Correlation to the Common Core State Standards

Saxon Math Intermediate 3

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Grade 3

COMMON CORE

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Revised July 2011

Saxon Math Intermediate 3 ©2012 correlated to the
Common Core State Standards for Mathematics, Grade 3

Domain	Standard	Text of Objective	*Saxon Math Intermediate 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**: Problem Solving Overview, pages 1–6, Lesson 18, pp. 98-99; Lesson 20, pp. 109-110; Lesson 30, pp. 162-163; Lesson 36, pp. 197-199; Lesson 39, pp. 212-213; Lesson 40, pp. 216-218; Lesson 60, pp. 322-323; Lesson 90, pp. 487-488; Lesson 93, pp. 505-506; Lesson 95, pp. 513-514; Lesson 99, pp. 531-532 **Investigation(s):** Investigation 10, pp. 538-539 **MAINTENANCE:** **Problem Solving:** Lessons 23, 53, 78, 85, 94, 98, 108 **Written Practice** Lesson 22 (#2, #3), Lesson 32 (#1), Lesson 41 (#1, #2), 50 (#1, #2, #6); Lesson 67 (#1, #3, #10); Lesson 106 (#8, #7); Lesson 109 (#1, #5)	Problem solving is integrated into the *Saxon Math*™ program every day. Focusing on a four-step problem solving process, which guides students to understand, plan, solve and check, *Saxon Math* 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 *Intermediate 3*, the first page of the Student Edition outlines the four-step problem solving process, emphasizing the importance of making sense of problems and persevering in solving them. Students then go on to use the four-step problem solving process in the Power Up section of every lesson. Additional opportunities occur in the cumulative written practice every day. Lesson reference numbers allow students to go back to the lesson where the concept was instructed to aid them in solving the problem. There are additional Investigations and Performance Tasks for focused activities and applications of complex problems. Many of these are hands-on and explorative in nature. The Teacher's Manual provides support with questioning prompts, math conversations, and checks for understanding.

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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**: Lesson 9, pp. 49-50; Lesson 18 pp. 98-99; Lesson 20, pp. 109-110; Lesson 25, pp. 135-137; Lesson 34, pp. 186-188; Lesson 36, pp. 197-199; Lesson 39, pp. 212-213; Lesson 40, pp. 216-218; Lesson 58, pp. 312-313; Lesson 60, pp. 322-323; Lesson 62, pp. 335-337; Lesson 63, pp. 341-342; Lesson 72, pp. 391-392; Lesson 73, pp. 394-396; Lesson 90, pp. 487-488 **MAINTENANCE:** **Problem Solving:** Lessons 12, 18, 20, 50, 60, 64, 78, 82, 107 **Written Practice:** Lesson 29 (see *Early Finishers*); Lesson 36 (#2, #5, #6); Lesson 44 (#1, #2, #3); Lesson 59 (#4, #5, #8); Lesson 60 (see *Early Finishers*); Lesson 65 (#1, #16, #17) ; Lesson 69 (#1, #5, #18, #19, #20); Lesson 84 (#2, #3, #12); Lesson 94 (#1, #6, #19, #20) **Performance Task(s):** 3, 8	The goal of *Saxon Math* is to produce mathematically proficient students – including fluency with computational and conceptual understanding. The distributed nature of *Saxon Math* lends itself naturally to developing abstract and quantitative reasoning. Because students are exposed to different concepts at the same time through incremental instruction and mixed practice, review, and assessment, they learn the importance of making sense of quantities and their relationships and of carefully considering the units involved. Problems do not focus simply on one concept, but rather may involve multiple concepts just as they would in real-world situations. Therefore, it is essential that students are able to make connections, think about what the quantities actually mean in a specific context, and solve appropriately. In *Intermediate 3*, Performance Tasks allow students to put their skills to work, using abstract and quantitative reasoning to solve real-world problems. The Performance Task on page 9 presents a problem where students consider the cost of different school supplies and the money (both quantity and particular bills and coins) they will need to purchase those items and how much change they will receive in return. The problem requires students to think about the meaning of each type of coin and what quantity they refer to. They then need to use that information to answer various questions that are related, but provide different information about the same situation.

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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**: Lesson 26, pp. 141-144; Lesson 27, pp. 146-149; Lesson 44, pp. 239-241; Lesson 51, pp.278-279; Lesson 67, pp. 362-365; Lesson 68, pp. 369-370; Lesson 102, pp. 546-547; Lesson 104, pp. 554-556 **Investigation(s):** Investigation 8, pp. 436-439 **MAINTENANCE:** **Problem Solving:** Lessons 41, 49, 55, 77, 84, 100 **Written Practice:** Lesson 42 (see *Early Finishers*); Lesson 58 (#10); Lesson 61 (see *Early Finishers*); Lesson 95 (#16) **Performance Task(s):** 9	*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 and with their classmates. *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. Examples can be found in both the way students solve problems and within problems themselves. For example, on page 223 of the *Intermediate 3* Student Edition, students are presented with a sequence of numbers and the following problem: "Ted wrote this sequence in order to help him find the number of feet in 1 yard, 2 yards and 3 yards, and so on. Which number is incorrect in his sequence? Why?" Problems like this explicitly ask students to critique the reasoning of another and explaining their thinking. This goes beyond simply asking students to solve, and ensures they can also explain why an answer is correct or incorrect.

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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**: Lesson 6, pp. 34-35; Lesson 7, pp. 39-41; Lesson 11, pp. 60-62; Lesson 13, pp. 70-73; Lesson 14, pp. 75-77; Lesson 16, pp. 85-89; Lesson 34, pp. 186-188; Lesson 81, pp. 440-442 **Investigation(s):** Investigation 1, pp. 56-28; Investigation 2, pp. 112-113; Investigation 3, pp. 166-168; Investigation 6, pp. 326-327 **MAINTENANCE:** **Problem Solving:** Lessons 7, 17, 28, 47, 51 **Written Practice:** Lesson 21 (#4, #6, #11); Lesson 38 (#2, #7); Lesson 39 (#8, #12, #16); Lesson 40 (#1, #9, #12); Lesson 42 (#2, #6, #17); Lesson 46 (#13); Lesson 60 (#13); Lesson 91 (#6, #7) **Performance Task(s):** 1, 4, 11	Students use many different types of models throughout *Saxon Math* 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, on page 12 of the *Intermediate 3* Performance Tasks book, students use a timeline/number line model to make sense of a situation. By plotting out dates, they see how it is easier to understand sequence and solve problems pertaining to time.

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Standards for Mathematical Practice	**5.**	Use appropriate tools strategically.	**INSTRUCTION:** **New Concept**: Lesson 14, pp. 75-77; Lesson 17, pp. 92-95; Lesson 19, pp. 102-105; Lesson 34, pp. 186-188; Lesson 35, pp. 191-194; Lesson 37, pp. 201-203; Lesson 38, pp. 207-208; Lesson 65, pp. 351-352; Lesson 77, pp. 417-418; Lesson 79, pp. 426-428; Lesson 81, pp. 440-442; Lesson 85, pp. 461-462 **Investigation(s):** Investigation 4, pp. 221-222; Investigation 9, pp. 491-493 **MAINTENANCE:** **Written Practice:** Lesson 3 (see *Early Finishers*); Lesson 5 (see *Early Finishers*); Lesson 11 (see *Early Finishers*); Lesson 17 (#2, #12, #14); Lesson 38 (see *Early Finishers*); Lesson 85 (#1, #7, #8, #18, #20); Lesson 86 (#4, #11, #17) ; Lesson 110 (#18, #19) **Performance Task(s):** 10 **Calculator Activities:** Lessons 16, 19, 60, 73, 101	*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. For example, in Lesson 37, page 202, students must estimate the length of several objects. Based on their estimations, they then strategically choose the appropriate tool – a yardstick or ruler - they should use to measure each item. They also learn how other things, including their own feet, can be used as tools to help with measurement.

