



# Elementary School Teaching and Learning

## 2022-2023 Scope and Sequence

### Mathematics – Kindergarten

<b>FIRST NINE WEEKS</b>	<b>OVERVIEW</b>
	In module 1, students will participate in counting experiences that integrate the four parts of the number core: number sequence, cardinality, one-to-one correspondence, and written number symbols. Students connect sorting a group into parts and decomposing numbers.
<b>ASSESSMENTS</b>	
<b>ASSESSMENT WINDOW</b>	<b>ASSESSMENT NAME</b>
September 6- October 4	Aims Web Beginning of the Year

\*Please see the assessment description at the bottom of this document.

UNIT	UNIT DURATION	PARENT/FAMILY RESOURCES	NORTH CAROLINA STANDARDS
<b>Module 1</b> Counting and Cardinality	33 lessons	<a href="#">Mod. 1 Family Math K</a>	<p><b>NC.K.CC.1</b> - Know number names and recognize patterns in the counting sequence by:</p> <ul style="list-style-type: none"> <li>Counting to 100 by ones.</li> <li>Counting to 100 by tens</li> </ul> <p><b>NC.K.CC.3</b> - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20, with 0 representing a count of no objects.</p> <p><b>NC.K.CC.4</b> - Understand the relationship between numbers and quantities.</p> <ul style="list-style-type: none"> <li>When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object (one-to-one correspondence).</li> <li>Recognize that the last number named tells the number of objects counted regardless of their arrangement (cardinality).</li> <li>State the number of objects in a group of up to 5 objects, without counting the objects (perceptual subitizing).</li> </ul> <p><b>NC.K.CC.5</b> - Count to answer "How many?" in the following situations:</p> <ul style="list-style-type: none"> <li>Given a number from 1–20, count out that many objects.</li> <li>Given up to 20 objects, name the next successive number when an object is added, recognizing the quantity is one more/greater.</li> <li>Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.</li> <li>Given 10 objects in a scattered arrangement, identify how many.</li> </ul>



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			<p><b>NC.K.OA.1</b>- Represent addition and subtraction, within 10:</p> <ul style="list-style-type: none"> <li>• Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, or expressions.</li> <li>• Demonstrate understanding of addition and subtraction by making connections among representations.</li> </ul> <p><b>NC.K.MD.3</b> Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.</p>
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<h2>SECOND NINE WEEKS</h2>	<h3>OVERVIEW</h3>
	<p>In module 2, students will analyze and describe two- and three-dimensional shapes by considering their attributes. This allows students to identify shapes in the world and create their own examples through building and drawing. In module 3, students will describe and compare measurable attributes. Using direct comparison, students will compare the length and weight of objects. They will develop a toolbox of strategies to compare sets and numbers within 10.</p>

UNIT	UNIT DURATION	PARENT/FAMILY RESOURCES	NORTH CAROLINA STANDARDS
<p><b>Module 2</b> Two- and Three-Dimensional Shapes</p>	<p>16 lessons</p>	<p><a href="#">Mod 2 Family Math K</a></p>	<p><b>NC.K.CC.1</b> - Know number names and recognize patterns in the counting sequence by:</p> <ul style="list-style-type: none"> <li>• Counting to 100 by ones.</li> <li>• Counting to 100 by tens</li> </ul> <p><b>NC.K.CC.2</b> - Count forward beginning from a given number within the known sequence, instead of having to begin at 1.</p> <p><b>NC.K.CC.3</b> - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20, with 0 representing a count of no objects.</p> <p><b>NC.K.CC.4</b> - Understand the relationship between numbers and quantities.</p> <ul style="list-style-type: none"> <li>• When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object (one-to-one correspondence).</li> <li>• Recognize that the last number named tells the number of objects counted regardless of their arrangement (cardinality).</li> </ul>



