




Second Grade Math Scope and Sequence 2008-09 Including Sample Ideas and Strategies




CA = center activity  
 RM = re-teach master  
 PM = practice master  
 EM = enrichment master  
 [Investigations]

Projected Timeline	Topic	TEKS	Concrete	Pictorial	Abstract	Language, Process & Generalizations	Comments
Emphasize a few minutes each day	<p><b>MEMORIZE</b>                      Addition &amp; Subtraction Facts (sums to 18)</p> <p>Count On                      Count Back</p> <p><b>See Teacher Notes</b></p>	<p>2.3a. Recall basic addition and subtraction facts (sums to 18)</p> <p>2.5c. Use patterns and relationships to develop strategies to remember basic addition and subtraction facts.</p> <p>Determine patterns in related addition and subtraction number sentences (including fact families) such as <math>8 + 9 = 17</math>, <math>9 + 8 = 17</math>, <math>17 - 8 = 9</math>, and <math>17 - 9 = 8</math>.</p>	<p>COUNT ON                      Use unifix cubes to count on by 1, 2, and 3.</p> <p>COUNT BACK                      Use unifix cubes to count back by 1, 2, and 3.</p> <p>"The Math Machine" 33K;</p>	<p>COUNT ON                      Use a number line to count on by 1, 2, and 3.                      RM 2-1</p> <p>COUNT BACK                      Use a number line to count back 1, 2, and 3.</p>	<p>COUNT ON                      Use a hundreds chart to count on by 1, 2, 3.</p> <p>COUNT BACK                      Use a hundred chart to count backward by 1, 2,3.</p> <p>Once a week, practice facts using paper and pencil. Graph the results so students can see progress each week.</p>	<p>COUNT ON                      Students should say the facts aloud.</p> <p>COUNT BACK                      Students should say the facts aloud.</p> <p>Please note: students should identify and explain which strategy was used to remember the fact.</p>	<p>Review strategies for addition facts in first six-weeks. Saying the facts orally as they use unifix cubes, number lines, etc. is important.                      "List the Facts" 33J</p> <p>Students should not be penalized for problems not completed; but encouraged to look at progress made each week using visuals, such as graphs.</p> <p>Help students understand that if they know the addition fact, then they also know the subtraction fact.</p>

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Projected Timeline	Topic	TEKS	Concrete	Pictorial	Abstract	Language, Process & Generalizations	Comments
Aug. 24 – Aug. 28  (See next table)	<b>5 Hours</b> Representing, Comparing, and Ordering Numbers through 99.   <b>See Teacher Notes</b>  <b>Assessment Examples</b>  <b>Assessment Examples</b>	2.1a. Use concrete models of tens and ones to represent a given whole number (up to 99) in various ways.  2.1b. Use place value to read, write and describe the value of whole numbers to 99.	Use objects (counters, unifix cubes, base-ten blocks) to model numbers.	Use pictures of models (counters and base-ten blocks) to represent the numbers.  	Use word cards (twenty, thirty, one, two, etc.) or picture cards to play a matching game.	Students should be able to represent a number in 4 other ways: $84 = 8 \text{ tens, } 4 \text{ ones}$ $84 = 80 + 4$ , pictorially $84 = \text{     } : :$ (8 rods and 4 units), and $84 = \text{eighty-four}$	See strategy.  
		2.8a. Use whole numbers to locate and name numbers on a number line.  <i>Process TEKS:</i> 2.12b, 2.12d, 2.13a, 2.13., 2.14.	Use a floor number line to locate numbers on a number line. Illustrate concepts of before, after, between.	Use pictures of the floor number line to locate numbers. Identify numbers that are before, after, between. <b>Les 16-1</b>	Locate whole numbers on a number line, counting forward or backward.	Number line, point, before, after, between, greater numbers, smaller numbers	Physical movement is important. Floor number lines provide more movement than pictures.
		2.5a. Find patterns in a hundreds chart.		Locate a number on the hundreds chart, ask students to find 10 more, 10 less, etc. by moving on the hundred chart.	Given a list of numbers, students can identify the pattern of the numbers (10 more, 10 less, 20 more, 20 less, etc.).  Given a description of a pattern, the student can identify the list of numbers.	Students should describe a pattern, i.e., numbers are ten less than the number before.  Vocabulary: Greater, More, Less, Fewer, Same, Greater than, Less than, Equal, expanded form, standard numeral, digit, place value, value, increase, decrease  Vocabulary: Ten more, twenty more, ten less, etc.	Physical movement is important. Use floor hundreds chart, as well as, finger movement on student chart.

