

# KINDERGARTEN MATH

K

## SCOPE AND SEQUENCE CHART

Unit 1	Unit 2	Unit 3	Unit 4	Unit 5
Counting with Friends	Comparing Numbers	Sophisticated Shapes	Investigating Addition and Subtraction	Measuring and Analyzing Data
Approximately 7 Weeks	Approximately 8 Weeks	Approximately 5 Weeks	Approximately 10 Weeks	Approximately 2 Weeks
MGSEK.CC.1*	MGSEK.CC.3*	MGSEK.G.1* MGSEK.G.2	MGSEK.OA.1*	MGSEK.MD.2* MGSEK.MD.1
MGSEK.CC.4* MGSEK.MD.3	MGSEK.CC.4a*	MGSEK.G.4* MGSEK.G.3 MGSEK.G.5	MGSEK.OA.2*	
MGSEK.CC.2*	MGSEK.CC.5*	MGSEK.G.6*	MGSEK.OA.3*	
	MGSEK.CC.6*	MGSEK.G.1* MGSEK.G.2	MGSEK.OA.4*	
	MGSEK.CC.7*		MGSEK.OA.5*	
			MGSEK.NBT.1*	

Grades K-2 Key: CC = Counting and Cardinality, G= Geometry, MD=Measurement and Data, NBT= Number and Operations in Base Ten, OA = Operations and Algebraic Thinking

**\*Prioritized Standards:** Grade level standards of highest priority have been identified. Pacing has been modified to allow sufficient time for in-depth instruction and practice.

**Supporting Standards:** Key concepts and skills, from these grade level standards, will be used to support the Prioritized Standards.

**Prerequisite Concepts and Skills:** Prioritized concepts and skills, from the previous grade level standards, which are most important for success with the current grade-level content, will be integrated, where they best fit, to address learning loss. Guidance received from Pre-K indicators. GELDS



PreK

48-60\_Indicators.pdf

Unit Name	Unit Description	Georgia Standards of Excellence	Unit Duration
<p style="text-align: center;"><b>Unit 1</b></p> <p style="text-align: center;"><b>Counting with Friends</b></p>	<p>In this unit, students will:</p> <ul style="list-style-type: none"> <li>● Start kindergarten thinking of counting as a string of words, but then they make a gradual transition to using counting as a tool for describing their world.</li> <li>● Construct the idea of counting using manipulatives and other resources to see the numbers visually (dot cards, tens frames).</li> <li>● Remember the rote counting sequence, assign one counting number to each object counted, and at the same time have a strategy for keeping track of what has already been counted and what still needs to be counted.</li> <li>● Understand that only the counting sequence is a rote procedure.</li> </ul>	<p><b><u>Know number names and the count sequence</u></b></p> <p><b>MGSEK.CC.1</b> Count to 100 by ones and by tens.</p> <p><b>Prerequisite Concepts and Skills:</b></p> <ul style="list-style-type: none"> <li>● (CD-MA1.4a) Recite numbers in sequence</li> <li>● (CD-MA1.4c) Match numerals to sets of objects with the same number</li> <li>● (CD-MA1.4f) Tell the number that come before and after a given number</li> </ul> <p><b><u>Count to tell the number of objects.</u></b></p> <p><b>MGSEK.CC.4</b> Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <ol 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> </ol>	<p style="text-align: center;"><b>Approximately 7 Weeks</b></p>

	<ul style="list-style-type: none"> <li>● Attach meaning to counting in order to understand that this is the key conceptual idea on which all other number concepts are developed.</li> <li>● Develop successful and meaningful counting strategies as they practice counting and as they listen to and watch others count.</li> </ul>	<ul style="list-style-type: none"> <li>b. Understand that the last number name said tells the number of objects counted (cardinality). The number of objects is the same regardless of their arrangement or the order in which they were counted.</li> <li>c. Understand that each successive number name refers to a quantity that is one larger.</li> </ul> <p><b>Incorporated Grade-Level Concepts and/or Skills:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Sorts and classifies objects and then count the number of objects (GSEK.MD.3)</b></li> </ul> <p><b>Prerequisite Concepts and Skills:</b></p> <ul style="list-style-type: none"> <li>• (CD-MA1.4) Match two equal sets using one-to-one correspondence</li> <li>• (CD-MA2.4b) Count at least 10 objects using one-to-one correspondence</li> </ul> <p><b><u>Know number names and the count sequence</u></b></p> <p><b>MGSEK.CC.2</b> Count forward beginning from a given number within the known sequence (instead of having to begin at 1).</p>	
<p style="text-align: center;"><b>Unit 2</b></p> <p style="text-align: center;"><b>Comparing Numbers</b></p>	<p>In this unit, students will:</p> <ul style="list-style-type: none"> <li>● Write and represent the numbers, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the</li> </ul>	<p><b><u>Know number names and the count sequence.</u></b></p> <p><b>MGSEK.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 style="text-align: center;"><b>Approximately 8 Weeks</b></p>

