

# Math Intervention Lesson Plan K-3

Subject: Math

Teacher(s): Bonnie Murphy

Week: November 14<sup>th</sup>-18<sup>th</sup>

Friday, 18<sup>th</sup> - 9:00 am WebEx and Collegial Meeting at NKU (will have a half day sub)

<b>3<sup>rd</sup> Grade Collaboration</b> <b>MHler</b>	<p>9:00-9:35</p>	<p><b>Number Talks</b></p> <p><b>Standards:</b> 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><b>Core Math Idea:</b> Number Talks this week will focus on eliciting a specific, efficient subtraction strategy within 100. Students will use a 100 bead string to explore structuring in this range. This is a concept that is foundational to problem solving involving other standards. During number talks the teacher will model how to notate students' strategies on an empty number line. This weeks' problem strings focus on the removal strategy (problems that require students to regroup or decompose).</p> <p><b>Number Talk Problem String-</b></p> <p>Monday-</p> <p>Tuesday-</p> <p>Wednesday-</p> <p>Thursday-</p> <p>Friday- WebEx Meeting</p> <p><b>Questions/Facilitation (re-voicing, repeating, reasoning, adding-on, waiting):</b> Explain how you found the difference? Tell me more about....., I am wondering..... What do you notice about the subtrahend and minuend?</p> <p><b>Sharing Out/Wrapping up:</b> Turn and Talks throughout...Record Student responses and strategies. Possible strategies include counting up or down, adding up, place value, etc.</p>	<p><b>Assessment:</b> <i>anecdotal</i> <b>observation</b> <i>Exit Slip</i></p>
<b>3<sup>rd</sup> Grade Collaboration</b> <b>Byerley</b>	<p>9:40-9:40-10:10</p>	<p><b>Math Small Groups-</b></p> <p><b>Standards:</b> 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Monday- Review 3<sup>rd</sup> Grade Study Guide for Module 2</p> <p>Tuesday-Module 2 test</p> <p>Wednesday- Friday: Students participate in a two problem number talk that is connected to the real-life word problem for the day. Then students work out the word problem by themselves, share their strategy with a partner participating in meaningful math dialogue, then we share out our strategies and answers to the problem.</p>	<p><b>Assessment:</b> <i>anecdotal</i> <b>observation</b> <i>Exit Slip</i></p>

<b>3<sup>rd</sup> Grade Collaboration TIME - Dolci</b>	10:10-10:35	<p><b>Math Small Groups</b></p> <p><u>Standards:</u> 3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p>Monday-Work with a small group to discover strategies for subtracting measurements with three digits using bundles and sticks/ empty number lines.</p> <p>Tuesday- In small group practice estimating sums and differences by rounding.</p> <p>Wednesday- Module 2 assessment</p> <p>Thursday- Students will use grid paper to investigate ways to use the distributive property in order to solve multiplication facts with factors of 6, 7, 8, and 9</p> <p>Friday- Continue to investigate the distributive and commutative properties of multiplication using grid paper.</p> <p>Students participate in a two problem number talk that is connected to the real-life word problem for the day. Then students work out the word problem by themselves, share their strategy with a partner participating in meaningful math dialogue, then we share out our strategies and answers to the problem.</p>	<p><b>Assessment:</b>  <i>anecdotal  observation  Exit Slip</i></p>
<b>3<sup>rd</sup> Grade RTI</b>	10:35-10:55	<p><b>Objective:</b> I can add or subtract ones, tens and/or hundreds using materials. I can also write the matching addition and subtraction sentences.</p> <p><b>Standard(s):</b> 2.NBT.7 Add and Subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p><b>Vocabulary:</b> addend, sum, subtrahend, minuend, difference, place value, digit, value, compose, decompose</p> <p><b>Flashback/Warm Up:</b> Reading 3 and 4 digit numbers.</p> <p><b>Activities/Strategies:</b></p> <p><b>Activity:</b>  Delivery Game: Each player starts by placing pictures of 5 big-bundles (of ten tens or one hundred), 5 bundles (of ten), and 5 loose sticks on or in his/her truck. The customer order cards are placed face down between the players. Players take turns taking a card and following the instructions. Players may make equal trades (such as trading a big-bundle of 100 for ten bundles of 10) as needed to follow the directions on the card. Write a "shipping report" for each stop--the addition or subtraction sentence of the changes in the truck amounts. Play continues until all cards have been used. The player with the greatest number of sticks wins the game.</p> <p><b>Evidence of Learning (Diagnostic Assessment of Progress):</b>  Show and hide a collection of 382 sticks represented by pictures of 3 big-bundles, 8 bundles, and 2 loose sticks. Show and add 213 (represented by pictures of 2 big-bundles, 1 bundle, and 3 loose sticks) to the hidden collection. Ask how many in all. Finally, show and add another 157 (represented by pictures of 1 big-bundle, 5 bundles and 7 loose sticks) to the hidden collection. Ask how many in all.</p>	<p><b>Assessment:</b>  <i>anecdotal  observation  Exit Slip</i></p>

