

CURRICULUM MAP MATH

TEACHERS: HENSON, LECLAIRE, RHODES

GRADE: 6

Month	Essential Question	Content (Chapter /Unit Description/ Activities	Skills (Standards/Learning Outcomes)	Materials/ Resources	Assessment (Objective/ Subjective)
9/6/07	Introductory Activities	Pre-Year Assessments			
9/7/07 - 9/14/07	Am I Typical?	Place Value	<p>6.N.2 Demonstrate an understanding of place value to billions and thousandths.</p> <p>6.N.3 Represent and compare very large (billions) and very small (thousandths) positive numbers in various forms such as expanded notation without exponents, e.g., $9724 = 9 \times 1000 + 7 \times 100 + 2 \times 10 + 4$.</p>	<p>Mystery Number Device with reeds, pipe cleaners, beads, teacher created handout for demonstrating "rules" of number system.</p> <p>Math Scapes Program</p>	<p>Ability to demonstrate and explain numbers based upon their original number system.</p> <p>Dr. Math questions assesses understanding of 0 as a place holder and place value.</p> <p>MCAS Test questions</p>

9/17/07 - 10/12/07	Am I Typical?	EVERYDAY MATH UNIT 1 and UNIT 7 (for tree diagrams only) DATA ABOUT US	<p>6.D.1 Describe and compare data sets using the concepts of median, mean, mode, maximum and minimum, and range.</p> <p>6.D.2 Construct and interpret stem-and-leaf plots, line plots, and circle graphs.</p> <p>6.D.3 Use tree diagrams and other models (e.g., lists and tables) to represent possible or actual outcomes of trials. Analyze the outcomes.</p> <p>6.P.5 Solve linear equations using concrete models, tables, graphs, and paper-pencil methods.</p> <p>6.P.6 Produce and interpret graphs that represent the relationship between two variables in everyday situations.</p> <p>6.P.7 Identify and describe relationships between two variables with a constant rate of change. Contrast these with relationships where the rate of change is not constant.</p>	<p>Everyday Math Math Journal volume 1</p> <p>Everyday Math Student Reference Book (SRB)</p> <p>Teacher created vocabulary cards for unit vocabulary and MCAS vocabulary</p> <p>Data About Us Connected Math book,</p> <p>Interactive web sites, MSM textbook (for scatterplot), teacher created materials, interactive and hands-on manipulatives, real world applications</p> <p>Teacher created vocabulary cards for unit vocabulary and MCAS vocabulary</p> <p>Pizzazz</p>	<p>Written test and quizzes, Am I Typical Graph Booklet (includes hand drawn and computer generated graphs)</p> <p>Hula Hoop Data</p> <p>MCAS Test questions</p>
		Line Plot			
		http://explorelearning.com/index.cfm?method=cResource.dspView&ResourceID=225			
		Stem-and-Leaf Plot			
		http://explorelarning.com/index.cfm?method=cResource.dspView&ResourceID=236			
		Bar Graph			
		http://nlvm.usu.edu/en/nav/frame_s_asid_323_g_3_t_5.html			
		Scatterplot/Coordinate Graph			
		http://nlvm.usu.edu/en/nav/frames_asid_144_g_3_t_5.html?open=activities			
		Box and Whisker			
		http://explorelarning.com/index.cfm?method=cResource.dspView&ResourceID=259			

