

## Grade K Mathematics Curriculum Guide

<b>Grade Level/Course Title: Grade K</b>	<b>Trimester 1</b>	<b>Academic Year: 2014-2015</b>
--	--------------------	---------------------------------

**Grade Level Mathematics Focus:**

In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

**Essential Questions for this Unit:**

1. How can students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as  $5 + 2 = 7$  and  $7 - 2 = 5$ ? (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.)
2. How can students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small 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?

Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources
<p><b>(Aug.-Oct.)</b></p> <p><b>Unit 1:</b></p> <p><b>Whole Numbers</b></p>	K.CC.4	<p>a. 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.</p> <p>b. Understand that the last number name said tells the number of objects counted. The number of objects is the same regardless of their arrangement or the order in which they were counted.</p> <p>c. Understand that each successive number name refers to a quantity that is one larger.</p>	<ul style="list-style-type: none"> <li>• One-to-one correspondence</li> <li>• Subitizing (recognizing the number of objects in small quantities without counting one by one)</li> <li>• Decomposition (breaking sets of objects into smaller sets)</li> <li>• Represent small whole number quantities on an open number line</li> <li>• Represent quantities on a ten-frame</li> </ul>	<p style="text-align: center;"><b>Chapter 1 (25 days)</b></p> <p>Lesson 1-1: Count Object 0 to 5 Lesson 1-2: Count Object 6 to 10 Lesson 1-3: Count Forward Lesson 1-4 Count Backward Progress Check 1 Replay Lesson 1-5: Numbers 0 and 1 Lesson 1-6: Numbers 2 and 3 Lesson 1-7: Numbers 4 and 5 Lesson 1-8: Numbers 6 to 10 Progress Check 2 Replay Review Assessment</p> <p>Use throughout Unit:  <a href="#">Subitizing</a> [L]  <a href="#">Decomposition</a> [L]  <a href="#">Bar Models</a> [L]  <a href="#">Number Lines</a> [L]  <a href="#">Ten Frames</a> [L] <a href="#">Ten Frames</a> [GMR]  <a href="#">Side-by-side</a> [L]  <a href="#">Number Match</a> [L]  <a href="#">Number Books</a> [CP]  <a href="#">Book</a> [L]  <a href="#">Number Books</a> [L]  <a href="#">Complements for Numbers to Ten</a> [L]  <a href="#">Treasures: Sorting, Counting, and Graphing</a> [CP]</p>
	K.CC.2	Count forward beginning from a given number within the known sequence (instead of having to begin at 1).		

## Grade K Mathematics Curriculum Guide

<b>Grade Level/Course Title: Grade K</b>	<b>Trimester 1</b>	<b>Academic Year: 2014-2015</b>
--	--------------------	---------------------------------

**Grade Level Mathematics Focus:**  
 In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

**Essential Questions for this Unit:**

- How can students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as  $5 + 2 = 7$  and  $7 - 2 = 5$ ? (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.)
- How can students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small 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?

Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources
<p style="color: blue;">(Aug.-Oct.)</p> <p><b>Unit 1: (Continued)</b></p> <p><b>Whole Numbers</b></p> <p style="color: red;">(Approx. 50 days)</p>	K.MD.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.	<ul style="list-style-type: none"> <li>• Connecting counting to sorting</li> <li>• Sorting</li> <li>• Classifying</li> <li>• Relative position of objects in space</li> <li>• Comparison</li> </ul>	<p style="text-align: center;"><b>Chapter 2 (25 days)</b></p> <p>Lesson 2-1: Before and After                      Lesson 2-2: First, Next, Last                      Lesson 2-3: Second and Third                      Lesson 2-4: Fourth and Fifth                      Progress Check 1                      Replay                      Lesson 2-5: Equal Sets                      Lesson 2-6: Greater Than and Less Than                      Lesson 2-7: Growing Number Patterns                      Lesson 2-8: More Number Patterns                      Progress Check 2                      Replay                      Review                      Assessment</p> <p>Use throughout Unit:  <a href="#">Subitizing</a> [L]  <a href="#">Decomposition</a> [L]  <a href="#">Bar Models</a> [L]  <a href="#">Number Lines</a> [L]  <a href="#">Ten Frames</a> [L]   <a href="#">Ten Frames</a> [GMR]  <a href="#">Side-by-side</a> [L]  <a href="#">Number Match</a> [L]  <a href="#">Number Books</a> [CP]  <a href="#">Book</a> [L]  <a href="#">Number Books</a> [L]  <a href="#">Complements for Numbers to Ten</a> [L]  <a href="#">Treasures: Sorting, Counting, and Graphing</a> [CP]</p>
	K.G.1	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> .		
	K.CC.3	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).		

