

Danvers Public Schools

Pacing Guide 2009 – 2010

2nd Edition of Investigations in Number, Data, and Space

Kindergarten

Unit Name	Essential Lessons	Mathematical Emphasis	Vocabulary	Assessments
<p>Unit K-1: Who Is In School Today? (Classroom Routines and Materials)</p> <p>Standards K.N.1 K.N.2 K.P.1 K.P.2 K.D.1</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Investigation 3</p> <p><u>Classroom Routines</u></p> <ul style="list-style-type: none"> • Calendar • Attendance 	<p>K.N.1 Count by ones to at least 20.</p> <p>K.N.2 Match quantities up to at least 10 with numerals and words.</p> <p>K.P.1 Identify the attributes of objects as a foundation for sorting and classifying, e.g., a red truck, a red block, and a red ball share the attribute of being red; a square block, a square cracker, and a square book share the attribute of being square shaped.</p> <p>K.P.2 Sort and classify objects by color, shape, size, number, and other properties.</p> <p>K.D.1 Collect, sort, organize, and draw conclusions about data using concrete objects, pictures, numbers, and graphs.</p>	<p>Object Set Chart Count Represent Number(s) Manipulate More than Less than Same number as Attribute Classify Size Side Corner Collect Graph Data Calendar Days Months Year Double-check</p>	<p>End of Unit Due October 8:</p> <p><u>Assessment Checklist: <i>Counting</i></u></p> <ul style="list-style-type: none"> • Knows the names of the numbers in order • Counts each object once and only once • Has a system for keeping track • Double checks

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<p>Unit K-2: Counting and Comparing (Measurement and the Number System 1)</p> <p>Standards: K.N.1 K.N.2 K.N.3 K.N.4 K.N.6* K.N.8 K.M.1 K.M.2**</p>	<p>Investigations 1</p> <p>Investigation 2</p> <p>Supplemental Activity 2 (Ordinal nos.)</p> <p><u>Classroom Routines</u></p> <ul style="list-style-type: none"> • Calendar • Attendance • Today’s Question 	<p>K.N.1 Count by ones to at least 20.</p> <p>K.N.2 Match quantities up to at least 10 with numerals and words.</p> <p>K.N.3 Identify positions of objects in sequences (e.g., first, second) up to fifth.</p> <p>K.N.4 Compare sets of up to at least 10 concrete objects using appropriate language (e.g., none, more than, fewer than, same number of, one more than), and order numbers.</p> <p>K.N.6 *Identify U.S. coins by name.</p> <p>K.N.8 Estimate the number of objects in a group and verify results.</p> <p>K.M.1 Recognize and compare the attributes of length, volume/capacity, weight, area, and time using appropriate language, e.g., longer, taller, shorter, same length; heavier, lighter, same weight; holds more, holds less, holds the same amount.</p> <p>K.M.2 **Make and use estimates of measurements from everyday experiences.</p>	<p>Biggest Compare Count Counting backwards Double-check Equal Fewer Fewest Handful In order Inventory length Longer Longer than Longest Measure More order Same Shorter Shorter than Shortest Size Smallest Taller Ten-frame Zero 1st, 2nd, ... 10th, last</p>	<ul style="list-style-type: none"> • Session 1.1 Checklist: <i>Counting</i> • Session 2.1 Checklist: <i>Comparing Length</i> • Session 2.4 Checklist: <i>Comparing Quantities</i> <p>Due November 18:</p> <ul style="list-style-type: none"> • Session 2.13: End-of-unit Grab and Count Assessment Checklist * <p>*Only do the assessment tasks with the students who have not yet met the benchmarks or those students you have questions about. You do not need to meet with students, who based on your notes, can consistently count a set of 10 objects accurately.</p>

