

**RIDGECROFT SCHOOL  
GRADE 2 MATHEMATICS**

**PACING GUIDE**

<b>2005-2006</b>	
<b>1<sup>st</sup> Six Weeks: August 17-September 26</b> <b>Lessons 1.1-2.7</b>	<b>4<sup>th</sup> Six Weeks: January 3-February 15</b> <b>Lessons 6.1-7.10</b>
<b>2<sup>nd</sup> Six Weeks: September 27-November 3</b> <b>Lessons 2.8-3.6</b>	<b>5<sup>th</sup> Six Weeks: February 16-April 4</b> <b>Lessons 8.1-9.11</b>
<b>3<sup>rd</sup> Six Weeks: November 6-December 19</b> <b>Lessons 3.7-5.10</b>	<b>6<sup>th</sup> Six Weeks: April 5-May 30</b> <b>Lessons 10.1-12.8</b>

**RESOURCE: *Everyday Math* (SRA McGraw-Hill)**

<b>AUGUST / SEPTEMBER</b>	<b>PACE</b>	<b>NC SCOS Grade 2</b>
<b>UNIT 1 NUMBER AND ROUTINES</b> Lessons 1.1-1.14 <ul style="list-style-type: none"> <li>• Complete number sequences; identify and use number patterns to solve problems</li> <li>• Find values of coin and bill combinations</li> <li>• Know addition facts (sums to 10)</li> <li>• Find equivalent names for numbers</li> <li>• Compare numbers (&lt;, &gt;, =)</li> <li>• Count by 2s, 5s, and 10s</li> <li>• Make tallies and give the total</li> </ul>	21	1.01
<b>UNIT 2 ADDITION AND SUBTRACTION FACTS</b> Lessons 2.1-2.7 <ul style="list-style-type: none"> <li>• Solve addition number stories</li> <li>• Know addition and subtraction facts</li> </ul>	10	1.01
<b>OCTOBER</b>		
<b>UNIT 2 ADDITION AND SUBTRACTION FACTS</b> Lessons 2.8-2.14 <ul style="list-style-type: none"> <li>• Know addition and subtraction facts</li> <li>• Complete “What’s My Rule?” tables</li> <li>• Complete “Frames and Arrows” diagrams</li> </ul>	10	1.01
<b>UNIT 3 PLACE VALUE, MONEY, &amp; TIME</b> Lessons 3.1-3.6 <ul style="list-style-type: none"> <li>• Make change</li> <li>• Tell time to 5-minute intervals</li> <li>• Solve “Frames and Arrows” problems</li> </ul>	10	1.01, 2.02
<b>NOVEMBER</b>		
<b>UNIT 3 PLACE VALUE, MONEY, &amp; TIME</b> Lessons 3.7-3.9 <ul style="list-style-type: none"> <li>• Make change (pennies, dimes, nickels, quarters)</li> <li>• Know addition and subtraction facts</li> </ul>	5	1.01
<b>UNIT 4 ADDITION AND SUBTRACTION</b> Lessons 4.1-4.7 <ul style="list-style-type: none"> <li>• Find sums of 2-digit numbers</li> <li>• Find differences of 2-digit numbers</li> <li>• Estimate approximate costs and sums</li> <li>• Read thermometer (Fahrenheit)</li> <li>• Add and subtract multiples of 10</li> </ul>	15	1.01, 2.01b
<b>DECEMBER</b>		
<b>UNIT 4 ADDITION AND SUBTRACTION</b> Lessons 4.8-4.10 <ul style="list-style-type: none"> <li>• Find sums of 2-digit numbers</li> </ul>	3	1.01, 1.05

