EUREKA MATH™

GREAT MINDS

ABOUT *EUREKA MATH*

Created by the nonprofit Great Minds, *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

Eureka Math is the only curriculum found by EdReports.org to align fully with the Common Core State Standards for Mathematics for all grades, Kindergarten through Grade 8. Great Minds offers detailed analyses which 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 greatminds.org/data.

FULL SUITE OF RESOURCES

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

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

GRADE 2 MATHEMATICS

The Grade 2 Missouri Learning Standards: Mathematics are fully covered by the Grade 2 *Eureka Math* curriculum. A detailed analysis of alignment is provided in the table below.

INDICATORS

- Green indicates that the Missouri standard is fully addressed in *Eureka Math*.
- Yellow indicates that the Missouri standard may not be completely addressed in *Eureka Math*.
- Red indicates that the Missouri standard is not addressed in *Eureka Math*.
- Blue indicates there is a discrepancy between the grade level at which this standard is addressed in the Missouri standards and in *Eureka Math*.

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
Number Sense and Operations in Base Ten	**Cluster: Understand place value of three digit numbers.**	
	2.NBT.A.1 Understand three-digit numbers are composed of hundreds, tens and ones.	G2 M3: Place Value, Counting, and Comparison of Numbers to 1,000
	2.NBT.A.2 Understand that 100 can be thought of as 10 tens—called a "hundred".	G2 M3: Place Value, Counting, and Comparison of Numbers to 1,000
	2.NBT.A.3 Count within 1,000 by 1s, 10s and 100s starting with any number.	G2 M3: Place Value, Counting, and Comparison of Numbers to 1,000
	2.NBT.A.4 Read and write numbers to 1,000 using number names, base-ten numerals and expanded form.	G2 M3 Topic C: Three-Digit Numbers in Unit, Standard, Expanded, and Word Forms G2 M3 Topic E: Modeling Numbers Within 1,000 with Place Value Disks G2 M3 Topic F: Comparing Two Three-Digit Numbers
	2.NBT.A.5 Compare two three-digit numbers using the symbols >, = or <.	G2 M3 Topic F: Comparing Two Three-Digit Numbers
	Cluster: Use place value understanding and properties of operations to add and subtract.	
	2.NBT.B.6 Demonstrate fluency with addition and subtraction within 100.	G2 M1: Sums and Differences to 100 G2 M4 Topic A: Sums and Differences Within 100 G2 M7 Topic B: Problem Solving with Coins and Bills

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	2.NBT.B.7 Add up to four two-digit numbers.		G2 M4 Lesson 22: Solve additions with up to four addends with totals within 200 with and without two compositions of larger units.
	2.NBT.B.8 Add or subtract within 1,000, and justify the solution.		G2 M4: Addition and Subtraction Within 200 with Word Problems to 100 G2 M5: Addition and Subtraction Within 1,000 with Word Problems to 100
	2.NBT.B.9 Use the relationship between addition and subtraction to solve problems.		G2 M4: Addition and Subtraction Within 200 with Word Problems to 100 G2 M5: Addition and Subtraction Within 1,000 with Word Problems to 100
	2.NBT.B.10 Add or subtract mentally 10 or 100 to or from a given number within 1,000.		G2 M3 Topic G: Finding 1, 10, and 100 More or Less than a Number G2 M4 Topic A: Sums and Differences Within 100 G2 M4 Lesson 17: Use mental strategies to relate compositions of 10 tens as 1 hundred to 10 ones as 1 ten. G2 M5 Topic A: Strategies for Adding and Subtracting Within 1,000

Domain	Standards for Mathematical Content	Aligned Components of *Eureka Math*
	Cluster: Represent and solve problems involving addition and subtraction.	
	2.NBT.C.11 Write and solve problems involving addition and subtraction within 100.	G2 M1 Topic A: Foundations for Fluency with Sums and Differences Within 100 G2 M1 Lesson 5: Make a ten to add within 100. G2 M1 Lesson 8: Take from 10 within 100. G2 M4 Lesson 31: Solve two-step word problems within 100. G2 M6 Lesson 9: Solve word problems involving addition of equal groups in rows and columns.
Relationships and Algebraic Thinking	**Cluster: Add and subtract within 20.**	
	2.RA.A.1 Demonstrate fluency with addition and subtraction within 20.	G2 M1: Sums and Differences to 100 G2 M4 Lesson 5: Solve one- and two-step word problems within 100 using strategies based on place value. G2 M4 Lesson 16: Solve one- and two-step word problems within 100 using strategies based on place value.
	Cluster: Develop foundations for multiplication and division.	
	2.RA.B.2 Determine if a set of objects has an odd or even number of members.	
	a. Count by 2s to 100 starting with any even number.	G2 M6 Topic D: The Meaning of Even and Odd Numbers

