

	MA 3.1 NUMBER		Students will communicate number sense concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.	L to J Quiz zes
	MA 3.1.1		Numeric Relationships: Students will demonstrate, represent, and show relationships among whole numbers and simple fractions within the base-ten number system.	

	MA 3.1.1a	4, 7, 11, 12, 32, 33	Read, write, and demonstrate multiple equivalent representations for numbers up to 100,000 using objects, visual representations, including standard form, expanded form, and expanded notation.	Cummulative Tests 1,2,3,7 Benchmark Tests 1, 2	L to J Quizzes
	MA 3.1.1.b	17, 27, 103	Compare whole numbers through the hundred thousands and represent the comparisons using the symbols $>$, $<$, or $=$.	Cummulative Tests 4, 6, 21 Benchmark Tests 1, 2,5	L to J Quizzes
	MA 3.1.1.c	5, 30, 93, 95	Round a whole number to the tens or hundreds place,	Cummulative Tests 1, 6, 19 Benchmark Tests 1,	L to J Quizzes

			using place value understanding or a visual representation.	2,5	
	MA 3.1.1.d	48	Represent and understand a fraction as a number on a number line.	Cummulative Test 10 Benchmark Test 3	L to J Quizzes
	MA 3.1.1.e	46, 48	Express whole numbers as fractions, and recognize fractions that are equivalent to whole numbers.	Cummulative Test 10 Benchmark Test 3	L to J Quizzes
	MA 3.1.1.f	46, 47, 48	Show and identify equivalent fractions using visual representations including pictures, manipulatives, and number lines.	Cummulative Test 10 Benchmark Test 3	L to J Quizzes

	MA 3.1.1.g	5, 29, 41, 42, 43, 44, 46, 47, 49, 82, 85	Find parts of a whole and parts of a set using visual representations.	Cummulative Tests 1, 6,9,10, 17 Benchmark Tests 1, 2, 3,4	L to J Quizzes
	MA 3.1.1.h	5, 29, 35, 87	Explain and demonstrate how fractions $\frac{1}{4}$, $\frac{1}{2}$, $\frac{3}{4}$ and a whole relate to time, measurement, and money, and demonstrate using visual representation.	Cummulative Tests 1, 6, 7, 18 Benchmark Tests 1, 2, 5	L to J Quizzes
	MA 3.1.1.i	43, 49	Compare and order fractions having	Cummulative Tests 9, 10	L to J Quizzes

			the same numerators or denominators using visual representations, comparison symbols, and verbal reasoning	Benchmark Tests 3	
	MA 3.1.2		Operations: Students will demonstrate the meaning of multiplication and division with whole numbers and compute accurately.		L to J Quizzes
	MA 3.1.2.a	6, 7, 8, 10, 13, 14, 16, 19, 23, 24, 28, 30, 40	Add and subtract within 1,000 with or without regrouping.	Cumulative Tests 2, 3, 4, 5, 6, 8 Benchmark Tests 1, 2	L to J Quizzes
	MA 3.1.2.b	9, 10, 36, 40	Select and apply	Cumulative	L to J

			<p>the appropriate methods of computation when solving one- and two- step addition and subtraction problems with four- digit whole numbers through the thousands (e.g., visual representations, mental computation, paper-pencil).</p>	<p>Tests 2, 8 Benchmark Tests 1,2</p>	<p>Quizzes</p>
	<p>MA 3.1.2c</p>	<p>54, 55, 57, 59, 60, 61, 62, 63</p>	<p>Use drawings, words, arrays, symbols, repeated addition, equal groups, and number lines to explain the meaning of multiplication.</p>	<p>Cumulative Tests 11,12, 13 Benchmark Tests 3, 4</p>	<p>L to J Quizzes</p>

					ion.		
	MA 3.1.2.d	56			Use words and symbols to explain the meaning of the Zero Property and Identity Property of multiplication.	Cummulative Test 12 Benchmark Test 3	L to J Quizzes
	MA 3.1.2.e	56, 78			Multiply one digit whole numbers by multiples of 10 in the range of 10 to 90.	Cummulative Tests 12, 16 Benchmark Tests 3,4	L to J Quizzes
	MA 3.1.2.f	82, 83, 85, 86, 89, 90	Use objects, drawings, arrays, words, and symbols to explain the relationship between multiplication and division (e.g., if 3 times 4 equals 12, then 12 divided by 3 equals 4.	Cummulative Tests 17, 18 Benchmark Test 5	L to J Quizzes		

	MA 3.1.2.g	54, 55, 56, 59, 61, 64, 70, 76, 81, 82, 83, 86, 89	Fluently (i.e. automatic recall based on understanding) multiply and divide within 100.	Cummulative Tests 11, 12, 13, 14, 16, 17, 18 Benchmark Tests 3. 4. 5	L to J Quizzes
	MA 3.1.2.h	15, 30, 92, 94, 95	Determine the reasonableness of whole number sums and differences in real-world problems using estimation, compatible numbers, mental computations, or other strategies.	Cummulative Tests 3, 6, 19 Benchmark Tests 1, 2, 5	L to J Quizzes

