Third Grade Mathematics Curriculum Map 4th Nine Weeks 2019-20

Fourth Nine Weeks – Topics and Concepts to be covered during the fourth quarter of the year		
Tennessee Standards	**Learning Outcomes**	**Content**
Week 1: Measurement to ¼" and Line Plots		
3.MD.B.4 Generate measurement data by measuring lengths using rulers marked with halves and fourths of an inch. Show the data by making a line plot, where the horizontal scale is marked off in appropriate units: whole numbers, halves, or quarters.	**Learning Targets** I can use a ruler to measure length in whole, half, and quarter inches. I can make a line plot with a horizontal scale to show measurement data. **Essential Understandings:** 1. Fractions of an inch give measurements that are closer to the actual lengths of objects than whole inches. 2. Line plots represent the frequency of a number occurring in a set of data and can be represented in the form of a number line. 3. A line plot represents data with halves and fourths of an inch just like the ruler. (This helps students make the connection between a ruler and a number line.) **Essential Questions:** 1. How do you measure to a fraction of an inch? 2. How can you read and interpret data in a line plot and use data to make a line plot?	**GO! Math** 10-6 Measure Length 2-7 Use and Make Line Plots EngageNY Module 6, Topic B has additional lessons **Vocabulary:** scale, line plot, data **Mathematical Practices Focus** 4. Model with mathematics. 5. Use appropriate tools strategically. **Accountable Talk Stems:** ▯ Did everyone hear that? ▯ Can someone repeat what was just said? ▯ Can someone add on to what was said? ▯ Does someone have a similar idea? ▯ Do you agree or disagree? **Math Instructional Focus Document** https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf
Teacher Created Formative Assessment		

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Week 2: Quadrilaterals		
3.G.A.1 Understand that shapes in different categories may share attributes and that the shared attributes can define a larger category. Recognize rhombuses, rectangles, and squares as examples of quadrilaterals and draw examples of quadrilaterals that do not belong to any of these subcategories. **3.G.A.3** Determine if a figure is a polygon.	**Learning Targets** I can use attributes to identify shapes. I can use attributes to classify shapes into categories. I can recognize examples of quadrilaterals. I can draw examples of quadrilaterals that are not rhombuses, rectangles, or squares. I can identify whether a figure is a polygon or not. **Essential Understandings:** 1. Shapes have many properties that make them different from one another. 2. Polygons can be described and classified by their sides and angles. **Essential Questions:** 1. What are some special names for quadrilaterals? 2. How can you use the attributes of shapes to classify them? 3. What characteristics do all polygons have in common?	**GO! Math** 12-1 Describe Plane Shapes 12-2 Describe Angles in Plane Shapes 12-3 Identify Polygons 12-4 Describe Sides of Polygons 12-5 Classify Quadrilaterals EngageNY Module 7, Topic B has additional lessons for this standard **Vocabulary:** properties, attributes, features, quadrilateral, open figure, closed figure, three-sided, 2-dimensional, rhombi, rectangles, and squares are subcategories of quadrilaterals, polygon, rhombus/rhombi, rectangle, square, kite **Accountable Talk Stems:** ▯ Did everyone hear that? ▯ Can someone repeat what was just said? ▯ Can someone add on to what was said? ▯ Does someone have a similar idea? ▯ Do you agree or disagree? **Additional Resources:** Quadrilateral Song PDF **Math Instructional Focus Document** https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf
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Week 3: Measure and Estimate Liquid Volumes and Masses		
3.MD.A.2 Measure the mass of objects and liquid volume using standard units of grams (g), kilograms (kg), milliliters (ml), and liters (l). Estimate the mass of objects and liquid volume using benchmarks. *For example, a large paper clip is about one gram, so a box of about 100 large clips is about 100 grams. Therefore, ten boxes would be about 1 kilogram.* *Students need lots of opportunities to weigh in grams and kg and measure in liters in order to reason about their size.	**Learning Targets** **I can estimate liquid volumes and masses of objects using standard units of mass and capacity.** **I can add and subtract to solve one-step measurement word problems by using drawings to model the problem.** **I can multiply and divide to solve one-step measurement word problems by using drawings to model the problem.** **Essential Understandings:** 1. Capacity is a measure of the amount of liquid a container can hold. 2. The mass of an object is a measure of how much matter is in an object. 3. Understand the relationship between the size of the unit and the number of units needed. **Essential Questions:** 1. How can you estimate and measure capacity? 2. How can you estimate and measure mass?	**GO! Math** 10-7 Estimate and Measure Liquid Volume 10-8 Estimate and Measure Mass 10-9 Solve Problem About Liquid Volume and Mass Refer to EngageNY Module 2, Topic B for lessons covering this standard **Vocabulary:** estimate, measure, liquid volume, mass, standard units, metric, gram (g), kilogram (kg), liter (L) **Mathematical Practices Focus** 6. Attend to precision. **Accountable Talk Stems:** ▯ Did everyone hear that? ▯ Can someone repeat what was just said? ▯ Can someone add on to what was said? ▯ Does someone have a similar idea? ▯ Do you agree or disagree? **Additional Resources:** Millions to Measure by David Schwartz On the Scale, a Weighty Tale by Brian Clearly BrainpopJr: Grams and Kilograms **Math Instructional Focus Document** https://www.tn.gov/content/dam/tn/education/standards/math/Standards_Support_grade_3_Mathematics.pdf
Teacher Created Benchmark Assessment		

