Grade 1 Mathematics Curriculum Map

1st Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 1A: Extend the Counting Sequence and Understand Place Value *1.NBT.1 is repeated in Units 2, 4, and 5, each time extending the skill. The skill focused on in this unit is bolded in the Scope and Sequence and S.L.O.	1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral. 1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: a. 10 can be thought of as a bundle of ten ones- called a "ten". b. The numbers from 11 to 19 are composed of a ten and one, two, three, four, five, six, seven, eight, nine ones.	*How does the position of the digit in a number affect its value? *How are place value patterns repeated in large numbers? *What are different ways to count?	*patterns relating to place value on a number grid *how the position of a digit in a number affects its value *counting with and without a number grid/line *how and when to create a bundle	***Count utilizing written or verbal numerals starting at any number less than 100** *Compose and decompose numbers to 20 to identify the value of the number in the tens & ones place.	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 1

1st Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 1B: Add and Subtract Withing 20 *1.OA.6 is repeated in Units 4 and 5, each time extending the skill. The skill focused on in this unit is bolded in the Scope and Sequence and S.L.O.	1.OA.5 Relate counting to addition and subtraction (e.g. by counting on 2 to add 2) 1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g. 8+6= 8+2+4= 10+4=14); decomposing a number leading to a ten (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).	*How can knowing addition facts make your life easier? *How are addition and subtraction alike? *How do numbers get bigger and smaller? *What do you know about numbers?	*Read numbers to 100. *Write numbers to 100. *Count to 100. *Place Value to 20 *Introduce number model symbols (+, -, =) *Add and subtract to 20 (Count forward and back to 20)	*Count utilizing written or verbal numerals starting at any number less than 100. *Count forward or backwards from any number within 20 to solve addition & subtraction problems. *Add or subtract whole numbers within **20 using strategies including making a 10 or decomposing a number leading to a 20.**	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 1

1st Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 1C: Understand and Apply Properties of Operations and Their Relationship Between Addition and Subtraction	1.OA.3 Apply properties of operations as strategies to add and subtract.[2] *Examples: If 8 + 3 = 11 is known, then 3 + 8 = 11 is also known. (Commutative property of addition.) To add 2 + 6 + 4, the second two numbers can be added to make a ten, so 2 + 6 + 4 = 2 + 10 = 12. (Associative property of addition.)* 1.OA.4 Understand subtraction as an unknown-addend problem. *For example, subtract 10 – 8 by finding the number that makes 10 when added to 8. Add and subtract within 20.*	*What are some strategies you use to solve a math problem? *When do you add and subtract when not in school?	*How to identify a turn-around fact *The various strategies they could use to solve problems with 2 or 3 addends.(doubles, doubles +1, making 10, etc…) *What a number model is and how to write one horizontally and vertically	*Apply properties of operations to add or subtract whole numbers within 20 (Commutative & Associative properties of addition *Solve subtraction problems using unknown addends (within 20)	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 1

1st Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 2A: Work With Addition and Subtraction Equations	1.OA.7 Understand the meaning of the equal sign, and determine if equations involving addition and subtraction are true or false. 1.OA.8 Determine the unknown whole number in an addition or subtraction equation relating three whole numbers. **Standards extended in this unit:** 1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	*What does it mean to be equal? *How do you know when something is not the same? *How can you find the missing number in math problems? (8+?=11, 5= ?+3, 6+6=?, ?+ 2=10)	*Decide if equations are equal (does 6+2=5+1) *Addition and subtraction to 20. After finding the answer with 2 addends (3+4=?), make the unknown one of the addends (6+?=7) *3 addends for addition to 20 *Read, write, and count numbers to 120	*Demonstrate understanding of the equal sign by determining if an equation is true or false. *Solve addition or subtraction equations by finding the missing whole number in any position. *Count to 120, starting at any number less than 120. *Read and write numerals to 120 including representing a number of objects with a written numeral. ***Count to 120 starting at any number less than 120.**	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 2