<ul style="list-style-type: none"> <li>• Find differences of 2-digit numbers</li> <li>• Estimate approximate costs and sums</li> </ul>		
<b>UNIT 5 2-D AND 3-D SHAPES</b> Lessons 5.1-5.10 <ul style="list-style-type: none"> <li>• Find common attributes of shapes</li> <li>• Identify 2-D shapes</li> <li>• Draw line segments</li> <li>• Identify parallel and nonparallel lines segments</li> <li>• Identify symmetrical figures</li> <li>• Identify 3-D shapes (rectangular prisms, cylinders, pyramids, cones, and spheres)</li> </ul>	9	3.01, 3.02, 3.03a,b
<b>JANUARY</b>		
<b>UNIT 6 WHOLE-NUMBER OPERATIONS AND NUMBER STORIES</b> Lessons 6.1-6.12 <ul style="list-style-type: none"> <li>• Add three 1-digit numbers and 2-digit numbers mentally</li> <li>• Solve addition and subtraction number stories</li> <li>• Make estimates of exact answers</li> <li>• Model multiplication problems with arrays</li> <li>• Solve equal-grouping and equal-sharing division problems</li> <li>• Solve stories about multiples of equal groups</li> <li>• Use trade-first method to solve 2-digit subtraction problems</li> </ul>	15	1.01, 1.02, 1.05
<b>UNIT 7 PATTERNS AND RULES</b> Lessons 7.1-7.3 <ul style="list-style-type: none"> <li>• Count by 2s, 5s, and 10s and describe the patterns</li> <li>• Find missing addends for the next multiple of 10</li> <li>• Solve number-grid puzzles</li> <li>• Find missing addends for any multiple of 10</li> <li>• Know complements of 10</li> </ul>	5	1.01, 1.05, 4.01, 5.01, 5.02 Add 1.06 (Odd and even numbers)
<b>FEBRUARY</b>		
<b>UNIT 7 PATTERNS AND RULES</b> Lessons 7.4-7.10 <ul style="list-style-type: none"> <li>• Plot data on a bar graph</li> <li>• Find the median of a data set</li> <li>• Add three 2-digit numbers mentally</li> <li>• Measure to the nearest inch and centimeter</li> </ul>	10	1.01, 1.04, 4.01 Add 4.01 (Venn)
<b>UNIT 8 FRACTIONS</b> Lessons 8.1-8.5 <ul style="list-style-type: none"> <li>• Understand fraction as names for equal parts of a region or set</li> <li>• Understand that the amount represented by a fraction depends on the size of the whole (one).</li> <li>• Shade a specified fractional part of a collection or region</li> <li>• Give the fraction name for the shaded part of a collection or region</li> </ul>	8	1.02, 1.03
<b>MARCH</b>		
<b>UNIT 8 FRACTIONS</b> Lessons 8.6-8.8 <ul style="list-style-type: none"> <li>• Compare fractions</li> <li>• Recognize equivalent fraction names</li> </ul>	6	Add 4.02
<b>UNIT 9 MEASUREMENT</b> Lessons 9.1-9.11 <ul style="list-style-type: none"> <li>• Identify equivalencies for mm, cm, dm, and m as well as inches, feet, and yards</li> <li>• Measure to the nearest 1.2 inch and cm.</li> <li>• Use appropriate units for measurement and recognize sensible measurements</li> <li>• Find area and perimeter concretely</li> <li>• Use a ruler, tape measure, and meter/yardstick correctly</li> </ul>	16	2.01a
<b>APRIL</b>		
<b>UNIT 10 DECIMALS AND PLACE VALUE</b> Lessons 10.1-10.12	12	1.01f (Place value)