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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**: Lesson 3, pp. 17-19; Lesson 4, pp. 22-25; Lesson 5, pp. 29-31; Lesson 20, pp. 109-110; Lesson 34, pp. 186-188; Lesson 35, pp. 191-194; Lesson 37, pp. 201-203; Lesson 38, pp. 207-208; Lesson 52, pp. 283-284; Lesson 74, pp. 399-401; Lesson 79, pp. 426-428; Lesson 80, pp. 431-433; Lesson 84, pp. 456-457; Lesson 87, pp. 471-474; Lesson 109, pp. 578-579 **Investigation(s):** Investigation 4, pp. 221-222 **MAINTENANCE:** **Problem Solving:** Lessons 20, 69, 87, 110 **Written Practice:** Lesson 22 (#3, #18, #20); Lesson 31 (#2, #19, #20); Lesson 41 (#6, #13); Lesson 84 (#4, #6, #11, #18); Lesson 86 (#1, #4, #8, #12); Lesson 88 (#2, #10, #11, #18); Lesson 89 (#4, #5, #6, #11); Lesson 98 (#2, #7, #13) **Performance Task(s):** 10	Saxon students are encouraged to attend to precision throughout the program, both directly in their student materials and indirectly through teacher tips in the Teacher's Edition. Additionally, because practice, review and assessment are mixed, it is especially important that students precisely identify units and symbols to accurately assess how to solve the problem correctly. Not all questions will cover the same concept, so students learn to look carefully at each situation and attend to precision in their answers. For example, in the Performance Tasks book on page 30, students attend to precision as they work through a word problem that involves measurement and multiple units. As they formulate their answers, they must consider which units are appropriate in different situations.

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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**: Lesson 8, pp. 45-46; Lesson 10, pp. 53-54; Lesson 25, pp. 135-137; Lesson 34, pp. 186-188; Lesson 53, pp. 288-289; Lesson 77, pp. 417-418; Lesson 78, pp. 422-423; Lesson 92, pp. 500-502; Lesson 102, pp. 546-547; Lesson 104, 554-556 **MAINTENANCE:** **Problem Solving:** Lessons 11, 24, 46, 56, 58, 86, 95, 102 **Written Practice:** Lesson 10 (#9, #10, #13); Lesson 26 (#8, #16, #19); Lesson 53 (#6, #14, #15); Lesson 78 (#12, #15, #16); Lesson 93 (#8, #9, #17, #18); Lesson 103 (#18, #20) **Performance Task(s):** 4, 5	*Saxon Math* emphasizes structure throughout the program, explicitly teaching number properties, including the communicative, associative and distributive properties. A strong focus on number properties also prepares students to utilize structure in problem-solving situations. Because the fundamentals of numbers and operations are highlighted in every lesson through mixed review, students develop a strong sense of mental math and comfort composing and decomposing numbers. For example, on page 422 of the *Intermediate 3* Student Edition, students learn about multiples of ten and how they can use their understanding of structure to break down numbers and facilitate mental multiplication. Knowing that 30 can be broken down into 3 x 10 makes it easier to calculate 4 x 30. This use of structure is then connected to real-world problems involving money and volume.

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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**: Lesson 15, pp. 80-82; Lesson 43, pp. 234-235; Lesson 44, pp. 239-241; Lesson 46, p. 251, Ex. 3; Lesson 47, pp. 254-257; Lesson 53, pp. 288-289; Lesson 54, pp. 293-294; Lesson 55, pp. 298-300; Lesson 56, pp. 302-304; Lesson 57, pp. 307-308; Lesson 58, pp. 312-313; Lesson 61, pp. 329-331; Lesson 70, p. 379; Lesson 76, pp. 411-413; Lesson 81, pp. 440-442; Lesson 82, pp. 445-447; Lesson 83, pp. 451-452; Lesson 84, pp. 456-457; Lesson 86, pp. 466-468; Lesson 88, pp. 477-479; Lesson 101, pp. 541-453; Lesson 102, pp. 546-547 **MAINTENANCE:** **Power Up:** Lessons 88, 90 **Problem Solving:** Lessons 47, 97, 105	Regularity and repeated reasoning are explicitly identified in the *Saxon Math* program to ensure students understand their importance and how they can be used to solve problems. This includes lessons that clearly present multiplication as repeated addition and division as repeated subtraction. These and other repeated reasoning scenarios allow students to make better sense of number and operations. Lessons draw out and explain how and why repeated reasoning works. Subsequent practice helps to solidify that understanding. For example, on page 541 of the Student Edition, students learn to look at division as repeated subtraction. This understanding of regularity and repeated reasoning allows them to better understand what division means so it can be better applied in problem solving situations.

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3.OA Operations and Algebraic Thinking		**Represent and solve problems involving multiplication and division.**	*Intermediate 3* 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 foundation for multiplication as repeated addition in Lesson 54 and continues with hands-on instruction with division in Lessons 82 and 84. Throughout the year, the program gradually builds an understanding of multiplication and division through facts and strategies as well as problem-solving scenarios. This integrated approach allows students to simultaneously focus on both computational fluency and real-world problem-solving. These lessons allow students to develop an understanding of multiplication as the total number of objects in equal groups and division as the partitioning of objects into equal groups, both in concrete word problems and using abstract reasoning. Lessons 60, 82, and 90 are examples of the direct instruction provided in solving these types of problems. In addition, every day includes a problem-solving activity and discussion as part of the "Power Up" portion of the lesson to reinforce students' ability to apply their mathematical knowledge to real-world problems. All of these skills and strategies are then continuously practiced and reviewed throughout the year and appear on both the Power Up and cumulative tests (given every five lessons) to ensure deep and long-lasting understanding.
	3.OA.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.	**INSTRUCTION:** **New Concept**: Lesson 54, pp. 293-294; Lesson 55, pp. 298-300; Lesson 57, pp. 307-308; Lesson 60, pp. 322-323; Lesson 61, pp. 329-331 **MAINTENANCE:** **Power Up:** Lessons 63, 66, 68, 73, 74, 76, 78, 80, 84, 86, 89, 90, 91, 97, 100, 101 **Problem Solving:** Lesson 55, 62, 75, 94 **Written Practice:** Lesson 54 (#6, #8); Lesson 55 (#2, #6, #7); Lesson 56 (#1, #5, #6); Lesson 57 (#4, #6, #12); Lesson 58 (#3, #5, #6); Lesson 59 (#7, #10, #12); Lesson 60 (#1, #2, #3); Lesson 61 (#4, #6, #13, #17); Lesson 62 (#1, #12, #13, #14); Lesson 63 (#1, #5, #15); Lesson 64 (#1, #8, #12, #17); Lesson 66 (#1, #5, #17); Lesson 67 (#10, #13, #17); Lesson 70 (#1); Lesson 73 (#3, #9, #14, #17); Lesson 75 (#3, #15); Lesson 76 (#1, #8, #14, #15, #17); Lesson 78 (#1); Lesson 79(#1, #3, #12); Lesson 81 (#1); Lesson 84 (#1, #3); Lesson 102 (#11); Lesson 104 (#3) **Learning Stations:** Lesson 54, 57, 59, 60, 61

