COMMON CORE

Teacher's Manual

Nancy

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Correlation to the Common Core State Standards

Saxon Math 3 © 2012 Grade 3

Revised April 2012

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SAXON MATH 3



Domain	Standard	Text of Objective	Saxon Math 3 Citations	Description
Standards for Mathematical Practice	1.	Make sense of problems and persevere in solving them.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept : Lessons 11, 22, 35-2, 66, 133 Problem-Solving Strategies: Lessons 10-1, 20-1, 30-1, 40-1, 50-1, 60-1, 70-1, 80-1, 90-1, 100-1, 110-1, 120-1, 130-1 MAINTENANCE: The Meeting (Problem of the Day): Lessons 1, 2, 10-2, 12, 19, 20-1, 30-1, 36, 40-2, 53, 62, 74, 84, 101, 119 Written Practice: Lessons 2, 3, 4	Problem solving is integrated into the <i>Saxon Math</i> program every day. Focusing on a four-step problem solving process, which guides students to understand, plan, solve and check, <i>Saxon Math</i> teaches students a consistent process for evaluating different problem solving situations and persevering in solving them. The four steps closely mirror the different aspects of this Standard for Mathematical Practice, encouraging students to understand the problem and make a plan before solving. Students also end by checking their solutions, providing opportunities to ask, "Does this make sense?" and re-direct if necessary. In <i>Math 3</i> , problem solving occurs in many different portions of the lessons. The daily Math Meeting offers discussion and communication on problem solving every day, with many of the problems focus on numbers, patterns, and sorting/classifying. This prepares children for solving more complex problems as they move up the grade levels. The Teacher's Manuals also support teachers as they guide students through the four-step problem solving process during the instructional portion of the lesson. For example, lesson 110-1 provides a modeled dialogue that highlights the understand, plan, solve and check process. This prepares students for a Performance Task where they apply their learning independently.

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Standards for Mathematical Practice	2.	Reason abstractly and quantitatively.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept: Lessons 11, 22, 24, 35-2, 42, 47, 56, 57, 66, 80-2, 86, 88, 101, 105-2, 107, 108, 117, 125-1, 133, E MAINTENANCE: The Meeting (Today's Pattern): Lessons 1, 2, 6, 8, 14, 26, 30-2, 35-1, 42, 48, 61, 64, 90-1, 92, 100-2, 120-1, 124 Guided Class Practice Worksheet: 12 (entire page), 15 (entire page), 24 (entire page), 29 (entire page), 32 (entire page), 37 (entire page), 45 (entire page), 52 (entire page), 56 (entire page), 68 (entire page), 101 (entire page), 114 (entire page), 89 (entire page), 101 (entire page), 114 (entire page), 121 (entire page), 126 (entire page) Math Center Activities Booklet: p 15 Activity 28 (Lesson 36); p 16 Activity 37 (Lesson 47); p 17 Activity 39 (Lesson 50-2); p 21 Activity 68 (Lesson 80-2); p 23 Activity 79 (Lesson 90-2) Test-Taking Strategies Practice Masters: 2 (23A/B); 5 (38A/B); 7 (49A/B); 9 (58A/B); 14 (81A/B); 19 (108A/B)	The goal of <i>Saxon Math</i> is to produce mathematically proficient students – including fluency with computational and conceptual understanding. In <i>Math 3</i> , during the daily lesson, new concepts are often introduced concretely with manipulatives or by acting out scenarios. This allows students to build a solid conceptual understanding so that they are able to solve complex and multi-step problems. By introducing concepts concretely, students better understand what numbers, patterns and operations mean. This understanding allows them to think flexibly in problem solving situations and builds the foundation for the ability to contextualize and decontextualize. For example, the New Concept portion of lesson 56 begins by engaging students in an activity where they act out equal group stories. The students then move on to the pictorial stage, drawing pictures to represent the situations they are acting out. Finally, the class moves to the abstract stage, writing an equation to represent the equal group stories. By the time symbols are used, students have a solid understanding of what they mean so that they can use that understanding to contextualize and decontextualize in problem solving situations.

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Standards for Mathematical Practice	3.	Construct viable arguments and critique the reasoning of others.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept: Lessons 12, 29, 37, 40-2, 45-2, 73, 76, 82, 118 MAINTENANCE: The Meeting (Today's Pattern): Lessons 42, 47, 48, 61, 70-2 The Meeting (Number of the Day): Lessons 1, 2, 3 Guided Class Practice Worksheet: 32 (item 4), 43 (item 1), 56 (item 6), 72 (item 6), 85 (item 4), 92 (item 6), 94 (item 3), 95 (item 5), 96 (item 5), 97 (item 5), 101 (item 6) Performance Task Worksheet: 10B, 20B, 30B, 40B, 50B, 60B, 70B, 80B, 90B, 100B, 110B, 120B, 130B Math Center Activities Booklet: p 21 Activity 69 (Lesson 82) Test-Taking Strategies Practice Masters: 2 (25A/B); 3 (30A/B) Journal Writing: Overview 8, JW76; Overview 10, JW92	Saxon Math is based on the belief that people learn by doing. Students learn mathematics not only by watching or listening to others, but by communicating and solving the problems themselves. Saxon Math's incremental and distributed structure enables students to view the big picture of mathematics and therefore make viable arguments between and among all of the math strands. In Math 3, the daily Math Meeting offers a forum for students to participate at their own levels and offer viable arguments on key topics. The Teacher Materials also provide modeled dialogues to help students demonstrate their understanding verbally. During the daily lessons, the New Concept instruction allows for student interaction between peers with open ended questions after a concept is taught. Additionally, Mathematical Practices discussion questions in the Section Overviews provide additional opportunities for students to explain their reasoning, critique the reasoning of others and solidify their learning. One example of this standard is found in the New Concept portion of lesson 45-2. Students interact with each other to estimate and find the capacity of a variety of containers. As a class, they construct viable arguments about their predictions, and the Teacher's Manual guides teachers to prompt students to justify their thinking and critique the reasoning of others in a supportive setting.

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Standards for Mathematical Practice	4.	Model with mathematics.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept: Lessons 2, 11, 13, 22, 23, 24, 35-2, 37, 40-2, 45-2, 49, 52, 53, 55-2, 56, 57, 59, 63, 65-2, 66, 76, 79, 80-2, 86, 87, 88, 91, 92, 102, 107, 108, 116, 121, 124, 125-1, 135, A, B MAINTENANCE: The Meeting (Problem of the Day): Lessons 12, 15-1, 22, 24, 28, 36, 49, 51, 55-1, 63, 71, 79, 85-1, 94, 101, 107, 115-2, 122 Lesson Worksheet: 13, 35-2, 49, 52, 53, 79, 86, 88, 91, 102, 107, 108, 121, 125-1 Guided Class Practice Worksheet: 11 (2), 16 (1, 4), 22 (1, 5), 31 (1, 4), 43 (3, 4), 49 (2, 4), 51 (1-4), 54 (2, 4, 5), 59 (2, 4, 5), 63 (2, 3, 5), 74 (2, 3), 87 (1-3), 94 (1-5), 105 (3, 5), 112 (2, 6), 119 (1-4), 125 (1-3, 5) Math Center Activities: p 10 Activity 2 (Lesson 2); p 16 Activity 37 (Lesson 47)	Students use many different types of models throughout <i>Saxon Math</i> to analyze mathematical relationships and solve problems. Models serve as visual aids to help make sense of situations so students truly understand the problem at hand, and both how and why their solutions work. For example, in the New Concept portion of lesson 2, students learn that using a model like a bar graph can help them organize and interpret information. The class works together to graph student birthdays and use the graph to make observations and analyze the results.

