

## Second Grade Math Curriculum Map

Quarter 1-Mid Quarter 1				
Domains	<i>Operations and Algebraic Thinking</i>	<i>Operations and Algebraic Thinking</i>	<i>Operations and Algebraic Thinking</i>	<i>Operations and Algebraic Thinking</i>
Cluster	Add and subtract within 20.	Add and subtract within 20.	Work with equal groups of objects to gain foundations for multiplication.	Work with equal groups of objects to gain foundations for multiplication.
Target Standards	MAFS.2.OA.2.2 : Fluently add and subtract within 20 using mental strategies.  (Fact Families)	MAFS.2.OA.2.2 : Fluently add and subtract within 20 using mental strategies.  (Make a Ten)	MAFS.2.OA.3.3 : 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.	MAFS.2.OA.3.4 : 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.
Mathematical Practices	1, 2, 4 and 5	1, 2, 4 and 5	2, 4, 7 and 8	2, 4, 7 and 8
Objective/Learning Goal/SWBT	*Use a variety of tools (ten frame, number line, hundreds chart, centimeter and inch ruler) to add or subtract numbers within 15 with ease. *Apply different mental strategies to calculate with efficiency within 15. *Represent the inverse relationship between addition and subtraction.	*Use a variety of tools (ten frame, number line, hundreds chart, centimeter and inch ruler) to add or subtract numbers within 15 with ease. *Apply different mental strategies to calculate with efficiency within 15. *Represent the inverse relationship between addition and subtraction.	*Show how to pair manipulatives to demonstrate odd and even numbers. *Show how an even number can be separated into two equal groups (without altering an object) while an odd number cannot be separated into two equal groups. *Classify numbers as odd or even and explain why.	*Organize a group of objects into rectangular arrays. *Use addition to find the total number of objects in an array. *Record pictorial models of rectangular array arrangements that have been constructed with tangible objects.
iReady Resources	Unit 1 Lesson 1	Unit 1 Lesson 3	Unit 1 Lesson 4	Unit 1 Lesson 5

## Second Grade Math Curriculum Map

Mid Quarter 1-End Quarter 1				
Domains	<i>Numbers and Operations in Base Ten</i>	<i>Operations and Algebraic Thinking</i>	<i>Operations and Algebraic Thinking</i>	<i>Operations and Algebraic Thinking</i>
Cluster	Use place value understanding and properties of operations to add and subtract.	Represent and solve problems involving addition and subtraction.	Represent and solve problems involving addition and subtraction.	Represent and solve problems involving addition and subtraction.
Target Standards	MAFS.2.NBT.2.5 : Fluently add and subtract within 100 using strategies based on place value, properties of operations and/or the relationship between addition and subtraction.	MAFS.2.OA.1.1a : Determine the unknown whole number in an equation relating four or more whole numbers.	MAFS.2.OA.1.1 : 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.	MAFS.2.OA.1.1 : 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.
Mathematical Practices	1, 2, 3 and 7	1, 2, 4 and 5	1, 2, 4 and 5	1, 2, 4 and 5
Objective/Learning Goal/SWBT	*Add and subtract two-digit numbers (within 100) efficiently and accurately, using a variety of strategies. *Explain why strategies work, using knowledge of place value.	*Understand that the equal sign means “is the same value as” or “balances”. *Solve an equation with an unknown number in any position. *Solve equations relating four or more whole numbers with an unknown using balancing situations. *Complete addition and subtraction equations using a symbol to represent the unknown number in a different position.	*Choose when to use addition and/or subtraction in a word problem. Represent two-step addition and subtraction word problems using objects, drawings, and equations. *Defend your representation of how to solve the word problem. *Justify and explain the strategy chosen to solve a real-world problem.	*Represent one-step addition and subtraction word problems using objects, drawings, and equations. *Defend your representation of how to solve the word problem. *Justify and explain the strategy chosen to solve a real-world problem.
iReady Resources	Unit 2 Lesson 7	Unit 1 Lesson 6A	Unit 1 Lesson 6B	Unit 1 Lesson 2

## Second Grade Math Curriculum Map

Quarter 2-Mid Quarter 2				
Domains	<i>Numbers and Operations in Base Ten</i>	<i>Operations and Algebraic Thinking</i>	<i>Numbers and Operations in Base Ten</i>	<i>Numbers and Operations in Base Ten</i>
Cluster	Use place value understanding and properties of operations to add and subtract.	Represent and solve problems involving addition and subtraction.	Understand place value.	Understand place value.
Target Standards	MAFS.2.NBT.2.8 : Mentally add 10 or 100 to a given number 100-900, and mentally subtract 10 or 100 from a given number 100-900.	MAFS.2.OA.1.1 : 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.	MAFS.2.NBT.1.1 : Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones. a: 100 can be thought of as a bundle of ten tens called a “hundred”. b: 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).	MAFS.2.NBT.1.3 : Read and write numbers to 1000 using base-ten numerals, number names and expanded form.
Mathematical Practices	1, 2, 3 and 7	1, 2, 4 and 5	2, 4 and 7	1, 2, 4 and 7
Objective/Learning Goal/SWBT	*Add and subtract two 2-digit numbers (within 100) efficiently and accurately, using a variety of strategies. *Add and subtract multiples of 10 up to 100 using different strategies.	*Choose when to use addition and/or subtraction in a word problem. *Represent two-step addition and solve one-step word problems with two-digit numbers. *Defend your representation of how to solve the word problem. *Justify and explain the strategy chosen to solve a real-world problem.	*Identify the digit of a number to 999 that corresponds with a given place value with concrete materials and pictorial representations. *Represent a hundred as ten groups of ten. *Express a number up to 999 using place value in multiple ways.	*Read and write numbers using base-ten numerals and number names (word form) through 999. *Model a number up to 999 in expanded form using appropriate tools. *Write a number up to 999 in expanded form.
iReady Resources	Unit 2 Lesson 8	Unit 2 Lesson 9	Unit 2 Lesson 10	Unit 2 Lesson 11


