

Grade K Mathematics Planning Guide Based on 60 Minutes of Instruction Daily

South Carolina College-and Career-Ready Mathematics Process Standards	
1. Make sense of problems and persevere in solving them.	4. Connect mathematical ideas and real-world situations through modeling.
2. Reason both conceptually and abstractly.	5. Use a variety of mathematical tools effectively and strategically.
3. Use critical thinking skills to justify mathematical reasoning and critique the reasoning of others.	6. Communicate mathematically and approach mathematical situations with precision.
7. Identify and utilize structure and patterns.	

Kindergarten, Unit 1 Understanding Numbers 1-10

Suggested dates of instruction: 26 days

Standard	Focus	Vocabulary	Supporting Standard(s)	Resource(s)
Unit 1: Lessons 1 – 6 K.NS.4a <i>Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that the last number said tells the number of objects in the set (cardinality).</i>	Number sequence 1 to 1 correspondence Strategies for keeping track Cardinality Hierarchical inclusion & embedded numbers Identify numerals Magnitude (1 – 5) Counting objects	5-frame 10-frame Arrangement Counting Five Four Group Scene Number Number Parade One Partners Three Two Zero		RMB: 1EE – 1FF (Connect Mathematics to the Real World with Anno’s Counting Book) 1GG (Connect Mathematics to the Real World Drawings) 1HH – 1JJ (Effective Practice Routines) 1JJ (Develop Subitizing Skills) ME: pp. 1 - 28 T: <u>2nd Edition-Student Centered Math: Van de Walle</u> <i>Fill the Towers</i> 8.3, p. 103 <i>Real Counting On</i> 8.5, p.104 <u>Navigating Through Numbers & Operations:</u> <i>Choose A Number</i> , p. 16 <u>Math Work Stations: Debbie Diller Chapter 4</u> <i>Beginning Number Stations</i> NCTM Illuminations: Numbers Up To 3 http://illuminations.nctm.org/unit.aspx?id=6136

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				<p>S: Mega Math: <i>Counting Critters, Level A</i> Link: Country Countdown: Counting Critters Level A Website Activity: <i>Number and Set Mat</i> http://www.abcya.com/number_match.htm Student Activity Book: pp. 1 - 8</p> <p>iTools: <i>Counters</i></p> <p>Materials: <i>Anno's Counting Book, Number Parade, Pointer Giant Number Cards, Square-Inch Tiles, Counting Mats, Number Tiles</i></p>
<p>Unit 1: Lesson 7 K.ATO.1 <i>Model situations that involve addition and subtraction within 10 using objects, fingers, mental images, drawings, acting out situations, verbal explanations,</i></p>	<p>Add and subtract orally to totals of up to 5</p> <p>Represent quantities</p>	<p>Adding Join Minus Order Partners Separate Subtracting Take Away</p>		<p>RMB: 1HH – 1JJ (Effective Practice Routines) 1JJ – 1KK (Develop Subitizing Skills) 1LL (Add & Subtract Within 5)</p> <p>ME: pp. 29 - 32 (Lesson 7)</p> <p>T: 2nd Edition-Student Centered Math: Van de Walle <i>Five-Frame Tell-About</i> 8.13, p.111 Navigating Through Numbers & Operations: <i>Frump's Fashion</i>, p. 41</p>

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<i>expressions, and equations.</i>				<p><i>Frames</i>, p. 46</p> <p>Math Work Stations: Debbie Diller Chapter 5 <i>Solving Story Problems</i>, p. 6</p> <p>K – 5 Resources Activity: Bears in the Cave http://www.k5mathteachingresources.com/supportfiles/bears-in-the-cave.pdf</p> <p>S: Mega Math: <i>Country Countdown, Block Busters, Level A</i> Link: Country Countdown: Block Busters Level A</p> <p>iTools: <i>Counters</i></p> <p>Materials: <i>Counting Mat, Number Tiles 1 - 5, Square-Inch Tiles</i></p>

