









**First Grade Math Scope and Sequence 2009-10 Including Sample Ideas and Strategies**


CA = center activity  
 RM = re-teach master  
 PM = practice master  
 EM = enrichment master  
 IMS= Interactive math story  
 BLN= Visual learning bridge

| Projected Timeline | Topic  | TEKS   | Concrete   | Pictorial   | Abstract   | Language, Process & Generalizations   | Integration Lessons                                  | Comments  |
|--------------------|--|--|--|---|--|---|--|---|
| Aug. 24 – Aug. 28  | (10 Hours)<br>Representing, Comparing and Ordering Numbers<br><br>(See Teacher Notes)<br><br>Assessment Examples | 1.1d. Read and write numbers to 25 to describe sets of concrete objects.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13  | Write numbers on clothespins, Students work in pairs using objects (groups of tens and singles) to build numbers.<br><br>Lesson 9-1, p. 215-217<br><br>Group the objects vertically to more closely resemble base 10 blocks. | Write numbers on index cards. Students work in pairs to draw a picture of the groups of objects (use eTools to create the picture) and write the number in words.<br><br>Lesson 9-1, p. 215-217<br><br> | Write numbers on clothespin and attach to clothesline. Have students choose a clothespin, read the number and describe it. | Vocabulary: ten, twenty, one, two, three, four, five, six, seven, eight, nine, zero, group, set, tens, ones                               | Safety, Hand washing, and Poisons<br><br>See Lessons | See Visual learning bridge, Lesson 1-3, p. 12 for variety of ways to describe numbers, helping to build number sense. |
|                    | Assessment Examples  | 2.8a. Locate and name points to 25 on a number line.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13  | Connect unifix cubes, draw a line under the cubes, and write the numbers.  | Draw a picture of a number line on sentence strips.   |  | Describe location of numbers (before, after, between).<br><br>Vocabulary: before, after, between  |  | Ensure students can name numbers before and after a given number.   |
|                    | Assessment Examples  | 1.1a. Compare and order whole numbers to 25 (less than, greater than, or equal to) using sets of concrete objects and pictorial models.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | Use word cards (greater than, less than or same) and counters to model comparing selected numbers.<br><br>Lesson 9-2, pp. 219-221  | Select a word card and then draw pictures of 2 numbers to represent the comparison.<br><br>Lesson 9-2, pp. 219-221<br><br>  | “Cover Nine” *, **<br>Lesson 9-2, p. 222B<br>PM 9-2, p. 41<br>EM 9-2, p. 42  | Explain verbally how the greater (or smaller) number is determined.<br><br>Vocabulary: greater than, more than, less than, fewer, same as |  | Create “Secret Number” riddles similar to p. 29H (Topic 2) to use with the number line.                               |

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|--|--|--|---|--|---|--|-----------------------|---|
| Aug. 31 - Sept. 15<br><br>(See next table) | (22 Hours)<br><br>Four-step Process;   | 1.11b. Solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.                |   | Use the Smarboard lesson to introduce the 4-step process (located in G:\elmath\smartboard)   |   |  | Magnets<br>See Lesson | In order to assist with writing, use abbreviations and arrows for lists. It maybe necessary for you to do the writing in step 4 for the first couple of weeks but insist that students tell you what to write.  |
|  | Addition and Subtraction (Actions) (sums to 10)<br><br>Actions:<br>Put together, take away<br><br>(See Teacher Notes)<br><br>Assessment Examples | 1.3a. Model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i> | Use real-life situations with objects, action words, and number sentences to ensure understanding of process.<br><br><br>From worded problems, use objects, action words, and number sentences to ensure understanding of process<br><br>Use unifix cubes to illustrate addition and subtraction number sentences. | Use real-life situation with model drawing, actions, and number sentences to ensure understanding of process.<br><br>IMS, "Subtraction Dance Party", p. 81K to demonstrate "take away" action.<br><br>From worded problems, use model drawing, actions, and number sentences to ensure understanding of process. | Use model drawing to write number sentences of the real-life situation.<br><br>(Step 2 to Step 3) | Connect addition to "put together" action or join...<br>Connect subtraction to taking away action<br><br>Students should use words to describe the action in the model drawing.<br><br>Vocabulary: Sum, difference, addend, add, join, subtract, minus, take away. |                       | Use action posters to connect operations.<br><br>Bridge the concrete to pictorial by ensuring that students do problems with unifix cubes and model drawing.<br><br>Avoid telling students that "altogether" means to add as the story can be subtraction and have altogether.<br><br>See strategy.<br><br><br>See Teaching Tip on p. 169D (topic 7) |



