

2nd Grade Math Curriculum Bundle # 2



Title	Suggested Dates
Addition/Subtraction Strategies, Problem Solving, and Place Value to 100	September 14 -October 2 (14 days) ** AMI BOY Window 10/1 - 10/15

Big Idea/Enduring Understanding	Guiding Questions
<p>Knowing basic facts will help build and expand math skills in our everyday lives</p> <p>The position of the digits in a number shows their value</p>	<p>How can numbers be used in our world?</p> <p>What strategies can be used for adding and subtracting two given numbers?</p> <p>What addition and subtraction strategy works for you?</p> <p>Note: These three questions are continuing from Bundle 1.</p> <p>What are some ways that you can represent a number?</p> <p>How can you identify how many tens and ones are in a given number?</p> <p>How can you explain the difference between the tens and one places?</p>

The resources included here provide teaching examples and/or meaningful learning experiences to address the District Curriculum. In order to address the TEKS to the proper depth and complexity, teachers are encouraged to use resources to the degree that they are congruent with the TEKS and research-based best practices. Teaching using only the suggested resources does not guarantee student mastery of all standards. Teachers must use professional judgment to select among these and/or other resources to teach the district curriculum.

Knowledge & Skills with Student Expectations	District Specificity/Examples	Suggested Resources (See note above) Teachers will use Math Investigations as the main instructional resource. District resources are listed and categorized to indicate suggested uses. Any additional resources must be aligned with the TEKS.	
<p>2.3 The student adds and subtracts whole numbers to solve problems.</p> <p>2.3A Recall and apply basic addition and subtraction facts to (18).</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • Use recognition of fact families, doubles, near doubles, continuing using ten frames and making ten (ex: 9+9 You would take one from 9 and you have 8 leftover so 10+8=18, hence 9+9=18) to help recall 	<p><u>Counting Coins and Combinations</u> Unit 1</p> <p>Investigation 4 Sessions 1-7, pages 138-174 Note: Combine Sessions 1 and 2 into one day.</p> <p><u>Stickers, Number Strings, and Story Problems</u> Unit 3</p> <p>Investigation 1 Sessions 1-6, pages 30-65</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 2 Lessons 3-5</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R.</u> Target Number # 70 Seeing Double # 71 Double Plus # 72 Using Models to Learn Basic Facts # 74 State the Difference #77</p>

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<p>2.5 The student uses patterns in numbers and operations.</p> <p>2.5C Use patterns and relationships to develop strategies to remember basic addition and subtraction facts. Determine patterns in related addition and subtraction number sentences (including fact families) such as $8 + 9 = 17$, $9 + 8 = 17$, $17 - 8 = 9$, $17 - 9 = 8$.</p> <p>Note: The concept of fact families is taught in 1st grade.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • create and extend patterns and describe the rule in words • use strategies such as near doubles, sums of ten, etc • generate another fact from that fact family when given one fact • generate all members of the fact family • use algebraic thinking to determine an unknown number when the unknown is not the solution ($12 - ? = 3$ or $? - 9 = 3$). <p>Making ten using ten frames (ex: $9+9 = 9+1+8$)</p> <ul style="list-style-type: none"> • Continue using a number line to jump ahead to add and jump back to subtract 	<p><u>Partners, Teams, and Paper Clips</u> Unit 8</p> <p>Investigation 2 Sessions 1-2, pages 52-63</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 2 Lessons 2 – 4</p> <p><u>Envision</u> Topic 3 Lessons 2 – 5</p> <p><u>Small Group Lessons/Centers</u></p> <p><u>A.I.R.R.</u> 36 Hardest Subtraction Facts # 147 Give a Fact # 148 Fast Facts # 149 Which Fact Does Not Belong # 150 The Facts are In # 151</p> <p><u>Region IV Prep</u> Fact Families 65-73</p>
<p>2.12 The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school.</p> <p>2.12A Identify the mathematics in everyday situations.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • Process skill to be addressed with relevant content. • Solving addition and subtraction story problems 		<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 1</p> <p><u>Small Group Lessons/Centers</u></p>
<p>2.12 The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school.</p> <p>2.12B Solve problems with guidance that incorporates the processes of understanding the problem, making a plan, carrying out the plan, and evaluating the solution for reasonableness.</p> <p>Note: Ongoing through 2nd grade.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • Process skill to be addressed with relevant content. • Use problems where students apply the addition/subtraction strategies taught in Bundle 1. 		<p><u>Kamico</u> How Do You Say That in Math Language? Pages 403-406</p> <p><u>Kamico</u> The Way I See It Pages 412-425</p>
<p>2.12 The student applies Grade 2 mathematics to solve problems connected to everyday experiences</p>	<p>Including but not limited to</p>		

