

Danvers Public Schools
Pacing Guide 2009 – 2010
2nd Edition of Investigations in Number, Data, and Space
Grade 1

Unit Name	Essential Lessons	Mathematical Emphasis	Vocabulary	Assessments
<p>Unit 1: How Many of Each? <i>(Addition, Subtraction, and the Number System 1)</i></p> <p>Standards: 2.N.1 2.N.2 2.N.4 2.N.6 2.N.7 2.M.1</p>	<p>Investigation 1 Investigation 2 Investigation 3 Investigation 4</p> <p>See sheet on greater than/less than (2.N.4)</p> <p><u>Ten-Minute Math</u></p> <ul style="list-style-type: none"> • Morning Meeting • Start With/Go To • Quick Images 	<p>2.N.1 Name and write (in numerals) whole numbers to 1000, identify the place values of the digits, and order the numbers. +</p> <p>2.N.2 Identify and distinguish among multiple uses of numbers, including cardinal (to tell how many) and ordinal (to tell which one in an ordered list), and numbers as labels and as measurements. +</p> <p>2.N.4 Compare whole numbers using terms and symbols, e.g., less than, equal to, greater than (<, =, >).</p> <p>2.N.7 Demonstrate an understanding of various meanings of addition and subtraction, e.g., addition as combination (plus, combined with, more); subtraction as comparison (how much less, how much more), equalizing (how many more are needed to make these equal), and separation (how much remaining).</p> <p>2.M.1 Identify parts of the day (e.g., morning, afternoon, evening), week, month, and calendar.</p>	<p>Add Addition Calendar Cent Combinations Combine Compare Counting all back Counting on Data Digit Equal Equal to Equation estimate Fewer Greater than Heads Image In order Larger Largest Less than More than Number line Penny Plus Row</p>	<ul style="list-style-type: none"> • Session 2.6: <i>Count 20 and Quick Images</i> • Session 3.6: <i>Double Compare and Combing Games</i> <p>Due October 21:</p> <ul style="list-style-type: none"> • Session 4.7: <i>End-of-the-unit assessment</i>

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Unit 2: Making Shapes and Designing Quilts <i>(2D Geometry)</i> Standards 2.N.3* 2.G.1 2.G.2 2.G.4 2.G.5 2.G.6 2.G.7 2.M.1	Investigation 1 Investigation 2 Investigation 3 Supplemental Activity Master 3 (Mirror Images) Supplemental Activity Master 4 (Slides, Flips, Turns) <u>Ten-Minute Math</u> <ul style="list-style-type: none"> • Morning Meeting • Start With/Get To • Quick Images 	2.N.3* Identify and represent common fractions ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$) as parts of wholes, parts of groups, and numbers on the number line. 2.G.1 Name, describe, sort, and draw simple two-dimensional shapes. 2.G.2 Describe attributes of two-dimensional shapes, e.g., number of sides, number of corners. 2.G.4 Identify shapes that have been rotated, reflected, translated, and enlarged. Describe positions of objects in space, and use appropriate language (e.g., left, right, up, down, beside, inside, next to, close to, above, below, apart) to describe and compare their relative positions. 2.G.5 Identify symmetry in 2-D shapes. 2.G.6 Make and use estimates of measurements from everyday experiences.	Circle Compose Corner Decompose Flip/reflect Geometry Hexagon Pattern Quadrilateral Rectangle Rhombus Shape Slide Symmetry Square Triangle Turn/rotate 2-dimensional Visualize	<ul style="list-style-type: none"> • Session 1.7: <i>Many Ways to Fill a Hexagon</i> • Session 2.5: <i>What is a triangle?</i> Due November 16: <ul style="list-style-type: none"> • Session 3.4: <i>End-of-unit assessment</i>