Domain	Standard	Text of Objective	Saxon Math 3 Citations	Description
Standards for Mathematical Practice	5.	Use appropriate tools strategically.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept: Lessons 1, 7, 30-2, 32, 40-2, 45-2, 46, 49, 60-2, 65-2, 83, 85-2, 95-2, 127, E Problem-Solving Strategies: Lessons 50-1, 80-1 MAINTENANCE: Lesson Worksheet: 7, 30-2, 32, 49, 60-2A/B, 65-2, 88, 99, 127 Math Center Activities: p 14 Activity 21 (Lesson 30-22); p 22 Activity 73 (Lesson 86-2) Test-Taking Strategies Practice Masters: 8 (51A/B); CRA (17); 10 (63A/B); 19 (110A/B); 21 (120A/); CRC (23, 24)	Saxon Math provides and supports grade level appropriate tools for instruction and problem solving. This begins with concrete models at the primary levels and moves to more sophisticated tools like geometry software at the secondary levels. Saxon offers instruction and guidance for appropriate usage throughout the program. In <i>Math 3</i> , the daily Math Meeting models concepts with objects and manipulatives. Other tools such as a Hundreds Chart, a calendar, clock, and a thermometer are modeled visually every day during the Math Meeting. Students also use manipulatives during the New Concepts and practice when concepts are introduced and instructed. For example, in lesson 60-2 students consider what tools they would use to measure ingredients in a recipe. They explore when they would use different types of measuring cups and spoons depending on the ingredient and how the different capacities relate to one another.

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Standards for Mathematical Practice	6.	Attend to precision.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept: Lessons 29, 30-2, 32, 45-2, 46, 49, 54, 55-2, 60-2, 65-2, 71, 78, 83, 85-2, 88, 99, 114, 118, 127, 130-1, 133 MAINTENANCE: The Meeting (Temperature): Lessons 47, 50-2, 72, 75-1, 84, 94 The Meeting (Time): Lessons 72, 83, 88, 94 Lesson Worksheet: 29, 30-2, 32, 49, 55-2, 60-2B, 65-2, 67, 70-2, 83, 88, 99, 119, 127 Guided Class Practice Worksheet: 6 (2, 3), 8 (1–3), 14 (2), 18 (2–4), 29 (3), 52 (2, 5, 6), 61 (2, 4), 63 (3–5), 66 (3, 4), 67 (2, 3, 5), 68 (3, 6), 74 (2, 3), 75 (2, 3, 5), 83 (2), 84 (2–5), 95 (2, 4), 96 (2, 4, 5), 108 (5), 114 (2), 115 (2, 3), 118 (1), 127 (3–5) Math Center Activities: p 14 Activity 24 (Lesson 32); p 16 Activity 35 (Lesson 45-2); p 17 Activity 44 (Lesson 55-2); p 22 Activity 73 (Lesson 85-2); p 23 Activity 84 (Lesson 95-2)	There are many aspects of <i>Saxon Math</i> that naturally support attention to precision in mathematics. Because <i>Saxon Math</i> teaches concepts incrementally, distributed across the year, students learn to carefully consider units since concepts are integrated rather than taught in isolation. Additionally, carefully modeled dialogues in the Teacher's Manual ensure that children are exposed to consistent and accurate vocabulary and definitions, allowing them to communicate precisely. For example, lesson 45-2 teaches students how to precisely identify different measures of capacity and compare them. Teachers clearly explain what this vocabulary means and then guide the students through activities with different containers to demonstrate their meanings.

Domain	Standard	Text of Objective	Saxon Math 3 Citations	Description
Standards for Mathematical Practice	7.	Look for and make use of structure.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept: Lessons 5, 20-2, 22, 38, 41, 43, 51, 64, 85-1, 87, 112, 116, 120-1, 125-1, 126 MAINTENANCE: Lesson Worksheet: 5, 120-1, 125-1 Guided Class Practice Worksheet: 5 (entire page), 18 (entire page), 24 (entire page), 25 (entire page), 42 (1-6), 53 (1-5), 72 (2, 3, 5, 6), 84 (2-5), 87 (2-4), 105 (2, 3, 4, 5), 112 (2, 4, 6), 119 (2, 3), 125 (2, 3, 5) Test-Taking Strategies Practice Masters: 2 (25A/B); 8 (54A/B)	Saxon Math emphasizes structure throughout the program. A strong focus on number properties and patterns prepares students to utilize structure in problem-solving situations. Because the fundamentals of number and operations are highlighted in every lesson through mixed review, students develop a strong sense of mental math and comfort composing and decomposing numbers. In <i>Math 3</i> , the daily Math Meeting provides a consistent structure and routine for students to learn concepts and make connections. This helps children see patterns between numbers, operations, shapes, months, days of the week, measurement and temperature. For example, the Counting Pattern is a consistent element in the Math Meeting that shows patterns with numbers, skip counting, fact families, and beyond. Fact Practice is another integral part of the <i>Saxon Math 3</i> structure. This practice enables students to build off of known facts in order to learn new, more complex ones and to see and understand the connections between them. New Concepts also teach students how to look for and make use of structure. For example, lesson 22 focuses on exploring place value and regrouping by tens and ones. Students learn how to use the structure inherent in our base ten system to solve problems including trading dimes and pennies.

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Standards for Mathematical Practice	8.	Look for and express regularity in repeated reasoning.	This standard is covered throughout the program; the following are examples. INSTRUCTION: New Concept: Lessons 10-1, 14, 24, 37, 45-1, 45- 2, 52, 59, 60-2, 61, 62, 69, 98, 101, 103, 109, 111, 120-2, 124, 131 MAINTENANCE: Lesson Worksheet: 45-1, 60-2B, 61, 111, 120-2 Guided Class Practice Worksheet: 15 (2–4), 21 (2, 3, 5, 7), 25 (2, 5, 6), 31 (3–5), 37 (3, 4), 57 (3, 4), 63 (2, 3, 5, 6), 73 (1, 3–5), 88 (3, 5), 94 (3, 5), 102 (3), 108 (4, 5), 118 (2, 5), 121 (3, 7), 131 (entire page)	Regularity and repeated reasoning are supported throughout the <i>Saxon Math</i> program to ensure students understand their importance and how they can be used to solve problems. Repeated reasoning scenarios allow students to make better sense of number and operations. Daily Meetings and lessons draw out and explain how and why repeated reasoning works. Subsequent practice helps to solidify that understanding. For example, students interact with an evolving bulletin board in the daily Meeting. Each day children build upon the bulletin board a little bit, exposing patterns and making connections. The daily Meeting is an ideal setting for students to look for and express regularity in repeated reasoning because it allows them to apply efficient methods and shortcuts particularly with number concepts, operations, and computational skills. In Grade 3, there is particular emphasis on the relationship between equal groups and multiplication. Students articulate their reasoning and understanding on a variety of concepts including problem solving, facts, number patterns, counting, geometry, temperature, and measurement; this leads them to make generalizations about topics. Also, during the daily lessons, students learn to express regularity in repeated reasoning when learning and practicing New Concepts. For example, in lesson 10-1, students learn about subtracting 0 and 1. The teacher guides them through the process of expressing regularity in repeated reasoning by highlighting what is the same about all of the facts and how those observations can be used to develop shortcuts for solving.