## Second Grade Math Curriculum Map

Mid Quarter 2-End Quarter 2			
Domains	<i>Numbers and Operations in Base Ten</i>	<i>Numbers and Operations in Base Ten</i>	<i>Numbers and Operations in Base Ten</i>
Cluster	Understand place value.	Use place value understanding and properties of addition to add or subtract.	Use place value understanding and properties of addition to add or subtract.
Target Standards	MAFS.2.NBT.1.4 : Compare two three-digit numbers based on meanings of the hundreds, tens, and ones digits, using $>$ , $=$ , and $<$ symbols to record the results of comparisons.	MAFS.2.NBT.2.7 : <u>Add</u> 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.	MAFS.2.NBT.2.7 : Add and <u>subtract</u> 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.
Mathematical Practices	1, 2, 4 and 7	1, 2, 3, 5 and 7	1, 2, 3, 5 and 7
Objective/Learning Goal/SWBT	<p>*Construct and communicate a comparison of two numbers up to 999 using place value blocks.</p> <p>*Explain a process for describing whether a three-digit number is greater than, less than, or equal to another three-digit number.</p> <p>*Compare two numbers up to 999 using symbols, <math>&gt;</math>, <math>=</math>, <math>&lt;</math>.</p>	<p>*<u>Add</u> two 3-digit numbers within 1000 using a variety of strategies and tools.</p> <p>*Justify the strategy chosen to solve a problem and explain thinking.</p> <p>*Apply knowledge of place value and the properties of operations to explain why addition or subtraction strategies work.</p>	<p>*<u>Subtract</u> two 3-digit numbers within 1000 using a variety of strategies and tools.</p> <p>*Justify the strategy chosen to solve a problem and explain thinking.</p> <p>*Apply knowledge of place value and the properties of operations to explain why addition or subtraction strategies work.</p>
iReady Resources	Unit 2 Lesson 12	Unit 2 Lesson 13	Unit 2 Lesson 14

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Please note: All standards should be taught in order of the curriculum map, but at the pace of your students' data.

## Second Grade Math Curriculum Map

Quarter 3-Mid Quarter 3				
Domains	<i>Numbers and Operations in Base Ten</i>	<i>Measurement and Data</i>	<i>Measurement and Data</i>	<i>Measurement and Data</i>
Cluster	Use place value understanding and properties of addition to add or subtract.	Measure and estimate lengths in standard units.	Measure and estimate lengths in standard units.	Measure and estimate lengths in standard units.
Target Standards	MAFS.2.NBT.2.6 : Add up to four two-digit numbers using strategies based on place value and properties of operations.	MAFS.2.MD.1.1 : Measure the length of an object to the nearest inch, foot, centimeter, or meter by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes.	MAFS.2.MD.1.1 : Measure the length of an object to the nearest inch, foot, centimeter, or meter by selecting and using appropriate tools, such as rulers, yardsticks, meter sticks, and measuring tapes.	MAFS.2.MD.1.2 : Describe the inverse relationship between the size of a unit and number of units needed to measure a given object.
Mathematical Practices	1, 2, 3, 5 and 7	2, 3, 5 and 6	2, 3, 5 and 6	2, 3, 5 and 6
Objective/Learning Goal/SWBT	*Add up to four two-digit numbers using a variety of strategies.	*Understand that length tells how long, how tall, or how wide something is. *Select an appropriate tool to measure the length of an object provided by the teacher.	*Understand that length tells how long, how tall, or how wide something is. *Select an appropriate tool to measure the length of an object provided by the teacher.  *Measure and record the length of various objects provided by the teacher to the nearest inch, foot, centimeter, or meter (from any given number).	*Discover what happens when different standard units are used to measure the same object.  *Explain that as the size of a unit increases, the number of units needed to measure an object decreases and vice versa.  *Determine an appropriate unit of measure.
iReady Resources	 Unit 2 Lesson 15	Unit 3 Lesson 16	Unit 3 Lesson 17	Unit 2 Lesson 18