Standard(s)	Focus	Vocabulary	Supporting Standard(s)	Resources
Unit 1: Lesson 8 K.ATO.1 <i>Model situations that involve</i>	Describe circles Use circles to	Above Behind Below		RMB: 1HH – 1JJ (Effective Practice Routines) 1MM (Identify Shapes)

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<p><i>addition and subtraction within 10 using objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, and equations.</i></p> <p>K.G.2 Identify and describe a given shape and shapes of objects in everyday situations to include two-dimensional shapes (i.e., triangle, square, rectangle, hexagon, and circle) and three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).</p>	<p>represent addition and subtraction within 5</p>	<p>Beside Circle Flat shape In front of Next to</p>		<p>ME: pp. 33 - 38 (Lesson 8)</p> <p>T: 2nd Edition-Student Centered Math: Van de Walle <i>Shape Show And Hunt</i> 16.1, p. 306</p> <p>K – 5 Resources Activity: Addition Plate—Story Problems http://www.k5mathteachingresources.com/support-files/addition-plate.pdf</p> <p>S: Mega Math: Shapes Ahoy Ship Shapes Level G Link: Shapes Ahoy: Ship Shapes, Level G Student Activity Book: pp. 9 – 12</p> <p>Materials: Circles, Two-Color Counters</p>

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<p>Unit 1: Lesson 9 K.NS.7 Determine whether the number of up to ten objects in one group is more than, less than, or equal to the number of up to ten objects in another group using matching and counting strategies.</p>	<p>Compare two numbers 1 – 5</p>	<p>Compare Horizontal Less Longer More Shorter Taller Vertical</p>		<p>RMB: 1HH – 1JJ (Effective Practice Routines) 1JJ – 1KK (Develop Subitizing Skills) 1LL (Add & Subtract within 5) 1MM (Compare by Matching)</p> <p>ME: pp. 39 - 44 (Lesson 9)</p> <p>T: K – 5 Resources Activity: Comparing Towers Web Activity http://www.k-5mathteachingresources.com/support-files/comparing-towers.pdf</p> <p>S: Mega Math: <i>Country Countdown, Harrison’s Comparisons, Level B</i> Link: Country Countdown: Harrison’s Comparisons Level B Student Activity Book: pp. 13 – 14</p> <p>iTools: <i>Counters (compare)</i></p> <p>Materials: <i>Counting Mat, Number Tiles, Square-Inch Tiles</i></p>

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<p>Unit 1: Lesson 10 K.G.2 <i>Identify and describe a given shape and shapes of objects in everyday situations to include two-dimensional shapes (i.e., triangle, square, rectangle, hexagon, and circle) and three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).</i> K.MD.3 <i>Sort and classify data into 2 or 3 categories with data not to exceed 20 items in each category.</i></p>	<p>Use defining attributes to identify squares and rectangles</p> <p>Classify shapes according to their attributes</p>	<p>Corner Rectangle Side Square</p>		<p>RMB: 1GG (Connect Math to the Real World) 1HH – 1JJ (Effective Practice Routines) 1MM (Identify Shapes)</p> <p>ME: pp. 45 - 54 (Lesson 10)</p> <p>T: <u>2nd Edition-Student Centered Math: Van de Walle</u> <i>Is It Or Isn't It</i> p.164 <u>Navigating Through Geometry:</u> <i>Alike & Different</i>, p. 17 <u>Math Work Stations: Debbie Diller</u> <i>Guess My Shapes</i>, p. 163 <i>Compare Two Shapes</i>, p. 165</p> <p>S: Mega Math Shapes Ahoy Ship Shapes Level G Link: Shapes Ahoy: Ship Shapes, Level G Student Activity Book: pp. 15 – 18</p> <p>Materials: <i>Circles, Squares and Rectangles, Square-Inch Tiles, Comparing Mat</i></p>