## Grade K Mathematics Curriculum Guide

Grade Level/Course Title: Grade K		Trimester 1		Academic Year: 2014-2015	
<b>Grade Level Mathematics Focus:</b>					
In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.					
<b>Essential Questions for this Unit:</b>					
<ol style="list-style-type: none"> <li>How can students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling 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>? (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.)</li> <li>How can students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small 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> </ol>					
Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources	
<b>Unit 2:</b>  <b>Addition and Subtraction</b>  <b>(Approx. 30 days)</b>	K.CC.1	Count to 100 by ones and by tens.	<ul style="list-style-type: none"> <li>Compare whole number sets to determine more, less, or equal</li> <li>Concept of tens and ones as a foundation for place value</li> </ul>	<p style="text-align: center;"><b>Chapter 3 (15 days)</b></p> <p>Lesson 3-1: Sums of 1 and 2 Lesson 3-2: Sums of 3 and 4 Lesson 3-3: Sums of 5 Lesson 3-4: Sums of 6 Progress Check 1 Replay Lesson 3-5: Sums of 7 Lesson 3-6: Sums of 8 Lesson 3-7: Sums of 9 Progress Check 2 Replay Review Assessment</p> <p>Use throughout Unit:  <a href="#">Subitizing</a> [L]  <a href="#">Decomposition</a> [L]  <a href="#">Bar Models</a> [L]  <a href="#">Number Lines</a> [L]  <a href="#">Ten Frames</a> [L]   <a href="#">Ten Frames</a> [GMR]  <a href="#">Tackling the Terrific Teens</a> [L]  <a href="#">Fluency to Five (or Ten)</a> [L]  <a href="#">Complements for Numbers to Ten</a> [L]</p>	
	K.CC.5	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.6	Identify whether the number of objects in one group is greater than, less than, or equal to the number of objects in another group, e.g., by using matching and counting strategies.			
	K.CC.7	Compare two numbers between 1 and 10 presented as written numerals.			
	K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.			

## Grade K Mathematics Curriculum Guide

Grade Level/Course Title: <b>Grade K</b>		<b>Trimester 2</b>		<b>Academic Year: 2014-2015</b>	
<b>Grade Level Mathematics Focus:</b>					
In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.					
<b>Essential Questions for this Unit:</b>					
1. How can students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as $5 + 2 = 7$ and $7 - 2 = 5$ ? (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.)					
2. How can students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small 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?					
Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources	
<b>Unit 2:</b> <b>(Continued)</b>  <b>Addition and Subtraction</b>	K.OA.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	<ul style="list-style-type: none"> <li>Decompose numbers to add and subtract in multiple ways</li> <li>Represent adding and subtracting on an open number line</li> <li>Represent adding and subtracting using bar models</li> <li>Represent adding and subtracting using ten frames</li> </ul>	<p style="text-align: center;"><b>Chapter 4 (15 days)</b></p> <p>Lesson 4-1: Take Away from 1 and 2                      Lesson 4-2: Take Away from 3 and 4                      Lesson 4-3: Take Away from 5                      Lesson 4-4: Take Away from 6                      Progress Check 1                      Replay                      Lesson 4-5: Take Away from 7                      Lesson 4-6: Take Away from 8                      Lesson 4-7: Take Away from 9                      Progress Check 2                      Review                      Assessment</p> <p>Use throughout Unit:  <a href="#">Subitizing</a> [L]  <a href="#">Decomposition</a> [L]  <a href="#">Bar Models</a> [L]  <a href="#">Number Lines</a> [L]  <a href="#">Ten Frames</a> [L]   <a href="#">Ten Frames</a> [GMR]  <a href="#">Tackling the Terrific Teens</a> [L]  <a href="#">Fluency to Five (or Ten)</a> [L]  <a href="#">Complements for Numbers to Ten</a> [L]</p>	
	K.OA.2	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.3	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 by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$ ).			
	K.OA.4	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.5	Fluently add and subtract within 5.			
(Approx. 30 days)					

