2nd Grade Math Curriculum Map

Standards	Content	Skills/Practices	Materials/ Resources	Assessments (All) Daily/Weekly/ Benchmarks	Timeline (Months/Weeks/ Days)
2.OA.1 2.OA.2 K.OA.3 K.OA.4 K.NBT.1 1.NBT.2b 1.OA.5 1.OA.5 2.NBT.5 1.NBT.4 1.NBT.5 1.NBT.6	Module 1: Sums and Differences to 100	**Topic A: Lessons 1-2** Lesson 1: Practice making ten and adding to ten. Lesson 2: Practice making the next ten and adding to a multiple of ten. **Topic B: Lessons 3-8** Lesson 3: Add and subtract like units Lesson 4: Make a ten to add within 20. Lesson 5: Make a ten to add within 100. Lesson 6: Subtract single-digit numbers from multiples of 10 within 100. Lesson 7: Take from ten within 20. Lesson 8: Take from ten within 100.	100-bead Rekenrek 5-group column Dice Hide Zero cards Linking cubes Number bond Personal white boards Place value chart Quick ten (vertical line representing a unit of ten) Ten-frame cards	**Daily:** Lesson Exit Tickets **~Weekly:** End of Module Quiz **Benchmarks:** District Created Check-In (Fall,Winter, Spring) AIMSWEBPlus (Fall, Winter, Spring)	10 days
2.MD.1 2.MD.2 2.MD.3 2.MD.4 2.MD.5 2.MD.6	Module 2: Addition and Subtraction of Length Units	**Topic A: Lessons 1-3** Lesson 1: Connect measurement with physical units by using multiple copies of the same physical unit to measure. Lesson 2: Use iteration with one physical unit to measure Lesson 3: Apply concepts to create unit rulers and measure lengths using unit rulers. **Topic B: Lessons 4-5** Lesson 4: Measure various objects using centimeter rulers and meter sticks. Lesson 5: Develop estimation strategies by	Centimeter cubes Centimeter rulers Large and small paper clips Meter sticks Paper meter strips Personal white boards Tape diagram		12 days

		applying prior knowledge of length and using mental benchmarks. **Topic C: Lessons 6-7** Lesson 6: Measure and compare lengths using centimeters and meters. Lesson 7: Measure and compare lengths using standard metric length units and non-standard length units; relate measurement to unit size **Topic D: Lessons 8-10** Lesson 8: Solve addition and subtraction word problems using the ruler as a number line. Lesson 9: Measure lengths of string using measurement tools, and use tape diagrams to represent and compare the lengths. Lesson 10: Apply conceptual understanding of measurement by solving two-step word problems.			
2.MP.2 2.MP.3 2.MP.6 2.NBT.1 2.NBT.2 2.NBT.3 2.MD.8 2.NBT.A 2.NBT.4 2.OA.1 2.NBT.8	Module 3: Place Value, Counting, and Comparison of Numbers to 1,000	**Topic A: Lesson 1** Lesson 1: Bundle and count ones, tens, and hundreds to 1,000. **Topic B: Lesson 2-3** Lesson 2: Count up and down between 100 and 220 using ones and tens. Lesson 3: Count up and down between 90 and 1,000 using ones, tens, and hundreds. **Topic C: Lessons 4-7** Lesson 4: Count up to 1,000 on the place value chart Lesson 5: Write base ten three-digit numbers in unit form; show the value of each digit.	2 boxes of 1,000 straws per class of 25 Clock number line Dice, 1 per pair Dienes blocks Hide Zero cards Hundreds place value chart Meter strip Number spelling activity sheet Personal white		25 days

| | | Lesson 6: Write base ten numbers in expanded form.
Lesson 7: Write, read, and relate base ten numbers in all forms
Topic D: Lessons 8-10
Lesson 8: Count the total value of $1, $10, and $100 bills up to $1,000
Lesson 9: Count from $10 to $1,000 on the place value chart and the empty number line.
Lesson 10: Explore $1,000. How many $10 bills can we change for a thousand dollar bill?
Topic E: Lessons 11-15
Lesson 11: Count the total value of ones, tens, and hundreds with place value disks.
Lesson 12: Change 10 ones for 1 ten, 10 tens for 1 hundred, and 10 hundreds for 1 thousand.
Lesson 13: Read and write numbers within 1,000 after modeling with place value disks.
Lesson 14: Model numbers with more than 9 ones or 9 tens; write in expanded, unit, standard, and word forms.
Lesson 15: Explore a situation with more than 9 groups of ten.
Topic F: Lessons 16-18
Lesson 16: Compare two three-digit numbers using <, >, and =.
Lesson 17: Compare two three-digit numbers using <, >, and = when there are more than 9 ones or 9 tens.
Lesson 18: : Order numbers in different forms. (Optional) | boards Place value box
Place value cards to 1,000, 1 large teacher set
Place value disks: suggested minimum of one set per pair (18 ones, 18 tens, 18 hundreds, and 1 one thousand)
Play money: $1, $5, $10, and $100 bills (10 ones, 1 five, 12 tens, and 10 hundreds per pair), and a single set of 16 pennies, 13 dimes
Rubber bands, 16 per pair
Small plastic bags | | |

