Third Grade Math			
First Nine Weeks	**Second Nine Weeks**	**Third Nine Weeks**	**Fourth Nine Weeks**

Mathematical Process Standards
1. Make sense of problems and persevere in solving them.
a. Relate a problem to prior knowledge.
b. Recognize there may be multiple entry points to a problem and more than one path to a solution.
c. Analyze what is given, what is not given, what is being asked, and what strategies are needed, and make an initial attempt to solve a problem.
d. Evaluate the success of an approach to solve a problem and refine it if necessary.
2. Reason both contextually and abstractly.
a. Make sense of quantities and their relationships in mathematical and real-world situations.
b. Describe a given situation using multiple mathematical representations.
c. Translate among multiple mathematical representations and compare the meanings each representation conveys about the situation.
d. Connect the meaning of mathematical operations to the context of a given situation.
3. Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.
a. Construct and justify a solution to a problem.
b. Compare and discuss the validity of various reasoning strategies.
c. Make conjectures and explore their validity.
d. Reflect on and provide thoughtful responses to the reasoning of others.
4. Connect mathematical ideas and real-world situations through modeling.
a. Identify relevant quantities and develop a model to describe their relationships.
b. Interpret mathematical models in the context of the situation.
c. Make assumptions and estimates to simplify complicated situations.
d. Evaluate the reasonableness of a model and refine if necessary.
5. Use a variety of mathematical tools effectively and strategically.
a. Select and use appropriate tools when solving a mathematical problem.
b. Use technological tools and other external mathematical resources to explore and deepen understanding of concepts.
6. Communicate mathematically and approach mathematical situations with precision.
a. Express numerical answers with the degree of precision appropriate for the context of a situation.
b. Represent numbers in an appropriate form according to the context of the situation.
c. Use appropriate and precise mathematical language.
d. Use appropriate units, scales, and labels.
7. Identify and utilize structure and patterns.
a. Recognize complex mathematical objects as being composed of more than one simple object.
b. Recognize mathematical repetition in order to make generalizations.
c. Look for structures to interpret meaning and develop solution strategies.

Georgetown County School District Pacing Guides
2015 SC College and Career Ready Standards

Number Sense and Base Ten			
First Nine Weeks	**Second Nine Weeks**	**Third Nine Weeks**	**Fourth Nine Weeks**
3.NSBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100. Youtube-place value	3.NSBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100.		
3.NSBT.2 Add and subtract whole numbers fluently to 1,000 using knowledge of place value and properties of operations. *(suggested goal up to 500)* classworks-properties of add/subt.	3.NSBT.2 Add and subtract whole numbers fluently to 1,000 using knowledge of place value and properties of operations. classworks-multi step ass/subt problems		
3.NSBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10 – 90, using knowledge of place value and properties of operations. classworks-properties of mult Array picture cards Multiplication word problems youcubed-multiplication cards youcubed-numbersense-fluency	3.NSBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10 – 90, using knowledge of place value and properties of operations.	3.NSBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10 – 90, using knowledge of place value and properties of operations.	
3.NSBT.4 Read and write numbers through 999,999 in standard form and equations in expanded form. classworks-using number forms to			

thousands			
3.NSBT.5 Compare and order numbers through 999,999 and represent the comparison using the symbols >, =, or <. classworks-compare/ordering numbers to 10,000			
Number Sense – Fractions			
	3.NSF.1 Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers. a. A fraction 1/*b* (called a unit fraction) is the quantity formed by one part when a whole is partitioned into *b* equal parts; b. A fraction *a/b* is the quantity formed by *a* parts of size 1/*b*; c. A fraction is a number that can be represented on a number line based on counts of a unit fraction; d. A fraction can be represented using set, area, and linear models. https://classroom.frontrowed.com/#lessons/9 Gynzy-fraction bars-lesson Gynzy-fractions on number line lesson	3.NSF.1 Develop an understanding of fractions (i.e., denominators 2, 3, 4, 6, 8, 10) as numbers. a. A fraction 1/*b* (called a unit fraction) is the quantity formed by one part when a whole is partitioned into *b* equal parts; b. A fraction *a/b* is the quantity formed by *a* parts of size 1/*b*; c. A fraction is a number that can be represented on a number line based on counts of a unit fraction; d. A fraction can be represented using set, area, and linear models.	
	3.NSF.2 Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an	3.NSF.2 Explain fraction equivalence (i.e., denominators 2, 3, 4, 6, 8, 10) by demonstrating an	

