

**Kennedy/Wilson
Middle School
Family
Math Night**

November 12, 2009
7 - 9 PM

Evening Overview

- Overview of Evening
- NPS Mathematics Programming
- Grade Level Investigations Experiences
- Parent Resources: A Look at the
Mathematics Parent Guide & MS Math Website
- Math Placement Process
- Math Courses and High School
- Q & A

Program Philosophy

- Balanced mathematics approach
 - ◆ Inquiry opportunities
 - ◆ Traditional skill building
 - ◆ Working with algorithms
- Learn the concepts behind mathematical operations
- Build mathematical understanding
- Enable students to develop efficient and flexible problem-solving strategies

Objective:

- Inform the families of our students about our programs and state standards & how the investigation of mathematics plays an important role in building a student's mathematical understanding

Note: Pacing this evening differs from what your students experience.

Curriculum Resources

- Middle School Mathematics
 - ◆ 5th Grade – Investigations (TERC)
 - ◆ 6th and 7th Grades – Connected Mathematics (CMP)
 - ◆ 8th Grade – Passport to Alg/Geo (McDougal Littell)
 - ◆ Algebra Honors – Algebra 1 (McDougal Littell)

Note: Drop-in units and supplementary materials are used at every grade level.

Parent Resources

Natick Website:

- ◆ Under Departments
- ◆ Select Curriculum and Assessments
- ◆ Select Mathematics

5th–8th Grade Middle School Parent Guide

- Math content help for units of study
- CMP Website (topics of study)
- Helpful math websites
- Challenge websites

Natick Middle School Mathematics Website

<http://www.natickps.org/Wilson/GeneralInfo/msmathwebsite.cfm>

- ◆ Organized by Strand and then Topic
- ◆ Math content practice and challenges
- ◆ Development will be throughout the year as math concepts are explored

Challenge is Built In...

- Investigations contain additional, richer assessments, in-class materials and online components
- Each CMP investigation has additional challenge (ACE) problems
- Math resources website in development (challenge and support materials included)
- Math Club experience available to all students at each middle school
- Math department meetings focus on differentiating lessons to meet the needs of all learners

Breakout Groups

- Grade 5 – Ms. Dewar’s Room: 112
- Grade 6 – Grade 5 Café Room: 110
- Grade 7/8 – Grade 6 Café Room:130

Placement: Guiding Framework

- First duty is to ensure that students leave us with solid ms math foundation--they will only receive this in middle school
- Students develop math/cognitive readiness at different times
- Instruction is differentiated to meet the needs of all learners
- Placement is based on math ability at time of placement
- Data-driven process
- Teachers work together to place students and review data
- Honors Algebra & Geometry are offered to elite math students

Placement Assessment Information

- 6th to 7th Grade

- ◆ 5th Grade MCAS
- ◆ Scantron Performance Series (nationally norm referenced aligned to the MA Standards)
- ◆ 6th Mid-Year Exam
- ◆ Teacher Recommendation
- ◆ Grades from Term 1 & 2

- 7th to 8th Grade

- ◆ 6th Grade MCAS
- ◆ 7th Mid-Year Exam
- ◆ Nationally Norm Referenced Algebra Readiness test
- ◆ Teacher Recommendation
- ◆ Grades from Term 1 & 2

Portfolio of Assessment

- Many opportunities to demonstrate skill/knowledge
- Variety of assessments to give complete picture of learner's skill/knowledge
 - ◆ Nationally-normed
 - ◆ State
 - ◆ Locally created
 - ◆ Skill competitions
 - ◆ Writing tasks
 - ◆ Inquiry tasks
 - ◆ Computation tasks
 - ◆ Readiness tasks

Placement Assessment Information

Name	<u>6- MCAS</u> 266-280	<u>7- MIDYEAR</u> 25-28	<u>Nationally Normed Algebra Readiness Assesment</u> 54-60	<u>7-T1</u>	<u>7-T2</u>
A	268	28	56	A	A-
B	250	22	42	B+	B+