## Grade K Mathematics Curriculum Guide

<b>Grade Level/Course Title: Grade K</b>	<b>Trimester 2</b>	<b>Academic Year: 2014-2015</b>
--	--------------------	---------------------------------

**Grade Level Mathematics Focus:**

In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

**Essential Questions for this Unit:**

1. How can students use numbers, including written numerals, to represent quantities and to solve quantitative problems, such as counting objects in a set; counting out a given number of objects; comparing sets or numerals; and modeling simple joining and separating situations with sets of objects, or eventually with equations such as  $5 + 2 = 7$  and  $7 - 2 = 5$ ? (Kindergarten students should see addition and subtraction equations, and student writing of equations in kindergarten is encouraged, but it is not required.)
2. How can students choose, combine, and apply effective strategies for answering quantitative questions, including quickly recognizing the cardinalities of small 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?

Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources
<b>Unit 3:</b>  <b>Geometry</b>  <b>(Approx. 60 days)</b>	K.OA.1	Represent addition and subtraction with objects, fingers, mental images, drawings, sounds (e.g., claps), acting out situations, verbal explanations, expressions, or equations.	<ul style="list-style-type: none"> <li>• Decompose numbers to add and subtract in multiple ways</li> <li>• Represent adding and subtracting on an open number line</li> <li>• Represent adding and subtracting using bar models</li> </ul>	<p align="center"><b>Chapter 5 (25 days)</b></p> <p>Lesson 5-1: Open or Closed Figures                      Lesson 5-2: Curved or Straight                      Lesson 5-3: Circles                      Lesson 5-4: Triangles                      Progress Check 1                      Replay                      Lesson 5-5: Rectangles                      Lesson 5-6: Squares                      Lesson 5-7: Create Two-Dimensional Figures                      Progress Check 2                      Review                      Assessment</p> <p>Use throughout Unit:  <a href="#">Decomposing/Recomposing Geometric Shapes</a> [L]  <a href="#">Geometry and Justifying</a> [L]</p>
	K.OA.2	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.3	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 by a drawing or equation (e.g., $5 = 2 + 3$ and $5 = 4 + 1$ ).		
	K.OA.4	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.5	Fluently add and subtract within 5.		
	K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.		

## Grade K Mathematics Curriculum Guide

<b>Grade Level/Course Title: Grade K</b>	<b>Trimester 3</b>	<b>Academic Year: 2014-2015</b>
--	--------------------	---------------------------------

**Grade Level Mathematics Focus:**

In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

**Essential Questions for this Unit:**

1. How can students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary?
2. How can students learn to 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), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres?
3. How can students use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes?

Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources
<b>(Jan.- March)</b>  <b>Unit 3: (Continued)</b>	K.MD.1	Describe measurable attributes of objects, such as length or weight. Describe several measurable attributes of a single object.	<ul style="list-style-type: none"> <li>• Measurement as comparison</li> <li>• Longer/Shorter</li> <li>• Heavier/Lighter</li> <li>• More/Less (capacity)</li> <li>• Spatial relationships</li> </ul>	<p align="center"><b><u>Chapter 6 (20 days)</u></b></p> <p>Lesson 6-1: Introduce Three-Dimensional Figures Lesson 6-2: Roll and Stack Lesson 6-3: Spheres Lesson 6-4: Cylinders Progress Check 1 Replay Lesson 6-5: Rectangular Prisms Lesson 6-6: Cubes Lesson 6-7: Create Three-Dimensional Figures Progress Check 2 Replay Review Assessment</p> <p>Use throughout Unit: <a href="#">Decomposing/Recomposing Geometric Shapes</a> [L] <a href="#">Geometry and Justifying</a> [L]</p>
	K.MD.2	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.</i>		
	K.MD.3	Classify objects into given categories; count the numbers of objects in each category and sort the categories by count.		
<b>Geometry</b>	K.G.1	Describe objects in the environment using names of shapes, and describe the relative positions of these objects using terms such as <i>above, below, beside, in front of, behind, and next to.</i>		
<b>(Approx. 60 days)</b>				

## Grade K Mathematics Curriculum Guide

<b>Grade Level/Course Title: Grade K</b>	<b>Trimester 3</b>	<b>Academic Year: 2014-2015</b>
--	--------------------	---------------------------------

**Grade Level Mathematics Focus:**  
 In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

**Essential Questions for this Unit:**

1. How can students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary?
2. How can students learn to 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), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres?
3. How can students use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes?

Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources
<b>(Jan.- March)</b>  <b>Unit 3:</b> <b>(Continued)</b>  <b>Geometry</b>  <b>(Approx. 60 days)</b>	K.G.2	Correctly name shapes regardless of their orientations or overall size.	<ul style="list-style-type: none"> <li>• Attributes of two and three dimensional shapes</li> <li>• Decomposition and re-composition of shapes</li> </ul>	<p align="center"><b>Chapter 7 (15 days)</b></p> <p>Lesson 7-1: Before or After                      Lesson 7-2: Above or Below                      Lesson 7-3: Top, Middle, or Bottom                      Lesson 7-4: Left or Right                      Progress Check 1                      Replay                      Lesson 7-5: Front or Back                      Lesson 7-6: Inside or Outside                      Lesson 7-7: Solve Puzzles                      Progress Check 2                      Review                      Assessment</p> <p>Use throughout Unit:  <a href="#">Decomposing/Recomposing Geometric Shapes</a> [L]  <a href="#">Geometry and Justifying</a> [L]</p>
	K.G.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").		
	K.G.4	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).		
	K.G.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.		
	K.G.6	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>		
	K.OA.5	Fluently add and subtract within 5.		
	K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.		

## Grade K Mathematics Curriculum Guide

<b>Grade Level/Course Title: Grade K</b>	<b>Trimester 3</b>	<b>Academic Year: 2014-2015</b>
--	--------------------	---------------------------------

**Grade Level Mathematics Focus:**

In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

**Essential Questions for this Unit:**

1. How can students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary?
2. How can students learn to 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), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres?
3. How can students use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes?

Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources
<b>Unit 4:</b>  <b>Measurement</b>  <b>(Approx. 50 days)</b>	K.G.2	Correctly name shapes regardless of their orientations or overall size.	<ul style="list-style-type: none"> <li>• Attributes of two and three dimensional shapes</li> <li>• Decomposition and re-composition of shapes</li> </ul>	<p align="center"><b>Chapter 8 (20 days)</b></p> <p>Lesson 8-1: Same or Different                      Lesson 8-2: Equal or Unequal                      Lesson 8-3: More or Less                      Lesson 8-4: Long or Short                      Progress Check 1                      Replay                      Lesson 8-5; Tall or Short                      Lesson 8-6: Heavy or Light                      Lesson 8-7: Full or Empty                      Progress Check 2                      Review                      Assessment</p> <p>Use throughout Unit:  <a href="#">Measurement in the Primary Grades</a> [L]</p>
	K.G.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").		
	K.G.4	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).		
	K.G.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.		
	K.G.6	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>		
	K.OA.5	Fluently add and subtract within 5.		
	K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.		