## Second Grade Math Curriculum Map

Mid Quarter 3-End Quarter 3				
Domains	Measurement and Data	Measurement and Data	Measurement and Data	Measurement and Data
Cluster	Measure and estimate lengths in standard units.	Measure and estimate lengths in standard units.	Relate addition and subtraction to length.	Represent and interpret data.
Target Standards	MAFS.2.MD.1.3 : Estimate lengths using units of inches, feet, yards, centimeters, and meters.	MAFS.2.MD.1.4 : Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.	MAFS.2.MD.2.5 : Use addition and subtraction within 100 to solve word problems involving lengths that are given in the same units, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.	MAFS.2.MD.4.9 : 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.
Mathematical Practices	2, 3, 5 and 6	1, 2, 5 and 6	1, 2, 5 and 6	1, 4, 5, 6 and 7
Objective/Learning Goal/SWBT	*Discover useful benchmarks for the following measurements: inch, foot, yard, centimeter, and meter. *Estimate a reasonable length for a given object visually after seeing a benchmark unit. *Justify the reasoning for an estimate.	*Find the difference in length between two objects using standard units. *Describe the difference between two objects with comparative phrases.	*Add and subtract lengths of the same unit within 100. *Represent addition and subtraction word problems involving lengths of the same unit by using diagrams and equations with a symbol for the unknown length. *Solve for the unknown number in an equation from a word problem.	*Measure and record the lengths of several objects to the nearest whole number. *Create a line plot with a horizontal scale marked off in whole-number units. *Record length measurements on a line plot. *Identify the parts of a line plot.
IReady Resources	Unit 2 Lesson 19	Unit 2 Lesson 20	Unit 2 Lesson 21	Unit 3 Lesson 22

Second Grade Math Curriculum Map

Quarter 4-Mid Quarter 4			
Domains	Measurement and Data	Measurement and Data	Measurement and Data
Cluster	Represent and interpret data.	Work with time and money.	Work with time and money.
Target Standards	MAFS.2.MD.4.10 : 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.	MAFS.2.MD.3.7 : Tell and write time from analog and digital clocks to the nearest five minutes.	MAFS.2.MD.3.8 : Solve one- and two-step word problems involving dollar bills or coins, using monetary symbols appropriately. Word problems may involve addition, subtraction, and equal groups situations.
Mathematical Practices	1, 4, 5, 6 and 7	1, 5, 6 and 7	1, 5, 6 and 7
Objective/Learning Goal/SWBT	<div><div><div>*Identify the parts of a picture graph and bar graph.</div><div>*Interpret and explain data on a given picture graph ad bar graph to solve problems.</div><div>*Create a picture graph and bar graph from a given set of data. (Students need to create both horizontal and vertical graphs.)</div><div>*Represent up to four categories of data on single-unit scales.</div></div></div>	<div><div><div>*Skip count by 5s to tell time in five-minute intervals on an analog clock.</div><div>*Determine the time on an analog clock and write time as it would appear on a digital clock when given a time to the hour, half-hour, and five minute intervals.</div><div>*Determine the time on a digital clock and draw in the hands on an analog clock when given a time to the hour, half-hour and five minute intervals.</div></div></div>	<div><div><div>*Identify and name the value of coins and bills.</div><div>*Skip count to find the value of a group of like coins up to \$1.</div><div>*Calculate the value of mixed coins up to \$1 or mixed bills up to \$100.</div><div>*Represent the value of coins.</div><div>*Solve one- and two-step word problems involving money finding both sums and differences.</div></div></div>
iReady Resources	Unit 3 Lesson 23	Unit 3 Lesson 24	Unit 3 Lesson 25

Second Grade Math Curriculum Map

Mid Quarter 4-End Quarter 4			
Domains	Geometry	Geometry	Geometry
Cluster	Reason with shapes and their attributes.	Reason with shapes and their attributes.	Reason with shapes and their attributes.
Target Standards	MAFS.2.G.1.1 : Recognize and draw shapes having specified attributes, such as a given number of angles or a given number of equal faces. Identify triangles, quadrilaterals, pentagons, hexagons, and cubes.	MAFS.2.G.1.2 : Partition a rectangle into rows and columns of same-size squares and count to find the total number of them.	MAFS.2.G.1.3 : Partition circles and rectangles into two, three, or four equal shares.
Mathematical Practices	3, 6 and 7	2, 4, 7 and 8	3, 6 and 7
Objective/Learning Goal/SWBT	<div><div>*Identify and classify two-dimensional shapes as triangles, quadrilaterals, pentagons, and hexagons.</div><div>*Identify and classify a cube as a three-dimensional shape.</div><div>*Explain which attributes define a shape or group of shapes.</div><div>*Construct two-dimensional shapes when given defining attributes.</div></div>	<div><div>*Differentiate between rows and columns.</div><div>*Partition a given rectangle into squares of equal size by drawing rows and columns.</div><div>*Determine the number of equal-sized squares that result in the partitioned rectangle.</div></div>	<div><div>*Partition/divide circles and rectangles into two, three, or four equal shares.</div><div>*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.</div></div>
iReady Resources	Unit 4 Lesson 26	Unit 4 Lesson 27	Unit 4 Lesson 28