

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

**Marking Period: 1st Nine Weeks**

**Days: Ongoing daily at calendar (180 days)**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL MK.1</b>	<b>The student, given two sets, each containing 10 or fewer concrete objects, will identify and describe one set as having more, fewer, or the same number of members as the other set, using the concept of one-to-one correspondence.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand how quantities relate to each other, which leads to an understanding of how numbers are related to each other.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>● Match each member of one set with each member of another set, using the concept of one-to-one correspondence to compare the number of members between sets, where each set contains 10 or fewer objects.</li> <li>● Compare and describe two sets of 10 or fewer objects, using the terms more, fewer, and the same.</li> <li>● Given a set of objects, construct a second set which has more, fewer or the same number of objects.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: More, Fewer or the Same?</a></p> <p><u>Interactive Websites</u> <a href="#">NCTM Illuminations-Five Frame</a></p> <p><u>Videos</u></p> <p><u>Downloadable Resources</u> <a href="#">Math Wire: Ten frame mat</a> <a href="#">Math Wire: Dot plates</a> <a href="#">Math Wire: Domino Math Mats-Game board, instructions and pieces.</a></p> <p><u>Literature Connections</u> <a href="#">VDOE: All subject area literature correlation</a></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><i>Ten Black Dots by Donald Crews</i>  <u>Classroom Materials</u>          Bear Counters          Cubes          Dominoes          Number Flash Cards</p>
<b>Essential Vocabulary</b>	<b>Equal, More, Fewer, Same</b>

**Marking Period: 1st Nine Weeks**

**Days: Ongoing daily at calendar 180 days**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL MK.2 a-c</b>	<p><b>The student, given a set containing 15 or fewer concrete objects, will</b></p> <p><b>a) tell how many are in the set by counting the number of objects orally;</b></p> <p><b>b) write the numeral to tell how many are in the set; and</b></p> <p><b>c) select the corresponding numeral from a given set of numerals.</b></p>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should read and write numerals from 0 through 15.</p> <ul style="list-style-type: none"> <li>● Read and write numerals from 0 through 15.</li> <li>● Understand that the total number of objects can be found by counting.</li> <li>● Understand that the last counted number describes the total amount in the set.</li> <li>● Understand that if the set is empty, it has 0 elements.</li> <li>● Understand that changing the spatial arrangement of a set of objects does not change the total amount of the set.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>● Count orally the number of objects in a set containing 15 or fewer concrete objects, using one-to-one correspondence, and identify the corresponding numeral.</li> <li>● Identify written numerals from 0 through 15 represented in random order. Select the numeral from a given set of numerals that corresponds to a set of 15 or fewer concrete objects.</li> <li>● Write the numerals from 0 through 15.</li> <li>● Write a numeral that corresponds to a set of 15 or fewer concrete objects.</li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

- Construct a set of objects that corresponds to a given numeral, including an empty set.

**Essential Questions**

**Primary Resources**

Textbook Correlation  
Harcourt Math

Lesson Plans  
[More, Less, Same](#)  
[VDOE Counting Centers](#)  
[VDOE Counting 15 Dots](#)

Interactive Website  
[NCTM Illuminations-Five Frame](#)

Videos  
[One Hundred by Brain PopJr.](#)

Downloadable Resources  
[Suffolk Teaching Activities and Resources](#)  
[Pocketful of Centers: All About the Numbers..Worksheets](#)  
[All About Numbers Flipchart: Teachers Pay Teachers Free Download](#)

Literature Connection  
Chicka Chicka 1,2, 3 by John Archambault & Bill Martin Jr.  
[VDOE: All subject area literature correlation](#)

Classroom Materials  
Lakeshore Counting Game  
Number Flash Cards  
Dice  
Teddy Bear Counters  
Dominoes  
Cubes

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<b>Essential Vocabulary</b>	<b>total, numbers 1-15</b>
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**Marking Period: 1st Nine Weeks**

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**Reporting Category/Strand: Number and Number Sense**

<b>SOL MK.4</b>	<p><b>The student will</b></p> <p><b>a) count forward to 100 and backward from 10;</b></p> <p><b>b) identify one more than a number and one less than a number; and</b></p> <p><b>c) count by fives and tens to 100.</b></p>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should:</p> <ul style="list-style-type: none"> <li>● Use the correct oral counting sequence in both forward and backward counting situations.</li> <li>● Understand that skip counting can be used to count a collection of objects.</li> <li>● Describe patterns in skip counting and use those patterns to predict the next number or numbers in the skip counting sequence.</li> <li>● Understand that numeric relationships include one more than, one less than, two more than, two less than, etc.</li> <li>● Understand benchmarks of five and ten.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>● Count forward from 0 to 100.</li> <li>● Count backward from 10 to 0.</li> <li>● Recognize the relationship of one more than and one less than a number using objects (i.e., five and one more is six; and one less than ten is nine).</li> <li>● Group 100 or fewer objects together into sets of fives or tens and then count them by fives or by tens.</li> <li>● Investigate and recognize the pattern of counting by fives to 100, using a variety of tools.</li> <li>● Investigate and recognize the pattern of counting by tens to 100, using a variety of tools.</li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE Hundreds Board Math</a></p> <p><u>Interactive Website</u> <a href="#">Kindergarten Math Skill Builder Activities for each SOL</a></p> <p><u>Videos</u> <a href="#">Jack Hartman: Count to 100-School Tube</a> <a href="#">Harry Kindergarten: I Can Count to 100</a> <a href="#">Jack Hartman Countdown to Blastoff:Free Download, Teachers Pay Teachers</a> <a href="#">School Tube: Counting by 5's</a> <a href="#">School Tube: Counting by 10's</a> <a href="#">School Tube: Teen Numbers</a></p> <p><u>Downloadable Resources</u> <a href="#">All About Numbers Flipchart: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connections</u> Kindergarten Count to 100 by Jacqueline Rogers 100 School Days by Anne Rockwell Miss Bindergarten Celebrates to the 100th Day by Joseph Slate</p> <p><a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Dot Plates Dominoes Ten Frame</p>
<b>Essential Vocabulary</b>	forward, backward

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

**Marking Period: 1st Nine Weeks**

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**Reporting Category/Strand: Measurement**

