



Big Idea 1: Develop understandings of multiplication and division and strategies for basic multiplication facts and related division facts.		Pacing: 1 st Nine Weeks		
Concepts/Content		Multiplication and Division Facts		
Week(s)	NGSSS Complexity Rating	Benchmark	Remarks/Examples	Vocabulary
1 – 3 Place Value, Addition and Subtraction	MA.3.A.4.1 <i>high</i>	Create, analyze, and represent patterns and relationships using words, variables, tables, and graphs. link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark543.aspx	<p>Example: Look at the pattern below. Tell in your own words what shape is missing. Explain.</p>  <p>A possible answer would be a seven sided regular polygon because the number of side is increasing by one from left to right.</p> <p>Another possible answer is some polygon with pointy top because the pattern in the top of the shapes is pointy, flat, pointy, flat,...</p> <p>Example: In the sequence of shapes below, the triangle is shape 1 and the square is shape 2. How many sides would the 10th shape have? How do you know?</p> 	Chapter 1 Sums Addends Differences Rule Estimate Regroup Digit
	MA.3.A.6.1 <i>high</i>	Represent, compute, estimate, and solve problems using numbers through hundred thousands. link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark547.aspx	<p>Instructional focus should be placed on estimation through mental computation prior to written calculations.</p> <p>Students should be able to represent numbers with flexibility. For instance, 947 can be thought of as 9 hundreds 4 tens 7 ones, or as 94 tens 7 ones, or as 8 hundreds 14 tens 7 ones.</p>	
	MA.3.A.6.2 <i>high</i>	Solve non-routine problems by making a table, chart ,or list and searching for patterns. link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark548.aspx	<p>Example: A frog in a pit tries to go out. He jumps 3 steps up and then slides 1 step down. If the height of the pit is 21 steps, how many jumps does the frog need to make?</p> <p>Example: Show 5 different combinations of US coins that total 53¢.</p> <p>Example: The 24 chairs in the classroom are arranged in rows with the same number of chairs in each row. List all of the possible ways the chairs can be arranged</p>	

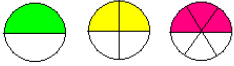
<p>4 – 5 Collect and Analyze Data</p>	<p>MA.3.S.7.1 <i>high</i></p>	<p>Construct and analyze frequency tables, bar graphs, pictographs, and line plots from data, including data collected through observations, surveys, and experiments. link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark549.aspx</p>	<p>Use of addition, subtraction, multiplication, and division of whole numbers should be included during this process. At this grade level, students might analyze graphs with words such as most, least, minimum, and maximum to provide a conceptual foundation for the more formal terms such as mode and range that they will learn in later grades.</p>	<p>Chapter 2 Data Experiment Frequency table Results Survey Tally table Pictograph Key Bar graph Scale Horizontal bar graph Vertical bar graph Line plot</p>
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Big Idea 1: Develop understandings of multiplication and division and strategies for basic multiplication facts and related division facts. Pacing: 1st Nine Weeks