Dates of Assessments

Assessment	Date of Administration
MCAS (all grades)	Late May '09
6 th Grade – Nationally Norm Referenced Assessment	October '09
Mid-year Tests (all grades)	Week of January 19–22 '10
7 th Grade – Nationally Norm Referenced Algebra Assessment	April '10
Placement Letters mailed home	June 4 '10

The Process

- Data analysis
- Recommendations made
- Placement is not a track of courses
- Class sections are created based on the number of eligible students (changes yearly)
- Criteria for placement remains consistent
- Parental input is critical to this process
- * NOTE: The process and courses are currently under review by the School Committee

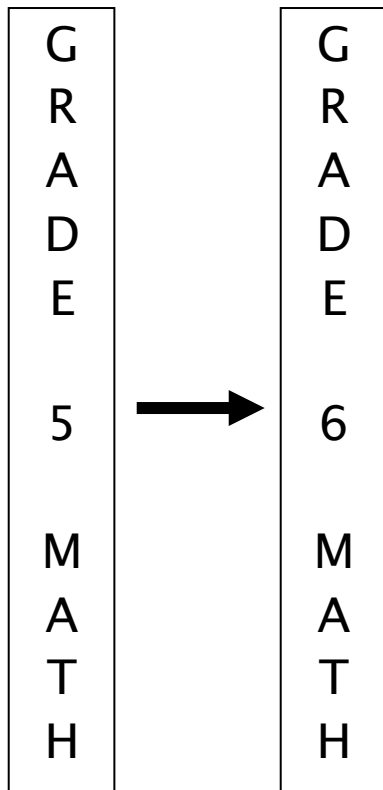
Middle School Math Classes

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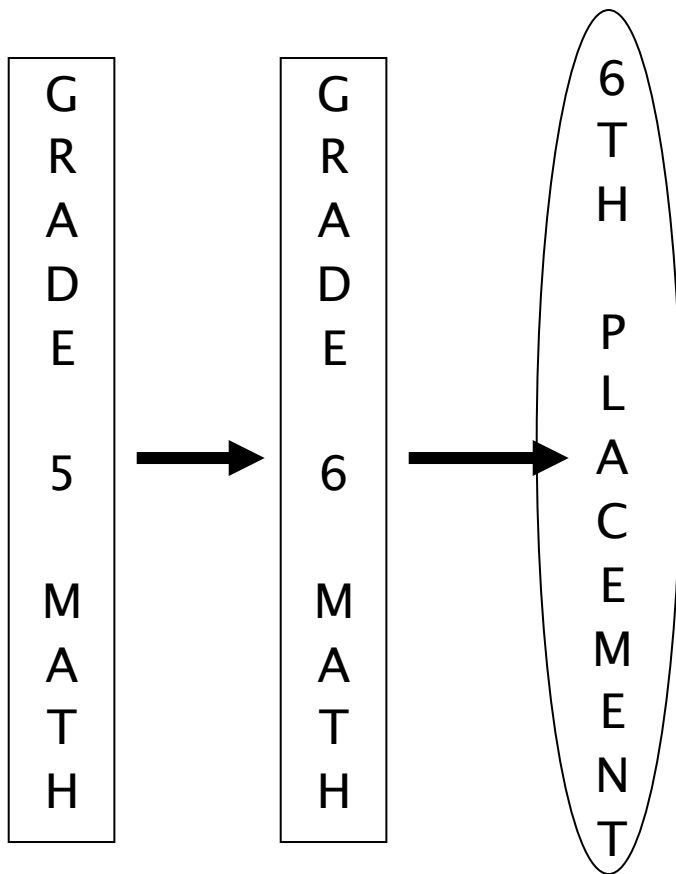
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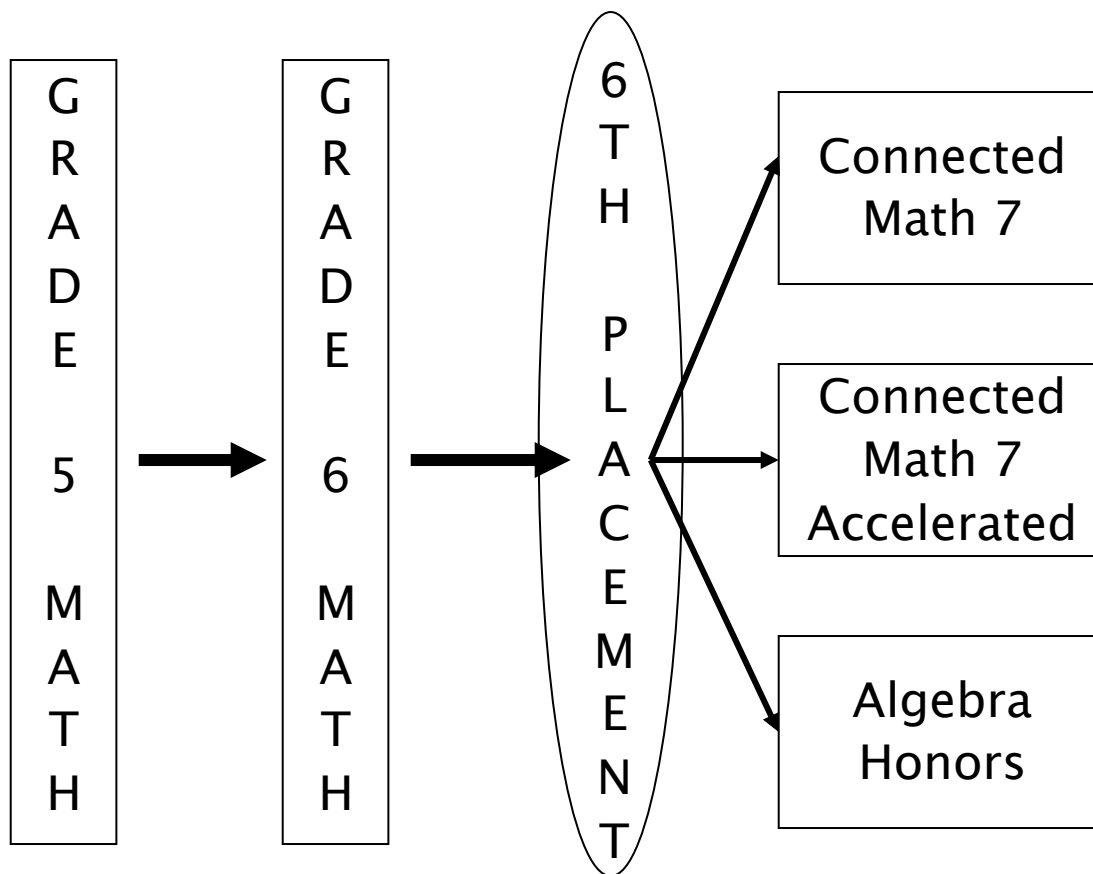
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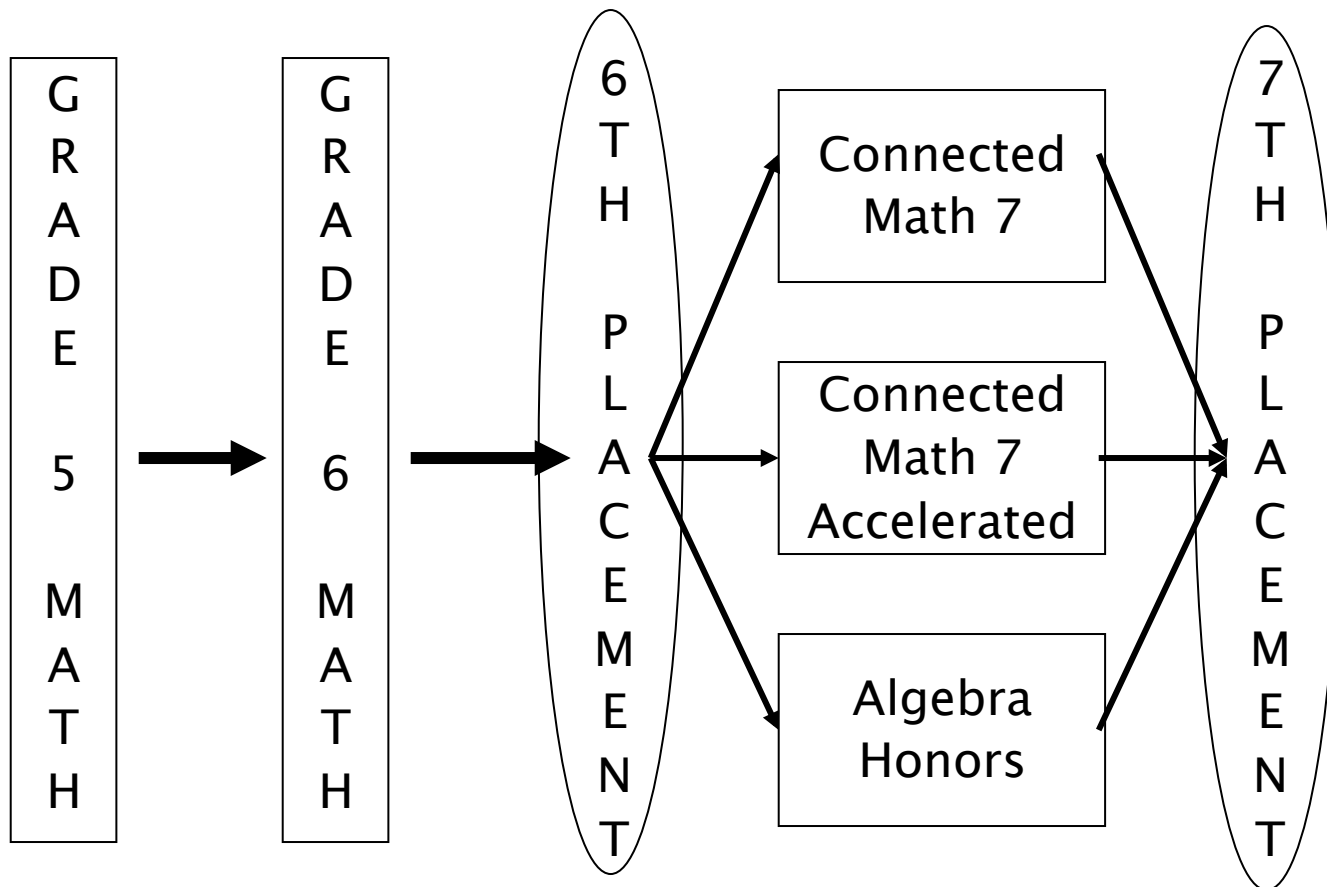
Middle School Math Classes



