



March 2021

Dear Parent/Guardian and Grade 7 Student:

The following information is being provided to all district families with students who will be advancing to the 8th grade to assist in the math course selection process for the 2021-2022 school year. Attached please find:

1. Course descriptions that explain the pace, content, and expectations of each course;
2. A timeline which outlines important dates; and
3. A chart which shows the course options at each grade of middle school.

We encourage students and parents/guardians to review the information together to inform your decision-making as you select a math course for next year.

Sincerely,

Curriculum & Instruction Department

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### Course Descriptions

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*The following 3 courses are offered in Grade 8:*

Course	Requirements	Description
<b>Pre-Algebra 8</b>	<i>This course fulfills the requirements of the Grade 8 New Jersey Student Learning Standards for math, in preparation for students to take Algebra I as 9th graders.</i>	This course focuses on three critical areas: (1) formulating and reasoning about expressions and equations, including modeling an association in bivariate data with a linear equation, and solving linear equations and systems of linear equations; (2) grasping the concept of a function and using functions to describe quantitative relationships; (3) analyzing two- and three-dimensional space and figures using distance, angle, similarity, and congruence, and understanding and applying the Pythagorean Theorem.
<b>Algebra I</b>	<i>This course integrates the Grade 8 and Algebra I New Jersey Student Learning Standards for math. This course fulfills the state Algebra I course requirement. Successful completion of Algebra I is a prerequisite to take Geometry as 8th graders.</i>	Algebra 1 builds on Pre-algebra and prepares students for further study in Geometry and Algebra 2. The course focuses on foundational ideas such as equivalent forms of expressions, rational and irrational numbers, linearity and rate of change (represented in situations, tables, graphs and equations) and operational reasoning as students evaluate or simplify expressions, or solve equations. Students will also solve systems of

		equations, graph linear equations and inequalities, and use varied methods to interpret and represent quadratic functions.
<b>Geometry</b>	<i>Students must successfully complete Algebra I before taking Geometry. This course fulfills the requirements of the Geometry New Jersey Student Learning Standards. Successful completion of Geometry is a prerequisite for students to take Algebra II as 9th graders. Students are required to take three years of math in high school to meet the graduation requirement.</i>	Geometry builds on Algebra 1 to prepare students for further study in Algebra 2. The course is designed to develop the logical reasoning foundation of mathematical proof. A primary goal of this Geometry curriculum is for students to develop Geometric Habits of Mind. These habits include: reasoning with relationships, generalizing geometric ideas, investigating invariants and balancing exploration and reflection. Students will make conjectures based on investigations using geometric constructions, diagrams, and geometric properties and relationships and use some form of proof to verify or refute conjectures. Students will experiment, hypothesize, measure, analyze, test, talk, write, explain, and justify their ideas, engaging in real mathematics.

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### Course Selection Process & Chart

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Math course selection will be in PowerSchool. Sign in to the [Parent Portal](#) using your username and password. ([Parent Portal Help](#)). From the left side Navigation column select “Forms”. Scroll down until you see Math Course Selection. If you need assistance to complete the form or do not have access to the Internet, please contact your child’s current school principal with your choice.

**Please Note:** We are not enrolling SOMSD summer programs at this time as details are still being confirmed. We are tentatively planning for July 6-July 30 on weekday mornings.

