Welcome to First Grade Mathematics!

Our journey through the NC revised First Grade Mathematics Standard Course of Study will include:

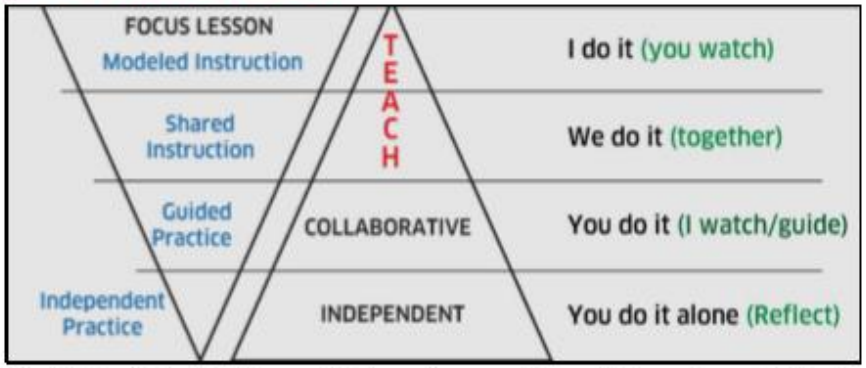
1. The planning of lessons within the following mathematical "themes": Number and Quantity, Algebra, Functions, Modeling, Geometry, and Statistics and Data, and
2. Eight Mathematical Practices which are the behaviors (or habits of mind) that are developed to achieve mathematical proficiency throughout the kindergarten school year.
3. All students must be able to conceptualize math concepts, follow procedural algorithms and apply essential understanding in the context of the learning; therefore, teachers are asked to consider the learners when selecting an approach to close academic gaps. The implementation of the required "**I Do; We Do; You Do**" (gradual release) instructional approach shown in "Figure 1/Link" ensures academic clarity in the processing of new content. See Figures 2 as well.

Figure 2/Link: Concrete → Representational → Abstract Modeling Method

Road to Mastery Includes the Following:

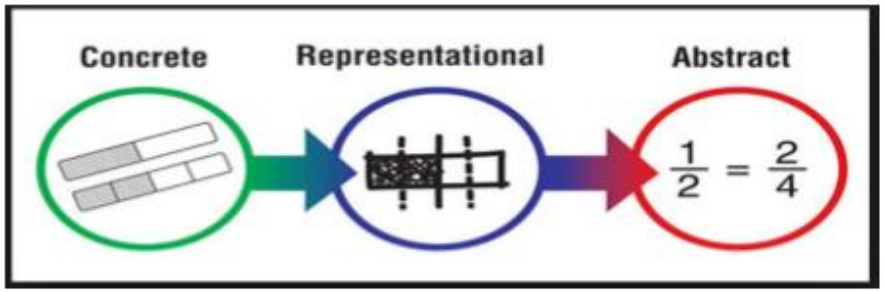
- **Follow the District's First Grade Math Pacing Guide**
  (**Note: Number** means quarter taught; **X** means quarters NOT taught)
- Instructional block consists of daily 60 to 90 minutes
- Teacher clusters standards to create 2-week units to maximize learning
- Unit plan includes daily whole group & small group instruction
- Appropriate hands-on manipulatives are utilized during guided practice
- Student engagement includes intellectually independent & collaborative computational & problem-solving tasks
- Data-driven Remediation Plan (includes scaffolding of content; direct instruction & anchor chart(s); use of other supplemental intervention resources)
- Daily 2-minute drills in building fluent retrieval of basic math facts
- Quiz, test, and conduct formative bi-weekly assessments
- Review as needed for District's K-2 Math Benchmark assessments

Figure 1: I Do; We Do; You Do Instructional Approach



Link: https://strategiesforspecialinterventions.weebly.com/i-do-we-do-you-do.html

Figure 2: Concrete to Representational to Abstract Modeling Method



Link: http://fcit.usf.edu/mathvids/strategies/category.html#teacher

Best regards for a successful school year!
"Charting a New Course"
Halifax County Schools
2018-2019 Curriculum Support Team