<b>SOL MK.8</b>	<b>The student will identify the instruments used to measure length (ruler), weight (scale), time (clock: digital and analog; calendar: day, month, and season), and temperature (thermometer).</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should Identify an appropriate measuring tool for a given unit of measure.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Identify a ruler as an instrument to measure length.</li> <li>- Identify different types of scales as instruments to measure weight. Identify different types of clocks (analog and digital) as instruments to measure time.</li> <li>- Identify the components of a calendar, including days, months, and seasons. Identify different types of thermometers as instruments used to measure temperature.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">Calendar Math Instruments</a></p> <p><u>Interactive Website</u> <a href="#">Harcourt Which Tool to Measure</a> <a href="#">Day, Month, Week Practice</a> <a href="#">Non-Standard Measurement Smartboard Exchange</a> <a href="#">Comparisons Using Non-Standard Measurement Smartboard Exchange</a> <a href="#">Animal Non-standard Measurement Smartboard Exchange</a> <a href="#">Nonstandard Power Point</a></p> <p><u>Video</u> <a href="#">School Tube: Seasons song</a> <a href="#">School Tube: Measuring with Blocks</a></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Downloadable Resources</u>  <a href="#">Kindergarten Time Worksheets and Printables</a>  <a href="#">Instruments for Measurement by Teachers Pay Teachers Free download</a></p> <p><u>Literature Connection</u>  <i>The Grouchy Ladybug</i> by Eric Carle  <a href="#">VDOE: All subject area literature correlation</a>  <u>Classroom Materials</u>            Lakeshore Nonstandard Measurement Game</p>
<b>Essential Vocabulary</b>	measure, count, day, season, yesterday, today, patterns, tomorrow, calendar, month

**Marking Period: 1st Nine Weeks**

**Days: Ongoing daily at calendar 180 days**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL MK.13</b>	<b>The student will gather data by counting and tallying.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should pose questions and gather data and understand how data are collected and presented in an organized manner by counting and tallying.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Use counting and tallying to gather data on categories identified by the teacher and/or student (e.g., favorites, number of days of various types of weather during a given month, types of pets, types of shoes).</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u>            Harcourt Math</p> <p><u>Lesson Plans</u>  <a href="#">VDOE: Using Tally Marks</a></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

Interactive Website

[Introduction to Tally Marks Smartboard Exchange](#)

[Weather Tally Smartboard Exchange](#)

[Johnnie's Math Page](#)

Video

[Math Monster: Counting and Symbolizing](#)

[Math Monster: Data Collection](#)

[The Number Crewe, Count with a Tally](#)

Downloadable Resources

[Shari Sloane: Tally Mark referral page](#)

[Tally Mark Monster: Teachers Pay Teachers Free Download](#)

[All About Numbers Flipchart: Teachers Pay Teachers Free Download](#)

Literature Connection

**Chrysanthemum** by Kevin Henkes

**Rumpelstilskin** by Paul O. Zelinsky

**Tikki Tikki Tembo** by Arlene Mosel

**Anno's Counting Book** by Mitsumasa Anno

**Ten Black Dots** by Donald Crews

**Ten in Bed** by Penny Dale

**Ten Little Mice** by Joyce Dynbar

**My Numbers** by Rebecca Emberley

**Feast for 10** by Cathryn Falwell

**Count and See** by Tana Hoban

**We All Went on a Safari: A Counting Journey Through Tanzania** by Laurie Krebs

**More or Less a Mess** by Sheila Kenan

**Chicka Chicka 1,2,3** by Bill Martin

**Chicka Chicka Boom Boom** by **Bill Martin Jr** and John Archambault

**Monster Musical Chair** by Stuart J. Murphy

**Roll Over! A Counting Song** by Merle Peek

**From One to One Hundred** by Teri Sloat

**Mouse Count** by Ellen Stoll Walsh

**How Many, How Many, How Many** by Rick Walton



**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><b><u>Teeth, Tails, &amp; Tentacles: An Animal Counting Book</u></b> by Christopher Wormell  <b><u>More or Less</u></b> by Stuart J. Murphy</p> <p><a href="#">VDOE: All subject area literature correlation Classroom Materials</a>  Lakeshore Counting and Tallying Game</p>
<b>Essential Vocabulary</b>	data, count, tally mark

**Marking Period: 1st Nine Weeks**

**Days: Ongoing daily at calendar 180 days**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL MK.14</b>	<b>The student will display gathered data in object graphs, picture graphs, and tables, and will answer questions related to the data.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>● data can be represented using concrete objects, pictures, and graphs</li> <li>● different types of representations emphasize different things about the same data</li> <li>● picture graphs use pictures to show and compare information</li> <li>● object graphs use concrete materials to represent categorical data</li> <li>● tables can be used to show an orderly arrangement of data in columns and rows</li> </ul> <p>Students should be able to answer questions related to the gathered data from object graphs, picture graphs, and tables and relate their ideas about the data to concepts such as part-part-whole and number relationships.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Display data by arranging concrete objects into organized groups to form a simple object graph.</li> <li>- Display gathered data, using pictures to form a simple picture graph (e.g., a picture graph of the types of shoes worn by students on a given day).</li> <li>- Display gathered data in tables, either in rows or columns.</li> <li>- Answer questions related to the gathered data displayed in object graphs, picture graphs, and tables by:</li> <li>- Describe the categories of data and the data as a whole (e.g., the total number of responses) and its parts.</li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	- Identifying parts of the data that represent numerical relationships, including categories with the greatest, the least, or the same.
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE:My Favorite Things</a> <a href="#">M&amp;M Graphing Lesson</a></p> <p><u>Interactive Website</u> <a href="#">Graphing Lesson: Kids have pets</a> <a href="#">I am special graph</a> <a href="#">Reading Graphs Smartboard Exchange</a></p> <p><u>Video</u> <a href="#">Learning to Use Graphs</a> <a href="#">Mathica's Mathshop, measurement, graph</a> <a href="#">Math Monster Putting all the data</a></p> <p><u>Downloadable Resources</u> <a href="#">M&amp;M Graph</a> <a href="#">Graphing by Kids Count 123</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Lakeshore Graphing Game</p>
<b>Essential Vocabulary</b>	picture graph, object graph, table, rows, column, more, fewer, same, compare

**Marking Period: 1st Nine Weeks**

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

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**Reporting Category/Strand: Patterns, Functions, and Algebra**

<b>SOL MK.16</b>	<b>The student will identify, describe, and extend repeating patterns.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- patterns are a way to recognize order and organize their world and to predict what comes next in an arrangement.</li> <li>- the sound pattern ‘snap, clap, snap, clap’ is the same in form as the color pattern ‘red, blue, red, blue’.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Observe and identify the basic repeating pattern (core) found in repeating patterns of common objects, sounds, and movements that occur in practical situations.</li> <li>- Identify the core in a repeating pattern.</li> <li>- Extend a repeating pattern by adding at least two repetitions to the pattern.</li> <li>- Create a repeating pattern.</li> <li>- Compare similarities and differences between patterns.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math <u>Lesson Plans</u> <a href="#">Pattern Learning Centers by Mrs. Ricca K</a> <a href="#">Patterns by Kindergarten, Kindergarten</a></p> <p><u>Interactive Website</u> <a href="#">Internet 4 Kids</a> <a href="#">Pattern Matcher PBS Kids</a> <a href="#">Turkey Math Smartboard Exchange</a></p> <p><u>Video</u> <a href="#">Patterns</a> <a href="#">Pattern by School tube</a> <a href="#">Patterns by Brain Pop Jr.</a></p> <p><u>Downloadable Resources</u></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><a href="#">Patterns by Kidzone</a> <a href="#">Repeating Patterns Draw What Comes Next</a></p> <p><a href="#">Literature Connection</a> <a href="#">VDOE: All subject area literature correlation</a></p> <p><a href="#">Classroom Materials</a> Lakeshore Patterns Game Cubes Teddy Bears Attribute Links, Blocks</p>
<b>Essential Vocabulary</b>	pattern, repeating pattern, core, predict, extend