<ul style="list-style-type: none"> <li>• Use equivalent coins to show money amounts in different ways</li> <li>• Use calculator to compute money amounts</li> <li>• Know exchange values of US coins</li> <li>• Solve money stories involving change</li> <li>• Estimate totals</li> <li>• Know and express automatically the values of digits in 2-, 3-, 4-, and 5-digit numbers</li> <li>• Read and write money amounts in decimal notation</li> <li>• Use parentheses in number models</li> </ul>		
<b>UNIT 11 WHOLE-NUMBER OPERATIONS REVISITED</b> Lessons 11.1-11.3 <ul style="list-style-type: none"> <li>• Estimate and solve addition and subtraction number stories with dollars and cents</li> <li>• Solve 1-digit multiplication stories (multiples of equal groups)</li> </ul>	2	1.01, 1.03, 1.04
<b>MAY/JUNE</b>		
<b>UNIT 11 WHOLE-NUMBER OPERATIONS REVISITED</b> Lessons 11.4-11.10 <ul style="list-style-type: none"> <li>• Solve 1-digit multiplication stories (multiples of equal groups)</li> <li>• Solve simple division stories (equal sharing and equal grouping)</li> <li>• Multiply numbers with 2, 5, or 10 as a factor</li> <li>• Make difference and ratio comparisons</li> <li>• Multiply numbers with 0 or 1 as a factor</li> </ul>	11	1.01, 1.03, 1.04
<b>UNIT 12 YEAR-END REVIEWS AND EXTENSIONS</b> Lessons 12.1-12.8 <ul style="list-style-type: none"> <li>• Use alternate names for times of day</li> <li>• Know multiplication facts</li> <li>• Determine the mode, median, maximum, minimum, and range of a data set</li> <li>• Construct multiplication/ division fact families</li> <li>• Multiple numbers with 2, 5, and 10 as a factor</li> <li>• Tell time to 5-minute intervals</li> <li>• Demonstrate calendar concepts and skills</li> <li>• Compare quantities from a bar graph</li> </ul>	12	1.01, 1.04, 2.02, 4.01
<b>TOTAL</b>	180	

8/1/06

### NC STANDARD COURSE OF STUDY

*Everyday Math* is an integrated math curriculum that will be used in grades K-6 at Ridgcroft School. It is not entirely aligned by grade with the NC SCOS. However, over the 6-year time period, all NC SCOS objectives will be included in instruction. Listed below are objectives from a 3-year grade span.

GRADE 1	GRADE 2	GRADE 3
<b>MAJOR CONCEPTS/ SKILLS:</b> <ul style="list-style-type: none"> <li>• Number sense 0 – 99</li> <li>• Single digit addition and subtraction</li> <li>• Time</li> <li>• Non-standard measurement</li> <li>• Collect and display data</li> <li>• Create and extend patterns</li> </ul> <b>CONCEPTS/SKILLS TO MAINTAIN</b> <ul style="list-style-type: none"> <li>• Basic geometric shapes</li> <li>• Sort and classify</li> </ul>	<b>MAJOR CONCEPTS/SKILLS:</b> <ul style="list-style-type: none"> <li>• Number sense 0-999</li> <li>• Place value</li> <li>• Addition and subtraction of multi-digit numbers</li> <li>• Length, time</li> <li>• Symmetry and congruence</li> <li>• Pictographs</li> <li>• Probability experiments</li> <li>• Numbers sentences</li> <li>• Students will solve relevant and authentic problems using appropriate technology and apply these concepts as well as those developed in earlier year.</li> </ul> <b>CONCEPTS/SKILLS TO MAINTAIN</b> <ul style="list-style-type: none"> <li>• Patterns</li> <li>• Sort and classify</li> </ul>	<b>MAJOR CONCEPTS/SKILLS:</b> <ul style="list-style-type: none"> <li>• Number sense 0-9,999</li> <li>• Multiplication and division</li> <li>• Non-negative rational numbers</li> <li>• Capacity and mass</li> <li>• Coordinate grids</li> <li>• Circle graphs</li> <li>• Permutations and combinations</li> <li>• Growing patterns</li> <li>• Variables</li> <li>• Students will solve relevant and authentic problems using appropriate technology and apply these concepts as well as those developed in earlier years.</li> </ul> <b>CONCEPTS/SKILLS TO MAINTAIN</b> <ul style="list-style-type: none"> <li>• Addition and subtraction of multi-digit numbers</li> <li>• Length and time</li> <li>• Symmetry and congruence</li> </ul>