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<p>Unit K-3: What Comes Next? (Patterns and Functions)</p> <p>Standards: K.P.2 K.P.3</p>	<p>Investigations 1</p> <p>Investigations 2</p> <p>Investigations 3</p> <p><u>Classroom routines</u></p> <ul style="list-style-type: none"> • Calendar • Attendance • Today's Question • Patterns on the Pocket Chart 	<p>K.P.2 Sort and classify objects by color, shape, size, number, and other properties.</p> <p>K.P.3 Identify, reproduce, describe, extend, and create color, rhythmic, shape, number, and letter repeating patterns with simple attributes, e.g., ABABAB....</p>	<p>Break down Decompose Describe Different Extend Observe Pattern Repeat Rule Same Unit</p>	<ul style="list-style-type: none"> • Session 1.5 Checklist: <i>Repeating Patterns</i> • Session 3.1 Checklist: <i>Identifying the Unit of a Pattern</i> <p>Due December 23:</p> <p>Session 3.6: End-of-unit Identifying the Unit of a Pattern Assessment Checklist</p>

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<p>Unit K-4: Measuring and Counting (Measurement and the Number System 2)</p> <p>Standards K.N.1 K.N.4 K.N.6* K.N.7 K.M.1 K.M.2** K.M.3</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Investigation 3</p> <p>Investigation 4</p> <p><u>Classroom Routines</u></p> <ul style="list-style-type: none"> • Calendar • Attendance • Today’s Question • Patterns on the Pocket Chart 	<p>K.N.1 Count by ones to at least 20.</p> <p>K.N.4 Compare sets of up to at least 10 concrete objects using appropriate language (e.g., none, more than, fewer than, same number of, one more than), and order numbers.</p> <p>K.N.6 *Identify U.S. coins by name.</p> <p>K.N.7 Use objects and drawings to model and solve related addition and subtraction problems to ten. Use objects and drawings to model and solve related addition and subtraction problems to ten.</p> <p>K.M.1 Recognize and compare the attributes of length, volume/capacity, weight, area, and time using appropriate language, e.g., longer, taller, shorter, same length; heavier, lighter, same weight; holds more, holds less, holds the same amount.</p> <p>K.M.2 **Make and use estimates of measurements from everyday experiences.</p> <p>K.M.3 Use nonstandard units to measure length, area, weight, and capacity</p>	<p>Add Arrangement Combining Compare Fewer Image Larger Length Less Long Longest Measure Minus More Order Penny Plus Remove Removing Shortest total</p>	<ul style="list-style-type: none"> • Session 1.1 Checklist: <i>Measuring Length</i> • Session 2.1 Checklist: <i>Counting</i> • Session 3.3 Checklist: <i>One More, One Fewer</i> <p>Due February 10:</p> <ul style="list-style-type: none"> • End-of-unit Measuring with Cubes Assessment Checklist

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<p>Unit K-5: Make a Shape, Build a Block (2D and 3D Geometry)</p> <p>Standards K.N.5* K.G.1 K.G.2 K.G.3 K.G.4**</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Supplemental Activity 4 (Spatial Relationships)</p> <p>Supplemental Activity 8 (Equal Parts)</p> <p>Investigation 3</p> <p><u>Classroom Routines</u></p> <ul style="list-style-type: none"> • Calendar • Attendance • Today’s Question • Patterns on the Pocket Chart 	<p>K.N.5 *Understands the concepts of whole and half.</p> <p>K.G. 1 Name, describe, sort, and draw simple two-dimensional shapes.</p> <p>K.G.2 Describe attributes of two-dimensional shapes, e.g., number of sides, number of corners.</p> <p>K.G.3 Name and compare three-dimensional shapes.</p> <p>K.G.4 **Identify positions of objects in space, and use appropriate language (eg.,beside, inside, next to, close to, above,below,apart) to describe and compare their relative positions</p>	<p>Above, below Behind Circle Cone Corners Cube Curved Cylinder Different Edge Far/farther Face Geoboard Hexagon Matching Near/nearer On top Outline Over, under Points Rectangle Rectangular prism Rhombus Right, left Round Same Side Sphere Squares Square prism Straight Trapezoid Triangle Triangular prism Turn Upside-down</p>	<ul style="list-style-type: none"> • Session 1.1 Checklist: <i>Describing Shapes</i> • Session 1.4 Checklist: <i>Constructing 2-D and 3-D Shapes</i> • Session 2.2 Checklist: Constructing and decomposing 2-D and 3-D shapes <p>Due March 26</p> <ul style="list-style-type: none"> • End-of-unit Pattern Block Puzzles Assessment Checklist • End-of-unit Build a Block Assessment Checklist <p><u>Additional Vocabulary for U 5</u> In back of In front of Beside Between Top Bottom Middle Equal One-half One-fourth</p>

