
Grade 1 | Indiana Academic Standards for Mathematics 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

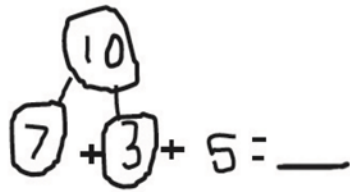
Schools and districts nationwide are experiencing student growth and impressive test scores after using *Eureka Math*. See their stories and data at greatminds.org/data.

Full Suite of Resources

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

Mathematics Process Standards	Aligned Components of <i>Eureka Math</i>
<p>PS.1 Make sense of problems and persevere in solving them.</p>	<p>Lessons in every module engage students in mathematical processes. These are designated in the Module Overview and labeled in lessons.</p> <p>For example:</p>
<p>PS.2 Reason abstractly and quantitatively.</p>	<p>A STORY OF UNITS Lesson 2 1•2</p>
<p>PS.3 Construct viable arguments and critique the reasoning of others.</p>	<p>T: So, even though they added two different numbers together first, did they get the same total? S: Yes! T: Wow! Okay. Let's try this again. Let's use Bob's strategy of making ten from two of our addends. (Write $7 + 5 + 3 = \underline{\quad}$.) Write the equation. Draw to show the three amounts. S: (Draw to show the three quantities.) T: What two numbers make ten? S: 7 and 3. T: Good. Show that 7 and 3 make ten in your drawing by circling like we did yesterday with the string.</p>
<p>PS.4 Model with mathematics.</p>	<p>S: (Circle the 3 and the 7, making a group of 10.) T: Here is a new number sentence that shows what numbers you added first. (Write $7 + 3 + 5 = \underline{\quad}$.) T: I'll make a number bond to show how you made ten from two numbers. (Bond the 7 and 3 to make ten.) T: You just showed 10 and 5 more, which equals...? S: 15. T: Good. I'll show how we solved for the unknown. I'll write the new number sentence explaining what we just did, starting with 10.</p>
<p>PS.5 Use appropriate tools strategically.</p>	<p>MP.7 S: (Solve $7 + 3 + 5 = \underline{\quad}$ while the teacher writes $10 + 5 = 15$.) T: Jo showed us at the beginning of the lesson that she could solve from left to right, without moving the addends around, in order to get the same answer as Bob. Work and talk with your partner to see if this is true again!</p>
<p>PS.6 Attend to precision.</p>	<p>Repeat this process using the following suggested sequence: $9 + 2 + 1$, $2 + 4 + 8$ (highlighting that students might begin with the 8 rather than the 2), $4 + 3 + 6$, and $3 + 8 + 7$. Students complete the number sentence while the teacher completes the drawing for the third example.</p>
<p>PS.7 Look for and make use of structure.</p>	<p>NOTES ON MULTIPLE MEANS OF ENGAGEMENT: Addends should be chosen so that students can easily identify the partners to ten, recognizing that they can add these two addends first, regardless of where they are positioned within the number sentence. If students are not fluent with 7 and 3, they may be replaced with 9 and 1, respectively.</p>
<p>PS.8 Look for and express regularity in repeated reasoning.</p>	<p></p>

Number Sense

Students fluently count, read, and represent numbers up to 120 and apply place value concepts to two-digit numbers.

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<p>1.NS.1</p> <p>Count to at least 120 by ones, fives, and tens from any given number. In this range, read and write numerals and represent a number of objects with a written numeral. (E)</p>	<p>G1 M4 Lesson 1: Compare the efficiency of counting by ones and counting by tens.</p> <p>G1 M6 Lesson 7: Count and write numbers to 120. Use Hide Zero cards to relate numbers 0 to 20 to 100 to 120.</p> <p>G1 M6 Lesson 8: Count to 120 in unit form using only tens and ones. Represent numbers to 120 as tens and ones on the place value chart.</p> <p>G1 M6 Lesson 9: Represent up to 120 objects with a written numeral.</p>
<p>1.NS.2</p> <p>Model place value concepts of two-digit numbers, multiples of 10, and equivalent forms of whole numbers using objects and drawings. (E)</p>	<p>G1 M2 Topic D: Varied Problems with Decompositions of Teen Numbers as 1 Ten and Some Ones</p> <p>G1 M4 Topic A: Tens and Ones</p> <p>G1 M4 Lesson 23: Interpret two-digit numbers as tens and ones, including cases with more than 9 ones.</p> <p>G1 M6 Lesson 3: Use the place value chart to record and name tens and ones within a two-digit number up to 100.</p> <p>G1 M6 Lesson 4: Write and interpret two-digit numbers to 100 as addition sentences that combine tens and ones.</p> <p>G1 M6 Lesson 24: Use dimes and pennies as representations of numbers to 120.</p>
<p>1.NS.3</p> <p>Match the ordinal numbers (e.g., first, second, third) with an ordered set of up to 20 items.</p>	<p><i>Supplemental material is necessary to address this standard.</i></p>

