3RD GRADE MATH-COMMON CORE
PACING GUIDE 1ST 9 WEEKS
2013-2014

Standard	I Can Statements	Date Taught	Assessment
DOMAIN: Operations and Algebraic Thinking (OA)	*** Indicates which 9 weeks the standard will be tested.**		
3.OA.1. Interpret products of whole numbers, e.g., interpret 5 × 7 as the total number of objects in 5 groups of 7 objects each. *For example, describe a context in which a total number of objects can be expressed as 5 × 7.*	I can multiply to find the product. **(1*)** I can show products using equal groups, arrays, and repeated addition. **(1*)** **(This standard will be taught in TOPIC # 4.)**		
3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem.[1] [1]See Glossary, Table 2.	I can multiply to solve word problems. **(1*, 2* 3*,4)** I can divide to solve word problems. **(1*, 2* ,3*,4)** I can decide when to multiply or divide to solve word problems. **(1*, 2* ,3*,4)** **(This standard will be taught in TOPIC # 4.)**		
3.OA.5. Apply properties of operations as strategies to multiply and divide.[2] *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)* [2] Students need not use formal terms for these properties.	I can use the properties of multiplication and division to solve problems. **(1,*2*,3, 4)** I can explain the commutative property of multiplication. **(1*,2*,3, 4)** I can explain the associative property of multiplication. **(1*,2*,3, 4)** I can explain the distributive property of multiplication. **(1*,2*,3, 4)** **(This standard will be taught in TOPIC # 4.)**		

3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of grade 3, know from memory all products of two one-digit numbers.	I can memorize all products within 100. **(1*,2*,3*,4*)** I can use strategies to solve multiplication problems. **(1*,2*,3*,4*)** I can use strategies to solve division problems. **(1*,2*,3*,4*)** (By the end of Grade 3, know from memory all products of one-digit numbers.) **(This standard will be taught in TOPIC # 5.)** **(This standard must be REVIEWED EVERY 9 WEEKS.)**		
3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]	I can identify the order of operations of a problem. **(1*,2*,3*,4*)** I can identify different strategies for estimating. **(1*,2*,3*,4*)** I can construct an equation with a letter standing for the unknown quality. **(1*,2*,3*,4*)** I can solve two-step word problems using the four operations. **(1*,2*,3*,4*)** I can justify my answer using estimation strategies and mental computation. **(1*,2*,3*,4*)** **(This standard will be taught in TOPIC # 2, 3, & 5.)** **(This standard must be REVIEWED EVERY 9 WEEKS.)**		
3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	I can identify patterns. **(1*, 2*,3*,4*)** I can explain rules for a pattern using properties of operations. **(1*, 2*,3*,4*)** I can explain relationships between the numbers in a pattern. **(1*, 2*,3*,4*)** **(This standard will be taught in TOPIC # 2, 4 & 5.)** **(This standard must be REVIEWED EVERY 9 WEEKS.)**		

DOMAIN: Numbers and Operations in Base Ten (NBT)			
3.NBT.1. Use place value understanding to round whole numbers to the nearest 10 or 100.[4] 4 A range of algorithms may be used	I can define "round or rounding" based on place value. **(1*)** I can round a whole number to the nearest 10. **(1*)** I can round a whole number to the nearest 100. **(1*)** **(This standard will be taught in TOPIC # 1, 2, & 3.)**		
3.NBT.2. Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.[4] 4 Range of algorithms may be used	I can identify strategies for adding within 1000. **(1*, 2*, 3*, 4*)** I can identify strategies for subtracting within 1000. (**1*, 2*, 3*, 4*)** I can fluently add within 1000. **(1*,2, 3, 4*)** I can fluently subtract within 1000. **(1*,2, 3, 4*)** **(This standard will be taught in TOPIC # 1, 2, & 3.)** **(This standard must be REVIEWED EVERY 9 WEEKS.)**		
3.NBT.3. Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 × 80, 5 × 60) using strategies based on place value and properties of operations.[4] 4 A range of algorithms may be used [3]This standard is limited to problems posed with whole numbers and having whole-number answers; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations). [4]A range of algorithms may be used.	I can identify strategies to multiply one-digit numbers by multiples of 10. **(1*,2*,3,4)** I can use knowledge of place value to multiply one-digit whole numbers by multiples of 10 . **(1*,2*,3, 4)** **(This standard will be taught in TOPIC # 5.)**		

