



# Second Grade Mathematics Curriculum Standards Matrix

Warren County Schools Standards Matrix is aligned with the *North Carolina Collaborative for mathematics Learning (NC<sup>2</sup>ML) Instructional Frameworks*. The clusters and sequencing are crafted to foster student understanding over time of the connections among mathematical ideas and procedures. Standards and skills are addressed through multiple clusters with increase depth of knowledge. Please note that strikethroughs represent parts of standards that are addressed in a different cluster. The mastery of all grade level standards is an expectation by the end of the academic school year. Teachers will have to continue to keep skills sharp throughout each grading period.

**Benchmark 1:** Schoolnet

**Benchmark 2:** Schoolnet

**Benchmark 3:** Schoolnet

(Standards are highlighted to indicate the Benchmark that it will be assessed on)

*Note: Be careful not to overlook standards that will be assessment in a particular benchmark window*

Instructional Framework Cluster	North Carolina Standard	Recommended Duration and Resources
<b>First Six Weeks</b>		
<b>1.Build Mathematical Community while Working with Numbers within 20</b>	<p><b>Relate addition and subtraction to length.</b>  <b>NC.2.MD.6</b> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points and represent whole-number sums and differences, within <del>100</del>(only up to 20 at this time), on a number line diagram.</p> <p><b>Add and subtract within 20.</b>  <b>NC.2.OA.2</b> Demonstrate fluency with addition and subtraction, within 20, using mental strategies.</p> <p><b>Work with equal groups</b>  <b>NC.2.OA.3</b> Determine whether a group of objects, within 20, has an odd or even number of members by: <ul style="list-style-type: none"> <li>Pairing objects, then counting them by 2s.</li> <li>Determining whether objects can be placed into two equal groups.</li> </ul> Writing an equation to express an even number as a sum of two equal addends.</p>	<p>3 to 4 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 1</u> Tools4teachers (Lessons/Tasks)</p>
<b>2.Adding and Subtracting within 20</b>	<p><b>Represent and solve problems.</b>  <b>NC.2.OA.1</b> Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving: <ul style="list-style-type: none"> <li>One-Step problems: <ul style="list-style-type: none"> <li>Add to/Take from-Start Unknown</li> <li>Compare-Bigger Unknown</li> <li>Compare-Smaller Unknown</li> </ul> </li> <li><del>Two Step problems involving single digits:</del> <ul style="list-style-type: none"> <li><del>Add to/Take from-Change Unknown</del></li> <li><del>Add to/Take From-Result Unknown</del></li> </ul> </li> </ul> </p> <p><b>Understand place value.</b>  <b>NC.2.NBT.2</b> Count within <del>1,000</del>(up to 100 at this time of year); skip-count by 5s, 10s, <del>and</del> 100s.</p> <p><b>Use place value understanding and properties of operations.</b>  <b>NC.2.NBT.5</b> Demonstrate fluency with addition and subtraction, within 100, by: <ul style="list-style-type: none"> <li>Flexibly using strategies based on place value, properties of operations, and/or the relationship between addition and subtraction.</li> <li>Comparing addition and subtraction strategies, and explaining why they work.</li> <li>Selecting an appropriate strategy in order to efficiently compute sums and differences.</li> </ul> </p>	<p>1 – 2 weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 2</u> Tools4teachers (Lessons/Tasks)</p>



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Instructional Framework Cluster	North Carolina Standard	Recommended Duration and Resources
<b>Second Six Weeks</b>		
<b>2.Adding and Subtracting within 20 (continued)</b>	<p><b>NC.2.NBT.6</b> Add up to three two-digit numbers using strategies based on place value and properties of operations [within 100].</p> <p><b>NC.2.NBT.8</b> Mentally add 10 <del>or 100</del> to a given number [<i>within</i>] 100 <del>–900</del>, and mentally subtract 10 <del>or 100</del> from a given number 100 <del>–900</del>.</p> <p><b>Relate addition and subtraction to length.</b></p> <p><b>NC.2.MD.6</b> Represent whole numbers as lengths from 0 on a number line diagram with equally spaced points and represent whole-number sums and differences, within 100, on a number line diagram.</p>	<p>3 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster2</u> Tools4teachers (Lessons/Tasks)</p>
<b>End of Nine Weeks: NC Check-In 1<sup>st</sup> Benchmark</b>		
<b>3.Skip Counting in Multiple Contexts</b>	<p><b>Build understanding of time and money.</b></p> <p><b>NC.2.MD.7</b> Tell and write time from analog and digital clocks to the nearest five minutes, using a.m. and p.m.</p> <p><b>Understand place value.</b></p> <p><b>NC.2.NBT.2</b> Count within 1,000; skip-count by 5s, 10s, and <del>100s</del>.</p> <p><b>Work with equal groups</b></p> <p><b>NC.2.OA.4</b> Use addition to find the total number of objects arranged in rectangular arrays with up to 5 rows and up to 5 columns; write an equation to express the total as a sum of equal addends.</p>	<p>3 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 4</u> Tools4teachers (Lessons/Tasks)</p>