**Marking Period: 1st Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL MK.2 a-c</b>	<p><b>The student, given a set containing 15 or fewer concrete objects, will</b></p> <p><b>a) tell how many are in the set by counting the number of objects orally;</b></p> <p><b>b) write the numeral to tell how many are in the set; and</b></p> <p><b>c) select the corresponding numeral from a given set of numerals.</b></p>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should read and write numerals from 0 through 15 and understand that:</p> <ul style="list-style-type: none"> <li>- the total number of objects can be found by counting.</li> <li>- the last counted number describes the total amount in the set.</li> <li>- if the set is empty, it has 0 elements.</li> <li>- changing the spatial arrangement of a set of objects does not change the total amount of the set.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Count orally the number of objects in a set containing 15 or fewer concrete objects, using one-to-one correspondence, and identify the corresponding numeral.</li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<ul style="list-style-type: none"> <li>- Identify written numerals from 0 through 15 represented in random order. Select the numeral from a given set of numerals that corresponds to a set of 15 or fewer concrete objects.</li> <li>- Write the numerals from 0 through 15.</li> <li>- Write a numeral that corresponds to a set of 15 or fewer concrete objects.</li> <li>- Construct a set of objects that corresponds to a given numeral, including an empty set.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">More, Less, Same</a> <a href="#">VDOE Counting Centers</a> <a href="#">VDOE Counting 15 Dots</a></p> <p><u>Interactive Website</u> <a href="#">NCTM Illuminations-Five Frame</a></p> <p><u>Videos</u></p> <p><u>Downloadable Resources</u> <a href="#">Suffolk Teaching Activities and Resources</a> <a href="#">Pocketful of Centers: All About the Numbers..Worksheets</a> <a href="#">Number Match worksheet</a> <a href="#">All About Numbers Flipchart: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> Chicka Chicka 1,2, 3 by John Archambault &amp; Bill Martin Jr. <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Lakeshore Counting Game Number Flash Cards Dice Teddy Bear Counters Dominoes</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	Cubes
<b>Essential Vocabulary</b>	total, numbers 1-15

**Marking Period: 1st Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Geometry**

<b>SOL MK.11a</b>	<b>The student will</b> <b>a) identify, describe, and trace plane geometric figures (circle, triangle, square, and rectangle);</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should</p> <ul style="list-style-type: none"> <li>- Use their knowledge of plane figures to help them systematically represent and describe their world.</li> <li>- Identify the characteristics of plane geometric figures (circle, triangle, square, and rectangle).</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Identify a circle, triangle, square, and rectangle.</li> <li>- Describe the characteristics of triangles, squares, and rectangles, including number of sides and number of angles.</li> <li>- Describe a circle using terms such as round and curved.</li> <li>- Trace a circle, triangle, square, and rectangle.</li> <li>- Compare and group plane geometric figures (circle, triangle, square, and rectangle) according to their relative sizes (larger, smaller).</li> <li>- Compare and group plane geometric figures (circle, triangle, square, and rectangle) according to their shapes.</li> <li>- Distinguish between examples and non-examples of identified geometric figures (circle, triangle, square, and rectangle)</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Geometric Figures in the Classroom</a></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Interactive Website</u>  <a href="#">Identifying Shapes Smartboard Exchange</a>  <a href="#">Shape Sort Smartboard Exchange</a>  <u>Video</u>  <a href="#">The Number Crew; Shape Sorting Discovery Ed</a>  <a href="#">Discovering Math, Geometric Shapes Discovery ED</a></p> <p><u>Downloadable Resources</u>  <a href="#">Shape Power Point</a>  <a href="#">Scarecrow Shape Color sheet</a>  <a href="#">Shape Detective Identification Sheet</a>  <a href="#">Trace Shapes by Kidzone</a></p> <p><u>Literature Connection</u>  <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u>          Attribute Blocks, Links          Greg and Steve Shapes Song          Shape Flash Cards          Lakeshore Shapes Game</p>
Essential Vocabulary	shape (circle, triangle, square, rectangle), trace, round, curved, angles, larger, smaller

**Marking Period: 1st Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Probability and Statistics**

SOL MK.13	<b>The student will gather data by counting and tallying.</b>
Essential Knowledge/Skills/Understandings	<p>All students should pose questions and gather data and understand how data are collected and presented in an organized manner by counting and tallying.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p>to:</p> <ul style="list-style-type: none"> <li>- Use counting and tallying to gather data on categories identified by the teacher and/or student (e.g., favorites, number of days of various types of weather during a given month, types of pets, types of shoes).</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Using Tally Marks</a></p> <p><u>Interactive Website</u> <a href="#">Introduction to Tally Marks Smartboard Exchange</a> <a href="#">Weather Tally Smartboard Exchange</a> <a href="#">Johnnie's Math Page</a></p> <p><u>Video</u> <a href="#">Math Monster: Counting and Symbolizing</a> <a href="#">Math Monster: Data Collection</a> <a href="#">The Number Crewe, Count with a Tally</a></p> <p><u>Downloadable Resources</u> <a href="#">Shari Sloane: Tally Mark referral page</a> <a href="#">Tally Mark Monster: Teachers Pay Teachers Free Download</a> <a href="#">All About Numbers Flipchart: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <b><u>Chrysanthemum</u></b> by Kevin Henkes <b><u>Rumpelstiltskin</u></b> by Paul O. Zelinsky <b><u>Tikki Tikki Tembo</u></b> by Arlene Mosel <b><u>Anno's Counting Book</u></b> by Mitsumasa Anno <b><u>Ten Black Dots</u></b> by Donald Crews <b><u>Ten in Bed</u></b> by Penny Dale <b><u>Ten Little Mice</u></b> by Joyce Dynbar <b><u>My Numbers</u></b> by Rebecca Emberley</p>



**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u><b>Feast for 10</b></u> by Cathryn Falwell  <u><b>Count and See</b></u> by Tana Hoban  <u><b>We All Went on a Safari: A Counting Journey Through Tanzania</b></u> by Laurie Krebs  <u><b>More or Less a Mess</b></u> by Sheila Kenan  <u><b>Chicka Chicka 1,2,3</b></u> by Bill Martin  <u><b>Chicka Chicka Boom Boom</b></u> by Bill Martin Jr and John Archambault  <u><b>Monster Musical Chair</b></u> by Stuart J. Murphy  <u><b>Roll Over! A Counting Song</b></u> by Merle Peek  <u><b>From One to One Hundred</b></u> by Teri Sloat  <u><b>Mouse Count</b></u> by Ellen Stoll Walsh  <u><b>How Many, How Many, How Many</b></u> by Rick Walton  <u><b>Teeth, Tails, &amp; Tentacles: An Animal Counting Book</b></u> by Christopher Wormell  <u><b>More or Less</b></u> by Stuart J. Murphy</p> <p><a href="#">VDOE: All subject area literature correlation Classroom Materials</a>  Lakeshore Counting and Tallying Game</p>
<b>Essential Vocabulary</b>	data, count, tally mark

