

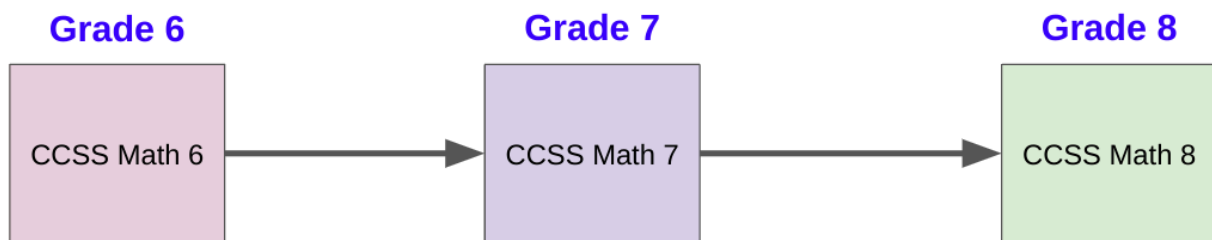
SMFCSD Math Pathways

Overview:

In the spring of 2021, the District and the Board of Trustees approved a single heterogeneous Math 6 with the expectation to improve the quality and rigor of grade 6 math learning for all students and continue to provide pathways to CCSS Algebra in 8th grade for as many interested and prepared students as possible. In order to meet the diverse needs of our students, we are offering three middle school math pathways to our San Mateo Foster City School District families.

[*More information for students in our Montessori schools click here](#)

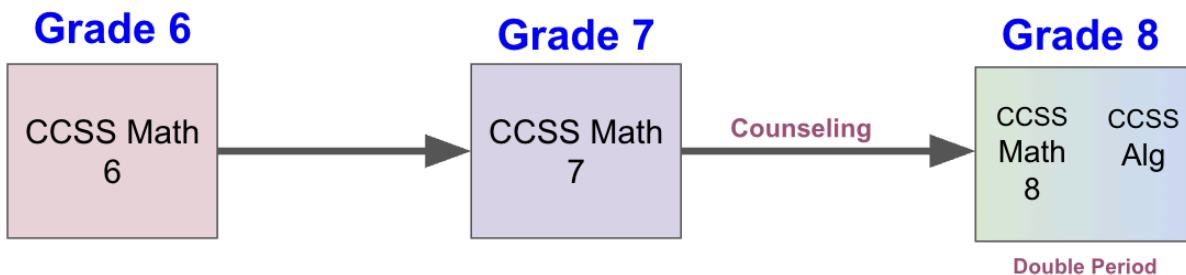
Pathway to Common Core Algebra in High School: Recommended for the majority of our students.



This pathway offers every student Common Core aligned, grade-level course work aimed to prepare them for the rigors of high school mathematics. Each high school in the San Mateo Union High School District offers a pathway to Advanced Placement (AP) mathematics courses for students who take CCSS Algebra in the 9th grade.

Pathway to Common Core Algebra in 8th Grade (double period):

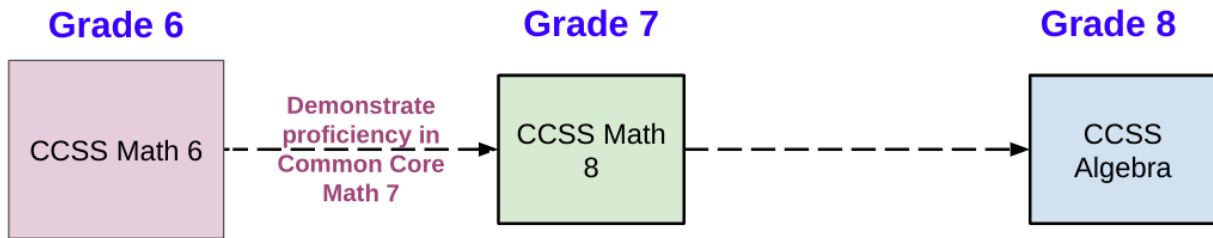
Recommended for middle school students interested in and prepared to take Common Core Algebra in Grade 8.