		Topic G: Lessons 19-21 Lesson 19: Model and use language to tell about 1 more and 1 less, 10 more and 10 less, and 100 more and 100 less. Lesson 20:Model 1 more and 1 less, 10 more and 10 less, and 100 more and 100 less when changing the hundreds place. Lesson 21: : Complete a pattern counting up and down.			
2.OA.1 2.NBT.5 2.NBT.6 2.NBT.8 2.NBT.7 2.NBT.9	Module 4: Addition and Subtraction Within 200 with Word Problems to 100	**Topic A: Lessons 1-5** Lesson 1: Relate 1 more, 1 less, 10 more, and 10 less to addition and subtraction of 1 and 10. Lesson 2: Add and subtract multiples of 10 including counting on to subtract. Lesson 3: Add and subtract multiples of 10 and some ones within 100. Lesson 4: Add and subtract multiples of 10 and some ones within 100. Lesson 5: Solve one- and two-step word problems within 100 using strategies based on place value. **Topic B: Lessons 6-10** Lesson 6: Use manipulatives to represent the composition of 10 ones as 1 ten with two-digit addends. Lesson 7: Relate addition using manipulatives to a written vertical method. Lesson 8: Use math drawings to represent the composition and relate drawings to a written method. Lesson 9: Use math drawings to represent	Arrow notation (arrow way) Chip model Hide Zero cards Number bond Personal white boards Place value chart Place value disk sets (19 ones, 19 tens, 18 hundreds, 1 one thousand per set) Rekenrek Tape diagram		35 days

		the composition when adding a two-digit to a three-digit addend. Lesson 10: Use math drawings to represent the composition when adding a two-digit to a three-digit addend. **Topic C: Lessons 11-16** Lesson 11: Represent subtraction with and without the decomposition of 1 ten as 10 ones with manipulatives. Lesson 12: Relate manipulative representations to a written method. Lesson 13: Use math drawings to represent subtraction with and without decomposition and relate drawings to a written method. Lesson 14: Represent subtraction with and without the decomposition when there is a three-digit minuend. Lesson 15: Represent subtraction with and without the decomposition when there is a three-digit minuend. Lesson 16: Solve one- and two-step word problems within 100 using strategies based on place value. **Topic D: Lessons 17-22** Lesson 17: Use mental strategies to relate compositions of 10 tens as 1 hundred to 10 ones as 1 ten. Lesson 18: Use manipulatives to represent additions with two compositions. Lesson 19: Relate manipulative representations to a written method. Lesson 20: Use math drawings to represent additions with up to two compositions and			

		relate drawings to a written method. Lesson 21: Use math drawings to represent additions with up to two compositions and relate drawings to a written method. Lesson 22: Solve additions with up to four addends with totals within 200 with and without two compositions of larger units. **Topic E: Lessons 23-28** Lesson 23: Use number bonds to break apart three-digit minuends and subtract from the hundred. Lesson 24: Use manipulatives to represent subtraction with decompositions of 1 hundred as 10 tens and 1 ten as 10 ones. Lesson 25: Relate manipulative representations to a written method. Lesson 26: Use math drawings to represent subtraction with up to two decompositions and relate drawings to a written method. Lesson 27: Subtract from 200 and from numbers with zeros in the tens place Lesson 28: Subtract from 200 and from numbers with zeros in the tens place **Topic F: Lessons 29-31** Lesson 29: Use and explain the totals below method using words, math drawings, and numbers. Lesson 30: Compare totals below to new groups below as written methods. Lesson 31: Solve two-step word problems within 100.			
2.NBT.7	Module 5:	**Topic A: Lessons 1-7**	Arrow notation (arrow		24 days