10/15/07 - 11/21/07	What is my special number?	<p>EVERYDAY MATH UNIT 7 for prime numbers and tree diagrams (if not covered with data) Prime Time</p> <p>Factor Game http://illuminations.nctm.org/ActivityDetail.aspx?ID=12</p> <p>Factor Tree http://nlvm.usu.edu/en/nav/frames_asid_202_g_3_t_1.html</p> <p>Product Game http://illuminations.nctm.org/ActivityDetail.aspx?ID=29</p> <p>Sieve of Eratosthenes http://nlvm.usu.edu/en/nav/frames_asid_158_g_3_t_1.html?open=instructions</p> <p>Factors - Practice identifying http://illuminations.nctm.org/ActivityDetail.aspx?ID=26</p>	<p>6.N.1 Demonstrate an understanding of positive integer exponents, in particular, when used in powers of ten, e.g., 10², 10⁵.</p> <p>6.N.6 Find and position integers, fractions, mixed numbers, and decimals (both positive and negative) on the number line.</p> <p>6.N.7 Compare and order integers (including negative integers), and positive fractions, mixed numbers, decimals, and percents.</p> <p>6.N.8 Apply number theory concepts-including prime and composite numbers, prime factorization, greatest common factor, least common multiple, and divisibility rules for 2, 3, 4, 5, 6, 9, and 10-to the solution of problems.</p> <p>6.N.9 Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers, and with positive fractions, mixed numbers, decimals, and percents.</p> <p>6.N.10 Use the number line to model addition and subtraction of integers, with the exception of subtracting negative integers.</p> <p>6.N.11 Apply the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols (+, -, ×, ÷).</p>	<p>Everyday Math Math Journal volume 1 AND volume 2 for prime numbers Everyday Math Student Reference Book (SRB) Teacher created vocabulary cards for unit vocabulary and MCAS vocabulary Prime Connected Math book, Interactive web sites, MSM textbook, teacher created materials, interactive and hands-on manipulatives, real world applications</p> <p>Pizzazz</p>	<p>Special Number Project</p> <p>Options to demonstrate knowledge: Poster PowerPoint Brochure Story Game</p> <p>Special Number Journal</p> <p>MCAS Test questions</p>
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<p>11/26/07 - 1/18/08</p>	<p>What is the relationship between fractions, decimals and percents?</p>	<p>EVERYDAY MATH UNITS 2, 4 and 6</p> <p>Bits and Pieces I, II, III</p>	<p>6.N.4 Demonstrate an understanding of fractions as a ratio of whole numbers, as parts of unit wholes, as parts of a collection, and as locations on the number line.</p> <p>6.N.5 Identify and determine common equivalent fractions, mixed numbers, decimals, and percents.</p> <p>6.N.6 Find and position integers, fractions, mixed numbers, and decimals (both positive and negative) on the number line.</p> <p>6.N.7 Compare and order integers (including negative integers), and positive fractions, mixed numbers, decimals, and percents.</p> <p>6.N.8 Apply number theory concepts-including prime and composite numbers, prime factorization, greatest common factor, least common multiple, and divisibility rules for 2, 3, 4, 5, 6, 9, and 10-to the solution of problems.</p> <p>6.N.9 Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers, and with positive fractions, mixed numbers, decimals, and percents.</p> <p>6.N.10 Use the number line to model addition and subtraction of integers, with the exception of subtracting negative integers.</p> <p>6.N.11 Apply the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols (+, -, x, ÷).</p> <p>6.N.13 Accurately and efficiently add, subtract, multiply, and divide (with double-digit divisors) whole numbers and positive decimals.</p> <p>6.N.14 Accurately and efficiently add, subtract, multiply, and divide positive fractions and mixed numbers. Simplify fractions.</p> <p>6.N.15 Add and subtract integers, with the exception of subtracting negative integers.</p> <p>6.N.16 Estimate results of computations with whole numbers, and with positive fractions, mixed numbers, decimals, and percents. Describe reasonableness of estimates.</p>	<p>Everyday Math Math Journal volume 1</p> <p>Everyday Math Student Reference Book (SRB)</p> <p>Teacher created vocabulary cards for unit vocabulary and MCAS vocabulary Bits and Pieces I, II, III</p> <p>Connected Math books, Interactive web sites, MSM textbook, teacher created materials, interactive and hands-on manipulatives, real world applications</p> <p>Pizzazz</p>	<p>Written tests and quizzes which ask for multiple choice and "open response" type answers, accelerated math, ability to explain the relationship between fractions, decimals and percents, Holiday Shopping Project</p> <p>Everyday Math Tests adapted to meet required standards</p> <p>MCAS Test questions</p>
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<p>1/21/08 - 3/14/08</p>	<p>What are the properties of polygons, angle measures, side-angle relationships, and tiling? AND How do you find area and perimeter of polygons and circles? AND What are the relationships in polygons and circles.</p>	<p>Shapes and Design AND Covering and Surrounding</p> <p>Everyday Math for very little as there was not ONE page in volume 1 or 2 for what geometry was needed for MCAS. There was some measurement in Everyday Math.</p> <p>We also started PI WEEK preparation with some activities during the last part of February and the first part of March. Details are in Henson plan book on computer.</p>	<p>See two columns over for the first four skills ... not enough room in this column</p> <p>6.G.5 Find the distance between two points on horizontal or vertical number lines.</p> <p>6.G.6 Predict, describe, and perform transformations on two-dimensional shapes, e.g., translations, rotations, and reflections.</p> <p>6.G.7 Identify types of symmetry, including line and rotational.</p> <p>6.G.8 Determine if two shapes are congruent by measuring sides or a combination of sides and angles, as necessary; or by motions or series of motions, e.g., translations, rotations, and reflections.</p> <p>6.G.9 Match three-dimensional objects and their two-dimensional representations, e.g., nets, projections, and perspective drawings.</p> <p>6.M.1 Apply the concepts of perimeter and area to the solution of problems. Apply formulas where appropriate.</p> <p>6.M.2 Identify, measure, describe, classify, and construct various angles, triangles, and quadrilaterals.</p> <p>6.M.3 Solve problems involving proportional relationships and units of measurement, e.g., same system unit conversions, scale models, maps, and speed.</p> <p>6.M.4 Find areas of triangles and parallelograms. Recognize that shapes with the same number of sides but different appearances can have the same area. Develop strategies to find the area of more complex shapes.</p> <p>6.M.5 Identify, measure, and describe circles and the relationships of the radius, diameter, circumference, and area (e.g., $d = 2r$, $p = C/d$), and use the concepts to solve problems.</p> <p>6.M.6 Find volumes and surface areas of rectangular prisms.</p> <p>6.M.7 Find the sum of the angles in simple polygons (up to eight sides) with and without measuring the angles.</p>	<p>Shapes and Design AND Covering and Surrounding Connected Math books, Interactive web sites, MSM textbook, teacher created materials, interactive and hands-on manipulatives, real world applications</p> <p>Some Everyday Math Everyday Math Student Reference Book (SRB) Teacher created vocabulary cards for unit vocabulary and MCAS vocabulary Pizzazz</p> <p>PI DAY 3/14/08 PI WEEK 3/10/08 to 3/14/08</p>	<p>MCAS Test questions on both geometry and measurement</p> <p>There is not enough room on the page for the correct placement of the skills; therefore, here are the first few</p> <p>6.G.1 Identify polygons based on their properties, including types of interior angles, perpendicular or parallel sides, and congruence of sides, e.g., squares, rectangles, rhombuses, parallelograms, trapezoids, and isosceles, equilateral, and right triangles.</p> <p>6.G.2 Identify three-dimensional shapes (e.g., cubes, prisms, spheres, cones, and pyramids) based on their properties, such as edges and faces.</p> <p>6.G.3 Identify relationships among points, lines, and planes, e.g., intersecting, parallel, perpendicular.</p> <p>6.G.4 Graph points and identify coordinates of points on the Cartesian coordinate plane (all four quadrants)</p>
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<p>3/17/08 - 4/4/08</p>		<p>Integers Everyday Math Unit 6</p>	<p>6.N.7 Compare and order integers (including negative integers), and positive fractions, mixed numbers, decimals, and percents.</p> <p>6.N.9 Select and use appropriate operations to solve problems involving addition, subtraction, multiplication, division, and positive integer exponents with whole numbers</p> <p>6.N.10 Use the number line to model addition and subtraction of integers, with the exception of subtracting negative integers.</p> <p>6.N.11 Apply the Order of Operations for expressions involving addition, subtraction, multiplication, and division with grouping symbols (+, -, ×, ÷).</p> <p>6.N.12 Demonstrate an understanding of the inverse relationship of addition and subtraction, and use that understanding to simplify computation and solve problems.</p> <p>6.N.13 Accurately and efficiently add, subtract, multiply, and divide (with double-digit divisors) whole numbers</p> <p>6.N.15 Add and subtract integers, with the exception of subtracting negative integers.</p>	<p>MCAS Test Questions Pizzazz Everyday Math Everyday Math Student Reference Book (SRB) Teacher created vocabulary cards for unit vocabulary and MCAS vocabulary</p>	
<p>From here on, the dates are a little different for each team because of Natures Classroom trips.</p>					