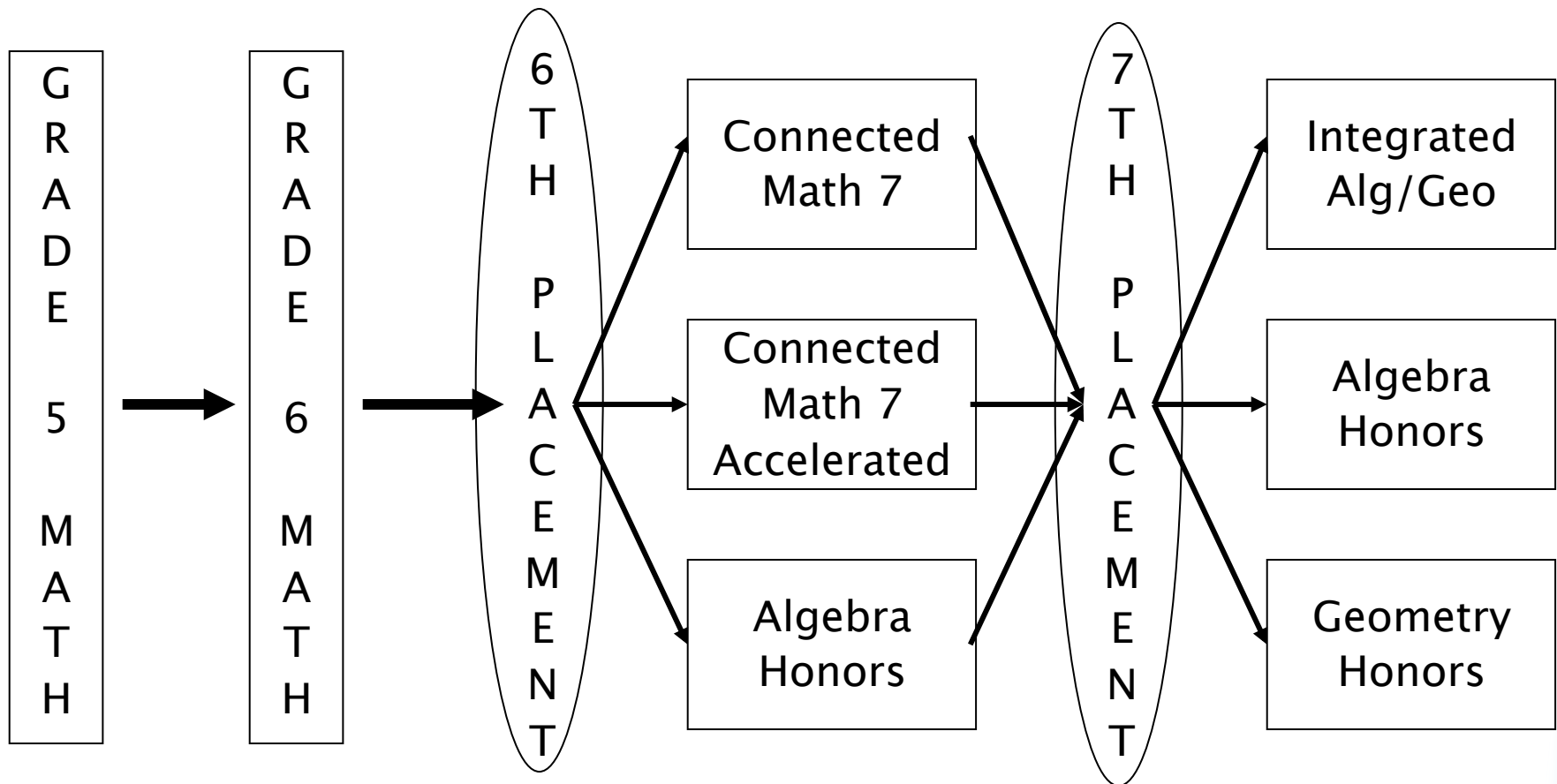
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