2nd Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 2B: Represent and Solve Problems Involving Addition and Subtraction *1.OA.1 is repeated in Unit 4. The Student Learning Objective remains the same in Unit 4.	1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. 1.OA.2 Solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, e.g. by using objects, drawings, and equations with a symbol for the unknown number to represent the problem.	*How do you use math in your daily life? *What strategies work best for you to solve word problems? *What helps you to decide whether you need to add or subtract when solving a word problem?	*Solve addition and subtraction word problems to 20 using objects, drawings, equations *Add 3 whole numbers whose sum is under 20. *Solve 3 addend word problems	*Use addition and subtraction within 20 to solve word problems involving situations or adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions. *Solve addition word problems with three whole numbers with sums less than or equal to 20.	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 2

2nd Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 3: Use Place Value Understanding and Properties of Operations to Add and Subtract *1.NBT.4 is repeated in Unit 5, extending the skill. The skill focused on in this unit is bolded in the Scope and Sequence and S.L.O.	1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. Understand the following as special cases: c. The numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens (and 0 ones). 1.NBT.3 Compare two two-digit numbers based on meanings of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <. 1.NBT.4 Add within 100, including adding a 2-digit number and a 1-digit number, & adding a 2-digit number & a multiple of ten, using concrete models or drawings & strategies based on place value, properties or operations, &/or the relationship between addition & subtraction; relate to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens & tens, ones & ones; & sometimes it is necessary to compose a ten.	*When would you need to add or subtract numbers? *Why is the number "0" important? *When might you need to compare numbers? *How does knowing place value help you add or subtract? *What strategies could you use to add or subtract mentally? *How are addition and subtraction related?	*Understand place value: tens and ones *Compare two 2-digit numbers using >, <, = *Add 2-digit and 1-digit numbers within 50 *Add 2-digit number and a multiple of 10 within 50 *Subtract multiple of 10 from multiple between 10 and 90 *Mentally find 10 more or 10 less of a 2-digit number	*Decompose two-digit numbers as the sum of tens and ones for numbers less than 100. *Compare two digit numbers using <, >, and = symbols. *Add a 2-digit and a 1-digit number, and a 2-digit number and a multiple of 10, using concrete models or drawings **(sums within 50)**. Add tens and tens, and ones and ones, by decomposing 2-digit numbers and composing an additional ten when necessary *(e.g., 18 + 20 equals 10 + 8 + 20 equals 30 + 8 equals 38; and, 37 + 5 equals 30 + 7 + 5 equals 30 + 12 equals 30 + 10 + 2 equals 40 + 2 equals 42)*	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 3

Continued…. **<u>Unit 3:</u>** Use Place Value Understanding and Properties of Operations to Add and Subtract	1.NBT.5 Given a two-digit number, mentally find 10 more or 10 less than the number, without having to count; explain the reasoning used. 1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90 (positive or zero differences), using concrete models or drawings and strategies based on place value, properties or operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used.			*Mentally find ten more or ten less than a number without having to count and explain the reasoning used. *Subtract multiples of ten from multiples of ten (numbers less than 100, differences greater than or equal to zero) and explain the reasoning used.	

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Unit 4A: Tell and Write Time	1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.	*Why is telling time an important skill? *When do you need to know how to tell time? *Where might you find different types of clocks in your house/world?	*Identify the parts of a clock. *Tell time to hour and half hour using analog and digital clocks (_:00 and __:30) *Write time using the words "o'clock"	*Tell and write time to the half-hour using "o'clock" and digital notation	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 4

3rd Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 4B: Measure Lengths Indirectly and By Iterating Length Units	1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object. 1.MD.2 Express the length of an object as a whole number of length units, by laying multiple copies of a shorter object (the length unit) end to end; understand that the length measurement of an object is the number of same-size length units that span it with no gaps or overlaps.	*When might it be helpful to know how long something is? *How can you compare the lengths of objects? *Why might you measure something?	*Understand how to measure by lining the object up to the measuring unit *Use non-standard measures to compare the length of 2 objects -Compare objects based on their length	*Order three objects by lengths and compare the lengths of two objects by using the third object (e.g., if the crayon is shorter than the marker and the marker is shorter than the pencil then the crayon is shorter than pencil. *Use an object to measure another object's length by laying multiple copies end to end with no overlaps giving measurements in whole number units	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 4