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3.OA Operations and Algebraic Thinking	**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.	**INSTRUCTION:** **New Concept:** Lesson 82, pp. 445-447; Lesson 85, pp. 461-462; Lesson 86, pp. 466-467; Lesson 88, pp. 477-478; Lesson 90, pp. 487-488; Lesson 101, pp. 541-543 **MAINTENANCE:** **Power Up:** 92, 93 **Problem Solving:** Lesson 93, 94 **Written Practice:** Lesson 82 (#7); Lesson 83 (#3); Lesson 85 (#5, #7, #8); Lesson 86 (#9, #18); Lesson 87 (#2, #12, #17, #18); Lesson 88 (#8, #9, #12, #19); Lesson 89 (#7, #9, #10, #15); Lesson 90 (#9, #14); Lesson 93 (#12, #14); Lesson 94 (#14); Lesson 97 (#5, #12, #18); Lesson 105 (#2, #6, #13, #18); Lesson 108 (#10); Lesson 109 (#14, #16, #18); Lesson 110 (#13, #14, #17) **Learning Stations:** Lesson 82, 85
	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.]	**INSTRUCTION:** **New Concept**: Lesson 60, pp. 322-323; Lesson 76, pp. 411-413; Lesson 79, pp. 426-428; Lesson 80, pp. 432-433; Lesson 82, pp. 446-447; Lesson 83, pp. 451-452; Lesson 85, pp. 461-462; Lesson 87, pp. 472-473; Lesson 89, pp. 482-483; Lesson 90, pp. 487-488; Lesson 95, pp. 513-514; Lesson 97, pp. 521-522; Lesson 99, pp. 531-532; Lesson 100, pp. 535-536 **MAINTENANCE:** **Power Up:** Lesson 83 **Problem Solving:** Lesson 82, 90, 93, 94, 105 **Written Practice:** Lesson 60 (#1, #2, #3); Lesson 61 (#4); Lesson 62 (#1); Lesson 63 (#1); Lesson 64 (#1); Lesson 65 (#6); Lesson 69 (#1); Lesson 73 (#3); Lesson 75 (#3); Lesson 76 (#1, #8, #14); Lesson 77 (#2, #18); Lesson 78 (#1, #10); Lesson 79 (#1, #6, #8, #9); Lesson 82 (#1, #5, #7, #8); Lesson 90 (#6, #8, #14); Lesson 91(#1, #4, #8); Lesson 93 (#7, #12); Lesson 94 (#5, #6); Lesson 100 (#1, #2, #8, #14); Lesson 101 (#1, #2, #12, #15); Lesson 102 (#1, #4, #15); Lesson 103 (#1, #15); Lesson 104 (#1, #8, #15); Lesson 107 (#8, #13, #15) **Learning Stations:** Lesson 60, 90, 100 **Test-Day Activity:** 6

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3.OA Operations and Algebraic Thinking	**3.OA.4**	Determine the unknown whole number in a multiplication or division equation relating three whole numbers.	**INSTRUCTION:** **New Concept**: Lesson 86, pp. 472-473; Lesson 89, pp. 482-483; Lesson 90, pp. 487-488 **MAINTENANCE:** **Power Up:** Lesson 87, 92, 101, 105 **Written Practice:** Lesson 86 (#9, #18); Lesson 87 (#12, #17, #18); Lesson 88 (#12, #19); Lesson 89 (#9, #15, #20); Lesson 91 (#1, #13); Lesson 92 (#15); Lesson 93 (#12, #14); Lesson 94 (#14); Lesson 95 (#17); Lesson 96 (#19); Lesson 97 (#12, #18); Lesson 98 (#6, #12, #14, #20); Lesson 99 (#18); Lesson 100 (#1, #16); Lesson 101 (#1, #8, #20); Lesson 102 (#1, #6, #17); Lesson 103 (#1, #8, #9, #17); Lesson 104 (#1, #9, #17); Lesson 105 (#13, #18); Lesson 106 (#15); Lesson 107 (#8, #15, #20); Lesson 109 (#16); Lesson 110 (#13, #13, #17)
		Understand properties of multiplication and the relationship between multiplication and division.	In *Intermediate 3*, students have multiple opportunities to develop a deep understanding of the properties of multiplication, both from a conceptual and algorithmic standpoint. Students learn how repeated addition can represent multiplication in Lesson 54, and develop an understanding of arrays in Lesson 57. Future lessons continue the development of various patterns and structures for multiplication problems without overwhelming students with extraneous vocabulary. Students will see patterns for multiplying by 0, 1, and 10, and they will learn that the order of factors in a multiplication problem will not affect the product. They will also apply their knowledge of doubling a number to begin learning how to multiply a two-digit number by a one-digit number. This gradual build in the level of difficulty culminates in Lessons 83, 86 and 89, all of which allow students to understand the relationship between multiplication and division through multiplication tables as well as multiplication and division fact families. Just like all lessons in Saxon, these concepts appear multiple times in later practice sets and the frequent, cumulative tests, ensuring long-term retention for future grade levels.

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3.OA Operations and Algebraic Thinking	**3.OA.5**	Apply properties of operations as strategies to multiply and divide.[2] [[2] Students need not use formal terms for these properties.]	**INSTRUCTION:** **New Concept**: Lesson 55, pp. 298-300; Lesson 56, pp. 302-304; Lesson 57, pp. 307-308; Lesson 70, p. 379; Lesson 77, pp. 417-418; Lesson 81 (see also TM Lesson 81 “Alternate Method” and “Math Background”), pp. 440-442; Lesson 86, pp. 466-468; Lesson 89, pp. 482-483 **MAINTENANCE:** **Power Up:** Lesson 86, 91, 92 **Written Practice:** Lesson 55 (#7, #8, #9); Lesson 56 (#1, #7, #8); Lesson 57 (#4, #6, #11); Lesson 58 (#3, #5, #12); Lesson 59 (#6, #7, #12); Lesson 62 (#1, #8, #14); Lesson 64 (#8, #13); Lesson 77 (#2, #16); Lesson 78 (#1, #11, #15); Lesson 80 (#5, #6, #13, #20); Lesson 81 (#12, #16); Lesson 82 (10, #13); Lesson 83 (#2, #8, #19); Lesson 84 (#3); Lesson 87 (#3, #12, #13, #18); Lesson 88 (#6, #12, #19); Lesson 89 (#9, #10, #14, #15); Lesson 90 (#15); Lesson 92 (#15); Lesson 94 (#14); Lesson 106 (#15); Lesson 109 (#4); Lesson 110 (#10, #13, #17, #18
	3.OA.6	Understand division as an unknown-factor problem.	**INSTRUCTION:** **New Concept**: Lesson 83, pp. 451-452; Lesson 86, pp.466-468; Lesson 89, pp. 482-483; Lesson 90, pp. 487-488 **MAINTENANCE:** **Power Up** Lesson 91, 92, 93, 96, 98, 101, 104, 105, 108, 110 **Written Practice:** Lesson 83 (#4); Lesson 84 (#6); Lesson 85 (#1, #5); Lesson 86 (7, #9, #18); Lesson 87 (#4, #12, #17); Lesson 88 (#4, #7, #8, #9, #14); Lesson 89 (#3, #4, #10, #13); Lesson 90 (#6, #8, #13); Lesson 91 (#2, #13); Lesson 92 (#14, #15); Lesson 93 (#12, #14); Lesson 94 (#6, #14); Lesson 105 (#13, #18); Lesson 107 (#8, #15, #20) **Learning Stations:** Lesson 86

