Curriculum Map – Fourth Grade

Year Overview

SEPT	OCT	NOV	DEC	JAN	FEB	MAR	APR	MAY	JUNE
Chapter 1 (13 days)			**Chapter 4 and Chapter 5** (17 days)			**Chapter 8** (9 days)			
Chapter 2 (13 days)			**Chapter 6** (22 days)			**Chapter 9** (9 days)			
						Chapter 10 and Chapter 11 (8 days)			
Chapter 3 (25 days)			**Chapter 7** (15 days)			**Chapter 12** (12 days)			
						Chapter 13 and Chapter 14 (8 days)			
Grades Entered by 12/6/13			**Grades Entered by 3/14/14**			**Grades Entered by 6/13/14**			
Standards Addressed:			**Standards Addressed:**			**Standards Addressed:**			
4.OA.1	4.NBT.1		4.MD.1	4.NF.1	4.OA.2	4.NBT.1	4.NBT.1	4.MD.1	4.OA.3
4.OA.2	4.NBT.2		4.MD.2	4.NF.2	4.OA.3	4.NBT.2	4.NBT.2	4.OA.5	
4.OA.3	4.NBT.3		4.MD.4	4.NF.3a		4.NBT.3a	4.NBT.4	4.MD.3	
4.OA.4	4.NBT.4			4.NF.3b				4.MD.5	
4.OA.5	4.NBT.5			4.NF.3c			4.NF.5	4.MD.5a	4.G.1
				4.NF.4				4.MD.5b	4.G.2
				4.NF.4b				4.MD.6	4.G.3
				4.NF.4c				4.MD.7	
				4.NF.5					
				4.NF.6					
				4.NF.7					

Curriculum Map – Fourth Grade

September

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NBT.1	**Generalize place value understanding for multi-digit whole numbers.** 1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700÷70 = 10 by applying concepts of place value and division.*	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar ThinkCentral.com Place Value Charts and Chips	digit place-value compare number pattern place-value chart ten thousand hundred thousand standard form word form expanded form greater than > less than < more than greatest least order	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 1- Place Value (13 days)
4.NBT.2	2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.				
4.OA.5	**Generate and analyze patterns.** 5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *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. Explain informally why the numbers will continue to alternate in this way.*				

Curriculum Map – Fourth Grade

September (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NBT.4	**Use place value understanding and properties of operations to perform multi-digit arithmetic.** 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.				
* Begin to review multiplication facts in preparation for Chapter 2					

Curriculum Map – Fourth Grade

End September-Mid October

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NBT.1 4.NBT.2 4.NBT.3	**Generalize place value understanding for multi-digit whole numbers.** 1. Recognize that in a multi-digit whole number, a digit in once place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.* 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons. 3. Use place value understanding to round multi-digit whole numbers to any place.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar ThinkCentral.com Prime Numbers Table	Estimate Reasonable Front-end estimation Rounding Product Quotient Factor Common factor Greatest common factor Prime number Composite number Multiple Common multiple Least common multiple	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 2: Estimation and Number Theory (13 days)
4.NBT.4	**Use place value understanding and properties of operations to perform multi-digit arithmetic.** 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.				

Curriculum Map – Fourth Grade

End September-Mid October

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.OA.3	**Use the four operations with whole numbers to solve problems.** 3. Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.				
4.OA.4	**Gain familiarity with factors and multiples.** 4. Find all factor pairs for a whole number in the range 1-100. Recognize that a whole number is a multiple of each of its factors. Determine whether a given whole number in the range 1-100 is a multiple of a given one-digit number. Determine whether a given whole number in the range of 1-100 is prime or composite.				
Spend time learning math multiplication facts.					

Curriculum Map – Fourth Grade

Mid October- End November

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NBT.1 4.NBT.2	**Generalize place value understanding for multi-digit whole numbers.** 1. Recognize that in a multi-digit whole number, a digit in once place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷ 70 = 10 by applying concepts of place value and division.* 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and expanded form. Compare two multi-digit numbers based on meanings of the digits in each place, using >, =, and < symbols to record the results of comparisons.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Web Resources: ThinkCentral.com Thinkingblocks.com Materials: Place Value Chart and Chips Base Ten Blocks	round estimate product regroup quotient remainder	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 3: Whole Number Multiplication and Division (25 days)
4.NBT.5	**Use place value understanding and properties of operations to perform multi-digit arithmetic.** 5. Multipy a whole number of up to four digits by a one-digit whole number, and multiply two-digit numbers, using strategies based on place value and the properties of operations. Illustrate and explain the calculation by using equations, rectangular arrays, and/or area models. MA.5a Know multiplications facts and related division facts through 12x12.				