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|---|--|--|---|---|---|---|---------------------|---|
| Aug. 31 – Sept. 15 (continued)              | Fact families<br><b>(See Teacher Notes)</b>  | 1.5e. Identify patterns in related addition and subtraction sentences (fact families for sums to 10).<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i>                | Use unifix cubes or pattern blocks in 2 different shapes to act out families ( $3 + 2 = 5$ , $5 - 3 = 2$ )  | Draw pictures to illustrate fact families   | Use magnetic numbers and operation signs to create a fact family from numbers given by the teacher.<br><br>Write fact families.   | Connect addition and subtraction to improve understanding.  |                     | Only do $\frac{1}{2}$ of fact family: $3 + 2 = 5$ , then $5 - 2 = 3$  |
|   | Addition and Subtraction Facts<br>(sums to 10)<br><br>Assessment Examples  | 1.3b. Use concrete and pictorial models to apply basic addition and subtraction facts.<br><br>1.5d. Use patterns to develop strategies to solve basic addition and subtraction problems. | Use unifix cubes to count on by 1, 2, and 3 and count back by 1, 2, and 3.<br><br>Use concrete models (ears, wheels on small car, etc.) to illustrate doubles.<br><br>Use counters to “Make Ten.” (Facts that = 10.)<br><br> | Use a number line to count on by 1, 2, and 3 and count back by 1, 2, and 3.<br><br>“Look and See”*, 14-1 p. 366B<br><br>VLB 5-3 with workbook pp. 128-129<br><br>EM 5-2, p. 38<br><br>Use the ten-frame with eTools to model ten facts. | Use a hundreds chart to count on by 1, 2, and 3 and count back by 1, 2, and 3.<br><br>Use a hundreds chart to color doubles.<br><br>Doubles VAK: “Math in Motion”, * and **, 6-2, p. 150B | Students should say the facts aloud.<br><br>Use “total” rather than “whole” with VLB and ten-frame.<br><br>Modify “Look and See”** p. 134B ,5-4 to have students say ten fact aloud to partner. |                     | This TEKS does NOT include <b>memorization</b> although some students may.<br><br><b>Memorization</b> will be practiced later in the year.<br><br>Timed tests should NOT be used as results can be dependent upon fine motor skills. See strategy.  |
| Sept. 15                                    | Mixed Review: Representing, Comparing, Ordering, Addition, Subtraction, Fact Families and Science investigations |  |   |   |   |   |                     |   |
| Sept. 16                                    | Quiz   |  |   |   |   |   |                     |   |
| Sept. 17                                    | Re-teach   |  |   |   |   |   |                     |   |
| <b>Reflections on student difficulties:</b> |  |  |   |   |   |   |                     |   |



