

Correlated with Neufeld Learning Systems Inc. Understanding Numeration PLUS September 2007

Grade 3 Mathematics Pacing Guide Text: Scott-Foresman Mathematics Place Value						
Class Day	Benchmark	Topic	Textbook Section	Vocabulary	Resources, Extensions	D.W. Test Item #s
1		Diagnostic Readiness Test				
2	MA.A.1.2 MA.A.2.2	Place Value Patterns/ Numbers in the 1000s	1-3/1-4	Digit, place value, expanded form, standard form, word form	Understanding Numeration PLUS PLACE VALUE Skill – Identify Place Value Patterns (to 1000) Level C/D 3 Digit numbers – Different Ways worksheet #2 Expanded Notation Worksheets #1, #2 Place Value Blocks, eTools, 1000 counters	70062, 70069, 2377, 19392, 2428, 8272, 8278, 12338
3	MA.A.1.2	Tenths and Hundredths	10-1/10-2	Tenths, hundredths, decimal, fraction, mixed number	Understanding Numeration PLUS Understanding Fractions Topic 5. Introduction to Decimals Place Value Ones and Tenths 1 Decimals to Tenths Examples 1, 2, Decimals to Hundredths Examples 1, 2, 3, 4, 5 *can be taught with money or fractions Decimal models and eTools- fractions DLM 10	2479

4	MA.A.1.2 MA.A.2.2	Greater Numbers	1-5	Period	DCV	70015, 70071, 70072
5	MA.A.1.2	Comparing Numbers	1-7	Compare, number line	<u>Understanding</u> <u>Numeration PLUS</u> <u>COMPARING AND</u> <u>ORDERING</u> Skill – Working with Whole Numbers >, <, = Level B/C Make it True #2 “ Great Than, Less Than #2” Compare Numbers #1 Level D Compare Numbers #2	2412, 2329, 2379
6	MA.A.1.2	Ordering Numbers	1-8	Order	<u>Understanding</u> <u>Numeration PLUS</u> <u>COMPARING AND</u> <u>ORDERING</u> Skill – Working with Whole Numbers >, <, = Level B/C Ordering...Horizontal #2 Ordering ... Vertical #2	5613, 8275
7	MA.A.1.2	Comparing and Ordering Decimals	10-3		<u>Understanding</u> <u>Numeration PLUS</u> <u>COMPARING AND</u> <u>ORDERING</u> Skill – Compare Decimals Level D Compare Decimals DLM 10 *can be taught with money or fractions	70031

8	MA.A.3.2 MA.D.1.2	Number Patterns	1-9	Even number, odd number		2509, 2414
9	MA.A.4.2	Rounding Numbers	1-10	Rounding	Neufeld Learning Systems Inc. Understanding Numeration PLUS <u>Understanding Fractions</u> Topic 5. Introduction to Decimals Rounding Decimals Examples 1, 2, 3, 4, 5 Special Case #1, #2 Summary	70044
10	MA.A.1.2 MA.A.3.2 MA.D.2.2	Equality and Inequality	3-14	Numerical Expression, equation, and inequality	<u>Understanding Numeration PLUS</u> <u>COMPARING AND ORDERING</u> Skill – Working with Whole Numbers >, <, = Level D Compare Numbers #2	2460, 70028
11	MA.A.1.2 MA.D.1.2 MA.E.2.2	Problem Solving Strategies	1-11/1-14/1-15		<u>Understanding Numeration PLUS</u> <u>PROBLEM SOLVING</u> Skill – Draw a Picture A Trip to School	
12		Review				
13		Test				

Number Sense						
1	MA.A.3.2	Properties/Relating Addition/ Subtraction	2-1/2-2	Addends, sum, Commutative (order) Property of Addition, Associative (grouping) Property of Addition, Identity (zero) Property of Addition, fact family, difference	<u>Understanding</u> <u>Numeration PLUS</u> <u>OPERATIONS</u> Skill – Fact Families...Add & Subtract Level C Check Subtraction by Addition	5608
2	MA.D.1.2 MA.D.2.2 MA.A.3.2	Find a Rule/ Problem Solving	2-3/2-4		DLM 2	2507, 13152
3	MA.A.4.2	Estimating Sums/ Estimating Differences	2-7/2-11	Estimate, rounding, front- end estimation, compatible numbers	DCV Seg. 2	19405
4		Review				
5		Test				