**Marking Period: 1st Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL MK.14</b>	<b>The student will display gathered data in object graphs, picture graphs, and tables, and will answer questions related to the data.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- data can be represented using concrete objects, pictures, and graphs</li> <li>- different types of representations emphasize different things about the same data</li> <li>- picture graphs use pictures to show and compare information</li> <li>- object graphs use concrete materials to represent categorical data</li> <li>- tables can be used to show an orderly arrangement of data in columns and rows</li> </ul> <p>Students should be able to answer questions related to the gathered data from object graphs, picture graphs, and tables and</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p>relate their ideas about the data to concepts such as part-part-whole and number relationships.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Display data by arranging concrete objects into organized groups to form a simple object graph.</li> <li>- Display gathered data, using pictures to form a simple picture graph (e.g., a picture graph of the types of shoes worn by students on a given day).</li> <li>- Display gathered data in tables, either in rows or columns.</li> <li>- Answer questions related to the gathered data displayed in object graphs, picture graphs, and tables by: <ul style="list-style-type: none"> <li>● describing the categories of data and the data as a whole (e.g., the total number of responses) and its parts.</li> <li>● identifying parts of the data that represent numerical relationships, including categories with the greatest, the least, or the same.</li> </ul> </li> </ul>
<p><b>Essential Questions</b></p>	
<p><b>Primary Resources</b></p>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE:My Favorite Things</a> <a href="#">M&amp;M Graphing Lesson</a></p> <p><u>Interactive Website</u> <a href="#">Graphing Lesson: Kids have pets</a> <a href="#">I am special graph</a> <a href="#">Reading Graphs Smartboard Exchange</a></p> <p><u>Video</u> <a href="#">Learning to Use Graphs</a> <a href="#">Mathica's Mathshop, measurement, graph</a> <a href="#">Math Monster Putting all the data</a></p> <p><u>Downloadable Resources</u> <a href="#">M&amp;M Graph</a> <a href="#">Graphing by Kids Count 123</a></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Literature Connection</u>  <a href="#">VDOE: All subject area literature correlation</a>  <u>Classroom Materials</u>            Lakeshore Graphing Game</p>
<b>Essential Vocabulary</b>	picture graph, object graph, table, rows, column, more, fewer, same, compare

**Marking Period: 1st Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Patterns, Functions, and Algebra**

<b>SOL MK.15</b>	<b>The student will sort and classify objects according to attributes.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- the same set of objects can be sorted and classified in different ways.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Sort objects into appropriate groups (categories) based on one attribute.</li> <li>- Classify sets of objects into groups (categories) of one attribute.</li> <li>- Label attributes of a set of objects that has been sorted.</li> <li>- Name multiple ways to sort a set of objects.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u>            Harcourt Math</p> <p><u>Lesson Plans</u>  <a href="#">VDOE: The Button Box</a></p> <p><u>Interactive Website</u></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Video</u> <a href="#">Learning about Sorting</a></p> <p><u>Downloadable Resources</u> <a href="#">Shape Sort: Teachers Pay Teachers Free Download</a> <a href="#">Sorting Shapes 3D- Teachers Pay Teachers Free Download</a> <a href="#">Sorting Letters and Numbers-Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Lakeshore Sorting Game Teddy bear counters Unifix cubes Attribute blocks Hula hoops</p>
<b>Essential Vocabulary</b>	describe, observe, different, pattern, sort, group, attribute

**Marking Period: 1st Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Patterns, Functions, and Algebra**

<b>SOL MK.16</b>	<b>The student will identify, describe, and extend repeating patterns.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- patterns are a way to recognize order and organize their world and to predict what comes next in an arrangement.</li> <li>- the sound pattern ‘snap, clap, snap, clap’ is the same in form as the color pattern ‘red, blue, red, blue’</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Observe and identify the basic repeating pattern (core) found in repeating patterns of common objects, sounds, and movements that occur in practical situations.</li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<ul style="list-style-type: none"> <li>- Identify the core in a repeating pattern.</li> <li>- Extend a repeating pattern by adding at least two repetitions to the pattern.</li> <li>- Create a repeating pattern.</li> <li>- Compare similarities and differences between patterns.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">Pattern Learning Centers by Mrs. Ricca K</a> <a href="#">Patterns by Kindergarten, Kindergarten</a></p> <p><u>Interactive Website</u> <a href="#">Internet 4 Kids</a> <a href="#">Pattern Matcher PBS Kids</a> <a href="#">Turkey Math Smartboard Exchange</a></p> <p><u>Video</u> <a href="#">Patterns</a> <a href="#">Pattern by School tube</a></p> <p><u>Downloadable Resources</u> <a href="#">Patterns by Kidzone</a> <a href="#">Repeating Patterns Draw What Comes Next</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Lakeshore Patterns Game Cubes Teddy Bears Attribute Links, Blocks</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<b>Essential Vocabulary</b>	pattern, predict, extend, repeating pattern, core

**Marking Period: 2nd Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Measurement**

<b>SOL MK.10</b>	<b>The student will compare two objects or events, using direct comparisons or nonstandard units of measure, according to one or more of the following attributes: length (shorter, longer), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder). Examples of nonstandard units include foot length, hand span, new pencil, paper clip, and block.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should:</p> <ul style="list-style-type: none"> <li>- Compare and order objects according to their attributes.</li> <li>- Develop an understanding of measuring with nonstandard and standard units of measure.</li> <li>- Recognize attributes (length, height, weight, temperature) that can be measured.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Compare and describe lengths of two objects (as shorter or longer), using direct comparison or nonstandard units of measure (e.g., foot length, hand span, new pencil, paper clip, block).</li> <li>- Compare and describe heights of two objects (as taller or shorter), using direct comparison or nonstandard units of measure (e.g., book, hand span, new pencil, paper clip, block).</li> <li>- Compare and describe weights of two objects (as heavier or lighter), using direct comparison or nonstandard units of measure (e.g., book, cubes, new pencil, paper clip, block).</li> <li>- Compare and describe temperatures of two objects or environment (as hotter or colder), using direct comparison.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><a href="#">VDOE: Measurement Lesson Plans</a></p> <p><u>Interactive Website</u>  <a href="#">Comparing Heavier/Lighter Game- Harcourt Math</a>  <a href="#">Montgomery County Public Schools Non-Standard Units Math Site</a></p> <p><u>Video</u>  <a href="#">Discovering Math: Measurement</a>  <a href="#">Discovery Education: Standard/Non-Standard Measurement</a></p> <p><u>Downloadable Resources</u>  <a href="#">Measuring Pumpkins: Teachers Pay Teachers Free Download</a>  <a href="#">Non-Standard Measurement Stations-Teacher Pay Teachers Free Download</a>  <a href="#">Non-Standard Measurement Assessment- Teachers Pay Teachers Free Download</a>  <a href="#">Measurement with How Big is a Foot?-Teachers Pay Teachers Free Download</a>  <a href="#">Non-standard Units of Measuring-Teachers Pay Teachers Free Download</a>  <a href="#">Measurement Worksheets</a>  <a href="#">Measurement: Temperature Unit-Bridges in Mathematics</a></p> <p><u>Literature Connection</u>  <i>How Big is a Foot?</i> by Rolf Myller  <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u>          Attribute blocks          Bear counters          Attribute bears          Classroom thermometers          Giant thermometer</p>
<b>Essential Vocabulary</b>	balance (scale), weight, calendar, month, season, thermometer, temperature, measure, shorter, longer, taller, shorter, heavier, lighter, hotter, colder

