

Math Intervention Lesson Plan, K-3

Subject: Math

Teacher(s): Bonnie Murphy

Week: February 22nd-24th

Attending KCM Elementary Math Content Coaching Co-hort Thursday and Friday (Freedom Elementary)

2nd Grade RTI	<p>9:00-9:20</p> <p>Objective: I can use many strategies to add and subtract within 20 (and within 100). I can use base-ten materials to help me add and subtract two and three digit numbers.</p> <p>Standard(s): 2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. 2.NBT.5/7 Add and subtract within 100 and 1,000 using place value properties, concrete models, drawings, and the relationship between addition and subtraction.</p> <p>Vocabulary: 20 frame, combination, subtraction, mental strategy,</p> <p>Activities/Strategies: Stack 20-frames face down. Students take turns turning over the top 20-frame. Others quickly write the number that goes with the quantity on the 20-frame to make 20. Ex: first student flips over 4, then the remaining students race to write 16. The one who turned over the 20 frame (or the teacher) is in charge of judging the winner of the round. Continue until someone wins at least 5 rounds. If all the 20-frames have been used, reshuffle and start again or stop play after one time through the stack.</p> <p>Fill 30-Students subtract numbers within 20. They add the difference of their subtraction problem to the fill 30 game board.</p> <p>Math Talks- Two digit addition 2 digit addition split game-Start by having students use materials (bundles and sticks) to add horizontal 2 digit addition problems. Then model for students how to notate. Students then practice using cards</p> <p>Three in a Line-add and subtract with Materials- Students use bundles and sticks to discover patterns and relationships when adding on 10s. Focus students thinking on the “ten-ness” of our number system to determine when we will need to make a ten or regroup.</p> <p>100 or Bust- Students use knowledge of place value to structure number up to 100 without going over. Students roll a dice and decide if they want to use the numeral as tens or ones</p>	<p>Assessment: <i>anecdotal</i> <i>observation</i> <i>Exit Slip</i></p>
3rd Grade Collaboration Edlin	<p>9:20-10:00</p> <p>During this time I co-teach assist during Eureka math instruction. I also complete any diagnostic or formative assessments for future math groups, etc. When needed I pull small groups based on formative assessments.</p>	<p>Assessment: <i>anecdotal</i> <i>observation</i> <i>Exit Slip</i></p>

1st Grade Collaboration	<p>10:00-10:35</p>	<p>Math Small Groups (M & T) (W & F)</p> <p><i>Structuring small groups based on fluency to 10 assessment and teacher recommendations.</i></p> <p>Objective: I can collect, organize, create, and read bar graphs.</p> <p>Standard(s): 1.MD.4 Organize, represent, and interpret data with up to three categories; ask and answer questions about the total number of data points, how many in each category, and how many more or less are in one category than in another.</p> <p>Vocabulary: tally, collect, organize, data, bar graph</p> <p>Activities/Strategies:</p> <p>Students start with reviewing how we sorted attributes last week. Show students how it is easier to answer questions about collections when we organize it. Show students how to compare how many more or less are in one category than another.</p> <p>Day 1-Students work together to organize/tally and create a bar graph. Together we discuss what we notice about our bar graph. Students ask and answer question about their graph.</p> <p>Day 2- Students get a scoop of Lego blocks. Students then must collect, organize and create a bar graph. Students think of 3 things they can learn from their graph and share with the group.</p>	<p>Assessment: <i>anecdotal observation Exit Slip</i></p>
3rd Grade RTI	<p>10:35-10:55</p>	<p>Objective: I can add or subtract a single digit number or 10 from a number in the range 1 to100! I can determine when I must make (compose) or break (decompose) a ten (regrouping).</p> <p>Standard(s): 2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Vocabulary: value, add, subtract, difference, sum,</p> <p>Activities/Strategies: 3 In A Line C, D, or E- The student will roll the cubes/spinner, determine the sum or difference (as indicated by the roll) and cover that number on his or her board. Students are encouraged to use a base-ten manipulative such as bundles and sticks, 10 frames or a 10 row bead rack to work out the problem or as a "check" to verify a predicted answer. The first player with 3 in a line (any direction) wins. Allow students to skip the "building" step if they are confident and can explain what would happen with the materials.</p> <p>Delivery Game-Students use math tools to add and subtract. Teacher selects "deliveries and pick ups" to challenge students with regrouping problems. Students practice notating their thinking.</p> <p>Steal the Crown!- Game starts by selecting a numeral card and placing a marker on the hundreds chart. Then students choose addition or subtractions cards and must find the sum or difference. Students will also practice notating their work to show how they determined the total. Specialty cards can be drawn. Game ends when the treasury (stack of cards) equals or exceeds 100. The player who has the crown wins.</p>	<p>Assessment: <i>anecdotal observation Exit Slip</i></p>