Adding and Subtracting

1	MA.A.3.2	Adding Two and Three-Digit Numbers	3-1/3-2/3-3	Regroup	<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Add 2 Digit Numbers ...Abstractly Level C Addition without Regrouping Worksheets #1, #2 Addition with Regrouping Worksheets #1, #2</p> <p>Skill – Add 3 Digit Numbers...Concretely Level D Addition without Regrouping Worksheets #1, #2 Addition with Regrouping Worksheets #1, #2 Addition with Regrouping – Any Column Worksheets #1, #2</p> <p>Place-Value Blocks or Place-Value Blocks eTool</p>	2330
2	MA.A.3.2	Adding 3 Numbers	3-4		<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Add 3 Digit Numbers...Abstractly Level D Addition without Regrouping Worksheets #1, #2 Addition with Regrouping Worksheets #1, #2, #3</p>	2332

3	MA.A.1.2 MA.A.3.2	Regrouping/ Subtracting Two Digit Numbers	3-6/3-7		<p><u>Understanding</u> <u>Numeration PLUS</u> <u>OPERATIONS</u> Skill – Subtract 2 Digit Numbers...Concretely Level C Subtraction without Regrouping : worksheets #1, #2 Subtraction with Regrouping: worksheets #1, #2</p> <p>Skill – Subtract 2 Digit Numbers...Abstractly Level C Subtraction without Regrouping : worksheets #1, #2 Subtraction with Regrouping: worksheets #1, #2</p> <p>DLM 3</p>	2331, 5612
4	MA.A.3.2	Regrouping/ Subtracting Three-Digit Numbers	3-8/3-9		<p><u>Understanding</u> <u>Numeration PLUS</u> <u>OPERATIONS</u> Skill – Subtract 3 Digit Numbers...Concretely Level D Subtraction Without Regrouping: worksheet #1, #2 Subtraction With Regrouping #1: worksheet #1, #2 Subtraction With Regrouping #2: worksheet #1, #2 Subtraction With Regrouping #3: worksheet #1, #2</p>	2337

					<p>Skill – Subtract 3 Digit Numbers...Abstractly Level D Subtraction Without Regrouping: worksheet #1, #2 Subtraction With Regrouping #1: worksheet #1, #2 Subtraction With Regrouping #2: worksheet #1, #2 Subtraction With Regrouping #3: worksheet #1, #2 Subtraction With Regrouping #4: worksheet #1, #2</p> <p>Place-Value Blocks or Place-Value Blocks eTool DCV Seg. 3</p>	
5	MA.A.2.2 MA.A.3.2	Subtracting Across Zeros	3-10			2464
6		Counting Money	1-12		<p><u>Understanding Numeration PLUS COUNTING</u> Skill – Counting Using Money Level C Quarters: worksheet #1, #2 Level D Dollars: worksheet #1, #2</p>	2478, 70021, 70051, 70027, 2328, 8293, 12341
7	MA.A.1.2 MA.A.3.2	Adding and Subtracting Money	3-12		<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Addition of Decimals Level D Add Decimals #1, #2</p>	19401, 70050

					Skill – Introduce Subtraction of Decimals Level D Subtract Decimals #1, #2 DLM 1	
8	MA.A.1.2 MA.E.2.2 MA.D.1.2 MA.A.3.2	Problem Solving Strategies	3-5/3-15		<u>Understanding Numeration PLUS PROBLEM SOLVING</u> Skill – Number Sentence Oranges Bill's Ball DLM 3	
9		Review				
10		Test				

Time, Data and Graphs

1	MA.B.1.2 MA.B.3.2 MA.B.4.2	Time to Half Hour and Quarter Hour	4-1	Hour, minute, second, half hour, quarter hour, a.m., and p.m.	<p><u>Understanding</u> <u>Numeration PLUS</u> <u>COMPARING AND ORDERING</u> Skill – Understand Measurement of Time Level B/C Analog and Digital Time to the Half Hour: worksheet #1, #2 Times to the Five Minutes Clock face</p>	13112
2	MA.B.1.2	Time to the Minute	4-2		<p><u>Understanding</u> <u>Numeration PLUS</u> <u>COMPARING AND ORDERING</u> Skill – Understand Measurement of Time Level D Time to the Minute DLM 4</p>	
3	MA.B.1.2 MA.B.4.2	Elapsed Time	4-3	Elapsed time	<p><u>Understanding</u> <u>Numeration PLUS</u> <u>COMPARING AND ORDERING</u> Skill – Describe Elapsed Time...Hours, 5 Minutes Level C Elapsed Time in Hours #1, #2 Level D Elapsed Time – 5 Minutes #1, #2 Time Goes By – Analog, Digital</p>	8290

