



<b>Course Title: Kindergarten Math</b>		
<p><b>Description:</b> Kindergarten math systematically integrates instruction in mathematical content with instruction in the mathematical practices. Throughout the program, emphasis is placed on:</p> <ul style="list-style-type: none"> <li>• Building from and connecting with children’s informal, everyday experiences with mathematics</li> <li>• Problem solving in everyday situations and mathematical contexts</li> <li>• An instruction design that revisits topics regularly to ensure depth of knowledge and long term learning</li> <li>• Distributed practice through routines, games, and other activities</li> <li>• Teaching that supports “productive struggle” and maintains high cognitive demand</li> <li>• Interactive lessons and activities that engage all children and make mathematics fun</li> </ul>		
<i><b>Number and Quantity</b></i>		
<u>Reporting Topic</u>	<u>Grade Level Standards</u>	<u>Standard Summary</u>
<b>Counting</b>	<ul style="list-style-type: none"> <li>• Count to 100 by ones and tens. (K.CC.A.1)</li> <li>• Count forward beginning from a given number within the known sequence (K.CC.A.2)</li> <li>• Write numbers from 0 to 20. Represent a number of objects with a written numeral 0-20 (K.CC.A.3)</li> <li>• Understand the relationship between numbers and quantities; connect counting to cardinality (K.CC.B.4)</li> <li>• Count to answer “how many?” questions about as many as 20 things arranged in a line, a rectangular array, or a circle, or as many as 10 things in a scattered configuration; given a number from 1-20, count out that many objects (K.CC.B.5)</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• Count and write numbers, as well as, understand the relationship between a number and it’s quantity.</li> <li>• Count to answer the question “how many”.</li> <li>• Build and write numbers from 0-20.</li> </ul>
<b>Compare Numbers</b>	<ul style="list-style-type: none"> <li>• Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group (K.CC.C.6)</li> <li>• Compare two numbers between 1 and 10 presented as written numerals (K.CC.C.7)</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>• Recognize more than, less than, and equal to when shown two numbers.</li> </ul>
	<ul style="list-style-type: none"> <li>• Compose and decompose numbers from 11 to 19 into ten ones</li> </ul>	<p>Students will:</p>



<p><b>Place Value</b></p>	<p>and some further ones, e.g. by using objects or drawings, and record each composition or decomposition by a drawing or equation; understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones (K.NBT.A.1)</p> <ul style="list-style-type: none"> <li>Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings to represent the problem (K.OA.A.3)</li> <li>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 (K.OA.A.4)</li> </ul>	<ul style="list-style-type: none"> <li>Build a number (11 - 20) using tens and ones.</li> <li>Represent a number (11 - 20) using a drawing, objects, or number model.</li> </ul>
<p><i>Operations and Algebra</i></p>		
<p><b><u>Reporting Topic</u></b></p>	<p><b><u>Grade Level Standards</u></b></p>	<p><b><u>Standard Summary</u></b></p>
<p><b>Addition and Subtraction</b></p>	<ul style="list-style-type: none"> <li>Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g. claps), acting out situations, verbal explanations, expressions, or equations (K.OA.A.1)</li> <li>Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem. (K.OA.A.2)</li> <li>Fluently add and subtract within 5 (K.OA.A.5)</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>Use objects, drawings, or number models to accurately solve addition and subtraction word problems within ten.</li> <li>Fluently add and subtract within five.</li> </ul>
<p><i>Geometry</i></p>		
<p><b><u>Reporting Topic</u></b></p>	<p><b><u>Grade Level Standards</u></b></p>	<p><b><u>Standard Summary</u></b></p>
<p><b>Shapes</b></p>	<ul style="list-style-type: none"> <li>Analyze and compare a variety of two- and three- dimensional shapes, in different sizes and orientations, using informal language to describe their similarities, differences, parts (e.g. number of sides and vertices/"corners") and other attributes (e.g. having sides of equal length) (K.G.B.4)</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>Identify and name shapes based on attributes, such as: squares, circles,</li> </ul>



	<ul style="list-style-type: none"> <li>Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as above, below, beside, in front of, behind, and next to. (K.G.A.1)</li> <li>Correctly name shapes regardless of their orientations or overall size (K.G.A.2)</li> <li>Identify shapes as two dimensional (lying on a plane, "flat") or three dimensional ("solid") (K.G.A.3)</li> </ul>	<p>triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres.</p> <ul style="list-style-type: none"> <li>Identify and tell the difference between two and three dimensional shapes.</li> </ul>
<b>Compose and Decompose Shapes</b>	<ul style="list-style-type: none"> <li>Model shapes in the world by building shapes from components (e.g. sticks and clay balls) (K.G.B.5)</li> <li>Compose simple shapes to form larger shapes. <i>For example, joining two triangles to make a rectangle.</i> (K.G.B.6)</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>Using basic shapes, build more complex shapes.</li> </ul>
<b>Measurement, Data, Statistics, and Probability</b>		
<b><u>Reporting Topics</u></b>	<b><u>Grade Level Standards</u></b>	<b><u>Standard Summary</u></b>
<b>Measurement</b>	<ul style="list-style-type: none"> <li>Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object (K.MD.A.1)</li> <li>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 (K.MD.A.2)</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>Find objects with the same and different length and weight.</li> </ul>
<b>Represent and Interpret Data</b>	<ul style="list-style-type: none"> <li>Classify objects into given categories; count the numbers of objects in each category and sort the categories by count (K.MD.B.3)</li> </ul>	<p>Students will:</p> <ul style="list-style-type: none"> <li>Put objects in order based on size.</li> <li>Count the number of objects in each group.</li> </ul>