

G R E A T M I N D S

Grade K | South Carolina College- and Career-Ready Mathematics Standards Correlation to *Eureka Math*®

About Eureka Math

Created by Great Minds®, a mission-driven Public Benefit Corporation, *Eureka Math®* helps teachers deliver unparalleled math instruction that provides students with a deep understanding and fluency in math. Crafted by teachers and math scholars, the curriculum carefully sequences the mathematical progressions to maximize coherence from Prekindergarten through Precalculus—a principle tested and proven to be essential in students' mastery of math.

Teachers and students using *Eureka Math* find the trademark "Aha!" moments in *Eureka Math* to be a source of joy and inspiration, lesson after lesson, year after year.

Aligned

Great Minds offers detailed analyses that demonstrate how each grade of *Eureka Math* aligns with specific state standards. Access these free alignment studies at greatminds.org/state-studies.

Data

Schools and districts nationwide are experiencing student growth and impressive test scores after using *Eureka Math*. See their stories and data at <u>greatminds.org/data</u>.

Full Suite of Resources

Great Minds offers the *Eureka Math* curriculum as PDF downloads for free, noncommercial use. Access the free PDFs at <u>greatminds.org/math/curriculum</u>.

The teacher-writers who created the curriculum have also developed essential resources, available only from Great Minds, including the following:

- · Printed material in English and Spanish
- Digital resources
- Professional development
- Classroom tools and manipulatives
- Teacher support materials
- · Parent resources

Mathematical Process Standards

Aligned Components of Eureka Math

MPS.PS.1

Make sense of problems and persevere in solving them strategically.

MPS.RC.1

Explain ideas using precise and contextually appropriate mathematical language, tools, and models.

MPS.C.1

Demonstrate a deep and flexible conceptual understanding of mathematical ideas, operations, and relationships while making real-world connections.

MPS.AJ.1

Use critical thinking skills to reason both abstractly and quantitatively.

MPS.SP.1

Identify and apply regularity in repeated reasoning to make generalizations.

Lessons in every module engage students in mathematical processes. These are designated in the Module Overview and labeled in lessons.

For example:

A STORY OF UNITS

Lesson 4

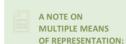


Note: Students can become frustrated as they attempt to articulate the difference between a circle and an oval. Though they may not be able to describe the concept of equidistance from a center, they can tell you that if they had a race car, they would rather have wheels in the shape of a circle than in the shape of an oval. "Circles can roll better!" "They are not squished!"



T: We are going to have another detective hunt today. You and your partner will search for these shapes in the classroom. Use your clipboards and detective equipment, and draw any circles and hexagons that are hiding! (Allow students to investigate for five minutes before they return to their seats.)

T: Would anyone like to show and share one of the circles or hexagons they found in the classroom today? How is your circle or hexagon different from the other shapes we've learned? (Allow time for sharing and discussion.)



Once the vocabulary words hexagon and circle have been introduced, post these on the word wall with a visual of a circle and many different examples of hexagons.

Data, Probability, and Statistical Reasoning

K.DPSR.1 Collect and organize data and communicate through multiple representations.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

K.DPSR.1.1 Sort pictures or objects into at least two categories. Count to determine how many are in each category. Limit to 20 pictures or objects.	GK M1 Topic A: Attributes of Two Related Objects GK M1 Topic B: Classify to Make Categories and Count GK M2 Lesson 9: Identify and sort shapes as two-dimensional or three-dimensional, and recognize two-dimensional and three-dimensional shapes in different orientations and sizes.
K.DPSR.1.2 Answer questions about data organized in a t-chart, object graph, or picture graph.	Supplemental material is necessary to address this standard.

Measurement, Geometry, and Spatial Reasoning

K.MGSR.1 Describe and compare objects in real-world situations using units of length, weight, money, and time.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

K.MGSR.1.1	G1 M6 Lesson 20: Identify pennies, nickels, and dimes by their image, name, or value. Decompose the
Identify a penny, nickel, dime,	values of nickels and dimes using pennies and nickels.
and quarter.	G1 M6 Lesson 21: Identify quarters by their image, name, or value. Decompose the value of a quarter using pennies, nickels, and dimes.

Aligned Components of Eureka Math

K.MGSR.1.2

Directly compare two objects using words including *shorter*, *longer*, *taller*, *lighter*, and *heavier*.

GK M3 Topic A: Comparison of Length and Height

GK M3 Lesson 4: Compare the length of linking cube sticks to a 5-stick.

GK M3 Lesson 5: Determine which linking cube stick is longer than or shorter than the other.

GK M3 Lesson 6: Compare the length of linking cube sticks to various objects.