This pathway allows students to complete all Common Core middle school math courses and high school Common Core Algebra without compression. This pathway requires a double period for math in 8th grade which means students will choose math as one of their two available electives.

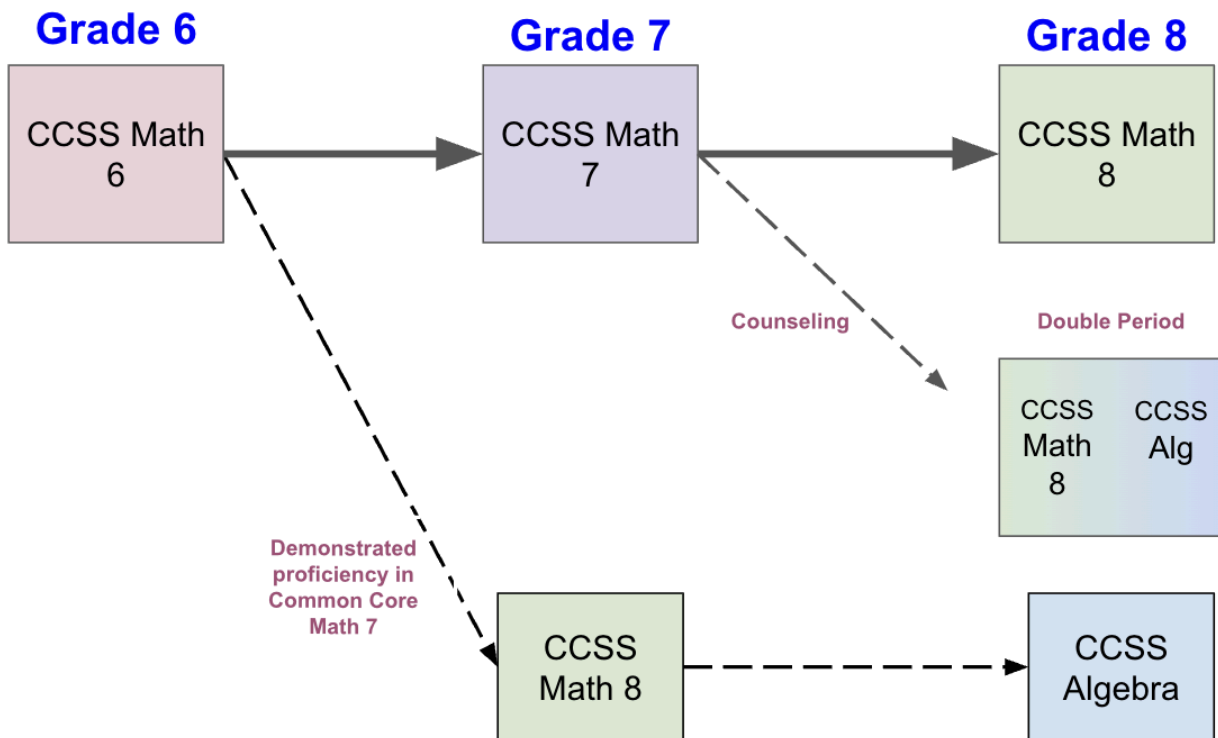
Pathway to Common Core Algebra in 8th Grade (single period):

Recommended for students who wish to demonstrate proficiency in Common Core Math 7 before 7th grade.