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| Sept. 18 – Sept. 22 | <b>(6 Hours)</b><br>Coins<br><br><b>(See Teacher Notes)</b><br><br>Assessment Examples | 1.1c. Identify individual coins by name and value and describe relationships among them.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | Describe how coins are alike and different.<br><br>Draw coin out of bag and give “clues” to partner.  | Use the divided workspace in eTools to compare the value of the coins. Ask students to sketch the coins and write their values. | Use eTools to help students connect the picture of the coin and its value.<br><br> | Students should be able to describe how they identify each of the coins.<br><br>Vocabulary: penny, nickel, dime, quarter, heads, tails, cents |                     | Students should also be able to compare coins on basis of value. Characteristics of both “head” and “tail” sides of coins should be noted. |
|                     |  | 2.3d. Count pennies to 25 cents.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13   | In real-life situations, use pennies to determine the value.<br><br><br><br>In worded problems, use pennies to determine the value of a collection of coins. | In worded problems, use pictures of coins to determine the value of a collection of coins.                                      | Given the number of pennies, determine the value of the pennies.  |   |                     |  |



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|---------------------|---|--|---|---|---|--|-------------------------------------|--|
| Sept. 23 – Sept. 28 | Real-Object and Picture Graphs<br><br>(See Teacher Notes) | 1.9a. Collect and sort data.<br><br>1.9b. Use organized data to construct real-object graphs and picture graphs.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i>   | Each group of students receives a paper bag of items, such as coins, to sort and organize into a real-object graph. Using dry erase markers, students should write a title.<br><br>Lesson 20-6, pp. 577-580 including TAKS PS page. | Replace the real-object graph made by the students with “math pictures.” Students should write a title and the key for the picture graph.<br><br>VLB 20-5 with workbook, pp. 574-575 and TAKS PS, p. 576 for understanding tally marks.<br><br>Lesson 20-7, pp. 581-583. Have students use “math picture” and provide a legend. |   | Students should explain why a specific title or key was chosen.<br><br>Vocabulary: Title, key, label | Living and non-living<br>See Lesson | Ensure that students have experiences of sorting the data and organizing into a graph.<br><br>Graphs should be constructed both vertically and horizontally.<br><br>Use voting as a way of making choices and decisions on class graphs.     |
|                     | Assessment Examples                                       | 1.10a. Draw conclusions and answer questions using information organized in real-object graphs and picture graphs.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i> | Teacher asks questions that groups of students can answer.  | Use worded problems with real-object and picture graphs to answer questions.<br><br>“Look and See” 20-2, p. 564B* as teacher-led activity.  | Write number sentences to answer questions. | Connect the actions in the questions to the operations.  |                                     | This is a great opportunity to give students’ experiences with “comparing” action prior to naming the action in the second six weeks. <br>See strategy. |



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| Sept. 29 – Oct. 2   | <b>(6 Hours)</b><br>Problem-Solving Strategies:<br>Use Objects<br><br><b>(See Teacher Notes)</b><br><br>Assessment Examples | 1.11c. Select or develop an appropriate problem solving plan or strategy including using objects.<br><br><i>Process TEKS:</i><br><i>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i> | Use bear problems and teddy bear counters to solve worded problems. | Use bear-colored crayons to draw “math picture” to solve worded problems. |          |                                    |                   |          |
| Oct. 5m 6   | Mixed Review for Benchmark  |   |   |   |          |                                    |                   |          |
| Oct. 7-8  | Benchmark   |   |   |   |          |                                    |                   |          |
| Oct. 9  | Re-teach  |   |   |   |          |                                    |                   |          |
| <b>Reflections on student difficulties:</b>   |   |   |   |   |          |                                    |                   |          |
| <b>Re-teach Ideas:</b><br>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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| Oct. 13–<br>Oct. 14  | (4 Hours)<br>Patterns and Skip Counting<br><br>(See Teacher Notes)           | 1.5a. Use patterns to count by tens.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | Lesson 9-3, pp. 223-225.<br><br>Line up 10 students and have them practice counting the number of fingers by tens.   | IMS: “Tens of Ants”, p. 212K  | TAKS PS 10-2, p. 262<br><br>Use a hundreds chart to count orally by tens.<br><br>Use hundreds chart on the Smart Board.  | “Tens Game”** and “Tens Game Challenge,”**, p. 262B<br><br>Vocabulary: Ten, twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety |                   |   |
| Oct. 15 –<br>Oct. 16 | (4 Hours)<br><br>Money<br><br>(See Teacher Notes)<br><br>Assessment Examples | 2.3e. Count dimes to \$1.00<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13          | In real-life situations, use coins and hairy money strategy to determine the value.<br><br>In worded problems, use coins and hairy money strategy to determine the value of a collection of coins. | In worded problems, use pictures of coins and hairy money strategy to determine the value of a collection of coins.<br><br>Using eTools, have students to create workspace of dimes and then count value. | Given the names of coins in a word problem, use the hairy money strategy to determine the value of a collection of coins.<br><br> |  |                   | Use skip counting by tens to count dimes to \$1.00.<br><br>See strategy.<br><br> |