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Unit 3: Solving Story Problems <i>(Addition, Subtraction, and the Number System 2)</i> Standards: 2.N.1 2.N.2 2.N.4 2.N.6* 2.N.7 2.N.8 2.N.9 2.P.2 2.M.1	Investigation 1 Investigation 2 Investigation 3 Investigation 4 <u>Ten-Minute Math</u> <ul style="list-style-type: none"> • Morning Meeting • Start With/Get To • Quick Images 	2.N.1 Name and write (in numerals) whole numbers to 1000, identify the place values of the digits, and order the numbers. + 2.N.2 Identify and distinguish among multiple uses of numbers, including cardinal (to tell how many) and ordinal (to tell which one in an ordered list), and numbers as labels and as measurements. + 2.N.4 Compare whole numbers using terms and symbols, e.g., less than, equal to, greater than (<, =, >). 2.N.6* Identify the value of all U.S. coins, and \$1, \$5, \$10, and \$20 bills. Find the value of a collection of coins and dollar bills and different ways to represent an amount of money up to \$5. Use appropriate notation, e.g., 69¢, \$1.35 2.N.7 Demonstrate an understanding of various meanings of addition and subtraction, e.g., addition as combination (plus, combined with, more); subtraction as comparison (how much less, how much more), equalizing (how many more are needed to make these equal), and separation (how much remaining).	100 chart Add Addition Between Combination Compose Counting backward Counting on Decompose Digit Equal Equal sign Fewer Greater than Less than Minus More More than Number line Pattern Plus Strategy Story problem Subtract Sum Take away Total	<ul style="list-style-type: none"> • Session 1.9: <i>How many of Each?</i> • Session 3.5: <i>How many books?</i> • Session 4.7: <i>Counting Strips</i> Due January 6: <ul style="list-style-type: none"> • Session 4.8: <i>End-of-unit Assessment</i>

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<p>Unit 4: What Would You Rather Be? <i>(Data Analysis)</i></p> <p>Standards: 2.M.1 2.D.1 2.D.2 2.D.3 2.D.4</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Investigation 3</p> <p>Supplemental Activity Master 11 (Median & Range)</p> <p>Supplemental Activity Master 12 (Probability Tallies)</p> <p><u>Ten-Minute Math</u></p> <ul style="list-style-type: none"> • Morning Meeting • Start With/Get To • Quick Images 	<p>2.M.1 Identify parts of the day (e.g., morning, afternoon, evening), week, month, and calendar.</p> <p>2.D.1 Use interviews, surveys, and observations to gather data about themselves and their surroundings.</p> <p>2.D.2 Organize, classify, represent, and interpret data using tallies, charts, tables, bar graphs, pictographs, and Venn diagrams; interpret the representations.</p> <p>2.D.3 Formulate inferences (draw conclusions) and make educated guesses (conjectures) about a situation based on information gained from data.</p> <p>2.D.4 Decide which outcomes of experiments are most likely.</p>	<p>Attribute</p> <p>Compare Data</p> <p>Describe Equation</p> <p>Largest Middle (Median)</p> <p>Range (difference)</p> <p>Representation</p> <p>Smallest</p> <p>Sorting Spinner</p> <p>Survey</p> <p>Tally mark</p>	<ul style="list-style-type: none"> • Session 2.5: <i>Deep Sea or Outer Space</i> <p>Due: January 27: Session 3.4: <i>End-of-unit assessment</i></p>

Danvers Public Schools
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Grade 1

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<p>Unit 5: Fish Lengths and Animal Jumps <i>(Measurement)</i></p> <p>Standards: 2.N.3* 2.M.1 2.M.2 2.M.3 2.M.4 2.M.5</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Supplemental Activity Master 43 & 53 (Telling Time hour and half hour)</p> <p><u>Ten-Minute Math</u></p> <ul style="list-style-type: none"> • Morning Meeting • Start With/Get To • Quick Images • Quick Surveys 	<p>2.N.3* Identify and represent common fractions (1/2, 1/3, 1/4) as parts of wholes, parts of groups, and numbers on the number line.</p> <p>2.M.1 Identify parts of the day (e.g., morning, afternoon, evening), week, month, and calendar.</p> <p>2.M.2 Tell time at quarter-hour intervals on analog and digital clocks using a.m. and p.m.</p> <p>2.M.3 Compare the length, weight, area, and volume of two or more objects by using direct comparison.</p> <p>2.M.4 Measure and compare common objects using metric and English units of length measurement, e.g., centimeter, inch.</p> <p>2.M.5 Select and correctly use the appropriate measurement tools, e.g., ruler, balance scale, thermometer.</p>	<p>Distance Height In-between Inch Length Longest Measure Measurement O'clock Shortest Thirty (as in 5 thirty) Unit</p>	<ul style="list-style-type: none"> • Session 1.6: <i>How Long Is This Fish?</i> <p>Due February 12:</p> <ul style="list-style-type: none"> • Session 2.5: <i>End-of-unit assessment</i>