3 <sup>rd</sup> Grade RTI	10:55-11:15	<p><b>Objective:</b> I can add or subtract ones, tens and/or hundreds using materials. I can also write the matching addition and subtraction sentences.</p> <p><b>Standard(s):</b> 2.NBT.7 Add and Subtract within 1,000, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction; relate the strategy to a written method. Understand that in adding or subtracting three-digit numbers, one adds or subtracts hundreds and hundreds, tens and tens, ones and ones; and sometimes it is necessary to compose or decompose tens or hundreds.</p> <p>3.NBT.2 Fluently add and subtract within 1000 using strategies and algorithms based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p><b>Vocabulary:</b> addend, sum, subtrahend, minuend, difference, place value, digit, value, compose, decompose</p> <p><b>Flashback/Warm Up:</b> Reading 3 and 4 digit numbers.</p> <p><b>Activities/Strategies:</b></p> <p><b>Activity:</b> Delivery Game: Each player starts by placing pictures of 5 big-bundles (of ten tens or one hundred), 5 bundles (of ten), and 5 loose sticks on or in his/her truck. The customer order cards are placed face down between the players. Players take turns taking a card and following the instructions. Players may make equal trades (such as trading a big-bundle of 100 for ten bundles of 10) as needed to follow the directions on the card. Write a "shipping report" for each stop--the addition or subtraction sentence of the changes in the truck amounts. Play continues until all cards have been used. The player with the greatest number of sticks wins the game.</p> <p><b>Evidence of Learning (Diagnostic Assessment of Progress):</b> Show and hide a collection of 382 sticks represented by pictures of 3 big-bundles, 8 bundles, and 2 loose sticks. Show and add 213 (represented by pictures of 2 big-bundles, 1 bundle, and 3 loose sticks) to the hidden collection. Ask how many in all. Finally, show and add another 157 (represented by pictures of 1 big-bundle, 5 bundles and 7 loose sticks) to the hidden collection. Ask how many in all.</p>	<p><b>Assessment:</b> <i>anecdotal observation</i> Exit Slip</p>
	Lunch/ Planning	11:15-11:45	<b>Lunch</b>

11:45-12:05

**Objective:** I can add or subtract ones and/or tens using materials (bundles and sticks). I can also write the matching addition and subtraction sentences. I can use multiple strategies to add and subtract within 100.

**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.

**Bell Ringer:** Subitizing Dot cards with two colors, Ten Frame Flash, BWNS from 120.

**Vocabulary:** join, combine, ten, fluency, number sentence/equation, quantity, subtraction, left,

**Activities/Strategies:**

**Delivery Game:** Each player starts by placing 5 bundles and 5 loose sticks on his/her truck. The customer order cards are placed face down between the players. Players take turns taking a card and following the instructions. Write a "shipping report" of each stop--the addition or subtraction sentence for the truck contents. Play continues until all cards have been used. The player with the greatest number of sticks wins the game.