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
l Algebraic Thinking		Represent and solve problems involving multiplication and division.	<i>Math 3</i> provides the critical transition from addition and subtraction to multiplication and division by providing conceptual instruction linked to both computation and problem-solving situations. This begins by building a foundational understanding of partitioning and equal groups in Lesson 37 and Lesson 45-1, which students then use to understand and represent story problems involving multiplication in Lessons 56-57 and division in Lessons 59, 107, and 108. This knowledge is further reinforced in regular problem-solving activities appearing every ten lessons, in which students learn a variety of problem-solving strategies to use as they solve word problems. Students then apply these strategies fluently and independently during the "Problem of the Day" portion of the daily math meeting, with both written and oral assessments to measure students' progress during the year. These resources ensure that all students can represent and solve multiplication and division word problems across a range of different mathematical scenarios.
		Interpret products of whole numbers, e.g., interpret 5 x 7 as the total number of objects in 5 groups of 7 objects each.	INSTRUCTION: New Concept : Lessons 45-1, 47, 55-1, 70-1, 85-1, 87, 95-1, 100-1, 109, 110-1, 115-1, 120-1, 125-1, 135
and			MAINTENANCE:
rations			The Meeting (Problem of the Day): Lessons 58, 62, 63, 66, 72, 77, 80-2, 81, 83, 97, 100-1, 104, 105-1, 111, 113, 117, 118, 129, 132
Ope	1.1		Lesson Worksheet: 87, 125-1, 135
3.0A	3.0/		Guided Class Practice Worksheet: 56 (2), 57 (2), 58 (3), 59 (5), 64 (2), 68 (6), 87 (3), 88 (5), 93 (3), 94 (4), 95 (3), 99 (3), 107 (1, 3), 113 (3), 121 (2), 123 (1)
			Math Center Activities Booklet: p 17 Activity 46 (Lesson 57); p 22 Activity 75 (Lesson 87)
			Math Center Activities Booklet (Learning Palette [®]): p 17 Activity 47 (Lesson 57); p 22 Activity 75 (Lesson 87)
			Test-Taking Strategies Practice Masters: 11 (67A/B), 12 (73A/B), CRB (22), 21 (116A/B)
			Extend & Challenge CD: Activity 5 (Lesson 56)
			LP Enrichment Card (Learning Palette [®]): E17

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id Algebraic Thinking	3.0A.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.	INSTRUCTION: New Concept: Lessons 37, 59, 90-1, 107, 108, 122, 124, 125-1 MAINTENANCE: The Meeting (Problem of the Day): Lessons 107, 108, 109, 115-1, 125-1, 128, 130-2, 133 Lessons Worksheet: 107, 108 Guided Class Practice Worksheet: 37 (2), 38 (3), 41 (2), 107 (3), 108 (1), 109 (1), 111 (5), 112 (2), 113 (3), 115 (4), 118 (4), 121 (2), 133 (1) Math Center Activities Booklet: p 17 Activity 46 (Lesson 57); p 24 Activity 96 (Lesson 108) Test-Taking Strategies Practice Masters: 19 (109A/B), 20 (113B), CRC (9) Journal Writing: Overview 11, JW108; Overview 13, JW124 LP Enrichment Card (Learning Palette [®]): E17
3.0A Operations ar	3.0A.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.]	INSTRUCTION: New Concept: Lessons 56, 57, 63, 87, 88, 107, 108, 121, 125-1, 126 Problem-Solving Strategies: Lesson 80-1 Standards Success Activity: Activity 4, Activity 6 MAINTENANCE: The Meeting (Problem of the Day): Lessons 58, 62, 63, 66, 72, 77, 80-2, 81, 83, 104, 105-1, 107, 108, 109, 111, 112, 115-1, 121, 122, 123, 125-1, 128, 130-2, 133 Lesson Worksheet: 107, 108, 125-1 Problem-Solving Worksheet: 80A

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
		Use multiplication and division within 100 to solve word problems in situations	Performance Task Worksheet: 80B
		involving equal groups, arrays, and	Math Center Activities Booklet: p 17 Activity 46 (Lesson 57); p 24 Activity 96 (Lesson 108)
	nt'd)	measurement quantities, e.g., by using drawings and equations with a symbol for	Test-Taking Strategies Practice Masters: 11 (67A/B), 12 (73A/B), CRB (22), 19 (109A/B), 20 (113A/B), 21 (116A/B)
gn	A.3 (co	the unknown number to represent the problem.	Journal Writing: Overview 9, JW87; Overview 10, JW95-1, Overview 11, JW107 and JW108; Overview 13, JW124
inki	3.0		Extend & Challenge CD: Activity 5 (Lesson 56)
Th			LP Enrichment Card (Learning Palette [®]): E17
gebraic			
Alge		Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	INSTRUCTION:
s and A			New Concept : Lessons 45-1, 55-1, 70-1, 85-1, 90-1, 95-1, 105-1, 109, 100-1, 110-1, 115-1, 120-1, 125-1
tion			Standards Success Activity: Activity 8
pera	.0A.4		MAINTENANCE:
3.0A Op			Class Fact Practice Worksheet : 55, 70, 85, 90, 91, 95, 100, 105, 106, 109, 110, 115, 120, 125, 126, 129
	e		Lesson Worksheet: 45-1, 55-1, 70-1, 85-1, 90-1, 95-1, 100-1, 105-1, 110-1, 115-1, 125-1
			Guided Class Practice Worksheet: 88 (5 6), 103 (4), 105 (6), 108 (1, 4), 109 (1, 7), 111 (1, 6), 117 (1, 6), 119 (6), 135 (4, 5)
			LP Enrichment Card (Learning Palette [®]): E14, E25

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tions and Algebraic Thinking		Understand properties of multiplication and the relationship between multiplication and division.	<i>Saxon Math's</i> incremental and cumulative approach to instruction, practice, and assessment ensures that students learn, practice, and apply concepts dealing with all four operations in an integrated fashion. This begins with solid foundation in number sense as well as addition & subtraction and continues with multiplication and division. In <i>Math 3</i> , students develop an initial understanding of the relationship between multiplication and division in Lesson 59. They continue on to learn the basic properties of multiplication and division and have multiple opportunities to apply this knowledge throughout the year. This includes the identity, commutative, and associative properties of multiplication, common patterns within multiplication fact families. These properties and patterns are continuously practiced and reviewed as part of the "Number of the Day" portion of the daily math meeting, and both oral and written assessments measure the level of student mastery.
		Apply properties of operations as strategies to multiply and divide. ² \int_{a}^{2} Students need not use formal terms for	INSTRUCTION: New Concept: Lessons 85-1, 87, 105-1, 112, 118, 120-1
3.0A Opera	3.0A.5	these properties.]	MAINTENANCE: The Meeting (Problem of the Day): Lesson 129 Lesson Worksheet: 105-1, 125-1 Guided Class Practice Worksheet: 105 (6), 118 (1–4), 119 (4, 6), 121 (1, 2, 5, 7), 122 (1, 4, 6), 124 (1, 5, 6), 125 (1, 3, 6), 129 (1, 4, 6) Math Center Activities Booklet (Learning Palette [®]): p 27 Activity 110 (Lesson 120-1)

