Lee County Curriculum Road Map-Grade 5 2019-2020

Unit	Test	Standard Description **Link to GO Math Guidance Document and GO Math Assessment Guidance Document** https://achievethecore.org/page/2853/go-math-k-5-guidance-documents **Investigations Correlation** http://assets.pearsonschool.com/correlations/CCSS_INV_2012_K-5.pdf	Teacher Resources **GO Math! Highlighted lessons must be modified**	Teacher Resources **Investigations 3rd Edition**
Place Value Multiplication/ Division **August 7- September 13 26 Days**	**1st Nine Weeks Midterm** OA1 OA2 NBT1 NBT2 NBT5 NBT6	OA-1 Use parentheses, brackets, or braces in numerical expressions, and evaluate expressions with these symbols.	1.11	Unit 1
		OA-2 Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them.	1.10	Unit 1
		NBT-1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left. **(whole numbers**)	1.1	Unit 1
		NBT-2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10. (**multiples of 10 only)**		Unit 1
		NBT-5 Fluently multiply multi-digit whole numbers using the standard algorithm**.(Continue to solidify the partial products model and algorithm with larger magnitude of numbers -NO STANDARD ALGORITHM)**	1.6-1.7	Unit 4
		NBT-6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, properties of operations, and/or the relationship between multiplication and division.	1.8 2.2, 2.3, 2.4, 2.6 - 2.9	Unit 4

Volume September 6- October 7 - 17 Days	**1st Nine Weeks FINAL** MD3 MD4 MD5	MD-3 Recognize volume as an attribute of solid figures and understand concepts of volume measurement. MD-3a A cube with side length 1 unit, called a —unit cube, is said to have one cubic unit‖ of volume, and can be used to measure volume. MD3b A solid figure which can be packed without gaps or overlaps using n unit cubes is said to have a volume of n cubic units. MD-4 Measure volumes by counting unit cubes, using cubic cm, cubic in, cubic ft. and improvised units. MD5 Relate volume to the operations of multiplication and addition, and solve real-world and mathematical problems involving volume. MD5a Find the volume of a right rectangular prism with whole-number side lengths by packing it with unit cubes, and show that the volume is the same as would be found by multiplying the edge lengths, equivalently by multiplying the height by the area of the base. Represent threefold whole-number products as volumes, to represent the associative property of multiplication. MD5b Apply the formulas V=l x w x h and V = B x h. Recognize volume as additive. Find volumes of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlapping parts, applying this technique to solve real world problems.	11.5, 11.6 11.8 11.9- 11.11	Unit 2 Unit 2 Unit 2 Unit 2 Unit 2 Unit 2

Unit	Test	Standard Description	Teacher Resources	
Decimals **October 10-November 22** **27 Days**	**2nd Nine Weeks Midterm** NBT1 NBT2 NBT3 NBT4 NBT7	NBT-1 Recognize that in a multi-digit number, a digit in one place represents 10 times as much as it represents in the place to its right and 1/10 of what it represents in the place to its left.	1.1	Unit 6
		NBT-2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	1.4, 1.5, 4.1, 4.3, 4.4-4.5, 4.7, 4.8 5.1, 5.4, 5.6	Unit 7
		NBT-3 Read, write and compare decimals to thousands. a. Read and write decimals to thousands using base-ten numerals, number names, and expanded form, e.g. 347.392 = 3 x 100 +4 x 10 + 7 x 1 + 3 x (1/10) + 9 x (1/100) + 2 x (1/1000). b. Compare two decimals to thousandths based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	3.2, 3.3	Unit 6
		NBT-4 Use place value understanding to round decimals to any place.	3.4	Unit 7
		NBT-7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationships between addition/subtraction and multiplication/division; relate the strategy to a written method, and explain the reasoning used.	3.5, 3.6, 3.7, 3.8, 3.9, 3.11-3.12 4.2, 4.3, 4.4-4.5 4.6-4.8 5.2-5.8	Unit 6 (add & subtract) Unit 7 (multiply & divide)
		MD-1 Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multistep, real-world problems **(with whole numbers and decimals)**	10.1-10.3 10.4-10.7	Unit 7