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<p>1.NS.4</p> <p>Use place value understanding to compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols $>$, $=$, and $<$. (E)</p>	<p>G1 M4 Topic B: Comparison of Pairs of Two-Digit Numbers</p> <p>G1 M6 Lesson 6: Use the symbols $>$, $=$, and $<$ to compare quantities and numerals to 100.</p>
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Computation and Algebraic Thinking

Within the numbers 1–20, students demonstrate fluency and apply addition and subtraction strategies to solve real-world problems. Students apply place value and number sense to add numbers within 100 and investigate beginning algebra concepts through the growing number patterns within 100.

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<p>1.CA.1</p> <p>Demonstrate fluency with addition facts and the corresponding subtraction facts within 20. Use strategies such as counting on; making ten (e.g., $8 + 6 = 8 + 2 + 4 = 10 + 4 = 14$); decomposing a number leading to a 10 (e.g., $13 - 4 = 13 - 3 - 1 = 10 - 1 = 9$); using the relationship between addition and subtraction (e.g., knowing that $8 + 4 = 12$, one knows $12 - 8 = 4$); and creating equivalent but easier or known sums (e.g., adding $6 + 7$ by creating the known equivalent $6 + 6 + 1 = 12 + 1 = 13$). Model the role of 0 and the equal sign in addition and subtraction using objects or drawings. (E)</p>	<p>G1 M1 Topic A: Embedded Numbers and Decompositions</p> <p>G1 M1 Topic B: Counting On from Embedded Numbers</p> <p>G1 M1 Topic C: Addition Word Problems</p> <p>G1 M1 Topic D: Strategies for Counting On</p> <p>G1 M1 Lesson 17: Understand the meaning of the equal sign by pairing equivalent expressions and constructing true number sentences.</p> <p>G1 M1 Lesson 18: Understand the meaning of the equal sign by pairing equivalent expressions and constructing true number sentences.</p> <p>G1 M1 Topic F: Development of Addition Fluency Within 10</p> <p>G1 M1 Topic G: Subtraction as an Unknown Addend Problem</p> <p>G1 M1 Topic I: Decomposition Strategies for Subtraction</p> <p>G1 M1 Topic J: Development of Subtraction Fluency Within 10</p> <p>G1 M2 Lesson 2: Use the associative and commutative properties to make ten with three addends.</p>
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<p>1.CA.1 <i>continued</i></p>	<p>G1 M2 Lesson 3: Make ten when one addend is 9.</p> <p>G1 M2 Lesson 4: Make ten when one addend is 9.</p> <p>G1 M2 Lesson 5: Compare efficiency of counting on and making ten when one addend is 9.</p> <p>G1 M2 Lesson 6: Use the commutative property to make ten.</p> <p>G1 M2 Lesson 7: Make ten when one addend is 8.</p> <p>G1 M2 Lesson 8: Make ten when one addend is 8.</p> <p>G1 M2 Lesson 9: Compare efficiency of counting on and making ten when one addend is 8.</p> <p>G1 M2 Lesson 10: Solve problems with addends of 7, 8, and 9.</p> <p>G1 M2 Lesson 11: Share and critique peer solution strategies for put together with total unknown word problems.</p> <p>G1 M2 Topic B: Counting On or Taking from Ten to Solve Result Unknown and Total Unknown Problems</p> <p>G1 M2 Lesson 25: Strategize and apply understanding of the equal sign to solve equivalent expressions.</p> <p>G1 M2 Lesson 27: Solve addition and subtraction problems decomposing and composing teen numbers as 1 ten and some ones.</p> <p>G1 M2 Lesson 28: Solve addition problems using ten as a unit, and write two-step solutions.</p> <p>G1 M2 Lesson 29: Solve subtraction problems using ten as a unit, and write two-step solutions.</p> <p>G1 M6 Topic G: Culminating Experiences</p>
