2019-2020

6th Grade Math & Science Program Informational Meeting

October 23, 2019

Mr. Michael Richards *Principal, LMS*

Mrs. Georgianna Kichura Asst. Principal, LMS Dr. Christopher Herte

Mathematics/Science Supervisor 5-8





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)



Academic Support

Additional Class

- Every other day student receives additional math instruction with Mrs. Levin
- Focus is on skills and concepts from previous year that have not yet been mastered along with help for current skills
- Feedback on progress quarterly

• In-Class Academic Support

- Every day in math class Mrs. Levin helps students with current (and possibly previous concepts)
- Feedback on progress quarterly



Textbooks

- How can I find out what textbook my child will be using next year?
- Go to the LMS Math Department webpage and click on Math Textbooks 5-8. You will see a complete list of all the textbooks and their information.
- New textbook materials later this year
- https://www.mtsd.k12.nj.us/Page/9477



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)



UMS Activities

- 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 NJSLS 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 NJSLS 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

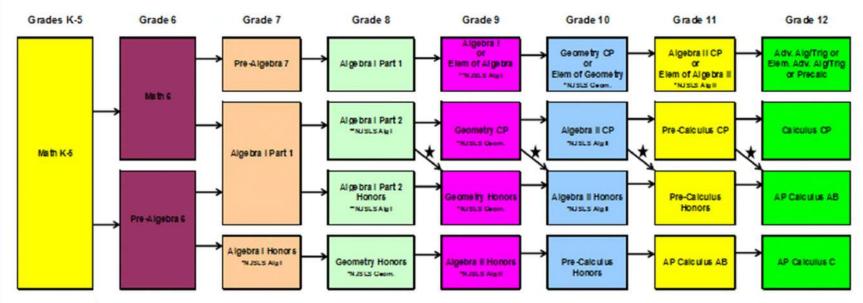


Math Sequences

- What are the <u>common</u> math sequences?
- The next slide illustrates the <u>common</u> 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.

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

Revised 2/19/19

^{**} Students must take and pass the NUSLS Algebra I test as it is a NU 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 placemark

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 6th (Make ups 4/7)
- 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 online in Genesis after May 27. 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 2020-2021
May 2020

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)

<u>Math Placement</u> =

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 2020-2021
 May 2020

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)

<u>Math Placement</u> =

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 Placement Letter in Genesis after 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 June 12.
- There will be no proficiency testing over the summer.





- May 4 8 -MAP Math Testing
- April 6 (4/7 Makeups) IOWA Algebra Aptitude Test
- May 18, 19 Cumulative Assessment (Math 6/Pre-Alg 6)
- May 27 Placement information online from LMS
- June 12- 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

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Actual placement letters have been included with student's names and dates redacted to provide parents examples of placement letters. There are several letters of students placing into Pre-Algebra 7, Algebra I Part 1 and Algebra I H. There is an example of a letter where a student was eligible for a waiver. The red BOLD text on each letter was added for this presentation.

The inclusion of the example letters on the next few pages is based on the feedback from parents who attended one of the Math/Science Information Meetings held in previous years. Thank you for your feedback.

I hope you find this helpful. -Dr. Herte

Dear Parent/Guardian of YOUR CHILD,

Below is the mathematics placement for your child. This placement also includes the student achievement data that are used to determine this placement. Mathematics placement is a careful process that includes multiple measures and the details are outlined on the LMS webpage. Our experience has demonstrated that your child should be successful in the placement indicated. We wish YOUR CHILD a very successful year at UMS, academically, and social and emotionally.

• Montgomery Township School District •

Math Placement Data Sheet

Seventh Grade Math Placement for NEXT YEAR

DATE

Student's Name STUDENT	•	Grade: 6		
Grade Six Unit Test Average (Test average of 4 marking periods)	=	83	(45% of Summary Score)	
Grade Six Cumulative Assessment (<i>Math 6</i>)	=	67	(25% of Summary Score)	
MAP Assessment (MAP score out of 285 points)	=	227	(25% of Summary Score)	
Work Habits/Study Skills Assessment	=	100	(5% of Summary Score)	
Summary Score	=	80	(out of 100 points)	
Math Placement:		Pre-Algebra 7		

Your child did not meet the criteria for Algebra I Part 1. However, your child's Summary Score is 3 or less points from the required Summary Score. You may consider completing a waiver to have your child scheduled for Algebra I Part 1. The waiver form has been included for your convenience. We request that you sign, indicating your request for the waiver, and return it to the Upper Middle School (UMS) Main Office by REQUIRED DATE. Your child's waiver is approved if received by REQUIRED DATE.