3RD GRADE MATH-COMMON CORE
PACING GUIDE 2ND 9 WEEKS
2013-2014

Standard	I Can Statements	Date Taught	Assessment
DOMAIN: Operations and Algebraic Thinking (OA)	*** Indicates which 9 weeks the standard will be tested.**		
3.OA.2. Interpret whole-number quotients of whole numbers, e.g., interpret 56 ÷ 8 as the number of objects in each share when 56 objects are partitioned equally into 8 shares, or as a number of shares when 56 objects are partitioned into equal shares of 8 objects each. *For example, describe a context in which a number of shares or a number of groups can be expressed as 56 ÷ 8.*	I can find the quotient of whole numbers using equal groups. **(2*)** I can tell what the number in a division problem means. **(2*)** I can explain what division means. **(2*)** I can show division as equal sharing. **(2*)** **(This standard will be taught in TOPIC #7.)**		
3.OA.3. Use multiplication and division within 100 to solve word problems in situations involving equal groups, arrays, and measurement quantities, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem[11] See Glossary, Table 2	I can multiply to solve word problems. **(1*, 2* 3*,4)** I can divide to solve word problems. **(1*, 2* ,3*,4)** I can decide when to multiply or divide to solve word problems. **(1*, 2* ,3*,4)** **(This standard will be taught in TOPICS 6, 7 & 8.)**		
3.OA.4. Determine the unknown whole number in a multiplication or division equation relating three whole numbers. *For example, determine the unknown number that makes the equation true in each of the equations 8 × ? = 48, 5 = ? ÷ 3, 6 × 6 = ?.*	I can find the missing number in a multiplication problem. **(2*)** I can find the missing number in a division problem. **(2*)** **(This standard will be taught in TOPICS 7 & 8.)**		

3.OA.5. Apply properties of operations as strategies to multiply and divide.[2] *Examples: If 6 × 4 = 24 is known, then 4 × 6 = 24 is also known. (Commutative property of multiplication.) 3 × 5 × 2 can be found by 3 × 5 = 15, then 15 × 2 = 30, or by 5 × 2 = 10, then 3 × 10 = 30. (Associative property of multiplication.) Knowing that 8 × 5 = 40 and 8 × 2 = 16, one can find 8 × 7 as 8 × (5 + 2) = (8 × 5) + (8 × 2) = 40 + 16 = 56. (Distributive property.)*	I can use the properties of multiplication and division to solve problems. **(1,*2*,3, 4)** I can explain the commutative property of multiplication. **(1*,2*,3, 4)** I can explain the associative property of multiplication. **(1*,2*,3, 4)** I can explain the distributive property of multiplication. **(1*,2*,3, 4)** **(This standard will be taught in TOPICS 6 & 8.)**		
3.OA.6. Understand division as an unknown-factor problem. *For example, find 32 ÷ 8 by finding the number that makes 32 when multiplied by 8.*	I can identify the multiplication problem related to the division problem. **(2*,3*,4)** I can use multiplication to solve division problems. (**2*,3*,4)** I can recognize and explain the relationship between multiplication and division. **(2*,3*,4)** **(This standard will be taught in TOPIC 7.)**		
3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of grade 3, know from memory all products of two one-digit numbers. [2] Students need not use formal terms for these properties.	I can memorize all products within 100. **(1*,2*,3*,4*)** I can use strategies to solve multiplication problems. **(1*,2*,3*,4*)** I can use strategies to solve division problems. **(1*,2*,3*,4*)** *(By the end of Grade 3, know from memory all products of one-digit numbers.)* **(This standard will be taught in TOPIC 8.)** **(This standard must be REVIEWED EVERY 9 WEEKS.)**		

