

Elementary Math; Grade 5

2016 – 2017

	Week	<p style="text-align: center;">Major Concepts / Topics</p> <p>Descriptions of the standards are listed first followed by the course description number for Florida Standards. To make this tool easy to use, we coded the standards in orange in the left column and gave you a blue hyperlink in the right column to help you and your child. Go Math lessons are also listed as possible practice. The hyperlinks get to the meat of understanding needed. Please use the hyperlinks before going to the Go Math Lessons.</p>	<p>Possible Resources: from NC DOE; See the topic in blue from 'Major Concepts/Topics.' Click on the aligned topic for help. Go Math lessons have been listed for <i>possible practice</i>.</p>
<p style="text-align: center;">Quarter 1 Aug 10 – Oct 14</p>	1	<p>Understanding Volume -Measurement and Data- Volume is an attribute of solid figures. A cube with side length of 1 unit is one cubic unit and can be used to measure volume. Volume of a solid figure is when it is packed without gaps or overlaps and has a volume of n units. [5.MD.3.3 a & b]</p>	<ul style="list-style-type: none"> • Khan Academy: <ul style="list-style-type: none"> ○ Volume: How to Measure It • Learn Zillion: <ul style="list-style-type: none"> ○ Identify Difference Between Square Unit and Cubic Unit ○ Find Volume by Counting Cubes ○ Tasks for 5.MD.3 and 4
	2	<p>Measuring volume involves counting by unit cubies using cubic cm, cubic ft and improvised units. [5.MD.3.4]</p>	<ul style="list-style-type: none"> • Learn Zillion Find volume by counting cubies • Learn Zillion Identify and Label 3-D figures • Learn Zillion Compute Volume Using Knowledge of Nets • Learn Zillion Count Unit Cubes in a Rectangular Prism • Tasks for 5.MD.3 and 4
	3	<p>Developing Multiplication and Division Strategies Multiply multi-digit whole numbers using concrete manipulatives for understanding. No decimals this quarter. [5.NBT.2.5]</p>	<ul style="list-style-type: none"> • Learn Zillion: Multiplying - partial product video • Tasks for 5.NBT.5
	4	<p>Find whole number quotients of whole numbers with up to 4-digit dividends and 2-digit divisors using place value strategies, properties of operation, and the relationship</p>	<ul style="list-style-type: none"> • Dividing using a rectangular array • Division with the area model