Concepts/ Content		Multiplication and Division Facts		
Week(s)	NGSSS Complexity Rating	Benchmark	Remarks/Examples	Vocabulary
6 - 7 Intro to Multiplication (arrays, 2s, 4s, 1s, 0s, 5s)	MA.3.A.1.1 <i>moderate</i>	<p>Model multiplication and division including problems presented in context: repeated addition, multiplicative comparison, array, how many combinations, measurement, and partitioning.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark533.aspx</p>	<p>Repeated addition: 4 bags of cookies with 8 in each bag. How many cookies are there? Multiplicative comparison: Sam has 8 baseball cards. Elise has 8 times as many. How many does Elise have? Array: A marching band has 8 rows with 7 students in each row. How many band members are marching? Combination: Patrick is getting dressed for school. He has 4 different colored shirts; blue, red, yellow and green. He has blue, tan and black shorts. How many combinations of a shirt and a pair of shorts can he make? Measurement: There are 35 bugs. You will put 5 bugs in each jar. How many jars will you need? Partitive: You have 72 coins and 9 jars. If you want to place an equal number of coins in each jar, how many coins will you put in each jar?</p>	<p>Chapter 3 Equal groups Multiply Factor Product Array Commutative Property of Multiplication Identity Property of Multiplication Zero Property of Multiplication</p>
	MA.3.A.1.2 <i>high</i>	<p>Solve multiplication and division fact problems by using strategies that result from applying number properties.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark534.aspx</p>	<p>The use of <u>multiple</u> strategies might incorporate number properties for both multiplication and division including the commutative property, associative property, distributive property, and the identity property. The zero property of multiplication may also be used to solve problems. A problem such as 8×6 can be solved by finding 4×6 then doubling the product. This strategy uses the associative property in that $8 \times 6 = 2 \times (4 \times 6)$. The distributive property is applied to 7×8 when we find 5×8 and add it to 2×8. Hence, $7 \times 8 = (5 + 2) \times 8 = (5 \times 8) + (2 \times 8)$. Example: Sally and Thomas each have a \$5 bill and three \$1 bills to spend at the book fair. Together the total amount of money they have can be shown using the expression below. $2 \times (3 + 5)$ Write a different expression that represents the total amount that Sally and Thomas have together. How much money do they have altogether?</p>	


12-13 Division (All to 9s)	MA.3.A.1.2 <i>moderate</i>	<p>http://www.floridastandards.org/Standards/PublicPreviewBenchmark533.aspx</p> <p>Solve multiplication and division fact problems by using strategies that result from applying number properties.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark534.aspx</p>	<p>shirt and a pair of shorts can he make? Measurement: There are 35 bugs. You will put 5 bugs in each jar. How many jars will you need? Partitive: You have 72 coins and 9 jars. If you want to place an equal number of coins in each jar, how many coins will you put in each jar?</p> <p>The use of <u>multiple</u> strategies might incorporate number properties for both multiplication and division including the commutative property, associative property, distributive property, and the identity property. The zero property of multiplication may also be used to solve problems.</p> <p>A problem such as 8×6 can be solved by finding 4×6 then doubling the product. This strategy uses the associative property in that $8 \times 6 = 2 \times (4 \times 6)$. The distributive property is applied to 7×8 when we find 5×8 and add it to 2×8. Hence, $7 \times 8 = (5 + 2) \times 8 = (5 \times 8) + (2 \times 8)$. Example: Sally and Thomas each have a \$5 bill and three \$1 bills to spend at the book fair. Together the total amount of money they have can be shown using the expression below. $2 \times (3 + 5)$ Write a different expression that represents the total amount that Sally and Thomas have together. How much money do they have altogether?</p>	Chapter 6 Remainder
	MA.3.A.1.3 <i>high</i>	<p>Identify, describe, and apply division and multiplication as inverse operations</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark535.aspx</p>	<p>Example: Twenty-four children are going to the circus in 6 cars. How many children can ride in each car, with the same number of children in each car? Which of the following number sentences can be used to solve this problem? a) $24 - 6 = _$ b) $24 + 6 = _$ c) $_ \div 6 = 24$ d) $6 \times _ = 24$</p>	
	MA.3.A.6.1 <i>high</i>	<p>Represent, compute, estimate, and solve problems using numbers through hundred thousands.</p> <p>link to C-Palms resources</p>	<p>Instructional focus should be placed on estimation through mental computation prior to written calculations. Students should be able to represent numbers with flexibility. For instance, 947 can be thought of as 9 hundreds 4 tens 7 ones, or as 94 tens 7 ones, or as 8</p>	