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3.OA Operations and Algebraic Thinking		**Multiply and divide within 100.**	*Intermediate 3* provides straightforward, explicit instruction with all aspects of multiplication and division to ensure that all students finish third grade fluent with their facts. This includes both a conceptual understanding of multiplication and division as well as numerous practice opportunities to develop computational fluency with single-digit products and quotients. Lesson 54 begins this sequence of lessons by introducing the concept of multiplication as repeated addition. Students then gradually learn their multiplication facts, beginning with 0s, 1s, and 10s in Lesson 56. Accompanying these lessons is a variety of strategies and representations to help structure their understanding of facts. Lesson 61, for example, introduces students to square number multiplication facts using a grid or an array, while Lesson 64 points out patterns and offers a shortcut for answering 9s facts using a hand. Throughout the year, students continuously practice their basic facts every day as part of the "Power Up" portion of the daily lesson. This fact review first transitions into multiplication at the beginning of Lesson 57, right after students first learn a set of facts. These timed exercises gradually build in complexity as the program introduces additional facts, eventually integrating division facts as well. Students demonstrate their mastery of facts and fluency with multiplication and division on regular Power Up and cumulative tests. This regular practice and strategic assessment allows for gradual introduction of more challenging multiplication and division work, including problems with two-digit numbers and parentheses, building a solid foundation to prepare students for more complicated skills in future grades.
	3.OA.7	Fluently multiply and divide within 100, using strategies such as the relationship between multiplication and division (e.g., knowing that 8 x 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.	<u>**INSTRUCTION:**</u> **New Concept**: Lesson 54, pp. 293-294; Lesson 55, pp. 298-300; Lesson 56, pp. 302-304; Lesson 59, pp. 317-318; Lesson 61, pp. 329-331; Lesson 64, pp. 346-347; Lesson 70, p. 379; Lesson 77, pp. 417-418; Lesson 81, pp. 440-442; Lesson 83, pp. 451-452; Lesson 86, pp. 466-468; Lesson 89, pp. 482-483; Lesson 92, pp. 500-502 <u>**MAINTENANCE:**</u> **Power Up:** Lessons 57, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 69, 70, 72, 73, 74, 75, 76, 77, 78, 79, 80, 81, 82, 83, 84, 86, 87, 88, 89, 90, 91, 92, 93, 94, 95, 96, 97, 98, 99, 100, 101, 102, 103, 104, 105, 106, 107, 108, 109, 110 **Written Practice:** Lesson 55 (#2, #6, #7); Lesson 56 (#1, #5, #6); Lesson 57 (#11, #12, #13); Lesson 58 (#6, #12, #13); Lesson 59 (#6, #7, #10); Lesson 60 (#7, #8, #11); Lesson 61 (#6, #13); Lesson 63 (#5, #6, #9, #15); Lesson 64 (#12, #17); Lesson 65 (#2, #6, #14); Lesson 68 (#15, #16); Lesson 69 (#16, #17); Lesson 70 (#1, #2, #15, #16, #17); Lesson 71 (#8, #9, #10); Lesson 72 (#5, #6, #7, #8, #15); Lesson 73 (#7, #8, #9, #14, #17); Lesson 74 (#10, #11, #13); Lesson 75 (#3, #7, #8, #12); Lesson 76 (#5, #11); Lesson 78 (#1, #8, #11); Lesson 79 (#12, #14); Lesson 80 (#5, #12, #13, #20); Lesson 81 (#9, #12, #16); Lesson 86 (#7, #9, #17); Lesson 87 (#3, #4, #12, #13); Lesson 89 (#3, #4, #9, #10, #13, #14); Lesson 101 (#8, #17, #18, #20) **Learning Stations** Lesson 54, 55, 56, 59, 64, 70, 86

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Common Core State Standards for Mathematics, Grade 3

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3.OA Operations and Algebraic Thinking		**Solve problems involving the four operations, and identify and explain patterns in arithmetic.**	Students need to be fluent with basic facts across the four operations, and they need to be able to apply this knowledge to problem-solving situations. *Intermediate 3* provides strategically sequenced lessons to build a solid foundation with basic arithmetic before gradually moving onto real-world story problems and building a structure for how solve them. This process begins with the "Power Up" portion of the daily lesson, which asks students to develop computational fluency through fact practice and mental math while also teaching a variety of problem-solving strategies that students apply to a daily word problem. By following the four-step process of understand, plan, solve, and check, students work through a problem in a consistent, logical fashion and determine the reasonableness of their answer. This work carries into the core instructional sequence. In Lesson 2, students begin identifying counting patterns, and in Lesson 9, students learn how to represent a missing number in an addition number sentence. The lessons gradually move onto similar lessons with subtraction, multiplication, and eventually, division, including multiple opportunities to work with a multiplication table. Regular Power Up tests include both facts and problem solving, while computational proficiency and word problems also appear on the program's cumulative tests. Saxon's wealth of cumulative practice and assessment across all four operations throughout the year ensures a deep level of mastery in both computation and problem solving.
	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] [[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).]	**INSTRUCTION:** **New Concept**: Lesson 9, pp. 49-50; Lesson 18 pp. 98-99; Lesson 20, pp. 109-110; Lesson 36, pp. 197-199; Lesson 39, pp. 212-213; Lesson 40, pp. 216-218; Lesson 60, pp. 322-323; Lesson 90, pp. 487-488 **Standards Success Activity**: 8, 9 **MAINTENANCE:** **Power Up:** Lesson 36, 37, 47, 51, 60, 61, 72, 76, 90, 102, 103, 104, 106, 108, 110 **Problem Solving:** Lesson 103, 107, 108 **Written Practice:** Lesson 9 (#6, #7); Lesson 10 (#6, #9, #10); Lesson 13 (#18, #19); Lesson 15 (#17, #18); Lesson 16 (#18, #19); Lessons 18-35; Lessons 37-55; Lesson 57 (#1); Lesson 59-110 **Performance Task**: 1 **Test-Day Activity**: 6

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.OA Operations and Algebraic Thinking	**3.OA.9**	Identify arithmetic patterns (including patterns in the addition table or multiplication table), and explain them using properties of operations.	**INSTRUCTION:** **New Concept**: Lesson 2, pp. 13-15; Lesson 34, pp. 186-188; Lesson 61, pp. 329-331; Lesson 64, pp. 346-347; Lesson 76, pp. 411-413; Lesson 88, pp. 477-479; Lesson 105, pp. 560-561 **MAINTENANCE:** **Power Up:** Lessons 2, 13, 23, 33, 39, 64, 74, 109 **Problem Solving:** Lessons 24, 55, 65, 86, 87, 101 **Written Practice:** Lesson 4 (#4, #5); Lesson 5 (#4, #5, #6); Lesson 6 (#3, #4); Lesson 7 (#3, #4); Lesson 8 (#4, #5); Lesson 10 (#3, #4, #5); Lesson 11 (#6, #7); Lesson 12 (#5, #6); Lesson 13 (#5, #6); Lesson 14 (#4, #5); Lesson 16 (#5, #6, #13); Lesson 17 (#6, #7); Lesson 18 (#7, #8); Lesson 19 (#7, #8); Lesson 33 (#8, #9); Lesson 61 (#4, #6, #13); Lesson 64 (#1, #3, #11); Lesson 65 (#2, #15); Lesson 66 (#2, #5); Lesson 67 (#12, #16); Lesson 69 (#17); Lesson 71 (#10); Lesson 72 (#5, #8); Lesson 73 (#8, #13); Lesson 75 (#7); Lesson 76 (#1, #5); Lesson 78 (#8, #11) **Learning Stations:** Lessons 2, 61, 64, 88 **Test-Day Activity**: 1