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		between mult. and division. Need to be exposed to rectangular arrays and area models. [5.NBT.2.6]	<ul style="list-style-type: none"> • Tasks for 5.NBT.6
	5	Continue week 4 then move into using equivalency to add and subtract fractions with unlike denominators, including mixed numbers. Focus on conceptual understanding rather than just using the algorithm. Lowest or simplest terms in NOT required, but equivalency is. [5.NF.1.1]	<ul style="list-style-type: none"> • Add-and-subtract-fractions-with-unlike-denominators • Tasks for 5.NF.1
	6	Word problems with add/subt of fractions referring to same whole and with unlike denominators...use visual fraction models and equations to represent. Need number sense of fractions to estimate mentally and assess reasonableness [5.NF.1.2]	<ul style="list-style-type: none"> • Solve-word-problems-involving-the-addition-and-subtraction-of-fractions-with-unlike-denominators • Tasks for 5.NF.2
	7	Expanding understanding of place value to decimals. 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 the place to its left. Use base-ten blocks! [5.NBT.1.1]	<ul style="list-style-type: none"> • Recognize-the-value-of-digits-in-a-multi-digit-number-5-nbt-a-1 • Tasks for 5.NBT.1 to 4
	8	Explain patterns in the number of zeros of the product when multiplying a number by power of 10 and explain the patterns in the placement of a decimal point. Use whole-number exponents to denote powers of 10 [5.NBT.1.2]	<ul style="list-style-type: none"> • Explain-and-represent-patterns-when-multiplying-or-dividing-by-a-power-of-ten-5-nbt-a-2 • Tasks for 5.NBT.1 to 4
	9	Read, write, and compare decimals to thousandths using base-ten numerals, number names, and expanded form. Use base-10 blocks for understanding [5.NBT.1.3]	<ul style="list-style-type: none"> • Read-and-write-decimals-to-thousandths-using-base-ten-numerals-5-nbt-a-3a • Tasks for 5.NBT.1 to 4
	Week	Major Concepts / Topics	Possible Resources
Quarter 2 Oct 18 – Dec 21	1	Understanding the concept of multiplying fractions by fractions. Interpret a fraction as division of the numerator by the denominator and solve word problems involving division of whole numbers leading to answers in the form of fractions or mixed numbers. [5.NF.2.3]	<ul style="list-style-type: none"> • Fractions-as-division • Tasks for 5.NF.3 to 7
	2	Apply and extend previous understandings of multiplication to multiply a fraction or whole number by a fraction. Interpret product as parts of a partition divided into equal parts and find the area of a rectangle by tiling it. [5.NF.2.4]	<ul style="list-style-type: none"> • Arithmetic Operations with Fractions • Tasks for 5.NF.3 to 7
	3	Finish from week 2, then move into comparing and rounding decimals. Focus is on understanding the place value system to read, write and compare decimals to thousandth and compare two decimals to thousandths based on meanings of the digits in each place. [5.NBT.1.3b]	<ul style="list-style-type: none"> • Compare-decimals-using-a-number-line • Tasks for 5.NBT.1 to 4

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	4	Use place value understanding to round decimals to any place. [5.NBT.1.4]	<ul style="list-style-type: none"> • Round-decimals-to-any-place-5-nbt-a-4
	5	Interpret multiplying fractions as scaling. Resizing by comparing the size of a product to the size of one factor on the basis of size of the other factor without performing indicated multiplication and explain why multiplying a given number by a fraction less than 1 results in a product greater than the given number as well as explain the inverse of this. [5.NF.2.5a and b]	<ul style="list-style-type: none"> • Interpret-multiplication-as-scaling-and-predict-the-outcome-of-multiplying-by-fractions-less-than-greater-than-and-equal-to-one-5-nf-b-5 • Tasks for 5.NF.3-7-scroll to the NF you need
	6	Solve real world problems involving multiplication of fractions and mixed numbers. [5.NF.2.6]	<ul style="list-style-type: none"> • Solve-problems-involving-multiplication-of-fractions-and-mixed-numbers-5-nf-b-6 • Tasks for 5.NF.3-7-scroll to the NF you need
	7	Developing the concept of dividing unit fractions. Interpret division of a unit fraction by a non-zero whole number and compute quotients. Use the relationship between multiplication and division to explain. [5.NF.2.7a]	<ul style="list-style-type: none"> • Divide-whole-numbers-by-fractions • Tasks for 5.NF.3-7-scroll to the NF you need
	8	Interpret division of a whole number by a unit fraction and compute such quotients. Use the relationship between multiplication and division to explain. [5.NF.2.7b]	<ul style="list-style-type: none"> • Divide-whole-numbers-by-fractions • Tasks for 5.NF.3-7-scroll to the NF you need
	9	Continue earlier weeks to complete this quarter's topics.	
Quarter 3 Jan 5 – Mar 10	Week	Major Concepts / Topics	Possible Resources
	1	Solving problems involving volume. Find the volume of a right rectangular prism with whole-number side lengths by packing it with cubes; show volume is the same as if multiplying edge lengths equivalently by multiplying the height by the area. [5.MD.3.5 a]	<ul style="list-style-type: none"> • How we measure volume • Tasks for 5.MD.3-5-scroll to what MD you need
	2	Apply formulas $V=l \times w \times h$ and $V= b \times h$ for rectangular prisms to find volumes of right rectangular prisms with whole number edge lengths; recognize volume as additive and find volume of solid figures composed of two non-overlapping right rectangular prisms by adding the volumes of the non-overlap parts. [5.MD.3.5 b & c]	<ul style="list-style-type: none"> • 5.MD.3.5b- video with hands on and drawing represented
	3	Performing operations with decimals: Add, sub., mult., and divide decimals to hundredths using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship btw add/sub. Write to explain. [5.NBT.2.7]	<ul style="list-style-type: none"> • Multiply-and-divide-by-decimals-to-the-hundredths-5-nbt-b-7