December 2- 19 **14 days**	**2nd Nine Weeks FINAL** OA3 G1 G2 NBT5	OA-3 Generate two numerical patterns using two given rules. Identify apparent relationships between corresponding terms. Form ordered pairs consisting of corresponding terms from the two patterns, and graph the ordered pairs on a coordinate plane. G-1 Use a pair of perpendicular number lines, called axes, to define a coordinate system, with the intersection of the lines (the origin) arranged to coincide with the 0 on each line and a given point in the plane located by using an ordered pair of numbers, called its coordinates. Understand that the first number indicates how far to travel from the origin in the direction of one axis, and the second number indicates how far to travel in the direction of the second axis, with the convention that the names of the two axes and the coordinates correspond. G-2 Represent real-world and mathematical problems by graphing points in the first quadrant of the coordinate plane, and interpret coordinate values of points in the context of the situation NBT-5 Fluently multiply multi-digit whole numbers using the standard algorithm (**standard US Algorithm**).	9.5, 9.6, 9.7 9.2 1.6-1.7	Unit 5 Unit 5 Unit 5 Unit 4

January 7- February 7 23 Days	**3rd Nine Weeks Midterm** G3 G4 NF1 NF2 MD2	G-3 Understand that attributes belonging to a category of two-dimensional figures also belong to all subcategories of that category. Example: All rectangles have four right angles, and squares are rectangles, so all squares have four right angles.	11.1, 11.2	Unit 8
		G-4 Classify two-dimensional figures in a hierarchy based on properties. Include angles that measure up to 180 and angles within triangles, measurement of a straight line, adding angles in triangles	11.2 - 11.3	Unit 8
		NF-1 Add and subtract fractions with unlike denominators (including mixed numbers) by replacing given fractions with equivalent fractions in such a way as to produce an equivalent sum or difference of fractions with like denominators. Example: 2/3 + 5/4 = 8/12 + 15/12 = 23/12. (In general, a/b + c/d = (ad + bc)/bd	6.4 – 6.7, 6.10	Unit 3
		NF-2 Solve word problems involving addition and subtraction of fractions refer to the same whole, including cases of unlike denominators by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. Example: Recognize an incorrect result 2/5 + ½ = 3/7 by observing 3/7 <1/2	6.1-6.3, 6.9	Unit 3
		MD-2 Make a line plot to display a data set of measurements in fractions of a unit (½, ¼, 1/8). Use operations on fractions for this grade to solve problems involving information presented in line plots. Example: Given different measurements of liquid in identical beakers, find the amount of liquid each beaker would contain if the total amount in all the beakers were redistributed equally.	9.1	Unit 3

February 10-March 27	**2 Teacher made tests to end third quarter** NF3 NF4 NF5 NF6 NF7 MD1 **3rd 9 Weeks Final (to be given right before Spring Break so will count in 4th 9 weeks grading period)**	NF-3 Interpret a fraction as division of the numerator by the denominator (1/6 = a ÷ b). Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. Examples: Interpret ¾ as the result of dividing 3 by 4, noting that ¾ multiplies by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size ¾. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between which two whole numbers does your answer lie?	2.7, 8.3	Unit 7
		NF-4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. a. Interpret the product *(a/b) x q* as *a* parts of a partition of *q* into *b* equal parts; equivalently, as a result of the sequence of operations *a x q ÷ b.* Example: Use a visual fraction model to show (2/3) x 4 = 8/3, and create a story context for this equation. Do the same with (2/3) x 4/5) = 8/15. (In general, (*a/b*) x (*c/d*) = *ac/bd*.)	7.1-7.4, 7.6, 7.7	Unit 7
		NF-5 Interpret multiplication as scaling (resizing), by: a. Comparing the size of a product to the size of one factor on the basis of the size of the other factor, without performing the indicated multiplication. b. Explaining why multiplying a given number by a fraction greater than 1 results in a product greater than the given number (recognizing multiplication by whole numbers greater than 1 as a familiar case), explaining why multiplying a given number by a fraction less than 1 results in a product smaller than the given number, and relating the principle of fraction equivalence a/b = (n x a/n x b) to the effect of multiplying *a*/b by 1.	7.5, 7.8, 7.10	Unit 7
		NF-6 Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem		Unit 7

		NF-7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (Students able to multiply fractions in general can develop strategies to divide fractions in general by reasoning about the relationship between multiplication and division. However, division of a fraction by a fraction is not a requirement at this grade.)	7.9	Unit 7
		a. Interpret division of a unit fraction by a nonzero whole number, and compute such quotients. Example: Create a story context for (1/3) ÷ 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) ÷ 4 = 1/12 because (1/12) x 4 = 1/3.	8.1- 8.2, 8.4-8.5	Unit 7
		b. Interpret division of a whole number by a unit fraction, and compute with quotients. Example: Create a story context for 4 divided (1/3) and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 ÷ (1/5) = 20 because 20 x (1/5) = 4.		
		MD-1 Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multistep, real-world problems **(include decimals and fractions)**	10.1 -10.3, 10.4-10.7	Unit 7