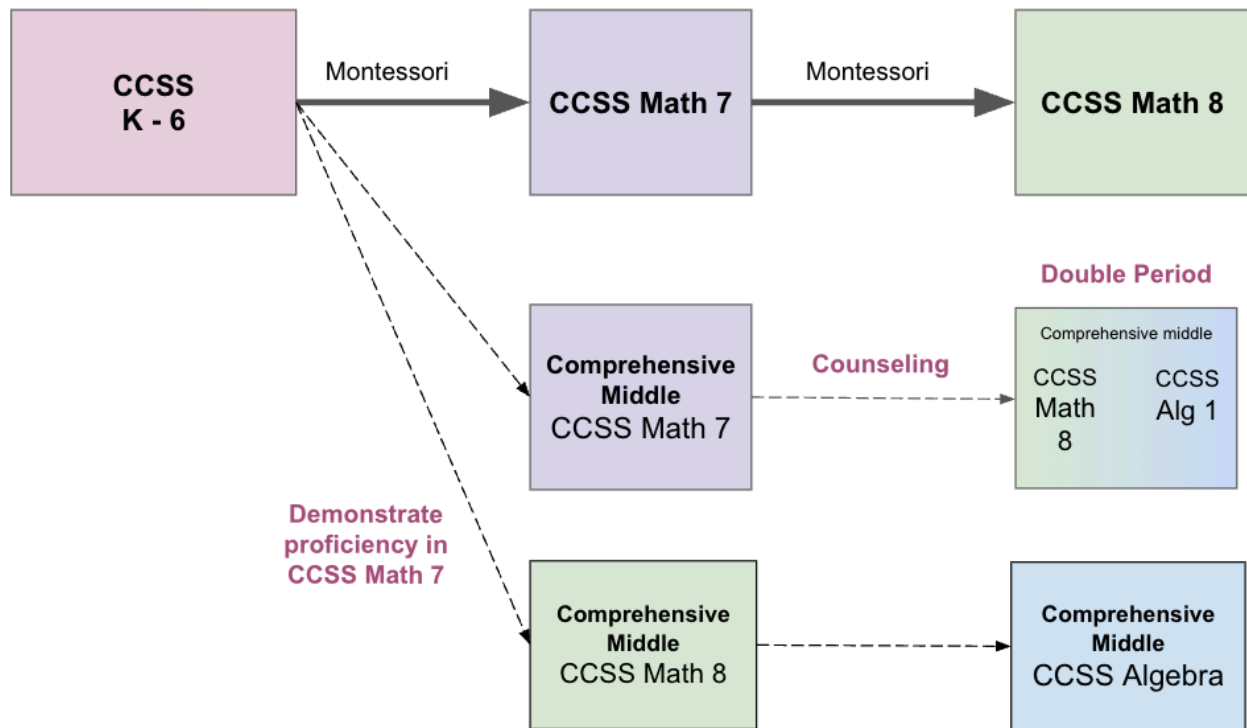


Students choosing this pathway are required to demonstrate proficiency in Common Core Math 7 on Math 7 assessments. This pathway allows students to complete Common Core Math 8 and high school Common Core Algebra without compression. Independent study and virtual preparation support will be provided for these students.

Flowchart of Math Pathways for students in our comprehensive schools



Flowchart for Math Pathways for students in our Montessori Schools



For students in our Montessori school sites, We hope students will stay in our Montessori program through 8th grade. Students who complete our Montessori program through grade 8 can access accelerated math pathways at the high school level. It's worth noting that each high school in the San Mateo Union High School District offers a pathway to Advanced Placement courses when they follow the Montessori pathway in middle school.

Students who want to pursue math pathways within San Mateo Foster City School District comprehensive middle schools may choose to access those offerings by transferring from our Montessori school sites after their 6th grade year. If you are interested in transferring to a comprehensive school site to access the pathways, we recommend speaking with your current teacher and site leadership. The decision to switch to a comprehensive middle school should be done in consultation with your school site.

FAQ's:

- [Why is SMFCSD offering three options?](#)
- [Why is SMFCSD not recommending compacted Math 7/8/Algebra?](#)
- [Why demonstrate proficiency in Common Core Math 7 instead of Math 6 or Math 8?](#)
- [Why does the Pathway to Common Core Algebra in 8th Grade require two periods of math and what impact will that have on my student's schedule?](#)
- [How would I know which pathway is right for my child?](#)
- [How does my student choose a pathway and how does my student qualify for any given pathway? What next steps do I need to take as a parent?](#)
- [My student would like to attempt the Pathway to Algebra in the 8th Grade \(single period\). What dates and details do we need to be aware of?](#)
- [Why is it important for students to take geometry in high school?](#)
- [What if we still have questions?](#)

Why is SMFCSD offering three options?