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		Understand division as an unknown-factor	INSTRUCTION:		
			New Concept: Lessons 59, 87, 95-1, 105-1, 110-1, 122		
			Fact Practice: Lessons 91, 92, 93, 94, 95-1, 106, 107, 108, 109, 110-1, 126, 127, 128, 129, 130-1		
			MAINTENANCE:		
	9.A		The Meeting (Today's Pattern): Lessons 126, 129, 131, 134		
	3.0		Class Fact Practice Worksheet: 55, 70, 85, 95, 100, 110, 115, 120		
king			Lesson Worksheet: 105-1, 120-2, 125-1		
braic Thin			Guided Class Practice Worksheet: <i>122 (6), 123 (5), 124 (6), 125 (6), 126 (6), 127 (6), 128 (1, 7), 129 (6), 131 (6)</i>		
			Journal Writing: Overview 9, JW87		
Alge			LP Enrichment Card (Learning Palette [®]): E25		
3.0A Operations and Alg		Multiply and divide within 100.	<i>Math 3</i> provides a gradual introduction of multiplication and division facts to allow a wealth of practice opportunities before moving onto more challenging computation problems. In all lessons connected to basic single-digit multiplication and division facts, students first learn a concrete or conceptual structure rather than immediately jumping to an abstract algorithm. For example, Lesson 45-1 teaches students how to multiply by one and ten using repeated addition, whereas Lessons 55-1 and 59 introduce multiplying and dividing by 7 in the real-world context of days in a week. In addition, rather than overwhelming students by introducing all facts at one time, Saxon gradually exposes students to new facts over time and then provides numerous opportunities for practice and review throughout the year. This is accomplished through the "Fact Practice" portion of the typical daily lesson, which includes an oral or hands-on warm-up and a double-sided fact worksheet to be started in class and completed later in the day or at home. As students become more fluent with different facts, teachers can assess their proficiency using the included fact and written assessments. This varied practice and multiple forms of assessment allow students to develop a deep and flexible understanding of their multiplication and division facts, one that is essential as students reach later lessons involving multiplication and division fact families as well as multi-digit multiplication and division problems.		

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3.0A Operations and Algebraic Thinking	3.0A.7	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that $8 \times 5 = 40$, one knows $40 \div 5$ = 8) or properties of operations. By the end of Grade 3, know from memory all products of two one-digit numbers.	INSTRUCTION: New Concept: Lessons 45-1, 55-1, 59, 63, 56, 57, 70-1, 85-1, 90-1, 95-1, 100-1, 105-1, 107, 108, 110-1, 115-1, 118, 120-1, 120-2, 121, 124, 125-1, 133 MAINTENANCE: The Meeting (Number of the Day): Lessons 122–135 The Meeting (Problem of the Day): Lessons 62, 63, 66, 72, 75-2, 83, 100-1, 104, 105-1, 107, 108, 109, 111, 112, 115-1, 124, 125-1 Class Fact Practice Worksheet: 47, 49, 55-59, 70–74, 85–129 Oral Fact Practice: 57, 59, 72, 74, 87, 89, 97, 99, 102, 104, 112, 114, 117, 119, 122, 124 Lesson Worksheet: 45-1, 55-1, 63, 70-1, 85-1, 87, 88, 90-1, 95-1, 100-1, 105-1, 110-1, 115-1, 120-1, 120-2, 121, 125-1 Guided Class Practice Worksheet: 55 (6), 58 (1), 61 (6), 63 (1, 2, 6), 64 (2, 6), 66 (1, 5), 68 (4-6), 69 (3, 6), 72 (1, 3), 74 (4), 76 (6), 83 (1, 3), 88 (3, 5, 6), 95 (3, 6), 105 (6), 106 (5), 107 (1, 3, 6), 108 (1, 4), 114 (7), 115 (1, 4), 118 (1, 2, 4), 119 (6), 121 (1, 2, 5, 7), 122 (1, 4, 6), 123 (1, 5), 124 (1, 5, 6), 125 (1, 3, 6), 133 (1, 2, 6), 134 (1, 5), 135 (4, 5) Math Center Activities Booklet: p 16 Activity 34 (Lesson 45-1); p 17 Activity 43 (Lesson 55-1); p 17 Activity 46 (Lesson 57); p 20 Activity 89 (Lesson 100-1); p 21 Activity 72 (Lesson 85-1); p 23 Activity 83 (Lesson 100-1); p 24 Activity 96 (Lesson 108); p 25 Activity 97 (Lesson 110-1); p 26 Activity 103 (Lesson 115-1); p 26 Activity 109 (Lesson 120-1) Math Center Activities Booklet (Learning Palette [®]): p 27 Activity 110 (Lesson 120-1) Math Center Activities Booklet (Learning Palette [®]): p 27 Activity 110 (Lesson 120-1) Math Center Activities Booklet (Learning Palette [®]): p

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
: Thinking		Solve problems involving the four operations, and identify and explain patterns in arithmetic.	<i>Math 3</i> provides systematic, explicit instruction in both conceptual skills and problem-solving scenarios connected to the four operations. Because of the program's integrated approach to instruction and gradual build in the difficulty of skills, students have the opportunity to develop a deep picture understanding of mathematics, including each operation and its relationship to others. This begins with a solid foundation in arithmetic, including direct instruction with addition & subtraction facts and patterns before moving onto representing and solving a variety of addition & subtraction word problems. This same type of instructional sequence exists with multiplication & division, again introducing facts and patterns before moving onto real-world problems. At the same time, beginning in Lesson 10-1 and occurring every ten lessons thereafter, students receive direct instruction in how to solve word problems. They learn and apply a variety of strategies to develop their flexibility and independence as problem solvers, and the word problems they encounter cover all four operations. Assessment is embedded in these instructional lessons through the Performance Task Worksheet and appears on future written assessments. This integrated collection of lessons and assessments dealing with addition, subtraction, multiplication, division, and problem solving across each operation ensures that all Saxon students are prepared for the more advanced problem-solving scenarios they will encounter in future grade levels.
3.0A Operations and Algebrai	3.0A.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 [³ This standard is limited to problems posed with whole numbers and having whole-number answera; students should know how to perform operations in the conventional order when there are no parentheses to specify a particular order (Order of Operations).	INSTRUCTION: New Concept: Lessons 5, 11, 31, 35-2, 49, 52, 53, 56, 57, 62, 66, 72, 95-1, 101, 107, 108, 110-1, 125-1, 133, 135, B, E Problem-Solving Strategies: Lessons 20-1, 90-1, 130-1 MAINTENANCE: The Meeting (Problem of the Day): Lessons 20-2, 23, 30-1, 33, 39, 50-2, 54, 70-1, 70-2, 75-2, 80-2, 90-1, 90-2, 105-1, 115-1, 120-1, 122, 124, 125-2, 129 Lesson Worksheet: 35-2, 107, 108, 125-1 Problem-Solving Worksheet: 20A, 90A, 130A Performance Task Worksheet: 20B, 90B, 130B Guided Class Practice Worksheet: 39 (1), 54 (2), 67 (1), 68 (1), 69 (1), 71 (1, 2), 74 (1), 78 (1), 105 (1), 112 (1), 122 (1), 123 (1), 124 (1), 129 (1), 133 (1), 134 (1), 135 (1) Math Center Activities Booklet: p 19 Activity 56 (Lesson 66) Test-Taking Strategies Practice Masters: 9 (58A/B), 12 (75A/B), 16 (93A/B), CRC (10) LP Enrichment Card (Learning Palette [®]): E6

