

Math Intervention Lesson Plan, K-3

Subject: Math

Teacher(s): Bonnie Murphy

Week: February 6th-10th

Tuesday, Feb. 7th Learning Check (5th grade accommodator)

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 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: 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>**To start the week have students use empty 20 frames and use chips to make numbers. Then ask students how many more to make 20. Have students share their strategies for finding out quickly how many more to make 20. (Either pair wise or 10+ arrangements may be used. If desired, have students compete to write the amount shown on the 20 frame.)</p> <p>High/Low Rollers (within 20)-Students add and subtract within 20 and practice notating. Fill the Pockets- Students draw two ten frame cards. Example: 7 and 5. Then they must show which 10 + equation can be made using those addends. This helps develop the making 10 strategy- they must decompose the 5 into a 3 and 2. Move the 3 with the 7 to make 10 and then add on 2. So, $10+2=7+5$</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>Assessment: <i>anecdotal</i> observation <i>Exit Slip</i></p>
3rd Grade Collaboration Edlin	<p>9:20-10:00</p> <p>I co-teach assist during Eureka math instruction. I also complete any diagnostic or formative assessments for future math groups, etc.</p>	<p>Assessment: <i>anecdotal</i> observation <i>Exit Slip</i></p>

1st Grade Collaboration

10:00-10:35

Math Small Groups (M & T) (W & F)

Structuring small groups based on fluency to 10 assessment and teacher recommendations.

Objective: I can use the relationship between addition and subtraction to add and subtract numbers up to 20.

Standard(s): 1.OA.3 Apply properties of operations as strategies to add and subtract. 1.OA.5 Relate counting to addition and subtraction.

Vocabulary: more, less, add, subtract, predict,

Activities/Strategies:

Word Problems-adding and subtracting within 20. Students use manipulatives or act it out. Then they must draw a picture and write a number sentence. Last they must restate their answer using words from the problem.

Use screening and hiding activities to encourage counting on. Use linear model to compare numbers using unifix cubes. Focus on finding the difference in length or distance between numbers (not just removal strategies).

Fill 20- Students use a linear model to add and subtract within 20.

Bingo 12-20. Teacher shows number of items under screen. Students roll a die to determine how many to add on. Then they must count on to find the sum.

Assessment:

*anecdotal
observation
Exit Slip*

3rd Grade RTI

10:35-10:55

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).

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.

Vocabulary: value, add, subtract, difference, sum,

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.

Math Race! Rules: Students solve math questions as they try and race their markers (each student has 2) to the finish line on the game board. Sample question: What are two numbers that add up to 51?

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.

Assessment:

*anecdotal
observation
Exit Slip*

3 rd 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>Math Race! Rules: Students solve math questions as they try and race their markers (each student has 2) to the finish line on the game board. Sample question: What are two numbers that add up to 51?</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</i> <i>Exit Slip</i></p>
	Lunch/ Planning	11:15-11:45	Lunch

2 nd Grade RTI	11:45-12:05	<p>Objective: I can add and subtract within 100 using place value strategies. 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. 2.NBT.5 Fluently add and subtract within 100 using strategies based on place value.</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>**To start the week have students use empty 20 frames and use chips to make numbers. Then ask students how many more to make 20. Have students share their strategies for finding out quickly how many more to make 20. (Either pair wise or 10+ arrangements may be used. If desired, have students compete to write the amount shown on the 20 frame.)</p> <p>High/Low Rollers (within 20)-Students add and subtract within 20 and practice notating. Fill the Pockets- Students draw two ten frame cards. Example: 7 and 5. Then they must show which 10 + equation can be made using those addends. This helps develop the making 10 strategy-they must decompose the 5 into a 3 and 2. Move the 3 with the 7 to make 10 and then add on 2. So, 10+2 =7 +5 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 1Os. 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>Assessment: <i>anecdotal observation</i> <i>Exit Slip</i></p>
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12:05-12:25

Objective: I can add and subtract within 100 using place value strategies.
I can use base-ten materials to help me add and subtract one and two 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 Fluently add and subtract within 100 using strategies based on place value.

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.

**To start the week have students use empty 20 frames and use chips to make numbers. Then ask students how many more to make 20. Have students share their strategies for finding out quickly how many more to make 20.
(Either pair wise or 10+ arrangements may be used. If desired, have students compete to write the amount shown on the 20 frame.)

High/Low Rollers (within 20)-Students add and subtract within 20 and practice notating.

Fill the Pockets- Students draw two ten frame cards. Example: 7 and 5. Then they must show which 10 + equation can be made using those addends. This helps develop the making 10 strategy-they must decompose the 5 into a 3 and 2. Move the 3 with the 7 to make 10 and then add on 2. So, $10+2=7+5$

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.

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 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

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1st Grade RTI	1:00-1:20	<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 rounds from numbers less than 30 to practice their backward number word sequence. Numeral Tracks can be used for support materials.</p> <p>Ten Frame Flash-students practice subitizing.</p> <p>Bull's Eye-This activity challenges students to find the total of items in two groups when one is shielded. Students will also be challenged to find the difference between their number and ten. Though not formalized, they are practicing their part/part/whole thinking with concrete support. Students are ready for this task when they are able to count items in one group to become familiar with combining groups for addition and subtraction tasks.-.</p> <p>High/Low Rollers (within 20)-Students add and subtract within 20 and practice notating.</p>	<p>Assessment: <i>anecdotal observation Exit Slip</i></p>
1st Grade RTI	1:20-1:40	<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 rounds from numbers less than 30 to practice their backward number word sequence. Numeral Tracks can be used for support materials.</p> <p>Ten Frame Flash-students practice subitizing.</p> <p>Bull's Eye-This activity challenges students to find the total of items in two groups when one is shielded. Students will also be challenged to find the difference between their number and ten. Though not formalized, they are practicing their part/part/whole thinking with concrete support. Students are ready for this task when they are able to count items in one group to become familiar with combining groups for addition and subtraction tasks.-.</p> <p>High/Low Rollers (within 20)-Students add and subtract within 20 and practice notating.</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:

Counting forward and backwards within 20 from any number. Sequencing 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*

2:05-2:25	<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.</p> <p>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>Assessment: <i>anecdotal observation</i> Exit Slip</p>
2:25-3:05	<p>Planning</p>	<p>Assessment: <i>anecdotal observation</i> Exit Slip</p>
3:05-3:30 3 rd Grade RTI	<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>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</i> Exit Slip</p>