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.NBT Number and Operations in Base Ten		**Use place value understanding and properties of operations to perform multi-digit arithmetic.**[4] [[4] A range of algorithms may be used.]	In earlier grade levels, *Saxon Math* built a solid foundation for place value using the concrete example of pennies, dimes, and dollars. In *Intermediate 3*, Saxon builds on this foundation by structuring students' knowledge of rounding, addition, subtraction, and multiplication by continuously returning to these organizing principles of the base-ten system. This begins with each lesson's "Power Up" to start the day, an opportunity for students to develop their computational fluency with a variety of mental math exercises. Early in the year, beginning with Lesson 6, students review the basic properties of addition and subtraction, including fact families, to ensure a deep understanding of the relationship between these two operations. Saxon uses real-world and concrete examples and representations to transition into more complicated instruction, including the use of money to model addition & subtraction with regrouping in Lessons 13, 14, and 16, and rounding in Lesson 15. This allows students to develop a strong conceptual understanding of these two operations before introducing various algorithms for computation. The program offers additional instruction and numerous chances for practice and review with these concepts before moving onto more advanced multiplication and estimation skills in later lessons, including regular assessment on both the cumulative tests and performance tasks within the program. These resources ensure a deep mastery of arithmetic structured by an understanding of fundamental place value principles.
	3.NBT.1	Use place value understanding to round whole numbers to the nearest 10 or 100. .	**INSTRUCTION:** **New Concept**: Lesson 15, pp. 80-82; Lesson 30, pp. 162-163; Lesson 93, pp. 505-506; Lesson 95, pp. 513-514 **MAINTENANCE:** **Power Up:** Lessons 58, 63, 70, 75, 85, 91, 94, 95, 99, 100, 104 **Written Practice:** Lesson 15 (#3, #4, #5); Lesson 16 (#8, #9); Lesson 17 (#4, #8, #9); Lesson 18 (#2, #9); Lesson 19 (#4, #9); Lesson 22 (#8); Lesson 24 (#5, #6); Lesson 25 (#5, #6, #20); Lesson 26 (#5, #6); Lesson 27 (#5, #6); Lesson 28 (#6, #7); Lesson 29 (#5, #6); Lesson 30 (#4, #5); Lesson 31 (#3, #4, #7); Lesson 32 (#3); Lesson 33 (#3, #4); Lesson 34 (#3); Lesson 35 (#4); Lesson 36(#3); Lesson 37 (#10); Lesson 38 (#5, #13); Lesson 39 (#4, #10); Lesson 40 (#4); Lesson 41 (#4); Lesson 50 (#18); Lesson 51 (#19); Lesson 53 (#16); Lesson 70 (#7, #9); Lesson 90 (#4, #5); Lesson 94 (#7); Lesson 105 (#5); Lesson 106 (#8) **Learning Stations:** Lesson 15, 93 **Performance Task(s)**: 2 **Test-Day Activity**: 4

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.NBT Number and Operations in Base Ten	**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.	**INSTRUCTION:** **New Concept**: Lesson 6, pp. 34-35; Lesson 7, pp. 39-41; Lesson 8, pp. 45-46; Lesson 10, pp. 53-54; Lesson 13, pp. 70-73; Lesson 14, pp. 75-77; Lesson 16, pp. 85-89; Lesson 19, pp. 102-105; Lesson 23, pp. 124-127; Lesson 24, pp. 131-132; Lesson 28, pp. 153-154; Lesson 30, pp. 162-163; Lesson 36, pp. 197-199; Lesson 39, pp. 212-213; Lesson 40, pp. 216-218 **Investigation:** Investigation 2, pp. 112-113 **MAINTENANCE:** **Power Up:** Lessons 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 29, 31, 32, 33, 34, 47, 53, 59, 81, 82 **Written Practice:** Lesson 13 (#2, #4, #10); Lesson 14 (#7, #8, #9); Lesson 15 (#6, #8, #9); Lesson 16 (#11, #12, #13); Lesson 17 (#1, #5, #12); Lesson 18 (#6, #11, #12); Lesson 19 (#1, #3, #6); Lesson 20 (#2, #9, 10); Lesson 21 (#4, #6, #11); Lesson 22 (#4, #11, #13); Lesson 23 (#6, #10, #12); Lesson 24 (#5, #8, #12);Lesson 25 (#8, #12, #16); Lesson 26 (#1, #2, #13); Lesson 27 (#12, #13, #14); Lesson 28 (#1, #12, #13); Lesson 29 (#11, #12, #13); Lesson 30 (#3, #10, #11); Lesson 31 (#3, #7, #11); Lesson 32 (#1, #2, #10); Lesson 33 (#4, #11); Lesson 34 (#10, #11, #12); Lesson 35 (#10, #12, #13); Lesson 36(#1, #2, #10); Lesson 37 (#2, #3, #11); Lesson 38 (#1, #2, #13); Lesson 39 (#2, #10, #12); Lesson 40 (#1, #8, #9); Lesson 41 (#2, #9, #14); Lesson 42 (#1, #2, #14); Lesson 43 (#1, #4, #7); Lesson 44 (#3, #4, #13); Lesson 45 (#2, #3, #14); Lesson 46 (#2, #12, #13); Lesson 47 (#1, #3, #13); Lesson 48 (#1, #2, #5); Lesson 49 (#7, #8, #14); Lesson 50 (#1, #2, #6); Lesson 51 (#1, #2, #5); Lesson 52 (#5, #14, #15); Lesson 53 (#2, #5, #10); Lesson 54 (#2, #4, #15); Lesson 55 (#3, #11, #13); Lesson 59 (#8, #14, #16); Lesson 60 (#13, #15); Lesson 61 (#15, #16, #20); Lesson 62 (#11, #16, #20); Lesson 63 (#2, #16, #17); Lesson 67 (#2, #3, #4); Lesson 68 (#1, #3, #17); Lesson 70 (#10, #19); Lesson 73 (#1, #); Lesson 75 (#1, #10, #13); Lesson 76 (#2, #12, #13); Lesson 77 (#1, #14); Lesson 78 (#2, #3, #13); Lesson 80 (#16); Lesson 81 (#1, #, #18); Lesson 82 (#2, #15, #16); Lesson 83 (#16); Lesson 84 (#2, #14, #15); Lesson 85 (#13, #14); Lesson 89 (#16, #17, #18)

Saxon Math Intermediate 3 ©2012 correlated to the
Common Core State Standards for Mathematics, Grade 3