Text of ObjectiveQZ	References in italics indicate foundational.
S00 Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations. INSTRUCTION New Concept 100-1, 101, 100 Problem-Solve S00 VO: VO: MAINTENAL S00 VO: VO: MAINTENAL S00 VO: Problem-Solve MAINTENAL S00 VO: Problem-Solve MAINTENAL S00 VO: VO: VO: Problem-Solve S01 VO: VO: VO: VO: VO: S02 VO: VO: VO: VO: VO: VO: VO: S03 VO: VO	ON: t: Lessons 5, 9, 10-1, 15-1, 20-1, 25-1, 30-1, 31, 35-1, 40-1, 42, 45-1, 55-1, 80-1, 85-1, 05-1, 110-1, 112, 117, 118, 120-1, 120-2, 125-1, 126 ving Strategies: Lesson 80-1 NCE: s Practice Worksheet: 5 (5), 9 (5), 16 (2), 18 (5, 6), 21 (2), 25 (2, 6), 31 (3), 35 (2), 38 41 (4, 7), 44 (2, 6), 46 (6), 47 (3), 52 (4, 5), 56 (6), 105 (6), 118 (2), 119 (3), 121 (3), 6 (2, 5), 135 (3) ving Worksheet: 80A e Task Worksheet: 80B * Activities Booklet (Learning Palette [®]): p 24 Activity 90 (Lesson 101) Strategies Practice Masters: 7 (46A/B), CRA (5), 15 (87A/B) ting: Overview 2, JW20-1 ent Card (Learning Palette [®]): E2

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
tions in Base Ten		Use place value understanding and properties of operations to perform multi-digit arithmetic. [*] [⁴ A range of algorithms may be used.]	In earlier grade levels, <i>Saxon Math</i> builds a solid foundation for place value using the concrete example of pennies, dimes, and dollars. In <i>Math 3</i> , students apply this knowledge to a variety of mathematical scenarios, again using real-world situations to structure their understanding and allow students to progress from the concrete to the abstract while continuously returning to the organizing principles of the base-ten system. Instruction in future lessons builds on this foundation but always includes a focus on conceptual understanding and numerous practice opportunities before jumping to an addition, subtraction, or multiplication algorithm. In Lessons 18 and 19, students learn how to round a number to the nearest 10 first using a thermometer and then using a number line. They apply this skill to estimation in Lessons 31, 52-53, and 62 before being asked to round to the nearest 100 in Lesson 72. In Lesson 31, students work on adding multiples of 10 using the concrete referent of a dime before moving onto adding two-digit numbers in Lesson 76. Saxon's gradual build in the level of difficulty of lessons ensures that students have ample time to practice simpler concepts before more challenging ones are introduced, and cumulative written assessments throughout the year offer valuable progress monitoring for each student. This yearlong integration of lessons dealing with place value and operations ensures a deep level of mathematical understanding.
3.NBT Number and Oper	3.NBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100.	INSTRUCTION: New Concept: Lessons 18, 19, 31, 52, 53, 62, 72, D Problem-Solving Strategies: Lesson 130-1 MAINTENANCE: The Meeting (Problem of the Day): Lessons 59, 61, 65-1, 73, 75-1, 91, 96, 135 Problem-Solving Worksheet: 130A Performance Task Worksheet: 130A Guided Class Practice Worksheet: 18 (2), 19 (2, 3), 21 (3, 4), 23 (2, 5), 25 (4, 5), 31 (5), 33 (3), 35 (5), 36 (6), 38 (2), 57 (4), 59 (1), 61 (1), 62 (5), 65 (1), 73 (1), 75 (1), 78 (4) Math Center Activities Booklet: p 12 Activity 11 (Lesson 19); p 20 Activity 60 (Lesson 72) Math Center Activities Booklet (Learning Palette [®]): p 14 Activity 23 (Lesson 31); p 20 Activity 61 (Lesson 72); p 20 Activity 62 (Lesson 72); p 20 Activity 63 (Lesson 72) Test-Taking Strategies Practice Masters: 4 (35A/B); CRA (10); 12 (74A/B); 13 (80A/B); 14 (83A/B); 15 (90A/B); CRB (9, 14, 19, 23); 17 (96A/B, 100A/B); 18 (101A/B); CRC (14)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
Ten		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.	INSTRUCTION: New Concept: Lessons 14, 31, 33, 35-2, 42, 44, 52, 53, 62, 67, 69, 72, 76, 86, 91, 92, 96, 101, 133, D, E Problem-Solving Strategies: Lessons 50-1, 60-1
			MAINTENANCE: The Meeting (Problem of the Day): Lessons 24, 32, 35-1, 36, 38, 39, 41, 43, 45-1, 47, 49, 50-2, 53, 54, 55-1, 56, 57, 59, 60-1, 61, 64, 65-1, 65-2, 67, 68, 69, 71, 73, 74, 75-1, 76, 78, 79, 84, 85-1, 87, 88, 89, 90-2, 91, 92, 93, 94, 95-1, 96, 98, 99, 101, 102, 105-1, 106, 114, 116, 119, 126 Lesson Worksheet: 35-2, 52, 53, 67, 86, 91, 96
Base			Problem-Solving Worksheet: 50A, 60A
ns in			Performance Task Worksheet: 50B, 60B
Number and Operation	3.NBT.2		Guided Class Practice Worksheet: 14 (6), 15 (3, 5), 16 (2, 4, 6), 17 (5, 6), 19 (5, 7), 21 (2, 6, 7), 24 (7), 27 (4, 6), 29 (1, 8), 31 (3, 5, 6), 32 (5), 33 (3, 4, 6), 35 (2, 5, 7), 36 (2, 6), 37 (4, 5), 38 (2, 5), 39 (5, 7), 41 (4, 5), 42 (1, 6, 7), 43 (3, 6), 44 (2, 6), 45 (6), 46 (6), 47 (3, 5), 48 (6), 49 (6), 51 (7), 52 (3, 4), 53 (5, 6), 54 (3, 6), 55 (6), 56 (5), 57 (4, 6), 58 (6), 59 (6), 61 (6), 62 (5, 7), 64 (6), 65 (6), 66 (6), 67 (4, 6), 68 (7), 69 (6, 7), 71 (6), 72 (4), 73 (6), 74 (4–6), 75 (4), 76 (2, 5, 6), 77 (6), 78 (4, 5), 79 (6), 81 (5, 6), 85 (1), 86 (2, 4, 5), 87 (5, 6), 88 (6), 89 (3, 6), 91 (6), 92 (4), 93 (6), 94 (6), 95 (1), 96 (3), 97 (3, 6), 98 (6), 99 (6), 101 (2, 6), 102 (6), 103 (6), 104 (4, 7), 105 (6), 106 (1, 6), 108 (6), 109 (4, 7), 111 (6), 113 (6), 114 (5, 7), 115 (6), 116 (1), 128 (3)
NBT			Math Center Activities Booklet: p 17 Activity 41 (Lesson 53); p 19 Activity 57 (Lesson 67); p 21 Activity 65 (Lesson 76)
3.]			Math Center Activities Booklet (Learning Palette [®]): p 12 Activity 9 (Lesson 14); p 17 Activity 40 (Lesson 53); p 20 Activity 58 (Lesson 67); p 20 Activities 62 and 63 (Lesson 72); p 23 Activity 85 (Lesson 96); p 24 Activity 90 (Lesson 101); p 26 Activity 108 (Lesson 117)
			Test-Taking Strategies Practice Masters: 4 (35A/B); 9 (58A/B); CRA (10); 13 (80A/B); 14 (83A/B); CRB (19); 16 (94A/B); 18 (101A/B); CRC (4)
			Journal Writing: Overview 8, JW76; Overview 10, JW92
			Extend & Challenge CD: Activity 4 (Lesson 42)
			LP Enrichment Card (Learning Palette [®]): E8, E12

