Math Competencies- Grade 3		
Lin-Wood Proficiencies (COMPETENCY)	**I Can Statements**	**Standards**
Numbers & Operations in Base 10 Students will demonstrate an understanding of adding and subtracting using various techniques to add three or more two- or three-digit numbers up to 1,000, and using various techniques to subtract two- and three-digit numbers with the whole less than 1,000.	1. I can round whole numbers to the nearest 10 or 100. 2. I can use a variety of models, representations, and strategies to fluently add and subtract within 1000.	3.NBT.A.1 3.NBT.A.2
Numbers & Operations in Base 10 AND Operations & Algebraic Thinking Students will demonstrate an understanding of and fluency in facts with multiplication and division within 100 using a variety of strategies, arithmetic properties, equal groups, arrays, and measurement quantities.	1. I can multiply multiples of ten up to 90 by a single digit whole number using strategies based on place value and properties of operations. 2. I can give a situation to represent a given multiplication expression; identifying the number of groups, the number of items in each group, and then the total number of items. 3. I can give a situation to represent a given division expression; identifying the total, the number of equal groups being partitioned into, and then the number of items in each group. 4. I can give a situation to represent a given division expression; identifying the total, the number of items to be in each group, and then the number of groups created. 5. I can solve multiplication and division (within 100) word problems involving equal groups, arrays, and measurement quantities. 6. I can determine the missing value in given multiplication and division equations. 7. I can describe the Commutative Property of Multiplication, the Associative Property of Multiplication, and the Distributive Property. 8. I can use properties of operations as a strategy when solving multiplication and division problems. 9. I can understand the relationship between multiplication and division.	3.NBT.A.3 3.OA.A.1 3.OA.A.2 3.OA.A.3 3.OA.A.4 3.OA.B.5 3.OA.B.6 3.OA.C.7 3.MD.C.7.C

	10. I can multiply and divide (within 100) fluently using a variety of strategies. 11. I can, with automaticity, know all products of two one-digit numbers. 12. I can use the area model as a strategy for the distributive property.	
Operations & Algebraic Thinking AND Measurement & Data Students will demonstrate an understanding of the arithmetic operations by solving one- and two-step word problems, estimating the reasonableness of answers using a variety of strategies, and in recognizing and using arithmetic patterns.	1. I can solve two-step word problems that include more than one operation. 2. I can create equations, using a variable, to represent a two-step word problem using any of the four arithmetic operations. 3. I can determine if an answer is reasonable using a variety of strategies such as mental computation and estimation. 4. I can look for and find arithmetic patterns in addition and multiplication tables. 5. I can look for and find arithmetic patterns. 6. I can explain arithmetic patterns using the properties of operations. 7. I can solve numerical and word problems involving perimeter, including finding unknown side lengths. 8. I can solve numerical and word problems involving rectangles with the same area and different perimeters or with the same perimeter and different areas. 9. I can solve numerical and word problems involving rectangles with the same area and different perimeters or with the same perimeter and different areas.	3.OA.D.8 3.OA.D.9 3.MD.D.8
Measurement & Data Students will demonstrate an understanding of the connection between area and multiplication and addition by using addition and multiplication to find the areas of squares and rectangles, using the distributive property to find the total areas of partitioned rectangles, and decomposing irregular shapes into rectangles to find their area.	1. I can understand that area is the amount of space inside a two-dimensional figure. 2. I can understand that the basic unit of measure for area is the square unit. 3. I can understand that a square with a side length of one unit of measure is called a square unit. 4. I can understand that the area is measured in square units. 5. I can find the area of a 2-dimensional figure by determining the number of square units that can cover it without gaps or overlays. 6. I can determine the area of the figure by counting the unit squares within the figure. 7. I can connect the area of a rectangle to the area model used to represent multiplication. 8. I can show how multiplying the side lengths of a rectangle gives the same area of measurement as does tiling it with identical	3.MD.C.5, 3.MD.C.5.A 3.MD.C.5.B 3.MD.C.6 3.MD.C.7 3.MD.C.7.A 3.MD.C.7.B 3.MD.C.7.C 3.MD.C.7.D