					Skill – Describe Elapsed Time... Minutes Level D Elapsed Time – Minutes #1, #2	
4	MA.B.1.2	Using a Calendar	4-4	Weeks, months, years, leap years, decades, centuries, and ordinal numbers	<u>Understanding Numeration PLUS COMPARING AND ORDERING</u> Skill – Use Ordinal Numbers Level A/B Ordering Ladybugs The Steps DLM 4	19412
5	MA.E.1.2	Line Plots/Median, Range, Mode	4-6	Line plot, range, and mode	<u>Understanding Numeration PLUS Understanding Graphing</u> Topic 2. Statistics An Introduction Line Graph #1 Line Graph #2	2369, 2420, 2471, 2519, 2371, 2419, 2470, 2520
6	MA.E.1.2 MA.E.3.2	Using Tally Charts/Reading Pictographs and Bar Graphs	4-5/4-7	Survey, data, tally chart, tally mark, pictograph, key, bar graph, and scale.	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Given Graphs...Perform Operations Level D Operations with Tally Charts: Worksheets #1, #2 Operations with Pictographs: Worksheets #1, #2 Operations with Bar Graphs: Worksheets #1, #2	2366, 2466, 13121, 13131, 13148, 13149, 2364, 2418, 13130, 13147

7	MA.D.2.2 MA.E.1.2 MA.E.3.2	Reading Line Graphs	4-10	Line graph	<u>Understanding Numeration PLUS Understanding Graphing</u> Topic 2. Statistics An Introduction Line Graph #1 Line Graph #2	2516
8	MA.C.3.2	Graphing Ordered Pairs	4-9	Coordinate grid, ordered pair, plot	<u>Understanding Numeration PLUS Understanding Graphing</u> Topic 3. Points on a Grid Josh's Neighborhood Concept Number Houses Grids on Maps First quadrant grid paper or geometry drawing eTool	2355, 2356, 2405, 2406, 2455, 2505
9	M.A.A.1.2 MA.B.1.2 MA.A.3.2 MA.E.1.2 MA.E.3.2	Problem Solving Strategies	4-14/4-15		<u>Understanding Numeration PLUS PROBLEM SOLVING</u> Skill – Make a Table Johnny's Pennies Centimeter grid paper	
10		Review				
11		Test				
12		Quarter 1 Benchmark Test				

Multiplication						
1	MA.A.3.2	Multiplication as Repeated Addition	5-1	Multiplication, factor, product	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Multiplication Concretely Level C Multiplication – Repeated Addition Counters or counters eTool	
2	MA.A.3.2 MA.A.5.2 MA.D.2.2	Arrays and Multiplication	5-2	Array, Commutative Property of Multiplication	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduction to Arrays Level C Introduction to Arrays Worksheet #1, #2 Build Arrays Worksheet #1, #2 Introduce Arrays with Multiplication Worksheet #1, #2 Build Arrays with Multiplication Worksheet #1, #2 Counters or counters eTool	
3	MA.A.3.2 MA.A.5.2	2, 5, and 10 as Factors	5-5/5-6/5-7	Multiple, even number, hundred chart	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Patterns in Multiplication Level D X Table – Groups of 6,7,8,9,10	2335, 8283

					Skill – Note Patterns in 10 X 10 Multiplication Table Level D X Table – Patterns in Rows X Table – Patterns in Columns X Table – Other Patterns X Table – User Picks X Table – Computer Picks Hundred chart DCV Seg. 5	
4	MA.A.3.2	Multiplying with 0 and 1	5-9	Identity Property of Multiplication, Zero property of Multiplication	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Multiplication by 1 and by 0 Level C Multiplication : Groups of 1 Multiplication : Groups of 0 Counters or counters eTool	
5		9 as a Factor	5-10		DLM 5	19423
6	MA.A.3.2	Practicing Multiplication Facts	5-11		<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Patterns in Multiplication Level D X Table – Groups of 6,7,8,9,10 Number cards, counters, game board teaching tool 15	

7	MA.A.3.2 MA.E.1.2	Problem Solving	5-8		<u>Understanding</u> <u>Numeration PLUS</u> <u>PROBLEM SOLVING</u> Skill – Number Sentence Oranges Bill's Ball	2381
8		Review				
9		Test				