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<p>Unit K-6: How Many Do You Have? (Addition, Subtraction, and the Number System)</p> <p>Standards: K.N.1 K.N.6* K.N.7 K.N.8 K.M.3 K.P.4 **</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Investigation 3</p> <p>Supplemental Activity 9 (Estimation)</p> <p>Investigation 4</p> <p>Supplemental Activity 16 (Counting by 5's)</p> <p>Supplemental Activity 18 (Using Money)</p> <p><u>Classroom Routines</u></p> <ul style="list-style-type: none"> • Calendar • Attendance • Today's Question • Patterns on the Pocket Chart 	<p>K.N.1 Count by ones to at least 20.</p> <p>K.N.6 *Identify U.S. coins by name.</p> <p>K.N.7 Use objects and drawings to model and solve related addition and subtraction</p> <p>K.N.8 Estimate the number of objects in a group and verify the results.</p> <p>K.M.3 Use nonstandard units to measure length, area, weight, and capacity.</p> <p>K.P.4**Count by fives and tens at least up to 50.</p>	<p>Add</p> <p>Added</p> <p>Arrangements</p> <p>Combination</p> <p>Combined</p> <p>Digit</p> <p>Eighteen</p> <p>Eleven</p> <p>Equal sign (=)</p> <p>Equation</p> <p>Fifteen</p> <p>Fourteen</p> <p>How long</p> <p>Length</p> <p>Less</p> <p>Least</p> <p>Measure</p> <p>Minus</p> <p>More</p> <p>Most</p> <p>Nineteen</p> <p>Plus</p> <p>Plus sign (+)</p> <p>Remove</p> <p>Same</p> <p>Seventeen</p> <p>Sixteen</p> <p>Thirteen</p> <p>Twelve</p> <p>Twenty</p>	<ul style="list-style-type: none"> • Session 1.3 Checklist: <i>Writing Numbers to 10</i> • Session 1.4 Checklist: <i>Counting</i> • Session 2.6 Checklist: <i>Addition</i> <p>Due May 12:</p> <ul style="list-style-type: none"> • End-of-unit Counting Jar Assessment Checklist *

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<p>Unit K-7: Sorting and Surveys (Data Analysis)</p> <p>Standards: K.P.2 K.M.2 K.D.1</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Investigation 3</p> <p>Supplemental Activity 25 (Weight: lighter, heavier)</p> <p><u>Classroom Routines</u></p> <ul style="list-style-type: none"> • Calendar • Attendance • Today’s Question • Patterns on the Pocket Chart 	<p>K.P.2 Sort and classify objects by color, shape, size, number, and other properties.</p> <p>K.M.2 **Make and use estimates of measurements from everyday experiences.</p> <p>K.D.1 Collect, sort, organize, and draw conclusions about data using concrete objects, pictures, numbers, and graphs.</p>	<p>Attributes</p> <p>Category</p> <p>Comparing</p> <p>Collecting</p> <p>Count</p> <p>Data</p> <p>Describe</p> <p>Different</p> <p>Equal (use = instead of “same”)</p> <p>Graph</p> <p>Heavy</p> <p>Heavier</p> <p>Light</p> <p>Lighter</p> <p>Record</p> <p>Response</p> <p>Same</p> <p>Skip counting</p> <p>Sort</p> <p>Survey</p>	<ul style="list-style-type: none"> • Session 1.1 Checklist: <i>Representation of Data</i> • Session 1.4 Checklist: <i>Using Data to Solve Problems</i> • Session 2.2 Checklist: <i>Sorting</i> <p>Due June 11:</p> <ul style="list-style-type: none"> • End-of-Unit Assessment Checklist-Sorting/Grouping Attribute Blocks • End-of-Unit Assessment Checklist- <i>Solving a Problem Using Favorite Meals Data Chart</i>