	squares. 9. I can solve numerical and word problems involving areas of rectangles, with whole number side lengths, using multiplication. 10. I can use tiling of rectangles with the same width or length to model the distributive property; how the area model represents the distributive property. 11. I can apply the strategy of decomposing a figure made of multiple rectangles. 12. I can calculate the total area of a decomposed figure, using the sum of the areas of each smaller rectangle. 13. I can solve word problems involving finding the area of composite figures made of rectangles.	
Number & Operations-Fractions Students will demonstrate an understanding of fractions as numbers by reading, writing, and comparing fractions, identifying how fractions relate to the whole, representing fractions of a whole and greater than one on a number line, partitioning shapes into equal parts and naming them using a unit fraction of the whole.	1. I can understand that a unit fraction is one part out of all the equal parts of a whole. 2. I can understand that a fraction is made up of that number (the numerator) of unit parts. 3. I can understand that a fraction is a number representing one point on a number line. 4. I can recognize that a point on a number line represents the distance between zero and itself. 5. I can place a fraction appropriately on a number line. 6. I can understand that the distance between one and zero on a number line can be partitioned into equal parts. 7. I can recognize that one of the equal parts of the whole is a unit fraction and is written as 1/b. 8. I can understand that a unit fraction represents its distance from zero on the number line. 9. I can place a fraction appropriately on a number line using its unit fraction as a strategy. 10. I can understand that a fraction represents its distance from zero on the number line. 11. I can explain why fractions are equal using models, representations, or strategies. 12. I can compare fractions by reasoning about their size using models, representations, or strategies. 13. I can understand that two fractions are equal if they name the same quantity or point on a number line. 14. I can recognize and create simple equivalent fractions. 15. I can explain why fractions are equal using visual models or other representations or strategies. 16. I can represent whole numbers in fraction form by placing it over 1. 17. I can understand that when the numerator and the denominator are the same, the value of the number is one whole.	3.NF.A.1 3.NF.A.2 3.NF.A.2.A 3.NF.A.2.B 3.NF.A.3 3.NF.A.3.A 3.NF.A.3.B 3.NF.A.3.C 3.NF.A.3.D 3.G.A.2 3.G.A.2

	18. I can compare two fractions with either the same numerator or the same denominator by reasoning about their size using models, representations, or strategies. 19. I can understand that fraction comparisons need to refer to the same whole. 20. I can write fraction comparisons using the symbols <, =, > , and support answers using visual models. 21. I can partition a given shape into parts with equal areas. 22. I can describe the fractional area of each part as a unit fraction of the whole shape.	
Measurement & Data Students will demonstrate an understanding of time, capacity, and mass by writing time to the nearest minute and identifying how much time has passed, estimating and measuring the liquid volume of a container, and estimating and measuring the mass of any object.	1. I can tell and write time to the nearest minute using digital and analogue clocks. 2. I can measure periods of time in minutes. 3. I can use number lines or other strategies to solve word problems involving adding and subtracting time in minutes. 4. I can estimate and measure the mass of objects using grams and kilograms. 5. I can estimate and measure liquids using liters. 6. I can solve one-step word problems involving mass or volume given in the same units using a variety of strategies.	3.MD.A.1 3.MD.A.2
Measurement & Data Students will demonstrate an understanding of representing and interpreting data by drawing scaled pictographs and bar graphs, solving one- and two-step word problems using information represented in a bar graph, and gathering measurement data using whole numbers, quarters and halves, and recording on line plots.	1. I can draw a scaled picture graph to represent a data set with different categories. 2. I can draw a scaled bar graph to represent a data set with different categories. 3. I can solve one- and two-step " how many more or less" problems using information from scaled bar graphs. 4. I can gather data by measuring objects to the nearest half and quarter-inch using a ruler. 5. I can make a line plot, using whole numbers, quarters, or halves, to display the data of the objects measured.	3.MD.B.3 3.MD.B.4
Geometry Students will demonstrate an understanding of quadrilaterals by identifying and defining the attributes of quadrilaterals , and classifying a quadrilateral as square, rectangle, rhombus, or parallelogram.	1. I can describe, analyze, and compare properties of two-dimensional shapes. 2. I can recognize a quadrilateral as a rhombus, rectangle, square, or none of those. 3. I can draw a quadrilateral that is not a rhombus, square, or rectangle.	3.G.A.1