3rd Grade RTI	10:55-11:15	<p>Objective: I can add or subtract a single digit number or 10 from a number in the range 1 to100!</p> <p>Standard(s): 2.NBT.5 Fluently add and subtract within 100 using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Vocabulary: value, add, subtract, difference, sum,</p> <p>Activities/Strategies: 3 In A Line C, D, or E- The student will roll the cubes/spinner, determine the sum or difference (as indicated by the roll) and cover that number on his or her board. Students are encouraged to use a base-ten manipulative such as bundles and sticks, 10 frames or a 10 row bead rack to work out the problem or as a "check" to verify a predicted answer. The first player with 3 in a line (any direction) wins. Allow students to skip the "building" step if they are confident and can explain what would happen with the materials.</p> <p>Delivery Game-Students use math tools to add and subtract. Teacher selects “deliveries and pick ups” to challenge students with regrouping problems. Students practice notating their thinking.</p> <p>Steal the Crown!- Game starts by selecting a numeral card and placing a marker on the hundreds chart. Then students choose addition or subtraction cards and must find the sum or difference. Students will also practice notating their work to show how they determined the total. Specialty cards can be drawn. Game ends when the treasury (stack of cards) equals or exceeds 100. The player who has the crown wins.</p> <p>100 or Bust- Students use knowledge of place value to structure number up to 100 without going over. Students roll a dice and decide if they want to use the numeral as tens or ones.</p>	<p>Assessment: <i>anecdotal observation Exit Slip</i></p>
	Lunch/ Planning	11:15-11:45	Lunch

2nd Grade RTI	11:45-12:05	<p>Objective: I can use many strategies to add and subtract within 20 (and within 100). I can use base-ten materials to help me add and subtract two and three digit numbers.</p> <p>Standard(s): 2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. 2.NBT.5/7 Add and subtract within 100 and 1,000 using place value properties, concrete models, drawings, and the relationship between addition and subtraction.</p> <p>Vocabulary: 20 frame, combination, subtraction, mental strategy,</p> <p>Activities/Strategies: Stack 20-frames face down. Students take turns turning over the top 20-frame. Others quickly write the number that goes with the quantity on the 20-frame to make 20. Ex: first student flips over 4, then the remaining students race to write 16. The one who turned over the 20 frame (or the teacher) is in charge of judging the winner of the round. Continue until someone wins at least 5 rounds. If all the 20-frames have been used, reshuffle and start again or stop play after one time through the stack.</p> <p>Fill 30-Students subtract numbers within 20. They add the difference of their subtraction problem to the fill 30 game board.</p> <p>Math Talks- Two digit addition 2 digit addition split game-Start by having students use materials (bundles and sticks) to add horizontal 2 digit addition problems. Then model for students how to notate. Students then practice using cards</p> <p>Three in a Line-add and subtract with Materials- Students use bundles and sticks to discover patterns and relationships when adding on 10s. Focus students thinking on the “ten-ness” of our number system to determine when we will need to make a ten or regroup.</p> <p>100 or Bust- Students use knowledge of place value to structure number up to 100 without going over. Students roll a dice and decide if they want to use the numeral as tens or ones</p>	<p>Assessment: <i>anecdotal observation Exit Slip</i></p>
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12:05-12:25

Objective: I can use many strategies to add and subtract within 20 (and within 100).
I can use base-ten materials to help me add and subtract two and three digit numbers.

Standard(s): 2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers. 2.NBT.5/7 Add and subtract within 100 and 1,000 using place value properties, concrete models, drawings, and the relationship between addition and subtraction.

Vocabulary: 20 frame, combination, subtraction, mental strategy,

Activities/Strategies: **Stack 20-**frames face down. Students take turns turning over the top 20-frame. Others quickly write the number that goes with the quantity on the 20-frame to make 20. Ex: first student flips over 4, then the remaining students race to write 16. The one who turned over the 20 frame (or the teacher) is in charge of judging the winner of the round. Continue until someone wins at least 5 rounds. If all the 20-frames have been used, reshuffle and start again or stop play after one time through the stack.

Fill 30-Students subtract numbers within 20. They add the difference of their subtraction problem to the fill 30 game board.

