Warren Middle School 6th Grade Math Program

Parent Presentation
April 13, 2016

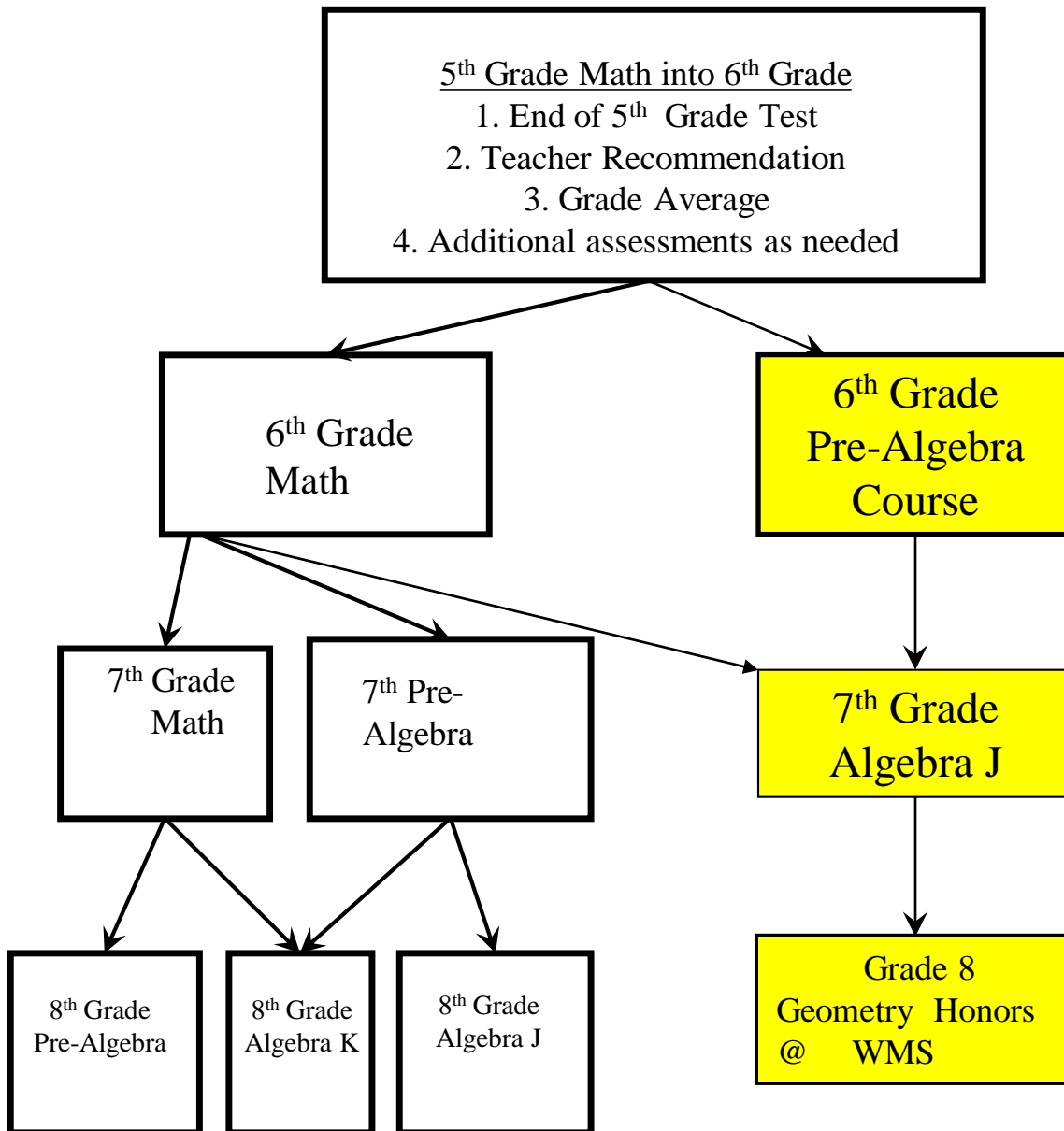# Evening's Agenda

Dr. Cooper
Mr. Kimmick
Mrs. Stacey Hann-Modugno
Mr. Comba

- Fall 2016 - Sequence of Math Courses
- Goal of Advanced Math Program
- History of the Advanced Math Program
- 6th Grade Common Core Standards
- Characteristics of the Advanced Math Student
- 5th to 6th Grade Math Placement Timeline and Procedure
- Pre-Algebra & 6th Grade Math
- May 2017
- Questions?

Warren Middle School
6th Grade Sequence of Mathematics Courses
2016-2017

5th Grade Math into 6th Grade
1. End of 5th Grade Test
2. Teacher Recommendation
3. Grade Average
4. Additional assessments as needed

6th Grade Math

6th Grade Pre-Algebra Course

7th Grade Math

7th Pre-Algebra

7th Grade Algebra J

8th Grade Pre-Algebra

8th Grade Algebra K

8th Grade Algebra J

Grade 8 Geometry Honors @ WMS

Goal of the Advanced Math Program

- The 6th Grade Advanced Math Program is geared to meet the needs of the most advanced mathematics' students in the Middle School.