4/07/08 - 4/11/08	What are your chances?	Probability	<p>6.D.3 Use tree diagrams and other models (e.g., lists and tables) to represent possible or actual outcomes of trials. Analyze the outcomes.</p> <p>6.D.4 Predict the probability of outcomes of simple experiments (e.g., tossing a coin, rolling a die) and test the predictions. Use appropriate ratios between 0 and 1 to represent the probability of the outcome and associate the probability with the likelihood of the event.</p> <p>6.P.1 Analyze and determine the rules for extending symbolic, arithmetic, and geometric patterns and progressions, e.g., ABBCCC; 1, 5, 9, 13 ...; 3, 9, 27,</p> <p>6.P.2 Replace variables with given values and evaluate/simplify, e.g., $2() + 3$ when $= 4$.</p> <p>6.P.3 Use the properties of equality to solve problems, e.g., if $+ 7 = 13$, then $= 13 - 7$, therefore $= 6$; if $3 \times = 15$, then $1/3 \times 3 \times = 1/3 \times 15$, therefore $= 5$.</p> <p>6.P.4 Represent real situations and mathematical relationships with concrete models, tables, graphs, and rules in words and with symbols, e.g., input-output tables.</p>	Probability Fair - all teacher created materials and manipulatives and experiments; interactive web sites MCAS Test Questions Pizzazz	Completed packet of experiments MCAS Test questions
4/21/08 - 4/25/08	Vacation				
4/28/08 - 5/02/08	Rates, Ratios and Patterns of Relationship	Everyday Math Unit 8 MCAS Test Questions		MCAS Test Questions Mountain Math Pizzazz	MCAS Test Questions
5/05/08 - 5/15/08		MCAS Prep MCAS Test Questions Mountain Math Pizzazz	A review of all of the concepts above	MCAS Test Questions Mountain Math Pizzazz	MCAS Test Questions

<p>After MCAS until end of year</p>			<p>Nutrition Mini Project</p> <p>We each spend the rest of the year a little differently:</p> <p>Henson: Pre-algebra is covered. Cribbage Let's Make a Deal</p> <p>LeClaire: Pre-algebra Chess</p> <p>Rhodes: Everyday Math Random Review Chess</p>	<p>Everyday Math for Nutrition Project and a variety of other resources for our individual teams</p>	
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