- 1) Go to https://www.khanacademy.org/
- 2) Create an account:
 - Your child can create their own
 - Suggestion: you create a parent account first and then create theirs so that you can easily monitor your child's progress
- 3) To find the classes:
 - Select the grade indicated on the pathway sheet and use the categories to find the topic
 - Use the search bar at the top to type in the topic name verify grade level is correct
- 4) The class structure:
 - All lessons are structured with an intro, video lessons, application problems, practice, and quizzes
 - Students can work at their own pace through these lessons, often skipping material they might already
 know if they are performing well. Khan Academy checks their work for them as they go and will give
 you a report of their progress as long as you have a parent account.
 - Each pathway provides a list of topics to support the next course. Students are asked to only complete topics in which they need to reinforce skills from the previous course.

5) Teacher tips:

- As students are watching the videos and working through the lessons, make sure they are writing their work down and actively engaging with the material math is all about practice and showing your work!
- Encourage them to do as much of the math as possible *without* the use of a calculator the more students practice their rational number operations the better. However, if it is getting in the way of them learning the method, let them use one.

If you have any questions before, or over the summer, please feel free to contact our Math Facilitator, Cheryl Vanosdall, cheryll.vanosdall@cms.k12.nc.us.

Have a wonderful summer!

Pathway Overview

Choose the number pathway that applies to your child and then find specific topics on the chart. Pay special attention to starred pathways as this indicates a jump in math content.

| | Pathway # | Current School Year 2019 - 2020 | Next School Year 2020 - 2021 | Preparation for: |
|-----------------------|-----------|------------------------------------|---------------------------------|------------------------|
| Rising 6th Graders | 1 | 5th Grade Math | Math 6 | 6th Grade Math |
| | 2 | 5th Grade Math | Honors Math 6 | 6th and 7th Grade Math |
| Rising 7th Graders | 3 | Math 6 | Math 7 | 7th Grade Math |
| | 4* | Math 6 | Honors Math 7 | 7th and 8th Grade Math |
| | 5 | Honors Math 6 | Honors Math 7 | 7th and 8th Grade Math |
| | 6 | Honors Math 6 | Math 1 | 9th Grade Math |
| | 7 | Math 7 | Math 8 | 8th Grade Math |
| Rising 8th Graders | 8* | Math 7 | Math 1 | 9th Grade Math |
| | 9 | Honors Math 7 | Math 1 | 9th Grade Math |
| | 10 | Math 1 | Math 2 | 10th Grade Math |

*Additional info about Pathway 4 and Pathway 8

The star indicates that children are skipping some material when moving to this above grade-level course. Due to this, we highly suggest completion and understanding of these topics, as it is imperative to their success in future courses. Teachers will be pre-assessing students at the beginning of the year to gauge their understanding of some of these most important topics. Though your child's placement in this class does not depend on a pre-assessment score, it will be used as a monitoring tool to make sure that all students are set up for success for the year.

Go to Rising 6th Graders Page Go to Rising 7th Graders Page Go to Rising 8th Graders Page

Topic Chart

Rising 6th graders:

Khan Academy Full 5th Grade Course
Khan Academy Full 6th Grade Course

| Pathway # | Next Year's Class 2020 - 2021 | Overview of Work | Specific Topic Focus |
|-----------|----------------------------------|--|---|
| 1 | Math 6 | Ensure strong number sense with a review of 5th grade topics. | 5th Grade Topics: • Add decimals • Subtract decimals • Add and subtract fractions • Multi-digit multiplication and division • Multiply fractions • Divide fractions • Multiply decimals • Divide decimals • Coordinate plane |
| 2 | Honors Math 6 | Focus first on 5th grade topics to ensure strong number sense and then attempt the 6th grade topics. | Pathway 1 topics plus 6th Grade Topics:: Arithmetic operations Negative numbers Properties of numbers Variables and expressions (only Parts of algebraic expressions) Equations and inequalities (only Algebraic equations basics) |

Topic Chart

Rising 7th graders: Khan Academy Full 6th Grade Course Khan Academy Full 7th Grade Course
Khan Academy Full 8th Grade Course

| Khan Academy Full 8th Grade Course | | | | | |
|------------------------------------|------------------------------|----------------------------------|--|--|--|
| Pathway # | Current Class 2019 - 2020 | Next Year's Class 2020 - 2021 | Overview of Work | Specific Topics | |
| 3 | Math 6 | Math 7 | Review most important 6th grade topics to create a solid foundation for 7th grade. | 6th Grade Topics: Ratio, rates percentages Arithmetic operations Negative numbers Variables and expressions Equations and inequalities introduction | |
| 4* | Math 6 | Honors Math 7 | Since students have only covered 6th grade content and Honors Math 7 focuses on 7th and 8th grade, students should try to familiarize themselves with the most important 7th grade topics. | Pathway 3 topics plus 7th Grade Topics: Negative numbers Fractions, decimals, percents Rates and proportional relationships Expressions, equations, inequalities | |
| 5 | Honors Math 6 | Honors Math 7 | Review big 6th and 7th grade topics. | Same as Pathway 4 | |
| 6 | Math 6 Honors | Math 1 | Review most important 7th grade topics and get a jump start and attempt the 8th grade topics. | 7th Grade Topics: Negative numbers Fractions, decimals, percents Rates and proportional relationships Expressions, equations, inequalities 8th Grade Topics Numbers and operations Solving equations with one unknown Linear equations and functions Systems of equations Geometry (mainly Pythagorean theorem) Data and Modeling | |

Topic Chart

Rising 8th graders:

Khan Academy Full 7th Grade Course
Khan Academy Full 8th Grade Course
Khan Academy Full Algebra 1 Course

| Pathway # | Current Class 2019 - 2020 | Next Year's Class 2020 - 2021 | Overview of Work | Specific Topics |
|-----------|---------------------------|-------------------------------------|---|---|
| 7 | Math 7 | Math 8 | Review big 7 th grade topics needed for 8 th grade. | 7th Grade Topics: • Negative numbers • Fractions, decimals, percents • Rates and proportional relationships • Expressions, equations, inequalities • Geometry |
| 8* | Math 7 | Math 1 | Since students have only covered 7th grade content and Math 1 builds upon 8th grade concepts, students should try to familiarize themselves with the most important 8th grade topics. | 7th Grade Topics: Negative numbers Fractions, decimals, percents Rates and proportional relationships Expressions, equations, inequalities 8th Grade Topics Numbers and operations Solving equations with one unknown Linear equations and functions Systems of equations Geometry (mainly Pythagorean theorem) Data and modeling (skip Two-way Frequency Tables) |
| 9 | Honors Math 7 | Math 1 | Review big 8 th grade topics needed for Math 1. | Same was Pathway 8. |
| 10 | Math 1 | Math 2 | Review most important Math 7, Math 8, and Math 1 topics that are needed for Math 2. | 7th Grade Topics: Probability 8th Grade Topics: Geometry (skip Volume) Geometric transformations Data and modeling (only Two-way Frequency Tables) Algebra 1 Topics: Algebra foundations Solving equations and inequalities (skip Compound Inequalities) Systems of Equations Functions Exponents and radicals Quadratics: multiplying and factoring Quadratic function and equations (Only: Intro to parabola, Solving with factored form, Solving by taking the square root, Solving by factoring, & Quadratic standard form) |