

# Math Intervention Lesson Plan, K-3

Subject: Math  
Week: October 3<sup>rd</sup>-7<sup>th</sup>

Teacher(s): Bonnie Murphy

<b>3<sup>rd</sup> Grade Collaboration -Dolci 3<sup>rd</sup> Grade</b>	<p>9:00-9:35</p>	<p><b>Number Talks</b></p> <p><b>Core Math Idea:</b> Addition: Making Landmark or Friendly Numbers When students understand that you can compensate in addition without altering the sum, they can begin to construct powerful mental computation strategies from this concept. This will give students opportunities to test and prove this idea. We will work with adding numbers up to 60 to connect structuring for elapsed time applications. Initially manipulatives may be shown as a visual for this concept development. The goal is for student to show fluency in composing and decomposing numbers.</p> <p><b>Number Talk Problem String-</b> (9+8), (19+5), (9+26), (16+19) (25+25), (25+26), (24+26), (26+49) (7+19), (16+29), (19+18), (29+33) (15+30), (14+29), (20+35), (19+35)</p> <p><b>Questions/Facilitation (re-voicing, repeating, reasoning, adding-on, waiting):</b> Explain how you found the sum? Tell me more about...., What did it sound like or how did you keep track of counting on?</p> <p><b>Sharing Out/Wrapping up:</b> Record Student responses and strategies. Possible split strategies using place value, counting on strategies, making 10 strategies, and compensation strategies.</p>	<p><b>Assessment:</b> <i>anecdotal</i> <b>observation</b> <i>Exit Slip</i></p>
<b>3<sup>rd</sup> Grade Collaboration -Byerley 3<sup>rd</sup> Grade</b>	<p>9:35-10:05</p>	<p>Math Small Groups-</p> <p>Student will use manipulatives to solve word problems involving multiplication and division. This will start a conversation about the actions involved in solving these kinds of word problems.</p> <p>Students will also use manipulatives to solve multiplication problems with one factor unknown.</p>	<p><b>Assessment:</b> <i>anecdotal</i> <b>observation</b> <i>Exit Slip</i></p>

<b>3<sup>rd</sup> Grade Collaboration TIMMiller</b>	10:05-10:35	<p><b>Number Talks</b></p> <p><b>Core Math Idea:</b> Addition: Making Landmark or Friendly Numbers When students understand that you can compensate in addition without altering the sum, they can begin to construct powerful mental computation strategies from this concept. This will give students opportunities to test and prove this idea. We will work with adding numbers up to 60 to connect structuring for elapsed time applications. Initially manipulatives may be shown as a visual for this concept development. The goal is for student to show fluency in composing and decomposing numbers.</p> <p><b>Number Talk Problem String-</b> (9+8), (19+5), (9+26), (16+19) (25+25), (25+26), (24+26), (26+49) (7+19), (16+29), (19+18), (29+33) (15+30), (14+29), (20+35), (19+35)</p> <p><b>Questions/Facilitation (re-voicing, repeating, reasoning, adding-on, waiting):</b> Explain how you found the sum? Tell me more about...., What did it sound like or how did you keep track of counting on?</p> <p><b>Sharing Out/Wrapping up:</b> Record Student responses and strategies. Possible split strategies using place value, counting on strategies, making 10 strategies, and compensation strategies.</p>	<p><b>Assessment:</b> <i>anecdotal</i> <b>observation</b> <i>Exit Slip</i></p>
<b>3<sup>rd</sup> Grade RTI</b>	10:35-10:55	<p><b>Objective:</b> I can add and subtract within 20 using different strategies.</p> <p><b>Standard(s):</b> 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><b>Vocabulary:</b> add, subtract, making ten, anchor to 5</p> <p><b>Flashback/Warm Up:</b> Reading 3 and 4 digit numbers.</p> <p><b>Activities/Strategies:</b> Fill 20- Students practice adding and subtracting with fill 20 board for support. Begin to screen boards to establish mental strategies.</p> <p><b>School Days:</b> Students solve addition and subtraction tasks involving ones and tens using materials. Students use build place value concepts for solving addition and subtraction problems.</p> <p><b>3 in a Line:</b> Students use bundles and sticks to model two digit numbers off the decade, then practice adding and subtracting 10's.</p>	<p><b>Assessment:</b> <i>anecdotal</i> <b>observation</b> <i>Exit Slip</i></p>

<b>3<sup>rd</sup> Grade RTI</b>	10:55-11:15	<p><b>Objective:</b> I can add and subtract within 20 using different strategies.</p> <p><b>Standard(s):</b> 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><b>Vocabulary:</b> add, subtract, making ten, anchor to 5</p> <p><b>Flashback/Warm Up:</b> Reading 3 and 4 digit numbers.</p> <p><b>Activities/Strategies:</b> Fill 20- Students practice adding and subtracting with fill 20 board for support. Begin to screen boards to establish mental strategies.</p> <p><b>School Days:</b> Students solve addition and subtraction tasks involving ones and tens using materials. Students use build place value concepts for solving addition and subtraction problems.</p> <p><b>3 in a Line:</b> Students use bundles and sticks to model two digit numbers off the decade, then practice adding and subtracting 10's.</p> <p><b>Leapfrog:</b> Students use game board to practice adding on 10's off the decade.</p>	<p><b>Assessment:</b> <i>anecdotal observation</i> Exit Slip</p>
<b>Lunch/ Planning</b>	11:15-11:45	<b>Lunch</b>	