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Projected Timeline	Topic	TEKS	Concrete	Pictorial	Abstract	Language, Process & Generalizations	Comments								
Aug. 24 – Aug. 28	Representing and Comparing (continued)  <b>Assessment Examples</b>	2.5b. Use patterns in place value to compare and order whole numbers through 99.  <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>		Locate the numbers on a hundreds chart and identify the larger number.  Use a number line to compare & order.	Given two numbers, write the number in 2 ways and then write the comparison using the symbol; i.e., 34 □ 27 3 tens, 4 ones □ 2 tens, 7 ones 30 + 4 □ 20 + 7 34 > 27	Students should describe how they knew which number was larger or smaller; i.e., 34 is greater than 27 because 3 tens is greater than 2 tens.									
	Comparing and Ordering (<, >, =)  <b>Assessment Examples</b>	2.1c. Use place value to compare and order whole numbers to 99 and record the comparisons using numbers and symbols.  <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>	Use objects (base-ten blocks) to model numbers and write <, >, or = using dry erase markers	Use pictures of base-ten blocks to model numbers, to compare and order whole numbers, and record the comparisons.   Use workspace divided into 2 or 3 parts to compare.	Use a vertical table to help students order 3 numbers. This helps students easily see the place value. <table border="1" data-bbox="1415 574 1528 691"> <tr> <td><b>T</b></td> <td><b>O</b></td> </tr> <tr> <td>2</td> <td>1</td> </tr> <tr> <td>1</td> <td>5</td> </tr> <tr> <td>2</td> <td>6</td> </tr> </table>  Click on place value chart	<b>T</b>	<b>O</b>	2	1	1	5	2	6	Student should write in words both ways and then use symbols; i.e.,  34 is <b>L</b> ess than 46 <b>and</b> 46 is <b>G</b> reater than 34  34 < 46 46 > 34	See strategy.  
<b>T</b>	<b>O</b>														
2	1														
1	5														
2	6														

Reflections on student difficulties:


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Aug. 31 – Sept. 16 	<b>12 Hours</b> Addition and Subtraction Concepts (one digit numbers)  <b>See Teacher Notes</b>  <b>Assessment Examples</b>	2.3a. Apply basic addition and subtraction facts to 18.  2.3c. Select addition or subtraction and solve problems using facts.  <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>	Use real-life situations with objects, action words, and number sentences to ensure understanding of process.  From worded problems, use objects, model drawing, and number sentences to ensure understanding of process.	Use real-life situation with pictures of objects, action words, and number sentences to ensure understanding of process.  From worded problems, use <u>model drawing</u> , and number sentences to ensure understanding of process.	Use real-life situation with <u>action words</u> and number sentences to ensure understanding of process.  From worded problems, use <u>model drawing</u> and number sentences to ensure understanding of process.	Connect models to actions of joining together or putting together in worded problems. Connect models to actions of taking away, comparing, and finding the missing part.  Students should justify operation selected.  Vocabulary: Sum, difference, addend, add, subtract, minus, compare, take away, missing part, join	Using model drawing and writing multiple number sentences is ESSENTIAL.  See strategy   Do NOT emphasize clue words and isolated vocabulary, like “altogether” means to add, as the context of the word determines the action.
Sept. 17	<b>Review: Representing, Comparing, Ordering, Addition and Subtraction (1- and 2-step problems)</b>						
Sept. 18	<b>Quiz: Representing, Comparing, Ordering, Addition and Subtraction (1- and 2-step problems)</b>						
<b>Reflections on student difficulties:</b>							