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
3.NBT Number and Operations in Base Ten	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.	INSTRUCTION: New Concept: Lessons 45-1, 109, 112, 118 MAINTENANCE: The Meeting (Problem of the Day): Lessons 58, 62, 66, 72, 122 Class Fact Practice Worksheet: 47, 49, 58 Lesson Worksheet: 45-1A/B Guided Class Practice Worksheet: 46 (6), 47 (3), 52 (3), 58 (1), 62 (1), 69 (6), 71 (2), 77 (1), 109 (7), 122 (6), 123 (5) Math Center Activities Booklet: p 16 Activity 34 (Lesson 45-1)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
ctions ⁵		Develop understanding of fractions as numbers. [⁵ Grade 3 expectations in this domain are limited to fractions with denominators 2, 3, 4, 6, and 8.]	A deep understanding of fractions is an essential gateway to higher mathematics, and <i>Math 3</i> provides numerous opportunities to develop this level of mastery. Just like other Grade 3 standards, Saxon begins by building a solid foundation using concrete representations by asking students to divide squares into two and four equal parts in Lesson 12. This expands to include eighths in Lesson 17 and thirds in Lesson 21; these two lessons also ask students to identify and shade one part of the partitioned whole using a visual representation. These lessons build a conceptual understanding of fractional parts ahead of Lesson 24, where students are asked to translate from these visual models to write a fraction in the form a/b. The program gradually builds from there to more advanced concepts with multiple opportunities for practice and review of these previously taught skills and many resources for monitoring student progress, including regular written assessments and math center activities. These lessons allow a student to place fractions on a number line (using a ruler as a concrete representation) and to compare two fractions using pattern blocks and visual models, setting students up for future success in higher grade levels.
3.NF Number and Operations – Fra	3.NF.1	Understand a fraction 1/ <i>b</i> as the quantity formed by 1 part when a whole is partitioned into <i>b</i> equal parts; understand a fraction <i>a</i> / <i>b</i> as the quantity formed by <i>a</i> parts of size 1/ <i>b</i> .	INSTRUCTION: New Concept: Lessons 12, 17, 21, 24, 25-2, 26, 37, 60-2, 61, 73, 74, 93, 94, 98, 111 MAINTENANCE: The Meeting (Problem of the Day): Lessons 35-2, 131 Lesson Worksheet: 25-2, 60-2, 61, 74, 94, 98, 111 Guided Class Practice Worksheet: 12 (2), 15 (2), 17 (2, 3), 18 (3, 4), 21 (5), 22 (5), 23 (3), 24 (2), 25 (3), 26 (4), 27 (5), 28 (3), 29 (7), 31 (4), 32 (6), 35 (6), 36 (3), 37 (2), 38 (4), 39 (4), 54 (4), 61 (3), 62 (4), 63 (5), 65 (2), 66 (3-5), 67 (2), 68 (3, 4), 69 (2), 71 (5), 73 (4), 74 (2, 6), 75 (4), 77 (2, 6), 81 (5), 84 (6), 86 (5), 93 (5), 94 (5), 95 (2, 6), 96 (4), 98 (2), 99 (2), 101 (3, 5), 102 (4), 104 (7), 106 (3, 6), 108 (5), 111 (4), 112 (2), 113 (3), 116 (3, 5), 118 (3), 119 (4, 5), 122 (2, 6), 126 (4), 131 (1, 2) Math Center Activities Booklet: p 18 Activity 50 (Lesson 61); p 25 Activity 100 (Lesson 111) Math Center Activities Booklet: p 18 Activity 50 (Lesson 61); p 25 Activity 100 (Lesson 111) Math Center Activities Booklet (Learning Palette [®]): p 13 Activity 18 (Lesson 24); p 18 Activity 51 (Lesson 61); p 20 Activity 64 (Lesson74); p 25 Activity 101 (Lesson 111) Test-Taking Strategies Practice Masters: 3 (27A/B, 29A/B, 30A/B) CRA (3, 8); 11 (69A/B); 13 (78A/B); CRB (10, 15)
			Journal Writing: Overview 3, JW21; Overview 8, JW74 LP Enrichment Card (Learning Palette [®]): E7

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
Su	3.NF.2	Understand a fraction as a number on the nu	mber line; represent fractions on a number line diagram.
3.NF Number and Operations – Fraction	3.NF.2a	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 <i>b</i> 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.	INSTRUCTION: New Concept: Lessons 54, 99, 119 <u>MAINTENANCE:</u> Lesson Worksheet: 99 Guided Class Practice Worksheet: 54 (4, dateline), 55 (4, dateline), 56 (dateline), 57 (3, dateline), 58 (dateline), 59 (2, dateline), 61 (5, dateline), 62 (dateline), 63 (dateline), 64 (dateline); Name and Date lines on the following Worksheets: 66, 72, 74, 76, 78, 83, 87, 88, 91, 93, 94, 95, 96, 97, 98, 99, 101, 102, 106, 108, 113 Math Center Activities Booklet (Learning Palette [®]): p 17 Activity 42 (Lesson 54); p 23 Activity 87 (Lesson 99) Journal Writing: Overview 10, JW99

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
perations – Fractions	3.NF.2b	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.	INSTRUCTION: New Concept: Lessons 54, 99, 119 MAINTENANCE: Lesson Worksheet: 99 Guided Class Practice Worksheet(Datelines): 103, 104, 105, 107, 109, 111, 112, 113 Math Center Activities Booklet (Learning Palette [®]): p 23 Activity 87 (Lesson 99)
	3.NF.3	Explain equivalence of fractions in specia	l cases, and compare fractions by reasoning about their size.
3.NF Number and O	3.NF.3.a	Understand two fractions as equivalent (equal) if they are the same size, or the same point on a number line.	INSTRUCTION: New Concept: Lessons 74, 94 Standards Success Activity: Activity 2 MAINTENANCE: Lesson Worksheet: 74, 94 Guided Class Practice Worksheet: 77 (2) Test-Taking Strategies Practice Masters: 17 (97A/B); CRC (7) LP Enrichment Card (Learning Palette [®]): E3

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
3.NF Number and Operations – Fractions	3.NF.3.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.	INSTRUCTION: New Concept: Lessons 12, 25-2, 60-2, 74, 94 Standards Success Activity: Activity 2 <u>MAINTENANCE:</u> Lesson Worksheet: 74, 94 Guided Class Practice Worksheet: 68 (3), 77 (2) Math Center Activities Booklet: p 18 Activity 50 (Lesson 61) Test-Taking Strategies Practice Masters: 17 (97A/B); CRC (7) LP Enrichment Card (Learning Palette [®]): E3