Instructional Framework Cluster	North Carolina Standard	Recommended Duration and Resources
<b>Third Six Weeks</b>		
<b>4. Understanding Place Value to Read, Write and Compare Numbers</b>	<p><b>Understand place value.</b></p> <p><b>NC.2.NBT.1</b> Understand that the three digits of a three-digit number represent amounts of hundreds, tens, and ones.</p> <ul style="list-style-type: none"> <li>• Unitize by making a hundred from a collection of ten tens.</li> <li>• Demonstrate that the numbers 100, 200, 300, 400, 500, 600, 700, 800, 900 refer to one, two, three, four, five, six, seven, eight, or nine hundreds, with 0 tens and 0 ones.</li> <li>• Compose and decompose numbers using various groupings of hundreds, tens, and ones.</li> </ul> <p><b>NC.2.NBT.2</b> Count within 1,000; skip-count by 5s, 10s, and 100s.</p> <p><b>NC.2.NBT.3</b> Read and write numbers, within 1,000, using base-ten numerals, number names, and expanded form.</p> <p><b>NC.2.NBT.4</b> Compare two three-digit numbers based on the value of the hundreds, tens, and ones digits, using &gt;, =, and &lt; symbols to record the results of comparisons.</p>	<p>4 to 5 Weeks (Continued)</p> <p>Instructional Framework Resource</p> <p><u>Cluster 4</u> Tools4teachers (Lessons/Tasks)</p>
<b>5. Adding and Subtracting</b>	<p><b>Use place value understanding and properties of operations.</b></p> <p><b>NC.2.NBT.6</b> Add up to three two-digit numbers using strategies based on place value</p>	<p>2 Weeks</p>



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within 1,000	<p>and properties of operations. (<i>sums greater than 100 are possible</i>)</p> <p>NC.2.NBT.7 Add and subtract, within 1,000, relating the strategy to a written method, using:</p> <ul style="list-style-type: none"> <li>Concrete models or drawings</li> <li>Strategies based on place value</li> <li>Properties of operations</li> <li>Relationship between addition and subtraction</li> </ul>	<p>Instructional Framework Resource</p> <p><u>Cluster 5</u> Tools4teachers (Lessons/Tasks)</p>
End of 2 <sup>nd</sup> Nine Weeks: NC Check-In Number 2 Benchmark		

Instructional Framework Cluster	North Carolina Standard	Recommended Duration and Resources
<b>Fourth Six Weeks</b>		
<b>5. Adding and Subtracting within 1,000</b>	<p>NC.2.NBT.8 Mentally add 10 or 100 to a given number 100 –900, and mentally subtract 10 or 100 from a given number 100 –900.</p> <p><b>Represent and solve problems.</b></p> <p><b>NC.2.OA.1</b> Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:</p> <ul style="list-style-type: none"> <li>One-Step problems: <ul style="list-style-type: none"> <li>Add to/Take from-Start Unknown</li> <li>Compare-Bigger Unknown</li> <li>Compare-Smaller Unknown</li> </ul> </li> <li>Two-Step problems involving single digits: <ul style="list-style-type: none"> <li>Add to/Take from- Change Unknown</li> </ul> </li> </ul> <p>Add to/Take From- Result Unknown</p>	<p>3 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 6</u> Tools4teachers (Lessons/Tasks)</p>
<b>6. Working with Linear Measurement</b>	<p><b>Measure and estimate lengths.</b></p> <p><b>NC.2.MD.1</b> Measure the length of an object in standard units by selecting and using appropriate tools such as rulers, yardsticks, meter sticks, and measuring tapes.</p> <p>NC.2.MD.2 Measure the length of an object twice, using length units of different lengths for the two measurements; describe how the two measurements relate to the size of the unit chosen.</p> <p>NC.2.MD.3 Estimate lengths in using standard units of inches, feet, yards, centimeters, and meters.</p> <p>NC.2.MD.4 Measure to determine how much longer one object is than another, expressing the length difference in terms of a standard length unit.</p> <p><b>Relate addition and subtraction to length.</b></p> <p><b>NC.2.MD.5</b> Use addition and subtraction, within 100, to solve word problems involving lengths that are given in the same units, using equations with a symbol for the unknown number to represent the problem.</p> <p><b>Represent and solve problems.</b></p> <p><b>NC.2.OA.1</b> Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:</p>	<p>3 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 6</u> Tools4teachers (Lessons/Tasks)</p>