**Evidence of Learning (Diagnostic Assessment of Progress):**

Show and hide a collection of 14 (1 bundle and 4 loose) sticks. Show and add 4 bundles to the hidden collection. Tell the student that you are adding 4 bundles. Ask the student how many sticks there are in all. Show and add 9 sticks to the hidden collection and ask how many. Ask the student to write the addition sentence for each action.

**Assessment:** anecdotal  
observation Exit  
Slip

12:05-12:25

**Objective:** I can add or subtract ones and/or tens using materials (bundles and sticks). I can also write the matching addition and subtraction sentences. I can use multiple strategies to add and subtract within 100.

**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.

**Bell Ringer:** Subitizing Dot cards with two colors, Ten Frame Flash, BWNS from 120.

**Vocabulary:** join, combine, ten, fluency, number sentence/equation, quantity, subtraction, left,

**Activities/Strategies:**

**Delivery Game:** Each player starts by placing 5 bundles and 5 loose sticks on his/her truck. The customer order cards are placed face down between the players. Players take turns taking a card and following the instructions. Write a "shipping report" of each stop--the addition or subtraction sentence for the truck contents. Play continues until all cards have been used. The player with the greatest number of sticks wins the game.

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**Assessment:** anecdotal  
observation  
Exit Slip

	12:25-1:00		<b>Assessment:</b> <i>anecdotal</i> <i>observation</i> <i>Exit Slip</i>
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<b>1<sup>st</sup> Grade RTI</b>	1:00-1:20	<p><b>Objective:</b> I can add and subtract within 20 using math tools.</p> <p><b>Standard(s):</b> 1.NBT.2 Understand the two digits of a two-digit number represent amounts of tens and ones. 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, adding a two digit number and a multiple of ten, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</p> <p><b>Vocabulary:</b> <b>compose (make a bundle) decompose (break a bundle), addition</b></p> <p><b>Flashback/Warm Up:</b> Forwards and Backwards number sequencing with crossing the decades.</p> <p><b>Activities/Strategies:</b>          Build a Bundle: Student roll a die and add sticks to their place value mat. Once students have ten sticks they practice composing a ten and moving it to the bundles digit on the place value mat. Students explore the meaning of the two digits and practice notating adding a two digit plus a one digit number.</p> <p>Screen mats to elicit non count by one strategies.</p> <p><b>School Days-</b>Students practice making bundles and sticks to represent 2 digit numbers. Students practice adding and subtracting sticks using their knowledge of ten.</p>	<b>Assessment:</b> <i>anecdotal</i> <i>observation</i> <i>Exit Slip</i>
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1:20-1:40

**Objective:** I can add and subtract within 20 using math tools.

**Standard(s):** 1.NBT.2 Understand the two digits of a two-digit number represent amounts of tens and ones. 1.NBT.4 Add within 100, including adding a two-digit number and a one-digit number, adding a two digit number and a multiple of ten, using concrete models or drawings and strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.

**Vocabulary:** compose (make a bundle) decompose (break a bundle), addition

**Flashback/Warm Up:** Forwards and Backwards number sequencing with crossing the decades.

**Activities/Strategies:**

Build a Bundle: Student roll a die and add sticks to their place value mat. Once students have ten sticks they practice composing a ten and moving it to the bundles digit on the place value mat. Students explore the meaning of the two digits and practice notating adding a two digit plus a one digit number.

Screen mats to elicit non count by one strategies.

**School Days-**Students practice making bundles and sticks to represent 2 digit numbers. Students practice adding and subtracting sticks using their knowledge of ten.

**Assessment:**

*anecdotal  
observation  
Exit Slip*

1:45-2:05

**Objective:** I can count objects and write numbers 0-10. I can recognize dot patterns 0-5.

**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 0-20 (with 0 representing a count of no objects).

**Vocabulary:** count, one-to-one correspondence,

**Flashback/Warm Up:** Subitizing Cards-0-6 (finger patterns, dot patterns, ten frames, etc)

**Activities/Strategies:** Students will participate in several small group activities to help them count and name objects focusing on one-to-one correspondence. Students will also practice writing and recognizing numbers 0-10.