More Multiplication						
1	MA.A.3.2 MA.D.1.2	3 as a Factor	6-1		<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Multiplication Facts...2,3,4,5 Level C Multiplication : Groups of 2,3,4,5</p> <p>Counters or eTool</p>	
2	MA.A.3.2 MA.D.1.2	4 as a Factor	6-2		<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Multiplication Facts...2,3,4,5 Level C Multiplication : Groups of 2,3,4,5</p> <p>Counters or eTool</p>	
3	MA.A.3.2	6 and 7 as Factors	6-3		<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Multiplication Facts...6,7,8,9 Level D Multiplication : Groups of 6,7,8,9</p>	
4	MA.A.3.2	8 as a Factor	6-4	Commutative Property of Multiplication, square number	<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Multiplication Facts...6,7,8,9 Level D Multiplication : Groups of 6,7,8,9</p>	

5	MA.A.3.2	Practicing Multiplication	6-5	Commutative Property of Multiplication	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Demonstrate Commutative Property Level C Multiplication – Any Order Worksheet #1, #2	
6	MA.A.3.2	Using Multiplication to Compare	6-7	Twice	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Patterns in Multiplication Level D X Table – Groups of 6,7,8,9,10	
7	MA.A.3.2	Patterns on a Table	6-8		<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Note Patterns in 10 X 10 Multiplication Table Level D X Table – Patterns in Rows X Table – Patterns in Columns X Table – Other Patterns X Table – User Picks X Table – Computer Picks Blank multiplication chart	
8	MA.D.1.2	Find a Rule	6-10		Counters or eTool DLM 6	

9	MA.A.3.2 MA.D.1.2	Problem Solving	6-6		<u>Understanding Numeration PLUS PROBLEM SOLVING</u> Skill – Number Sentence Oranges Bill's Ball Skill – Find a Pattern Johnny's Pennies	
10	MA.A.1.2 MA.A.3.2	Problem Solving	6-11		DLM 6	
11		Review				
12		Test				

Division						
1	MA.A.3.2	Division as Sharing/ Division as repeated Subtraction	7-1/7-2	Division	<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduction to Division Level C Equal Groups of Eggs: Worksheets #1, #2 Sharing Oranges Equally: Worksheets #1, #2 Division Introduction – Eggs Worksheets #1, #2 Division Introduction – Oranges Worksheets #1, #2 Division - How Many Groups? Worksheets #1, #2 Counters DLM 7	2410, 2413, 2515, 2532, 2431
2	MA.A.3.2 MA.A.5.2	Relating Multiplication and Division	7-5	Array, fact family, factor, product, dividend, divisor, quotient	<u>Understanding Numeration PLUS Understanding Whole Numbers and Integers</u> Topic 8. Dividing Integers The Inverse of Multiplication Examples 1, 2 DLM 7	
3	MA.A.3.2	Dividing by 2 and 5	7-6		<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Division Facts...2,3,4,5 Level C Division Groups of 2,3,4,5	

4	MA.A.3.2	Dividing by 3 and 4	7-7		<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Division Facts...2,3,4,5 Level C Division Groups of 2,3,4,5	13105
5	MA.A.3.2	Dividing by 6 and 7	7-8		<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Division Facts...6,7,8,9 Level D Division Groups of 6,7,8,9	
6	MA.A.3.2	Dividing by 8 and 9	7-9		<u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduce Division Facts...6,7,8,9 Level D Division Groups of 6,7,8,9	
7	MA.A.3.2	Dividing by 0 and 1	7-10			
8	MA.A.3.2	Dividing with Remainders	7-11	Remainder	Counters	
9	MA.A.3.2 MA.A.5.2	Division Patterns with 10,11, and 12	7-12	Divisible, multiple	Crayons or markers, counters, completed multiplication table	
10	MA.A.3.2 MA.D.2.2	Problem Solving	7-13	Numerical expression		2431
11		Review				
12		Test				