	<ul style="list-style-type: none"> <li>Line plots, tallies</li> </ul>	<ul style="list-style-type: none"> <li>Line plots, tallies, pictographs</li> <li>Venn diagram</li> </ul>
<p><b>GOAL 1: The learner will read, write, and model whole numbers through 99 and compute with whole numbers.</b></p> <p>1.01 Develop number sense for whole number using a variety of representations.</p> <p>(a) Connect the model, number word, and number using a variety of representations.</p> <p>(b) Use efficient strategies to count the number of objects in a set.</p> <p>(c) Read and write numbers</p> <p>(d) Compare and order sets and numbers.</p> <p>(e) Build understanding of place value (ones, tens).</p> <p>(f) Estimate quantities fewer than or equal to 100.</p> <p>(g) Recognize equivalence in sets and numbers 1-99.</p> <p>1.02 Use groupings of 2's, 5's, and 10's with models and pictures to count collections of objects.</p> <p>1.03 Develop FLUENCY with single-digit addition and corresponding differences using strategies such as modeling, composing and decomposing quantities, using doubles, and making tens.</p> <p>1.04 Create, model, and solve problems that use addition, subtraction, and fair shares (between two or three).</p>	<p><b>GOAL 1: The learner will read, write, model and compute with whole numbers through 999.</b></p> <p>1.01 Develop number sense for whole numbers through 999.</p> <ul style="list-style-type: none"> <li>Connect model, number word, and number using a variety of representations.</li> <li>Read and write numbers.</li> <li>Compare and order.</li> <li>Rename</li> <li>Estimate</li> <li>Use a variety of models to build understanding of place values (ones, tens, hundreds).</li> </ul> <p>1.02 Use area or region models and set models of fractions to explore part-whole relationships in context.</p> <ul style="list-style-type: none"> <li>Represent fractions (halves, thirds, fourths) concretely and symbolically.</li> <li>Compare fractions (halves, thirds, fourths) using models.</li> <li>Make different representations of the same fraction.</li> <li>Combine fractions to describe parts of a whole.</li> </ul> <p>1.03 Create, model, and solve problems that involve addition, subtraction, equal grouping, and division into halves, thirds, and fourths (record in fraction form).</p> <p>1.04 Develop FLUENCY with multi-digit addition and subtraction through 999 using multiple strategies.</p> <p>(a) Strategies for adding and subtracting numbers.</p> <p>(b) Estimation of sums and differences in appropriate situations.</p> <p>(c) Relationships between operations.</p> <p>1.05 Create and solve problems using strategies such as modeling, composing and decomposing quantities, using doubles, and making tens and hundreds.</p> <p>1.06 Define and recognize odd and even numbers.</p>	<p><b>GOAL 1: The learner will understand and compute with whole numbers through 9,999.</b></p> <p>1.01 Develop number sense for whole numbers through 9,999.</p> <p>(a) Connect model, number word, and number using a variety of representations.</p> <p>(b) Build understanding of place value (ones through thousands).</p> <p>(c) Compare and order.</p> <p>1.02 Develop FLUENCY with multi-digit addition and subtraction through 9,999 using:</p> <p>(a) Strategies for adding and subtracting numbers.</p> <p>(b) Estimation of sums and differences in appropriate situations.</p> <p>(c) Relationships between operations.</p> <p>1.03 Develop FLUENCY with multiplication from 1x1 to 12x12 and division up to two-digit by one-digit numbers using:</p> <p>(a) Strategies for multiplying and dividing numbers</p> <p>(b) Estimation of products and quotients in appropriate situations</p> <p>(c) Relationships between operations.</p> <p>1.04 Use basic properties (identity, commutative, associative, order of operations) for addition, subtraction, multiplication, and division.</p> <p>1.05 Use area or region models and set models of fractions to explore part-whole relationships.</p> <p>(a) Represent fractions concretely and symbolically (halves, fourths, thirds, sixths, eighths).</p> <p>(b) Compare and order fractions (halves, fourths, thirds, sixths, eighths) using models and benchmark numbers (zero, one-half, one); describe comparisons.</p> <p>(c) Model and describe common equivalents, especially relationships among halves, fourths, and eighths, and thirds and sixths.</p> <p>(d) Understand that the fractional relationships that occur between zero and one also occur between every two consecutive whole numbers.</p> <p>(e) Understand and use mixed numbers and their equivalent fraction forms.</p> <p>1.06 Develop flexibility in solving problems by selecting strategies and using mental computation, estimation, calculators or computers, and paper and pencil.</p>
<p><b>GOAL 2: The learner will use non-standard units of measure and tell time.</b></p> <p>2.01 For given objects:</p>	<p><b>GOAL 2: The learner will recognize and use standard units of metric and customary measurement.</b></p>	<p><b>GOAL 2: The learner will recognize and use standard units of metric and customary measurement.</b></p> <p>2.01.Solve problems using measurement</p>