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Sept. 21 – Sept. 30	(8 Hours) Time  See Teacher Notes 	2.10c. Describe activities that take approximately one second, one minute, and one hour.	Count how many times the student can blink eyes, snap finger, draw circle, etc. in one second and one minute. Estimate how many could be done in an hour.	Make a list of things that take about one second, one minute and one hour. Kids should draw a picture of something that takes one second, one minute, and one hour.	From worded problems, identify picture of an activity that takes 1 second, 1 minute, 1 hour. Given an activity, students should be able to tell the best estimate of the length of time. <b>CA 19-4**</b>	Students should be able to explain why an activity would take a second, minute or hour.	
	Assessment Examples	2.10b. Read and write times shown on analog and digital clocks using five-minute increments  <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>	The big floor clock and the etools clock can be used to demonstrate the movement of the hands.  Students use geared clocks and write the time.  Students should use clocks and time lines to describe times before, after and between	Relate the big clock or geared clock to a time line. Show the hours and five-minute markers on the time line. Discuss times that are after, before or between   Use analog and digital clocks to show times.	Students outline the activities of the day (or evening) by making a chart showing the name of the activity, the time the activity begins or ends, and pictures of both analog and digital clock faces showing these times. Use timelines to order times. <b>Lesson 19-1; CA 19-1*</b>	Students should be able to describe the location of the hands at various times.  <b>Les 19-2; PM 19-2</b>  <b>Vocabulary:</b> before, after, between, minute, hour, earlier, later, hands.	No elapsed time. There will be some ordering of time; i.e., determining if a time is earlier or later than a given time. See strategy.   When students write the time, the minutes should be written first to help students with the “danger zone.”
Oct. 1 – Oct. 2	<b>2 Hours</b> Problem Solving Strategies: Act it out (line)  See Teacher Notes  See Assessment Examples	2.12c. Select or develop an appropriate problem-solving plan or strategy including drawing a picture and acting it out. (line). <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>	Use bear problems and teddy bear counters to solve worded problems.	Use crayons to draw “math picture” to solve worded problems. Use crayons that match bear colors.		<b>Vocabulary:</b> Before after, behind, in front, above, below, between	
Oct. 5-6	Review for Benchmark						
Oct. 7-8	Benchmark						
Oct. 9	Re-teach from Benchmark						
<b>Re-teach Ideas:</b> Use one of the powerpoint game templates to create a review and practice of the areas of student difficulties. Play 5 minutes at the beginning or end of each class period for the next week. 							


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Emphasize a few minutes each day	Addition & Subtraction Facts (sums to 18)  Count On Count Back Double Facts Doubles + 1  <b>See Teacher Notes</b>	2.3a. Recall basic addition and subtraction facts (sums to 18)  2.5c. Use patterns and relationships to develop strategies to remember basic addition and subtraction facts. Determine patterns in related addition and subtraction number sentences (including fact families) such as $8 + 9 = 17$ , $9 + 8 = 17$ , $17 - 8 = 9$ , and $17 - 9 = 8$ .	COUNT ON Use unifix cubes to count on by 1, 2, and 3. COUNT BACK Use unifix cubes to count back by 1, 2, and 3. DOUBLES Use concrete models (ears, wheels on small car, 6-pack of coke, etc.) to illustrate doubles. "Double It" 69H ["Doubles Arrays" Investigations Unit 1, pg 171] DOUBLES + 1 Use counters to practice doubles + 1. "Clap-Clap-Stomp Near Doubles" 46B; Les 2-3; RM 2-3	COUNT ON Use a number line to count on by 1, 2, and 3. COUNT BACK Use a number line to count back 1, 2, and 3.  DOUBLES Use pictures of concrete models (ears, wheels, 6-pack coke, etc.) to illustrate doubles.	COUNT ON Use a hundreds chart to count on by 1, 2, 3. COUNT BACK Use a hundred chart to count backward by 1, 2,3.  DOUBLES Use a hundreds chart to color doubles.   Once a week, practice facts using paper and pencil. Graph the results so students can see progress each week.	COUNT ON Students should say the facts aloud. COUNT BACK Students should say the facts aloud.  DOUBLES Students should say the facts aloud.   Please note: students should identify and explain which strategy was used to remember the fact.	Students should not be penalized for problems not completed; but encouraged to look at progress made each week using visuals such as graphs.  Help students understand that if they know the addition fact, then they also know the subtraction fact.  See strategy. 