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| Oct. 19 – Oct. 22<br><br>(See next table) | (8 Hours)<br>Representing Comparing, Ordering<br><br>Representing Numbers to 99<br><br>(See Teacher Notes)<br><br>Assessment Examples | 1.1b. Create sets of tens and ones using concrete objects to describe whole numbers.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | Each group of students uses unifix cubes to organize the sets of tens and ones and match the number from word cards.<br>Use unit cubes to organize in sets of tens and one and trade 10 units for rod. Represent numbers with base-ten blocks or in eTools and sketch and write the number in expanded and standard form. | Each group of students draws pictures of unifix cubes to represent numbers and then represents the number using base-10 blocks with rods and units.<br><br>IMS: “Tens and Ones at the Diner”, p. 253I<br>VLB 10-3 with wkb, pp. 264-265.<br><br> | Write numbers on clothespins.<br>Students work in pairs using a poster-board divided in 3 parts to build the number with base-ten blocks in part 1, draw a picture of the base-ten blocks in part 2, and match or write the number in words in the part 3. | Students explain how they knew the number of tens, the number of ones, and how to arrange the digits.<br><br>Vocabulary: tens, ones, place value, digit | Using the Hand Lens<br>See Lesson | It is important to begin connecting the number to the set of ten and ones (beginning of place value)  |
|   | Assessment Examples   | 1.1d. Read and write numbers to 99 to describe sets of concrete objects<br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13                  | Use word cards to help students describe numbers.   | Draw pictures of base-ten blocks to represent numbers. Draw pictures of base-ten blocks and use word cards to describe the picture.  | Given a number, write the number of tens and ones using expanded form; i.e., 35 = 3 tens and 5 ones.<br>VAK activity: “Clap and Tap”, p. 253F  | Vocabulary: Ten, twenty, thirty, forty, fifty, sixty, seventy, eighty, ninety, one, two, three, four, five, six, seven, eight, nine, etc.               |                                   | Use of the base-ten blocks begins the early concepts of place value.<br><br>See strategy.  |
|   |   | 2.8a. Locate and name points on a number line.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13                                       |   | Use sentence strip number lines to locate numbers.   |  | Vocabulary: Number line, before, after, between, middle   |                                   |   |