Math Talks- Two digit addition
2 digit addition split game-Start by having students use materials (bundles and sticks) to add horizontal 2 digit addition problems. Then model for students how to notate. Students then practice using cards

Three in a Line-add and subtract with Materials- Students use bundles and sticks to discover patterns and relationships when adding on 10s. Focus students thinking on the "ten-ness" of our number system to determine when we will need to make a ten or regroup.

100 or Bust- Students use knowledge of place value to structure number up to 100 without going over. Students roll a dice and decide if they want to use the numeral as tens or ones

Assessment: anecdotal
observation
Exit Slip

12:25-1:00

Objective: I can count and name quantities up to 20. I can identify and write numbers 0-20. I can compare numbers using more and less.

Standard(s): K.CC.4a Understand the relationship between numbers and quantities; connect counting to cardinality. K.CC.3 Write numbers from 0-20. Represent a number of objects with a written numeral. K.CC.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. COMPARE numbers.

Vocabulary: teen numbers-eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen
More , less

Activities/Strategies: #6, 7, 8, 9, 10, 11, and 12

Counting forward and backwards within 20 from any number. Sequencing and writing numbers in the range of 0-20.

Flash subitizing cards -regular and irregular dot patterns.

Grow, Shrink, and Compare- Teacher calls out number and student used counters to cover that number of dots on their working-space paper. As you call out different numbers ask if the number is more or less.

Cookie Company- Student use trays of ten cookies and some more to explore how to write teen numbers.

Diffy Game-Students select a numeral card and counts cubes to make a tower with the quantity. Then compare students' towers to discuss most, more, least, less.

Sorting Line Puzzles-Students use cubes to number puzzles and line puzzles to count quantities up to 20. Students also place the correct numeral with the

Sorting Colors-Students spill and sort colored tiles. Then they must determine how many they have of each color group and label with a numeral card.

Assessment:
anecdotal
observation
Exit Slip

<p style="writing-mode: vertical-rl; transform: rotate(180deg);">1st Grade RTI</p>	<p>1:00-1:20</p>	<p>Objective: I can use the relationship between addition and subtraction to add and subtract numbers up to 20. I can find the total of two numbers within twenty with support, when one quantity is screened.</p> <p>Standard(s): 1.OA.3 Apply properties of operations as strategies to add and subtract. 1.OA.5 Relate counting to addition and subtraction.</p> <p>Vocabulary: more, less, add, subtract, predict,</p> <p>Activities/Strategies:</p> <p>BNWS-Count arounds from numbers less than 30 to practice their backward number word sequence. Numeral Tracks can be used for support materials.</p> <p>Treasure Hunt 109-120- Students sequence numbers in 109-120 range using patterns.</p> <p>Ten Frame Flash- Combinations with 10. Support with bead rack or twenty frame if needed.</p> <p>Partitions of Numbers in the Range of 1-20. Students use bead racks or twenty frames to record ways to make a number.</p> <p>Additive tasks with two screened collections within 20. Addition and Subtraction with a rack. Teacher poses additive tasks with both addends in the range of 1-10 and corresponding subtractive tasks: such as $6+5$, $9+6$, $8+7$, $6+ \underline{\quad}=13$, $7+ \underline{\quad}=14$. Students use a bead rack to show the first addend. Then give students a bare number problem and ask them to work it out.</p>	<p>Assessment: <i>anecdotal observation Exit Slip</i></p>
<p style="writing-mode: vertical-rl; transform: rotate(180deg);">1st Grade RTI</p>	<p>1:20-1:40</p>	<p>Objective: I can use the relationship between addition and subtraction to add and subtract numbers up to 20. I can find the total of two numbers within twenty with support, when one quantity is screened.</p> <p>Standard(s): 1.OA.3 Apply properties of operations as strategies to add and subtract. 1.OA.5 Relate counting to addition and subtraction.</p> <p>Vocabulary: more, less, add, subtract, predict,</p> <p>Activities/Strategies:</p> <p>BNWS-Count arounds from numbers less than 30 to practice their backward number word sequence. Numeral Tracks can be used for support materials.</p> <p>Treasure Hunt 109-120- Students sequence numbers in 109-120 range using patterns.</p> <p>Ten Frame Flash- Combinations with 10. Support with bead rack or twenty frame if needed.</p> <p>Partitions of Numbers in the Range of 1-20. Students use bead racks or twenty frames to record ways to make a number.</p> <p>Additive tasks with two screened collections within 20. Addition and Subtraction with a rack. Teacher poses additive tasks with both addends in the range of 1-10 and corresponding subtractive tasks: such as $6+5$, $9+6$, $8+7$, $6+ \underline{\quad}=13$, $7+ \underline{\quad}=14$. Students use a bead rack to show the first addend. Then give students a bare number problem and ask them to work it out.</p>	<p>Assessment: <i>anecdotal observation Exit Slip</i></p>

1:45-2:05

Objective: I can count and name quantities up to 20. I can identify and write numbers 0-20. I can compare numbers using more and less.