3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]	I can identify the order of operations of a problem. **(1*,2*,3*,4*)** I can identify different strategies for estimating. **(1*,2*,3*,4*)** I can construct an equation with a letter standing for the unknown quality. **(1*,2*,3*,4*)** I can solve two-step word problems using the four operations. **(1*,2*,3*,4*)** I can justify my answer using estimation strategies and mental computation. **(1*,2*,3*,4*)** **(This standard will be taught in TOPIC 8.)** **(This standard must be REVIEWED EVERY 9 WEEKS.)**		
3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	I can identify patterns. **(1*, 2*,3*,4*)** I can explain rules for a pattern using properties of operations. **(1*, 2*,3*,4*)** I can explain relationships between the numbers in a pattern. **(1*, 2*,3*,4*)** **(This standard will be taught in Topic 7.)** **(This standard must be REVIEWED EVERY 9 WEEKS.)**		
DOMAIN: Numbers and Operations-Fractions (NF)			
3.NF.1. Understand a fraction 1/*b* as the quantity formed by 1 part when a whole is partitioned into *b* equal parts; understand a fraction *a/b* as the quantity formed by *a* parts of size 1/*b*.[5] 5 Gr. 3 expectations in this domain are limited to fractions with denominators 2,3,4,6, and 8	I can define a unit fraction. **(2*, 3*,4)** I can recognize a unit fraction as part of a whole. **(2*, 3*,4)** I can identify and explain the parts of a written fraction. **(2*, 3*,4)** I can compare fractions using equal to, less than, and greater than one. **(2*, 3*,4)**		

3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.[5] a. Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line. b. Represent a fraction *a/b* on a number line diagram by marking off *a* lengths 1/*b* from 0. Recognize that the resulting interval has size *a/b* and that its endpoint locates the number *a/b* on the number line.	**(This standard will be taught in TOPIC 9.)** I can define the interval from 0 to 1 on a number line as the whole number. **(2*,3*,4)** I can divide a whole on a number line into equal parts. **(2*,3*,4)** I can recognize that the equal parts between 0 and 1 stand for a fraction. **(2*,3*,4)** I can represent each equal part on a number line with a fraction. **(2*,3*,4)** I can explain the endpoint of each equal part represents the total number of equal parts. **(2*,3*,4)** **(This standard will be taught in TOPIC 9.)**		
DOMAIN: Measurement and Data (MD)			
3.MD.7. **c.** Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths *a* and *b* + *c* is the sum of *a* × *b* and *a* × *c*. Use area models to represent the distributive property in mathematical reasoning.	I can use an array to multiply. **(2*, 3*, 4)** I can find the area of a rectangle by modeling the distributive property using multiplication and addition. **(2*, 3*, 4)** I can use tiling to find the area of rectangles using the distributive property. **(2*, 3*, 4)** **(This standard will be taught in TOPIC 6.)**		
3.MD.8. 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.	I can define a polygon. **(2*, 3*, 4*)** I can define perimeter. **(2*, 3*, 4*)** I can find the perimeter when given the length of sides. **(2*, 3*, 4*)** I can find the perimeter when there is an unknown side length. **(2*, 3*, 4*)** I can create rectangles with the same perimeter and different areas. **(2*, 3*, 4*)**		

	I can create rectangles with the same area and different perimeters. **(2*, 3*, 4*)** **(This standard will be taught in TOPIC 6.)**		
DOMAIN: Numbers and Operations in Base Ten (NBT)			
3.NBT.2. Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.[4] 4 Range of algorithms may be used	I can identify strategies for adding within 1000. **(1*, 2*, 3*, 4*)** I can identify strategies for subtracting within 1000. (**1*, 2*, 3*, 4*)** I can fluently add within 1000. **(1*,2, 3, 4*)** I can fluently subtract within 1000. **(1*,2, 3, 4*)** **(This standard will be taught in TOPIC # 1, 2, & 3.)** **(This standard MUST BE TAUGHT EVERY 9 WEEKS.)**		