<p>(a) Select an attribute (length, capacity, mass) to measure (use non-standard units).  (b) Develop strategies to estimate size.  (c) Compare, using appropriate language, with respect to the attribute selected.  2.02 Develop an understanding of the concept of time.  (a) Tell time at the hour and half-hour.  (b) Solve problems involving applications of time (clock and calendar).</p>	<p>2.01 Estimate and measure using appropriate units.  (a) Length (meters, centimeters, feet, inches, yards).  (b) Temperature (Fahrenheit)  2.02 Tell time at the five-minute intervals.</p>	<p>concepts and procedures involving:  (a) Elapsed time  (b) Equivalent measure within the same measurement systems  2.02 Estimate and measure using appropriate units.  (a) Capacity (cups, pint, quarts, gallons, liters)  (b) Length (miles, kilometers)  (c) Mass (ounces, pounds, grams, kilograms)  (d) Temperature (Fahrenheit, Celsius)</p>
<p><b>GOAL 3: The learner will identify, describe, draw, and build basic geometric figures.</b>  3.01 Identify, build, draw and name parallelograms, squares, trapezoids, and hexagons.  3.02 Identify, build, and name cylinders, cones, and rectangular prisms.  3.03 Compare and contrast geometric figures.  3.04 Solve problems involving spatial visualization.</p>	<p><b>GOAL 3: The learner will perform simple transformations.</b>  3.01 Combine simple figures to create a given shape.  3.02 Describe the change in attributes as two- and three-dimensional figures are cut and rearranged.  3.03 Identify and make:  (a) Symmetric figures.  (b) Congruent figures.</p>	<p><b>GOAL 3: The learner will recognize and use basic geometric properties of two- and three-dimensional figures.</b>  3.01 Use appropriate vocabulary to compare, describe and classify two- and three-dimensional figures.  3.02 Use a rectangular coordinate system to solve problems.  (a) Graph and identify points with whole number and/or letter coordinates.  (b) Describe the path between given points on the plane.</p>
<p><b>GOAL 4: The learner will understand and use data and simple probability concepts.</b>  4.01 Collect, organize, describe and display data using line plots and tallies.  4.02 Describe events as certain, impossible, more likely or less likely to occur.</p>	<p><b>GOAL 4: The learner will understand and use data and simple probability concepts.</b>  4.01 Collect, organize, describe and display data using Venn diagrams (three sets) and pictographs where symbols represent multiple units (2's, 5's, 10's).  4.02 Conduct simple probability experiments; describe the results and make predictions.</p>	<p><b>GOAL 4: The learner will understand and use data and simple probability concepts.</b>  4.01 Collect, organize, analyze, and display data (including circle graphs and tables) to solve problems.  4.02 Determine the number of permutations and combinations of up to three items.  4.03 Solve probability problems using permutations and combinations.</p>
<p><b>GOAL 5: The learner will demonstrate an understanding of classification and patterning.</b>  5.01 Sort and classify objects by two attributes.  5.02 Use Venn diagrams to illustrate similarities and differences in two sets.  5.03 Create and extend patterns, identify the pattern unit, and translate into other forms.</p>	<p><b>GOAL 5: The learner will recognize and represent patterns and simple mathematical relationships.</b>  5.01 Identify, describe, translate, and extend repeating and growing patterns.  5.02 Write addition and subtraction number sentences to represent a problem; use symbols to represent unknown quantities.</p>	<p><b>GOAL 5: The learner will recognize, determine, and represent patterns and simple mathematical relationships.</b>  5.01 Describe and extend numeric and geometric patterns.  5.02 Extend and find missing terms of repeating and growing patterns.  5.03 Use symbols to represent unknown quantities in numbers sentences.  5.04 Find the value of the unknown in a number sentence.</p>