Standard(s): K.CC.4a Understand the relationship between numbers and quantities; connect counting to cardinality. K.CC.3 Write numbers from 0-20. Represent a number of objects with a written numeral. K.CC.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. COMPARE numbers.

Vocabulary: teen numbers-eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen
More , less

Activities/Strategies: #6, 7, 8, 9, 10, 11, and 12

Counting forward and backwards within 20 from any number. Sequencing and writing numbers in the range of 0-20.

Flash subitizing cards -regular and irregular dot patterns.

Grow, Shrink, and Compare- Teacher calls out number and student used counters to cover that number of dots on their working-space paper. As you call out different numbers ask if the number is more or less.

Cookie Company- Student use trays of ten cookies and some more to explore how to write teen numbers.

Diffy Game-Students select a numeral card and counts cubes to make a tower with the quantity. Then compare students' towers to discuss most, more, least, less.

Sorting Line Puzzles-Students use cubes to number puzzles and line puzzles to count quantities up to 20. Students also place the correct numeral with the

Sorting Colors-Students spill and sort colored tiles. Then they must determine how many they have of each color group and label with a numeral card.

UNO-with cards 6, 7, 8, and 9.

Assessment:

*anecdotal
observation
Exit Slip*

<p>2:05-2:25</p>	<p>Objective: I can count and name quantities up to 20. I can identify and write numbers 0-20. I can compare numbers using more and less.</p> <p>Standard(s): K.CC.4a Understand the relationship between numbers and quantities; connect counting to cardinality. K.CC.3 Write numbers from 0-20. Represent a number of objects with a written numeral. K.CC.5 Count to answer "how many?" questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects. COMPARE numbers.</p> <p>Vocabulary: teen numbers-eleven, twelve, thirteen, fourteen, fifteen, sixteen, seventeen, eighteen, nineteen More , less</p> <p>Activities/Strategies:</p> <p>Counting forward and backwards within 20 from any number. Sequencing numbers in the range of 0-20.</p> <p>Flash subitizing cards -regular and irregular dot patterns.</p> <p>Grow, Shrink, and Compare- Teacher calls out number and student used counters to cover that number of dots on their working-space paper. As you call out different numbers ask if the number is more or less. Cookie Company- Student use trays of ten cookies and some more to explore how to write teen numbers.</p> <p>Diffy Game-Students select a numeral card and counts cubes to make a tower with the quantity. Then compare students' towers to discuss most, more, least, less.</p> <p>Sorting Line Puzzles-Students use cubes to number puzzles and line puzzles to count quantities up to 20. Students also place the correct numeral with the</p> <p>Sorting Colors-Students spill and sort colored tiles. Then they must determine how many they have of each color group and label with a numeral card.</p> <p>UNO cards with numbers 6, 7, 8, and 9</p>	<p>Assessment: anecdotal observation Exit Slip</p>
<p>2:25-3:05</p>	<p>Planning</p>	<p>Assessment: anecdotal observation Exit Slip</p>
<p>3:05-3:30 3rd Grade RTI</p>	<p>Objective: I can use many strategies to add and subtract within 20 (and within 100). I can use base-ten materials to help me add and subtract one and two digit numbers.</p> <p>Standard(s): 2.OA.2 Fluently add and subtract within 20 using mental strategies. By end of Grade 2, know from memory all sums of two one-digit numbers.</p> <p>Vocabulary: 20 frame, combination, subtraction, mental strategy,</p> <p>Activities/Strategies:</p> <p>Math Talks- Two digit addition 2 digit addition split game-Start by having students use materials (bundles and sticks) to add horizontal 2 digit addition problems. Then model for students how to notate. Students then practice using cards</p> <p>Three in a Line-add and subtract with Materials- Students use bundles and sticks to discover patterns and relationships when adding on 10s. Focus students thinking on the "ten-ness" of our number system to determine when we will need to make a ten or regroup.</p> <p>Delivery Game-Students use math tools to add and subtract. Teacher selects "deliveries and pick ups" to challenge students with regrouping problems. Students practice notating their thinking.</p>	<p>Assessment: anecdotal observation Exit Slip</p>