michael Richards
Principal, LMS

Dr. Christopher Herte
Mathematics/Science Supervisor 5-8

Mrs. Georgianna Kichura
Asst. Principal, LMS



February 2019

Montgomery Township School District



Mathematics Program

- Overview
- Resources
 - Extra help once a week with child's teacher
 - Study Guides for each unit assessment
 - Online textbook and resources (Pre-Algebra & Math 6)
- Extra-curricular & Math related activities
 - Math Competitions & Games
 - Mathcounts (Competitive & ongoing)



Science Program

- Resources
 - Extra help provided weekly by teachers
 - Study Guides for each Unit Assessment
 - Materials on Google Classroom or Teacher's webpage
 - Engineering/ Performance Tasks
- Extra-curricular & Science related activities
 - Science Competitions & Games
 - Science League Contest -1-day contest (April/May)
 - Sally Ride STEM contest



Science Program 6 & 7

- **Grade 6 Units:**

- Weather & Climate
- Waves & Electromagnetic Radiation
- Earth Systems & History
- Space Systems

- **Grade 7 (Life Science):**

- Structure & Function
- Growth, Development & Reproduction
- Matter, Energy in Organisms & Ecosystems
- Interdependent Relationships in Ecosystems
- Natural Selection and Adaptation



Next Generation Science in Montgomery

2019-2020

Dr. Christopher Herte
Mathematics & Science Supervisor 5-8



Strong Foundation



Blocks of content carefully placed to create a foundation for strong understanding.



Common concepts that hold the content together & connect the grade levels

Tools and techniques that assist in building the foundation- ways of thinking and acting like a scientist and/or engineer

Departments

- Overview
- Contests & Activities

Welcome to the LMS Science Department.

Math/Science Parent Meetings:

- [Grade 5 Math/Science Flyer](#)
- [Grade 6 Math/Science Flyer](#)

Next Generation Science Standards (NGSS) Resources

Parent Resource from the National Science Teachers Association (NSTA)
[NGSS Parent Guide](#)

About the Next Generation Science Standards (NGSS)
[Getting to Know the NGSS](#)

Video Explaining the NGSS
[Video Explaining NGSS](#)

Comparing the New Vision of NGSS
[Comparison of Former Science to NGSS](#)

Other Parent Resources from the NSTA
[NSTA Parent Resources](#)

We wish your child the very best success.

Dr. Christopher Herte
Mathematics/Science Supervisor 5-8
Presidential Awardee in Mathematics & Science Teaching (2000)

LMS Activities

- *What activities are available?*
- Mathcounts (Math Olympiad, AMC 8)
- Grade 6 Science Club
- Science League Contest (Contest in April)
- Sally Ride STEM Contest (Girls only)
(E-Alert will be sent for sign ups)



UMSAactivities

- Robotics Teams (**Tryouts**)
- Mathcounts (Math Olympiads) (**Tryouts**)
- Science Olympiad Team (**Tryouts**)
- Math League Contests, AMC 8 Contest
- National Life Science Contest
- National General Science Contest
- Sally Ride STEM Contest (Girls only)
- Annual Awards Night 5-8



Pre-Algebra 7

- A course aligned with the NJ State Learning Standards that emphasizes problem-solving and critical thinking while developing necessary concepts for the further study of algebra in a high school level course.
- Emphasis is placed upon the development and understanding of pre-algebraic and algebraic skills and their use in application and problem solving.
- Course topic sections include operations with integers, and rational numbers, factors, exponents, algebraic expressions, solving multi-step equations and inequalities, ratio, proportions, percents, probability, and geometry.
- Students take Math 7 NJSL Math Assessment



Algebra I Part 1

- A full-year course that develops the first half of the study of high school Algebra I. Students develop skills in problem solving and critical thinking through real-world and mathematical problems.
- Course topic sections include writing, simplifying, and evaluating algebraic expressions. Modeling, writing, and solving algebraic equations and functions. Graphing and representing linear equations in a variety of forms. Creating, analyzing, and making linear predictions with scatter plots is developed. Additional Common Core topics are also taught (Geometry, Statistics)
- Students take Math 7 NJSL Math Assessment