Curriculum Map – Fourth Grade

Mid October- End November (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.OA.1 4.OA.2	**Use the four operations with whole numbers to solve problems.** 1. Interpret a multiplication equation as a comparison, e.g., interpret 35 = 5 x 7 as a statement that 35 is 5 times as many as 7 and 7 times as many as 5. Represent verbal statements of multiplicative comparisons as multiplication equations. 2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.[24]				

[24] See MA Curriculum Framework for Mathematics, March 2011 Glossary, Table 2

*First exposure to long division- many need more time.
* First exposure to bar modeling

Curriculum Map – Fourth Grade

December

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NF.3c	**Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers.** 3c. Add and subtract mixed numbers with like denominators, e.g., by replacing each mixed number with an equivalent fraction, and/or by using properties of operations and the relationship between addition and subtracting.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar	data table tally chart row column intersection line graph horizontal axis vertical axis	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 4: Tables Chapter 5: Probability (17 days)
4.NF.1* (Also covered in more depth in Chapter 6)	**Extend understanding of fraction equivalence and ordering.** 1. Explain why a fraction $^{a}/_{b}$ is equivalent to a fraction $^{(n \times a)}/_{(n \times b)}$ by using visual fraction models, with attention to how the numbers and sizes of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions.		average mean median mode range line plot stem and leaf outlier outcome certain more likely equally likely less likely impossible probability		

Chapters 4 and 5 do not cover critical areas. Give the pretests for chapter 4 and 5 to address areas of concern.
Chapter 6 Fractions should start in January

Curriculum Map – Fourth Grade

January- Beg February

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NF.1 4.NF.2	**Extend understanding of fraction equivalence and ordering.** 1. Explain why a fraction $^{a}/_{b}$ is equivalent to a fraction $^{(n \times a)}/_{(n \times b)}$ by using visual fraction models, with attention to how the numbers and sizes of the parts differ even though the two fractions themselves are the same size. Use this principle to recognize and generate equivalent fractions. 2. Compare two fractions with different numerators and different denominators, e.g., by creating common denominators or numerators, or by comparing to a benchmark fraction such as ½. Recognize that comparisons are valid only when the two fractions refer to the same whole. Record the results of comparisons with symbols >, =, or <, and justify the conclusions, e.g., by using a visual fraction model.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com Materials: Fraction circles Fraction bar models Connecting cubes	Numerator Denominator Equivalent fraction Unlike fraction Mixed number Simplest form Improper fraction	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 6: Fractions (22 Days)
4.MD.1	**Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.** 1. Know relative sizes of measurement units within one system of units, including km, m, cm; kg, g; lb., oz; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number of pairs (1, 12), (2, 24), (3, 36), . . .*				

Curriculum Map – Fourth Grade

January- Beg February (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NF.3.a 4.NF.3.b 4.NF.4 4.NF.4b 4.NF.4c	**Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.** 3. Understand a fraction $^{a}/_{b}$ with a > 1 as a sum of fractions $^{1}/_{b}$. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole. b. Decompose a fraction into a sum of fractions with the same denominator in more than one way, recording each decomposition by an equation. Justify decompositions, e.g., by using a visual fraction model. *Examples: 3/8 = 1/8 + 1/8 + 1/8; 3/8 = 1/8 + 2/8; 2 1/8 – 1 + 1 + 1/8 = 8/8 + 8/8 + 1/8.* 4. Apply and extend previous understandings of multiplication to multiply a fraction by a whole number. b. Understand a multiple of a/b as a multiple of 1/b, and use this understanding to multiply a fraction by a whole number. *For example, use a visual fraction model to express 3 x (2/5) as 6 x (1/5), recognizing this product as 6/5.* (In general, n x (a/b) = (n x a)/b.)				

Curriculum Map – Fourth Grade

January- Beg February (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.MD.2	**Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.** 2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.				
4.OA.2 4.OA.3	**Use the four operations with whole numbers to solve problems.** 2. Multiply or divide to solve word problems involving multiplicative comparison, e.g., by using drawings and equations with a symbol for the unknown number to represent the problem, distinguishing multiplicative comparison from additive comparison.[24] 3. Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.				

