4th Grade Math Pacing Guide
Unit 1
Board Approved: December 12, 2016

#	CCSS	Unit 1: Use the four operations with whole numbers to solve problems	September/October 18 Days	Go Math Chapters Covered: 1,2	Completed
		Student Learning Objective:	Go Math Lessons		
1	4.NBT.1	1. Explain the quantitative relationship between places of a multi-digit whole number up to one million when moving from right to left.	1.1, 1.5 Place Value Video (4 days)		
2	4.NBT.2	2. Compare numbers using >, =, and < for two multi-digit whole numbers up to one million (presented as base ten numerals, number names, or expanded form).	1.2, 1.3 Expanded Form Video (2 days)		
3	4.NBT.3	3. Round multi-digit whole numbers up to one million to any place.	1.4 (1 day)		
4	4.OA.1	4. Write multiplication equations from multiplicative comparisons given in words (example, 35 is 5 times as many as 7 and 7 times as many as 5) and describe a multiplication equation in words.	1.1, 2.1 (1 day)		
5	4.OA.2	5. Multiply or divide to solve word problems involving multiplicative comparisons.	2.2 (1st day of 2 day lesson-see below)		
6	4.OA.2	6. Write an equation to identify the arithmetic operation written in a word problem (without solving).	2.2 (day 2)		
7	4.NBT.4	7. Fluently add and subtract multi-digit whole numbers using the standard algorithm.	1.6, 1.7, 1.8 (5 days)		

4th Grade Math Pacing Guide
Unit 2
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#	CCSS	Unit 2: Compute with Multi-digit Whole Numbers and Define Equivalent Fractions	Recommended Pacing: October- December (43-46 days)	Go Math Chapters Covered: 2, 3, 4,, 6	Completed
		Student Learning Objective:	Go Math Lessons		
1	4.OA.3	1. Compose equations from information supplied in word problems (with all 4 operations) using letters to represent unknowns (without solving).	2.9, 2.12 (3 days)		
2	4.NBT.5	2. Use strategies to multiply multi-digit numbers and explain the answer using equations, rectangular arrays, and area models (up to 4-digits by 1-digit or 2-digits by 2-digits).	2.3, 2.4, 2.5, **2.6/2.7**, 2.8, **2.10/2.11**, 3.1, 3.2, 3.3, 3.4, 3.5, 3.6 **Turtlehead Multiplication** (16 days)		
3	4.NBT.6	3. Use strategies to divide multi-digit dividends by one-digit divisors and explain the answer using equations, rectangular arrays, and area models.	4.1, 4.2, *4.3 embedded across, 4.4, 4.5, (4.6, 4.7, 4.8, 4.9) - alternative division methods require exposure **4.10/ 4.11** (9 days)		
4	4.NF.1	4. Recognize and generate equivalent fractions and explain why they are equivalent using visual fraction models.	6.1, 6.2, 6.3, 6.4, 6.5 (6-9 days)		

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5	4.NF.2	5. Compare two fractions with different numerators and different denominators using >, <, and = and justify the comparison by using visual fraction models (recognizing the comparison is valid only when two fractions refer to the same whole).	6.6, 6.7, 6.8 (3 days)	
6	4.OA.4	6. Determine if a number between 1 and 100 is a prime or composite number.	5.5 (1 day)	
7	4.OA.4	7. Find all factor pairs for a whole number up to 100 and determine whether it is a multiple of a given 1-digit whole number.	5.1, 5.2, 5.3, 5.4 (5 days)	

4th Grade Math Pacing Guide
Unit 3
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#	CCSS	Unit 3: Solve problems involving addition, subtraction, and multiplication of fractions. Properties of operations with multi-digit arithmetic	Recommended Pacing: January/February (Instructional Days): 33	Go Math Chapters Covered: 1, 2, 3, 4, 7*, 8, 12	Completed
		Student Learning Objective:	**Go Math Lessons**		
1	4.NF.3a, 4.NF.3b	1. Decompose a fraction into a sum of fractions with the same denominator in more than one way; record the decomposition as an equation and justify with a visual fraction model.	7.1, 7.2, 7.6 (4 days) Running Laps problem Piggy Bank problem		
2	4.NF.3c	2. Add and subtract mixed numbers with like denominators by replacing each mixed number with an equivalent fraction.	7.7, 7.8, 7.9 (5 days)		
3	4.NF.3d	3. Solve word problems involving addition and subtraction of fractions referring to the same whole and having like denominators, e.g., by using visual fraction models and equations to represent the problem.	7.3, 7.4, 7.5, 7.10 (5 days)		
4	4.NF.4a 4.NF.4b	4. Multiply a fraction by a whole number using visual fraction models and equations, demonstrating a fraction **a/b** as a multiple of 1/**b**.	8.1, 8.2, 8.3 (5 days)		
5	4.NF.4c	5. Solve 1-step word problems involving multiplication of a fraction by a whole number. *For example, if each person at a party will eat 3/8 of a pound of roast beef,*	8.4- minimal word problems-more foundational, 8.5 (4 days) Thinking Blocks Fraction Word Problems		

		and there will be 5 people at the party, how many pounds of roast beef will be needed? Between what two whole numbers does your answer lie?		
6	4.MD.1	6. Express measurement comparisons within a single system of measurement and record in a two-column chart within a single system of measurement; e.*g.,* know that 1 ft. is 12 times as long as 1 in.	12.1- benchmark comparisons, 12.2, 12.3, 12.4, 12.6, 12.7, 12.8, 12.11 (8 days)	
7	4.OA.3	7. Compose equations from information supplied in word problems using letters to represent unknowns and solve the word problems with addition and subtraction.	3.7 (2 days)	
8	4.NBT.4	8. Add and subtract two multi-digit whole numbers using the standard algorithm fluently (with speed and accuracy) without a calculator.	1.6, 1.7, 1.8 (as needed)	