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<p>and activities in and outside of school.</p> <p>2.12C Select or develop an appropriate problem-solving plan or strategy including drawing a picture, looking for a pattern, systematic guessing and checking, or acting it out in order to solve a problem.</p> <p><i>Note: Ongoing through 2nd grade.</i></p>	<ul style="list-style-type: none"> • Process skill to be addressed with relevant content. • Drawing a picture, using manipulatives, using addition/subtraction strategies taught in Bundle 1. 		
<p>2.12 The student applies Grade 2 mathematics to solve problems connected to everyday experiences and activities in and outside of school.</p> <p>2.12D Use tools such as real objects, manipulatives, and technology to solve problems.</p> <p><i>Note: Ongoing through 2nd grade.</i></p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • Process skill to be addressed with relevant content. • Make sure students have manipulatives available while solving problems. 		
<p>2.5 The student uses patterns in numbers and operations.</p> <p>2.5A Find patterns in numbers such as in a 100s chart.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • identify pattern in columns, rows, diagonals, growing patterns, tables, objects, pictures, numerals • identify skip counting as a pattern (count forward and backward) and connect to concrete numerals or pictures 	<p><u>Counting Coins and Combinations</u> Unit 1</p> <p>Investigation 1 Session 4, pages 46-50 <i>Note: Only do activities 1 & 3.</i></p> <p><u>How Many Tens? How Many Ones?</u> Unit 6</p> <p>Investigation 2 Sessions 1, Activities 1-3/Discussion 4, pages 54-59 2-3, pages 62-74</p> <p>Investigation 3 Sessions 1, 3-4, 6, pages 100-104,110-118, 123-126</p> <p>Investigation 4 Sessions 1-3, pages 130-147</p>	<p><u>Whole Group Lessons</u></p> <p><u>Envision</u> Topic 4 Lessons 9 – 10</p> <p><u>Envision</u> Topic 11 Lesson 4</p>
<p>2.1 The student understands how place value is used to represent whole numbers.</p>	<p>Including but not limited to</p>	<p><u>Stickers, Number Strings, and Story Problems</u></p>	<p><u>Whole Group Lessons</u></p>

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<p>2.1A Use concrete models of hundreds, tens, and ones to represent a given whole number (up to 999) in various ways.</p> <p><i>Note: Only do numbers up to 100 in this bundle.</i></p>	<ul style="list-style-type: none"> • construct and create concepts of number sense by using multiple representations of whole numbers up to 100 such as using base-10 blocks, ten frames, interlocking cubes and straw bundles • create a model that is more or less than a given number (ex: 50) • differentiate between odd and even numbers using concrete models such as using base-10 blocks, interlocking cubes, and charts/grids • order and compare models up to 100 	<p>Unit 3</p> <p>Investigation 4 Sessions 1-6, pages 168-203</p>	<p><u>Envision</u> Topic 4</p> <p><u>Envision</u> Topic 11 Lessons 4 - 6</p> <p><u>Envision</u> Topic 16 Lessons 1</p> <p><u>Small Group Lessons/Centers</u></p>
<p>2.1 The student understands how place value is used to represent whole numbers.</p> <p>2.1B Use place value to read, write, and describe the value of whole numbers to 999.</p> <p><i>Note: "Write" refers to the use of numerals. Words are introduced in third grade.</i> <i>Only do numbers up to 100 in this bundle.</i></p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • represent place value concepts using whole numbers with numerals, expanded notation and concrete objects up to 100 • be able to read or listen to a number and then write it numerically 		<p><u>Kamico</u> Toss 'Em Page 59</p>
<p>2.1 The student understands how place value is used to represent whole numbers.</p> <p>2.1C Use place value to compare and order whole numbers to 999 and record the comparisons using numbers and symbols (<, =, >).</p> <p><i>Note: Only do numbers up to 100 in this bundle.</i></p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • determine place value through visual clues and creation of concrete representation (ex: pictures, numbers, 100's charts, number lines, base-10 blocks/charts) only through 100 		
<p>2.8 The student recognizes that a line can be used to represent a set of numbers and its properties.</p> <p>2.8A Use whole numbers to locate and name points on a number line.</p> <p><i>Note: Only do numbers up to 100 in this bundle.</i></p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • Use a number line to compare numbers up to 100. • Use patterns to determine missing numbers (before, after, or between) in a given set of numbers or in partial number lines 		
<p>2.5 The student uses patterns in numbers and operations.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • Use concrete models, numerals and words to 		

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<p>2.5B Use patterns in place value to compare and order whole numbers through 999.</p> <p>Note: Only do numbers up to 100 in this bundle.</p>	<p>represent place value through 100</p> <ul style="list-style-type: none"> • Use patterns to determine missing numbers (before, after, or between) in a given set of numbers or in partial number lines 		
<p>2.13 The student communicates about Grade 2 mathematics using informal language.</p> <p>2.13B Relate informal language to mathematical language and symbols.</p>	<p>Including but not limited to</p> <ul style="list-style-type: none"> • Process skill to be addressed with relevant content. • Using +, -, and = symbols • Using <, >, = symbols 		