3RD GRADE MATH-COMMON CORE
PACING GUIDE 3RD 9 WEEKS
2013-2014

Standard	I Can Statements	Date Taught	Assessment
DOMAIN: Numbers and Operations-Fractions(NF)	*** Indicates which 9 weeks the standard will be tested.**		
3.NF.2. Understand a fraction as a number on the number line; represent fractions on a number line diagram.[5] **a.** Represent a fraction 1/*b* on a number line diagram by defining the interval from 0 to 1 as the whole and partitioning it into *b* equal parts. Recognize that each part has size 1/*b* and that the endpoint of the part based at 0 locates the number 1/*b* on the number line. **b.** Represent a fraction *a/b* on a number line diagram by marking off *a* lengths 1/*b* from 0. Recognize that the resulting interval has size *a/b* and that its endpoint locates the number *a/b* on the number line.	I can define the interval from 0 to 1 on a number line as the whole number. **(3*,4*)** I can divide a whole on a number line into equal parts. **(,3*,4*)** I can recognize that the equal parts between 0 and 1 stand for a fraction. **(3*,4*)** I can represent each equal part on a number line with a fraction. **(3*,4*)** | - - - | - - - | - - - | - - - | 0 1/4 2/4 3/4 4/4 **(This standard will be taught in TOPIC 10.)**		
3.NF.3. Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.[5] **a.** Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line. **b.** Recognize and generate simple equivalent fractions, *e.g., 1/2 = 2/4, 4/6 = 2/3).* Explain why the fractions are equivalent, e.g., by using a visual fraction model. **c.** Express whole numbers as fractions, and recognize fractions that are equivalent to whole	I can describe equivalent fractions. **(3*, 4*)** I can recognize simple equivalent fractions. **(3*, 4*)** I can compare fractions by their size to determine equivalence. **(3*, 4*)** I can use number lines, size, visual fraction models, etc. to find equivalent fractions. **(3*, 4*)** I can recognize whole numbers written in fractional parts on a number line. **(3*, 4*)** I can recognize the difference in a whole number and a fraction. **(3*, 4*)** I can express whole numbers as fractions. **(3*, 4*)** I can explain how a fraction is equivalent to a whole number. **(3*, 4*)** I can explain what a numerator means. **(3*, 4*)**		

numbers. *Examples: Express 3 in the form 3 = 3/1; recognize that 6/1 = 6; locate 4/4 and 1 at the same point of a number line diagram.* **d.** Compare two fractions with the same numerator or the same denominator by reasoning about their size. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model. 5 Gr 3 Expectations in this domain are limited to fractions with denominators 2,3,4,6, and 8	I can explain what a denominator means. **(3*, 4*)** I can recognize whether fractions refer to the same whole. I can decide if comparison of fractions can be made (if they refer to the same whole). **(3*, 4*)** I can explain why fractions are equivalent. **(3*, 4*)** I can compare two fractions with the same numerator by reasoning about their size. **(3*, 4*)** I can compare two fractions with the same denominator by reasoning about their size. **(3*, 4*)** I can record the results of comparisons using symbols >, <, = **(3*, 4*)** **(This standard will be taught in TOPIC 10.)**		
DOMAIN: Measurement and Data (MD)			
3.MD.1. Tell and write time to the nearest minute, and measure time intervals in minutes. Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram.	I can recognize minute marks on an analog clock face and minute position on a digital clock face. **(3*, 4*)** I can tell and write time to the nearest minute. **(3*, 4*)** I can compare an analog clock face with a number line. **(3*, 4*)** I can use a number line to add and subtract time. **(3*, 4*)** I can solve word problems related to adding and subtracting minutes. **(3*, 4*)** **(This standard will be taught in TOPIC 12.)**		
3.MD.5. Recognize area as an attribute of plane figures, and understand concepts of area measurement. **a.** A square with side length 1 unit, called "a unit square," is said to have "one square unit" of area, and can be used to measure area. **b.** A plane figure which can be covered without gaps or overlaps by *n* unit squares is said to have an area of *n*	I can define "unit square." **(3*, 4*)** I can define area. **(3*, 4*)** I can find the area of a plane figure using unit squares. **(3*, 4*)** I can cover the area of a plane figure with unit squares without gaps or overlaps. **(3*, 4*)** **(This standard will be taught in TOPIC 14.)**		