Algebra I Honors

- A full year rigorous honors course that develops all the concepts and skills of high school Algebra I.
- Topics include: expressions, polynomials, radicals, exponents, linear and non-linear functions, quadratic equations, systems of equations and inequalities, probability and data analysis.
- Students take the NJSLS Algebra I Assessment

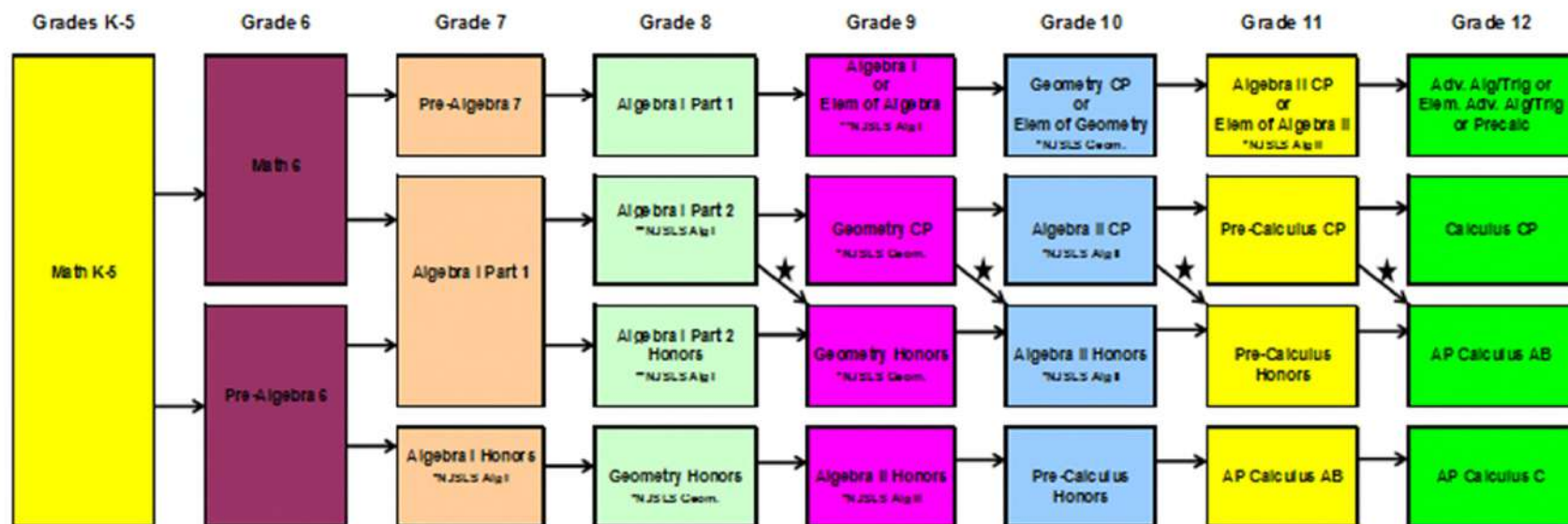


Math Sequences

- *What are the common math sequences?*
- The next slide illustrates the common math sequences. Students can also accelerate, once they enter the High School, if they choose. There are several opportunities for this once a student enters High School. More information on these opportunities (Option II) can be found in the HS Program of Studies available on the HS website. Class of 2019 over 60 paths



Montgomery Township Schools Common Mathematics Sequences



NOTES:

* Denotes possible course path if student meets the HS Program of Studies Requirement of 95% or higher in prerequisite course.

Common course sequences are illustrated. Additional opportunities are available through Option II process. See HS Program of Studies Guide.

In order for students to continue in the Honors sequence, students must maintain the required average based on the Course of Study requirements.