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<p>Unit 1: Lessons 11 – 13 K.NS.3 Read numbers from 0 – 20 and represent a number of objects 0 – 20 with a written numeral. K.NS.4a Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that the last number said tells the number of objects in the set (cardinality). K.NS.4b Understand the relationship between number and quantity. Connect</p>	<p>Identify and order numbers 1 through 10</p> <p>Count up to 10 objects</p> <p>Compare two numbers within 10</p> <p>Write the numbers 1, 2, and 3</p>	<p>Fewer Group Horizontal More Pair Vertical</p>		<p>RMB: 1EE – 1FF (Connect Mathematics to the Real World with Anno’s Counting Book) 1GG (Connect Mathematics to the Real World Drawings) 1HH – 1JJ (Effective Practice Routines) 1LL (Add & Subtract within 5) 1MM (Compare by Matching) 1NN (Write 1, 2, 3, 4, 5)</p> <p>ME: pp. 55 - 76 (Lessons 11, 12, 13)</p> <p>T: 2nd Edition-Student Centered Math: Van de Walle <i>Find The Same Amount</i> 8.8, p.106 <i>Number Medley</i> 8.14, p. 111 Math Work Stations: Debbie Diller <i>Dominoes for Counting and Comparing</i>, p. 74 <i>Comparing Games</i>, p.76</p> <p>S: Mega Math: Countdown Critters, Levels A Link: Country Countdown: Counting Critters Level A Mega Math: Harrison’s Comparisons Level B Link: Country Countdown: Harrison’s Comparisons Level B</p>

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<p><i>counting to cardinality by demonstrating an understanding that the number of objects is the same regardless of their arrangement or the order in which they are counted (conservation of number).</i></p> <p>K.NS.4c Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that each successive number name refers to a quantity that is one more and each</p>				<p>Student Activity Book: p. 19 – 24 Homework & Remembering: pp. 1 – 2, pp. 11 – 12</p> <p>Websites: Additional Counting Activities (# 1- 10) K – 5 Teaching Resources: http://www.k5mathteachingresources.com/kindergarten-math-activities.html</p> <p>ABCYa Website: http://www.abcya.com/kindergarten_counting.htm</p> <p>Materials: Number Tiles, Centimeter Cubes, Giant Number Cards 1-10, Counting Mats, Number Tiles, Square-Inch Tiles</p>

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<p><i>previous number name refers to a quantity that is one less.</i></p> <p>K.NS.5 Count a given number of objects from 1 – 20 and connect this sequence in a one-to-one manner.</p> <p>K.NS.7 Determine whether the number of up to ten objects in one group is more than, less than, or equal to the number of up to ten objects in another group using matching and counting strategies.</p>				

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<p>Unit 1: Lesson 14 K.NS.3 <i>Read numbers from 0 – 20 and represent a number of objects 0 – 20 with a written numeral.</i> K.ATO.1 <i>Model situations that involve addition and subtraction within 10 using objects, fingers, mental images, drawings, acting out situations, verbal explanations, expressions, and equations.</i> K.ATO.2 <i>Solve real-world/story problems using objects and drawings to find sums</i></p>	<p>Represent addition and subtraction with fingers</p> <p>Write the numeral 4 and identify groups of 4</p>	<p>Add Group Math Stories Model Represent Subtract</p>		<p>RMB: 1GG (Connect Mathematics to the Real World Drawings) 1HH – 1JJ (Effective Practice Routines) 1NN (Write 1, 2, 3, 4, 5)</p> <p>ME: pp. 69 - 76 (Lesson 14)</p> <p>T: 2nd Edition-Student Centered Math: Van de Walle <i>How Many Are There?</i> 8.4, p. 103 Math Work Stations: Debbie Diller <i>Grab and Graph Objects</i>, p. 77 <i>Piggy Penny</i>, p. 84</p> <p>S: Student Activity Book: pp, 25 - 28 Homework & Remembering: pp. 13 – 14 NCTM Illuminations: http://illuminations.nctm.org/Activity.aspx?id=3565 K – 5 Resources Activity: http://k-5teachingresources.com/supportfiles/handwriting-sheets-1-10.pdf</p>