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			<ul style="list-style-type: none"> <li>• State the number of objects in a group of up to 5 objects, without counting the objects (perceptual subitizing).</li> <li><b>NC.K.CC.5</b> - Count to answer “How many?” in the following situations:             <ul style="list-style-type: none"> <li>• Given a number from 1–20, count out that many objects.</li> <li>• Given up to 20 objects, name the next successive number when an object is added, recognizing the quantity is one more/greater.</li> <li>• Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.</li> <li>• Given 10 objects in a scattered arrangement, identify how many.</li> </ul> </li> <li><b>NC.K.G.1</b> - Describe objects in the environment using names of shapes, and describe the relative positions of objects using positional terms.</li> <li><b>NC.K.G.2</b> - Correctly name squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres regardless of their orientations or overall size.</li> <li><b>NC.K.G.3</b> - Identify squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres as two-dimensional or three-dimensional</li> <li><b>NC.K.G.4</b> - Analyze and compare two- and three-dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, attributes and other properties.</li> <li><b>NC.K.G.5</b> - Model shapes in the world by:             <ul style="list-style-type: none"> <li>• Building and drawing triangles, rectangles, squares, hexagons, circles.</li> <li>• Building cubes, cones, spheres, and cylinders.</li> </ul> </li> </ul>
<b>Module 3</b> Comparison	22 lessons	<a href="#">Mod 3 Family Math K</a>	<b>NC.K.CC.1</b> - Know number names and recognize patterns in the counting sequence by: <ul style="list-style-type: none"> <li>• Counting to 100 by ones.</li> <li>• Counting to 100 by tens</li> </ul> <b>NC.K.CC.2</b> Count forward beginning from a given number within the known sequence, instead of having to begin at 1. <b>NC.K.CC.3</b> - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20, with 0 representing a count of no objects.



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### Mathematics – Kindergarten

			<p><b>NC.K.CC.4</b> - Understand the relationship between numbers and quantities.</p> <ul style="list-style-type: none"><li>• When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object (one-to-one correspondence).</li><li>• Recognize that the last number named tells the number of objects counted regardless of their arrangement (cardinality).</li><li>• State the number of objects in a group of up to 5 objects, without counting the objects (perceptual subitizing).</li></ul> <p><b>NC.K.CC.5</b> - Count to answer “How many?” in the following situations:</p> <ul style="list-style-type: none"><li>• Given a number from 1–20, count out that many objects.</li><li>• Given up to 20 objects, name the next successive number when an object is added, recognizing the quantity is one more/greater.</li><li>• Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.</li><li>• Given 10 objects in a scattered arrangement, identify how many.</li></ul> <p><b>NC.K.CC.6</b> - Identify whether the number of objects, within 10, in one group is greater than, less than, or equal to the number of objects in another group, by using matching and counting strategies.</p> <p><b>NC.K.CC.7</b> - Compare two numbers, within 10, presented as written numerals.</p> <p><b>NC.K.MD.1</b> - Describe measurable attributes of objects; and describe several different measurable attributes of a single object.</p> <p><b>NC.K.MD.2</b> - Directly compare two objects with a measurable attribute in common, to see which object has “more of”/“less of” the attribute, and describe the difference.</p> <p><b>NC.K.MD.3</b> - Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.</p>
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### Mathematics – Kindergarten