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Oct. 13 – Nov. 4	<p>(17 Hours) Addition and Subtraction</p> <p><b>See Teacher Notes</b></p>  <p><b>See Assessment Examples</b></p>	<p>2.3c. Select addition or subtraction to solve problems using two-digit numbers, whether or not regrouping is necessary.</p> <p><i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i></p> <p><i>Focus on process with number sentences and words.</i></p>	<p>In worded problems, use base-ten blocks to model addition and subtraction.</p> <p><b>"Take It Away" 257G</b></p>	<p>In worded problems, use pictures of base-ten blocks to model the addition and subtraction algorithm.</p> <p>Students should use model drawing in details to determine the action and hence the operation.</p>	<p>In worded problems, connect the pictures of base-ten blocks to the addition and subtraction algorithms.</p> <p>The number sentence and algorithm should be shown as the strategy (step 3).</p> <p>Add: <b>"Cover Up!" 217H; TAKS PS 8-3 (pg 230);</b></p> <p>Sub: <b>TAKS PS 9-3 (pg 270; TAK PS 9-5 (pg 278)</b></p> <p>If time: <b>add-to-check Les 9-7; EM 9-7</b></p>	<p>Vocabulary: sum, difference, regroup, ones, tens, rods, units, number sentence, action words for addition and subtraction.</p> <p><b>"Name the Difference" 257I</b></p> <p>Students should clearly describe the process and use the base-ten blocks to ensure understanding of the algorithm.</p> <p>Students should be able to justify the operation used by giving the action.</p>	<p>Mix problems with no regrouping and regrouping from the beginning of add. and subtraction of 2 digit numbers.</p> <p>Verbalization helps to ensure correct patterns are learned.</p> <p>See strategy.</p> 
Nov. 5	<b>Quiz: Addition and subtraction</b>						
<b>Reflections on student difficulties:</b>							
<p><b>Ideas for re-teaching:</b></p> <p>If the error analysis indicates selection of incorrect operation, use the action response cards with a couple of problems each day over the next week.</p> <p>If the error analysis indicates algorithm issues, use peer tutors to partner to work with the base-ten blocks to understand the algorithm.</p>							


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Nov. 6 – Nov. 13	<p><b>(6 Hours)</b> Problem Solving Strategies: Look for Pattern, Make a Table</p> <p><b>See Teacher Notes</b></p>	<p>2.5a. Find patterns in numbers such as in a 100s chart and number lines.</p> <p>2.6c. Identify, describe and extend repeating and additive patterns to make predictions and solve problems.</p>	<p>Given a list of numbers, ask students to use a hundreds chart on the Smartboard to locate the numbers on the chart using colors.</p>	<p>Given a list of numbers, ask students to use a hundreds chart to locate the numbers on the chart using markers and identify the patterns.</p> <p>Given a list of number, ask students to use a number line to locate the numbers and identify the pattern.</p>	<p>Given a list of numbers, describe the pattern and extend the pattern.</p>	<p>Students should be able to describe the pattern using phrases such as “increasing by 3” or “adding 3”, or “3 more.” Repeating patterns described such as 2 circles, 3 triangles, 2 circles, 3 triangles.</p>	<p>Explanation of the pattern is important to ensure that students have picked up the critical attributes of the pattern.</p> <p>See strategy. </p>						
		<p>2.6a. Generate a list of paired numbers based on a real-life situation such as number of tricycles related to the number of wheels.</p> <p>2.6b. Identify patterns in a list of related number pairs based on a real-life situation and extend the list.</p> <p>2.12c. Select or develop an appropriate problem-solving plan or strategy including looking for a pattern and making a table. <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i></p>	<p>Build tables using real-life examples, i.e., number of eyes, number of fingers, number of legs, number of wheels, etc. Concrete models could be students, models of cars, animals or insects. ["How Many Legs in Our Class?" Invest. Unit 3, pg 139-142 "Counting Our Fingers" Invest Unit 3, pg 145-147]</p>	<p>From worded problems with pictures of a real-life example, students use “math” pictures to build the table.</p> <table border="1" data-bbox="961 760 1188 1057"> <thead> <tr> <th>Student</th> <th>Eyes</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>**</td> </tr> <tr> <td>2</td> <td>** **</td> </tr> <tr> <td>3</td> <td>** ** **</td> </tr> </tbody> </table> <p>After practicing building tables, and extending them, students should describe how they knew how to extend, i.e. each one is “two more”, etc.</p>	Student	Eyes	1	**	2	** **	3	** ** **	<p>From worded problems with pictures of a real-life example, students should build the pattern pictorially and extend the pattern by connecting to an operation, i.e., add 2. Les 6-5; PM 6-5 (add pictorial piece)</p>
Student	Eyes												
1	**												
2	** **												
3	** ** **												
Nov. 16-17	Benchmark Review												
Nov. 18-19	Benchmark												
<b>Reflections on student difficulties:</b>													






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Nov. 20 – Nov. 24	<b>(3 Hours)</b> Probability  <b>See Teacher Notes</b>  <b>See Assessment Examples</b>	2.11c. Use data to describe events as more likely or less likely such as drawing a certain color crayon from a bag of seven red crayons and three green crayons. <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>	Use small concrete objects to do real life experiment; i.e., teddy bear counters, color tiles, coins, etc. Les 20-5; CA 20-5*; 20-5**	Use pictures of items to choose less or more likely from worded problems. RM 20-5; PM 20-5  		Students should be able to explain why a choice is more likely or less likely.  Vocabulary: more likely, less likely, equally likely, certain, impossible, most likely, least likely, predict	
Thanksgiving							