		http://www.floridastandards.org/Standards/PublicPreviewBenchmark547.aspx	hundreds 14 tens 7 ones.	
Big Idea 2: Develop an understanding of fractions and fraction equivalence.			Pacing: 2 nd Nine Weeks	
Concepts/ Content	Fractions			
Week(s)	NGSSS Complexity Rating	Benchmark	Remarks/Examples	Vocabulary
Week 14-16 Understanding Fractions	MA.3.A.2.1 <i>moderate</i>	<p>Represent fractions, including fractions greater than one, using area, set, and linear models.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark536.aspx</p>	<p>Examples of area models include circular and rectangular shapes. Area models can also be represented by more unusual shapes. Examples of set models include groups of objects such as counters. Linear models refer to the number line and fraction strips.</p> <p>Example: Arvin ate $\frac{1}{2}$ of a pizza. April ate $\frac{1}{2}$ of a pizza. Arvin claimed that he ate more pizza than April did. Show that Arvin's claim can be correct.</p>	<p>Chapter 7 Equal parts Halves Thirds Fourths Sixths Eighths Fraction Unit fraction Numerator Denominator Fraction greater than 1 Mixed number</p>
Week 16-18 Compare and Order Fractions	MA.3.A.2.2 <i>moderate</i>	<p>Describe how the size of the fractional part is related to the number of equal sized pieces in the whole.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark537.aspx</p>	<p>For instance, "As the number of equal parts increases, the size of each fractional part decreases." Fractions can also be compared by looking at numerators, such as when comparing $\frac{1}{5}$ and $\frac{1}{6}$. Since both fractions represent one part of a whole, the size of the parts can be compared. Fifths are larger than sixths so $\frac{1}{5}$ is greater than $\frac{1}{6}$.</p>	<p>Chapter 8 Benchmark Equivalent fractions</p>

	<p>MA.3.A.2.3 <i>moderate</i></p>	<p>Compare and order fractions, including fractions greater than one, using models and strategies.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark538.aspx</p>	<p>Strategies include using benchmark fractions and common numerators and denominators. Typical benchmarks for comparing fractions are 0, $\frac{1}{2}$, and 1. Fractions can also be compared by looking at numerators, such as when comparing $\frac{2}{5}$ and $\frac{2}{6}$. Since both fractions represent two parts of a whole, the size of the parts can be compared. Fifths are larger than sixths so $\frac{2}{5}$ is greater than $\frac{2}{6}$.</p>	
	<p>MA.3.A.2.4 <i>moderate</i></p>	<p>Use models to represent equivalent fractions, including fractions greater than 1, and identify representations of equivalence.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark539.aspx</p>	<p>Example: Use your fraction circle set to come up with different combination of the same sized pieces that represent $\frac{1}{2}$ of a circle.</p> <div style="text-align: center;">  $\frac{1}{2} = \frac{2}{4} = \frac{3}{6}$ </div>	

Big Idea 3: Describe and analyze properties of two-dimensional shapes. Pacing: 3rd Nine Weeks

Concepts/ Content	Geometry			
Week(s)	NGSSS Complexity Rating	Benchmark	Remarks/Examples	Vocabulary
19-20 Plane Shapes	M.A.3.A.4.1 <i>high</i>	<p>Create, analyze, and represent patterns and relationships using words, variables, tables, and graphs.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark543.aspx</p>	<p>Example: Look at the pattern below. Tell in your own words what shape is missing. Explain.</p> <div style="text-align: center;">  </div> <p>A possible answer would be a seven sided regular polygon because the number of side is increasing by one from left to right. Another possible answer is some polygon with pointy top because the pattern in the top of the shapes is pointy, flat, pointy, flat,...</p> <p>Example: In the sequence of shapes below, the triangle is shape 1 and the square is shape 2. How many sides would the 10th shape have? How do you know?</p>	<p>Chapter 9 Plane shape Point Line Line segment Ray Angle Vertex Two-dimensional shapes Closed shape Open shape Polygon</p>