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	b. Express even numbers as pairings/ groups of 2, and write an expression to represent the number using addends of 2.		G2 M6 Topic D: The Meaning of Even and Odd Numbers
	c. Express even numbers as being composed of equal groups and write an expression to represent the number with 2 equal addends.		G2 M6 Topic D: The Meaning of Even and Odd Numbers
	2.RA.B.3 Find the total number of objects arranged in a rectangular array with up to 5 rows and 5 columns, and write an equation to represent the total as a sum of equal addends.		G2 M6: Foundations of Multiplication and Division
Geometry and Measurement	**Cluster: Reason with shapes and their attributes.**		
	2.GM.A.1 Recognize and draw shapes having specified attributes, such as a given number of angles or sides.		
	a. Identify triangles, quadrilaterals, pentagons, hexagons, circles and cubes.		G2 M8 Topic A: Attributes of Geometric Shapes G2 M8 Lesson 6: Combine shapes to create a composite shape; create a new shape from composite shapes.
	b. Identify the faces of three-dimensional objects.		G2 M8 Topic A: Attributes of Geometric Shapes

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	2.GM.A.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of squares.		G2 M6 Topic C: Rectangular Arrays as a Foundation for Multiplication and Division
	2.GM.A.3 Partition circles and rectangles into two, three or four equal shares, and describe the shares and the whole.		
	a. Demonstrate that equal shares of identical wholes need not have the same shape.		G2 M8: Time, Shapes, and Fractions as Equal Parts of Shapes
	Cluster: Measure and estimate lengths in standard units.		
	2.GM.B.4 Measure the length of an object by selecting and using appropriate tools.		G2 M2: Addition and Subtraction of Length Units G2 M7 Topic C: Creating an Inch Ruler G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units
	2.GM.B.5 Analyze the results of measuring the same object with different units.		G2 M2 Topic C: Measure and Compare Lengths Using Different Length Units G2 M7 Lesson 18: Measure an object twice using different length units and compare; relate measurement to unit size.

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	2.GM.B.6 Estimate lengths using units of inches, feet, yards, centimeters and meters.	G2 M2 Topic B: Measure and Estimate Length Using Different Measurement Tools G2 M7 Topic D: Measuring and Estimating Length Using Customary and Metric Units
	2.GM.B.7 Measure to determine how much longer one object is than another.	G2 M2 Topic C: Measure and Compare Lengths Using Different Length Units G2 M2 Lesson 9: Measure lengths of string using measurement tools, and use tape diagrams to represent and compare lengths. G2 M7 Lesson 19: Measure to compare the differences in lengths using inches, feet, and yards.
	Cluster: Relate addition and subtraction to length.	
	2.GM.C.8 Use addition and subtraction within 100 to solve problems involving lengths that are given in the same units.	G2 M2 Topic D: Relate Addition and Subtraction to Length G2 M7 Lesson 20: Solve two-digit addition and subtraction word problems involving length by using tape diagrams and writing equations to represent the problem.
	2.GM.C.9 Represent whole numbers as lengths on a number line, and represent whole-number sums and differences within 100 on a number line.	G2 M2 Lesson 8: Solve addition and subtraction word problems using the ruler as a number line. G2 M7 Topic E: Problem Solving with Customary and Metric Units G2 M7 Lesson 24: Draw a line plot to represent the measurement data; relate the measurement scale to the number line.

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	Cluster: Work with time and money.	
	2.GM.D.10 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	G2 M8 Topic D: Application of Fractions to Tell Time
	2.GM.D.11 Describe a time shown on a digital clock as representing hours and minutes, and relate a time shown on a digital clock to the same time on an analog clock.	G2 M8 Topic D: Application of Fractions to Tell Time
	2.GM.D.12 Find the value of combinations of dollar bills, quarters, dimes, nickels and pennies, using $ and ¢ appropriately.	G2 M7 Topic B: Problem Solving with Coins and Bills
	2.GM.D.13 Find combinations of coins that equal a given amount.	G2 M7 Topic B: Problem Solving with Coins and Bills
Data and Statistics	**Cluster: Represent and interpret data.**	
	2.DS.A.1 Create a line plot to represent a set of numeric data, given a horizontal scale marked in whole numbers.	G2 M7 Topic F: Displaying Measurement Data

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	2.DS.A.2 Generate measurement data to the nearest whole unit, and display the data in a line plot.		G2 M7 Topic F: Displaying Measurement Data
	2.DS.A.3 Draw a picture graph or a bar graph to represent a data set with up to four categories.		G2 M7 Topic A: Problem Solving with Categorical Data
	2.DS.A.4 Solve problems using information presented in line plots, picture graphs and bar graphs.		G2 M7 Topic A: Problem Solving with Categorical Data G2 M7 Topic F: Displaying Measurement Data
	2.DS.A.5 Draw conclusions from line plots, picture graphs and bar graphs.		G2 M7 Topic A: Problem Solving with Categorical Data G2 M7 Topic F: Displaying Measurement Data