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<p>Emphasize for a few minutes most days over the six-weeks.</p>	<p>Addition and Subtraction Facts</p> <p>Count On Count Back Double Facts Doubles + 1 Make Ten Make Ten + Extra Fact Families</p>	<p>2.3a. Recall basic addition and subtraction facts (sums to 18).</p> <p>2.5c. Use patterns and relationships to develop strategies to remember basic addition and subtraction facts. Determine patterns in related addition and subtraction number sentences (including fact families) such as <math>8 + 9 = 17</math>, <math>9 + 8 = 17</math>, <math>17 - 8 = 9</math>, and <math>17 - 9 = 8</math>.</p>	<p>MAKE 10 Use counters to “Make 10” and write the fact. MAKE 10 + Extra (i.e., <math>7 + 4 = 10 + 1</math>) Les 2-6 change engagement; RM 2-6; PM 2-6; CA 2-6*; Les 2-7; RM 2-7; PM 2-7; EM 2-7; CA 2-7* FACT FAMILIES: Les 2-4; CA 2-4*; CA2-4**</p>	<p>Use the ten frame to</p>  <p>show “Make Ten” facts.</p>	<p>Drill orally using “Wrap Ups.”</p> <p>After oral drill, practice with paper and pencil.</p>	<p>Oral drill through “wrap ups” enhances long term memory of facts and will improve speed of learning for ALL students.</p> <p><b>Please note:</b> students should identify and explain which strategy was used to remember the fact.</p>	<p>Graphing progress helps students see growth.</p> <p>TIMED tests should NOT be used as results can be dependent upon fine motor skills.</p>

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Nov. 30 – Dec. 3	<p>(4 Hours) Representing, Comparing and Ordering</p>  <p>Representing <b>See Teacher Notes</b></p> <p>See Assessment Examples</p>	<p>2.1a. Use concrete models of hundreds, tens and ones to represent a given whole number (up to 999) in various ways.</p> <p><i>Process TEKS:</i> 2.12b, 2.12d, 2.13a, 2.13., 2.14.</p>	<p>Use base-ten blocks to build models of numbers.</p> <p><b>"Three for Three!" 334B</b></p>	<p>Given a number, draw pictures of base-ten blocks to represent the number.</p> <p>Given a picture of a number in base-ten blocks, write the number.</p> <p><b>Les 11-1 but write all forms of numbers; PM 11-1</b></p> 	<p>Combine word cards to write the number; i.e., 243 would be 3 cards with the words two-hundred, forty, and one-one word written on a card as well as in expanded notation-200+40+3.</p> <p><b>Les 11-2; RM 11-2; PM 11-2; CA 11-2*; Value - "Name that Place" 325H</b></p>	<p>Vocabulary: Flats, Rods, Units, Hundred, Ten, Twenty, Thirty, ...one, two, three..., expanded form, standard numeral, place value, digit, value</p> <p><b>Vocab activity on 325I</b></p>											
		<p>2.1c. Use models to compare and order numbers through 999 using &lt;, &gt;, or = and record the comparisons.</p> <p>2.8a. Use whole numbers to locate and name points on a number line.</p> <p><i>Process TEKS:</i> 2.12b, 2.12d, 2.13a, 2.13., 2.14.</p>	<p>Use base-ten blocks to build models of numbers and use &gt;, &lt; or =.</p> <p>No. line - <b>Les 16-2; PM 16-2; EM 16-2; CA 16-2**</b></p> 	<p>Given worded problems, use pictures of base-ten blocks to compare numbers.</p> <p>Given worded problems, use number lines to compare numbers.</p> <p><b>CA 11-2**</b></p> 	<p>Given worded problems, use &lt; or &gt; to compare expanded notation of two numbers.</p>	<p>Student should write in words both ways and then use symbols; i.e.,</p> <p>164 is <b>Less</b> than 178 <b>and</b> 178 is <b>Greater</b> than 164</p> <p>164 &lt; 178 178 &gt; 164</p>											
		<p>2.5b. Use patterns in place value to compare and order whole numbers through 999.</p> <p><i>Process TEKS:</i> 2.12b, 2.12d, 2.13a, 2.13., 2.14</p>			<p>Use a vertical table to order 3 numbers. This helps students easily see the place value.</p> <table border="1" data-bbox="1291 1271 1453 1401"> <thead> <tr> <th>H</th> <th>T</th> <th>O</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>2</td> <td>3</td> </tr> <tr> <td>3</td> <td>1</td> <td>4</td> </tr> <tr> <td>3</td> <td>2</td> <td>6</td> </tr> </tbody> </table> <p><b>Les 12-3, but use table. Les 11-5; RM 11-1</b></p> 	H	T	O	1	2	3	3	1	4	3	2	6
H	T	O															
1	2	3															
3	1	4															
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Dec. 4 – Dec. 9	<b>4 Hours</b> Geometry (2-dimen. Figures)   See Assessment Examples	2.7a. Describe attributes (number of sides, equal sides, square type angles or not) of two-dimensional geometric figures such as circles and polygons. 2.7b. Use attributes to describe how 2 two-dimensional figures are alike or different.  <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>	Use pattern blocks to count the number of sides and angles, as well as, how the angles are alike and different, i.e., the square has a larger angle than the triangle.  Use geo-boards to make shapes and count vertices and sides.	Using pictures of shapes, students should count the sides. Use a slash for sides to help students count. Students should record the number of sides as S= 3.  Play “I Have, Who Has.”  	Using worded problems, students should be able to identify from a list, a sentence that describes the shape(s).  [Create a "Quadrilateral Chart" Invest. Unit 2, pg 72 and follow with the "What's a Rectangle?" discussion on Unit 2, pg 74]	Vocabulary: Side, angles, polygon, triangle, quadrilateral, rectangle, square, pentagon, hexagon, octagon, circle, 2-dimensional, attributes, vertex, vertices  Students should use the vocabulary when they describe how the shapes are alike and different.  Students should write in sentences the number of sides and vertices a particular shape has.	Being able to identify the attributes of a shape in writing is important.  Students should understand that a square is a special rectangle.  See strategy.  
		2.7c. Cut geometric figures apart and identify the new geometric figures formed.  <i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i>	Using pictures of shapes on tag or paper, students use scissors to cut the shapes into different shapes by cutting along a line and identifying the new shapes.	Using pictures of shapes, students use dotted lines to cut the shapes into different shapes and write the name of the new shape. Les 15-4; PM 15-4 "Making New Shapes" 446B  	Given the name of a shape (rectangle, hexagon, etc.), student sketches the shape, uses dotted lines to cut the shape into new shapes and write the name of the new shape.	See strategy.  	