| 2.NBT.8 2.NBT.9 | Addition and Subtraction Within 1,000 with Word Problems to 100 | Lesson 1: Relate 10 more, 10 less, 100 more, and 100 less to addition and subtraction of 10 and 100
Lesson 2: Add and subtract multiples of 100, including counting on to subtract
Lesson 3: Add multiples of 100 and some tens within 1,000
Lesson 4: Subtract multiples of 100 and some tens within 1,000.
Lesson 5: Use the associative property to make a hundred in one addend.
Lesson 6: Use the associative property to subtract from three-digit numbers and verify solutions with addition.
Lesson 7: Share and critique solution strategies for varied addition and subtraction problems within 1,000.
Topic B: Lessons 8-12
Lesson 8: Relate manipulative representations to the addition algorithm
Lesson 9: Relate manipulative representations to the addition algorithm
Lesson 10: Use math drawings to represent additions with up to two compositions and relate drawings to the addition algorithm.
Lesson 11: Use math drawings to represent additions with up to two compositions and relate drawings to the addition algorithm.
Lesson 12: Choose and explain solution strategies and record with a written addition method.
Topic C: Lessons 13-18
Lesson 13: Relate manipulative | way)
Chip model
Hide Zero cards
Number bond
Personal white boards Place value charts
 Place value disk sets (19 ones, 19 tens, 10 hundreds, 1 one thousand per set)
Tape diagram | | |

		representations to the subtraction algorithm, and use addition to explain why the subtraction method works. Lesson 14: : Use math drawings to represent subtraction with up to two decompositions, relate drawings to the algorithm, and use addition to explain why the subtraction method works. Lesson 15: : Use math drawings to represent subtraction with up to two decompositions, relate drawings to the algorithm, and use addition to explain why the subtraction method works. Lesson 16: : Subtract from multiples of 100 and from numbers with zero in the tens place. Lesson 17: : Subtract from multiples of 100 and from numbers with zero in the tens place. Lesson 18: Apply and explain alternate methods for subtracting from multiples of 100 and from numbers with zero in the tens place **Topic D: Lessons 19-20** Lesson 19: : Choose and explain solution strategies and record with a written addition or subtraction method. Lesson 20: : Choose and explain solution strategies and record with a written addition or subtraction method.			
2.OA.3 2.OA.4 2.G.2	Module 6: Foundations of Multiplication	**Topic A: Lessons 1-4** Lesson 1: Use manipulatives to create equal groups	Counters Number bond Number path		24 days

2.NBT.2 2.NBT.6	and Division	Lesson 2: Use math drawings to represent equal groups, and relate to repeated addition.	Personal white board Rectangular array Square tiles		
		Lesson 3: Use math drawings to represent equal groups, and relate to repeated addition.			
		Lesson 4: Represent equal groups with tape diagrams, and relate to repeated addition			
		Topic B: Lessons 5-9			
		Lesson 5: Compose arrays from rows and columns, and count to find the total using objects.			
		Lesson 6: Decompose arrays into rows and columns, and relate to repeated addition.			
		Lesson 7: Represent arrays and distinguish rows and columns using math drawings.			
		Lesson 8: Create arrays using square tiles with gaps			
		Lesson 9: Solve word problems involving addition of equal groups in rows and columns.			
		Topic C: Lessons 10-16			
		Lesson 10: Use square tiles to compose a rectangle, and relate to the array model.			
		Lesson 11: Use square tiles to compose a rectangle, and relate to the array model.			
		Lesson 12: Use math drawings to compose a rectangle with square tiles.			
		Lesson 13: Use square tiles to decompose a rectangle.			
		Lesson 14: Use scissors to partition a rectangle into same-size squares, and compose arrays with the squares.			

		Lesson 15: Use math drawings to partition a rectangle with square tiles, and relate to repeated addition. Lesson 16: Use grid paper to create designs to develop spatial structuring. **Topic D: Lessons 17-20** Lesson 17: Relate doubles to even numbers, and write number sentences to express the sums. Lesson 18: Pair objects and skip-count to relate to even numbers Lesson 19: Investigate the pattern of even numbers: 0, 2, 4, 6, and 8 in the ones place, and relate to odd numbers. Lesson 20: Use rectangular arrays to investigate odd and even numbers.			
2.NBT.5 2.NBT.6 2.MD.1 2.MD.2 2.MD.6 2.MD.8 2.MD.10	Module 7: Problem Solving with Length, Money, and Data	**Topic A: Lessons 1-5** Lesson 1: Sort and record data into a table using up to four categories; use category counts to solve word problems. Lesson 2: Draw and label a picture graph to represent data with up to four categories. Lesson 3: Draw and label a bar graph to represent data; relate the count scale to the number line. Lesson 4: Draw a bar graph to represent a given data set. Lesson 5: Solve word problems using data presented in a bar graph. **Topic B: Lessons 6-13** Lesson 6: Solve word problems using data presented in a bar graph.	Bar graph (representation of data) Centimeter cube Centimeter ruler Dice Grid paper Inch and centimeter ruler Inch tiles Line plot Measuring tape Meter stick Money (i.e., dollars, coins) Number bond Number line		30 days