Geometry						
1	MA.C.1.2	Solid Figures	8-1	Solid figure, sphere, cube, rectangular prism, pyramid, cone, cylinder	<u>Understanding Numeration PLUS COUNTING</u> Skill – Recognize and Count Solids Level B/C Counting Solids #1 Counting Solids #2 Set of solids	2496, 2497, 13125, 19419, 19768
2	MA.C.1.2	Relating Solids and Shapes	8-2	Face, edge, corner, vertex, vertices	<u>Understanding Numeration PLUS COUNTING</u> Skill – Recognize and Count Solids Level B/C Counting Solids #1 Counting Solids #2 Set of solids	
3	MA.C.1.2	Lines and Line Segments	8-4	Point, line, line segment, ray, intersecting lines, parallel lines	<u>Understanding Math PLUS Understanding Measurement and Geometry</u> Topic 5. Angles and their Measure Lines and Rays Ruler	13116, 2546
4	MA.B.1.2 MA.C.1.2	Angles	8-5	Angle, vertex. Right angle, obtuse angle, perpendicular	<u>Understanding Math PLUS Understanding Measurement and Geometry</u> Topic 5. Angles and their Measure Angles... An Introduction The Degree Classifying Angles Classifications Memory Game	2346, 19769, 2438

5	MA.C.1.2 MA.C.2.2	Polygons	8-6	Polygon, side, triangle, quadrilateral, pentagon, hexagon, octagon	<p><u>Understanding Math PLUS</u> <u>Understanding Measurement and Geometry</u> Topic 2. Perimeter and Area of Polygons Polygons... What Are They? Concept A Triangle is A Quadrilateral is A Pentagon is A Hexagon is An Octagon is Classify Polygons</p> <p>Geoboards, dot paper, or eTool</p>	
6	MA.C.1.2	Triangles	8-7	Equilateral triangle, isosceles triangle, scalene triangle, right triangle, acute triangle, obtuse triangle	<p><u>Understanding Math PLUS</u> <u>Understanding Measurement and Geometry</u> Topic 5. Angles and their Measure Angles... An Introduction The Degree Classifying Angles Classifications Memory Game</p> <p>Grid paper, scissors, crayons, tape or glue</p>	2347
7	MA.C.1.2	Quadrilaterals	8-8	Rectangle, square, parallelogram, rhombus, trapezoid	Grid paper or eTools	2396

8	MA.C.2.2	Congruent Figures and Motion/ Symmetry	8-9/8-10	Flip (reflection), congruent, slide(translate), turn(rotate), Symmetric, line of symmetry	<p><u>Understanding Math PLUS</u> <u>Understanding Graphing</u> Topic 4. Transformations Introduction to Common Transformations Translations - An Introduction Slide #1, #2, #3, #4 Reflections - An Introduction Flip #1, #2, #3 Rotations - An Introduction Turn #1, #2, #3, #4, #5 The Transformation Machine Examples 1, 2, 3, 4, 5 Tracing paper, set of polygons, grid paper, crayons</p>	2550, 2348, 2351, 2352, 2401, 2402, 2502, 19773
9	MA.B.1.2 MA.B.2.2 MA.B.3.2 MA.B.4.2 MA.C.3.2	Perimeter	8-11	Perimeter	<p><u>Understanding Math PLUS</u> <u>OPERATIONS</u> Skill – Finding the Perimeter of a Shape Level C/D Perimeter of a Rectangle: Worksheets #1, #2 Perimeter of a 2D Shape: Worksheets #1, #2</p> <p>Paper clips, crayons, grid paper or eTools</p> <p>DLM 8</p>	2353, 2354, 2387, 2403, 2466

10	MA.B.1.2 MA.B.3.2 MA.B.4.2 MA.C.3.2	Area	8-12	Square unit, area	<u>Understanding Math PLUS OPERATIONS</u> Skill – Finding the Area of a Shape Level D Area of a Shaded Region #1: Worksheets #1, #2 Area of a Shaded Region #2: Worksheets #1, #2 Paper clips, square tiles, grid paper or eTools DLM 8	2553
11	MA.B.1.2 MA.B.2.2 MA.B.3.2 MA.C.2.2	Volume	8-13	Cubic unit, volume	<u>Understanding Math PLUS Understanding Measurement and Geometry</u> Topic 4. Solids...Volume and Surface Area Volume of a Solid The Concept Small cubes, small box	
12		Review				
13		Test				

Fractions

1		Quarter 2 Benchmark Test				
2	MA.A.1.2	Equal Parts of a Whole/ Naming Fractional Parts	9-1/9-2	Grid paper, crayons, scissors, fraction, numerator, denominator	<p><u>Understanding Numeration PLUS COUNTING</u></p> <p>Skill – Introduce Common Fractions as Parts of a Whole Level B One Half of a Shape Three Quarters of a Shape Cut in Half: Worksheets #1, #2</p> <p>Level C Fifths to Tenths #1, #2 Write the Fraction #1, #2</p> <p>DLM 9</p>	2326, 70017, 70018, 2427, 8336, 12305, 12343
3	MA.A.1.2	Equivalent Fractions	9-3	Equivalent fractions	<p><u>Understanding Math PLUS Understanding Fractions</u></p> <p>Topic 3. Equivalent Fractions Introduction Square Triangle Pattern Blocks Hexagon 1, 2 Fraction Strips Concepts 1, 2</p> <p>Fraction strips or eTools</p>	70063, 2327, 12309