Curriculum Map – Fourth Grade

January- Beg February (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.MD.4	**Represent and interpret data.** 4. Make a line plot to display a data set of measurements in fractions of unit (1/2, ¼, 1/8). Solve problems involving addition and subtraction of fractions by using information presented in line plots. *Fore example, from a line plot find and interpret the difference in length between the longest and shortest specimens in an insect collection.*				

[24] See MA Curriculum Framework for Mathematics, March 2011 Glossary, Table 2

Curriculum Map – Fourth Grade

February-Beg March

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.MD.1	**Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.** 1. Know relative sizes of measurement units within one system of units, including km, m, cm; kg, g; lb., oz; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number of pairs (1, 12), (2, 24), (3, 36), . . .*	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com Materials: Place value Chart and chips Decimal Bars Decimal and fraction cards	Tenth Decimal form Decimal pint Expanded form Hundredth Placeholder zero More than Less than Greatest Order Round Equivalent fraction	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 7: Decimals (15 days)
4.NBT.1 4.NBT.2	**Generalize place value understanding for multi-digit whole numbers.** 1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷70 = 10 by applying concepts of place value and division.* 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and using >, =, and < symbols to record the results of comparisons.				
4.NF.3.a	**Build fractions from unit fractions by applying and extending previous understandings of operations on whole numbers.** 3. Understand a fraction 1/b with a > 1 as a sum of fractions 1/**b**. a. Understand addition and subtraction of fractions as joining and separating parts referring to the same whole.				

Curriculum Map – Fourth Grade

February-Beg March (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NF.5 4.NF.6 4.NF.7	**Understand decimal notation for fractions, and compare decimal fractions.** 5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.[27] *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.* 6. Use decimal notation for fractions with denominators 10 or 100. *For example, rewrite 0.62 as 62/100; describe a length as 0.62 meters; locate 0.62 on a number line diagram.* 7. 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.				

[27]Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.

Curriculum Map – Fourth Grade

March

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.NBT.1 4.NBT.2	**Generalize place value understanding for multi-digit whole numbers.** 1. Recognize that in a multi-digit whole number, a digit in one place represents ten times what it represents in the place to its right. *For example, recognize that 700 ÷70 = 10 by applying concepts of place value and division.* 2. Read and write multi-digit whole numbers using base-ten numerals, number names, and using >, =, and < symbols to record the results of comparisons.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com Materials: Money manipulatives		Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 8: Adding and Subtracting Decimals (9 days)
4.NBT.4	**Use place value understanding and properties of operations to perform multi-digit arithmetic.** 4. Fluently add and subtract multi-digit whole numbers using the standard algorithm.				
4.NF.5	**Understand decimal notation for fractions, and compare decimal fractions.** 5. Express a fraction with denominator 10 as an equivalent fraction with denominator 100, and use this technique to add two fractions with respective denominators 10 and 100.[27] *For example, express 3/10 as 30/100, and add 3/10 + 4/100 = 34/100.*				

Curriculum Map – Fourth Grade

March

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.OA.3	**Use the four operations with whole numbers to solve problems.** 3. Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.				
4.MD.1 4.MD.2	**Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.** 1. Know relative sizes of measurement units within one system of units, including km, m, cm; kg, g; lb., oz; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number of pairs (1, 12), (2, 24), (3, 36), . . .*				

Curriculum Map – Fourth Grade

March (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
	2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.				

Students will need to apply adding and subtracting decimals to problem solving.

[27]Students who can generate equivalent fractions can develop strategies for adding fractions with unlike denominators in general. But addition and subtraction with unlike denominators in general is not a requirement at this grade.

Curriculum Map – Fourth Grade

End March

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.G.1	**Draw and identify lines and angles, and classify shapes by properties of their lines and angles.** 1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com Materials: Protractor	ray vertex protractor degrees inner scale outer scale acute angle obtuse straight angle turn additive	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 9: Angles (9 days)
4.MD.5 4.MD.5a 4.MD.5b 4.MD.6 4.MD.7	**Geometric measurement: Understand concepts of angle and measure angles.** 5. Recognize angles as geometric shapes that are formed wherever two rays share a common endpoint, and understand concepts of angle measurement. a. An angle is measured with reference to a circle with its center at the common endpoint of the rays, by considering the fraction of the circular arc between the points where the two rays intersect the circle. An angle that turns through 1/360 of a circle is called a "one-degree angle," and can be used to measure angles. b. An angle that turns through *n* one-degree angles is said to have an angle measure of *n* degrees. 6. Measure angles in whole-number degrees using a protractor. Sketch angles of specified measure.				

Curriculum Map – Fourth Grade

End March (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
	7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real0-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.				
Use Calendar Math throughout the year to review geometry concepts.					