square units.			
3.MD.6. Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	I can measure areas by counting unit squares. I can use unit squares of cm, m, in, ft, and other sizes of unit squares to measure area. **(This standard will be taught in TOPIC 14.)**		
3.MD.7. Relate area to the operations of multiplication and addition. **a.** Find the area of a rectangle with whole-number side lengths by tiling it, and show that the area is the same as would be found by multiplying the side lengths. **b.** Multiply side lengths to find areas of rectangles with whole-number side lengths in the context of solving real-world and mathematical problems, and represent whole-number products as rectangular areas in mathematical reasoning. **c.** Use tiling to show in a concrete case that the area of a rectangle with whole-number side lengths *a* and *b* + *c* is the sum of *a* × *b* and *a* × *c*. Use area models to represent the distributive property in mathematical reasoning. **d.** Recognize area as additive. Find areas of rectilinear figures by decomposing them into non-overlapping rectangles and adding the areas of the non-overlapping parts, applying this technique to solve real-world problems.	I can find the area of a rectangle by tiling it in unit squares. **(3*, 4*)** I can find the side lengths of a rectangle in units. **(3*, 4*)** I can compare the area found by tiling a rectangle to the area found by multiplying the side lengths. **(3*, 4*)** I can multiply side lengths to find areas of rectangles. **(3*, 4*)** I can solve real world problems using area. **(3*, 4*)** I can use arrays to represent multiplication problems. **(3*, 4*)** I can use an array to multiply. **(2*, 3*, 4*)** I can find the area of a rectangle by modeling the distributive property using multiplication and addition. **(2*, 3*, 4*)** I can use tiling to find the area of rectangles using the distributive property. **(2*, 3*, 4*)** I can find areas of rectangles. **(3*, 4*)** I can add area of rectangles. **(3*, 4*)** I can recognize the areas of each rectangle in a rectilinear (straight line) figure can be added together to find the area of the figure. **(3*, 4*)** I can separate a polygon into rectangles to find the area of each rectangle to solve real world problems. **(3*, 4*)** I can separate polygons into non-overlapping rectangles. **(3*, 4*)** **(This standard will be taught in TOPIC 14.)**		

3.MD.8. 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.	I can define a polygon. **(2*, 3*, 4*)** I can define perimeter. **(2*, 3*, 4*)** I can find the perimeter when given the length of sides. **(2*, 3*, 4*)** I can find the perimeter when there is an unknown side length. **(2*, 3*, 4*)** I can create rectangles with the same perimeter and different areas. **(2*, 3*, 4*)** I can create rectangles with the same area and different perimeters. **(2*, 3*, 4*)** **(This standard will be taught in TOPICS 13 & 14.)**		
DOMAIN: Geometry (G)			
3.G.1. Understand that shapes in different categories (e.g., rhombuses, rectangles, and others) may share attributes (e.g., having four sides), and that the shared attributes can define a larger category (e.g., quadrilaterals). Recognize rhombuses, rectangles, and squares as examples of quadrilaterals, and draw examples of quadrilaterals that do not belong to any of these subcategories.	I can identify and define two-dimensional shapes based on their attributes. **(3*)** I can identify rhombuses, rectangles, and squares as quadrilaterals. **(3*)** I can define attributes. **(3*)** I can describe, analyze, and compare properties of two-dimensional shapes. **(3*)** I can compare and classify shapes by attributes. **(3*)** I can group shapes with shared attributes. **(3*)** I can draw examples that are and are not quadrilaterals. **(3*)** **(This standard will be taught in TOPIC 11.)**		
3.G.2. Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole. *For example, partition a shape into 4 parts with equal area, and describe the area of each part as 1/4 of the area of the shape.*	I can divide shapes into equal parts. **(3*)** I can describe the area of each part as a fractional part of the whole. **(3*)** I can divide a shape into parts with equal areas and describe the area of each part as a unit fraction of the whole. **(3*)** **(This standard will be taught in TOPIC 12.)**		