GK M3 Topic C: Comparison of Weight

GK M3 Topic D: Comparison of Volume

GK M3 Topic H: Clarification of Measurable Attributes

GK M6 Lesson 8: Culminating task.

Measurement, Geometry, and Spatial Reasoning

K.MGSR.2 Analyze, describe, and manipulate shapes to make sense of their relationships in mathematical and real-world situations.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

Identify and describe the attributes
of triangles, squares, rectangles, circles,
cubes, and spheres to include everyday
situations.

GK M2 Topic A: Two-Dimensional Flat Shapes

GK M2 Topic B: Three-Dimensional Solid Shapes

K.MGSR.2.2

K.MGSR.2.1

Describe relative positions of objects by appropriately using terms including below, above, beside, between, inside, outside, in front of, or behind. GK M2 Lesson 5: Describe and communicate positions of all flat shapes using the words above, below, beside, in front of, next to, and behind.

GK M2 Lesson 8: Describe and communicate positions of all solid shapes using the words above, below, beside, in front of, next to, and behind.

Numerical Reasoning

K.NR.1 Represent multi-digit numbers in a variety of ways to build the foundation for place value understanding.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

K.NR.1.1

Read, write, and represent the numerals 0 to 20 and represent the written numeral with concrete models.

GK M1 Topic D: The Concept of Zero and Working with Numbers 0-5

GK M1 Topic E: Working with Numbers 6-8 in Different Configurations

GK M1 Lesson 23: Organize and count 9 varied geometric objects in linear and array (3 threes) configurations. Place objects on 5-group mat. Match with numeral 9.

GK M1 Lesson 24: Strategize to count 9 objects in circular (around a paper plate) and scattered configurations printed on paper. Write numeral 9. Represent a path through the scatter count with a pencil. Number each object.

GK M1 Lesson 25: Count 10 objects in linear and array configurations (2 fives). Match with numeral 10. Place on the 5-group mat. Dialogue about 9 and 10. Write numeral 10.

GK M1 Lesson 26: Count 10 objects in linear and array configurations (2 fives). Match with numeral 10. Place on the 5-group mat. Dialogue about 9 and 10. Write numeral 10.

GK M1 Lesson 27: Count 10 objects, and move between all configurations.

GK M5 Lesson 6: Model with objects and represent numbers 10 to 20 with place value or Hide Zero cards.

GK M5 Lesson 7: Model and write numbers 10 to 20 as number bonds.

GK M5 Lesson 8: Model teen numbers with materials from abstract to concrete.

GK M5 Lesson 14: Show, count, and write to answer how many questions with up to 20 objects in circular configurations.

GK M6 Lesson 8: Culminating task.

Aligned Components of Eureka Math

K.NR.1.2

Compose and decompose numbers from 11 to 19 into tens and ones by using concrete objects, pictorial models, or drawings to demonstrate understanding that the teen numbers are composed of one set of ten ones and a few more ones.

GK M5 Lesson 2: Count 10 objects within counts of 10 to 20 objects, and describe as 10 ones and $___$ ones.

GK M5 Lesson 3: Count and circle 10 objects within images of 10 to 20 objects, and describe as 10 ones and ____ ones.

GK M5 Lesson 4: Count straws the Say Ten way to 19; make a pile for each ten.

GK M5 Lesson 5: Count straws the Say Ten way to 20; make a pile for each ten.

GK M5 Topic B: Compose Numbers 11–20 from 10 Ones and Some Ones; Represent and Write Teen Numbers

GK M5 Lesson 11: Show, count, and write numbers 11 to 20 in tower configurations increasing by 1–a pattern of 1 larger.

GK M5 Lesson 12: Represent numbers 20 to 11 in tower configurations decreasing by 1-a pattern of 1 smaller.

GK M5 Lesson 13: Show, count, and write to answer how many questions in linear and array configurations.

GK M5 Lesson 14: Show, count, and write to answer how many questions with up to 20 objects in circular configurations.

GK M5 Topic E: Represent and Apply Compositions and Decompositions of Teen Numbers

Numerical Reasoning

K.NR.2 Demonstrate and explain the relationship between numbers and quantities.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