	<p>number of objects that remain in a set after some are taken away.</p> <ul style="list-style-type: none"> <li>● Use objects, pictures, actions, and explanations to solve problems and represent thinking.</li> <li>● Rely on using concrete objects or pictures to help conceptualize and solve a problem.</li> <li>● Use objects to make sense of the quantities and relationships in problem situations, connecting whether the answer makes sense through comparisons and discussions.</li> <li>● Use the mathematical language to verbalize their reasoning as an important cognitive facet for establishing a strong place value foundation.</li> </ul>	<p><b><u>Count to tell the number of objects.</u></b></p> <p><b>MGSEK.CC.4</b> Understand the relationship between numbers and quantities; connect counting to cardinality.</p> <ol 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> </ol> <p><b>MGSEK.CC.5</b> Count to answer “how many?” questions.</p> <ol style="list-style-type: none"> <li>Count to answer “how many?” questions about as many as 20 things arranged in a variety of ways (a line, a rectangular array, or a circle), or as many as 10 things in a scattered configuration.</li> <li>Given a number from 1-20, count out that many objects.</li> <li>Identify and be able to count pennies within 20. (Use pennies as manipulatives in multiple mathematical contexts.)</li> </ol> <p><b>Prerequisite Concepts and Skills:</b></p> <ul style="list-style-type: none"> <li>● (CD-MA2.4e With guidance, can say the last number in the count to represent quantity (cardinality))</li> </ul>	
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<p><b>Unit 3</b></p> <p><b>Sophisticated Shapes</b></p>	<p>In this unit, students will:</p> <ul style="list-style-type: none"> <li>• Describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary.</li> <li>• Identify, name, and describe basic two-dimensional shapes, such as squares, triangles, circles, rectangles, and hexagons, presented in a variety of ways (e.g., with different sizes and orientations)</li> <li>• Identify, name, and describe three-dimensional shapes such as cubes, cones, cylinders, and spheres.</li> </ul>	<p><b><u>Classify and describe shapes (squares, circles, triangles, rectangles, hexagons, cubes, cones, cylinders, and spheres).</u></b></p> <p><b>MGSEK.G.1</b> Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above</i>, <i>below</i>, <i>beside</i>, <i>in front of</i>, <i>behind</i>, and <i>next to</i>.</p> <p><b>Incorporated Grade-Level Concepts and/or Skills:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Name shapes shown in different orientations or size</b></li> </ul> <p><b>MGSEK.G.3</b> Identify shapes as two-dimensional (lying in a plane, “flat”) or three-dimensional (“solid”).</p>	<p><b>Approximately 5 Weeks</b></p>

	<ul style="list-style-type: none"> <li>● Use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes.</li> </ul>	<p><b><u>Analyze, compare, create, and compose shapes.</u></b></p> <p><b>MGSEK.G.4</b> Analyze and compare 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).</p> <p><b>Incorporated Grade-Level Concepts and/or Skills:</b></p> <ul style="list-style-type: none"> <li>▪ <b>Identify shapes as two-dimensional or three-dimensional.</b></li> <li>▪ <b>Build models of shapes</b></li> </ul> <p><b>MGSEK.G. 6</b> Compose simple shapes to form larger shapes. <i>For example, “Can you join these two triangles with full sides touching to make a rectangle?”</i></p>	
<p style="text-align: center;"><b>Unit 4</b></p> <p style="text-align: center;"><b>Investigating Addition and Subtraction</b></p>	<p>In this unit students will:</p> <ul style="list-style-type: none"> <li>● Represent, relate, and operate on whole numbers, initially with sets of objects.</li> <li>● Use numbers, including written numerals, to represent quantities and to solve quantitative problems</li> <li>● Count objects in a set</li> <li>● Count out a given number of objects</li> <li>● Compare sets or numerals</li> </ul>	<p><b><u>Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from.</u></b></p> <p><b>MGSEK.OA.1</b> Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.</p>	<p style="text-align: center;"><b>Approximately 10 Weeks</b></p>

	<ul style="list-style-type: none"> <li>● Model simple joining and separating situations with sets of objects, or eventually with equations, such as <math>5 + 2 = 7</math> and <math>7 - 2 = 5</math>.</li> <li>● Choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of less sets of objects, counting and producing sets of given sizes, counting the number of objects in combined sets, or counting the number of objects that remain in a set after some are taken away.</li> <li>● Work with numbers 11-19 to gain foundations for place value.</li> <li>● Compose and decompose numbers from 11 to 19 into ten ones, and some more ones</li> <li>● Compose and decompose numbers 11 to 19 and represent numbers using objects or drawings</li> </ul>	<p><b>MGSEK.OA.2</b> Solve addition and subtraction word problems, and add and subtract within 10, e.g., by using objects or drawings to represent the problem.</p> <p><b>MGSEK.OA.3</b> Decompose numbers less than or equal to 10 into pairs in more than one way, e.g., by using objects or drawings, and record each decomposition</p> <p><b>MGSEK.OA.4</b> 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.</p> <p><b>MGSEK.OA.5</b> Fluently add and subtract within 5.</p> <p><b><u>Work with numbers 11–19 to gain foundations for place value.</u></b></p> <p><b>MGSEK.NBT.1</b> Compose and decompose numbers from 11 to 19 into ten ones and some further ones to understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., <math>18 = 10 + 8</math>)</p>	
<b>Unit 5</b>		<b><u>Describe and compare measurable attributes.</u></b>	

<p><b>Measuring and Analyzing Data</b></p>		<p><b>MGSEK.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. <i>For example, directly compare the heights of two children and describe one child as taller/shorter. For example, directly compare the heights of two children and describe one child as taller/shorter.</i></p> <p><b>Incorporated Grade-Level Concepts and/or Skills:</b></p> <ul style="list-style-type: none"> <li>▪ Describe an object using several measurable attributes such as length or weight</li> </ul>	<p><b>Approximately 2 Weeks</b></p>
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