THIRD NINE WEEKS		OVERVIEW	
		<p>In module 4, students will explore part-total relationships as they compose and decompose shapes and numbers in more than one way. They will represent the quantities and relationships in story problems with objects, fingers, drawings, and number bonds. In Module 5, students will develop a conceptual understanding of addition and subtraction. They will represent situations with number sentences and model story problems in various ways.</p>	
ASSESSMENTS			
ASSESSMENT WINDOW		ASSESSMENT NAME	
January 3- February 2		aimsWeb+ Middle of the Year	
UNIT	UNIT DURATION	PARENT/FAMILY RESOURCES	NORTH CAROLINA STANDARDS
<b>Module 4</b> Composition and Decomposition	18 lessons	<a href="#">Mod 4 Family Math K</a>	<p><b>NC.K.CC.1</b> - Know number names and recognize patterns in the counting sequence by:</p> <ul style="list-style-type: none"> <li>Counting to 100 by ones.</li> <li>Counting to 100 by tens</li> </ul> <p><b>NC.K.CC.2</b> Count forward beginning from a given number within the known sequence, instead of having to begin at 1.</p> <p><b>NC.K.CC.3</b> - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20, with 0 representing a count of no objects.</p> <p><b>NC.K.CC.4</b> - Understand the relationship between numbers and quantities.</p> <ul style="list-style-type: none"> <li>When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object (one-to-one correspondence).</li> <li>Recognize that the last number named tells the number of objects counted regardless of their arrangement (cardinality).</li> <li>State the number of objects in a group of up to 5 objects, without counting the objects (perceptual subitizing).</li> </ul> <p><b>NC.K.CC.5</b> - Count to answer "How many?" in the following situations:</p> <ul style="list-style-type: none"> <li>Given a number from 1–20, count out that many objects.</li> </ul>



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### Mathematics – Kindergarten

			<ul style="list-style-type: none"> <li>Given up to 20 objects, name the next successive number when an object is added, recognizing the quantity is one more/greater.</li> <li>Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.</li> <li>Given 10 objects in a scattered arrangement, identify how many.</li> </ul> <p><b>NC.K.OA.1</b>- Represent addition and subtraction, within 10:</p> <ul style="list-style-type: none"> <li>Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, or expressions.</li> <li>Demonstrate understanding of addition and subtraction by making connections among representations.</li> </ul> <p><b>NC.K.OA.2</b> - Solve addition and subtraction word problems, within 10, using objects or drawings to represent the problem, when solving:</p> <ul style="list-style-type: none"> <li>Add to/Take From-Result Unknown</li> <li>Put Together/ Take Apart (Total Unknown and Two Addends Unknown)</li> </ul> <p><b>NC.K.OA.3</b> - Decompose numbers less than or equal to 10 into pairs in more than one way using objects or drawings, and record each decomposition by a drawing or expression.</p> <p><b>NC.K.G.6</b> - Compose larger shapes from simple shapes</p>
<p><b>Module 5</b> Addition and Subtraction</p>	<p>27 lessons</p>	<p><a href="#">Mod 5 Family Math K</a></p>	<p><b>NC.K.CC.1</b> - Know number names and recognize patterns in the counting sequence by:</p> <ul style="list-style-type: none"> <li>Counting to 100 by ones.</li> <li>Counting to 100 by tens</li> </ul> <p><b>NC.K.CC.2</b> Count forward beginning from a given number within the known sequence, instead of having to begin at 1.</p> <p><b>NC.K.CC.3</b> - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20, with 0 representing a count of no objects.</p> <p><b>NC.K.CC.4</b> - Understand the relationship between numbers and quantities.</p> <ul style="list-style-type: none"> <li>When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only</li> </ul>



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one object (one-to-one correspondence).

- Recognize that the last number named tells the number of objects counted regardless of their arrangement (cardinality).
- State the number of objects in a group of up to 5 objects, without counting the objects (perceptual subitizing).

**NC.K.CC.5** - Count to answer "How many?" in the following situations:

- Given a number from 1–20, count out that many objects.
- Given up to 20 objects, name the next successive number when an object is added, recognizing the quantity is one more/greater.
- Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.
- Given 10 objects in a scattered arrangement, identify how many.

**NC.K.OA.1** - Represent addition and subtraction, within 10:

- Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, or expressions.
- Demonstrate understanding of addition and subtraction by making connections among representations.