Domain	Standard	Text of Objective	*Saxon Math Intermediate 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**: Lesson 56, pp. 302-304; Lesson 78, pp. 422-423 **MAINTENANCE:** **Power Up:** Lessons 79, 85, 87, 88, 90, 93, 96, 99, 107 **Written Practice:** Lesson 78 (#12, #16); Lesson 79 (#11); Lesson 80 (#2, #14); Lesson 81 (#14, #16, #17); Lesson 82 (#13); Lesson 83 (#2, #8, #15); Lesson 84 (#1, #3, #10); Lesson 85 (#4, #12); Lesson 86 (#8); Lesson 88 (#10, #17); Lesson 90 (#7, #17); Lesson 92 (#10); Lesson 94 (#12, #13, #16); Lesson 100 (#14, #17) **Learning Stations:** Lessons 56, 78

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.NF Number and Operations – Fractions[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 strong grasp on fundamental fractions skills is an essential gateway to higher mathematics, and *Intermediate 3* contains numerous resources to develop this understanding through carefully sequenced instruction and continuous practice and review. After building a solid foundation with basic number skills and operations, the program gradually introduces students to fractions beginning with Lesson 29, in which students learn the form for a basic fraction first with coins and then with visual representations. Students then move onto lessons connecting fractions to measurement and offering additional models and representations for part of a whole, including using manipulatives in Lesson 41 and a number line in Lesson 48. They also develop an understanding of equivalent fractions and learn how to compare two fractions using both visual models and symbols. Assessment resources for these skills include the frequent cumulative tests as well as learning stations connected to each concept. These key lessons build a solid foundational understanding of fractions in preparation for future grade levels and the advanced concepts students will encounter.
	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 $1/b$.	**INSTRUCTION:** **New Concept**: Lesson 29, pp. 157-158; Lesson 41, pp. 224-225; Lesson 42, pp. 229-230; Lesson 43, pp. 234-235; Lesson 46, p. 251, Ex. 3; Lesson 47, pp. 254-257 **MAINTENANCE:** **Power Up:** Lessons 52, 55, 59, 63, 68, 71, 75, 76, 87, 94 **Written Practice:** Lesson 29 (#19, #20); Lesson 31 (#6); Lesson 33 (#7); Lesson 36 (#18); Lesson 39 (#1, #6); Lesson 41 (#12); Lesson 42 (#5); Lesson 43 (#17, #18); Lesson 44 (#6, #16); Lesson 45 (#1, #12, #13); Lesson 46 (#7, #10); Lesson 48 (#6, #8, #9); Lesson 49 (#4, #5, #20); Lesson 50 (#4, #5, #10); Lesson 51 (#4); Lesson 52 (#4, #7, #18); Lesson 53 (#4); Lesson 54 (#3); Lesson 58 (#4, #11); Lesson 59 (#3); Lesson 62 (#17); Lesson 63 (#13, #14); Lesson 64 (#7, #20); Lesson 65 (#9, #19); Lesson 66 (#18, #19); Lesson 68 (#14, #20); Lesson 69 (#13, #14); Lesson 70 (#13); Lesson 71 (#4, #7, #16); Lesson 74 (#8); Lesson 76 (#10, #18); Lesson 77 (#7, #9, #20); Lesson 81 (#11); Lesson 84 (#17); Lesson 88 (#5); Lesson 90 (#10); Lesson 95 (#5, #9); Lesson 99 (#7, #20); Lesson 100 (#9) **Learning Stations:** Lessons 29, 41, 42, 46 **Performance Task(s)**: 5 **Test-Day Activity**: 5

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.NF Number and Operations – Fractions	**3.NF.2**	Understand a fraction as a number on the number line; represent fractions on a number line diagram.	
	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 *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.	**INSTRUCTION:** **New Concept**: Lesson 35, pp. 191-194; Lesson 48, pp. 261-263 **MAINTENANCE:** **Power Up:** Lessons 59, 83, 95, 100 **Written Practice:** Lesson 48 (#7); Lesson 49 (#10); Lesson 50 (#8); Lesson 62 (#10); Lesson 65 (#11, #13); Lesson 66 (#12, #20); Lesson 69 (#2); Lesson 70 (#20); Lesson 84 (#5); Lesson 97 (#19)
	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**: Lesson 35, pp. 191-194; Lesson 48, pp. 261-263 **MAINTENANCE:** **Written Practice:** Lesson 48 (#7); Lesson 49 (#10); Lesson 50 (#8); Lesson 62 (#10); Lesson 65 (#11, #13); Lesson 66 (#12, #20); Lesson 69 (#2); Lesson 70 (#20); Lesson 84 (#5); Lesson 97 (#19) **Learning Stations:** Lesson 48

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.NF Number and Operations – Fractions	**3.NF.3**	Explain equivalence of fractions in special cases, and compare fractions by reasoning about their size.	
	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**: Lesson 46, p. 250, Ex. 1; Lesson 47, pp. 254-257; Lesson 48, pp. 261-263 **MAINTENANCE:** **Power Up:** Lesson 59 **Written Practice:** Lesson 47 (#9, #10); Lesson 48 (#7, #8, #9); Lesson 49 (#12, #20); Lesson 52 (#6, #7, #18); Lesson 54 (#3); Lesson 55 (#20); Lesson 56 (#2); Lesson 58 (#4, #11); Lesson 63 (#13, #14); Lesson 64 (#20); Lesson 70 (#13, #20); Lesson 76 (#18); Lesson 90 (#10); Lesson 93 (#13); Lesson 99 (#7); Lesson 102 (#5) **Learning Stations:** Lesson 47
	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**: Lesson 46, p. 250, Ex. 1; Lesson 47, pp. 254-257; Lesson 48, pp. 261-263 **MAINTENANCE:** **Power Up:** Lesson 59 **Written Practice:** Lesson 47 (#9, #10); Lesson 48 (#7, #8, #9); Lesson 49 (#12, #20); Lesson 50 (#8, #10); Lesson 52 (#6, #7, #18); Lesson 54 (#3); Lesson 55 (#20); Lesson 56 (#2); Lesson 58 (#4, #11); Lesson 63 (#13, #14); Lesson 64 (#20); Lesson 70 (#13, #20); Lesson 76 (#18); Lesson 90 (#10); Lesson 93 (#13); Lesson 99 (#7); Lesson 102 (#5) **Learning Stations:** Lesson 47

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.NF Number and Operations – Fractions	**3.NF.3.c**	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	**INSTRUCTION:** **New Concept**: Lesson 46, p. 250, Ex. 1, 2; Lesson 48, pp. 261-263 **MAINTENANCE:** **Written Practice:** Lesson 47 (#9) **Learning Stations:** Lesson 46
	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**: Lesson 43, pp. 234-235; Lesson 49, pp. 266-267 **MAINTENANCE:** **Power Up:** Lesson 53, 62 **Written Practice:** Lesson 50 (#4, #5); Lesson 59 (#3); Lesson 61 (#11); Lesson 62 (#3); Lesson 64 (#7); Lesson 65 (#9); Lesson 68 (#8); Lesson 69 (#8); Lesson 75 (#6); Lesson 81 (#11)