4	MA.A.1.2	Comparing and Ordering Fractions	9-4	Unit fractions	<p><u>Understanding Math PLUS Understanding Fractions</u> Topic 1. The Meaning of Fractions Fraction of a Gas Tank Fraction Strips Concepts 1, 2, 3, 4 Comparison of Fractions The Symbol Greater Than - Ex. 1, Ex. 2 Less Than - Ex. 1, Ex. 2 Greater and Less Than - Ex. 1, Ex. 2</p> <p>Fraction strips or eTools</p>	70036, 70037, 70038
5	MA.A.4.2	Estimating Fractional Parts	9-5		<p>Fraction strips or eTools</p>	2427, 70019, 2376, 12337
6	MA.A.1.2	Fraction on a Number Line	9-6		<p><u>Understanding Math PLUS Understanding Fractions</u> Topic 1. The Meaning of Fractions Fractions on a Number Line Halves Thirds Quarters Summary Pattern Blocks Examples 1, 2, 3, 4</p> <p>Fraction strips or eTools</p>	

7	MA.A.1.2	Fractions and Sets/ Finding Fractional Parts of a Set	9-7/9-8		<p><u>Understanding Math PLUS Understanding Fractions</u> Topic 1. The Meaning of Fractions Fraction of a Set Example 1 - Marbles Example 2 - Candies Example 3 - Birthday Cake</p>	70020, 70049, 70057
8	MA.A.1.2	Adding and Subtracting Fractions	9-9		<p><u>Understanding Math PLUS Understanding Fractions</u> Topic 8. Adding Fractions Pattern Blocks Hexagon 1, 2, 3 Summary Fraction Strips Concepts 1, 2</p> <p>Topic 9. Subtracting Fractions Pattern Blocks Hexagons 1, 2, 3 Summary The Clock Examples 1, 2</p> <p>Fraction strips or eTools</p>	

9	MA.A.1.2	Mixed Numbers	9-10	Mixed number	<p><u>Understanding Math PLUS</u> <u>Understanding Fractions</u> Topic 13. Improper and Mixed Numbers The Concept Packages Clock Improper Fractions and Mixed Numbers... What are They?</p> <p>6 rectangular pieces of paper, scissors DCV Seg. 9</p>	
10	MA.E.2.2	Describing Chances	12-7	Certain, possible, impossible, likely, unlikely	<p><u>Understanding Math PLUS</u> <u>Understanding Probability</u> Topic 1. Introduction to Probability The Language of Chance Impossible to Certain Activity 1 Activity 2</p> <p>DLM 12</p>	
11	MA.E.2.2	Probability	12-9	Probability	<p><u>Understanding Math PLUS</u> <u>Understanding Probability</u> Topic 1. Introduction to Probability Probability Lines Line 1 Line 2</p> <p>DCV Seg. 12</p>	2374, 2424, 2425, 2474, 2524, 19432

12	MA.A.3.2 MA.D.1.2	Problem Solving	9-11		<u>Understanding Numeration PLUS</u> <u>PROBLEM SOLVING</u> Skill – Draw a Picture A Trip to School Skill – Find a Pattern Johnny's Pennies	
13		Review				
14		Test				

Measurement						
1	MA.B.1.2 MA.B.2.2 MA.B.3.2 MA.B.4.2	Length/ Measuring to the Nearest $\frac{1}{2}$ inch	9-12/9-13	Inch	<u>Understanding Math</u> <u>PLUS</u> <u>Understanding</u> <u>Measurement and</u> <u>Geometry</u> Topic 1. Introduction to Measurement The Ruler Large paper clips, small paper clips, crayons, inch ruler	2483, 2341
2	MA.B.2.2 MA.B.4.2	Length in Feet and Inches	9-14	Foot(ft)	<u>Understanding Math</u> <u>PLUS</u> <u>Understanding</u> <u>Measurement and</u> <u>Geometry</u> Topic 1. Introduction to Measurement Benchmarks Establishing Benchmarks Foot Benchmarks Inch Benchmarks Inch ruler	2383
3	MA.B.2.2 MA.B.4.2	Feet, Yards, and Miles	9-15	Yard(yd), mile(mi)	<u>Understanding Math</u> <u>PLUS</u> <u>Understanding</u> <u>Measurement and</u> <u>Geometry</u> Topic 1. Introduction to Measurement Benchmarks Establishing Benchmarks Foot Benchmarks Yard Benchmarks	2432, 2390, 2442
4	MA.B.1.2 MA.B.2.2 MA.B.4.2	Customary Units of Capacity	12-1	Capacity, cup(c), pint(pt), quart(qt), gallon(gal)	Measuring cup, variety of pint, quart, gallon containers, variety of unmarked containers, water	2392, 2441, 2343, 2443, 13132