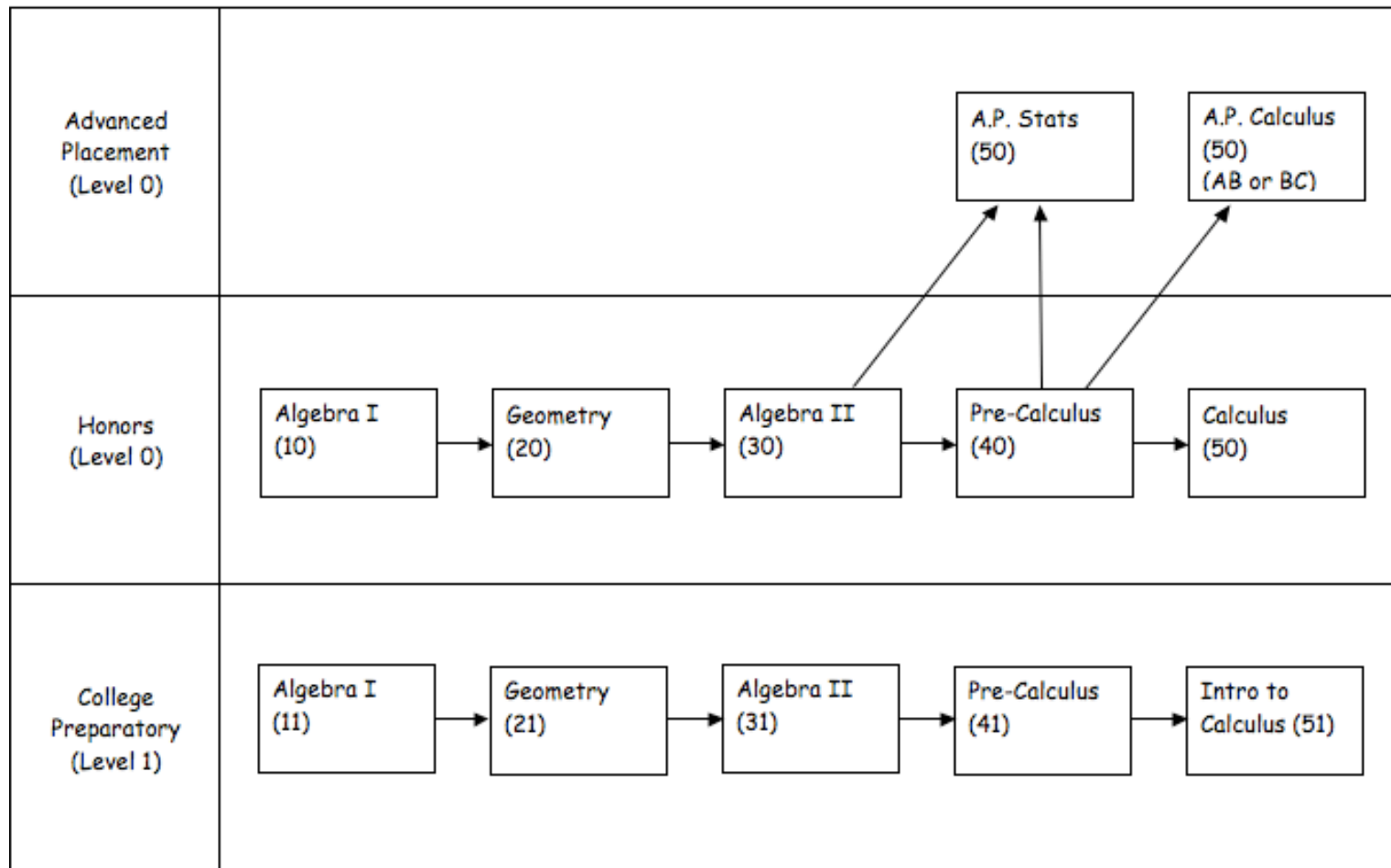
High School Math