	understanding that: a. two fractions are equal if they are the same size, based on the same whole, or at the same point on a number line; b. fraction equivalence can be represented using set, area, and linear models; c. whole numbers can be written as fractions (e.g., 4= 4/1 and 1= 4/4); d. fractions with the same numerator or same denominator can be compared by reasoning about their size based on the same whole. Youtube half fraction snake Gynzy-learning fractions lesson Gynzy compare numbers lesson	understanding that: a. two fractions are equal if they are the same size, based on the same whole, or at the same point on a number line; b. fraction equivalence can be represented using set, area, and linear models; c. whole numbers can be written as fractions (e.g., 4= 4/1 and 1= 4/4); d. fractions with the same numerator or same denominator can be compared by reasoning about their size based on the same whole.	
	3.NSF.3 Develop an understanding of mixed numbers (i.e., denominators 2, 3, 4, 6, 8, 10) as iterations of unit fractions on a number line.	3.NSF.3 Develop an understanding of mixed numbers (i.e., denominators 2, 3, 4, 6, 8, 10) as iterations of unit fractions on a number line.	
Algebraic Thinking and Operations			
3.ATO.1 Use concrete objects, drawings and symbols to represent multiplication facts of two single-digit whole numbers and explain the relationship between the factors (i.e., 0 – 10) and the product. youcubed-factors			

3.ATO.2 Use concrete objects, drawings and symbols to represent division without remainders and explain the relationship among the whole number quotient (i.e., 0 – 10), divisor (i.e., 0 – 10), and dividend.			
3.ATO.3 Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication and related division facts. Represent the problem situation using an equation with a symbol for the unknown.	3.ATO.3 Solve real-world problems involving equal groups, area/array, and number line models using basic multiplication and related division facts. Represent the problem situation using an equation with a symbol for the unknown.		
	3.ATO.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is a missing factor, product, dividend, divisor, or quotient. youcubed-multiples	3.ATO.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers when the unknown is a missing factor, product, dividend, divisor, or quotient.	
	3.ATO.5 Apply properties of operations (i.e., Commutative Property of Multiplication, Associative Property of Multiplication, Distributive Property) as strategies to multiply and divide and explain the reasoning.	3.ATO.5 Apply properties of operations (i.e., Commutative Property of Multiplication, Associative Property of Multiplication, Distributive Property) as strategies to multiply and divide and explain the reasoning.	
	3.ATO.6 Understand division as a missing factor problem. Gynzy times table pattern lesson		

3.ATO.7 Demonstrate fluency with basic multiplication and related division facts of products and dividends through 100. Gynzy-sum machine lesson	3.ATO.7 Demonstrate fluency with basic multiplication and related division facts of products and dividends through 100.	3.ATO.7 Demonstrate fluency with basic multiplication and related division facts of products and dividends through 100.	3.ATO.7 Demonstrate fluency with basic multiplication and related division facts of products and dividends through 100.
3.ATO.8 Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.	3.ATO.8 Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.	3.ATO.8 Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.	3.ATO.8 Solve two-step real-world problems using addition, subtraction, multiplication and division of whole numbers and having whole number answers. Represent these problems using equations with a letter for the unknown quantity.
3.ATO.9 Identify a rule for an arithmetic pattern (e.g., patterns in the addition table or multiplication table). youcubed-pattern recognition	3.ATO.9 Identify a rule for an arithmetic pattern (e.g., patterns in the addition table or multiplication table).	3.ATO.9 Identify a rule for an arithmetic pattern (e.g., patterns in the addition table or multiplication table).	
Geometry			
		3.G.1 Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these	3.G.1 Understand that shapes in different categories (e.g., rhombus, rectangle, square, and other 4-sided shapes) may share attributes (e.g., 4-sided figures) and the shared attributes can define a larger category (e.g., quadrilateral). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories. youcubed-geometry proportions