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|---|--|---|--|---|--|------------------------------------|-------------------|----------|---|---|---|---|---|--|--|---|
| Oct. 19 – Oct. 22   | Comparing and Ordering<br><br>Assessment Examples                          | 1.1a. Compare and order whole numbers less than 100 using sets of concrete and pictorial models.<br><br>1.5c. Compare and order whole numbers using place value.<br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | Use base-ten blocks to model the comparisons.<br><br>Use eTools and multiple workspaces to create and compare numbers. Students should sketch and record the results.<br><br> | <b>VLB Lesson 11-1 with workbook pp. 276-277</b><br><br>Given 2-3 numbers on popsicle sticks, draw pictures of base-ten blocks, use word cards for greater than, less than or equal to compare the numbers. | Use a vertical table or grid paper to help students easily see the place values to write and order 3 numbers.<br><table border="1" data-bbox="1255 435 1369 548"> <tr> <td>T</td> <td>O</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> | T                                  | O                 | 2        | 1 | 1 | 5 | 2 | 6 | Explain verbally how the greater (or smaller) number is selected.<br><br>Explain verbally how to order numbers using place value.<br><br><b>What's My Number?"</b> , p. 253F<br><br>Vocabulary: greater than, more than, less than, fewer, same as, least, greatest, equal |  | Teachers should guide students to describe how they compared the numbers and which digit was most important in choosing the larger or smaller number.<br><br>See strategy.<br> |
| T   | O  |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |
| 2   | 1  |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |
| 1   | 5  |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |
| 2   | 6  |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |
| Oct. 22   | Review: Skip Counting By Ten, Money, Representing, Comparing, and Ordering |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |
| Oct. 23   | Quiz   |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |
| <b>Reflections on student difficulties:</b>   |  |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |
| <b>Ideas for re-teaching:</b><br>Use the Smartboard to ask students to build and compare number or use the double workspace with eTools to let students practice. Use the workshop paper copy to record practice and to ensure students' understanding. |  |   |  |   |  |                                    |                   |          |   |   |   |   |   |  |  |   |



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| Oct. 26 – Nov. 3<br><br>See next table | (14 Hours)<br>Addition and Subtraction<br><br>(sums to 14)<br><br>Actions:<br>Put together, Take away, & Compare<br><br>(See Teacher Notes)<br><br>Assessment Examples | 1.3a. Model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences.<br><br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | Use real-life situations with objects, action words, and number sentences to ensure understanding of process.<br><b>Les 4-6, p. 103 to concretely illustrate comparing action with students.</b><br>From worded problems, use objects, action words, and number sentences to ensure understanding of process<br><br>Use unifix cubes to illustrate addition and subtraction number sentences. | Use real-life situation with model drawing, actions, and number sentences to ensure understanding of process.<br><br><b>VLB 406, p. 104-105 with workbook pages 104-105 for compare action.</b><br><br>From worded problems, use model drawing, actions, and number sentences to ensure understanding of process. | Use model drawing to write number sentences of the real-life situation.<br><br>(Step 2 to Step 3)                               | Connect addition to “put together” action or join...<br>Connect subtraction to taking away action<br><br>Students should use words to describe the action in the model drawing.<br><br>Vocabulary: Sum, difference, addend, add, join, subtract, minus, take away. |                   | Use action posters to connect operations.<br><br>Bridge the concrete to pictorial by ensuring that students do problems with unifix cubes and model drawing.<br><br>Avoid telling students that “altogether” means to add as the story can be subtraction and have altogether.<br><br>Compare action has been included. See strategy. |
|  | Fact families (Sums to 14)<br><br>(See Teacher Notes)<br><br>Assessment Examples   | 1.5e. Identify patterns in related addition and subtraction sentences.<br><br>1.5d. Use patterns to develop strategies to solve basic addition and subtraction problems.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13  | Use unifix cubes or pattern blocks in 2 different shapes to act out families ( $7 + 6 = 13$ , $6 + 7 = 13$ , $13 - 6 = 7$ , $13 - 7 = 6$ .)   | Draw pictures to illustrate fact families.<br><br><b>VLB 3-6, p. 72 to illustrate order of addends.</b>   | Use magnetic numbers and operation signs to create a fact family from numbers given by the teacher.<br><br>Write fact families. | Help student make the connection that if an addition fact is learned, then the related subtraction fact is also learned.<br><br>Have students explain “why” the numbers belong in the same fact family.  |                   | All of the fact family included.    |