5th to 6th Grade
Advanced Math Placement

History of the Advanced Math Program:

Many Warren Middle School students excel in mathematics and demonstrate mastery of advanced skills and the common core state standards. Our school provides both enrichment and advanced math opportunities to students who need them.

The advanced math program currently in place at the middle school was introduced to our current 8th graders in September 2013 and will be offered again to the incoming 6th graders in September 2017. The advanced math program offers a pre-algebra class which is available to incoming 6th graders, Algebra J (in 7th grade) and Geometry Honors (in 8th grade),

This advanced math program is geared to meet the needs of the most advanced mathematics students in the middle school.

Common Core State Standards for MATHEMATICS ~ Grade 6

Mathematical Practices

1. Make sense of problems and persevere in solving them;

2. Reason abstractly and quantitatively;

3. Construct viable arguments and critique the reasoning of others;

4. Model with mathematics;

5. Use appropriate tools strategically;

6. Attend to precision;

7. Look for and make use of structure;

8. Look for and express regularity in repeated reasoning;

6th grade Common Core State Standards:

http://www.corestandards.org/Math/Content/6/introduction/

Characteristics of the Advanced Mathematics Student

- display mathematical thinking and have a keen awareness for quantitative information in the world around them;
- think logically and symbolically about quantitative, spatial, and abstract relationships.;
- perceive, visualize, and generalize numeric and non-numeric patterns and relationships;
- reason analytically, deductively, and inductively;
- reverse reasoning processes and switch methods in a flexible yet systematic manner;
- work, communicate, and justify mathematical concepts in creative and intuitive ways, both verbally and in writing;
- transfer learning to novel situations;
- formulate probing mathematical questions that extend or apply concepts;
- persist in their search for solutions to complex, "messy," or "ill-defined" tasks;
- organize information and data in a variety of ways and to disregard irrelevant data;
- grasp mathematical concepts and strategies quickly, with good retention, and to relate mathematical concepts within and across content areas and real-life situations;
- solve problems with multiple and/or alternative solutions;
- use mathematics with self-assurance;
- take risks with mathematical concepts and strategies;
- apply estimation and mental computation strategies.

5th to 6th Grade Math Placement Timeline and Procedure

- **May 2016** – All 5th grade students will take a 35-question scantron exam.

- This test will take place in the 5th grade math classrooms as administered by the current 5th grade math teachers. **All tests are secure and will not be shared.**

- Students who score in the pre-determined ranges will be recommended for one of two (**2**) placement options:

1. Pre-Algebra
2. 6th Grade Math

Pre-Algebra

Pre-Algebra

0-4 wrong meets eligibility for the matrix evaluation. A math matrix evaluation will be completed on these candidates.

•**The MATH MATRIX Evaluates the Following Criteria:**

•Number of problems wrong on math placement exam

•Overall % score on the math placement exam (out of 100%)

•Marking period 2 numerical math grade as per report card

•Marking period 3 numerical math grade as per report card

•Traits, Aptitudes, & Behaviors (TABs) Form completed by math teacher.

•If the student meets the criteria on the math matrix (22+/25 total points), he or she will be given the opportunity to take an additional performance-based pre-algebra readiness assessment to collect further math knowledge on the student's abilities. If the student's performance on this additional assessment shows an understanding of pre-algebra readiness skills, then the student will be recommended for pre-algebra.

•The recommendation for all incoming 6th graders slated for pre-algebra is to review the entire 6th grade Big Ideas Book over the summer. **There are no parent waivers permitted with this option and grades from private advanced summer math courses will not be accepted for pre-algebra consideration.**

6th Grade Math

- All 5th grade students who do not meet the criteria for the pre-algebra course will be scheduled for 6th grade math.

May 2017

- Every 6th grader (not in pre-algebra) will be given a placement exam for determination of placement into one of **three** 7th grade math courses:

1. Algebra J - students who demonstrate algebra readiness must successfully score mastery on 2 additional assessments as well as meet specific criteria. **There are no parent waivers permitted with this option**
2. Pre-Algebra
3. Grade 7 Math

Questions

Course Sequence

Grade	Course							
~~8th~~	~~PA~~	~~PA~~	~~K~~	~~K~~	~~J~~	~~J~~	~~J~~	~~Geo H~~
9th	Alg 1 CP	Alg 1 A	Alg 1 CP	Geom A	Alg 1 CP	Geom A	Geom H	Alg 2 H
10th	Geom CP	Geom A	Geo m CP	Alg 2 A	Geom CP	Alg 2 A	Alg 2 H	Pre-Calc H
11th	Alg 2 CP	Alg 2 A	Alg 2 CP	Adv Math/ Trig or Pre-Calc A	Alg 2 CP	Adv Math/ Trig or Pre-Calc A	Pre-Calc H	AP Calc BC
12th	Alg 3 CP	Adv Math/ Trig A	Alg 3 CP	Pre-Calc or Calc A	Alg 3 CP	Pre-Cal or Calc A	AP Calc AB/BC	Multi-variable Calc