GK M1 Lesson 33: Order quantities from 10 to 1 , and match numerals. GK M1 Lesson 34: Count down from 10 to 1 , and state 1 less than a given number. GK M1 Lesson 35: Arrange number towers in order from 10 to 1 , and describe the pattern. GK M5 Topic D: Extend the Say Ten and Regular Count Sequence to 100
Supplemental material is necessary to address this standard.
GK M1 Topic C: Numbers to 5 in Different Configurations, Math Drawings, and Expressions GK M1 Topic D: The Concept of Zero and Working with Numbers 0–5 GK M1 Topic E: Working with Numbers 6–8 in Different Configurations GK M1 Lesson 23: Organize and count 9 varied geometric objects in linear and array (3 threes) configurations. Place objects on 5-group mat. Match with numeral 9. GK M1 Lesson 24: Strategize to count 9 objects in circular (around a paper plate) and scattered configurations printed on paper. Write numeral 9. Represent a path through the scatter count with a pencil. Number each object. GK M1 Lesson 25: Count 10 objects in linear and array configurations (2 fives). Match with numeral 10 Place on the 5-group mat. Dialogue about 9 and 10. Write numeral 10.
GK M1 Lesson 26: Count 10 objects in linear and array configurations (2 fives). Match with numeral 10

Aligned Components of Eureka Math

K.NR.2.3 continued	GK M1 Lesson 27: Count 10 objects, and move between all configurations.
	GK M3 Lesson 23: Reason to identify and make a set that has 1 more.
	GK M4 Lesson 38: Add 1 to numbers 1 – 9 to see the pattern of the next number using 5 -group drawings and equations.
	GK M5 Lesson 1: Count straws into piles of ten; count the piles as 10 ones.
	GK M5 Lesson 2: Count 10 objects within counts of 10 to 20 objects, and describe as 10 ones and ones.
	GK M5 Lesson 3: Count and circle 10 objects within images of 10 to 20 objects, and describe as 10 ones and ones.
	GK M5 Topic C: Decompose Numbers 11–20, and Count to Answer "How Many?" Questions in Varied Configurations
	GK M5 Topic E: Represent and Apply Compositions and Decompositions of Teen Numbers
	GK M6 Lesson 4: Describe the relative position of shapes using ordinal numbers.
	GK M6 Lesson 8: Culminating task.
K.NR.2.4 Given a number from 0 to 20, count out	GK M1 Lesson 7: Sort by count in vertical columns and horizontal rows (linear configurations to 5). Match to numerals on cards.
that many objects.	GK M1 Lesson 8: Answer how many questions to 5 in linear configurations (5-group), with 4 in an array configuration. Compare ways to count five fingers.
	GK M1 Lesson 9: Within linear and array dot configurations of numbers 3, 4, and 5, find hidden partners.
	GK M1 Topic E: Working with Numbers 6-8 in Different Configurations
	GK M1 Lesson 23: Organize and count 9 varied geometric objects in linear and array (3 threes) configurations. Place objects on 5-group mat. Match with numeral 9.

Aligned Components of Eureka Math

K.NR.2.4 continued

GK M1 Lesson 24: Strategize to count 9 objects in circular (around a paper plate) and scattered configurations printed on paper. Write numeral 9. Represent a path through the scatter count with a pencil. Number each object.

GK M1 Lesson 25: Count 10 objects in linear and array configurations (2 fives). Match with numeral 10. Place on the 5-group mat. Dialogue about 9 and 10. Write numeral 10.

GK M1 Lesson 26: Count 10 objects in linear and array configurations (2 fives). Match with numeral 10. Place on the 5-group mat. Dialogue about 9 and 10. Write numeral 10.

GK M1 Lesson 27: Count 10 objects, and move between all configurations.

GK M5 Lesson 2: Count 10 objects within counts of 10 to 20 objects, and describe as 10 ones and ____ ones.

GK M5 Lesson 3: Count and circle 10 objects within images of 10 to 20 objects, and describe as 10 ones and ____ ones.

GK M5 Lesson 13: Show, count, and write to answer how many questions in linear and array configurations.

GK M5 Lesson 14: Show, count, and write to answer how many questions with up to 20 objects in circular configurations.

GK M5 Lesson 20: Represent teen number compositions and decompositions as addition sentences.

GK M5 Lesson 21: Represent teen number decompositions as 10 ones and some ones, and find a hidden part.

GK M5 Lesson 22: Decompose teen numbers as 10 ones and some ones; compare some ones to compare the teen numbers.

Numerical Reasoning

K.NR.3 Demonstrate the ability to compare quantities of objects and numerals representing quantities of objects.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

K.NR.3.1	GK M3 Lesson 5: Determine which linking cube stick is longer than or shorter than the other.
Compare up to 10 objects in one set to another set of up to 10 objects using the phrases more than, fewer than, or the same as.	GK M3 Topic E: Are There Enough? GK M3 Topic F: Comparison of Sets Within 10 GK M3 Topic G: Comparison of Numerals

Patterns, Algebra, and Functional Reasoning

K.PAFR.1 Develop an understanding of the relationship between addition and subtraction to solve problems.