		subcategories.	youcubed -trapezoid activity
	3.G.2 Partition two-dimensional shapes into 2, 3, 4, 6, or 8 parts with equal areas and express the area of each part using the same unit fraction. Recognize that equal parts of identical wholes need not have the same shape.	3.G.2 Partition two-dimensional shapes into 2, 3, 4, 6, or 8 parts with equal areas and express the area of each part using the same unit fraction. Recognize that equal parts of identical wholes need not have the same shape.	
			3.G.3 Use a right angle as a benchmark to identify and sketch acute and obtuse angles.
			3.G.4 Identify a three-dimensional shape (i.e., right rectangular prism, right triangular prism, pyramid) based on a given two-dimensional net and explain the relationship between the shape and the net. Gynzy-3D shapes lesson youcubed-area youcubed-3D shapes
Measurement and Data Analysis			
		3.MDA.1 Use analog and digital clocks to determine and record time to the nearest minute, using a.m. and p.m.; measure time intervals in minutes; and solve problems involving addition and subtraction of time intervals within 60 minutes. Gynzy-tell time lesson Gynzy time lesson	3.MDA.1 Use analog and digital clocks to determine and record time to the nearest minute, using a.m. and p.m.; measure time intervals in minutes; and solve problems involving addition and subtraction of time intervals within 60 minutes.

			e-clock	
			3.MDA.2 Estimate and measure liquid volumes (capacity) in customary units (i.e., c., pt., qt., gal.) and metric units (mL, L) to the nearest whole unit. Gynzy units of measure-lesson Gynzy customary system lesson Gynzy metric system lesson	3.MDA.2 Estimate and measure liquid volumes (capacity) in customary units (i.e., c., pt., qt., gal.) and metric units (mL, L) to the nearest whole unit. Gynzy units of measure-lesson Gynzy customary system lesson Gynzy metric system lesson
			3.MDA.3 Collect, organize, classify, and interpret data with multiple categories and draw a scaled picture graph and a scaled bar graph to represent the data.	3.MDA.3 Collect, organize, classify, and interpret data with multiple categories and draw a scaled picture graph and a scaled bar graph to represent the data. classworks-using a table Gynzy-pie chart/histogram lesson classworks-line graph classworks-interpreting bar graphs Create a graph
			3.MDA.4 Generate data by measuring length to the nearest inch, half-inch and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units. Youtube-measuring	3.MDA.4 Generate data by measuring length to the nearest inch, half-inch and quarter-inch and organize the data in a line plot using a horizontal scale marked off in appropriate units.

		Gynzy-ruler lesson Gynzy-measuring liquids	
		3.MDA.5 Understand the concept of area measurement. a. Recognize area as an attribute of plane figures; b. Measure area by building arrays and counting standard unit squares; c. Determine the area of a rectilinear polygon and relate to multiplication and addition. Mathpickle-area/perimeter youcubed-Pi activity	3.MDA.5 Understand the concept of area measurement. a. Recognize area as an attribute of plane figures; b. Measure area by building arrays and counting standard unit squares; c. Determine the area of a rectilinear polygon and relate to multiplication and addition. Mathpickle-area/perimeter youcubed-Pi activity
		3.MDA.6 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.	3.MDA.6 Solve real-world and mathematical problems involving perimeters of polygons, including finding the perimeter given the side lengths, finding an unknown side length, and exhibiting rectangles with the same perimeter and different areas or with the same area and different perimeters.