<p>21-23 Plane Shapes in Motion</p>	<p>M.A.3.A.6.2 <i>high</i></p>	<p>Solve non-routine problems by making a table, chart ,or list and searching for patterns.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark548.aspx</p>	 <p>Example: A frog in a pit tries to go out. He jumps 3 steps up and then slides 1 step down. If the height of the pit is 21 steps, how many jumps does the frog need to make? Example: Show 5 different combinations of US coins that total 53¢. Example: The 24 chairs in the classroom are arranged in rows with the same number of chairs in each row. List all of the possible ways the chairs can be arranged</p>	<p>Side Triangle Quadrilateral Pentagon Hexagon Octagon Decagon Right angle Acute angle Obtuse angle Straight angle Intersecting lines Perpendicular lines Parallel lines Equilateral triangle Isosceles triangle Scalene triangle Right triangle Obtuse triangle Acute triangle Rhombus Trapezoid Parallelogram</p>
	<p>M.A.3.G.3.1 <i>moderate</i></p>	<p>Describe, analyze, compare, and classify two-dimensional shapes using sides and angles - including acute, obtuse, and right angles - and connect these ideas to the definition of shapes.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark540.aspx</p>	<p>Polygonal shapes can be classified by the number of sides. For example, quadrilaterals are polygons with four sides. Quadrilaterals can be further classified by properties, such as the number of parallel pairs of sides (none, one pair or two pair). In the case of two pair of parallel sides, we call it a parallelogram. Note: Angles are classified by comparing them to a right angle as a benchmark. Students should be familiar with the geometric term "diagonal."</p>	
	<p>M.A.3.G.3.2 <i>high</i></p>	<p>Compose, decompose, and transform polygons to make other polygons, including concave and convex polygons with three, four, five, six, eight, or ten sides</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark540.aspx</p>	<p>Example: With pattern blocks, a trapezoid and a triangle can be combined to form a parallelogram or a large triangle. Also, the hexagon can be decomposed to form two trapezoids, and so forth.</p> <p>Example: One can cut a triangle off of a parallelogram so that, when translated and attached to the other side, the</p>	<p>Chapter 10 Diagonal Pattern unit Repeating pattern Growing pattern Congruent Symmetry Line of symmetry</p>

<p>23-25 Length and Perimeter</p>	<p>M.A.3.G.3.3 <i>moderate</i></p>	<p>rk541.aspx</p> <p>Build, draw, and analyze two-dimensional shapes from several orientations in order to examine and apply congruence and symmetry.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark542.aspx</p>	<p>parallelogram becomes a rectangle.</p> <p>Example: Draw a line of symmetry for each of the following:</p>  <p>Symmetry mainly includes reflectional symmetry at grade 3. Students should explore that reflectional symmetry produces congruent shapes.</p>	<p>Chapter 11 Length Foot (ft) Yard (yd) Mile (mi) Centimeter (cm) Decimeter (dm) Meter (m) Millimeter (mm) Kilometer (km) Perimeter</p>
<p>26-28</p>	<p>M.A.3.G.5.1 <i>high</i></p> <p>M.A.3.G.5.2 <i>low</i></p>	<p>Select appropriate units, strategies, and tools to solve problems involving perimeter.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark544.aspx</p> <p>Measure objects using fractional parts of linear units such as $\frac{1}{2}$, $\frac{1}{4}$, and $\frac{1}{10}$.</p> <p>link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark545.aspx</p>	<p>Example: Find the perimeter of a football field.</p>	<p>Chapter 12</p>
<p>26-28</p>	<p>M.A.3.G.5.3</p>	<p>Tell time to the nearest minute and</p>	<p>Elapsed time may include days, weeks, months, years, decades, and centuries.</p>	<p>Chapter 12</p>

Time	<i>moderate</i>	to the nearest quarter hour, and determine the amount of time elapsed. link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark546.aspx		Analog clock Digital clock Hour Half hour Quarter hour Minute Midnight Noon A.M. P.M. Time line Elapsed time Calendar Year Decade century
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Big Ideas: All will be covered Pacing: 4th Nine Weeks

