

5th Grade Mathematics (Math 65)

I. Course Goals:

1	Students will understand that God gave us numbers and systems of math to help us and to show us His unchangeable character.
2	Students will properly use basic mathematical operations and carry these skills over into their other subject areas as needed.
3	Students will demonstrate an increased understanding of the mathematical principles of basic geometry, fractions, linear measurement, money, and time.

II. Resources:

Title	Author/ Publisher/ ISBN	Abbreviation
Key Resources		
Saxon 6/5 text and Teacher's Edition		
Other math-related worksheets as needed		
Mastering Math Facts	Otter Creek	
Additional Resources/ Teacher Resources		
manipulatives, etc.		

III. Key Projects: N/A

IV. Field Trips: N/A

V. Objectives:

1st Quarter					
#	Topic/ Objective	Materials	Measurement	Time	Done
	Addition and subtraction facts are to be reviewed this quarter using the Mastering Math Facts materials.	MMF	Daily review W/bi-weekly 2-min. tests		
1	Counting Sequence. Even and Odd – Lessons 1-2 Using \$ for Place Value – Lesson 3 Comparing Whole #s – Lesson 4 Naming Whole #s – Lesson 5 Addition Timed Tests (5) Numbers through 100,000 – Lessons 6-7 Subtraction. Missing #s – Lessons 8-9	Saxon 6/5	Problem Set (PS) #2, 4, 5,7, 9, Test #1	1 ½ week	
2	Some and Some More – Lessons 10-11 Number Lines. Tally Marks. Multiplying – Lessons 12-13 Missing #s in Subtraction – Lesson 14 Horizontal, Vertical, Oblique – Lesson 16 Addition (1), Division (1) and Multiplication (2) Timed Tests	Saxon 6/5	PS #11, 13, 14, 16 Test #2	1 week	
3	Multiplication. Multiplying 1 Digit #s – Lesson 17 3 Factors. Missing #s – Lesson 18 Division – Lessons 19-20 Multiplication (3) Timed Tests	Saxon 6/5	PS #17, 18, 20 Multiplication test Test #3	1 week	
4	Equal Groups – Lesson 21 Remainders. $\frac{1}{2}$, $\frac{1}{4}$, $\frac{1}{10}$ – Lessons 22-23 Dollars. Parentheses – Lesson 24 Listing the Factors of Whole #s – Lesson 25 Multiplication (3) Timed Tests	Saxon 6/5	PS #21, 23, 24, 25 Multiplication test Test #4	1 week	
5	Practicing Division – Lesson 26 Solving Problems about Time – Lesson 27 Reading and Drawing # Lines – Lesson 28 Clock. Multiples of 10 – Lesson 29-30 Division (4) Timed Tests	Saxon 6/5	PS # 26, 27, 28, 30 Test #5	1 week	
6	Fractions. cents and % - Lesson 31 Lines: Parallel and Perpendicular – Lesson 32 Drawing Angles – Lesson 33 Rounding #s – Lesson 34 Dividing with Zeros in Quotient – Lesson 35 Larger-Smaller Dif. Stories – Lesson 36 Division (4) Timed Tests	Saxon 6/5	PS # 31, 33, 34 Division test Test #6	2 weeks	
7	Pictures of Fractions – Lesson 37 Drawing Segments to Close an Area –	Saxon 6/5	PS #37, 38, 39, 40		

	Lesson 38 Polygons – Lesson 39 Picturing Fractions – Lesson 40 Addition (4) Timed Tests		Test #7	1 week	
8	$\frac{1}{2}$ or an Odd Number – Lesson 41 Comparing Fractions – Lesson 42	Saxon 6/5	PS #41, 42	2 class periods	
2nd Quarter					
#	Topic/ Objective	Materials	Measurement	Time	Done
	Multiplication facts are to be reviewed this quarter using the Mastering Math Facts materials.	MMF	Daily review W/bi-weekly 2-min. tests		
1	Mixed #s. Dividing Remainders – Lesson 43 Add/ Subtract Fractions – Lesson 44 Short Division – Lesson 45 Fraction Manipulatives – Lesson 46 Whole #s. Fractions. Mixed #s – Lesson 47 Reading a Metric Scale – Lesson 48 Reading a Ruler – Lesson 49 Addition (2), Subtraction (3) Timed tests	Saxon 6/5	PS #43, 44, 46, 47, 48, 49 Test #8	1 $\frac{1}{2}$ week	
2	Illustrating Fraction Stories – Lesson 50 Compass Directions – Lesson 51 Simplifying Mixed Measures – Lesson 52 Expanded Notation of Whole #s - Lesson 53 Subtraction (4) Timed Tests	Saxon 6/5	PS # 50, 51, 52, 53 Test #9	1 week	
3	Finding Information to Solve Problems – Lesson 54 Solving 2-Step Word Problems – Lesson 55 Equal Groups to Find an Average – Lesson 56 Multiplying by 2-Digit #s – Lesson 57 Multiplication (4) Timed Tests	Saxon 6/5	PS #54, 55, 56, 57 Subtraction test Test #10	1 week	
4	Place Value through 100,000,000 – Lesson 58 Naming #s through 100, 000, 000 – Lesson 59 Perimeter Of Polygons. Measuring Circles – Lesson 60 Dividing by Multiples of 10 – Lesson 61 Multiplying by 3-Digit #s – Lessons 62-62 Division (4) Timed Tests. “G” Timed Test	Saxon 6/5	PS #58, 60, 61, 62, 63 Test #11	2 weeks	
5	Divisor, Dividend, Quotient – Lesson 64 Dividing and Writing Quotients with Fractions – Lesson 65 Fractions to Equal 1; Subtracting a Fraction from 1 – Lesson 66 Finding a Fraction to Compare a Whole – Lesson 67 Uneven Division Tests (4)	Saxon 6/5	PS #64, 65, 66, 67 Test #12	1 week	
6	Recognizing Halves – Lesson 68	Saxon 6/5	PS #68, 69, 70		