## Grade K Mathematics Curriculum Guide

Grade Level/Course Title: Grade K		Trimester 3		Academic Year: 2014-2015	
<b>Grade Level Mathematics Focus:</b> In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.					
<b>Essential Questions for this Unit:</b>					
1. How can students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary?					
2. How can students learn to 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), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres?					
3. How can students use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes?					
Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources	
<b>Unit 4: (Continued)</b>  <b>Measurement</b>  <b>(Approx. 50 days)</b>	K.G.2	Correctly name shapes regardless of their orientations or overall size.	<ul style="list-style-type: none"> <li>Attributes of two and three dimensional shapes</li> <li>Decomposition and re-composition of shapes</li> </ul>	<p align="center"><b><u>Chapter 9 (15 days)</u></b></p> <p>Lesson 9-1: Long, Longer, Longest Lesson 9-2: Tall, Taller, Tallest Lesson 9-3: Short, Shorter, Shortest Lesson 9-4: Heavy or Heavier Progress Check 1 Replay Lesson 9-5: Light or Lighter Lesson 9-6: More and Most Lesson 9-7: Less and Least Progress Check 2 Review Assessment</p> <p>Use throughout Unit: <a href="#">Measurement in the Primary Grades</a> [L]</p>	
	K.G.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").			
	K.G.4	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).			
	K.G.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.			
	K.G.6	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>			
	K.OA.5	Fluently add and subtract within 5.			
	K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.			

## Grade K Mathematics Curriculum Guide

<b>Grade Level/Course Title: Grade K</b>	<b>Trimester 3</b>	<b>Academic Year: 2014-2015</b>
--	--------------------	---------------------------------

**Grade Level Mathematics Focus:**  
 In Kindergarten, instructional time should focus on two critical areas: (1) representing, relating, and operating on whole numbers, initially with sets of objects; and (2) describing shapes and space. More learning time in Kindergarten should be devoted to number than to other topics.

**Essential Questions for this Unit:**

1. How can students describe their physical world using geometric ideas (e.g., shape, orientation, spatial relations) and vocabulary?
2. How can students learn to 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), as well as three-dimensional shapes such as cubes, cones, cylinders, and spheres?
3. How can students use basic shapes and spatial reasoning to model objects in their environment and to construct more complex shapes?

Unit (Time)	Standard	Standard Description	Content	Triumphs/Resources
<b>Unit 4: (Continued)</b>  <b>Measurement</b>  <b>(Approx. 50 days)</b>	K.G.2	Correctly name shapes regardless of their orientations or overall size.	<ul style="list-style-type: none"> <li>• Attributes of two and three dimensional shapes</li> <li>• Decomposition and re-composition of shapes</li> </ul>	<p style="text-align: center;"><b><u>Chapter 10 (15 days)</u></b></p> <p>Lesson 10-1: More than One Attribute                      Lesson 10-2: AB Patterns                      Lesson 10-3: AAB Patterns                      Lesson 10-4: ABB Patterns                      Progress Check 1                      Replay                      Lesson 10-5: ABC Patterns                      Lesson 10-6: Identify and Extend Patterns                      Lesson 10-7: Create Patterns                      Progress Check 2                      Review                      Assessment</p> <p>Use throughout Unit:  <a href="#">Measurement in the Primary Grades</a> [L]</p>
	K.G.3	Identify shapes as two-dimensional (lying in a plane, "flat") or three-dimensional ("solid").		
	K.G.4	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).		
	K.G.5	Model shapes in the world by building shapes from components (e.g., sticks and clay balls) and drawing shapes.		
	K.G.6	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>		
	K.OA.5	Fluently add and subtract within 5.		
	K.NBT.1	Compose and decompose numbers from 11 to 19 into ten ones and some further ones, e.g., by using objects or drawings, and record each composition or decomposition by a drawing or equation (e.g., $18 = 10 + 8$ ); understand that these numbers are composed of ten ones and one, two, three, four, five, six, seven, eight, or nine ones.		