Danvers Public Schools
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Grade 1

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<p>Unit 6: Number Games and Crayon Puzzles <i>(Addition, Subtraction, and the Number System 3)</i></p> <p>Standards: 2.N.6* 2.N.7 2.N.8 2.N.9 2.P.5 2.P.6 2.M.1</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Investigation 3</p> <p><u>Ten-Minute Math</u></p> <ul style="list-style-type: none"> • Morning Meeting • Start With/Get To • Quick Images • Quick Surveys 	<p>2.N.6*Identify the value of all U.S. coins, and \$1, \$5, \$10, and \$20 bills. Find the value of a collection of coins and dollar bills and different ways to represent an amount of money up to \$5. Use appropriate notation, e.g., 69¢, \$1.35</p> <p>2.N.7 Demonstrate an understanding of various meanings of addition and subtraction, e.g., addition as combination (plus, combined with, more); subtraction as comparison (how much less, how much more), equalizing (how many more are needed to make these equal), and separation (how much remaining).</p> <p>2.N.8 Understand and use the inverse relationship between addition and subtraction (e.g., $8 + 6 = 14$ is equivalent to $14 - 6 = 8$ and is also equivalent to $14 - 8 = 6$) to solve problems and check solutions.</p> <p>2.N.9 Know addition facts (addends to ten) and related subtraction facts, and use them to solve problems.</p> <p>2.P.5 Construct and solve open sentences that have variables, e.g., $\square + 7 = 10$.</p>	<p>Add Addition Combination Combine Count all Count back Count on Count up Equal sign Equation Fewer Minus More Plus sign Story problem Sum Ten-frame</p>	<ul style="list-style-type: none"> • Session 2.5: <i>Ten Crayons in All</i> • Session 3.3 Checklist: <i>Counting On</i> <p>Due March 24:</p> <ul style="list-style-type: none"> • Session 3.8: <i>End-of-unit Assessment</i>

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<p>Unit 7: Color, Shape, and Number Patterns <i>(Patterns and Functions)</i></p> <p>Standards: 2.N.5 2.P.1 2.P.2 2.P.3 2.P.4 2.M.1</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Supplemental Activity Master 55 (Even and Odd)</p> <p><u>Ten-Minute Math</u></p> <ul style="list-style-type: none"> • Start With/Get To • Quick Survey • Tell a Story • Morning Meeting 	<p>2.N.5 Identify odd and even numbers and determine whether a set of objects has an odd or even number of elements.</p> <p>2.P.1 Identify, reproduce, describe, extend, and create simple rhythmic, shape, size, number, color, and letter repeating patterns.</p> <p>2.P.2 Identify different patterns on the hundreds chart.</p> <p>2.P.3 Describe and create addition and subtraction number patterns, e.g., 1, 4, 7, 10...; or 25, 23, 21....</p> <p>2.P.4 Skip count by twos, fives, and tens up to at least 50, starting at any number</p> <p>2.M.1 Identify parts of the day (e.g., morning, afternoon, evening), week, month, and calendar.</p>	<p>Even Hexagon Odd Pattern Repeating pattern Square Trapezoid Triangle Unit</p>	<ul style="list-style-type: none"> • Session 1.8: <i>Make a Repeating Pattern</i> <p>Due April 27:</p> <ul style="list-style-type: none"> • Session 2.7: <i>End-of-unit assessment</i>