Second Grade July 2009

Projected Timeline	Topic	TEKS	Concrete	Pictorial	Abstract	Language, Process, Generalizations	Comments
Dec. 10 – Dec. 16	<p><b>(5 Hours)</b> Geometry-Solids w review Plane</p> <p><b>See Teacher Notes</b></p> <p><b>See Assessment Examples</b></p>	<p>2.7a. Describe attributes of three-dimensional geometric figures.</p> <p>2.7b. Use attributes to describe how two 3-dimensional figures are alike or different.</p> <p><i>Process TEKS: 2.12b, 2.12d, 2.13a, 2.13., 2.14.</i></p>	<p>Use the geometric models to identify the number of edges, vertices, and faces; as well as, describe the type of face(s) included in the solid.</p> <p><b>"Making Shape Molds" 438B</b></p> <p>Make geometric models from pipe-cleaners</p>	<p>Using the geometric models, trace some of the faces of the solid and name the faces.</p> <p><b>Les 15-2; EM 15-2</b></p> <p>In worded problems, students can identify the number of faces, edges and vertices in a solid, as well as, describe the types of faces in the solid.</p> <p><b>Les 15-5 riddles; RM 15-5; PM 15-5</b></p> 	<p>Students should label the figures to identify the vertices, edges, and faces AND record each:</p> <p>V =</p> <p>E =</p> <p>F =</p>	<p>Vocabulary: 3-dimensional, face, edge, base, vertex and names of some solids: Prisms-square, rectangular, triangular, and pyramids-square, rectangular, triangular. Other solids such as spheres, cones and cylinders.</p> <p><b>"Our Visit to Shape Land" 429H;</b></p> <p><b>"Sorting Out Shapes" 429G</b></p> <p>Description should include the number of faces that are triangles or rectangles, etc.</p> <p><b>"Learn the Names" 429E</b></p>	<p>See strategy.</p> 
Dec. 17	<b>Quiz: Place Value, Geometry,</b>						
Dec. 18	Reteach						
Break							