5	MA.B.1.2 MA.B.2.2 MA.B.3.2 MA.B.4.2	Customary Units of Weight	12-4	Pound(lb), ounce(oz)	Pan balance, ounce and pound weights, objects to weigh	2391, 2487, 2343, 2443
6	MA.B.1.2 MA.B.3.2 MA.B.4.2	Centimeters and Decimeters	10-6	Centimeter(cm), decimeter(dm)	<u>Understanding Math</u> <u>PLUS</u> <u>Understanding</u> <u>Measurement and</u> <u>Geometry</u> Topic 1. Introduction to Measurement Metric Prefixes at Work Converting Between Metric Units Centimeter ruler	2336, 2340
7	MA.A.3.2 MA.B.2.2 MA.B.3.2 MA.B.4.2	Meters and Kilometers	10-7	Meter(m), kilometer(km)	<u>Understanding Math</u> <u>PLUS</u> <u>Understanding</u> <u>Measurement and</u> <u>Geometry</u> Topic 1. Introduction to Measurement Metric Prefixes at Work Converting Between Metric Units Meter stick	2393
8	MA.B.1.2 MA.B.2.2	Milliliters and Liters	12-2	Milliliter(mL), liter(L)	Liter bottles, eyedropper marked in milliliters, measuring cups marked in milliliters, liter containers, spoon and drinking glass, quart container, water	
9	MA.B.1.2 MA.B.2.2 MA.B.3.2 MA.B.4.2	Grams and Kilograms	12-5	Gram(g), kilogram(kg)	Pan balance, gram and kilogram weights, pound weights, objects to weigh	2491

10	MA.B.1.2 MA.B.3.2	Temperature	12-6	Thermometer, degrees Fahrenheit, degrees Celsius	<u>Understanding</u> <u>Numeration PLUS</u> <u>COMPARING AND</u> <u>ORDERING</u> Skill – Reading and Comparing Temperatures Level C Fahrenheit and Celsius Temperatures worksheet #1, #2 Compare Temperatures in a Day worksheet #1, #2 DLM 12	113113, 2437
11		Review				
12		Test				

Greater Multiplication

1	MA.A.3.2 MA.A.4.2	Multiplication and Arrays	11-5	Array, place value blocks or eTools	<p><u>Understanding Numeration PLUS OPERATIONS</u> Skill – Introduction to Arrays Level C Introduction to Arrays Worksheet #1, #2 Build Arrays Worksheet #1, #2 Introduce Arrays with Multiplication Worksheet #1, #2 Build Arrays with Multiplication Worksheet #1, #2</p>	
2	MA.A.3.2 MA.A.4.2	Multiplying Two-Digit Numbers	11-7		<p><u>Understanding Math PLUS Understanding Whole Numbers and Integers</u> Topic 3. Multiplying and Dividing Whole Numbers Multiply by a Two Digit Multiplier Partial Products (Area) Partial Products - Example 1 - With Blocks Partial Products - Example 2 - With Blocks Partial Products - Example 3 - With Blocks Partial Products - Example 4 - Without Blocks Partial Products - Example 5 - Without Blocks Partial Products - Example 6 - Without</p>	2432, 2480, 10160

					Blocks Partial Products - Questions 1, 2, 3	
3	MA.E.2.2	Problem Solving	11-11			
4		Quarter 3 Benchmark Test				
1-15		15 Review Day before FCAT				