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			<ul style="list-style-type: none"> • Tasks for 5.NBT.5-7- scroll to NBT you need
	4	Convert like measurement units within a given measurement system and use these conversions in solving multi-step, real world problems. [5.MD.1.1]	<ul style="list-style-type: none"> • 5.MD.1 Tasks 1 and 2
	5	Classifying two-dimensional geometric figures. Understand that attributes belonging to a category of 2-D figures also belong to all subcategories of that category. [5.G.2.3]	<ul style="list-style-type: none"> • Tasks for G.3 and 4- 3 tasks
	6	Classify 2-D figures in a hierarchy based on properties. [5.G.2.4]	<ul style="list-style-type: none"> • Tasks for G.3 and 4- 3 tasks
	7	Solving problems with fractional quantities. Solve real world problems involving division to divide unit fractions by whole numbers and whole numbers by unit fractions. ***Division of a fraction by a fraction is NOT a requirement at this grade level. [5.NF.2.7c]	<ul style="list-style-type: none"> • Tasks for NF.7c- scroll to the bottom for tasks 8 and 9
	8	Make a line plot to display a data set of measurements in fractions of a unit [$1/2$, $1/4$, $1/8$]. Use operations on fractions for this grade to solve problems involving info presented in line plots. [5.MD.2.2]	<ul style="list-style-type: none"> • Tasks for 5.md.2- use any or all
	9	Continue earlier weeks to complete this quarter's topics.	
	Week	Major Concepts / Topics	Possible Resources
Quarter 4 Mar 21 – May 24	1	Representing Algebraic Thinking Use parentheses, brackets, or braces in numerical expressions with symbols. [5.OA.1.1]	<ul style="list-style-type: none"> • 5.OA.1 and 2 tasks- use any or all
	2	Write simple expressions that record calculations with numbers, and interpret numerical expressions without evaluating them. [5.OA.1.2]	<ul style="list-style-type: none"> • 5.OA.1 and 2 tasks- use any or all
	3	Exploring the coordinate plane Generate two numerical patterns using two given rules. Id. Apparent relationships btwn corresponding terms; form ordered pairs and graph.... [5.OA.2.3] Use a pair of perpendicular number lines, axes, to define a coordinate system with the intersection of the lines [origin] arranged to coincide with the 0 on each line....Represent real world and math problems by graphing points in the first quadrant of the coordinate plane and interpret coordinate values. [5.G.1.1, 5.G.1.2]	<ul style="list-style-type: none"> • Tasks for 5.OA.3 • Tasks for 5.G.1 and 2- use any or all
	4	Finalizing multiplication and division of whole numbers Fluently multiply multi-digit whole numbers using the standard algorithm [5.NBT.2.5] . Find whole-number quotients using strategies based on place value...illustrate and explain the calculations using equation, rectangular arrays and/or area models. The standard algorithm for division is a 6 th grade standard.	Florida Standards Assessment training questions for grades 3-4 Florida Students- website for tutorials and resources
	5	FSA testing window	

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	6	Teachers will use their DE data, MFAS tasks, and classroom assessments to pull small groups based upon need. Students will continue to deepen their understanding of grade level math standards through the end of the year.	
	7	Teachers will use a lot of Project-based Learning for enrichment and remediation this last quarter of school.	
	8		
	9		

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