

# Grade 2 Yearlong Mathematics Map

**Resources:** Approved from Board of Education

**Assessments:** Performance Series, District Benchmark Assessments

**Common Core State Standards – Standards for Mathematical Practice:**

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| 1. Make sense of problems and persevere in solving them.            | 2. Reason abstractly and quantitatively.                  |
| 3. Construct viable arguments and critique the reasoning of others. | 4. Model with mathematics.                                |
| 5. Use appropriate tools strategically.                             | 6. Attend to precision.                                   |
| 7. Look for and make use of structure.                              | 8. Look for and express regularity in repeated reasoning. |

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
OA	Represent and solve problems involving addition and subtraction.	2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	addition	2.OA.1 Solve one-step addition word problems for the unknown within 100	digit expanded form place value hundred  <i>unknown</i>
OA	Represent and solve problems involving addition and subtraction.	2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	addition	2.OA.1 Solve two-step addition word problems for the unknown within 100	
OA	Represent and solve problems involving addition and subtraction.	2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	subtraction	2.OA.1 Solve one-step subtraction word problems within 100	

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OA	Represent and solve problems involving addition and subtraction.	2.OA.1 Use addition and subtraction within 100 to solve one- and two-step word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	subtraction	2.OA.1 Solve two-step subtraction word problems for the unknown within 100	
OA	Add and subtract within 20.	2.OA.2 Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.	mental strategies for addition	2.OA.2 Add sums within 20 by applying mental strategies with automaticity	digit
OA	Add and subtract within 20.	2.OA.2 Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.	mental strategies for addition	2.OA.2 Identify sums of two one-digit numbers within 20 with automaticity	
OA	Add and subtract within 20.	2.OA.2 Fluently add and subtract within 20 using mental strategies.2 By end of Grade 2, know from memory all sums of two one-digit numbers.	mental strategies for subtraction	2.OA.2 Subtract differences within 20 by applying mental strategies with fluency	
OA	Work with equal groups of objects to gain foundations for multiplication.	2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	multiplication	2.OA.3 Organize a given group of objects up to 20 to determine an odd or even number	column digit equal shares place value row  <i>odd</i> <i>even</i>
OA	Work with equal groups of objects to gain foundations for multiplication.	2.OA.3 Determine whether a group of objects (up to 20) has an odd or even number of members, e.g., by pairing objects or counting them by 2s; write an equation to express an even number as a sum of two equal addends.	multiplication	2. OA.3 write an equation to express an even number as a sum of two equal addends.	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
OA	Work with equal groups of objects to gain foundations for multiplication.	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	multiplication	2.OA.4 Add the total number of objects in an array up to 5 rows and 5 columns	column digit equal shares horizontal place value row vertical
OA	Work with equal groups of objects to gain foundations for multiplication.	2.OA.4 Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.	multiplication	2.OA.4 Represent the sum of objects in an array up to 5 rows and 5 columns with an equal addend equation	
NBT	Understand place value.	2.NBT.1 Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones; e.g., 706 equals 7 hundreds, 0 tens, and 6 ones. Understand the following as special cases:	place value: hundreds, tens and ones	2.NBT.1 Recognize and represent the digits in a three-digit number as hundreds, tens and ones	digit expanded form hundred place value
NBT	Understand place value.	2.NBT.1a 100 can be thought of as a bundle of ten tens — called a “hundred.”	place value: hundreds	2.NBT.1a	
NBT	Understand place value.	2.NBT.1b The numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds (and 0 tens and 0 ones).	place value: hundreds	2.NBT.1b	
NBT	Understand place value.	2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.	place value: hundreds, tens and ones	2.NBT.2 Count within 1000	digit place value hundred
NBT	Understand place value.	2.NBT.2 Count within 1000; skip-count by 5s, 10s, and 100s.	place value: hundreds, tens and ones	2.NBT.2 Skip-count by 5s, 10s and 100s	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NBT	Understand place value.	2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	place value: hundreds, tens and ones	2.NBT.3 Read numbers to 1000	digit expanded form hundred place value
NBT	Understand place value.	2.NBT.3 Read and write numbers to 1000 using base-ten numerals, number names, and expanded form.	place value: hundreds, tens and ones	2.NBT.3 Write numbers to 1000 using base-ten numerals, number names, and expanded form	
NBT	Understand place value.	2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.	place value: hundreds, tens and ones	2.NBT.4 Compare two three-digit numbers based on place value	digit hundred place value
NBT	Understand place value.	2.NBT.4 Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.	place value: hundreds, tens and ones	2.NBT.4 Record comparisons of two three-digit numbers based on place value with mathematical symbols	
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	addition	2.NBT.5 Add within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction	digit expanded form hundred place value
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.	subtraction	2.NBT.5 Subtract within 100 using strategies based on place value and/or the relationship between addition and subtraction	
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations.	addition	2.NBT.6 Add up to four two-digit numbers using strategies based on place value and properties of operations	digit expanded form horizontal hundred place value vertical