Count and Dump-Students drop objects in a container (this provides sound and a visual).

Making Towers-Students practice counting to a designated number as I direct them to make several towers of the different heights.

Number After Race-During game play, on a student's turn the student will roll a cube to generate a number, determine the number after, and move his or her token to the next space containing that number. The first student to reach the "winner" space wins the game. For example, if a student rolls a 9, the student will move to the next space on the path containing a 10.

Angry Birds Number ID #1-10 and 11-20. Students draw a number and must correctly identify. If they do not it goes back in the bucket. Students read number trying to collect the most. If students draw an angry bird they lose all their numbers collected and start again.

**Assessment:**

*anecdotal  
observation  
Exit Slip*

Kindergarten RTI	2:05-2:25	<p><b>Objective:</b> I can count objects and write numbers 0-10. I can recognize dot patterns 0-5.</p> <p><b>Standard(s):</b> 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 0-20 (with 0 representing a count of no objects).</p> <p><b>Vocabulary:</b> count, one-to-one correspondence,</p> <p><b>Flashback/Warm Up:</b> Subitizing Cards-0-6 (finger patterns, dot patterns, ten frames, etc)</p> <p><b>Activities/Strategies:</b> Students will participate in several small group activities to help them count and name objects focusing on one-to-one correspondence. Students will also practice writing and recognizing numbers 0-10.</p> <p>Count and Dump-Students drop objects in a container (this provides sound and a visual).</p> <p>Making Towers-Students practice counting to a designated number as I direct them to make several towers of the different heights.</p> <p>Number After Race-During game play, on a student's turn the student will roll a cube to generate a number, determine the number after, and move his or her token to the next space containing that number. The first student to reach the "winner" space wins the game. For example, if a student rolls a 9, the student will move to the next space on the path containing a 10.</p> <p>Angry Birds Number ID #1-10 and 11-20. Students draw a number and must correctly identify. If they do not it goes back in the bucket. Students read number trying to collect the most. If students draw an angry bird they lose all their numbers collected and start again.</p>	<p><b>Assessment:</b>  <i>anecdotal  observation  Exit Slip</i></p>
Kindergarten RTI	2:25-3:05	<p><b>Planning</b></p>	<p><b>Assessment:</b>  <i>anecdotal  observation  Exit Slip</i></p>
Kindergarten RTI	3:05-3:30 2 <sup>nd</sup> Grade RTI	<p><b>Objective:</b> I can add or subtract ones and/or tens using materials (bundles and sticks). I can also write the matching addition and subtraction sentences. I can use multiple strategies to add and subtract within 100.</p> <p><b>Standard(s):</b> 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><b>Bell Ringer:</b> Subitizing Dot cards with two colors, Ten Frame Flash, BWNS from 120.</p> <p><b>Vocabulary:</b> join, combine, ten, fluency, number sentence/equation, quantity, subtraction, left,</p> <p><b>Activities/Strategies:</b></p> <p><b>Delivery Game:</b> Each player starts by placing 5 bundles and 5 loose sticks on his/her truck. The customer order cards are placed face down between the players. Players take turns taking a card and following the instructions. Write a "shipping report" of each stop--the addition or subtraction sentence for the truck contents. Play continues until all cards have been used. The player with the greatest number of sticks wins the game.</p> <p><b>Evidence of Learning (Diagnostic Assessment of Progress):</b>  Show and hide a collection of 14 (1 bundle and 4 loose) sticks. Show and add 4 bundles to the hidden collection. Tell the student that you are adding 4 bundles. Ask the student how many sticks there are in all. Show and add 9 sticks to the hidden collection and ask how many. Ask the student to write the addition sentence for each action.</p>	<p><b>Assessment:</b>  <i>anecdotal  observation  Exit Slip</i></p>

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