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	<ul style="list-style-type: none"> <li>One-Step problems:               <ul style="list-style-type: none"> <li>Add to/Take from-Start Unknown</li> <li>Compare-Bigger Unknown</li> <li>Compare-Smaller Unknown</li> </ul> </li> <li>Two-Step problems involving single digits:               <ul style="list-style-type: none"> <li>Add to/Take from- Change Unknown</li> </ul> </li> </ul> <p>Add to/Take From- Result Unknown</p>	
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Instructional Framework Cluster	North Carolina Standard	Recommended Duration and Resources
<b>Fifth Six Weeks</b>		
<b>7. Data and Two Step Problem Solving</b>	<p><b>Represent and interpret data.</b>  <b>NC.2.MD.10</b> Organize, represent, and interpret data with up to four categories.</p> <ul style="list-style-type: none"> <li>Draw a picture graph and a bar graph with a single-unit scale to represent a data set.</li> <li>Solve simple put-together, take-apart, and compare problems using information presented in a picture and a bar graph.</li> </ul> <p><b>Represent and solve problems.</b>  <b>NC.2.OA.1</b> Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:</p> <ul style="list-style-type: none"> <li>One-Step problems:               <ul style="list-style-type: none"> <li>Add to/Take from-Start Unknown</li> <li>Compare-Bigger Unknown</li> <li>Compare-Smaller Unknown</li> </ul> </li> <li>Two-Step problems involving single digits:               <ul style="list-style-type: none"> <li>Add to/Take from- Change Unknown</li> </ul> </li> </ul> <p>Add to/Take From- Result Unknown</p>	<p>1-2 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 7</u> Tools4teachers (Lessons/Tasks)</p>
<b>End of 3<sup>rd</sup> Nine Weeks: NC Check-In 3 Benchmark</b>		
<b>8. Problem Solving with Money</b>	<p><b>Build understanding of time and money.</b>  <b>NC.2.MD.8</b> Solve word problems involving:</p> <ul style="list-style-type: none"> <li>Quarters, dimes, nickels, and pennies within 99¢, using ¢ symbols appropriately.</li> <li>Whole dollar amounts, using the \$ symbol appropriately.</li> </ul> <p><b>Represent and solve problems.</b>  <b>NC.2.OA.1</b> Represent and solve addition and subtraction word problems, within 100, with unknowns in all positions, by using representations and equations with a symbol for the unknown number to represent the problem, when solving:</p> <ul style="list-style-type: none"> <li>One-Step problems:               <ul style="list-style-type: none"> <li>Add to/Take from-Start Unknown</li> <li>Compare-Bigger Unknown</li> <li>Compare-Smaller Unknown</li> </ul> </li> <li>Two-Step problems involving single digits:               <ul style="list-style-type: none"> <li>Add to/Take from- Change Unknown</li> </ul> </li> </ul> <p>Add to/Take From- Result Unknown</p>	<p>1-2 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 8</u> Tools4teachers (Lessons/Tasks)</p>



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<b>Sixth Six Weeks</b>		
<b>9. Reasoning with Shapes</b>	<p><b>Reason with shapes and their attributes.</b></p> <p>NC.2.G.1 Recognize and draw triangles, quadrilaterals, pentagons, and hexagons, having specified attributes; recognize and describe attributes of rectangular prisms and cubes.</p> <p>NC.2.G.3 Partition circles and rectangles into two, three, or four equal shares.</p> <ul style="list-style-type: none"> <li>Describe the shares using the words <i>halves</i>, <i>thirds</i>, <i>half of</i>, <i>a third of</i>, <i>fourths</i>, <i>fourth of</i>, <i>quarter of</i>.</li> <li>Describe the whole as two halves, three thirds, four fourths.</li> </ul> <p>Explain that equal shares of identical wholes need not have the same shape.</p>	<p>3 Weeks</p> <p>Instructional Framework Resource</p> <p><u>Cluster 9</u> Tools4teachers (Lessons/Tasks)</p>
<b>Review All Clusters</b>	<b>Review all standards</b>	3 Weeks
<b>End of Grade Assessment</b>		