		Lesson 7: Solve word problems involving the total value of a group of coins.	Personal white board		
		Lesson 8: Solve word problems involving the total value of a group of bills.	Picture graph		
		Lesson 9: Solve word problems involving different combinations of coins with the same total value	Table		
		Lesson 10: Use the fewest number of coins to make a given value.	Tape diagram		
		Lesson 11: Use different strategies to make $1 or make change from $1.	Yardstick		
		Lesson 12: Solve word problems involving different ways to make change from $1.			
		Lesson 13: Solve two-step word problems involving dollars or cents with totals within $100 or $1.			
		Topic C:Lessons 14-15			
		Lesson 14: Connect measurement with physical units by using iteration with an inch tile to measure.			
		Lesson 15: Apply concepts to create inch rulers; measure lengths using inch rulers.			
		Topic D: Lessons 16-19			
		Lesson 16: Measure various objects using inch rulers and yardsticks.			
		Lesson 17: Develop estimation strategies by applying prior knowledge of length and using mental benchmarks.			
		Lesson 18: Measure an object twice using different length units and compare; relate measurement to unit size.			
		Lesson 19: Measure to compare the differences in lengths using inches, feet, and			

		yards. **Topic E: Lessons 20-22** Lesson 20: Solve two-digit addition and subtraction word problems involving length by using tape diagrams and writing equations to represent the problem. Lesson 21: Identify unknown numbers on a number line diagram by using the distance between numbers and reference points. Lesson 22: Represent two-digit sums and differences involving length by using the ruler as a number line. **Topic F: Lessons 23-26** Lesson 23: Collect and record measurement data in a table; answer questions and summarize the data set. Lesson 24: Draw a line plot to represent the measurement data; relate the measurement scale to the number line. Lesson 25: Draw a line plot to represent a given data set; answer questions and draw conclusions based on measurement data. Lesson 26: Represent arrays and distinguish rows and columns using math drawings.			
2.MD.7 2.G.1 2.G.3 2.NBT.2 2.NBT.5 2.NBT.6	Module 8: Time, Shapes, and Fractions as Equal Parts of Shapes	**Topic A: Lessons 1-5** Lesson 1: Describe two-dimensional shapes based on attributes. Lesson 2: Build, identify, and analyze two-dimensional shapes with specified attributes. Lesson 3: Use attributes to draw different polygons including triangles, quadrilaterals,	Cube: a three-dimensional shape (real-world examples such as a die, alphabet blocks, or a box) Geoboards Large instructional		20 days

		pentagons, and hexagons.	geared clock		
		Lesson 4: Use attributes to identify and draw different quadrilaterals including rectangles, rhombuses, parallelograms, and trapezoids.	Pattern blocks		
			Personal white		
			boards Rulers		
		Lesson 5: Relate the square to the cube, and describe the cube based on attributes.	Spaghetti		
			Student clocks,		
		Topic B:Lessons 6-8	preferably those with		
		Lesson 6: Combine shapes to create a composite shape; create a new shape from composite shapes.	gears that can		
			provide the		
			appropriate		
		Lesson 7: interpret equal shares in composite shapes as halves, thirds, and fourths.	hour-hand alignment		
			Tangrams		
			Toothpicks		
		Lesson 8: interpret equal shares in composite shapes as halves, thirds, and fourths.			
		Topic C: Lessons 9-12			
		Lesson 9: Partition circles and rectangles into equal parts, and describe those parts as halves, thirds, or fourths.			
		Lesson 10: Partition circles and rectangles into equal parts, and describe those parts as halves, thirds, or fourths.			
		Lesson 11: Describe a whole by the number of equal parts including 2 halves, 3 thirds, and 4 fourths.			
		Lesson 12: Recognize that equal parts of an identical rectangle can have different shapes.			
		Topic D: Lessons 13-16			
		Lesson 13: Construct a paper clock by partitioning a circle into halves and quarters, and tell time to the half hour or quarter hour.			
		Lesson 14: Tell time to the nearest five			

		minutes. Lesson 15: Tell time to the nearest five minutes; relate a.m. and p.m. to time of day. Lesson 16: Solve elapsed time problems involving whole hours and a half hour.			