	Estimating Addition Answers – Lesson 69 Subtracting Fractions – Lesson 70 Addition (1), Subtraction (1), Uneven Division (1) Timed Tests		Test #13	1 week	
7	Decimal Place Value: Hundredths – Lesson 71 Writing Tenths – Lesson 72 Number Lines: tenths – Lesson 73 Centimeter Scale – Lesson 74 Writing Hundredths – Lesson 75 Naming Fraction Parts – Lesson 76 Identifying Decimal Place – Lesson 77 Multiplication (4) Division (2) Timed Tests	Saxon 6/5	PS #71, 72, 73, 74, 75, 76, 77 Multiplication test	1 1/2 weeks	

3rd Quarter

#	Topic/ Objective	Materials	Measurement	Time	Done
	Division facts are to be reviewed this quarter using the Mastering Math Facts materials.	MMF	Daily review W/bi-weekly 2-min. tests		
1	Fraction of a Second. Comparing Decimal #s – Lesson 78 Counting Decimal #s. Equivalent Decimal #s – Lesson 79 Writing \$ in 2 Forms: Cents, \$ - Lesson 80 Fraction Manipulatives – Lesson 81 Multiplication (1) , Division (2) Timed Tests	Saxon 6/5	Test #14 PS #78, 79, 81 Test #15	1 week	
2	Adding and Subtracting Decimal #s – Lesson 82 Converting Units of Length – Lesson 83 Improper Fractions. Mixed #s – Lessons 84-85 Multiplying Fractions – Lesson 86 Weight and Mass – Lesson 87 Addition (5), Subtraction (1), Division (1), Multiplication (1) Timed Tests	Saxon 6/5	PS #82, 83, 84, 85, 86 Test #16	2 weeks	
3	Equivalent Fractions – Lessons 88-89 Prime #s – Lesson 90 Equivalent Fractions by Division by 1 – Lesson 91 Greater Common Factor – Lesson 92 Addition (2), Subtraction (2) Timed Tests	Saxon 6/5	PS #89, 90, 91, 92 Test #17	1 1/2 week	
4	Geometric Solids – Lesson 93 Letters to Name Angles – Lesson 94 Converting Units of Liquid Measure – Lesson 95 Multiplying Fractions – Lesson 96 Dividing Fractions – Lesson 97 Reducing Fraction Answers – Lesson 98 Reducing Mixed #s –	Saxon 6/5	PS #93, 94, 96, 97, 98, 99 Test #18	1 1/2 week	

	Lesson 99 Subtraction (1) Timed Test. “H” – Improper Fraction Test				
5	Reducing Fractions to Lowest Terms – Lesson 100 Reducing Improper Fractions – Lesson 101 Dividing by 2-Digit #s – Lessons 102-103 “H” – Improper Fractions Test (2). “I” – Reducing Fractions Test (2).	Saxon 6/5	PS #100, 101, 102, 103 Test #19	1 week	
6	Dividing by 2-Digit #s – Lesson 104 Fraction Reciprocals – Lesson 105 Dividing Fractions – Lesson 106 Ratios – Lesson 107 “I” – Reducing Fractions Test (4)	Saxon 6/5	PS #104, 105, 106, 107 Test #20	1 week	
7	Decimal #s (+, -) – Lesson 108 Adding Whole and Decimal #s – Lesson 109 Simplifying Decimal #s – Lesson 110 “I” – Reducing Fractions Test (4)	Saxon 6/5	PS #108, 109, 110 “I” Test Test #21	1 week	