**Marking Period: 2nd Nine Weeks  
Days: 5**

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

**Reporting Category/Strand: Geometry**

<p><b>SOL MK.11b</b></p>	<p><b>The student will:</b> <b>b) compare the size (larger, smaller) and shape of plane geometric figures (circle, triangle, square, and rectangle)</b></p>
<p><b>Essential Knowledge/Skills/Understandings</b></p>	<p>All students should:</p> <ul style="list-style-type: none"> <li>- Compare the size and shape of plane geometric figures by using strategies to sort and/or group and begin to refine the vocabulary used to explain their strategies.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Compare and group plane geometric figures (circle, triangle, square, and rectangle) according to their relative sizes (larger, smaller).</li> <li>- Compare and group plane geometric figures (circle, triangle, square, and rectangle) according to their shapes.</li> </ul>
<p><b>Essential Questions</b></p>	
<p><b>Primary Resources</b></p>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Geometric Figures in the Classroom</a></p> <p><u>Interactive Website</u> <a href="#">Identifying Shapes Smartboard Exchange</a> <a href="#">Shape Sort Smartboard Exchange</a></p> <p><u>Video</u> <a href="#">The Number Crew; Shape Sorting Discovery Ed</a> <a href="#">Discovering Math, Geometric Shapes Discovery ED</a></p> <p><u>Downloadable Resources</u> <a href="#">Shape Power Point</a> <a href="#">Scarecrow Shape Color sheet</a> <a href="#">Shape Detective Identification Sheet</a> <a href="#">Trace Shapes and Compare Size by Kidzone</a></p>



**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Attribute Blocks, Links Greg and Steve Shapes Song Shape Flash Cards Lakeshore Shapes Game Attribute Bears</p>
<b>Essential Vocabulary</b>	shape, trace, round, curved, angles, larger, smaller

**Marking Period: 2nd Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Geometry**

<b>SOL MK.12</b>	<b>The student will describe the location of one object relative to another (above, below, next to) and identify representations of plane geometric figures (circle, triangle, square, and rectangle) regardless of their positions and orientations in space.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- objects can have different orientations in space.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Identify pictorial representations of a circle, triangle, square, and rectangle, regardless of their position and orientation in space.</li> <li>- Describe the location of one object relative to another, using the terms above, below, and next to.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Lesson Plans</u>  <a href="#">VDOE: Geometric Games</a>  <a href="#">Pete the Cat the Wheels on the Bus Lesson with Positional Words</a></p> <p><u>Interactive Website</u>  <a href="#">Positional Words Smartboard Exchange</a></p> <p><u>Video</u></p> <p><u>Downloadable Resources</u>  <a href="#">Positional Words by KDULS</a>  <a href="#">Where's the Bear</a>  <a href="#">Positional Words Unit by Teachers Pay Teachers</a>  <a href="#">Positional Words Above Below by Teachers Pay Teachers</a></p> <p><u>Literature Connection</u>  <a href="#">VDOE: All subject area literature correlation</a>  <a href="#">Pete the Cat by James Dean</a></p> <p><u>Classroom Materials</u>  <a href="#">Lakeshore Positional Words Game</a>  <a href="#">Positional Word Cards</a></p>
<b>Essential Vocabulary</b>	position (above, below, next to), compare, describe, alike, different

**Marking Period: 2nd Nine Weeks**

**Days: 3**

**Reporting Category/Strand: Probability and Statistics**

<b>SOL MK.13</b>	<b>The student will gather data by counting and tallying.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should:</p> <ul style="list-style-type: none"> <li>- Pose questions and gather data.</li> <li>- Understand how data are collected and presented in an organized manner by counting and tallying.</li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Use counting and tallying to gather data on categories identified by the teacher and/or student (e.g., favorites, number of days of various types of weather during a given month, types of pets, types of shoes).</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Using Tally Marks</a></p> <p><u>Lesson Plans</u> AIMS-M&amp;M Graphing AIMS-You Can Count on Us (graph boys &amp; Girls) AIMS- An Eye Full of Color (graph eye color)</p> <p><u>Interactive Website</u> <a href="#">Introduction to Tally Marks Smartboard Exchange</a> <a href="#">Weather Tally Smartboard Exchange</a> <a href="#">Johnnie's Math Page</a></p> <p><u>Video</u> <a href="#">Math Monster: Counting and Symbolizing</a> <a href="#">Math Monster:Data Collection</a> <a href="#">The Number Crewe, Count with a Tally</a></p> <p><u>Downloadable Resources</u> <a href="#">Shari Sloane: Tally Mark referral page</a> <a href="#">Tally Mark Monster: Teachers Pay Teachers Free Download</a> <a href="#">Valentine Candy Count Graph</a> <a href="#">All About Numbers Flipchart: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <b>Chrysanthemum</b> by Kevin Henkes</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u><b>Rumplestilskin</b></u> by Paul O. Zelinsky  <u><b>Tikki Tikki Tembo</b></u> by Arlene Mosel  <u><b>Anno's Counting Book</b></u> by Mitsumasa Anno  <u><b>Ten Black Dots</b></u> by Donald Crews  <u><b>Ten in Bed</b></u> by Penny Dale  <u><b>Ten Little Mice</b></u> by Joyce Dynbar  <u><b>My Numbers</b></u> by Rebecca Emberley  <u><b>Feast for 10</b></u> by Cathryn Falwell  <u><b>Count and See</b></u> by Tana Hoban  <u><b>We All Went on a Safari: A Counting Journey Through Tanzania</b></u> by Laurie Krebs  <u><b>More or Less a Mess</b></u> by Sheila Kenan  <u><b>Chicka Chicka 1,2,3</b></u> by Bill Martin  <u><b>Chicka Chicka Boom Boom</b></u> by <b>Bill Martin Jr</b> and John Archambault  <u><b>Monster Musical Chair</b></u> by Stuart J. Murphy  <u><b>Roll Over! A Counting Song</b></u> by Merle Peek  <u><b>From One to One Hundred</b></u> by Teri Sloat  <u><b>Mouse Count</b></u> by Ellen Stoll Walsh  <u><b>How Many, How Many, How Many</b></u> by Rick Walton  <u><b>Teeth, Tails, &amp; Tentacles: An Animal Counting Book</b></u> by Christopher Wormell  <u><b>More or Less</b></u> by Stuart J. Murphy</p> <p><a href="#">VDOE: All subject area literature correlation</a></p> <p>Classroom Materials Lakeshore Counting and Tallying Game</p>
Essential Vocabulary	data, count, tally mark