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Weeks 4-7: TNReady Review and Assessments		
Review skills for State Math Assessment. Refer to Pacing Guide for a list of all tested standards.	**Learning Targets:** I can review and practice skills to help me show my best on the State Math Assessment Test.	EngageNY has the following review lessons available: Perimeter and Area: Module 7, Topics D and E Fractions, Multiplication, and Division: Module 7, Topic F
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Tennessee Standards	**Learning Outcomes**	**Content**
Week 8: 4th Grade Place Value and Comparing Numbers		
4.NBT.A.1 Recognize that in a multi-digit whole number (less than or equal to 1,000,000), a digit in one place represents 10 times as much as it represents in the place to its right. *For example, recognize that 7 in 700 is 10 times bigger than the 7 in 70 because 700 ÷ 70 = 10 and 70 x 10 = 700.* 4.NBT.A.2 Read and write multi-digit whole numbers (less than or equal to 1,000,000) using standard form, word form, and expanded form (e.g. the expanded form of 4256 is written as 4 x 1000 + 2 x 100 + 5 x 10 + 6 x 1). Compare two multi-digit numbers based on meanings of the digits in each place and use the symbols >, =, and < to show the relationship.	**Learning Targets** I can recognize that a digit in one place represents 10 times as much as the place to its right. I can read and write a multi-digit number in standard form, word form, and expanded form. I can compare two multi-digit numbers using place value and record the comparison using symbols >, <, and =. **Essential Understandings:** 1. Our number system is based on groups of ten. 2. In our numeration system, the value of a digit is determined by its position. 3. Numbers can be read and written in a variety of ways, including standard form, word form, and expanded form. 3. Place value can be used to compare numbers. **Essential Questions:** Is place value important when comparing numbers?	**GO! Math** 1-1 Model place Value Relationships 1-2 Read and Write Numbers 1-3 Compare and Order Numbers **Vocabulary:** digits, place value, standard form, expanded form, word form, period, compare **Mathematical Practices Focus** Make sense of problems and persevere in solving them. **Accountable Talk Stems:** ▯ Did everyone hear that? ▯ Can someone repeat what was just said? ▯ Can someone add on to what was said? ▯ Does someone have a similar idea? ▯ Do you agree or disagree? **Additional Resources:** How Much Is a Million? by David M Schwartz Place Value Song PDF PlaceValue Song BrainpopJr: Place Value, Comparing Numbers
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Week 9: 4th Grade Multi-Digit Multiplication		
4.NBT.B.5 Multiply a whole number of up to four digits by a one-digit whole number, and multiply two two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models.	**Learning Targets** I can multiply a multi-digit number by a one-digit whole number using strategies and properties. I can multiply two two-digit numbers using strategies and properties. I can use equations, arrays, and area models to illustrate and explain my calculations. **Essential Understandings:** 1. Making an array with place value blocks provides a way to visualize and find products. 2. There is an expanded algorithm for multiplying where the numbers are broken apart using place value and the parts are used to find partial products. **Essential Questions:** 1. How can you use arrays to help multiply with a 2-digit number? 2. How can you break apart arrays to help you multiply with greater numbers?	**GO! Math** 2-10 Multiply 2-Digit Numbers with Regrouping 2-11 Multiply 3-Digit and 4-Digit Numbers with Regrouping 3-1 Multiply by Tens 3-5 Multiply with Regrouping **Vocabulary:** partial products **Accountable Talk Stems:** ▯ Did everyone hear that? ▯ Can someone repeat what was just said? ▯ Can someone add on to what was said? ▯ Does someone have a similar idea? ▯ Do you agree or disagree? **Mathematical Practices Focus** 1. Make sense of problems and persevere in solving them. 7. Look for and make use of structure.
Teacher Created Formative Assessment		

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