4th Quarter

#	Topic/ Objective	Materials	Measurement	Time	Done
	Drill and practice simplifying improper fractions, reducing and simplifying fractions, percents to fractions	Saxon Drill sheets G-K	Daily review W/bi-weekly 2-min. tests		
1	Rounding Mixed #s – Lesson 111 Subtracting: Fill in “0”s – Lesson 112-113 Dollars and Cents: Rounding – Lesson 114 Rounding Decimals – Lesson 115 Decimal Place Value: .000 – Lesson 116 % - Lesson 117 “I” Test (1). “J” Test (4).	Saxon 6/5	PS #111, 112, 113, 115, 116, 117 Test #22	1 ½ week	
2	% as a Fraction – Lesson 118 Multiplying Decimals – Lesson 119-120 Multiplying Decimals #s – Lesson 121 Least Common Multiples – Lesson 122 Mixed #s as Improper Fractions – Lesson 123 Probability – Lesson 124 Multiplication (1), Division (3) Timed Tests. “K” Test (2).	Saxon 6/5	PS #118, 119, 120, 121, 122, 123, 124 Test #23	3 weeks	
3	Area – Lesson 125 Probability – Lesson 126 “+ “ and “-“ Fractions – Lesson 127 Adding and Subtracting Mixed #s – Lesson 128 “K” Test (1). Addition Timed Test (2).	Saxon 6/5	PS #125, 126, 127, 128, Test #24	1 week	
4	Dividing Decimal #s – Lesson 129-131 Addition Timed Test (1). Subtraction Timed Test (2).	Saxon 6/5	PS #129, 130 Addition Test Test #25	1 week	

5	Dividing by 10; 100; 1000 – Lesson 132 Averages – Lesson 133 Add and Subtract Fractions – Lesson 134 Add and Subtract Mixed #s – Lesson 135 Subtraction Timed Test (1). “K” Test (1).	Saxon 6/5	PS #132, 133, 134, 135 “K” Test Test #26	1 week	
6	Dividing by a Decimal # - Lesson 136 Multiplying Mixed #s – Lesson 137 Graphing – Lesson 138, 140 Negative #s – Lesson 139 Addition Timed Test (2). Subtraction Timed Tests (4).	Saxon 6/5	PS # 136, 137, 138, 139 Test #27	1 ½ week	
Additional Objectives					
1.	Solve timed math problems involving all four functions with greater accuracy and speed.				
2.	Complete written story problems involving multiple steps.				
3.	Solve addition, subtraction (3 digits), division (2 digits) problems using whole numbers and decimal numbers.				
4.	Correctly solve money problems.				
5.	Apply math skills to other subject areas, e.g. science, history, etc. as required.				
6.	Correctly add and subtract fractions, creating common denominators when needed.				
7.	Accurately describe and use standard and metric measurements.				
8.	Accurately estimate (round) numbers to solve and check problems.				
9.	Correctly identify basic geometric figures and calculate perimeter/area of rectangles.				
10.	Correctly add and subtract mixed numbers.				

VI. Special Grading Notes:

Homework: 20%

Fact Tests: 10%

Tests: 70%

Partial Credit Policy:

- 1) Prior to Algebra I, arithmetic accuracy is the core of the courses. As such, arithmetic errors cannot, and should not, be identified as “careless” vs. “conceptual”. Accuracy in the process is the primary concept.
- 2) “Careless” errors should be dealt with in two fashions:
 - a. Drill of math facts to ensure that fundamental math knowledge is in place
 - b. Appeal to the student to use self-discipline in working and checking with care.
- 3) Working carefully is much more under a student’s control than math

giftedness is. Therefore, in the spirit of encouraging students to be faithful with their gifts, carelessness should not be thought of as a lesser problem than not understanding the material. (In one sense, it could be concluded that the penalty for carelessness ought to be greater.)

- 4) Students exhibiting perceptual problems, such as dyslexic reversals of digits, etc., would be given grace in these areas when a teacher observes that arithmetic errors are made on the paper but not in the mind. This is bit tricky but is often able to be discerned.

VII. Teaching Methods Used:

1	Large group instruction using daily drills, integration with other subjects, and problems on the board; daily emphasis on checking work for accuracy
2	Small group work and individual instruction
3	Games
4	Set individual goals for speed and accuracy
5	Timed test, various worksheets for enhancement

VIII. Approximate Time per Week: 5 periods for 45 minutes each

IX. Math level Placement: Fifth graders may be placed in either Math 6/5 or Math 7/6. Parents will be contacted and notified that acceleration may mean additional time on homework and the possibility of grade averages decreasing.