DOMAIN: Operations and Algebraic Thinking (OA)			
<u>3.OA.7.</u> Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of grade 3, know from memory all products of two one-digit numbers.	I can memorize all products within 100. **(1*,2*,3*,4*)** I can use strategies to solve multiplication problems. **(1*,2*,3*,4*)** I can use strategies to solve division problems. **(1*,2*,3*,4*)** (By the end of Grade 3, know from memory all products of one-digit numbers.) **(This standard will be taught in TOPIC # 5.)** **(This standard was taught in OTHER TOPICS, BUT MUST BE REVIEWED EVERY NINE WEEKS.)**		
<u>3.OA.8.</u> Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]	I can identify the order of operations of a problem. **(1*,2*,3*,4*)** I can identify different strategies for estimating. **(1*,2*,3*,4*)** I can construct an equation with a letter standing for the unknown quality. **(1*,2*,3*,4*)** I can solve two-step word problems using the four operations. **(1*,2*,3*,4*)** I can justify my answer using estimation strategies and mental computation. **(1*,2*,3*,4*)** **(This standard will be taught in TOPIC # 2, 3, & 5.)** **(This standard was taught in OTHER TOPICS, BUT MUST BE REVIEWED EVERY NINE WEEKS.)**		
<u>3.OA.9.</u> Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be*	I can identify patterns. **(1*, 2*,3*,4*)** I can explain rules for a pattern using properties of operations. **(1*, 2*,3*,4*)** I can explain relationships between the numbers in a pattern. **(1*, 2*,3*,4*)** **(This standard will be taught in TOPIC # 2, 4 & 5.)**		

decomposed into two equal addends.	**(This standard was taught in OTHER TOPICS BUT MUST BE REVIEWED EVERY NINE WEEKS.)**		
DOMAIN: Numbers and Operations in Base Ten (NBT)			
3.NBT.2. Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.[4] 4 Range of algorithms may be used	I can identify strategies for adding within 1000. **(1*, 2*, 3*, 4*)** I can identify strategies for subtracting within 1000. (**1*, 2*, 3*, 4*)** I can fluently add within 1000. **(1*,2, 3, 4*)** I can fluently subtract within 1000. **(1*,2, 3, 4*)** **(This standard will be taught in TOPIC # 1, 2, & 3.)** **(This standard was taught in OTHER TOPICS BUT MUST BE REVIEWED EVERY NINE WEEKS.)**		