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<i>up to 10 and differences within 10.</i>				Materials: <i>Anno's Counting Book</i>
<p>Unit 1: Lessons 15 - 17</p> <p>K.NS.3 <i>Read numbers from 0 – 20 and represent a number of objects 0 – 20 with a written numeral.</i></p> <p>K.NS.4a <i>Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that the last number said tells the number of objects in the set (cardinality).</i></p>	<p>Identify, order, and count numbers 1 through 10</p> <p>Compare two numbers</p> <p>Identify groups with 1 through 5 items</p> <p>Count, write, draw the numeral 5</p> <p>Identify groups of 5</p>	<p>Alike</p> <p>Different</p> <p>Dot-to-Dot</p> <p>Fewer</p> <p>Same</p> <p>More</p>		<p>RMB: 1GG (Connect Mathematics to the Real World Drawings)</p> <p>1HH – 1JJ (Effective Practice Routines)</p> <p>1LL (Add & Subtract within 5)</p> <p>1MM (Compare by Matching)</p> <p>1NN (Write 1, 2, 3, 4, 5)</p> <p>ME: pp. 77 – 90 (Lessons 15, 16, 17)</p> <p>T: 2nd Edition-Student Centered Math: Van de Walle</p> <p><i>Make Sets of More/Less/Same</i> 8.7, p. 105</p> <p><i>Find The Same Amount</i> 8.8, p. 106</p> <p><i>How Many Are There?</i> 8.4, p. 103</p> <p>S: Mega Math: Numberopolis Carnival Stories Level A</p> <p>Link: Numberopolis: Carnival Stories Level A</p> <p>Student Activity Book: pp. 29 - 34</p> <p>Homework & Remembering: pp. 15 - 20</p>

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<p>K.NS.4b <i>Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that the number of objects is the same regardless of their arrangement or the order in which they are counted (conservation of number).</i></p> <p>K.NS.4c <i>Understand the relationship between number and quantity. Connect counting to cardinality by demonstrating an understanding that</i></p>				<p>ABCYa Website: Comparing Situations http://www.abcya.com/kindergarten_word_problems_more_less.htm</p> <p>ABCYa Website: Connect the Dots http://www.abcya.com/connect_the_dots_10.htm</p> <p>Illustrations NCTM: Match representations http://illuminations.nctm.org/Activity.aspx?id=3563</p> <p>Materials: <i>Number Tiles, Centimeter Cubes, Counting Mats, Square-Inch Tiles</i></p>

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<p><i>each successive number name refers to a quantity that is one more and each previous number name refers to a quantity that is one less.</i></p> <p>K.NS.5 <i>Count a given number of objects from 1 – 20 and connect this sequence in a one-to-one manner.</i></p> <p>K.NS.7 <i>Determine whether the number of up to ten objects in one group is more than, less than, or equal to the number of up to ten objects in another group using matching</i></p>				

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<i>and counting strategies.</i>				
Unit 1: Lesson 18 K.G.2 <i>Identify and describe a given shape and shapes of objects in everyday situations to include two-dimensional shapes (i.e., triangle, square, rectangle, hexagon, and circle) and three-dimensional shapes (i.e., cone, cube, cylinder, and sphere).</i>	Apply Mathematical Process Standards to solve problems			RMB: 1HH – 1JJ (Effective Practice Routines) End of Unit Review & Test: ME: pp. 97 - 102 Student Activity Book: pp. 37 - 40 ME Performance Task: https://www-k6.thinkcentral.com/content/hsp/math/hspmthmx/na/grk/performance_task_9780544586291_/pdf/unit1.pdf