<b>2<sup>nd</sup> Grade RTI</b>	11:45-12:05	<p><b>Objective:</b> I can use multiple strategies to add and subtract within 20.</p> <p><b>Standard(s):</b> 2.OA.6 Fluency for addition and subtraction within 20. 1. NBT.2 Understand that the two-digit numbers of a two-digit number represents the amount of tens and ones.</p> <p><b>Bell Ringer:</b> Subitizing Dot cards with two colors, Ten Frame Flash, FWNS and BWNS 105-120</p> <p><b>Vocabulary:</b> join, combine, ten, fluency, number sentence/equation, quantity, subtraction, left,</p> <p><b>Activities/Strategies: Removing Counters: (subtraction)</b> Display 3-10 counters of the same color then take away 1-4 counters, student tells how many are left. <b>Teacher Notes:</b> Watch how student keeps track of removed counters. Question for strategy if needed by asking "How did you get that answer?"</p> <p><b>Counting Items in Two Screened Collections/Counting Items in Row with Some Items Screened</b></p> <p><b>Domino Addition (screened):</b> Students add two collections where the first collection is screened to encourage non count from 1 strategies.</p> <p><b>How Many?</b> Students count up to 3 groups of items and tell how many to practice adding 3 addends. Students self-discover non-count by one strategies.</p>	<p><b>Assessment:</b> <i>anecdotal observation</i> Exit Slip</p>
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**School Days-** Student practice adding and subtracting with the support of manipulatives. Students make place value connections while using bundles and sticks to make bundles while adding and break bundles when subtracting.

**2<sup>nd</sup> Grade RTI**

12:05-12:25

**Objective:** I can use multiple strategies to add and subtract within 20.

**Standard(s):** 2.OA.6 Fluency for addition and subtraction within 20. 1. NBT.2 Understand that the two-digit numbers of a two-digit number represents the amount of tens and ones.

**Bell Ringer:** Subitizing Dot cards with two colors, Ten Frame Flash, FWNS and BWNS 105-120

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

**Activities/Strategies: Removing Counters: (subtraction)**

Display 3-10 counters of the same color then take away 1-4 counters, student tells how many are left. **Teacher Notes:**

Watch how student keeps track of removed counters. Question for strategy if needed by asking "How did you get that answer?"

**Counting Items in Two Screened Collections/Counting Items in Row with Some Items Screened**

**Domino Addition (screened):** Students add two collections where the first collection is screened to encourage non count from 1 strategies.

**How Many?** Students count up to 3 groups of items and tell how many to practice adding 3 addends. Students self-discover non-count by one strategies.

**School Days-** Student practice adding and subtracting with the support of manipulatives. Students make place value connections while using bundles and sticks to make bundles while adding and break bundles when subtracting.

**Assessment:**  
*anecdotal*  
*observation*  
*Exit Slip*

12:25-1:00

**Kindergarten Collaboration with medium kindergarten math class during their MAP switch groups.**

**Assessment:**  
*anecdotal*  
*observation*  
*Exit Slip*

1:00-1:20

**Objective:** I can add and subtract within 10.

**Standard(s):** 0-K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

1.OA.6 Fluency for addition and subtraction within 10.

**Vocabulary:** plus, minus,

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

**Activities/Strategies:** Race to 10-This game helps students practice distinguishing between the plus and minus signs and performing the corresponding operation. Each player starts with an empty working space paper. Players use counters to cover the dots on their papers. Their goal is to be the first to cover all ten dots.

Build a Floor Race-Students use unifix cubes to make trains made from two colors to show different ways to compose numbers (combinations of 6, 7, 8, 9, and 10)

Domino Parking Lot-Student recognize the regular spatial pattern then count on to find the sum of the domino. Students must find combination that equal 0-12 to fill their parking lot.

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*

1:20-1:40

**Objective:** I can add and subtract within 10.

**Standard(s):** 0-K.OA.4 For any number from 1 to 9, find the number that makes 10 when added to the given number, e.g., by using objects or drawings, and record the answer with a drawing or equation.

1.OA.6 Fluency for addition and subtraction within 10.

**Vocabulary:** plus, minus,

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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.

Toy Box-Student roll a dice with numbers 0, 1, and 2. Student take the rolled number as items to add to their toy box. Students practice counting their growing collection of toys to establish cardinality.

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.

**Assessment:**

*anecdotal  
observation  
Exit Slip*

<p>2:05-2:25</p>	<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>Toy Box-Student roll a dice with numbers 0, 1, and 2. Student take the rolled number as items to add to their toy box. Students practice counting their growing collection of toys to establish cardinality.</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><b>Assessment:</b> anecdotal observation Exit Slip</p>
<p>2:25-3:05</p>	<p><b>Planning</b></p>	<p><b>Assessment:</b> anecdotal observation Exit Slip</p>
<p>3:05-3:30 2<sup>nd</sup> Grade RTI</p>	<p><b>Objective:</b> I can use multiple strategies to add and subtract within 20.</p> <p><b>Standard(s):</b> 2.OA.6 Fluency for addition and subtraction within 20. 1. NBT.2 Understand that the two-digit numbers of a two-digit number represents the amount of tens and ones.</p> <p><b>Bell Ringer:</b> Subitizing Dot cards with two colors, Ten Frame Flash, FWNS and BWNS 105-120</p> <p><b>Vocabulary:</b> join, combine, ten, fluency, number sentence/equation, quantity, subtraction, left,</p> <p><b>Activities/Strategies: Removing Counters: (subtraction)</b> Display 3-10 counters of the same color then take away 1-4 counters, student tells how many are left. <b>Teacher Notes:</b> Watch how student keeps track of removed counters. Question for strategy if needed by asking "How did you get that answer?"</p>	<p><b>Assessment:</b> anecdotal observation Exit Slip</p>

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