3RD GRADE MATH-COMMON CORE
PACING GUIDE 4TH 9 WEEKS
2013-2014

Standard	I Can Statements	Date Taught	Assessment
DOMAIN: Measurement and Data (MD)	*** Indicates which 9 weeks the standard will be tested.**		
3.MD.2. Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).[6] Add, subtract, multiply, or divide to solve one-step word problems involving masses or volumes that are given in the same units, e.g., by using drawings (such as a beaker with a measurement scale) to represent the problem.[7]	I can explain how to measure liquid volume in liters. **(4*)** I can explain how to measure mass in grams and kilograms. **(4*)** I can add, subtract, multiply and divide units of liters, grams, and kilograms. **(4*)** I can use strategies to represent a word problem involving liquid volume or mass. **(4*)** I can solve one step word problems involving masses given in the same units. **(4*)** I can solve one step word problems involving volume given in the same units (eg. by using cups, pints, quarts, and gallons). **(4*)** I can measure liquid volumes using liters. **(4*)** I can measure mass of objects using grams (g) and kilograms (kg). **(4*)** **(This standard will be taught in TOPIC 15.)**		
3.MD.3. Draw a scaled picture graph and a scaled bar graph to represent a data set with several categories. Solve one- and two-step "how many more" and "how many less" problems using information presented in scaled bar graphs. *For example, draw a bar graph in which each square in the bar graph might represent 5 pets.*[5] **Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.[6] Excludes compound units such as cm3 and finding geometric volume of a container.** **[7] Excludes multiplicative comparison problems (problems involving notions**	I can identify and explain the scale of a graph. **(4*)** I can interpret a bar/picture graph to determine "how many more" and "how many less". **(4*)** I can analyze a graph with a scale greater than one. **(4*)** I can choose a proper scale for a bar graph or picture graph. **(4*)** I can create a scaled picture graph to show data. **(4*)** I can create a scaled bar graph to show data. **(4*)** **(This standard will be taught in TOPIC 16.)**		

of "times as much," see Glossary, Table 2)			
3.MD.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.	I can define horizontal axis. **(4*)** I can identify each plot on the line as data or a number of objects. **(4*)** I can determine appropriate unit of measurement. **(4*)** I can determine appropriate scale for line plot. **(4*)** I can measure and record lengths using rulers marked with halves and fourths of an inch. **(4*)** I can create a line plot where the horizontal scale is marked off in appropriate units-whole numbers, halves, and quarters. **(4*)** **(This standard will be taught in TOPIC 16.)**		
DOMAIN: Operations and Algebraic Thinking (OA)			
3.OA.7. Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 × 5 = 40, one knows 40 ÷ 5 = 8) or properties of operations. By the end of grade 3, know from memory all products of two one-digit numbers	I can memorize all products within 100. **(1*,2*,3*,4*)** I can use strategies to solve multiplication problems. **(1*,2*,3*,4*)** I can use strategies to solve division problems. **(1*,2*,3*,4*)** (By the end of Grade 3, know from memory all products of one-digit numbers.) **(This standard was taught in OTHER TOPICS, BUT MUST BE REVIEWED EVERY NINE WEEKS.)**		
3.OA.8. Solve two-step word problems using the four operations. Represent these problems using equations with a letter standing for the unknown quantity. Assess the reasonableness of answers using mental computation and estimation strategies including rounding.[3]	I can identify the order of operations of a problem. **(1*,2*,3*,4*)** I can identify different strategies for estimating. **(1*,2*,3*,4*)** I can construct an equation with a letter standing for the unknown quality. **(1*,2*,3*,4*)** I can solve two-step word problems using the four operations. **(1*,2*,3*,4*)** I can justify my answer using estimation strategies and mental computation. **(1*,2*,3*,4*)** **(This standard was taught in OTHER TOPICS, BUT**		

3.OA.9. Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. *For example, observe that 4 times a number is always even, and explain why 4 times a number can be decomposed into two equal addends.*	**MUST BE REVIEWED EVERY NINE WEEKS.)** I can identify patterns. **(1*, 2*,3*,4*)** I can explain rules for a pattern using properties of operations. **(1*, 2*,3*,4*)** I can explain relationships between the numbers in a pattern. **(1*, 2*,3*,4*)** **This standard was taught in OTHER TOPICS, BUT MUST BE REVIEWED EVERY NINE WEEKS.)**		
DOMAIN: Numbers and Operations in Base Ten (NBT)			
3.NBT.2. Fluently add and subtract within 1,000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.[4] 4 Range of algorithms may be used	I can identify strategies for adding within 1000. **(1*, 2*, 3*, 4*)** I can identify strategies for subtracting within 1000. (**1*, 2*, 3*, 4*)** I can fluently add within 1000. **(1*,2, 3, 4*)** I can fluently subtract within 1000. **(1*,2, 3, 4*)** **This standard was taught in OTHER TOPICS, BUT MUST BE REVIEWED EVERY NINE WEEKS.)**		