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
Operations – Fractions	3.NF.3.c	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	INSTRUCTION:New Concept: Lessons 17, 21, 25-2, 60-2, 61Standards Success Activity: Activity 2MAINTENANCE:The Meeting (Problem of the Day): Lessons 35-2, 45-2, 55-2Lesson Worksheet: 25-2, 61Guided Class Practice Worksheet: 31 (4), 32 (6), 35 (6), 38 (4), 39 (4), 42 (5)Math Center Activities Booklet: p 18 Activity 50 (Lesson 61)Test-Taking Strategies Practice Masters: 20 (111A/B); CRC (16)
3.NF Number and	3.NF.3.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.	INSTRUCTION: New Concept: Lessons 60-2, 73, 74, 93, 94, 111 Standards Success Activity: Activity 5 MAINTENANCE: Lesson Worksheet: 60-2, 74, 94 Guided Class Practice Worksheet: 74 (2), 94 (5), 95 (2), 112 (2), 113 (3), 116 (3), 119 (4), 135 (2) Math Center Activities Booklet (Learning Palette [®]): p 23 Activity 82 (Lesson 94)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
nd Data		Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.	<i>Math 3</i> includes many resources to develop students' skills with measurement across a variety of contexts. The daily Math Meeting asks students to develop a deep foundational understanding of how to tell time, as they are gradually asked to become more and more precise in their answers until they are telling time to the minute. This change in precision coincides with Lesson 71, which provides direct instruction in telling time to the minute. Students continue to practice this until the Math Meeting in Lesson 121; from this point on, they are asked to solve problems involving addition and subtraction of time intervals in minutes. Problems dealing with time appear on written assessments, while the daily math meeting also allows a teacher to gather data on student performance. The program also includes instruction on volume and mass as well as center activities to support these concepts, allowing students to become familiar with the various measures as well as how to measure or estimate each type of situation.
3.MD Measurement a	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.	INSTRUCTION:New Concept: Lessons 65-2, 71MAINTENANCE:The Meeting (Time): Lessons 71–97, 121–135Lesson Worksheet: 65-2Guided Class Practice Worksheet: 71 (4), 73 (5), 75 (2), 76 (4), 78 (3), 84 (3), 85 (2)Math Center Activities Booklet (Learning Palette®): p 23 Activity 86 (Lesson 97)Test-Taking Strategies Practice Masters: 18 (103A/B)Journal Writing: Overview 10, JW97Online Activity: Telling Time (L39)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
3.MD Measurement and Data	3.Md.2	Measure and estimate liquid volumes and masses of objects using standard units of grams (g), kilograms (kg), and liters (1). 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 [⁶ Excludes compound units such as cm3 and finding the geometric volume of a container. [⁷ Excludes multiplicative comparison problems (problems involving notions of "times as much"; see Glossary, Table 2).]	INSTRUCTION: New Concept: Lessons 45-2, 60-2, 95-2 Standards Success Activity: Activity 6 MAINTENANCE: Lesson Worksheet: 60-2 Guided Class Practice Worksheet: 63 (5), 66 (3), 68 (3), 116 (4) Math Center Activities Booklet: p 16 Activity 35 (Lesson 45-2); p 23 Activity 84 (Lesson 95-2)
		Represent and interpret data.	Students in <i>Math 3</i> have a wealth of opportunities to represent data on a variety of graphs and then draw conclusions from these visual representations. This begins with Lesson 2, as the teacher guides students in creating a birthday graph using data from the class and then analyzing the graph to answer questions about the data. This continues with Lesson 40-2, where students create a pictograph, and Lesson 55-2, where students create a mathematically correct bar graph using a scale of 10. The program also provides instruction on measuring lengths to the nearest half or quarter inch and then using that data to create a line plot. Continuous review and practice throughout the year coupled with frequent written assessments and accompanying math center activities ensure that students master these skills and retain them for future grade levels that build to more challenging data analysis concepts.

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
3.MD Measurement and Data	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.	INSTRUCTION: New Concept: Lessons 2, 40-2, 55-2 MAINTENANCE: Lesson Worksheet: 40-2, 55-2 Guided Class Practice Worksheet: 3 (3), 4 (2), 5 (2), 13 (4), 14 (5), 15 (4), 19 (6), 24 (3), 47 (2), 49 (2), 56 (4), 59 (4), 63 (3), 64 (5), 105 (5), 112 (6) Math Center Activities Booklet: p 10 Activity 2 (Lesson 2); p 15 Activity 31 (Lesson 40-2); p 17 Activity 44 (Lesson 55-2) Math Center Activities Booklet (Learning Palette [®]): Activity 45 (Lesson 55-2); p 21 Activities 67 and 68 (L80-2)p 10 Activity 3 (Lesson 2); p 17 Test-Taking Strategies Practice Masters: 4 (32A/B); 6 (42A/B); 7 (50A/B); 8 (52A/B); 9 (60A/B); CRA (19, 25) Journal Writing: Overview 1, JW2; Overview 4, JW40-2 Online Activity: Reading Graphs (L2)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
		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.	INSTRUCTION: New Concept: Lessons 54, 99, A Standards Success Activity: Activity 7
	.Md.4		MAINTENANCE: Lesson Worksheet: 99
nd Data	3		Guided Class Practice Worksheet: 54 (dateline), 55 (3, dateline), 56 (dateline), 59 (dateline), 61 (dateline), 64 (dateline), 65 (3, dateline), 66 (dateline), 67 (dateline), 68 (dateline); Name and Date lines on the following Worksheets: 69, 101, 102, 103, 104, 105
nt an			Math Center Activities Booklet: p 22 Activity 73 (Lesson 85-2)
eme			Journal Writing: Overview 9, JW85-2
3.MD Measure		Geometric measurement: understand concepts of area and relate area to multiplication and to addition.	<i>Math 3</i> builds a solid foundation in working with area to prepare students for more advanced geometry concepts in future grades. This begins with an introduction to area through Lessons 10-2 and 15-2 (using pattern blocks to cover the "area" of a design) and through the "Problem of the Day" in the math meeting for Lessons 35-2, 45-2, and 55-2. Students then learn how to calculate the area of a square in Lesson 63, where they are also introduced to a unit square for use in future lessons. Lesson 88 takes this concept one step further by asking students to use their understanding of area to estimate and find the area of rectangles. Assessment opportunities include the frequent, written assessments as well as accompanying math center activities, allowing students to develop and retain a strong grasp on the concept of area for use in higher grade levels.
	3.MD.5	Recognize area as an attribute of plane figures and u	inderstand concepts of area measurement.