Curriculum Map – Fourth Grade

Early – Mid-April

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.G.1 4.G.2	**Draw and identify lines and angles, and classify shapes by properties of their lines and angles.** 1. Draw points, lines, line segments, rays, angles (right, acute, obtuse), and perpendicular and parallel lines. Identify these in two-dimensional figures. 2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absences of angles of a specific size. Recognize right triangles as a category, and identify right triangles.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com	perpendicular line segments drawing triangle parallel line segments base horizontal lines vertical lines	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 10: Parallel and Perpendicular (4 days)
4.G2	**Draw and identify lines and angles, and classify shapes by properties of their lines and angles.** 2. Classify two-dimensional figures based on the presence or absence of parallel or perpendicular lines, or the presence or absences of angles of a specific size. Recognize right triangles as a category, and identify right triangles.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com	square right angle rectangle parallel	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 11: Squares and Rectangles (4 days)

Curriculum Map – Fourth Grade

Early – Mid-April (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.MD.1 4.MD.2	**Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.** 1. Know relative sizes of measurement units within one system of units, including km, m, cm; kg, g; lb., oz; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number of pairs (1, 12), (2, 24), (3, 36), . . .* 2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale.				

Curriculum Map – Fourth Grade

Early – Mid-April (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.OA.3	**Use the four operations with whole numbers to solve problems.** 3. Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.				
4.MD.7	**Geometric measurement: Understand concepts of angle and measure angles.** 7. Recognize angle measure as additive. When an angle is decomposed into non-overlapping parts, the angle measure of the whole is the sum of the angle measures of the parts. Solve addition and subtraction problems to find unknown angles on a diagram in real-world and mathematical problems, e.g., by using an equation with a symbol for the unknown angle measure.				

Review of concepts- line segments, lines, rays

Use Calendar Math throughout the year to review geometry concepts.

You may need to trim down lesson lengths to get in more Geometry before MCAS

Trim down lesson lengths to get in more Geometry before MCAS

Curriculum Map – Fourth Grade

End April

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.MD.1 4.MD.2 4.MD.3	**Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit.** 1. Know relative sizes of measurement units within one system of units, including km, m, cm; kg, g; lb., oz; l, ml; hr, min, sec. Within a single system of measurement, express measurements in a larger unit in terms of a smaller unit. Record measurement equivalents in a two-column table. *For example, know that 1 ft. is 12 times as long as 1 in. Express the length of a 4 ft. snake as 48 in. Generate a conversion table for feet and inches listing the number of pairs (1, 12), (2, 24), (3, 36), . . .* 2. Use the four operations to solve word problems involving distances, intervals of time, liquid volumes, masses of objects, and money, including problems involving simple fractions or decimals, and problems that require expressing measurements given in a larger unit in terms of a smaller unit. Represent measurement quantities using diagrams such as number line diagrams that feature a measurement scale. 3. Apply the area and perimeter formulas for rectangles in real-world and mathematical problems. *For example, find the width of a rectangular room given the area of the flooring and the length, by viewing the area formula as a multiplication equation with an unknown factor.*	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com	length width composite figure	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 12: Area and Perimeter (12 days)

Curriculum Map – Fourth Grade

End April (cont.)

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.OA.3	**Use the four operations with whole numbers to solve problems.** 3. Solve multi-step word problems posed with whole numbers and having whole-number answers using the four operations, including problems in which remainders must be interpreted. 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.				

Curriculum Map – Fourth Grade

End May

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.G.3	**Draw and identify lines and angles, and classify shapes by properties of their lines and angles.** 3. Recognize a line of symmetry for a two-dimensional figure as a line across the figure such that the figure can be folded along the line into matching parts. Identify line-symmetric figures and draw lines of symmetry.	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com	line of symmetry symmetric figure rotation rotational symmetry center of rotation clockwise counterclockwise	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 13: Symmetry (4 days)

Curriculum Map – Fourth Grade

June

MA 2011 Code	MA 2011 Standard (with Focus Highlighted)	Resources	Key Vocabulary	Assessment	Pacing
4.OA.5	**Generate and analyze patterns.** 5. Generate a number or shape pattern that follows a given rule. Identify apparent features of the pattern that were not explicit in the rule itself. *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. Explain informally why the numbers will continue to alternate in this way.*	MIF Teacher's Edition 4A, Student Text 4A, Workbook 4A, Reteaching 4A, Enrichment 4A MIF Transition guide for needed background skills. Everyday Counts Calendar Thinkcentral.com	• Tessellation • Repeated shape • Slide • Rotate • Flip • Modify	Create a common assessment; blending best items from test prep, chapter assessment, and put on your thinking cap.	Chapter 14: Tessellations (4 days)