Third Grade Saxon Math Curriculum Guide

	Sections and Lessons	Key Standards Addressed in Section	Approximate Dates
MAP September 15–26, 2014	**Section 1: Lessons 1-10** 2-Digit Numbers & Place Value, Elapsed Time, Data Collection & Display, Odd & Even Numbers	3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100. 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. 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.	**September**
	Section 2: Lessons 11-20 Mental Computation, Addition & Subtraction, Parts of a Whole, Geometric Attributes, Polygons	3.OA.9 Identify arithmetic patterns (including patterns in the addition table), and explain them using properties of operations. 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction. 3.MD.1 Solve word problems involving addition and subtraction of time intervals in minutes, e.g., by representing the problem on a number line diagram. 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. 3.G.2 Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	**Late September**

Third Grade Saxon Math Curriculum Guide (Page 2)		**Key Standards Addressed in Section**	**Approximate Dates**
Extended Response I November 12–19, 2014	**Section 3: Lessons 21-30** Writing Fractions, Number Patterns, Thermometers	3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. 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.	**Early October**
	Section 4: Lessons 31-40 Measuring Length with Centimeters, Collecting Data, Bar Graphs, Story Problems, Number Sentences	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. 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. 3.OA.9 Identify arithmetic patterns (including patterns in the addition table), and explain them using properties of operations. 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.	**Late October**

Third Grade Saxon Math Curriculum Guide (Page 3)		Key Standards Addressed in Section	Approximate Dates
MAP January12–26, 2015	**Section 5: Lessons 41-50** Multiplication as Repeated Addition, Perimeter, Formula for Perimeter, Types of Triangles, Sum of 2-Digit Numbers, Multiply by 10, Mental Computation	3.AO.1 Interpret products of whole numbers, e.g., interpret 5 x 7 as the total number of objects in 5 groups of 7 objects each. 3.AO.3 Use multiplication within 100 to solve word problems in situations involving equal groups and arrays, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 3.AO.5 Apply properties of operations as strategies to multiply. (Commutative and Associative) 3.AO.7 Fluently multiply within 100, using strategies or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. 3.AO.9 Identify arithmetic patterns (including patterns in the multiplication table), and explain them using properties of operations. 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.	**Nov**
	Section 6: Lessons 51-60 Multiplication with Equal Groups, Dividing with Equal Groups, Measure to Half Inch, Draw Pictures for Multiplication & Division	3.AO.1 Interpret products of whole numbers, e.g., interpret 5 x 7 as the total number of objects in 5 groups of 7 objects each. 3.AO.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. 3.AO.3 Use multiplication within 100 to solve word problems in situations involving equal groups and arrays, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem. 3.AO.5 Apply properties of operations as strategies to multiply. (Commutative and Associative) 3.AO.7 Fluently multiply within 100, using strategies or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers. 3.AO.9 Identify arithmetic patterns (including patterns in the multiplication table), and explain them using properties of operations.	**Dec**
End of Trimester 1: December 3, 2014			

Third Grade Saxon Math Curriculum Guide (Page 4)		Key Standards Addressed in Section	Approximate Dates
Extended Response II March 2–13, 2015	**Section 7: Lessons 61-70** Fractions as Part of a Set, Numerator & Denominator, Square Numbers, Symbols to Represent Missing Numbers, Number Sentences	3.NF.3 Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size. 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 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. 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.	**Jan**
	Section 8: Lessons 71-80 Add & Subtract Fractions Using Models, Money as Fractions & Decimals, Using Data to Make Predictions	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. 3.NF.2 Understand a fraction as a number on the number line; represent fractions on a number line diagram. 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.	**Feb**

Third Grade Saxon Math Curriculum Guide (Page 5)		Key Standards Addressed in Section	Approximate Dates
Extended Response II March 2–13, 2015	**Section 9 Lessons 81-90** Measure with Feet, Yards, and Meters, Relating Units of Measure, Area of Rectangles, Arrays, Relating Multiplication & Division	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 square units. 3.MD.6 Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units). 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 x b and a x 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.	**Early March**
	End of Trimester 2: March 17, 2015		
	Section 10: Lessons 91-100 Fractions, Geometric Shapes, Angles of Geometric Figures, Quadrilaterals, Trapezoids, Rectangles	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.	**Late March**
Common Core Geometry Mini-Unit		**Time Frame:** 1 week (March)	

Third Grade Saxon Math Curriculum Guide (Page 6)		Key Standards Addressed in Section	Approximate Dates
MAP May 20–June 8, 2015	**Section 11: Lessons 101-110** Periods of a Number, Place Value, Multiplication & Division Fact Families, Number Sentences, Symbols Represent Missing Addends	3.NBT.1 Use place value understanding to round whole numbers to the nearest 10 or 100. 3.AO.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. 3.AO.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. 3.AO.4 Determine the unknown whole number in a multiplication or division equation relating three whole numbers. 3.AO.5 Apply properties of operations as strategies to multiply and divide. (Distributive) 3.AO.6 Understand division as an unknown-factor problem. 3.AO.7 Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division, or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	**April**
	Section 12: Lessons 111-120 Measure Length Using Millimeters, Types of Triangles, Angles, Missing Numbers in a Pattern, Function Rules	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. 3.NBT.3 Multiply one-digit whole numbers by multiples of 10 in the range 10–90 (e.g., 9 x 80, 5 x 60) using strategies based on place value and properties of operations.	**Early May**

Third Grade Saxon Math Curriculum Guide (Page 7)		Key Standards Addressed in Section	Approximate Dates
Getting Ready for Fourth Grade	**Section 13: Lessons 121-130** Divide 2-Digit Numbers, Measure Using Miles & Kilometers, Map Scales, Unit Costs with Division	3.AO.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. 3.AO.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. 3.AO.5 Apply properties of operations as strategies to multiply and divide. (Distributive)	**Late May**
	Section 14: Lessons 131-135 Lessons A-F Division with Remainders, Fractions & Decimals, Pictures to Represent Fractions & Decimals, Mental Math and Estimation, Problem Solving Strategies	3.AO.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.MD.2 Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (l).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.	**June**
End of Trimester 3: June 18, 2015			