



**Georgia's K-12
Mathematics Standards
Curriculum Map**

2026 – 2027

GRADE 4 ADVANCED MATH

FCS GRADE 4 ADVANCED MATH CURRICULUM MAP

Georgia's K-8 Mathematics Standards

Semester 1				Semester 2			
Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6	Unit 7	Unit 8
Making Connections with Place Value Understanding, Addition and Subtraction of Whole Numbers	Exploring Real-Life Phenomena Through Patterning and Algebraic Reasoning	Reasoning about Multiplication and Division	Reasoning with Shapes	Investigating Fractions	Investigating Fractions and Decimals	Building Conceptual Understanding of Angles and Measurement	Culminating Capstone Unit
25 Days	19 Days	21 Days	18 Days	23 Days	24 Days	15 Days	25 Days
<u>Unit Dates</u> 8/5/2026 - 9/9/2026	<u>Unit Dates</u> 9/10/2026 - 10/14/2026	<u>Unit Dates</u> 10/15/2026 - 11/13/2026	<u>Unit Dates</u> 11/16/2026 - 12/16/2026	<u>Unit Dates</u> 1/5/2027 - 2/5/2027	<u>Unit Dates</u> 2/8/2027 - 3/19/2027	<u>Unit Dates</u> 3/22/2027 - 4/16/2027	<u>Unit Dates</u> 4/19/2027 - 5/21/2027
Learning Expectations 4.NR.1.1 4.NR.1.2 4.NR.1.3 4.NR.1.4 4.NR.2.1 4.NR.2.5 4.MDR.6.1* 4.MDR.6.2 5.NR.1.1	Learning Expectations 4.PAR.3.1 4.PAR.3.2 4.PAR.3.3 4.PAR.3.4 4.MDR.6.1* 4.MDR.6.2 5.PAR.6.1	Learning Expectations 4.NR.2.2 4.NR.2.3 4.NR.2.4 4.NR.2.5 4.MDR.6.1* 5.NR.2.1 5.NR.2.2	Learning Expectations 4.GSR.8.1 4.GSR.8.2 4.GSR.8.3	Learning Expectations 4.NR.4.1 4.NR.4.2 4.NR.4.3 4.NR.4.4 4.NR.4.5 4.NR.4.6 5.NR.3.2 5.NR.3.3	Learning Expectations 4.NR.5.1 4.NR.5.2 4.NR.5.3 4.MDR.6.1* 4.MDR.6.2 4.MDR.6.3 5.NR.4.1 5.NR.4.2	Learning Expectations 4.GSR.7.1 4.GSR.7.2	Learning Expectations All Standards
4.MP.1-8	4.MP.1-8	4.MP.1-8	4.MP.1-8	4.MP.1-8	4.MP.1-8	4.MP.1-8	4.MP.1-8

The [Framework for Statistical Reasoning](#), [Mathematical Modeling Framework](#), and the [K-12 Mathematical Practices](#) should be taught throughout the units.

Curriculum Map Key

Learning Expectations for ES Advanced Courses are in green.

An * indicates to refer to the unit details below for specific instructional and assessment expectations.

Unit 1: Making Connections with Place Value Understanding, Addition and Subtraction of Whole Numbers

25 Days

Unit Dates: 8/5/2026 - 9/9/2026

4.NR.1: Recognize patterns within the base ten place value system with quantities presented in real-life situations to compare and round multi-digit whole numbers through the hundred-thousands place.

4.NR.2: Using part-whole strategies, solve problems involving addition and subtraction through the hundred-thousands place, as well as multiplication and division of multi-digit whole numbers presented in real-life, mathematical situations.

4.MDR.6: Measure time and objects that exist in the world to solve real-life, mathematical problems and analyze graphical displays of data to answer relevant questions.

5.NR.1: Use place value understanding to solve real-life, mathematical problems.

- 4.NR.1.1:** Read and write multi-digit whole numbers to the hundred-thousands place using base-ten numerals and expanded form.
- 4.NR.1.2:** Recognize and show that a digit in one place has a value ten times greater than what it represents in the place to its right and extend this understanding to determine the value of a digit when it is shifted to the left or right, based on the relationship between multiplication and division.
- 4.NR.1.3:** Use place value reasoning to represent, compare, and order multi-digit numbers, using $>$, $=$, and $<$ symbols to record the results of comparisons.
- 4.NR.1.4:** Use place value understanding to round multi-digit whole number.
- 4.NR.2.1:** Fluently add and subtract multi-digit numbers to solve real-life, mathematical problems using place value understanding, properties of operations, and relationships between operations.
- 4.NR.2.5:** Solve multi-step problems using addition, subtraction, multiplication, and division involving whole numbers. Use mental computation and estimation strategies to justify the reasonableness of solutions.
- 4.MDR.6.1*:** Use the four operations to solve problems involving elapsed time to the nearest minute, intervals of time, metric measurements of liquid volumes, lengths, distances, and masses of objects, including problems involving fractions with like denominators, and also problems that require expressing measurements given in a larger unit in terms of a smaller unit, and expressing a smaller unit in terms of a larger unit (*Only mass of objects).
- 4.MDR.6.2:** Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.
- 5.NR.1.1:** Explain that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and $1/10$ of what it represents in the place to its left.