South Carolina College- and Career-Ready Mathematics Standards

Aligned Components of Eureka Math

K.PAFR.1.1	GK M4 Topic A: Compositions and Decompositions of 2, 3, 4, and 5
Add and subtract number combinations within 5.	
K.PAFR.1.2 Create a sum of 10 using objects and drawings when given one of two addends 0–9, to include real-world situations.	GK M4 Lesson 39: Find the number that makes 10 for numbers 1–9, and record each with a 5-group drawing.
	GK M4 Lesson 40: Find the number that makes 10 for numbers 1–9, and record each with an addition equation.
	GK M5 Lesson 10: Build a Rekenrek to 20.
	GK M6 Lesson 8: Culminating task.

Aligned Components of Eureka Math

K.PAFR.1.3

Compose and decompose numbers up to 10 in different ways. Record using objects or drawings.

GK M1 Lesson 8: Answer how many questions to 5 in linear configurations (5-group), with 4 in an array configuration. Compare ways to count to five fingers.

GK M1 Lesson 9: Within linear and array dot configurations of numbers 3, 4, and 5, find hidden partners.

GK M1 Lesson 10: Within circular and scattered dot configurations of numbers 3, 4, and 5, find hidden partners.

GK M1 Lesson 11: Model decompositions of 3 with materials, drawings, and expressions. Represent the decomposition as 1 + 2 and 2 + 1.

GK M1 Lesson 14: Write numerals 1–3. Represent decompositions with materials, drawings, and equations, 3 = 2 + 1 and 3 = 1 + 2.

GK M1 Lesson 16: Write numerals 1–5 in order. Answer and make drawings of decompositions with totals of 4 and 5 without equations.

GK M1 Lesson 37: Culminating task.

GK M3 Lesson 7: Compare objects using the same as.

GK M4 Topic A: Compositions and Decompositions of 2, 3, 4, and 5

GK M4 Topic B: Decompositions of 6, 7, and 8 into Number Pairs

GK M4 Lesson 13: Represent decomposition and composition addition stories to 6 with drawings and equations with no unknown.

GK M4 Lesson 14: Represent decomposition and composition addition stories to 7 with drawings and equations with no unknown.

GK M4 Lesson 15: Represent decomposition and composition addition stories to 8 with drawings and equations with no unknown.

GK M4 Lesson 18: Solve both addends unknown word problems to 8 to find addition patterns in number pairs.

GK M4 Lesson 20: Solve take from with result unknown expressions and equations using the minus sign with no unknown.

Aligned Components of Eureka Math

K.PAFR.1.3 continued	GK M4 Lesson 21: Represent subtraction story problems using objects, drawings, expressions, and equations.
	GK M4 Lesson 22: Decompose the number 6 using 5-group drawings by breaking off or removing a part, and record each decomposition with a drawing and subtraction equation.
	GK M4 Lesson 23: Decompose the number 7 using 5-group drawings by hiding a part, and record each decomposition with a drawing and subtraction equation.
	GK M4 Lesson 24: Decompose the number 8 using 5-group drawings and crossing off a part, and record each decomposition with a drawing and subtraction equation.
	GK M4 Topic E: Decompositions of 9 and 10 into Number Pairs
	GK M4 Topic F: Addition with Totals of 9 and 10
	GK M4 Topic G: Subtraction from 9 and 10
	GK M4 Lesson 41: Culminating task.
K.PAFR.1.4	GK M1 Lesson 28: Act out result unknown story problems without equations.
Solve add-to/joining,	GK M4 Topic A: Compositions and Decompositions of 2, 3, 4, and 5
take-from/separating, part-part-whole (total unknown), part-part-whole (both	GK M4 Topic B: Decompositions of 6, 7, and 8 into Number Pairs
addends unknown) real-world situations	GK M4 Topic C: Addition with Totals of 6, 7, and 8
to find sums and differences within $10.$	GK M4 Topic D: Subtraction from Numbers to 8
	GK M4 Topic E: Decompositions of 9 and 10 into Number Pairs
	GK M4 Topic F: Addition with Totals of 9 and 10
	GK M4 Topic G: Subtraction from 9 and 10
	GK M4 Topic H: Patterns with Adding 0 and 1 and Making 10
	GK M6 Lesson 8: Culminating task.

K | South Carolina College- and Career-Ready Mathematics Standards Correlation to Eureka Math

Patterns, Algebra, and Functional Reasoning

K.PAFR.2 Recognize, describe, extend, and create patterns.

South Carolina
College- and Career-Ready
Mathematics Standards

Aligned Components of Eureka Math

K.PAFR.2.1	Supplemental material is necessary to address this standard.
Describe, extend, and create (to the next term) simple repeating patterns in the form of AB, AAB, ABB, and ABC.	