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| Oct. 26 – Nov. 3   | Addition and Subtraction Facts<br><br>(Sums to 14)<br><br>Assessment Examples                        | 1.3b. Use concrete and pictorial models to apply basic addition and subtraction facts.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i>      | Use unifix cubes to count on by 1, 2, and 3 and count back by 1, 2, and 3.<br><br>Use concrete models (ears, wheels on small car, etc.) to illustrate doubles.<br><br>Use counters to show facts “Make 10.”  | Use a number line to count on by 1, 2, and 3 and count back 1, 2, and 3.  | Use a hundreds chart to count on by 1, 2, and 3 and count back 1, 2, and 3.<br><br>Use a hundreds chart to color doubles. | Students should say the facts aloud.  | Soil<br>See Lessons |   |
| Nov. 4– Nov. 6     | <b>(6 Hours)</b><br><br>Bar-type Graphs<br><br><b>(See Teacher Notes)</b><br><br>Assessment Examples | 1.9a. Collect and sort data.<br><br>1.9b. Use organized data to construct bar-type graphs.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i>  | Each group of students receives a paper bag of items, such as coins, to sort and organize into sets or groups. Organize the real-objects into a graph. Use dry-erase markers to create a bar-like graph around the objects. Remove the objects and tell students to write a title and number the bars. | Use worded problems that have been bar-type graphs. Tell students to make a tally chart that matches the data.<br><br>Les 20-8, pp. 585-588 including TAKS PS.<br><br> |   | Students should explain why a specific title was chosen.<br><br>Vocabulary: tally marks |                     | Ensure that students have experiences of sorting the data and organizing into a graph.              |
|                    |  | 1.10a. Draw conclusions and answer questions using information organized in bar-type graphs<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i> | Teacher asks questions that groups of students can answer.   | Use worded problems with bar-type graphs to answer questions.<br><br>Les 20-3, pp. 565-568 including TAKS PS.<br>PM 20-3, p. 54.  | Write number sentences to answer questions.   | Relate the actions in the questions to the operations in the number sentences.          |                     |  See strategy. |

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|---|--|---|--|--|---|---|-------------------|---|
| Nov. 9 – Nov. 13<br><br>Assessment Examples | (10 Hours)<br>Patterns<br>Skip Counting,<br>Money<br><br>(See Teacher Notes)<br>Even and Odd | 1.5a. Use patterns to skip count by two's, five's, and ten's..<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i>  | Use eyes and hands to practice skip counting by twos, five's, and ten's.<br><br>Working in partners, ask students to build patterns of 5, 10, 15, 20 by building the numbers using unifix cubes. | Use grid paper and ask students to show a pattern of 5, 10, 15, 20 by coloring each bar with different   | Use a hundreds chart to count orally by twos.<br><br>Use hundreds chart on the Smart Board. | Students should describe the patterns in the hundreds chart when counting by twos.          |                   | Each student should have a hundreds chart in order to kinesthetically count. Counting aloud helps students remember                             |
|   |  | 1.5b. Find patterns in numbers including even and odd.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i>  | Use 2 color counters or transparent chips to make "partners" in order to show even and odd.<br><br>Les 9-8, pp. 243-245  | Draw pictures of counters to show even and odd.<br><br>Les 9-8, pp. 243-245<br>PM 9-8, p. 77   | Locate even and odd numbers on a hundreds chart as a way to note patterns.                  | Students should describe the patterns seen in chart (even numbers end in 0, 2, 4, 6, or 8). |                   |   |
|   | Extending patterns   | 1.4a. Identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i> | Use pattern blocks-the teacher starts a pattern, then student analyze and take turns extending the pattern.<br><br>Have students create patterns using eTools.<br><br>Les 8-2, pp. 199-201       | Use pictures of pattern blocks to analyze and extend the pattern.<br><br><br><br>Les 8-2, pp. 199-201<br>EM 8-1, p. 22 | Use a list of numbers to analyze and extend the number pattern.                             |   |                   | Use variety of materials: shapes, colors numbers. Students should be able to find the missing parts of a pattern as well as extend the pattern. |