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.MD Measurement and Data		**Solve problems involving measurement and estimation of intervals of time, liquid volumes, and masses of objects.**	In *Intermediate 3*, students have many opportunities to develop and enhance their understanding of measurement developed in earlier grades. This begins each day with the “Jump Start” section of the “Power Up” at the start of each lesson. Students first learn how to read a clock to the nearest five minutes in Lesson 3 and then practice this concept numerous times in future “Power Ups” as well as future practice sets, oftentimes using real-world problems to structure students’ understanding. This practice builds a solid foundation ahead of Lesson 38, where students learn to tell time to the nearest minute and measure time intervals. Students learn basic volume skills in Lesson 73 as a preparation for taking actual measurements in Lesson 87 and develop an understanding of mass in Lesson 80, all of which appear on future cumulative tests or learning stations to allow teachers to monitor student progress. These skills continue to be reinforced throughout the year in preparation for more advanced concepts and problem-solving scenarios in future grades.
	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**: Lesson 3, pp. 17-19; Lesson 5, pp. 29-31; Lesson 38, pp. 207-208 **Standards Success Activity**: Activity 2 **MAINTENANCE:** **Power Up:** Lessons 1-30, 32, 33, 34, 36, 37, 39, 40, 41, 42, 43, 44, 45, 46, 47, 49, 50, 51, 53, 54, 55, 56, 58, 61, 62, 64, 71, 72, 76, 77, 78, 85, 89, 90, 92, 94, 99, 102, 103, 107 **Problem Solving:** Lesson 69, 71, 87 **Written Practice:** Lesson 3 (#1, #8, #11); Lesson 4 (#2, #3, #7); Lesson 5 (#1, #7, #10); Lesson 6 (#2, #5, #9); Lesson 7 (#6, #11, #12); Lesson 8 (#3, #10, #13); Lesson 9 (#2, #8, #12); Lesson 11 (#4, #10, #19); Lesson 12 (#17); Lesson 13 (#9, #17); Lesson 15 (#20); Lesson 16 (#10, #11); Lesson 18 (#10, #19, #20); Lesson 19 (#10, #19, #20); Lesson 21 (#9, #19); Lesson 22 (#18); Lesson 30 (#19); Lesson 32 (#18); Lesson 34 (#19); Lesson 37 (#9); Lesson 38 (#19); Lesson 39 (#19); Lesson 42 (#20); Lesson 44 (#7); Lesson 45 (#19); Lesson 55 (#19); Lesson 57 (#19); Lesson 63 (#20); Lesson 65 (#10); Lesson 66 (#10); Lesson 68 (#9); Lesson 70 (#12); Lesson 71 (#5); Lesson 72 (#4); Lesson 75 (#5); Lesson 81 (#4); Lesson 83 (#5); Lesson 84 (#18) **Learning Stations:** Lessons 3, 5, 38 **Performance Task(s)**: 1

Domain	Standard	Text of Objective	*Saxon Math Intermediate 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 (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] [[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**: *Lesson 72, pp. 391-392; Lesson 73, pp. 394-396; Lesson 77, pp. 417-418; Lesson 78, p. 422;* Lesson 80, pp. 432-433; Lesson 87, pp. 472-474; Lesson 98, pp. 526-527 **Standards Success Activity**: Activity 7 **MAINTENANCE:** **Written Practice:** *Lesson 73 (#5, #6); Lesson 74 (#17); Lesson 75 (#17); Lesson 76 (#16); Lesson 77 (#10, #16); Lesson 79 (#5, #11);* Lesson 80 (#2, #14, #20); *Lesson 81 (#10, #16, #17);* Lesson 82 (#10, #12, #13); *Lesson 84 (#1, #10, #12);* Lesson 86 (#8, #10); Lesson 100 (#14, #17) **Learning Stations:** Lesson 73, 77, 80, 87, 98

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.MD Measurement and Data		**Represent and interpret data.**	Students in *Intermediate 3* have multiple opportunities to learn how to represent and interpret data during the year. Instead of simply providing direct instruction, the program offers a variety of explorative activities and resources to allow students to engage in active learning as they learn about various graphs. This process begins with Investigation 1, as students learn how to make and interpret both a pictograph and bar graph and then have the opportunity to create one of each using the data provided. Future investigations then expand their knowledge of these concepts. In Investigation 3, students review how to make and interpret a pictograph but then have a chance to create one using their own data that they gather from their classmates. This lesson structure repeats in Investigation 6 with making and interpreting bar graphs using authentic data from the class. Students also have the opportunity to develop measurement skills using fractional parts of an inch and then display that data on a line plot in Lesson 35 and the accompanying extension activity. Power Up, cumulative, and extension tests offer easy to implement assessment resources to monitor students' progress, building a deep level of mastery for success.
	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.	**<u>INSTRUCTION:</u>** **Investigation(s):** Investigation 1, pp. 56-58; Investigation 3, pp. 166-168; Investigation 6, pp. 326-327 **<u>MAINTENANCE:</u>** **Test-Taking Strategies Guide:** Interpreting Graphs, pages 35 and 36
	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.	**<u>INSTRUCTION:</u>** **New Concept***: Lesson 34, pp. 186-188; Lesson 35, pp. 191-194; Lesson 37, pp. 201-203; Lesson 52, pp. 283-284* **Standards Success Activity:** Activity 1 **<u>MAINTENANCE:</u>** **Learning Stations:** *Lessons 34, 35, 37*

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3.MD Measurement and Data		**Geometric measurement: understand concepts of area and relate area to multiplication and to addition.**	In *Intermediate 3*, students develop a strong foundational understanding of geometric shapes and terms and then apply this knowledge to a variety of area problems. This application begins in Lesson 53, as students use rectangular grid patterns to begin developing a conceptual understanding of area. This key lesson does not immediately leap to an abstract formula or definition for area, instead providing instruction on area using a visual model and a unit square. Then, in Lessons 62 and 63, students use this foundation to apply it to area problems, again using visual models, real-world examples, and, for the first time, the formula of length x width. All of these skills are continuously reviewed through future lessons' practice sets but also appear as instructional examples for students to see additional applications of area to a variety of mathematical topics, including computation and measurement; frequent cumulative tests allow for easy progress-monitoring and ensure a long-lasting understanding of area.
	3.MD.5	Recognize area as an attribute of plane figures and understand concepts of area measurement.	
	3.MD.5a	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**: Lesson 53, pp. 288-289; Lesson 62, pp. 335-337 **MAINTENANCE:** **Power Up:** Lessons 93, 103, 108 **Written Practice:** Lesson 61 (#1); Lesson 62 (#4); Lesson 63 (#3); Lesson 64 (#6); Lesson 65 (#1); Lesson 67 (#20); Lesson 68 (#5); Lesson 72 (#20); Lesson 77 (#5); Lesson 78 (#6); Lesson 79 (#7, #20); Lesson 80 (#11); Lesson 81 (#14); Lesson 82 (#9); Lesson 83 (#13); Lesson 85 (#18); Lesson 87 (#19); Lesson 88 (#20)

