

RRPS Accelerated Math Courses in the Middle School

Updated January 2016

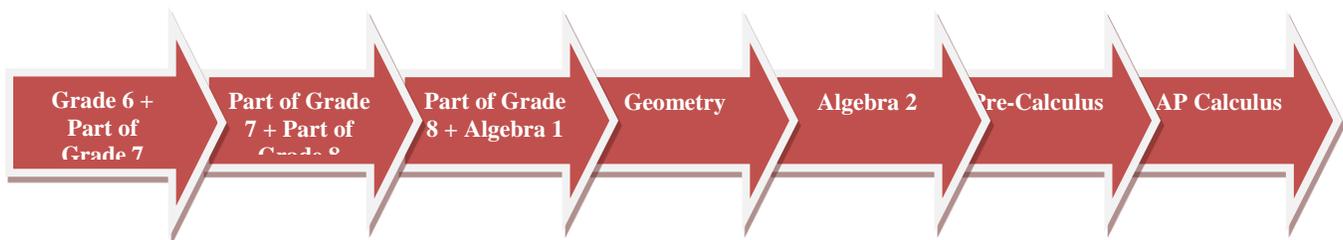
The transition to the *CCSS Math Standards* created an opportunity to appropriately sequence middle school mathematics courses. In this document, we provide information and resources to support decision-making around course placement and scheduling including:

- compacted Grade 6, Grade 7 and Grade 8 Algebra 1 math courses;
- the selection of students for accelerated math courses in the middle school;

High School Mathematics in Middle School

Students who have demonstrated the ability to meet the full expectations of the standards quickly should, of course, be encouraged to do so. For those students ready to move at a more accelerated pace, one method that has been recommended by the writers of the Common Core State Standards is to compress the standards for any three consecutive grades and/or courses into an accelerated pathway.

The CCSS Mathematics Standards in grades 6-8 are coherent, rigorous, and non-redundant, so the offering of high school coursework in middle school to students for whom it is appropriate requires careful planning to ensure that all content and practice standards are fully addressed. The Common Core State Standards initiative has provided “compact” pathways in which the standards from Grade 6, Grade 7, Grade 8, and Algebra I could be compressed into an accelerated pathway for students in grades 6, 7, and 8, allowing students to enter the Geometry course in grade 9. The “compact” pathways can be found in the document *Common Core State Standards for Mathematics Appendix A: Designing High School Mathematics Courses Based on the Common Core State Standards*, at <http://www.corestandards.org/the-standards>. This graphic depicts how to compact grade 6, grade 7, grade 8, and Algebra I in middle school and the trajectory of courses for high school.



Accelerated Math Courses

- **CCSS Compacted Math Year One (Advanced 6th Grade Math)** will cover one-and-a-quarter years of mathematics. Instruction will align to the complete CCSS 6th grade as well as approximately twenty-five percent of the CCSS 7th grade standards.
- **CCSS Compacted Math Year Two (Pre-Algebra)** will cover one-and-a-quarter years of mathematics. Instruction will align to the remaining seventy-five percent CCSS 7th grade as well as approximately fifty percent of the CCSS 8th grade standards. Students who complete this course and meet district guidelines for Pre-AP Algebra I will continue on to:
- **CCSS Compacted Math Year Three (Pre-AP Algebra I)** as 8th graders. Instruction will align to the remaining 8th grade CCSS as well as all of the standards from **CCSS Algebra**. Students who complete this course and meet district criteria will exit 8th grade with one year of high school math credit (CCSS Algebra I).

- Students must take their grade level PARCC exam in grades 6 and 7. Grade 8 students enrolled in Algebra 1 take the PARCC Algebra 1 exam.
- RRPS students must take math every year in high school, regardless of credits earned in middle school.
- All 8th grade Algebra 1 students must maintain at least a 73% average for first semester and at least a 73% average for second semester to receive high school credit. If these criteria are met, students will be awarded one credit for high school math (Algebra 1). If an 8th grade Algebra 1 student has less than a 73% average at the first semester, he/she will be placed in regular math for second semester. No half credits for 8th grade Algebra 1 will be given and semester grades of below a 73% will earn a NC requiring the student to take Algebra 1 in 9th grade.

Selection of Students for Accelerated Math Courses

The selection and placement of students into accelerated opportunities must be done carefully in order to ensure success. Students who follow a compacted pathway will be undertaking advanced work at an accelerated pace. This creates a challenge for these students as well as their teachers, who will be teaching within a compressed timeframe standards that are significantly rigorous. The District recommends that placement decisions are made based upon the following guidelines to be reviewed by a team of stakeholders that includes teachers, instructional leadership, and parents.

• **6th Grade Advanced Math**

- NWEA Grade 5 Winter/Spring Score of 238 or higher which places the student in the 85th percentile (scored better than 85 of every 100 students nationally), particularly in the categories of Operations and Algebraic Thinking, and Numbers and Operations, AND
- **PARCC Grade 4 Score of 4 or 5 in Major, Supporting, and Additional Standard Clusters, AND**
- Teacher recommendations based upon student's portfolio.

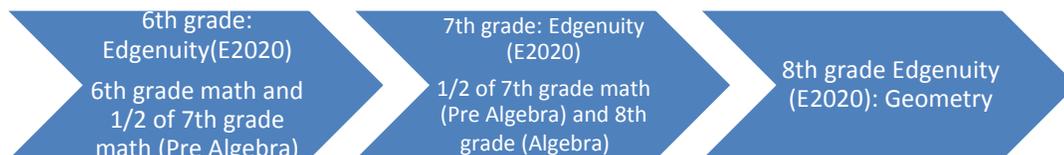
• **7th Grade Pre-Algebra**

- NWEA Grade 6 Winter/Spring Score of 243 or higher which places the student in the 85th percentile (scored better than 85 of every 100 students nationally), particularly in the categories of Operations and Algebraic Thinking and The Real and Complex Number System, AND
- **PARCC Grade 5 Score of 4 or 5 in Major, Supporting, and Additional Standard Clusters, AND**
- Teacher recommendation based upon student's portfolio.

• **8th Grade Pre-AP Algebra I**

- NWEA Grade 7 Winter/Spring Score of 247 or higher which places the student in the 85th percentile (scored better than 85 of every 100 students nationally), particularly in the categories of Operations and Algebraic Thinking and The Real and Complex Number System, AND
- **PARCC Grade 6 Score of 4 or 5 in Major, Supporting, and Additional Standard Clusters, AND**
- Teacher recommendation based upon student's portfolio.

For students that are exceptionally talented in mathematics, RRPS offers an additional option for advancement and acceleration in math:



Students must meet the following requirements to be considered for placement into the Edgenuity program:

1. Only students that can provide evidence of being highly skilled in mathematics and mastering mathematical skills in the 5th grade in the 98th percentile (5th grade winter/spring math NWEA scores of 255 or better particularly in the categories of Operations and Algebraic Thinking, and Numbers and Operations) will be considered. In addition, students must:
2. **Score a 4 or 5 in Major, Supporting, and Additional Standard Clusters on the PARCC Grade 4 Exam, AND**
3. Demonstrate maturity and skills to work in an online environment successfully. (teacher recommendation based on student work), AND
4. Have a teacher recommendation based upon student's portfolio.

To stay in the program students must:

1. Maintain a grade of at least an 83 for each quarter and each semester, AND
2. Parent and student contract signed and adhered to, AND
3. Qualify each year for continuation in program. 6th grade Winter/Spring NWEA score of 260, 7th grade Winter/Spring NWEA score of 265 **and a PARCC Score of 4 or 5 in Major, Supporting, and Additional Standard Clusters.**