Marking Period: 2nd Nine Weeks

Days: 3

Reporting Category/Strand: Probability and Statistics

SOL MK.14	The student will display gathered data in object graphs, picture graphs, and tables, and will answer questions related to the data.
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**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<p><b>Essential Knowledge/Skills/Understandings</b></p>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- data can be represented using concrete objects, pictures, and graphs</li> <li>- different types of representations emphasize different things about the same data</li> <li>- picture graphs use pictures to show and compare information</li> <li>- object graphs use concrete materials to represent categorical data</li> <li>- tables can be used to show an orderly arrangement of data in columns and rows</li> </ul> <p>Students should be able to answer questions related to the gathered data from object graphs, picture graphs, and tables and relate their ideas about the data to concepts such as part-part-whole and number relationships.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Display data by arranging concrete objects into organized groups to form a simple object graph.</li> <li>- Display gathered data, using pictures to form a simple picture graph (e.g., a picture graph of the types of shoes worn by students on a given day).</li> <li>- Display gathered data in tables, either in rows or columns.</li> <li>- Answer questions related to the gathered data displayed in object graphs, picture graphs, and tables by:             <ul style="list-style-type: none"> <li>● describing the categories of data and the data as a whole (e.g., the total number of responses) and its parts.</li> <li>● identifying parts of the data that represent numerical relationships, including categories with the greatest, the least, or the same. *Display data by arranging concrete objects into organized groups to form a simple object graph.</li> </ul> </li> <li>- Display gathered data, using pictures to form a simple picture graph (e.g., a picture graph of the types of shoes worn by students on a given day).</li> <li>- Display gathered data in tables, either in rows or columns.</li> <li>- Answer questions related to the gathered data displayed in object graphs, picture graphs, and tables by:             <ul style="list-style-type: none"> <li>● Describing the categories of data and the data as a whole (e.g., the total number of responses) and its parts.</li> <li>● Identifying parts of the data that represent numerical relationships, including categories with the greatest, the least, or the same.</li> </ul> </li> </ul>
<p><b>Essential Questions</b></p>	
<p><b>Primary Resources</b></p>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><a href="#">VDOE: My Favorite Things M&amp;M Graphing Lesson</a></p> <p><u>Interactive Website</u>  <a href="#">Graphing Lesson: Kids have pets</a>  <a href="#">I am special graph</a>  <a href="#">Reading Graphs Smartboard Exchange</a></p> <p><u>Video</u>  <a href="#">Learning to Use Graphs</a>  <a href="#">Mathica's Mathshop, measurement, graph</a>  <a href="#">Math Monster Putting all the data</a>            Tally Charts and Graphs by Brain Pop Jr.</p> <p><u>Downloadable Resources</u>  <a href="#">M&amp;M Graph</a>  <a href="#">Graphing by Kids Count 123</a>            Valentine Candy Count Graph</p> <p><u>Literature Connection</u>  <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u>            Lakeshore Graphing Game</p>
<b>Essential Vocabulary</b>	picture graphs, object graph, table, rows, column, more, fewer,same, compare

**Marking Period: 2nd Nine Weeks**

**Days: 4**

**Reporting Category/Strand: Patterns, Functions, and Algebra**

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<b>SOL MK.15</b>	<b>The student will sort and classify objects according to attributes.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- the same set of objects can be sorted and classified in different ways.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Sort objects into appropriate groups (categories) based on one attribute.</li> <li>- Classify sets of objects into groups (categories) of one attribute.</li> <li>- Label attributes of a set of objects that has been sorted.</li> <li>- Name multiple ways to sort a set of objects.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: The Button Box</a></p> <p><u>Interactive Website</u></p> <p><u>Video</u> <a href="#">Learning about Sorting</a></p> <p><u>Downloadable Resources</u> <a href="#">Shape Sort: Teachers Pay Teachers Free Download</a> <a href="#">Sorting Shapes 3D- Teachers Pay Teachers Free Download</a> <a href="#">Sorting Letters and Numbers-Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Lakeshore Sorting Game</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	Teddy bear counters Unifix cubes Attribute blocks Hula hoops
<b>Essential Vocabulary</b>	describe, observe, different, pattern, sort, group, attribute

**Marking Period: 2nd Nine Weeks**

**Days: 4**

**Reporting Category/Strand: Patterns, Functions, and Algebra**

<b>SOL MK.16</b>	<b>The student will identify, describe, and extend repeating patterns.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- patterns are a way to recognize order and organize their world and to predict what comes next in an arrangement.</li> <li>- the sound pattern ‘snap, clap, snap, clap’ is the same in form as the color pattern ‘red, blue, red, blue’.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Observe and identify the basic repeating pattern (core) found in repeating patterns of common objects, sounds, and movements that occur in practical situations.</li> <li>- Identify the core in a repeating pattern.</li> <li>- Extend a repeating pattern by adding at least two repetitions to the pattern.</li> <li>- Create a repeating pattern.</li> <li>- Compare similarities and differences between patterns.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u><a href="#">Textbook Correlation</a></u> Harcourt Math</p> <p><u><a href="#">Lesson Plans</a></u> <u><a href="#">Pattern Learning Centers by Mrs. Ricca K</a></u> <u><a href="#">Patterns by Kindergarten, Kindergarten</a></u></p>



**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Interactive Website</u>  <a href="#">Internet 4 Kids</a>  <a href="#">Pattern Matcher PBS Kids</a>  <a href="#">Turkey Math Smartboard Exchange</a></p> <p><u>Video</u>  <a href="#">Patterns</a>  <a href="#">Pattern by School tube</a></p> <p><u>Downloadable Resources</u>  <a href="#">Patterns by Kidzone</a>  <a href="#">Repeating Patterns Draw What Comes Next</a></p> <p><u>Literature Connection</u>  <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u>            Lakeshore Patterns Game            Cubes            Teddy Bears            Attribute Links, Blocks</p>
<b>Essential Vocabulary</b>	patterns, predict, extend, repeating pattern, core