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<p>1.CA.2</p> <p>Solve real-world problems involving addition and subtraction within 20 in situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all parts of the addition or subtraction problem (e.g., by using objects, drawings, and equations with a symbol for the unknown number to represent the problem). (E)</p>	<p>G1 M1 Lesson 3: See and describe numbers of objects using 1 more within 5-group configurations.</p> <p>G1 M1 Topic B: Counting On from Embedded Numbers</p> <p>G1 M1 Topic C: Addition Word Problems</p> <p>G1 M1 Topic D: Strategies for Counting On</p> <p>G1 M1 Topic G: Subtraction as an Unknown Addend Problem</p> <p>G1 M1 Topic H: Subtraction Word Problems</p> <p>G1 M1 Lesson 33: Model 0 less and 1 less pictorially and as subtraction number sentences.</p> <p>G1 M2 Lesson 1: Solve word problems with three addends, two of which make ten.</p> <p>G1 M2 Lesson 2: Use the associative and commutative properties to make ten with three addends.</p> <p>G1 M2 Lesson 3: Make ten when one addend is 9.</p> <p>G1 M2 Lesson 4: Make ten when one addend is 9.</p> <p>G1 M2 Lesson 7: Make ten when one addend is 8.</p> <p>G1 M2 Lesson 8: Make ten when one addend is 8.</p> <p>G1 M2 Lesson 11: Share and critique peer solution strategies for put together with total unknown word problems.</p> <p>G1 M2 Lesson 12: Solve word problems with subtraction of 9 from 10.</p> <p>G1 M2 Lesson 13: Solve word problems with subtraction of 9 from 10.</p> <p>G1 M2 Lesson 16: Relate counting on to making ten and taking from ten.</p> <p>G1 M2 Lesson 19: Compare efficiency of counting on and taking from ten.</p> <p>G1 M2 Lesson 21: Share and critique peer solution strategies for take from with result unknown and take apart with addend unknown word problems from the teens.</p> <p>G1 M2 Lesson 22: Solve put together/take apart with addend unknown word problems, and relate counting on to the take from ten strategy.</p> <p>G1 M2 Lesson 23: Solve add to with change unknown problems, relating varied addition and subtraction strategies.</p>
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<p>1.CA.2 <i>continued</i></p>	<p>G1 M2 Lesson 24: Strategize to solve take from with change unknown problems.</p> <p>G1 M2 Lesson 27: Solve addition and subtraction problems decomposing and composing teen numbers as 1 ten and some ones.</p> <p>G1 M2 Lesson 28: Solve addition problems using ten as a unit, and write two-step solutions.</p> <p>G1 M2 Lesson 29: Solve subtraction problems using ten as a unit, and write two-step solutions.</p> <p>G1 M3 Lesson 9: Answer compare with difference unknown problems about lengths of two different objects measured in centimeters.</p> <p>G1 M3 Lesson 12: Ask and answer varied word problem types about a data set with three categories.</p> <p>G1 M3 Lesson 13: Ask and answer varied word problem types about a data set with three categories.</p> <p>G1 M4 Topic E: Varied Problem Types Within 20</p> <p>G1 M6 Topic A: Comparison Word Problems</p> <p>G1 M6 Topic F: Varied Problem Types Within 20</p>
<p>1.CA.3</p> <p>Using number sense and place value strategies, add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of 10. Use models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; describe the strategy and explain the reasoning used. (E)</p>	<p>G1 M1 Lesson 19: Represent the same story scenario with addends repositioned (the commutative property).</p> <p>G1 M1 Lesson 20: Apply the commutative property to count on from a larger addend.</p> <p>G1 M1 Lesson 22: Look for and make use of repeated reasoning on the addition chart by solving and analyzing problems with common addends.</p> <p>G1 M1 Lesson 24: Practice to build fluency with facts to 10.</p> <p>G1 M2 Topic A: Counting On or Making Ten to Solve Result Unknown and Total Unknown Problems</p> <p>G1 M2 Lesson 12: Solve word problems with subtraction of 9 from 10.</p> <p>G1 M2 Lesson 13: Solve word problems with subtraction of 9 from 10.</p> <p>G1 M2 Lesson 14: Model subtraction of 9 from teen numbers.</p> <p>G1 M2 Lesson 15: Model subtraction of 9 from teen numbers.</p> <p>G1 M2 Lesson 16: Relate counting on to making ten and taking from ten.</p>