Unit 2: Exploring Real-Life Phenomena through Patterning and Algebraic Reasoning

19 Days

Unit Dates: 9/10/2026 - 10/14/2026

4.PAR.3: Generate and analyze patterns, including those involving shapes, input/output diagrams, factors, multiples, prime numbers, and composite numbers.

4.MDR.6: Measure time and objects that exist in the world to solve real-life, mathematical problems and analyze graphical displays of data to answer relevant questions.

5.PAR.6: Solve real-life problems by creating and analyzing numerical patterns using the given rule(s).

4.PAR.3.1: Generate both number and shape patterns that follow a provided rule.

4.PAR.3.2: Use input-output rules, tables, and charts to represent and describe patterns, find relationships, and solve problems.

4.PAR.3.3: Find factor pairs in the range 1–100 and find multiples of single-digit numbers up to 100.

4.PAR.3.4: Identify composite numbers and prime numbers and explain the relationship with the factors.

4.MDR.6.1*: Use the four operations to solve problems involving elapsed time to the nearest minute, intervals of time, metric measurements of liquid volumes, lengths, distances, and masses of objects, including problems involving fractions with like denominators, and also problems that require expressing measurements given in a larger unit in terms of a smaller unit, and expressing a smaller unit in terms of a larger unit (*Only metric measurements of liquid volumes, lengths, and distances).

4.MDR.6.2: Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.

5.PAR.6.1: Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms by completing a table.

Unit 3: Reasoning about Multiplication and Division

21 Days

Unit Dates: 10/15/2026 - 11/13/2026

4.NR.2: Using part-whole strategies, solve problems involving addition and subtraction through the hundred-thousands place, as well as multiplication and division of multi-digit whole numbers presented in real-life, mathematical situations.

4.MDR.6: Measure time and objects that exist in the world to solve real-life, mathematical problems and analyze graphical displays of data to answer relevant questions.

5.NR.2: Multiply and divide multi-digit whole numbers to solve real-life, mathematical problems.

4.NR.2.2: Interpret, model, and solve problems involving multiplicative comparison.

4.NR.2.3: Solve relevant problems involving multiplication of a number with up to four digits by a 1-digit whole number or involving multiplication of two two-digit numbers using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.

4.NR.2.4: Solve real-life division problems involving up to 4-digit dividends and 1-digit divisors (including whole number quotients with remainders) using strategies based on place-value understanding, properties of operations, and the relationships between operations. Use place value understanding to round multi-digit whole number.

4.NR.2.5: Solve multi-step problems using addition, subtraction, multiplication, and division involving whole numbers. Use mental computation and estimation strategies to justify the reasonableness of solutions.

4.MDR.6.1*: Use the four operations to solve problems involving elapsed time to the nearest minute, intervals of time, metric measurements of liquid volumes, lengths, distances, and masses of objects, including problems involving fractions with like denominators, and also problems that require expressing measurements given in a larger unit in terms of a smaller unit, and expressing a smaller unit in terms of a larger unit based on the idea of equivalence. (*Only elapsed time to the nearest minute and intervals of time).

5.NR.2.1: Fluently multiply multi-digit (up to 3-digit by 2-digit) whole numbers to solve real-life problems.

5.NR.2.2: Fluently divide multi-digit whole numbers (up to 4- digit dividends and 2-digit divisors no greater than 25) to solve real-life problems.

Unit 4: Reasoning with Shapes

18 Days

Unit Dates: 11/16/2026 -12/16/2026

4.GSR.8: Identify and draw geometric objects, classify polygons based on properties, and solve problems involving area and perimeter of rectangular figures.

4.GSR.8.1: Explore, investigate, and draw points, lines, line segments, rays, angles (right, acute, obtuse), perpendicular lines, parallel lines, and lines of symmetry. Identify these in two-dimensional figures.

4.GSR.8.2: Classify, compare, and contrast polygons based on lines of symmetry, the presence or absence of parallel or perpendicular line segments, or the presence or absence of angles of a specified size and based on side lengths.

4.GSR.8.3: Solve problems involving area and perimeter of composite rectangles involving whole numbers with known side lengths.

Unit 5: Investigating Fractions

23 Days

Unit Dates: 1/5/2027 - 2/5/2027

4.NR.4: Solve real-life problems involving addition, subtraction, equivalence, and comparison of fractions with denominators of 2, 3, 4, 5, 6, 7, 8, 10, 12 and 100 using part-whole strategies and visual models.