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	addition	2.NBT.7 Add within 1000	digit expanded form horizontal hundred place value vertical
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	subtraction	2.NBT.7 Subtract within 1000	
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	addition subtraction	2.NBT.7 Connect addition and subtraction strategies to a written method	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	addition	2.NBT.7 Recognize place value when adding three-digit numbers composing when necessary	
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.7 Add and subtract within 1000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.	subtraction	2.NBT.7 Recognize place value when subtracting three-digit numbers decomposing when necessary	
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	addition of whole numbers	2.NBT.8 Mentally add 10 or 100 to a given number 100-900	digit hundred place value
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.8 Mentally add 10 or 100 to a given number 100–900, and mentally subtract 10 or 100 from a given number 100–900.	subtraction of whole numbers	2.NBT.8 Mentally subtract 10 or 100 from a given number 100-900	

Domain	Cluster	Common Core Standard	Content	Skills	Academic Vocabulary
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations	addition of whole numbers	2.NBT.9 Explain why addition strategies work using place value and properties of operations	digit hundred place value
NBT	Use place value understanding and properties of operations to add and subtract.	2.NBT.9 Explain why addition and subtraction strategies work, using place value and the properties of operations	subtraction of whole numbers	2.NBT.9 Explain why subtraction strategies work using place value and properties of operations	
MD	Measure and estimate lengths in standard units.	2.MD.1 Measure the length of an object by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.	measuring length	2.MD.1 Measure the length of an object by selecting and using appropriate tools	centimeter equal shares foot horizontal inch meter vertical
MD	Measure and estimate lengths in standard units.	2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	measuring length	2.MD.2 Measure the length of an object two times using a different unit for each measurement	centimeter equal shares foot horizontal inch meter vertical
MD	Measure and estimate lengths in standard units.	2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.	measuring length	2.MD.2 Describe and compare measurements based on units	

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MD	Measure and estimate lengths in standard units.	2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.	measuring length	2.MD.3 Estimate lengths using units of inches, feet, centimeters, and meters.	centimeter equal shares foot horizontal inch meter vertical
MD	Measure and estimate lengths in standard units.	2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	measuring length	2.MD.4 Measure to determine how much longer one object is than another	centimeter equal shares foot horizontal inch meter vertical
MD	Measure and estimate lengths in standard units.	2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	measuring length	2.MD.4 Express the difference of lengths in standard units	
MD	Relate addition and subtraction to length.	2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	addition of whole numbers	2.MD.5 Use addition within 100 to solve word problems involving lengths that are given in the same units	centimeter foot horizontal inch meter vertical
MD	Relate addition and subtraction to length.	2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.	subtraction of whole numbers	2.MD.5 Use subtraction within 100 to solve word problems involving lengths that are given in the same units	