Unit	Test	Standard Description	Teacher Resources	
Unit **April 6- May 15** **29 Days**	**4th NINE WEEKS Midterm** NBT5 NBT6 NBT7 NF2 NF3 NF4 NF6 NF7 MD1 MD5	NBT-5 Fluently multiply multi-digit whole numbers using the standard algorithm (**standard US Algorithm**).	1.6, 1.7	Unit 4
		NBT 6 Find whole-number quotients of whole numbers with up to four-digit dividends and two-digit divisors, using strategies based on place value, properties of operations, and/or the relationship between multiplication and division.	1.8 2.2,2.3, 2.4 , 2.6 - 2.9	Unit 4
		NBT 7 Add, subtract, multiply, and divide decimals to hundredths, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationships between addition/subtraction and multiplication/division; relate the strategy to a written method, and explain the reasoning used.	3.5, 3.6, 3.7, 3.8, 3.9, 3.11-3.12 4.2, 4.3, 4.4-4.5 4.6-4.8 5.2-5.8	Unit 7
		NF-2 Solve word problems involving addition and subtraction of fractions refer to the same whole, including cases of unlike denominators by using visual fraction models or equations to represent the problem. Use benchmark fractions and number sense of fractions to estimate mentally and assess the reasonableness of answers. Example: Recognize an incorrect result 2/5 + ½ = 3/7 by observing 3/7 <1/2	6.1-6.3, 6.9	Unit 3
		NF-3 Interpret a fraction as division of the numerator by the denominator (1/6 = a divided by b) . Solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers, e.g., by using visual fraction models or equations to represent the problem. Examples: Interpret ¾ as the result of dividing 3 by 4, noting that ¾ multiplies by 4 equals 3, and that when 3 wholes are shared equally among 4 people each person has a share of size ¾. If 9 people want to share a 50-pound sack of rice equally by weight, how many pounds of rice should each person get? Between which two whole numbers does your answer lie?	2.7, 8.3	Unit 7

		NF-4 Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. *a.* Interpret the product *(a/b) x q* as *a* parts of a partition of *q* into *b* equal parts; equivalently, as a result of the sequence of operations *a x q divided b.* Example: Use a visual fraction model to show (2/3) x 4 = 8/3 and create a story context for this equation. Do the same with (2/3) x 4/5) = 8/15. (In general, (*a/b*) x (*c/d*) = *ac/bd*.)	7.1-7.4, 7.6, 7.7	Unit 7
		NF-6 Solve real-world problems involving multiplication of fractions and mixed numbers, e.g., by using visual fraction models or equations to represent the problem.		Unit 7
		NF-7 Apply and extend previous understandings of division to divide unit fractions by whole numbers and whole numbers by unit fractions. (Students able to multiply fractions in general can develop strategies to divide fractions in general by reasoning about the relationship between multiplication and division. However, division of a fraction by a fraction is not a requirement at this grade.) a. Interpret division of a unit fraction by a nonzero whole number, and compute such quotients. Example: Create a story context for (1/3) divided by 4, and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that (1/3) divided 4 = 1/12 because (1/12) x 4 = 1/3.	7.9 8.1- 8.2, 8.4-8.5	Unit 7 Unit 7
		c. Interpret division of a whole number by a unit fraction, and compute with quotients. Example: Create a story context for 4 divided (1/3) and use a visual fraction model to show the quotient. Use the relationship between multiplication and division to explain that 4 divided (1/5) = 20 because 20 x (1/5) = 4.		Unit 7
		MD-1 Convert among different-sized standard measurement units within a given measurement system and use these conversions in solving multistep, real-world problems.	10.1 -10.3, 10.4-10.7	Unit 7

		NBT-2 Explain patterns in the number of zeros of the product when multiplying a number by powers of 10, and explain patterns in the placement of the decimal point when a decimal is multiplied or divided by a power of 10. Use whole-number exponents to denote powers of 10.	1.4, 1.5, 4.1, 4.3, 4.4-4.5, 4.7, 4.8 5.1, 5.4, 5.6	Unit 7