Danvers Public Schools
Pacing Guide 2009 – 2010
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Grade 1

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<p>Unit 8: Twos, Fives, and Tens <i>(Addition, Subtraction, and the Number System 4)</i></p> <p>Standards: 2.N.1 2.N.3 2.N.6* 2.N.10 2.N.12 2.P.2 2.P.4 2.P.6 2.M.1 2.M.2</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p>Investigation 3</p> <p>Supplemental Activity Master 31 (adding)</p> <p>Supplemental Activity Master 34 (arrays)</p> <p>Supplemental Activity Master 36 (fractions)</p> <p>Supplemental Activity Master 40 (coins)</p> <p>Supplemental Activity Master 53 (time)</p> <p>Supplemental Activity Master 56 (2-digit nos.) Pgs.: 47, 48</p> <p><u>Ten-Minute Math</u></p> <ul style="list-style-type: none"> • Start With/Get To • Quick Survey 	<p>2.N.1 Name and write (in numerals) whole numbers to 1000, identify the place values of the digits, and order the numbers. +</p> <p>2.N.3 Identify and represent common fractions ($\frac{1}{2}$, $\frac{1}{3}$, $\frac{1}{4}$) as parts of wholes, parts of groups, and numbers on the number line.</p> <p>2.N.6* Identify the value of all U.S. coins, and \$1, \$5, \$10, and \$20 bills. Find the value of a collection of coins and dollar bills and different ways to represent an amount of money up to \$5. Use appropriate notation, e.g., 69¢, \$1.35</p> <p>2.N.10 Demonstrate ability to add and subtract two-digit numbers.</p> <p>2.N.12 Estimate, calculate, and solve problems involving addition and subtraction of two-digit numbers. Describe differences between estimates and actual calculations.</p> <p>2.P.2 Identify different patterns on the hundreds chart.</p> <p>2.P.4 Skip count by twos, fives, and tens up to at least 50, starting at any number</p>	<p>Addend</p> <p>Addition equation</p> <p>Addition notation</p> <p>Combination</p> <p>Combine counting on</p> <p>Equals</p> <p>Less than</p> <p>One-half</p> <p>One-third</p> <p>One-fourth</p> <p>Pattern</p> <p>Regrouping</p> <p>Rows</p> <p>Columns</p> <p>The same as</p> <p><u>Coins</u></p> <p>Penny</p> <p>Nickel</p> <p>Dime</p> <p>Quarter</p> <p>Half-dollar</p> <p>Quarter Hour</p> <p>A.M. P.M.</p>	<ul style="list-style-type: none"> • Session 1.4: <i>Counting Strips</i> • Session 2.8: <i>How many Squares?</i> <p>Due: May 25:</p> <ul style="list-style-type: none"> • Session 3.6: <i>End-of-unit assessment</i>

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Grade 1

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<p>Unit 9: Blocks and Boxes <i>(3D Geometry)</i></p> <p>Standards: 2.G.1 2.M.1</p>	<p>Investigation 1</p> <p>Investigation 2</p> <p><u>Ten-Minute Math</u></p> <ul style="list-style-type: none"> • Quick Images • Quick Survey • Tell a Story • Morning Meeting 	<p>2.G.1 Describe attributes and parts of two- and three-dimensional shapes, e.g., length of sides, and number of corners, edges, faces, and sides.</p> <p>2.M.1 Identify parts of the day (e.g., morning, afternoon, evening), week, month, and calendar.</p>	<p>Corner Edge Face Footprint Geometry Prism Pyramid Shape Side Solid Three-dimensional Two-dimensional Visualize</p>	<ul style="list-style-type: none"> • Session 1.4: <i>Blocks in a sock</i> • Session 1.5: <i>Matching Blocks to Outlines</i> <p>Due June 22:</p> <ul style="list-style-type: none"> • Session 2.8: <i>End-of-unit assessment</i>

Student Handbook pages are a valuable resource for teachers, parents and students.