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MD	Relate addition and subtraction to length.	2.MD.5 Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings (such as drawings of rulers) and equations with a symbol for the unknown number to represent the problem.		2.MD.5 Write equations using a symbol for the unknown to represent the problem	
MD	Relate addition and subtraction to length.	2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	measurement of whole numbers	2.MD.6 Represent whole numbers as lengths from 0 on a number line with equally spaced points	digit equal shares horizontal hundred line plot vertical
MD	Relate addition and subtraction to length.	2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	measurement and addition of whole numbers	2.MD.6 Represent whole-number sums within 100 on a number line	
MD	Relate addition and subtraction to length.	2.MD.6 Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points corresponding to the numbers 0, 1, 2, ..., and represent whole-number sums and differences within 100 on a number line diagram.	measurement and subtraction of whole numbers	2.MD.6 Represent whole-number differences within 100 on a number line	
MD	Work with time and money.	2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	measurement of time	2.MD.7 Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.	analog digital equal shares
MD	Work with time and money.	2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	measurement of money	2.MD.8 Recognize values of dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately	dollar quarter dime nickel penny \$ and ¢

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MD	Work with time and money.	2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately. Example: If you have 2 dimes and 3 pennies, how many cents do you have?	measurement of money	2.MD.8 Solve word problems involving dollar bills, quarters, dimes, nickels, and pennies, using \$ and ¢ symbols appropriately	
MD	Represent and interpret data.	2.MD.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	measuring length	2.MD.9 Produce measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object	line plot horizontal vertical
MD	Represent and interpret data.	2.MD.9 Generate measurement data by measuring lengths of several objects to the nearest whole unit, or by making repeated measurements of the same object. Show the measurements by making a line plot, where the horizontal scale is marked off in whole-number units.	measurement and data	2.MD.9 Create a line plot, where the horizontal scale is marked off in whole-number units.	
MD	Represent and interpret data.	2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	measurement and data	2.MD.10 Draw a picture graph with single-unit scale and up to four categories	equal shares horizontal vertical
MD	Represent and interpret data.	2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	measurement and data	2.MD.10 Draw a bar graph with single-unit scale and up to four categories	
MD	Represent and interpret data.	2.MD.10 Draw a picture graph and a bar graph (with single-unit scale) to represent a data set with up to four categories. Solve simple put-together, take-apart, and compare problems using information presented in a bar graph.	measurement and data	2.MD.10 Solve simple put-together, take-apart, and compare problems using information presented in a bar graph	

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G	Reason with shapes and their attributes.	2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	geometry	2.G.1 Recognize shapes having specified attributes	angle face quadrilateral pentagon
G	Reason with shapes and their attributes.	2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	geometry	2.G.1 Draw shapes having specified attributes	
G	Reason with shapes and their attributes.	2.G.1 Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	geometry	2.G.1 Identify triangles, quadrilaterals, pentagons, hexagons, and cubes	
G	Reason with shapes and their attributes.	2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	geometric measurement	2.G.2 Partition a rectangle into rows and columns of same-size squares and count to find the total number of them	column equal shares horizontal row vertical
G	Reason with shapes and their attributes.	2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	fractions	2.G.3 Partition circles and rectangles into two, three, or four equal shares	equal shares fraction thirds
G	Reason with shapes and their attributes.	2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	fractions	2.G.3 Describe shares of circles and rectangles using the words halves, thirds and fourths	

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G	Reason with shapes and their attributes.	2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	fractions	2.G.3 Describe the whole as two halves, three thirds and four fourths	
G	Reason with shapes and their attributes.	2.G.3 Partition circles and rectangles into two, three, or four equal shares, describe the shares using the words halves, thirds, half of, a third of, etc., and describe the whole as two halves, three thirds, four fourths. Recognize that equal shares of identical wholes need not have the same shape.	fractions	2.G.3 Recognize that equal shares of identical wholes need not have the same shape	