Halifax County Schools: Math Pacing Guide August 2019				
1st Grade At-a-Glance				
Operations and Algebraic Thinking	**Quarters**			
Represent and solve problems.	**1**	**2**	**3**	**4**
NC.1.OA.1 Represent and solve addition and subtraction word problems, within 20, with unknowns, by using objects, drawings, and equations with a symbol for the unknown number to represent the problem, when solving: • Add to/Take from-Change Unknown • Put together/Take Apart-Addend Unknown • Compare-Difference Unknown	X	X	X	4
NC.1.OA.2 Represent and solve word problems that call for addition of three whole numbers whose sum is less than or equal to 20, by using objects, drawings, and equations with a symbol for the unknown number.				
Understand and apply the properties of operations.	**1**	**2**	**3**	**4**
NC.1.OA.3 Apply the commutative and associative properties as strategies for solving addition problems.	X	X	X	4
NC.1.OA.4 Solve an unknown-addend problem, within 20, by using addition strategies and/or changing it to a subtraction problem.	X	X	X	4
Add and subtract within 20.	1	2	3	4
NC.1.OA.9 Demonstrate fluency with addition and subtraction within 10.	X	X	X	4
NC.1.OA.6 Add and subtract, within 20, using strategies such as: • Counting on • Making ten • Decomposing a number leading to a ten • Using the relationship between addition and subtraction • Using a number line • Creating equivalent but simpler or known sums	X	X	X	4
Analyze addition and subtraction equations within 20.	**1**	**2**	**3**	**4**
NC.1.OA.7 Apply understanding of the equal sign to determine if equations involving addition and subtraction are true.	X	X	3	X
NC.1.OA.8 Determine the unknown whole number in an addition or subtraction equation involving three whole numbers.				
Number and Operations in Base Ten	**Quarters**			
Extend and recognize patterns in the counting sequence.	1	2	3	4
NC.1.NBT.1 Count to 150, starting at any number less than 150.	1	X	X	X
NC.1.NBT.7 Read and write numerals, and represent a number of objects with a written numeral, to 100.	1	X	X	X
Understand place value.	1	2	3	4
NC.1.NBT.2 Understand that the two digits of a two-digit number represent amounts of tens and ones. • Unitize by making a ten from a collection of ten ones. • Model the numbers from 11 to 19 as composed of a ten and one, two, three, four, five, six, seven, eight, or nine ones. • Demonstrate that the numbers 10, 20, 30, 40, 50, 60, 70, 80, 90 refer to one, two, three, four, five, six, seven, eight, or nine tens, with 0 ones.	1	X	X	X
NC.1.NBT.3 Compare two two-digit numbers based on the value of the tens and ones digits, recording the results of comparisons with the symbols >, =, and <.	1	X	X	X

Number and Operations in Base Ten	Aug. 2019			
Use place value understanding and properties of operations.	**1**	**2**	**3**	**4**
NC.1.NBT.4 Using concrete models or drawings, strategies based on place value, properties of operations, and explaining the reasoning used, add, within 100, in the following situations: • A two-digit number and a one-digit number • A two-digit number and a multiple of 10	1	X	X	X
NC.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	X	X	X
NC.1.NBT.6 Subtract multiples of 10 in the range 10-90 from multiples of 10 in the range 10-90, explaining the reasoning, using: • Concrete models and drawings • Number lines • Strategies based on place value • Properties of operations • The relationship between addition and subtraction	X	2	X	X
Measurement and Data	**Quarters**			
Measure lengths.	**1**	**2**	**3**	**4**
NC.1.MD.1 Order three objects by length; compare the lengths of two objects indirectly by using a third object.	X	X	3	X
NC.1.MD.2 Measure lengths with non-standard units. • Express the length of an object as a whole number of non-standard length units. • Measure by laying multiple copies of a shorter object (the length unit) end to end (iterating) with no gaps or overlaps.	X	X	3	X
Build understanding of time and money.	**1**	**2**	**3**	**4**
NC.1.MD.3 Tell and write time in hours and half-hours using analog and digital clocks.	X	X	3	X
NC.1.MD.5 Identify quarters, dimes, and nickels and relate their values to pennies.	X	X	3	X
Represent and interpret data	**1**	**2**	**3**	**4**
NC.1.MD.4 Organize, represent, and interpret data with up to three categories. • Ask and answer questions about the total number of data points. • Ask and answer questions about how many in each category. • Ask and answer questions about how many more or less are in one category than in another.	X	2	3	4
Geometry	**Quarters**			
Reason with shapes and their attributes.	**1**	**2**	**3**	**4**
NC.1.G.1 Distinguish between defining and non-defining attributes and create shapes with defining attributes by: • Building and drawing triangles, rectangles, squares, trapezoids, hexagons, circles. • Building cubes, rectangular prisms, cones, spheres, and cylinders.	X	2	X	X
NC.1.G.2 Create composite shapes by: • Making a two-dimensional composite shape using rectangles, squares, trapezoids, triangles, and half-circles naming the components of the new shape. • Making a three-dimensional composite shape using cubes, rectangular prisms, cones, and cylinders, naming the components of the new shape.	X	2	X	X
NC.1.G.3 Partition circles and rectangles into two and four equal shares. • Describe the shares as halves and fourths, as half of and fourth of. • Describe the whole as two of, or four of the shares. • Explain that decomposing into more equal shares creates smaller shares.	X	2	X	X

Note: Both independent and collaborative student tasks should engage the following 8 Mathematical Practices as often as possible to develop math proficiency:

Mathematical Practices:

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

August 2019