	MA 3.2 ALG EBRA		Students will communicate algebraic concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.		
	MA 3.2.1 Algebraic Relationships:		Students will demonstrate, represent, and show relationships with expressions and equations.		L to J Quizzes
	MA 3.2.1a	2, 34, 61, 64, 76, 88	Identify arithmetic patterns (including patterns in the addition or multiplication tables) using properties of	Cummulative Tests 1, 7, 13, 16, 18 Benchmark Test 1, 2, 4,5	L to J Quizzes

			operations .		
	MA 3.2.1.b	2, 34, 61, 64, 76, 88	Interpret a multiplication equation as equal groups (e.g., interpret 4×6 as the total number of objects in four groups of six objects each). Represent verbal statements of equal groups as multiplication equations.	Cummulative Tests 1, 7, 13, 16, 18 Benchmark Tests 1,2,4, 5	L to J Quizzes
	MA 3.2.2 Algebraic Processes :		Student will apply the operational properties when multiplying and dividing.		
	MA 3.2.2.a	55, 57, 70, 77, 78, 81, 86, 89	Apply the commutative, associative	Cummulative Tests 11, 12,	L to J Quizzes

			e, and distributive properties as strategies to multiply and divide.	14, 16,17,18 Benchmark Tests 3, 4, 5	
	MA 3.2.2.b	9, 36, 40, 86, 90	Solve one-step whole number equations involving addition, subtraction, multiplication, or division, including the use of a letter to represent the unknown quantity.	Cummulative Tests 2, 8,18, Benchmark Tests 1,2,5	L to J Quizzes

	MA 3.2.3 Applications		Students will solve real-world problems involving equations with whole numbers.		
	MA 3.2.3.a	9, 10	Solve real-world problems involving two-step equations (involving two operations) involving whole numbers using addition and subtraction .	Cummulative Test 2 Benchmark Test 1	L to J Quizzes
	MA 3.2.3.b	6, 9, 18, 20, 40, 60, 92	Write an equation (e.g., one operation, one variable) to represent real-world problems involving whole numbers.	Cummulative Tests 2, 4, 8, 12, 19 Benchmark Test 1, 2, 3 ,5	L to J Quizzes

	MA 3.3 GEOMETRY		Students will communicate geometric concepts and measurement concepts using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.		
	MA 3.3.1 Characteristics:		Students will identify and describe geometric characteristics and create two- and three-dimensional shapes.		
	MA 3.3.1.a	51, 61, 66, 67, 69	Identify the number of sides, angles, and vertices of two-	Cumulative Tests 11, 13, 14 Benchmark	L to J Quizzes

			dimensional shapes.	Tests 3, 4	
	MA 3.3.1.b	Lesson 104: Extension Activity 10	Sort quadrilaterals into categories (e.g., rhombuses, squares, and rectangles).	Cumulative Test 21	L to J Quizzes

MA 3.3.1c	42, 47, 62, 63	Draw lines to separate two-dimensional figures into equal parts. Express the area of each part as a unit fraction of the whole.
MA 3.3.2 Coordinate Geometry		Student will determine location, orientation, and relationships in the coordinate plane.
MA 3.3.3 Measurement:		Students will perform and compare measurements and understand units, area, and volume.
MA 3.3.3.a	58, 62, 63, 66, 67, 79	Find the perimeter of polygons given the side lengths, and find the unknown side length.

MA 3.3.3.b	39, 65, 71	Tell and write time to the minute using both analog and digital.
MA 3.3.3.c	1	Solve real-world problems involving addition and subtraction of money in terms of dollars and cents, intervals and find elapsed time.
MA 3.3.3.d	6, 7, 18, 32, 43, 49, 50, 54, 63, 85, 95, 99, 114, 119	Identify and use the appropriate tools and units of measurement, customary and metric, to solve real-world problems involving length, weight, mass, liquid volume, and capacity (within the same unit).
MA 3.3.3.e	6, 32, 54, 99	Estimate and measure length to the nearest half inch, quarter inch, and centimeter.
MA 3.3.3.f	63, 88	Use concrete and pictorial models to measure areas in square units by counting square units.
MA 3.3.3.g	63, 81, 88	Find the area of a rectangle with whole-number side lengths by tiling, modeling with unit squares, and show that the area is the same whether the rectangle is tiled by multiplying the side lengths or by multiplying the side lengths.
MA 3.3.3.h	63, 88	Identify and draw rectangles with the same perimeter and different areas or with the same area and different perimeters.
MA 3.4 DATA:		Students will communicate data analysis/probability using multiple representations to reason, solve problems, and make connections within mathematics and across disciplines.
MA 3.4.1 Representations:		Students will create displays that represent data.

MA 3.4.1.a	Lessons 2, 40, 55	Create scaled pictographs and scaled bar graphs to represent data sets-including data collected through observations, surveys, and experiments-with several categories.
MA 3.4.1.b	Lessons 54, 99,	Represent data using line plots where the horizontal scale is marked in appropriate units-whole numbers, halves, or quarters.
MA 3.4.2 Analysis & Applications		Students will analyze data to address the situation.
MA 3.4.2.a	2, 40, 55	Solve problems and make simple statements about quantities represented in pictographs and bar graphs (e.g., how many more and how many less) using information represented in pictographs and bar graphs.

	MA 3.4.3 Probability:	Students will interpret and apply concepts of probability.		