

Math Intervention Lesson Plan, K-3

Subject: Math

Teacher(s): Bonnie Murphy

Week: March 13th-March 17th

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. I pull small groups based on formative assessment data as needed.</p>	<p>Assessment: <i>anecdotal</i> <i>observation</i> <i>Exit Slip</i></p>

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 build, draw and describe shapes using attributes.
4(defining and non defining).

Standard(s): 1.G.1 Distinguish between defining attributes (e.g. triangles are closed and three-sided) versus non-defining attributes (e.g. color, orientation, overall size); build and draw shapes to possess defining attributes.

Vocabulary: attribute, rectangle, triangle, trapezoids, squares, circles (half and quarter), closed, open, side, color, orientation, size,

Activities/Strategies:

Guess My Rule- Students use a sorting mat to guess the teachers rule. Teacher facilitates the learning by drawing a attribute card. Students then pick a shape and ask if it fits the rule. If it does fit the rule then the student places it in the circle. If it doesn't fit the rule place it outside of the circle on the mat. After a few shapes have been placed ask, "What do you notice about the shapes in the circle/out of the circle?" Students begin to look for the rule. Rule cards include: small, large, circle, square, triangle, trapezoid, rectangle, red, yellow, blue, thick thin.

Then chart with students the defining attributes vs. the non-defining attributes.

Which One Doesn't Belong?- Christopher Danielson

Students are given a collection of shapes and must choose which shape doesn't belong. There is more than 1 right answer! This facilitates great mathematical discourse and challenges students to justify their thinking. This can also lead to discovery of defining attributes vs non-defining attributes.

Assessment:
anecdotal
observation
Exit Slip

10:35-10:55

Objective: I can add or subtract within 100 and 1,000! I can write number bonds to represent two and three digit numbers.

Standard(s): 2.NBT.5 Fluently add and subtract within 100 and 1,000 (3.NBT.5) using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

Vocabulary: value, add, subtract, difference, sum, shift a ten, expanded form, represent, number bond

Activities/Strategies: Students will begin by examining the following representation of numbers using bundles and sticks. One pile will have 2 hundreds, 0 tens, and 5 ones. The other pile will have 1 hundred 9 tens, and 15 ones. Ask students if these represent the same number and to prove their thinking.

Then ask students which number bond would be best for helping us solve 205-139.

M-T Students explore writing number bonds for two and three digit numbers beyond the traditional expanded form. Students practice "shifting hundreds, tens, or both".

Provide problems to help students discover that sometimes expanded form isn't the best number bond to help solve problems efficiently. Students decide what number bond to use when given the subtrahend. Then they must determine if it is still the best number bond once the teacher has shown the minuend. This may change students thinking!! Discuss any patterns they notice (when I need to regroup I should not use expanded form but shift a hundred, ten, etc.)

W-R Students use this strategy to do a series of number strings and apply it to solve word problems.

Assessment:
anecdotal
observation
Exit Slip

3rd Grade RTI	10:55-11:15	<p>Objective: I can add or subtract within 100 and 1,000! I can write number bonds to represent two and three digit numbers.</p> <p>Standard(s): 2.NBT.5 Fluently add and subtract within 100 and 1,000 (3.NBT.5) 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, shift a ten, expanded form, represent, number bond</p> <p>Activities/Strategies: Students will begin by examining the following representation of numbers using bundles and sticks. One pile will have 2 hundreds, 0 tens, and 5 ones. The other pile will have 1 hundred 9 tens, and 15 ones. Ask students if these represent the same number and to prove their thinking.</p> <p>Then ask students which number bond would be best for helping us solve 205-139. M-T Students explore writing number bonds for two and three digit numbers beyond the traditional expanded form. Students practice "shifting hundreds, tens, or both".</p> <p>Provide problems to help students discover that sometimes expanded form isn't the best number bond to help solve problems efficiently. Students decide what number bond to use when given the subtrahend. Then they must determine if it is still the best number bond once the teacher has shown the minuend. This may change students thinking!! Discuss any patterns they notice (when I need to regroup I should not use expanded form but shift a hundred, ten, etc.)</p> <p>W-R Students use this strategy to do a series of number strings and apply it to solve word problems.</p>	<p>Assessment: <i>anecdotal</i> <i>observation</i> <i>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.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, shift a ten, expanded form, represent, number bond</p> <p>Activities/Strategies: Students will begin by examining the following representation of numbers using bundles and sticks. One pile will have 6 tens, and 5 ones. The other pile will have 5 tens, and 15 ones. Ask students if these represent the same number and to prove their thinking.</p> <p>Then ask students which number bond would be best for helping us solve 65-39. M-T Students explore writing number bonds for two digit numbers beyond the traditional expanded form. Students practice "shifting tens".</p> <p>Provide problems to help students discover that sometimes expanded form isn't the best number bond to help solve problems efficiently. Students decide what number bond to use when given the subtrahend. Then they must determine if it is still the best number bond once the teacher has shown the minuend. This may change students thinking!! Discuss any patterns they notice (when I need to regroup I should not use expanded form but shift a ten to create a more friendly equation, expression.</p> <p>W-R Students use this strategy to do a series of number strings and apply it to solve word problems.</p>	<p>Assessment: <i>anecdotal</i> <i>observation</i> <i>Exit Slip</i></p>

12:05-12:25	<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.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, shift a ten, expanded form, represent, number bond</p> <p>Activities/Strategies: Students will begin by examining the following representation of numbers using bundles and sticks. One pile will have 6 tens, and 5 ones. The other pile will have 5 tens, and 15 ones. Ask students if these represent the same number and to prove their thinking.</p> <p>Then ask students which number bond would be best for helping us solve 65-39. M-T Students explore writing number bonds for two digit numbers beyond the traditional expanded form. Students practice "shifting tens".</p> <p>Provide problems to help students discover that sometimes expanded form isn't the best number bond to help solve problems efficiently. Students decide what number bond to use when given the subtrahend. Then they must determine if it is still the best number bond once the teacher has shown the minuend. This may change students thinking!! Discuss any patterns they notice (when I need to regroup I should not use expanded form but shift a ten to create a more friendly equation, expression.</p> <p>W-R Students use this strategy to do a series of number strings and apply it to solve word problems.</p>	<p>Assessment: anecdotal observation Exit Slip</p>
12:25-1:00	<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: 9, 10, 11, 12, and 13</p> <p>Counting forward and backwards within 20 from any number. Sequencing and writing 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>Assessment: anecdotal observation Exit Slip</p>

--	--	--	--

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 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>Number bonds-Students will use number bonds to add and subtract with making 10 strategy. Students may use ten and twenty frames for support.</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 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>Number bonds-Students will use number bonds to add and subtract with making 10 strategy. Students may use ten and twenty frames for support.</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. I can add and subtract within 5.

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.

K.OA.1 Represent addition and subtraction with objects, fingers, mental images, drawings, sounds, acting out situations, etc. K.OA.5 Fluently add and subtract within 5.

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*

Kindergarten RTI	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>UNO cards with numbers 6, 7, 8, and 9</p>	<p>Assessment: anecdotal observation Exit Slip</p>
Kindergarten RTI	2:25-3:05	<p>Planning</p>	<p>Assessment: anecdotal observation Exit Slip</p>
Kindergarten RTI	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>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>