Middle school is the bridge between the elementary classroom of “all together” and the high school classrooms of “choice.” Three pathways allow students to exercise choice in mathematics in either their 7th or their 8th grade year. Each option will set SMFCSD students up to enter SMUHSD on track to access AP math coursework by their 12th grade year if they choose.

- *Am I interested in learning math at the recommended common core pace? **Follow Pathway to Algebra in High School***
- *Am I interested in learning math at the recommended common core pace and would like to be supported with an extra period of math to complete High School Algebra while in middle school? **Follow Pathway to Algebra in 8th Grade [double period]***
- *Have I learned 7th grade mathematics independent of the San Mateo Foster City School System and wish to demonstrate that knowledge so I can move a year ahead in my mathematics learning? **Follow Pathway to Algebra in 8th Grade [single period]***

Why is SMFCSD no longer offering the compacted Math 7/8/Algebra model?

Families want choice and we wish to offer that choice and still carry out the mission of public school education. That mission is to educate in the most inclusive model possible. A compacted Math 7/8/Algebra model creates three challenges.

- 1) *It compresses mathematics learning in the most critical years, when the bulk of algebraic thinking is established (CCSS Math 8 & CCSS Algebra). Those students who might be prepared to do that and how best to do that is difficult to determine. Compressing incorrectly or admitting students who are not prepared for the compression can have a lasting negative impact on learning. Showing CCSS Math 7 knowledge and then learning CCSS Math 8 and CCSS Algebra with the recommended pace and time is a better solution.*
- 2) *Compacted classes segregate students from the general population of students not only during that class but throughout their scheduled day. Segregated classes send messages to students about who can and cannot succeed. They add undue stress on those who enroll in the accelerated class. These unintended impacts of tracking students can hurt/hinder learning for all students.*
- 3) *Compacted math classes are difficult to program and pull extra resources including teacher preparation time unnecessarily. Our two suggested pathways to High School Algebra in 8th grade reduce segregation and the unnecessary pull on our resources.*

Why demonstrate proficiency in Common Core Math 7 instead of Math 6 or Math 8?

CCSS Math 6 focuses on ratios and proportional relationships and early algebraic expressions and equations. CCSS Math 7 continues to deepen students' understanding of ratios and proportional relationships and focuses on the arithmetic of rational numbers. This pre-algebra content sets the stage for algebra content in CCSS Math 8 and beyond. To confirm proper preparation for all students in SMFCSD to access and succeed in CCSS Algebra, we need to provide all of our students with a strong foundation in CCSS Math 6. We have a responsibility to set this strong math foundation for all students once they enter our middle school math program.

Similarly, to ensure students are prepared for CCSS Algebra and high school math coursework beyond, students need to have a deep understanding of algebraic content. Linear algebra and linear functions are first introduced in CCSS Math 8. To guarantee our students have the time and experiences to deepen their understanding of these significant concepts we must engage all SMFCSD students in rich CCSS Math 8 classrooms.

Why does the Pathway to Common Core Algebra in 8th Grade require two periods of math and what impact will that have on my student's schedule?

Mathematics has been a gatekeeper to college for many years. The mathematics a student completes and their depth of knowledge of mathematics impact both whether they will be UC/CSU eligible and how competitive they will be when applying to colleges. We do not take offering High School Common Core Algebra lightly. We carry the burden of not just offering High School Common Core Algebra but teaching it well and completely. By giving it the appropriate time (an entire year's worth of time for both 8th grade math and Algebra), we are investing in the math success for our students who choose it. Students in 8th grade have two elective periods available in their day. One of these two periods will be used for mathematics leaving one more period for students to choose an elective.