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
		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.	INSTRUCTION: New Concept: Lessons 63, 88
			MAINTENANCE:
			Lesson Worksheet: 63, 88
	D.5a		Guided Class Practice Worksheet: 63 (2), 88 (3), 89 (2), 92 (2), 93 (2), 97 (4)
ta	3.MI		Math Center Activities Booklet: p 18 Activity 52 (Lesson 63); p 22 Activity 76 (Lesson 88)
l Da			Math Center Activities Booklet (Learning Palette [®]): p 23 Activity 78 (Lesson 88)
and			Test-Taking Strategies Practice Masters: 15 (89A/B)
men			Online Activity: Rectangular Area (L88)
sure			
Mea	.5.b	A plane figure which can be covered without gaps	INSTRUCTION:
3.MD N		or overlaps by n unit squares is said to have an area of n square units.	New Concept: Lessons 63, 88
			MAINTENANCE:
			The Meeting (Problem of the Day): Lessons 35-2, 45-2, 55-2
	.MD		Lesson Worksheet: 63, 88
	(m)		Guided Class Practice Worksheet: 39 (4), 42 (5), 63 (2), 88 (3)
			Math Center Activities Booklet: p 18 Activity 52 (Lesson 63); p 22 Activities 76 and 77 (Lesson 88)
			Test-Taking Strategies Practice Masters: 20 (111A/B); CRC (16)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
		Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised	INSTRUCTION:
		units).	New Concept: Lessons 63, 88 Standards Suggess Activity: Activity 4
			Standards Success Activity 4
	9		MAINTENANCE:
	.Md.		The Meeting (Problem of the Day): Lessons 35-2, 45-2, 55-2
	3.		Lesson Worksheet: 63, 88
Data			Guided Class Practice Worksheet: 39 (4), 42 (5), 63 (2), 88 (3)
t and I			Math Center Activities Booklet: p 18 Activity 52 (Lesson 63); p 22 Activity 76 (Lesson 88)
men			Test-Taking Strategies Practice Masters: 15 (89A/B); CRB (12); 20 (111A/B);CRC (16)
sure	7.	Relate area to the operations of multiplication and ac	ldition.
ID Mea	3.MD		
3.N		Find the area of a rectangle with whole-number	INSTRUCTION:
		the same as would be found by multiplying the	New Concept: Lessons 63, 88
	/a	side lengths.	
	1D.7		MAINTENANCE:
	3.N		Lesson Worksheet: 63, 88
			Guided Class Practice Worksheet: 63 (2), 88 (3)
			Math Center Activities Booklet: p 18 Activity 52 (Lesson 63); p 22 Activity 76 (Lesson 88)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
easurement and Data		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.	INSTRUCTION: New Concept: Lessons 63, 81, 88 Standards Success Activity: Activity 4
	3.MD.7b		MAINTENANCE:Lesson Worksheet: 63, 88Guided Class Practice Worksheet: 63 (2), 88 (3), 89 (2), 92 (2), 93 (2), 97 (4), 134 (3)Math Center Activities Booklet: p 18 Activity 52 (Lesson 63); p 22 Activity 77 (Lesson 88)Math Center Activities Booklet (Learning Palette®): p 23 Activity 78 (Lesson 88)Online Activity: Rectangular Area (L88)
3.MD N	3.MD.7c	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 $a \ge b$ and $a \ge c$. Use area models to represent the distributive property in mathematical reasoning.	LP Enrichment Card (Learning Palette [®]): E10 <u>INSTRUCTION:</u> New Concept: Lessons 63, 81, 88, 112 Standards Success Activity: Activity 9

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
rement and Data	3.MD.7d	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.	INSTRUCTION: New Concept: Lessons 63, 88 Standards Success Activity: Activity 4, Activity 9 MAINTENANCE: The Meeting (Problem of the Day): Lessons 35-2, 45-2, 55-2 Guided Class Practice Worksheet: 39 (4), 42 (5) Test-Taking Strategies Practice Masters: 15 (89A/B); CRB (12); 20 (111A/B); CRC (16)
3.MD Meas		Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures.	Just like area, perimeter is a key geometric skill for students to develop before transitioning into higher levels of mathematics, and <i>Math 3</i> provides explicit instruction to build this foundation. Lesson 49 introduces perimeter using a concrete example of the border of a bulletin board: how much should a teacher buy to surround the board? They continue this hands-on exploration in Lesson 50-2, making a variety of shapes using pattern blocks and then calculating the perimeter as well as using pattern blocks to create a shape with a given perimeter. These concepts are then continuously reviewed and assessed on written assessments throughout the year and additional ancillary pieces help ensure long-term mastery.

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
3.MD Measurement and Data	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.	INSTRUCTION: New Concept: Lessons 49, 50-2, 88 Standards Success Activity: Activity 3 <u>MAINTENANCE:</u> The Meeting (Problem of the Day): Lessons 51, 55-1, 115-2 Lesson Worksheet: 49, 50-2, 88 Guided Class Practice Worksheet: 49 (4), 51 (1), 52 (5), 54 (2), 55 (3), 65 (3), 73 (3), 85 (3), 115 (2), 134 (3) Math Center Activities Booklet: p 17 Activity 39 (Lesson 50-2) Math Center Activities Booklet (Learning Palette [®]): p 16 Activity 38 (Lesson 49) Test-Taking Strategies Practice Masters: 8 (54A/B); 9 (58A/B); CRA (12) LP Enrichment Card (Learning Palette [®]): E6

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
itry		Reason with shapes and their attributes.	Students need to have a strong grasp of basic geometric shapes, and in <i>Math 3</i> , this begins right at the beginning of the year. In Lesson 10-2, students are introduced to pattern blocks. While many students may have used pattern blocks before, some may be unfamiliar with specific geometric vocabulary, and this lesson builds that foundation for basic shapes that will be used in future lessons. In Lesson 20-2, students expand their knowledge of geometry from the concrete pattern block to more representational shapes as they learn how to name and draw common polygons, eventually expanding to encompass attributes of triangles and quadrilaterals. At the same time, students use this foundational knowledge to begin partitioning shapes into equal parts in Lessons 17 and 21; they then develop an understanding of how to label parts of a geometric whole in Lesson 36. Saxon's integrated approach to instruction and practice allows all of these skills to be continuously reviewed and mastered before moving to more challenging geometry concepts such as comparing fractions using hands-on and visual models, with regular written assessments to demonstrate mastery of all concepts throughout the year.
3.G Geom	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.	INSTRUCTION: New Concept: Lessons 7, 10-2, 20-2, 32, 43, 100-2, 105-2, 113 Standards Success Activity: Activity 1 MAINTENANCE: Lesson Worksheet: 20-2, 43, 100-2, 113 Guided Class Practice Worksheet: 23 (6), 25 (7), 28 (6), 34 (2), 35 (4), 43 (4), 45 (4), 58 (4), 122 (5) Math Center Activities Booklet: p 12 Activity 14 (Lesson 20-2); p 26 Activity 102 (Lesson 113) Math Folder: (Polygons)

Domain	Standard	Text of Objective	Saxon Math 3 Citations/Examples References in italics indicate foundational.
		Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	INSTRUCTION:
			New Concept : Lessons <i>12</i> , 17, 21, 24, 25-2, 36, 73, 74, 93, 94
			Standards Success Activity: Activity 2
3.G Geometry	3.G.2		MAINTENANCE: The Meeting (Problem of the Day): Lesson 131 Lesson Worksheet: 25-2, 74, 94 Guided Class Practice Worksheet: 12 (2), 15 (2), 17 (2, 3), 18 (3, 4), 21 (5), 22 (5), 23 (3), 24 (2), 25 (3), 27 (5), 29 (7), 31 (4), 32 (6), 36 (3), 63 (5), 66 (4), 68 (3), 71 (5), 94 (5), 95 (2) Math Center Activities Booklet (Learning Palette [®]): p 13 Activity 18 (Lesson 24) Journal Writing: Overview 3, JW21