- Refer to high school courses handout
- No level 2's in grade 9 (all college track courses)
- Pushing children into Algebra too early is a disservice in high school and college math
- Students gain admission to elite colleges with and without having taken Algebra in grade 8
- College and high school math teachers state strong foundation in middle school mathematics is best asset for students

High School Math

- Algebra 1 does not need to be completed by 8th grade in order for students to take Calculus by senior year
 - ◆ Students can accelerate in high school by doubling up Geometry & Algebra II in 10th grade
 - ◆ Geometry builds on Algebra I; Algebra II concepts are independent of Geometry
- College placement data indicates students who engage in the normal course of math classes at NHS can & do entrance into elite colleges

High School Math Course



High School Math

- Students may move up a level by earning an A- or better in the prerequisite course.
- Independent summer study is recommended for those seeking to move up a level.
- To remain in honors classes, students must earn a B- or better in the prerequisite course.
- Students with a C- or worse in a prerequisite course should move down a level.
- Students may also change levels by permission of the department head

Family Math Night FAQs

Are all of the math teachers able to teach all levels of math?

Yes! All teachers in grade 7 and 8 are certified to teach all math levels and subjects for middle school.

Do you limit the number of sections of each level of math or make the number of sections based on eligible students?

We make as many sections as there are students eligible for sections.

Are teacher recommendations used in math placement decisions?

Are grades used in placement decisions?

Yes, as a part of the portfolio of data points used to make the decisions.

Are teachers involved in the placement process?

Yes! Teachers and administrators sit together to review data points and place students according to test data, grades and discussion of student aptitude and performance.

Family Math Night

Thank you for coming!