

Middle School Math Pathways

It is important for parents to understand the math pathway options that Anchorage School offers for our students. It is important for parents to know that **all of the Anchorage Middle School Math Pathways will prepare our students to be enrolled in college-readiness high-school programs in order to perform well on college-entrance assessments. Students following any of the Anchorage School mathematics pathways will be prepared to pursue degrees and eventual careers in any area.**

In order to be placed in a pathway that is above grade level, a student must demonstrate the needed prerequisite knowledge, as well as a strong drive to learn advanced mathematics topics in middle school. Our overall program is focused on providing all students rigorous instruction and learning opportunities that will prepare them for high school.

| 6 th Grade Curriculum | 7 th Grade Curriculum | 8 th Grade Curriculum | Description of Math Pathway |
|---|----------------------------------|---|--|
| Pre-Algebra Pathway | | | |
| 6th Grade Math | Pre-Algebra Part I | Pre-Algebra Part II/Intro to Algebra I | <ul style="list-style-type: none"> • Grade-level core content mathematics curriculum taught in 6th grade • Progresses in 7th and 8th grades to cover grade level core content, plus pre-algebra and intro to algebra topics that provide students a head start on learning the Algebra I concepts that they will learn in high school • Moderately paced, additional time and review spent covering key concepts |
| High School Algebra I Pathway | | | |
| Advanced 6th Grade Math | Pre-Algebra | High School Algebra I | <ul style="list-style-type: none"> • Qualifying 6th grade students score 224 or greater on 5th Grade spring MAP Mathematics Assessment, achieve a 5th grade end-of-year class and quiz/test average of an A or B and score at least 10 of 30 on the math placement exam • Qualifying 7th grade students score at least a 240 on 6th grade spring MAP Assessment and achieve a 6th grade end-of-year class and quiz/test average of an A or B • Covers key concepts from 6th and 7th grade mathematics core content in 6th grade, preparing students for 8th grade math in 7th grade and High School Algebra 1 in 8th grade • Fast paced, in-depth analysis and application of concepts • Appropriate for students who are enthusiastic about math, can work independently and are academically motivated*+ |
| High School Geometry Pathway | | | |
| Pre-Algebra | High School Algebra I | High School Geometry | <ul style="list-style-type: none"> • Qualifying 6th grade students score 240 or greater on 5th Grade spring MAP Mathematics Assessment, achieve a 5th grade end-of-year class and quiz/test average of an A or B and score at least 20 of 30 on the math placement exam • Qualifying 7th grade students score at least an 80% on the math placement final exam and 250 or greater on the 6th grade spring MAP Mathematics Assessment • Covers key concepts from 6th-8th grade mathematics core content in 6th grade, preparing students for High School Algebra I in 7th grade and High School Geometry in 8th grade • Very fast paced, in depth analysis and rigorous application of concepts • Appropriate for students who are very enthusiastic about math, like to work independently and are highly academically motivated.*+ |

The Advanced Math Curriculum is designed to give students the opportunity to take high school credit classes while still in middle school.

- Students enrolled in the pathway shown in cream will be learning material that is 1 year ahead of their current grade level.
- Students enrolled in the pathway shown in blue will be learning material that is 2 years ahead of their current grade level.

*Students who qualify for the cream or blue pathways and wish to OPT OUT may do so by emailing guidance counselor Sara Wiles at sara.wiles@anchorage.kyschools.us. Students who qualify for the cream or blue pathways, but struggle with the pace and concepts (grades falling below a B average) will have a teacher/student review to determine appropriate math level. This may result in a schedule change. On the cream and blue pathways, a student that does not meet this expectation at the end of a six-weeks grading period will be placed on academic probation. If they do not meet the expectation at the end of another six-weeks grading period, the student's math teacher will recommend that the student be moved into a course better suited to meet their learning needs.

+Because both Algebra I and Geometry are high school level courses, the grades that a student earns in these courses will be counted toward their high school GPA if they attend a Kentucky public high school. If your child intends to enroll in a private or out-of-state high school, parents would need to check with that specific institution to determine if the credits will be counted toward their high school G.P.A. The high school course grades that a student earns in middle school do not however affect their KEES scholarship award upon high school graduation. Additionally, most high schools require not only successful completion of the courses in middle school, but additionally proficiency on a high school mathematics placement exam for a student to enroll in the next level course, meaning that scoring a high grade in the courses at Anchorage School is not enough to necessarily skip the courses in high school. Students must continue to work to retain previous concepts learned and must continue to practice their Algebra I and Geometry problem-solving skills to qualify to take advanced mathematics courses as a high school freshman.

Typical High School Mathematics Pathways

Historically, Algebra I has been considered a 9th grade course, with the most typical high school math path including the following progression:

9th Grade - Algebra I
10th Grade - Geometry
11th Grade - Algebra II
12th Grade - Math Elective (Examples include Statistics and Pre-Calculus)

Advanced students that test out of Algebra I often complete the following path:

9th Grade - Geometry
10th Grade - Algebra II
11th Grade - Pre-Calculus
12th Grade - Math Elective (Examples include AP Statistics and AP Calculus)

Advanced students that have a strong drive and passion for mathematics, and that test out of Algebra I and Geometry often complete the following path:

9th Grade - Algebra II
10th Grade - Pre-Calculus
11th Grade - AP Calculus
12th Grade - AP Statistics

While high school students are required to take one math course per school year, **some students choose to double up with regards to math in particular years**, taking five or six mathematics courses instead of the required four. This provides an opportunity for students in any pathway to progress beyond Pre-Calculus in high school.