**Marking Period: 2nd Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Measurement**

<b>SOL MK.7</b>	<b>The student will recognize a penny, nickel, dime, and quarter and will determine the value of a collection of pennies and/or nickels whose total value is 10 cents or less.</b>
<b>Essential Knowledge/Skills/Understandings</b>	All students should: <ul style="list-style-type: none"> <li>- Develop common referents for identifying pennies, nickels, dimes, and quarters.</li> <li>- Understand the value of a collection of coins whose value is 10 cents or less.</li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Describe the properties/characteristics (e.g., color, relative size) of a penny, nickel, dime, and quarter.</li> <li>- Identify a penny, nickel, dime, and quarter.</li> <li>- Identify that a nickel is the same value as five pennies.</li> <li>- Count a randomly placed collection of pennies and/or nickels (or models of pennies and/or nickels) whose value is 10 cents or less, and determine the value of the collection</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Money Math</a> <a href="#">Discovering Math: Counting Coins by Discovery Ed</a></p> <p><u>Interactive Website</u> <a href="#">Money by Smart Exchange</a></p> <p><u>Videos</u> <a href="#">School Tube: The Coin Song</a> <a href="#">School Tube: Coins in my Hands</a> <a href="#">School Tube: Show Me the Money</a> <a href="#">Counting Coins by Brain pop Jr.</a> <a href="#">Equivalent Coins by Brain Pop Jr.</a></p> <p><u>Downloadable Resources</u> <a href="#">Money Booklets-Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	Lakeshore Play Store Money wallets Coins
<b>Essential Vocabulary</b>	penny, nickel, dime, quarter, coin, cents, value

**Marking Period: 3rd Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL MK.1</b>	<b>The student, given two sets, each containing 10 or fewer concrete objects, will identify and describe one set as having more, fewer, or the same number of members as the other set, using the concept of one-to-one correspondence.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand how quantities relate to each other, which leads to an understanding of how numbers are related to each other.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Match each member of one set with each member of another set, using the concept of one-to-one correspondence to compare the number of members between sets, where each set contains 10 or fewer objects.</li> <li>- Compare and describe two sets of 10 or fewer objects, using the terms more, fewer, and the same.</li> <li>- Given a set of objects, construct a second set which has more, fewer or the same number of objects.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u><a href="#">Textbook Correlation</a></u> Harcourt Math</p> <p><u><a href="#">Lesson Plans</a></u> <a href="#">VDOE: More, Fewer or the Same?</a></p> <p><u><a href="#">Interactive Websites</a></u></p> <p><u><a href="#">Videos</a></u> <u><a href="#">Downloadable Resources</a></u></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><a href="#">Math Wire: Ten frame mat</a>  <a href="#">Math Wire: Dot plates</a>  <a href="#">Math Wire: Domino Math Mats-Game board, instructions and pieces.</a>  <a href="#">All About Numbers Flipchart: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connections</u>  <a href="#">VDOE: All subject area literature correlation</a></p> <p><i>Ten Black Dots by Donald Crews</i></p> <p><u>Classroom Materials</u>  Bear Counters  Cubes  Dominoes  Number Flash Cards</p>
<b>Essential Vocabulary</b>	more, fewer, same, equal

**Marking Period: 3rd Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL MK.3</b>	<b>The student, given an ordered set of ten objects and/or pictures, will indicate the ordinal position of each object, first through tenth, and the ordered position of each object.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should use ordinal numbers to describe the position of objects in a sequence.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Identify the ordinal positions first through tenth using ordered sets of ten concrete objects and/or pictures of such sets presented from <ul style="list-style-type: none"> <li>- left-to-right;</li> <li>- right-to-left;</li> <li>- top-to-bottom; and/or</li> <li>- bottom-to-top.</li> </ul> </li> </ul>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Counting on the Bus</a> <a href="#">Henry the Fourth- Stuart J. Murphy-Math Start</a></p> <p><u>Interactive Website</u> <a href="#">Ordinal Numbers First and Last by Smart Exchange</a></p> <p><u>Video</u> <a href="#">Discovery Education: Cardinal/Ordinal Numbers</a> <a href="#">The Number Crew: The Party</a></p> <p><u>Downloadable Resources</u> <a href="#">Ordinal Numbers Math Center: Teachers Pay Teachers Free Download</a> <a href="#">Thanksgiving Ordinal Numbers: Teachers Pay Teachers Free Download</a> <a href="#">We Know Our Ordinal Numbers: Teachers Pay Teachers Free Download</a> <a href="#">Sporty Ordinal Numbers: Teachers Pay Teachers Free Download</a> <a href="#">Ordinal Word Practice: Teachers Pay Teachers Free Download</a> <a href="#">All About Numbers Flipchart: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Ordinal number flash cards</p>
<b>Essential Vocabulary</b>	first-tenth, last, middle, left to right, top to bottom

**Marking Period: 3rd Nine Weeks**  
**Days: 10**

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

**Reporting Category/Strand: Measurement**

<b>SOL MK.7</b>	<b>The student will recognize a penny, nickel, dime, and quarter and will determine the value of a collection of pennies and/or nickels whose total value is 10 cents or less.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should:</p> <ul style="list-style-type: none"> <li>- Develop common referents for identifying pennies, nickels, dimes, and quarters.</li> <li>- Understand the value of a collection of coins whose value is 10 cents or less.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Describe the properties/characteristics (e.g., color, relativesize) of a penny, nickel, dime, and quarter.</li> <li>- Identify a penny, nickel, dime, and quarter.</li> <li>- Identify that a nickel is the same value as five pennies.</li> <li>- Count a randomly placed collection of pennies and/or nickels (or models of pennies and/or nickels) whose value is 10 cents or less, and determine the value of the collection.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Money Math</a></p> <p><u>Interactive Website</u></p> <p><u>Videos</u> <a href="#">School Tube: The Coin Song</a> <a href="#">School Tube: Coins in my Hands</a> <a href="#">School Tube: Show Me the Money</a> <a href="#">Counting Coins by Brain pop Jr.</a> <a href="#">Equivalent Coins by Brain Pop Jr.</a></p> <p><u>Downloadable Resources</u> <a href="#">Money Booklets-Teachers Pay Teachers Free Download</a></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Lakeshore Play Store Money wallets Coins</p>
<b>Essential Vocabulary</b>	penny, nickel , dime, quarter, coin, cents, value

**Marking Period: 3rd Nine Weeks**

**Days: 5**

**Reporting Category/Strand: Measurement**

<b>SOL MK.8</b>	<b>The student will identify the instruments used to measure length (ruler), weight (scale), time (clock: digital and analog; calendar: day, month, and season), and temperature (thermometer).</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should Identify an appropriate measuring tool for a given unit of measure.</p> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Identify a ruler as an instrument to measure length.</li> <li>- Identify different types of scales as instruments to measure weight. Identify different types of clocks (analog and digital) as instruments to measure time.</li> <li>- Identify the components of a calendar, including days, months, and seasons. Identify different types of thermometers as instruments used to measure temperature.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Lesson Plans</u>  <a href="#">VDOE: Calendar Math</a></p> <p><u>Interactive Website</u>  <a href="#">Which Tool for Measuring by Harcourt</a>  <a href="#">It's a Date by Beacon Learning Center</a>  <a href="#">Non-Standard Measure of Animals by Smart Exchange</a>  <a href="#">Days, Weeks, Months by Smart Exchange</a></p> <p><u>Video</u>  <a href="#">Math Monsters Non-standard Measurement by Discovery Ed</a></p> <p><a href="#">Parts of a Clock by Brain Pop Jr.</a>  <a href="#">Temperature by Brain Pop Jr.</a>  <a href="#">School Tube: Four Seasons-Harry Kindergarten</a>  <a href="#">School Tube: Four Seasons</a></p> <p><u>Downloadable Resources</u>  <a href="#">Non-Standard Measurement Power Point</a>  <a href="#">Monthly Calendar Templates: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u>  <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u>  Rulers  Judy Clocks  Scales  Thermometers</p>
<b>Essential Vocabulary</b>	measure, calendar, days, month, season, count, yesterday, today, tomorrow, pattern