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.MD Measurement and Data	**3.MD.5.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.	**INSTRUCTION:** **New Concept**: Lesson 62, pp. 335-337; Lesson 63, pp. 341-342 **MAINTENANCE:** **Power Up:** Lessons 93, 103, 108 **Problem Solving:** Lesson 82 **Written Practice:** Lesson 64 (#3, #6); Lesson 73 (#20); Lesson 79 (#7, #20); Lesson 85 (#18); Lesson 91 (#20); Lesson 92 (#13); Lesson 104 (#10); Lesson 105 (#20); Lesson 106 (#13)
	3.Md.6	Measure areas by counting unit squares (square cm, square m, square in, square ft, and improvised units).	**INSTRUCTION:** **New Concept**: Lesson 53, pp. 288-289; Lesson 62, pp. 335-337; Lesson 106, pp. 565-567; Lesson 108, p. 574 **MAINTENANCE:** **Problem Solving:** Lesson 54 **Written Practice:** Lesson 53 (#6); Lesson 54 (#7); Lesson 57 (#10); Lesson 58 (#6); Lesson 59 (#9); Lesson 61 (#1); Lesson 63 (#3); Lesson 78 (#6); Lesson 80 (#11)
	3.MD.7	Relate area to the operations of multiplication and addition.	
	3.MD.7a	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.	**INSTRUCTION:** **New Concept**: Lesson 62, pp. 335-337; Lesson 63, pp. 341-342; Lesson 64, p. 347 **MAINTENANCE:** **Written Practice:** Lesson 62 (#4); Lesson 63 (#4, #11); Lesson 64 (#1, #3, #6); Lesson 80 (#11)

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.MD Measurement and Data	**3.MD.7b**	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**: Lesson 62, pp. 335-337; Lesson 63, pp. 341-342; Lesson 64, p. 347; Lesson 79, pp. 427-428 **MAINTENANCE:** **Power Up:** Lessons 93, 103, 108 **Written Practice:** Lesson 62 (#4); Lesson 63 (#4, #11); Lesson 64 (#1, #3, #6); Lesson 65 (#1, #2, #15); Lesson 67 (#12, #20); Lesson 68 (#5); Lesson 72 (#5, #8, #20); Lesson 73 (#3, #8, #20); Lesson 77 (#5); Lesson 79 (#6, #7, #8); Lesson 80 (#11, #15); Lesson 88 (#20); Lesson 91 (#20); Lesson 92 (#13, #20); Lesson 94 (#20); Lesson 97 (#4, #20); Lesson 98 (#19); Lesson 99 (#19); Lesson 104 (#10); Lesson 105 (#11, #20); Lesson 106 (#13); Lesson 107 (#10) **Learning Stations:** Lesson 62, 63 **Test-Day Activity**: 7
	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* x *b* and *a* x *c*. Use area models to represent the distributive property in mathematical reasoning.	**INSTRUCTION:** **New Concept**: Lesson 81 (see “Teacher Edition Alternate Method” and “Math Background”), p. 442 **Standards Success Activity**: Activity 6

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.MD Measurement 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**: *Lesson 62, pp. 335-337* **MAINTENANCE:** **Written Practice:** *Lesson 68 (#5)* **Performance Task(s):** 8 **Test Day Activity:** 7
		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 *Intermediate 3* provides explicit instruction to build this foundation. After introducing students to basic geometry concepts, the program provides direct instruction on perimeter in Lesson 58. However, instead of immediately jumping to an abstract formula or representation, Saxon structures the lesson using a real-world example. In Lesson 62, students connect perimeter to area and identify how the two measures are different. The use of straightforward visual models and a lesson activity allows students to distinguish between the two and set a foundation for future instruction. This includes having students calculate the perimeter of parallelograms in Lesson 66 and polygons in Lesson 67 and a number of extension activities to allow students to work with both area and perimeter flexibly. Teachers can easily monitor student progress with Power Up, cumulative, and extension tests included in the program, again ensuring that students develop and retain a high level of mathematical understanding.
	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**: Lesson 58, pp. 312-313; Lesson 62, pp. 336-337; Lesson 63, pp. 341-342; Lesson 66, p. 357; Lesson 67, pp. 363-362; Lesson 79, p. 427 **Standards Success Activity**: Activity 3, 5 **MAINTENANCE:** **Power Up:** Lesson 67, 69, 73, 78, 84, 88, 93, 98 **Written Practice:** Lesson 62 (#4, #5); Lesson 63 (#4, #12); Lesson 64 (#3, #5, #6); Lesson 65 (#1, #5); Lesson 67 (#7, #16, #20); Lesson 68 (#4, #10, #11); Lesson 72 (#14, #15, #16); Lesson 73 (#20); Lesson 77 (#5); Lesson 79 (#6, #7, #20); Lesson 80 (#4, #9, #11); Lesson 91 (#20); Lesson 92 (#13, #20); Lesson 94 (#20); Lesson 97 (#4, #20); Lesson 98 (#19); Lesson 105 (#11, #20); Lesson 106 (#13); Lesson 107 (#3, #10) **Learning Stations:** Lesson 58, 62, 79

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.G Geometry		**Reason with shapes and their attributes.**	Third graders need to have the ability to reason with shapes and categorize them based on key attributes, and *Intermediate 3* provides many opportunities for them do just that. This begins during the instructional lessons dealing with fractions, as students use visual models to partition shapes into fractional parts of a whole in Lesson 42 and 47. They then move onto more targeted lessons in geometry dealing with a variety of mathematical shapes: rectangles in Lesson 51, parallelograms in Lesson 66, polygons in Lesson 67, and triangles in Lesson 69. Saxon's cumulative approach to practice and assessment allows these skills to appear on numerous future practice sets and cumulative tests, ensuring that students develop a deep understanding of geometric shapes & attributes and can demonstrate this understanding in testing situation.
	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.	**<u>INSTRUCTION:</u>** **New Concept**: Lesson 51, pp.278-279; Lesson 66, pp. 356-358; Lesson 67, pp. 362-365; Lesson 69, pp. 373-375; Lesson 104, pp. 554-556; Lesson 105, p. 561 **Standards Success Activity**: Activity 10 **<u>MAINTENANCE:</u>** **Power Up:** Lessons 61, 70, 72, 73, 76, 79, 82, 84, 87, 88, 90, 95, 98, 100, 105, 108 **Problem Solving:** Lessons 75, 100 **Written Practice:** Lesson 51-60; Lesson 64-86; Lesson 90 (#18); Lesson 103 (#2); Lesson 105-108; Lesson 110 (#4) **Learning Stations:** Lessons 51, 52, 66, 67, 69, 104 **Test-Day Activity**: 8

Domain	Standard	Text of Objective	*Saxon Math Intermediate 3* Citations/Examples ***References in italics indicate foundational.***
3.G Geometry	**3.G.2**	Partition shapes into parts with equal areas. Express the area of each part as a unit fraction of the whole.	**INSTRUCTION:** **New Concept**: Lesson 42, pp. 229-230; Lesson 47, pp. 254-257; Lesson 62, pp 335-337; Lesson 63, p. 342 **Standards Success Activity**: Activity 4 **MAINTENANCE:** **Power Up:** Lessons 63, 68, 75, 76, 83, 87, 94, 95, 100, 105 **Written Practice:** Lesson 48 (#8, #11); Lesson 49 (#4, #20); Lesson 52 (#7); Lesson 62 (#4); Lesson 63 (#4, #13, #14); Lesson 64 (#3, #7, #20); Lesson 68 (#5, #20); Lesson 69 (#, #); Lesson 76 (#18); Lesson 77 (#5, #7); Lesson 80 (#11); Lesson 81 (#14); Lesson 83 (#13); Lesson 84 (#17); Lesson 88 (#5, #20); Lesson 90 (#10); Lesson 95 (#9, #); Lesson 97 (#20); Lesson 99 (#7) **Learning Stations:** Lessons 42, 62, 63