| Projected Timeline                          | Topic   | TEKS  | Concrete   | Pictorial   | Abstract  | Language, Process, Generalizations                      | Integration Ideas | Comments   |
|---|---|---|--|---|---|---|-------------------|--|
| Nov. 9 – Nov. 13<br><br>Assessment Examples | Money and Patterns<br><br>(See Teacher Notes) | 1.5a. Use patterns to skip count by fives and tens.<br><br>2.3d. Count nickels to 50 cents and dimes to \$1.00.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i>       | In real-life situations, use coins and hairy money strategy to determine the value.<br><br>In worded problems, use coins and hairy money strategy to determine the value of a collection of coins.<br><br>Ask students to use eTools to create amounts using dimes or nickels. Students should sketch the coins and write the value. | In worded problems, use pictures of coins and hairy money strategy to determine the value of a collection of coins. | Given the names of coins in a word problem, use the hairy money strategy to determine the value of a collection of coins. | Explain why a dime has 2 hairs and a nickel has 1 hair. |                   | See strategy.<br><br> |
|   | Extending patterns                            | 1.4a. Identify, describe, and extend concrete and pictorial patterns in order to make predictions and solve problems.<br><br><i>Process TEKS: 1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13</i> | Have students create patterns using eTools.<br><br>  | Have students create patterns using eTools.   | Use a list of numbers to analyze and extend the number pattern.   |   |                   |  |
| Nov. 16-17                                  | Benchmark Review                              |   |  |   |   |   |                   |  |
| Nov. 18 – Nov. 19                           | Benchmark                                     |   |  |   |   |   |                   |  |
| Nov. 20 - 24                                | Re-teach                                      |   |  |   |   |   |                   |  |

| Projected Timeline                          | Topic   | TEKS  | Concrete  | Pictorial   | Abstract  | Language, Process, Generalizations  | Integration Ideas | Comments   |
|---|---|---|---|---|---|---|-------------------|--|
| Nov. 30 – Dec. 9<br><br>Assessment Examples | <b>(16 Hours)</b><br>Addition and Subtraction (Actions)<br><br>(sums to 18)<br><br>Actions:<br>Put together,<br>Take away,<br>Compare<br><br><b>See Teacher Notes</b> | 1.3a. Model and create addition and subtraction problem situations with concrete objects and write corresponding number sentences.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13                               | Use real-life situations with objects, action words, and number sentences to ensure understanding of process. From worded problems, use objects, action words, and number sentences to ensure understanding of process<br><br>Use unifix cubes to illustrate addition and subtraction number sentences. | Use real-life situation with model drawing, actions, and number sentences to ensure understanding of process.<br><br>From worded problems, use model drawing, actions, and number sentences to ensure understanding of process. | Use model drawing to write number sentences of the real-life situation.<br><br>(Step 2 to Step 3)   | Connect addition action to joining or putting together.<br>Connect subtraction action to taking away and comparing.<br><br>Vocabulary: Total, Sum, difference, addend, add, join, subtract, minus, compare, take away, “who, what, unit bar”<br><br>Having students justify their chosen actions and operation depends understanding. |                   | Use action posters to connect operations.<br><br>Bridge the concrete to pictorial by ensuring that students do problems with unifix cubes and model drawing. |
|   | Fact families<br>(Sums to 18)   | 1.5e. Identify patterns in related addition and subtraction sentences.<br>1.5d. Use patterns to develop strategies to solve basic addition and subtraction problems.<br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | Use unifix cubes or pattern blocks in 2 different shapes to act out families (7 + 6 = 13, 6 + 7 = 13, 13 - 6 = 7, 13 - 7 = 6.)<br><br>Les 15-1, pp. 403-405<br>“Are They Related” 15-1, p. 406B*<br>Les 15-2, pp. 407-409   | Draw pictures to illustrate fact families.<br><br>Les 15-1, pp. 403-405<br>“Are They Related” 15-1, p. 406B*<br>Les 15-2, pp. 407-409   | Use magnetic numbers and operation signs to create a fact family from numbers given by the teacher.<br><br>“Win with Five” 15-2, p. 410B*<br><br>Write fact families. | Help students make the connections that when an addition fact is learned, then the subtraction fact is also learned.<br><br>Use “total” instead of “whole” in Les 15-1 and 15-2.  |                   | All of the fact family included.   |
|   | Addition and Subtraction Facts<br>(Sums to 18)  | 1.3b. Use concrete and pictorial models to apply basic addition and subtraction facts.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13   | Use unifix cubes to count on by 1, 2, and 3 and count back 1, 2, and 3. Use concrete models (ears, wheels on small car, etc.) to illustrate doubles.<br>Use counters to “Make 10.”  | Use a number line to count on by 1, 2, and 3 and count back 1, 2, and 3.  | Use a hundreds chart to count on by 1, 2, and 3 and count back 1, 2, and 3.<br><br>Use a hundreds chart to color doubles.   | Students should say the facts aloud.  |                   | Timed paper-pencil tests should NOT be used.   |