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<p>1.CA.3 <i>continued</i></p>	<p>G1 M2 Lesson 17: Model subtraction of 8 from teen numbers.</p> <p>G1 M2 Lesson 18: Model subtraction of 8 from teen numbers.</p> <p>G1 M2 Lesson 19: Compare efficiency of counting on and taking from ten.</p> <p>G1 M4 Lesson 5: Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number.</p> <p>G1 M4 Lesson 6: Use dimes and pennies as representations of tens and ones.</p> <p>G1 M4 Lesson 12: Add tens to a two-digit number.</p> <p>G1 M4 Topic D: Addition of Tens or Ones to a Two-Digit Number</p> <p>G1 M4 Lesson 24: Add a pair of two-digit numbers when the ones digits have a sum less than or equal to 10.</p> <p>G1 M4 Lesson 25: Add a pair of two-digit numbers when the ones digits have a sum less than or equal to 10.</p> <p>G1 M4 Lesson 26: Add a pair of two-digit numbers when the ones digits have a sum greater than 10.</p> <p>G1 M4 Lesson 27: Add a pair of two-digit numbers when the ones digits have a sum greater than 10.</p> <p>G1 M4 Lesson 28: Add a pair of two-digit numbers with varied sums in the ones.</p> <p>G1 M4 Lesson 29: Add a pair of two-digit numbers with varied sums in the ones.</p> <p>G1 M6 Lesson 5: Identify 10 more, 10 less, 1 more, and 1 less than a two-digit number within 100.</p> <p>G1 M6 Topic C: Addition to 100 Using Place Value Understanding</p> <p>G1 M6 Topic D: Varied Place Value Strategies for Addition to 100</p>
<p>1.CA.4</p> <p>Create, extend, and give an appropriate rule for number patterns using addition within 100.</p>	<p>G1 M1 Lesson 16: Count on to find the unknown part in missing addend equations such as $6 + \underline{\quad} = 9$. Answer, “How many more to make 6, 7, 8, 9, and 10?”</p> <p>G1 M1 Lesson 23: Look for and make use of structure on the addition chart by looking for and coloring problems with the same total.</p> <p>G1 M4 Lesson 15: Use single-digit sums to support solutions for analogous sums to 40.</p> <p><i>Supplemental material is necessary to fully address this standard.</i></p>

Geometry

Students make observations about a shape’s defining attributes and utilize them to classify, draw, and compose two-dimensional or three-dimensional shapes. Students begin exploring fractional foundations through the partitioning of rectangles and circles.

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<p>1.G.1</p> <p>Distinguish between defining attributes of two- and three-dimensional shapes (e.g., triangles are closed and three-sided) versus non-defining attributes (e.g., color, orientation, overall size). Create and draw two-dimensional shapes with defining attributes.</p>	<p>G1 M5 Topic A: Attributes of Shapes</p>
<p>1.G.2</p> <p>Use two-dimensional shapes (e.g., rectangles, squares, trapezoids, triangles, half-circles, quarter-circles) or three-dimensional shapes (e.g., cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. [In grade 1, students do not need to learn formal names such as “right rectangular prism.”]</p>	<p>G1 M5 Topic B: Part-Whole Relationships Within Composite Shapes</p>

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<p>1.G.3</p> <p>Partition circles and rectangles into two and four equal parts; describe the parts using the words halves, fourths, and quarters; and use the phrases half of, fourth of, and quarter of. Describe the whole as two of, or four of, the parts. Understand for partitioning circles and rectangles into two and four equal parts that decomposing into equal parts creates smaller parts.</p>	<p>G1 M5 Topic C: Halves and Quarters of Rectangles and Circles</p> <p>G1 M5 Lesson 11: Recognize halves within a circular clock face and tell time to the half-hour.</p> <p>G1 M5 Lesson 12: Recognize halves within a circular clock face and tell time to the half-hour.</p> <p>G1 M5 Lesson 13: Recognize halves within a circular clock face and tell time to the half-hour.</p>
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Measurement

Using standard and non-standard measurements, students compare and order objects, tell time to the hour and half-hour, and investigate beginning concepts of money.

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<p>1.M.1</p> <p>Use direct comparison or a nonstandard unit to compare and order objects according to length, area, capacity, weight, and temperature. (E)</p>	<p>G1 M3 Topic A: Indirect Comparison in Length Measurement</p> <p>G1 M3 Topic B: Standard Length Units</p> <p>G1 M3 Topic C: Non-Standard and Standard Length Units</p>
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<p>1.M.2</p> <p>Tell and write time to the nearest half-hour and relate time to events (before/after, shorter/longer) using analog clocks. Explain how to read hours and minutes using digital clocks. (E)</p>	<p>G1 M5 Topic D: Application of Halves to Tell Time</p>
<p>1.M.3</p> <p>Identify the value of a penny, nickel, dime, and a collection of pennies, nickels, and dimes.</p>	<p>G1 M6 Topic E: Coins and Their Values</p> <p>G2 M7 Topic B: Problem Solving with Coins and Bills</p>

Data Analysis

Students collect, organize, and evaluate simple data using grade-level appropriate strategies.

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<p>1.DA.1</p> <p>With guidance, collect data from a simple survey or collaborative investigation; organize data into appropriate single-unit bar graphs, pictographs, and/or tables and draw conclusions based on mathematical observations, comparisons, and grade-level computation strategies. (E)</p>	<p>G1 M3 Topic D: Data Interpretation</p>