**Marking Period: 3rd Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Measurement**



**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<b>SOL MK.9</b>	<b>The student will tell time to the hour, using analog and digital clocks.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should:</p> <ul style="list-style-type: none"> <li>- Apply an appropriate technique, depending on the type of clock, to determine time to the nearest hour.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Tell time on an analog clock to the hour.</li> <li>- Tell time on a digital clock to the hour.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: What Time Is It?</a></p> <p><u>Interactive Website</u> <a href="#">Time by Smart Exchange</a></p> <p><u>Video</u> <a href="#">Time to the Hour by Brain Pop Jr.</a> <a href="#">Parts of a Clock by Brain Pop Jr.</a> <a href="#">Telling Time by Discovery Ed</a></p> <p><u>Downloadable Resources</u> <a href="#">Write the Time</a> <a href="#">Read and Write the Time</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Judy Clocks AIMS Time and Money</p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	Plate Clocks
<b>Essential Vocabulary</b>	analog, digital, clock, hour, minuter, hands, o'clock

**Marking Period: 4th Nine Weeks**

**Days: 10**

**Reporting Category/Strand: Number and Number Sense**

<b>SOL MK.5</b>	<b>The student will identify the parts of a set and/or region that represent fractions for halves and fourths.</b>
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- fractional parts are equal shares of a whole region or a whole set.</li> <li>- the fraction name (half, fourth) tells the number of equal parts in the whole.</li> <li>- the fraction name (half, fourth) of the set model is a subset of the whole set with equal numbers.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Recognize fractions as representing parts of equal size of a whole.</li> <li>- Given a region, identify half and/or a fourth of the region.</li> <li>- Given a set, identify half and/or a fourth of the set.</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u><a href="#">Textbook Correlation</a></u> Harcourt Math</p> <p><u><a href="#">Lesson Plans</a></u> <a href="#">VDOE: Fractions</a></p> <p><u><a href="#">Interactive Website</a></u> <a href="#">Fractions by Smart Exchange</a></p> <p><u><a href="#">Video</a></u></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><a href="#">Equivalent Fractions by Brain Pop Jr.</a> <a href="#">Basic Parts of a Whole by Brain Pop Jr.</a></p> <p><u>Downloadable Resources</u> <a href="#">Fraction Worksheet: Teachers Pay Teachers Free Download</a> <a href="#">Fraction Booklet: Teachers Pay Teachers Free Download</a> <a href="#">Fraction Leprechaun : Teachers Pay Teachers Free Download</a> <a href="#">One Half &amp; One Fourth: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Lakeshore Magnetic Fractions Fraction Burgers</p>
<b>Essential Vocabulary</b>	fraction, half, fourth, whole, part, fair share, equal

**Marking Period: 4th Nine Weeks**

**Days: 12**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL MK.6 (Addition)</b>	The student will model adding and subtracting whole numbers, using up to 10 concrete objects.
<b>Essential Knowledge/Skills/Understandings</b>	<p>All students should understand that:</p> <ul style="list-style-type: none"> <li>- addition means putting things together.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Combine two sets with known quantities in each set, and count the combined set using up to 10 concrete objects, to determine the sum, where the sum is not greater than 10.</li> </ul>
<b>Essential Questions</b>	

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

<b>Primary Resources</b>	<p><u>Textbook Correlation</u> Harcourt Math</p> <p><u>Lesson Plans</u> <a href="#">VDOE: Addition</a></p> <p><u>Interactive Website</u> <a href="#">Sum Sense Game</a> <a href="#">Harcourt Busy Bees Addition/Subtraction</a> <a href="#">Addition by Smart Exchange</a></p> <p><u>Video</u> <a href="#">Making Ten by Brain Pop Jr.</a> <a href="#">Counting on with Addition by Brain Pop Jr.</a> <a href="#">School Tube : Add 'Em Up</a></p> <p><u>Downloadable Resources</u> <a href="#">Addition Story Problems: Teachers Pay Teachers Free Download</a> <a href="#">Addition Math Center: Dunk It Dominoes: Teachers Pay Teachers Free Download</a> <a href="#">Summertime Math Stations: Teachers Pay Teachers Free Download</a></p> <p><u>Literature Connection</u> <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u> Beans Buttons Cereal Candy Dominoes Dice Cubes Counting Bears Lakeshore Addition Game</p>
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**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	Ten frames
<b>Essential Vocabulary</b>	add, add-on, plus, sum, total

**Marking Period: 4th Nine Weeks**

**Days: 12**

**Reporting Category/Strand: Computation and Estimation**

<b>SOL MK.6 (Subtraction)</b>	The student will model adding and subtracting whole numbers, using up to 10 concrete objects.
<b>Essential Knowledge/Skills/Understandings</b>	<p>Understand that:</p> <ul style="list-style-type: none"> <li>- subtraction is the inverse of addition and means to separate things out.</li> </ul> <p>The student will use problem solving, mathematical communication, mathematical reasoning, connections, and representations to:</p> <ul style="list-style-type: none"> <li>- Given a set of 10 or fewer concrete objects, remove, take away, or separate part of the set and determine the result</li> </ul>
<b>Essential Questions</b>	
<b>Primary Resources</b>	<p><u><a href="#">Textbook Correlation</a></u> Harcourt Math</p> <p><u><a href="#">Lesson Plans</a></u> <a href="#">VDOE: Subtraction</a></p> <p><u><a href="#">Interactive Website</a></u> <a href="#">Subtraction Game</a> <a href="#">Harcourt Busy Bees</a> <a href="#">Subtraction by Smart Exchange</a></p> <p><u><a href="#">Video</a></u> <a href="#">Basic Subtraction by Brain Pop Jr.</a> <a href="#">School Tube: Add and Subtract Body Part Dance</a> <a href="#">School Tube: Adding and Subtracting Song</a></p>

**KG Math Curriculum Guide  
Lunenburg County Public Schools  
June 2014**

	<p><u>Downloadable Resources</u>  <a href="#">Fun Subtraction Worksheet by Teachers Pay Teachers Free</a>  <a href="#">Leaping Frog Subtraction by Teachers Pay Teachers Free</a></p> <p><u>Literature Connection</u>  <a href="#">VDOE: All subject area literature correlation</a></p> <p><u>Classroom Materials</u>  Beans  Buttons  Cereal  Candy  Dominoes  Dice  Ten Frame  Cubes  Counting Bears  Lakeshore Subtraction Game</p>
<b>Essential Vocabulary</b>	subtract, difference, minus