Placement Cutoffs:

Pre-Algebra 7: Summary Scores from 0 – 82
 Algebra I Part 1: Summary Scores from 83 – 100

This letter is for a student who was taking Math 6 and was placed into Pre-Algebra 7. This student was eligible for a waiver into Algebra I Part 1. You can see this text to the parents just below the Math Placement informing them of this.

Dear Parent/Guardian of YOUR CHILD,

Below is the mathematics placement for your child. This placement also includes the student achievement data that are used to determine this placement. Mathematics placement is a careful process that includes multiple measures and the details are outlined on the LMS webpage. Our experience has demonstrated that your child should be successful in the placement indicated. We wish YOUR CHILD a very successful year at UMS, academically, and social and emotionally.

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Math Placement Data Sheet

Seventh Grade Math Placement for NEXT YEAR

DATE

Student's Name: STUDENT		Grade: 6		
Grade Six Unit Test Average (Test average of 4 marking periods)	=	93	(45% of Summary Score)	
Grade Six Cumulative Assessment (Math 6)	=	90	(25% of Summary Score)	
MAP Assessment (MAP score out of 285 points)	=	247	(25% of Summary Score)	
Work Habits/Study Skills Assessment	=	100	(5% of Summary Score)	
Summary Score	=	91	(out of 100 points)	
Math Placement:		Algebra I Part 1		

Placement Cutoffs:

Pre-Algebra 7: Summary Scores from 0 – 82
 Algebra I Part 1: Summary Scores from 83 - 100

This letter is for a student who was taking Math 6 and was placed into Algebra I Part 1. This student qualified with the Summary Score of 91.

DATE

Dear Parent/Guardian of STUDENT,

Below is the mathematics placement for your child. This placement also includes the student achievement data that are used to determine this placement. Mathematics placement is a careful process that includes multiple measures and the details are outlined on the LMS webpage. Our experience has demonstrated that your child should be successful in the placement indicated. We wish YOUR CHILD a very successful year at UMS, academically, and social and emotionally.

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Math Placement Data Sheet

Seventh Grade Math Placement for NEXY YEAR

DATE

Student's Name: STUDENT

Grade: 6

Grade Six Unit Test Average (Test average of 4 marking periods)	=	86	(35% of Summary Score)
Iowa Algebra Aptitude Test	=	72	(20% of Summary Score)
MAP Assessment (Out of 285 points)	=	249	(20% of Summary Score)
Grade Six Cumulative Assessment (Pre-Algebra 6)	=	80	(20% of Summary Score)
Work Habits/Study Skills Assessment	=	100	(5% of Summary Score)
Summary Score	=	84	(out of 100 points)

Math Placement:

Algebra I Part 1

Your child did not meet the criteria for Algebra I Honors. However, your child's Summary Score is 3 or less points from the required Summary Score. You may consider completing a waiver to have your child scheduled for Algebra I Honors. The waiver form has been included for your convenience. We request that you sign, indicating your request for the waiver, and return it to the Upper Middle School (UMS) Main Office by THE REQUIRED DATE. Your child's waiver is approved if received by THE REQUIRED DATE.

Placement Cutoffs:

Algebra I Part 1: Summary Scores from 0 – 86
 Algebra I Honors: Summary Scores from 87 – 100

This letter is for a student who was taking Pre-Algebra 6 and was placed into Algebra I Part 1. This student was eligible for a waiver into Algebra I Honors since his/her Summary Score was within 3 points of the required score (87). You can see this text to the parents just below the Math Placement informing them of this.

DATE

Dear Parent/Guardian of STUDENT,

Below is the mathematics placement for your child. This placement also includes the student achievement data that are used to determine this placement. Mathematics placement is a careful process that includes multiple measures and the details are outlined on the LMS webpage. Our experience has demonstrated that your child should be successful in the placement indicated. We wish YOUR CHILD a very successful year at UMS, academically, and social and emotionally.

Montgomery Township School District

Math Placement Data Sheet

Seventh Grade Math Placement for NEXT YEAR

DATE

Student's Name: STUDENT

Grade: 6

Grade Six Unit Test Average (Test average of 4 marking periods)	=	91	(35% of Summary Score)
Iowa Algebra Aptitude Test	=	72	(20% of Summary Score)
MAP Assessment (Out of 285 points)	=	247	(20% of Summary Score)
Grade Six Cumulative Assessment (Pre-Algebra 6)	=	91	(20% of Summary Score)
Work Habits/Study Skills Assessment	=	90	(5% of Summary Score)
Summary Score	=	87	(out of 100 points)

Math Placement:

Algebra I Honors

Placement Cutoffs:

Algebra I Part 1: Summary Scores from 0 – 86
 Algebra I Honors: Summary Scores from 87 – 100

This letter is for a student who was taking Pre-Algebra 6 and was placed into Algebra I Honors. This student qualified with the Summary Score of 87.