NJSLS:

* In grades 5-8 students take the NJSLS Math Assessment for their grade level unless they are in an indicated HS level course

** Students must take and pass the NJSLS Algebra I test as it is a NJ High School Graduation Requirement.

Placement Criteria for Pre-Algebra 7 & Algebra I Pt. 1

- *Students in Math 6...*
- *Unit Test averages (45%)* the marking periods
- *Cumulative Assessment (25%)* placement test
- *Measures of Academic Progress-MAP (25%)*
- *Work Habits/Study Skills (5%)* assessed by the teacher using a district-developed rubric

*These criteria will make up the final summary score
that determines the student's mathematics placement*



Placement Criteria for Algebra I Honors

- *Students in Pre-Algebra 6...*
- *Unit Test averages (35%)* the marking periods
- *Cumulative Assessment (20%) Pre-Algebra 6*
- *Measures of Academic Progress-MAP (20%)*
- *IOWA Algebra Aptitude Test (20%)*
- *Work Habits/Study Skills (5%)* determined by the teacher using a district developed rubric

These criteria will make up the final summary score



Iowa Algebra Aptitude Test

- National Test **April 15th (Make ups 4/16)**
- Students in Pre-Algebra 6 take this assessment
- Helps determine the readiness of students for Algebra I Honors
- Four sections, each section is timed. It takes 10 or less minutes to complete each section.
- Total of 60 questions, calculators may not be used.



Math Placement

- *How will I be informed of my child's placement in grade 7?*
- You will receive a Summary Sheet which should be mailed from LMS on **May 23**. It will provide the details illustrated on the next two slides.



Data Summary Sheet

• Montgomery Township Schools •

Math Placement Data Sheet

Seventh Grade Math Placement for 2019-2020

May 2019

Student's Name:

Cumulative Assessment = (25% of Summary Score)
(Math 6)

MAP Assessment = (25% of Summary Score)
(Out of 285 points)

Grade Six Test Average = (45% of Summary Score)
(Test Average of marking periods)

Work Habits/Study Skills Assessment = (5% of Summary Score)

Summary Score = (out of 100 points)

Math Placement =

Placement Cutoffs:

Pre-Algebra 7: Summary Scores from 0 - 82

Algebra I Part 1: Summary Scores from 83 - 100

Data Summary Sheet

• Montgomery Township Schools •

Math Placement Data Sheet

Seventh Grade Math Placement for 2019-2020

May 2019

Student's Name:

Cumulative Assessment = (20% of Summary Score)
(Pre-Algebra 6)

Iowa Algebra Aptitude Test = (20% of Summary Score)

MAP Assessment = (20% of Summary Score)
(Out of 285 points)

Grade Six Test Average = (35% of Summary Score)
(Test Average of marking periods)

Work Habits/Study Skills Assessment = (5% of Summary Score)

Summary Score = (out of 100 points)

Math Placement =

Placement Cutoffs:

Algebra I Part 1: Summary Scores from 0 - 86

Algebra I Honors: Summary Scores from 87 - 100

Waiver Option

- The student's performance **summary score** and **placement** will be included in the **May 23** mailing.
- Parents and students can consider the **waiver option** if and only if a student's **summary score** is within **3 points** of the score needed for the requested placement.
- Waivers must be submitted to the **UMS main office** no later than **May 31**.
- There will be **no proficiency testing** over the summer.



Placement Timeline into 7th



- **April 8-12** -MAP Math Testing
- **April 15 (4/16 Makeups)** – IOWA Algebra Aptitude Test
- **May 16, 17** – Cumulative Assessment (Math 6/Pre-Alg 6)
- **May 23** – Placement information mailed/online from LMS
- **May 31**– Waiver form deadline to be returned to UMS main office
- Summer – New student testing (dates to be posted)



Your Questions



Please remember to
return your feedback
sheets before leaving
this meeting.

Thank you so much.



Dr. Christopher Herte
Mathematics/Science Supervisor 5-8
cherte@mtsd.us