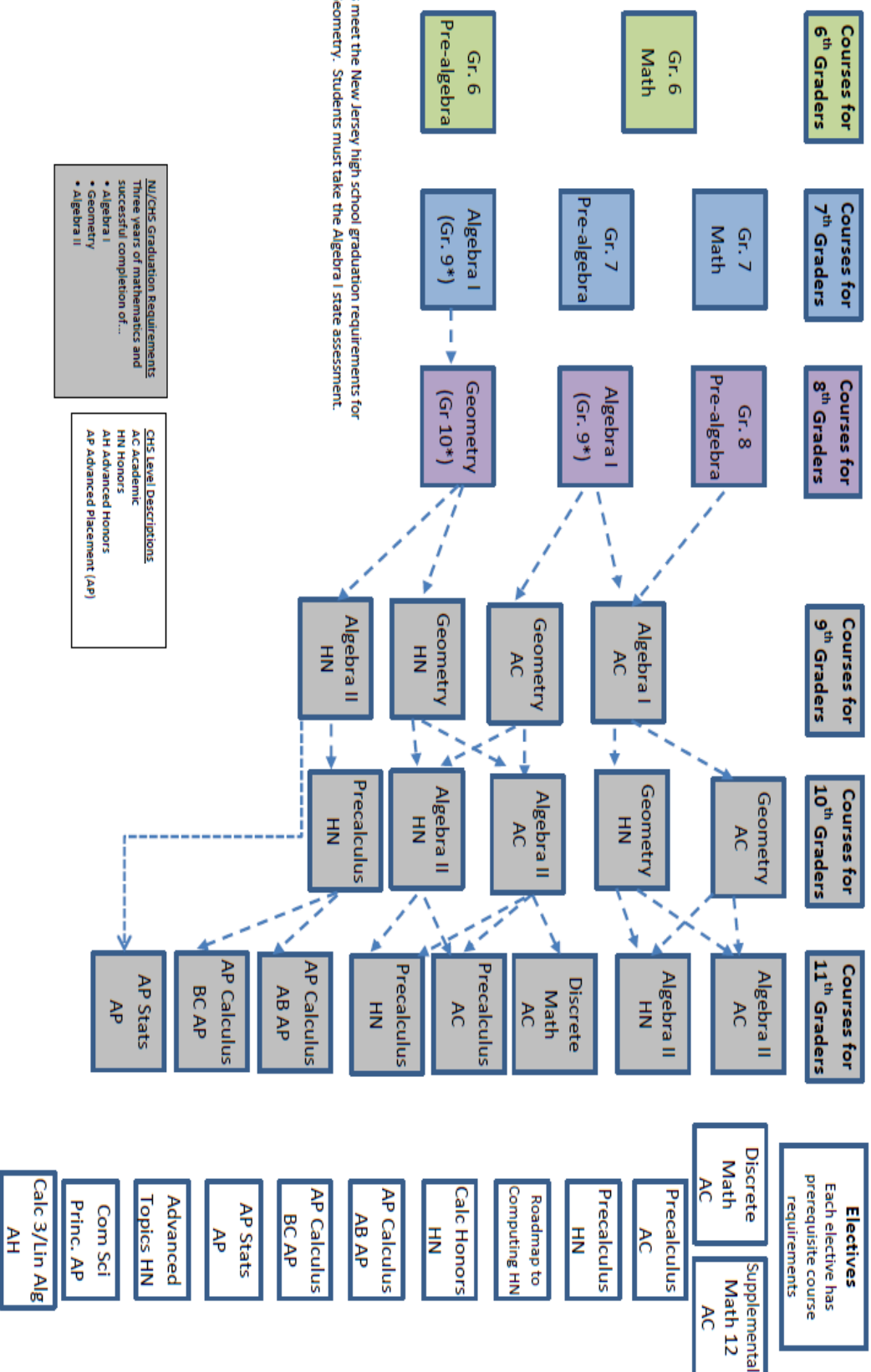
#### **Timeline for Math Course Selection:**

March 16, 2021	<ul style="list-style-type: none"> <li>● Middle School Math Parent Information Night Online 7:00 pm. via WebEx</li> </ul> <b>Event:</b> Middle School Math Parent Information Night <b>Event address for attendees:</b> <a href="https://somsd.webex.com/somsd/onstage/g.php?MTID=eadfd10e5dc13bc46932553d3e771eb27">https://somsd.webex.com/somsd/onstage/g.php?MTID=eadfd10e5dc13bc46932553d3e771eb27</a> <b>Date and time:</b> Tuesday, March 16, 2021 7:00 pm <b>Event number:</b> 129 126 7961 <b>Event password:</b> Numbers2021 (68623772 from phones) <b>Dial In Number:</b> 408-418-9388
March 26, 2021	<ul style="list-style-type: none"> <li>● Last day to select a math course for 2021-2022</li> </ul>

***All middle school course selections provide a path to high-level high school math courses, including Calculus.***

Middle School Math Courses

High School Math Recommended Paths



\* The courses meet the New Jersey high school graduation requirements for Algebra I or Geometry. Students must take the Algebra I state assessment.