*chapter 7 used completely

4th Grade Math Pacing Guide
Unit 4

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#	CCSS	Unit 4: Extend Understanding of Fractions, Solve Word Problems, and Introduce Decimals.	Recommended Pacing: March/April (Instructional Days): 24	Go Math Chapters Covered: 2,3,5,9,12,13	Completed
		Student Learning Objective:	**Go Math Lessons**		
1	4.OA.5	1. Generate number or shape patterns by using rules including words, models, or graphs, and identify apparent features of the pattern that were not explicit in the rule of the original pattern. For example, given the rule "Add 3" and the starting number 1 generate terms in the resulting sequence and observe that the terms appear to alternate between odd and even numbers.	5.6 10.7 (2 days)		
2	4.OA.3	2. Compose equations from information supplied in word problems, using letters to represent unknowns in formulas, and solve the word problems (with all four operations).	Assessed Unit 2 (as needed- see unit 2) 2.9: 2.12: 3.7: 4.3		
3	4.NF.5	3. Add two fractions with respective denominators of 10 and 100 by writing each fraction as a fraction with denominator 100.	9.3: 9.6: (3 days)		
4	4.NF.6	4. Use decimal notation to write fractions with denominators of 10 or 100 by writing each fraction as a fraction with denominator 100.	9.1: 9.2: 9.4: (5 days)		
5	4.MD.3	5. Apply area and perimeter formulas for rectangles in real world math problems (whole numbers).	13.1 13.2 13.3 13.4 13.5		

			(7 days)	
6	4.MD.4	6. Make a line plot to display a data set in measurements in fractions of a unit (1/2, 1/4, 1/8) and use it to solve problems involving addition and subtraction of fractions with like denominators.	12.5: Illustrative Mathematics: Button Diameters (2 days)	
7	4.NF.7	7. Compose equations from information supplied in word problems, using letters to represent unknowns in formulas, and solve the word problems (with all four operations). Compare two decimals to hundredths by reasoning about their size. Recognize that comparisons are valid only when the two decimals refer to the same whole. Record the results of comparisons with the symbols >, =, or <, and justify the conclusions, e.g., by using a visual model.	Ongoing assessment using decimal concepts in word problem 9.7: (2 days)	
8	4.MD.2 4.NF.4	8. Solve word problems involving simple fractions or decimals that incorporate measurement comparisons of like units (including problems that require measurements given in a larger unit in terms of a smaller unit).	9.5: Problem solving with Money - 12.9: Elapsed time problem solving 12.10: Mixed Measures (3 days)	

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Unit 5
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#	CCSS	Unit 5: Compare decimals and measure/classify geometric figures	Recommended Pacing: May Instruction Days:10	Go Math Chapters Covered: 10,11	Completed
		Student Learning Objective:	**Go Math Lessons**		
1	4.MD.5 a,b	1.Determine the measure of an angle in degrees. The two rays of an angle share a common endpoint. If that endpoint is located at the center of a circle, the fraction of the circular arc (between the points where the rays intersect the circle) measures the angle in degrees. A "degree" is defined as 1/360 (one degree angle) of the entire circle; and an angle that turns **n** one degree angles is said to measure **n** degrees.	11.1,11.2,11.3 4.MD.C.6, 4.MD.C.7, 4.G.A.1 Measuring Angles 2 days		
2	4.NBT.4	2. Add and subtract two multi-digit whole numbers using the standard algorithm fluently (with speed and accuracy) without a calculator.	1.6,1.7 Getting Ready for Grade 5 Lesson 1, Lesson 2 4.OA.A.3 Carnival Tickets ongoing		
3	4.G.1	3. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines and identify these in two-dimensional figures.	10.1 Lines, Rays, Angles 10.2 Classify Triangles by Angles 10.3 Parallel Lines and Perpendicular Lines Review Project: Creating Cars (online project page B15-16) PBL: Geometry Town project 4.G.A.1 The Geometry of Letters 4.G.A.1 What's the Point? 3 days		
4	4.G.2	4. Classify two-dimensional figures based on the	10.4 1 day		

		presence or absence of parallel or perpendicular lines, or the presence or absence of angles of a specific size. Recognize right angles as a category, and identify right triangles.	4.G.A.2 Are these right? 4.G.A.2 Defining Attributes of Rectangles and Parallelograms	
5	4.MD.6	5. Use a protractor to measure angles in whole number degrees and sketch angles of specific measures.	11.3,11.4, Angle Hunt activity 2 days	
6	4.MD.7	6. Solve addition and subtraction problems to find unknown angles on a diagram in real world and mathematical problems using a symbol for an unknown angle measure.	11.5 4.MD.C.7, 4.G.A.2 Finding an unknown angle 1 day	
7	4.G.3	7. Draw lines of symmetry and identify line-symmetric figures.	10.6 1 day 4.G.A.3 Finding Lines of Symmetry 4.G.A.3 Lines of symmetry for triangles	