Review of Multiplication						
1-14		Memoriza-tion of Multiplica-tion Facts				

Begin Fourth Grade Curriculum						
1	MA.A.2.2	Numbers in Thousands	4 th grade text 1-1	Expanded form, standard form, word form, digits, value, place value chart	<u>Understanding Numeration PLUS PLACE VALUE</u> Skill – Identify Place Value Patterns (to 1000) Level C/D 3 Digit numbers – Different Ways worksheet #2 Expanded Notation Worksheets #1, #2	
2	MA.A.2.2	Understand-ing greater Numbers	1-2			
3	MA.A.2.2	Place Value Patterns	1-3		<u>Understanding Numeration PLUS PLACE VALUE</u> Level C/D 3 Digit numbers – Different Ways worksheet #2 Expanded Notation Worksheets #1, #2	
4	MA.A.1.2	Comparing and Ordering Numbers	1-5		<u>Understanding Numeration PLUS COMPARING AND ORDERING NUMBERS</u> <i>All Sections</i>	
5	MA.A.2.2	Rounding Numbers	1-6	Rounding		

6	MA.A.2.2	Using Money to Understand Decimals	1-9	Decimal point, hundredth, tenth	<u>Understanding Numeration PLUS COUNTING</u> Skill – Introduce Decimals Level D Tenths and Decimals Ones and Tenths	
7	MA.A.2.2	Counting Money	1-10		<u>Understanding Numeration PLUS COUNTING</u> Skill – Counting Using Money Level D Dollars: worksheet #1, #2	
8	MA.A.3.2	Making Change	1-11			
9	MA.A.1.2	More About Decimals	1-12		<u>Understanding Numeration PLUS COMPARING AND ORDERING</u> Skill – Compare Decimals Level D Compare Decimals	
10	MA.A.3.2	Mental Math Adding	2-1	Commutative Property of Addition, Associative Property of Addition, Addends		
11	MA.A.3.2	Mental Math Subtracting	2-2	Difference		
12	MA.A.4.2	Estimating Sums/ Differences	2-3	Rounding, front end estimation		
13	MA.A.3.2	Over-estimates and Under-estimates	2-4	Overestimate, underestimate		

14	MA.A.3.2	Adding Whole Numbers and Money	2-5		<p><u>Understanding Math PLUS</u> <u>Understanding Whole Numbers and Integers</u> Topic 3. Adding and Subtracting Whole Numbers Add... Trade First Example 1 - With Blocks Example 2 - With Blocks Example 3 - Without Blocks Example 4 - Without Blocks Example 5 - Without Blocks Example 6 - Without Blocks Add... Right to Left Example 1 - With Blocks Example 2 - With Blocks Example 3 - Without Blocks Example 4 - Without Blocks Example 5 - Without Blocks Example 6 - Without Blocks</p>	
15	MA.A.3.2	Column Addition	2-6			

16	MA.A.3.2	Subtracting Whole Numbers and Money	2-7	Inverse operations	<p><u>Understanding Math PLUS</u> <u>Understanding Whole Numbers and Integers</u> Topic 3. Adding and Subtracting Whole Numbers Subtract... Right to Left Example 1 - With Blocks Example 2 - With Blocks Example 3 - Without Blocks Example 4 - Without Blocks Example 5 - Without Blocks Example 6 - Without Blocks Subtract... Trade First Example 1 - With Blocks Example 2 - With Blocks Example 3 - Without Blocks Example 4 - Without Blocks Example 5 - Without Blocks Example 6 - Without Blocks</p>	
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17	MA.D.2.2	Algebra: Matching Words and Number Expressions	2-11	Parentheses	<u>Understanding Math PLUS</u> <u>Understanding Algebra</u> Topic 1. Introduction to Algebraic Thinking Trick #1 - Whole Numbers Instruction Trick Machine Explanation Trick #2 - Whole Numbers Instruction Explanation Trick #3 - Whole Numbers Instruction Explanation	
18	MA.D.2.2	Algebra: Evaluating Expressions	2-12	Variable, algebraic expressions, evaluate an expression	<u>Understanding Math PLUS</u> <u>Understanding Algebra</u> Topic 1. Introduction to Algebraic Thinking Pictures to Words - Whole Numbers Pictures to Words More Pictures to Words	
19	MA.D.2.2	Algebra: Solving Addition and Subtraction Equations	2-13	Equation, solution, solve	<u>Understanding Math PLUS</u> <u>Understanding Algebra</u> Topic 1. Introduction to Algebraic Thinking Pictures to Words - Whole Numbers Pictures to Words More Pictures to Words	
20		Quarter 4 Benchmark Test				
*Following this curriculum guide will allow 15 review days before the FCAT *Days per unit are approximations. The number of days may vary.						