3rd Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Extending Standards from Units 1 and 2 **Standard 1.OA.1 student learning objective remains the same as the one in Unit 2**	**Continued…..** **Standards extended in this unit:** 1.OA.1 Use addition and subtraction within 20 to solve word problems involving situations of adding to, taking from, putting together, taking apart, and comparing, with unknowns in all positions, e.g. by using objects, drawings, and equations with a symbol for the unknown number to represent the problem. 1.OA.6 Add and subtract within 20, demonstrating fluency for addition and subtraction within 10. Use strategies such as counting on; making ten (e.g. 8+6= 8+2+4= 10+4=14); decomposing a number leading to a ten (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). 1.NBT.1 Count to 120, starting at any number less than 120. In this range, read and write numerals and represent a number of objects with a written numeral.	*How do you use math in your daily life? *What strategies work best for you to solve word problems? *What helps you to decide whether you need to add or subtract when solving a word problem?	*Add and subtract within 20. *Word problems within 20. *Read and write numbers to 120 – represent objects with a written numeral.	*Use addition and subtraction within 20 to solve word problems involving situations or adding to, taking from, putting together, taking apart, and comparing with unknowns in all positions. *Add or subtract whole numbers within 20 **(various strategies: counting on, composition, etc.)** ***Read and write numerals** to 120 starting at any number **and represent a number of objects with a written number.**	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 4

3rd Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 5A: Reason With Shapes and Their Attributes	1.G.1 Distinguish between defining attributes (e.g. Triangles are closed and three sided.) versus non-defining attributes (e.g. color, orientation, overall size); build and draw shapes to possess defining attributes. 1.G.2 Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles, and quarter-circles) or three-dimensional shapes (cubes, right rectangular prisms, right circular cones, and right circular cylinders) to create a composite shape, and compose new shapes from the composite shape. 1.G.3 Partition circles and rectangles into two and four equal shares, describe the shares 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 shares. Understand for these examples that decomposing into more equal shares creates similar shares.	*Where can shapes be found? *How can we put shapes together and take them apart to form other shapes? *How can we divide things so we all get the same amount?	*Reason with shapes and their attributes-defining and non-defining (2 dimensional shapes) *Create and compose 2D and 3D shapes *Divide circles and rectangles into halves and fourths *The vocabulary terms halves, fourths, quarters, half of, fourth of, quarter of, attribute, cylinder, cone, cube, rectangular prism, rectangle, square, circle, trapezoid, triangle. *The difference between a 2-D and 3-D shape. *The difference between an equal and unequal share.	*Name the attributes of a 2-dimensional shape (square, triangle, rectangle, regular hexagon) distinguish between defining & non-defining attributes. *Draw & build shapes when given defining attributes (e.g., 3 sides, 3 corners). *Compose two-dimensional shapes (rectangles, squares, trapezoids, triangles, half-circles and quarter circles) or three-dimensional shapes (cubes, rectangular prisms, circular cones, & circular cylinders) to create a composite shape, and compose new shapes from the composite shape. *Partition circles and rectangles into two or four equal shares, describe shares using halves, fourths, and quarters, and use the phrases half of, fourth of, & quarter of.	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 4 *Benchmark Test 5

3rd Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Unit 5B: Represent and Interpret Data	1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.	*What could it be like if there were no numbers? *How might you show numbers without numbers? *Why do you count things?	* Organize, represent, and interpret data up to 3 categories	*Organize, represent, and interpret, data with up to three categories, and compare the number counts of data points among the categories, e.g., equal to, more than, or less than another category.	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 5

3rd Trimester	Standards	Essential Questions	Scope and Sequence	Student Learning Objectives	Assessment
Extending Standard from Unit 3	**Standard extended in this unit:** 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, and adding a two-digit number and a multiple of ten, using concrete models or drawings and strategies based on place value, properties or operations, and/or the relationship between addition and subtraction; relate the strategy to a written method and explain the reasoning used. Understand that in adding two-digit numbers, one adds tens and tens, ones and ones; and sometimes it is necessary to compose a ten.	*How does knowing place value help you add or subtract? *What strategies could you use to add or subtract mentally? *How are addition and subtraction related?	*Add 2-digit and 1-digit numbers within 100 *Add 2-digit number and a multiple of 10 within 100 *Subtract multiple of 10 from multiple between 10 and 90	*Add a 2-digit and a 1-digit number, and a 2-digit number and a multiple of 10, using concrete models or drawings **(sums within 100**). Add tens and tens, and ones and ones, by decomposing 2-digit numbers and composing an additional ten when necessary.	*Slate Drills *Teacher Observation *Performance Assessments *Benchmark Test 5