5.NR.3: Describe fractions and perform operations with fractions to solve real-life, mathematical problems using part-whole strategies and visual models.

- 4.NR.4.1:** Using concrete materials, drawings, and number lines, demonstrate and explain the relationship between equivalent fractions, including fractions greater than one, and explain the identity property of multiplication as it relates to equivalent fractions. Generate equivalent fractions using these relationships.
- 4.NR.4.2:** Compare two fractions with the same numerator or the same denominator by reasoning about their size and recognize that comparisons are valid only when the two fractions refer to the same whole.
- 4.NR.4.3:** Compare two fractions with different numerators and/or different denominators by flexibly using a variety of tools and strategies and recognize that comparisons are valid only when the two fractions refer to the same whole.
- 4.NR.4.4:** Represent whole numbers and fractions as the sum of unit fractions.
- 4.NR.4.5:** Represent a fraction as a sum of fractions with the same denominator in more than one way, recording with an equation.
- 4.NR.4.6:** Add and subtract fractions and mixed numbers with like denominators using a variety of tools.
- 5.NR.3.2:** Compare and order up to three fractions with different numerators and/or different denominators by flexibly using a variety of tools and strategies.
- 5.NR.3.3:** Model and solve problems involving addition and subtraction of fractions and mixed numbers with unlike denominators.

Unit 6: Investigating Fractions and Decimals

24 Days

Unit Dates: 2/8/2027 - 3/19/2027

4.NR.5: Solve real-life problems involving addition, equivalence, comparison of fractions with denominators of 10 and 100, and comparison of decimal numbers as tenths and hundredths using part-whole strategies and visual models.

4.MDR.6: Measure time and objects that exist in the world to solve real-life, mathematical problems and analyze graphical displays of data to answer relevant questions.

5.NR.4: Read, write, and compare decimal numbers to the thousandths place, and round and perform operations with decimal numbers to the hundredths place to solve real-life, mathematical problems.

4.NR.5.1: Demonstrate and explain the concept of equivalent fractions with denominators of 10 and 100, using concrete materials and visual models. Add two fractions with denominators of 10 and 100.

4.NR.5.2: Represent, read, and write fractions with denominators of 10 or 100 using decimal notation, and decimal numbers to the hundredths place as fractions, using concrete materials and drawings.

4.NR.5.3: Compare two decimal numbers to the hundredths place by reasoning about their size. Record the results of comparisons with the symbols $>$, $=$, or $<$, and justify the conclusions.

4.MDR.6.1*: Use the four operations to solve problems involving elapsed time to the nearest minute, intervals of time, metric measurements of liquid volumes, lengths, distances, and masses of objects, including problems involving fractions with like denominators, and also problems that require expressing measurements given in a larger unit in terms of a smaller unit, and expressing a smaller unit in terms of a larger unit based on the idea of equivalence. (*Only including problems involving fractions with like denominators, and also problems that require expressing measurements given in a larger unit in terms of a smaller unit and expressing a smaller unit in terms of a larger unit).

4.MDR.6.2: Ask questions and answer them based on gathered information, observations, and appropriate graphical displays to solve problems relevant to everyday life.

4.MDR.6.3: Create dot plots to display a distribution of numerical (quantitative) measurement data.

5.NR.4.1: Read and write decimal numbers to the thousandths place using base-ten numerals written in standard form and expanded form.

5.NR.4.2: Represent, compare, and order decimal numbers to the thousandths place based on the meanings of the digits in each place, using $>$, $=$, and $<$ symbols to record the results of comparisons.

Unit 7: Building Conceptual Understanding of Angle Measurement

15 Days

Unit Dates: 3/22/2027 - 4/16/2027

4.GSR.7: Investigate the concepts of angles and angle measurement, estimate and measure angles.

4.GSR.7.1: Recognize angles as geometric shapes formed when two rays share a common endpoint. Draw right, acute, and obtuse angles based on the relationship of the angle measure to 90 degrees.

4.GSR.7.2: Measure angles in reference to a circle with the center at the common endpoint of two rays. Determine an angle's measure in relation to the 360 degrees in a circle through division or as a missing factor problem.

Unit 8: Culminating Capstone

25 Days

Unit Dates: 4/19/2027 - 5/21/2027

ALL Standards Addressed in this Unit

The capstone unit applies content already learned in previous interdisciplinary PBLs and units throughout the school year. The capstone unit is an interdisciplinary unit that allows students to create a presentation, report, or demonstration that could include their models used to answer an overarching driving question. (e.g., Students can present their solution(s), findings, project, or answer the driving question to a larger audience during the culminating capstone unit.)