| Projected Timeline | Topic   | TEKS   | Concrete  | Pictorial  | Abstract  | Language, Process, Generalizations  | Integration Ideas | Comments  |
|--------------------|---|--|---|--|---|---|-------------------|---|
| Dec. 9 – Dec. 15   | (10 Hours)<br><br>Geometry (shapes)<br><br>(See Teacher Notes)<br><br>Assessment Examples | 1.6a. Describe and identify 2-dimensional geometric figures, including circles, triangles, rectangle, and squares (a special type of rectangle).   | Les 17-1, pp. 463-465.<br><br>In groups, students describe various shapes in the room, library, etc.<br><br>Use geo-boards or eTools to make different sized shapes and then describe informally as to number of sides, length of sides, number of vertices.<br> | “Cover Shapes” 17-1, p. 466B*<br><br>Using pictures of shapes, sort them by a given attribute, i.e., all shapes that have 4 sides.<br><br>Use foam shapes and tempura paint to create a picture of shapes organized by attributes. Write the attribute on which the sorting was done.<br><br>Les 17-2, pp. 467-469 | “Trace Shapes”, 17-1, p. 466B**<br><br>Students draw a name of a shape from a bag and then describe the shape in terms of sides and vertices.                           | Students should describe how they found the number of sides.<br><br>Students should describe how they know it is a circle, triangle, rectangle, including square, and polygon.<br><br>Vocabulary: 2-dimensional, polygon, circle, square, triangle, rectangle, side, corner |                   | Putting dots on vertices and a slash on sides can sometimes help students to count..<br><br>Encourage students to draw different types of triangles and rectangles.<br><br>See strategy.<br> |
|                    |   | 1.6c. Describe and identify 2 dimensional geometric figures in order to sort them according to a given attribute.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13 | 1.6d Use concrete models to combine two-dimensional geometric figures to make new geometric figures.<br><br><i>Process TEKS:</i><br>1.11a, 1.11b, 1.11d, 1.12a, 1.12b, 1.13   | In groups, students use cut-out shapes or pattern blocks to combine shape and then describe the new shape.<br><br>Les 17-7, pp. 487-489<br>“Helping Hands” 17-7, p. 490B**   | Using a picture of a shape with a dotted line to indicate where shapes have been put together, students can identify the number of sides and vertices in the new shape. |   |                   |   |
| Dec. 16            | Review: Patterns, Addition, Subtraction, Geometry   |  |   |  |   |   |                   |   |
| Dec. 17            | Quiz: Money, Patterns, Addition, Subtraction, Geometry                                    |  |   |  |   |   |                   |   |
| Dec. 18            | Re-teach  |  |   |  |   |   |                   |   |

Reflections on student difficulties:

Winter Break