Concepts/
Content End of Year Resources- Moving onto 4th grade standards

Week(s)	NGSSS Complexity Rating	Benchmark	Remarks/Examples	Vocabulary
29-30 Lessons 1-5 Big Idea 1 Project	MA.4.A.2.4 Moderate	Compare and order decimals, and estimate fraction and decimal amounts in real-world problems.	link to C-Palms resources http://www.floridastandards.org/Standards/PublicPreviewBenchmark555.aspx	
	MA4.A.6.1 Moderate	Use and represent numbers through millions in various contexts, including estimation of relative sizes of amounts or distances.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark566.aspx	
	MA4.A.4.1 High	Generate algebraic rules and use all four operations to describe patterns, including nonnumeric growing or repeating patterns.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark560.aspx	
	MA4.A.1.1 Moderate	Use and describe various models for multiplication in problem-solving situations, and demonstrate recall of basic multiplication and related division facts with ease.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark550.aspx	

31-32 Lessons 6-10 Big Idea Project 2	MA3.A.6.1 High	Represent, compute, estimate, and solve problems using numbers through hundred thousands.		
	MA3.A.1.1 Moderate	Model multiplication and division including problems presented in context: repeated addition, multiplicative comparison, array, how many combinations, measurement, and partitioning.		
	MA3.A.1.2 Moderate	Solve multiplication and division fact problems by using strategies that result from applying number properties.		
	MA4.A.1.1 Moderate	Use and describe various models for multiplication in problem-solving situations, and demonstrate recall of basic multiplication and related division facts with ease.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark550.aspx	
	MA4.A.4.2 High	Describe mathematics relationships using expressions, equations, and visual representations.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark561.aspx	
33-34 Lessons 11-15 Big Idea Project 3	MA.4.A.1.2 High	Multiply multi-digit whole numbers through four digits fluently, demonstrating understanding of the standard algorithm, and checking for reasonableness of results, including solving real-world problems.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark551.aspx	
	MA3.A.1.1 Moderate	Model multiplication and division including problems presented in context: repeated addition, multiplicative comparison, array, how many combinations, measurement, and partitioning.		
	MA4.A.6.2 High	Use models to represent division as: <ul style="list-style-type: none"> • the inverse of multiplication • as partitioning • as successive subtraction 	http://www.floridastandards.org/Standards/PublicPreviewBenchmark567.aspx	
	MA4.A.2.3			

35-36 Lessons 16- 20	Moderate	Relate equivalent fractions and decimals with and without models, including locations on a number line.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark554.aspx	
	MA3.A.1.1 Moderate	Model multiplication and division including problems presented in context: repeated addition, multiplicative comparison, array, how many combinations, measurement, and partitioning.		
	MA3.A.2.4 Moderate	Use models to represent equivalent fractions, including fractions greater than 1, and identify representations of equivalence Represent fractions, including fractions greater than one, using area, set, and linear models.		
	MA3.A.2.1 Moderate			
	MA4.G.3.1 Moderate	Describe and determine area as the number of same-sized units that cover a region in the plane, recognizing that a unit square is the standard unit for measuring area.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark556.aspx	
	MA4.G.3.3 Moderate	Select and use appropriate units, both customary and metric, strategies, and measuring tools to estimate and solve real-world area problems.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark558.aspx	
	MA4.G.5.3 Moderate	Identify and build a three-dimensional object from a two-dimensional representation of that object and vice versa.	http://www.floridastandards.org/Standards/PublicPreviewBenchmark565.aspx	
	MA3.A.1.1 Moderate	Model multiplication and division including problems presented in context: repeated addition, multiplicative comparison, array, how many combinations, measurement, and partitioning.		
MA3.G.3.1 Moderate	Describe, analyze, compare, and classify two-dimensional shapes using sides and angles - including acute, obtuse, and right angles - and connect these ideas to the definition of shapes.			