How would I know which pathway is right for my child?

Start by talking with your child. Do they enjoy thinking about mathematics? Do they enjoy math class? Do they get excited by math challenges? Are they interested in careers where mathematics is important? If yes to all, the Pathway to Algebra in 8th Grade (double period) will probably be the best choice for your student. The decision does not need to be made now. The

choice to double up in mathematics or not can be made in a student's 7th grade year.

If your student says yes to all of the above, actively pursues mathematics outside of the SMFCSD system, and wishes to have two electives in the 8th grade, he/she may want to consider the Pathway to Algebra in the 8th Grade (single period). This will begin with a readiness assessment in January for interested 6th graders. If your student shows proficient understanding of 7th grade material, they will be scheduled to take 8th grade math in their 7th grade year.

How does my student choose a pathway and how does my student qualify for any given pathway? What next steps do I need to take as a parent?

Pathway to Algebra in High School:

Encourage your student to continue to work hard in math class. Ask your teacher and counselor for advice on how to best support your student in mathematics. No further action is required.

Pathway to Algebra in 8th Grade (double period):

Encourage your student to continue to work hard in math class. Ask your student if they are enjoying math class, understanding the math they are learning, completing homework and doing well on assessments. Ask your teacher and counselor whether taking a double period of mathematics in grade 8 is a right fit. Be prepared to inform the school of your student's choice by the middle of 7th grade.

Pathway to Common Core Algebra in 8th Grade (single period):

Reflect with your student on their math learning and classroom experiences. Has your student studied math independent of the SMFCSD system and do they enjoy it? Are they interested in learning mathematics in a classroom with mixed grade levels (both 7th & 8th graders)? Sign your student up to take the set of three assessments. The three assessments will cluster around the big ideas of 7th grade math:

- Proportional Relationships, Percents, and Probability
- Expressions, Equations, Inequalities, and Rational Number Arithmetic
- Measuring Circles, Angles, Triangles and Prisms

Further district support will be provided for students who do not yet show proficiency in all three assessments and wish to still pursue this pathway model. Classroom teachers will not be providing this support.

My student would like to attempt the Pathway to Algebra in the 8th Grade (single period). What dates and details do we need to be aware of?

<i>December</i>	<ul style="list-style-type: none"> • Watch Informational video on Pathways • Receive Interest Survey in Student Emails • Sign up in survey for the initial three–assessment cycle of math 7 content. This will be administered on campus and after school in the Beginning part of January.
<i>January</i>	<ul style="list-style-type: none"> • Receive the three–assessment cycle results at the end of January. Students who have demonstrated proficiency on all three assessments will be placed into Math 8 for the following school year. • Students who have passed 1 or 2 assessments and wish to move on have an opportunity to reassess. • Reassess at the beginning of February. • Receive results by the end of February.
<i>February</i>	<ul style="list-style-type: none"> • Students who have not demonstrated proficiency in the February assessment period will have one more opportunity to assess beginning of March • Reassess at the beginning of March • Receive results by the end of March
<i>March</i>	<ul style="list-style-type: none"> • Students will need to pass at least one additional assessment to qualify for the targeted reassessment in Early April • Final assessment early April
<i>April</i>	<ul style="list-style-type: none"> • All assessments passed and Final placement is confirmed.

What if we still have questions?

Step 1: Watch the SMFCSD pathway video as a family. Discuss the pros and cons of each pathway.

Step 2: Reach out to your middle school counselor. You can find their contact email on your school website under “About → “Contact” → “Staff Directory” links

*Step 3: If the counselor was unable to answer your questions, contact your child’s 6th grade teacher. Your teacher may be able to give you guidance on which pathway best fits your child. Be aware that classroom teachers **will not** be providing study support for your child and should not be asked to do so. Study support will be provided through the district office.*

Step 4: If you still have questions, please ask the counselor or teacher to put you in touch with the district math team or email us math@smfc.k12.ca.us