**NC.K.OA.2** - Solve addition and subtraction word problems, within 10, using objects or drawings to represent the problem, when solving:

- Add to/Take From-Result Unknown
- Put Together/ Take Apart (Total Unknown and Two Addends Unknown)

**NC.K.OA.3** - Decompose numbers less than or equal to 10 into pairs in more than one way using objects or drawings, and record each decomposition by a drawing or expression.

**NC.K.OA.4** - For any number from 0 to 10, find the number that makes 10 when added to the given number using objects or drawings, and record the answer with a drawing or expression.

**NC.K.OA.5** - Demonstrate fluency with addition and subtraction within 5.





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			<p><b>NC.K.OA.6</b> - Recognize and combine groups with totals up to 5 (conceptual subitizing).</p> <p><b>NC.K.G.6</b> - Compose larger shapes from simple shapes</p>
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FOURTH NINE WEEKS		OVERVIEW	
		<p>In module 6, students will compose and decompose numbers 11 to 20 as 10 ones and some more ones in various contexts. As they count to 100 by tens and ones, students will explore patterns in the number sequence. This prepares them for continued work with the base ten number system.</p>	
ASSESSMENTS			
ASSESSMENT WINDOW		ASSESSMENT NAME	
April 28- May 25		aimsWeb+ End of the Year	
UNIT	UNIT DURATION	PARENT/FAMILY RESOURCES	NORTH CAROLINA STANDARDS
<p><b>Module 6</b> Place Value Foundations</p>	24 lessons	<a href="#">Mod. 6 Family Math K</a>	<p><b>NC.K.CC.1</b> - Know number names and recognize patterns in the counting sequence by:</p> <ul style="list-style-type: none"> <li>Counting to 100 by ones.</li> <li>Counting to 100 by tens</li> </ul> <p><b>NC.K.CC.2</b> Count forward beginning from a given number within the known sequence, instead of having to begin at 1.</p> <p><b>NC.K.CC.3</b> - Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20, with 0 representing a count of no objects.</p> <p><b>NC.K.CC.4</b> - Understand the relationship between numbers and quantities.</p> <ul style="list-style-type: none"> <li>When counting objects, say the number names in the standard order, pairing each object with one and only one number name and each number name with one and only one object (one-to-one correspondence).</li> <li>Recognize that the last number named tells the number of objects counted regardless of their arrangement (cardinality).</li> <li>State the number of objects in a group of up to 5 objects, without counting the objects (perceptual subitizing).</li> </ul> <p><b>NC.K.CC.5</b> - Count to answer "How many?" in the following situations:</p> <ul style="list-style-type: none"> <li>Given a number from 1–20, count out that many objects.</li> </ul>





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			<ul style="list-style-type: none"><li>• Given up to 20 objects, name the next successive number when an object is added, recognizing the quantity is one more/greater.</li><li>• Given 20 objects arranged in a line, a rectangular array, and a circle, identify how many.</li><li>• Given 10 objects in a scattered arrangement, identify how many.</li></ul> <p><b>NC.K.OA.1</b>- Represent addition and subtraction, within 10:</p> <ul style="list-style-type: none"><li>• Use a variety of representations such as objects, fingers, mental images, drawings, sounds, acting out situations, verbal explanations, or expressions.</li><li>• Demonstrate understanding of addition and subtraction by making connections among representations.</li></ul> <p><b>NC.K.NBT.1</b> - Compose and decompose numbers from 11 to 19 into ten ones and some further ones by:</p> <ul style="list-style-type: none"><li>• Using objects or drawings.</li><li>• Recording each composition or decomposition by a drawing or expression.</li><li>• Understanding that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.</li></ul>
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#### \*Family Math Resources

The Family Math Resources provide information by topic about what students are learning, examples of the concepts, and At-Home activities to align with classroom learning

#### \*aimsWeb+

aimswebPlus is a universal screening assessment given to all students three times a year. Universal screeners are quick, standardized assessments that measure academic skills for reading and math. These measures help schools inform instruction, identify students at risk, and help teachers determine why the student may be at risk.