

# Math Curriculum Map for Kindergarten

	September	October	November	December	January	
Unit Name or Theme	Sorting and Classifying	Patterning	Numbers 0-5	Shapes	Numbers 0-10	Unit Name or Theme
Enduring Understandings and Performance Indicators	<p>Positions and directions define locations</p> <p>Shapes can be described, classified and compared according to characteristics</p> <p>Shapes are everywhere</p> <p>Attributes demonstrate similarities and differences</p> <p>Logical reasoning requires experiences and research</p>	<p>I can demonstrate a pattern in many ways</p> <p>Patterns exhibit relationships that can be extended, described and generalized</p> <p>Mathematics is represented in everyday life</p>	<p>Numbers help us understand our world</p> <p>The form in which we represent a number depends on the problems we are solving</p> <p>The base-ten number system is a way to organize, represent and compare numbers using place value</p>	<p>Shapes can be 2 or 3 dimensional</p> <p>Shapes can be identified by mathematical terminology and attributes</p> <p>Shapes can be constructed</p> <p>Data can be represented and communicated in graphs</p> <p>Shapes can be found within the environment in 2 and 3 dimensional form</p>	<p>Numbers help us to understand our world</p> <p>Numbers are represented and organized in a base-ten system</p> <p>Numbers can be compared and ordered with patterns, numbers and tables</p> <p>Numbers can represent sets of data and objects</p>	Enduring Understandings and Performance Indicators
Essential Questions	<p>How can we describe, compare or sort shapes and objects?</p> <p>Why do we organize groups of shapes or objects?</p> <p>How can mathematical situations be represented?</p> <p>What words can I use to describe the position or direction of an object or movement?</p> <p>Where can I find shapes?</p> <p>What is a calendar? How is it organized? What does it tell us?</p>	<p>How can I see, hear, extend and represent patterns?</p> <p>What are the relationships exhibited among shapes or objects in a collection?</p> <p>How can I represent a mathematical situation?</p>	<p>How can I use numbers every day?</p> <p>How can I determine which number to use in solving a problem?</p> <p>How are numbers organized?</p> <p>How can I communicate the position of numbers?</p>	<p>What are differences and similarities among shapes?</p> <p>How can I communicate what I know and understand about shapes?</p>	<p>Why should I use numbers?</p> <p>What are the mathematical patterns among numbers?</p> <p>How can I communicate the ordering of numbers?</p>	Essential Questions

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Assessment Strategies Formative & Summative	Observation Anecdotal records Self-reflection and discussion Participation checks	Observations Anecdotal records Self-reflection and discussion Participation checks	Observations Anecdotal records Self-reflection and discussion Participation checks	Observations Anecdotal records Self-reflection and discussion Participation checks	Observations Anecdotal records Self-reflection and discussion Participation checks	Assessment Strategies Formative & Summative
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<p>Instructional Skills and Strategies</p>	<p><b>Calendar Activities:</b> Calendar grid/passage of time, months information (i.e. holiday/seasonal), songs, days of the week (“weekend”), sequence days, schedule of the day (including time of day- “morning and afternoon”), symbols for months (e.g. seasonal), counting on by one for each day, count forward by ones, count backward by ones, tally “train” for ones and fives, number line (counting on by ones), straw pocket tally (i.e. place value), 100s pocket chart (i.e. counting by ones), weather wheel, weather tally and bar graph, calendar math clipboards and binders to document tallies, writing numbers/dates, identify month and days, pennies in a jar</p> <p><b>Instructional Skills and Strategies:</b> Name and demonstrate positions (e.g. top, middle, bottom, in front, behind, before, between, after, over, under, on, above, below, inside, outside)</p> <p>Identify left and right sing, dance with left to right directions</p> <p>Sort, draw, classify, organize objects by color, shape, size, similarities, differences, and type</p> <p>Recognize the “sorting rule” of a given set of shapes or objects</p> <p>Reason with logic to identify what object or shape doesn’t belong</p> <p>Count on by ones</p> <p>Recognize ones, fives, tens</p> <p>Weather graphs and tallies</p> <p>Morning Meeting (surveys)</p>	<p><b>Calendar Activities:</b> Extension of September binders and activities AB patterns, counting by tens, weather graph added to binder, tracking the temperature</p> <p><b>Instructional Skills and Strategies:</b> Copy and extend rhythm and movement patterns</p> <p>Identify and extend 2 and 3 element color, shape and size patterns</p> <p>Guess and check to find missing parts of a pattern</p> <p>Describe and extend growing patterns</p> <p>Develop patterns with a variety of materials, shapes and objects Translate patterns from one mode to another</p> <p>Morning Meeting</p> <p>Use storyboards to represent real life word problems</p>	<p><b>Calendar Activities:</b> Extension activities, AAB pattern</p> <p><b>Instructional Skills and Strategies:</b> Count forward and backward with numbers 0 through 5</p> <p>Identify, match and count sets of up to five objects</p> <p>Compare sets of objects (i.e. fewer, more, equal)</p> <p>Form groups of objects and pictographs to compare sets with specialized terminology and numbers (e.g. fewer, more, equal to)</p> <p>Write numbers 0-5</p> <p>Draw, reproduce, clap, represent up to five</p> <p>Identify ordinals 1-5<sup>th</sup> position</p>	<p><b>Calendar Activities:</b> Extension activities, ABB pattern</p> <p><b>Instructional Skills and Strategies:</b> Hunt for geometric shapes in the classroom, outdoors, in literature, and at home</p> <p>Graph shapes by attributes</p> <p>Identify, draw, create and sort the shapes and attributes of squares, circles, rectangles and triangles</p> <p>Describe objects in the environment by positional terms (e.g. above, below, beside, in front of, behind, next to)</p> <p>Identify shapes as 2 (e.g. lying in a plane) or 3 dimensional (e.g. solid, sphere, cube, cone)</p> <p>Identify equal parts of a region</p> <p>Recognize halves of a whole Use models to demonstrates equal parts of a whole</p> <p>Identify, draw, construct, and sort the shapes and attributes of cubes, spheres, cylinders and cones</p> <p>Attempt to roll, stack, slide shapes</p> <p>Build models</p>	<p><b>Calendar Activities:</b> Extension activities, ABC patterns, coin identification with pennies, nickels and dimes, counting groups of five, exchanging groups of ones-five-tens with coins</p> <p><b>Instructional Skills and Strategies:</b> Count forward and backward</p> <p>Count by ones, twos, fives and tens to 100</p> <p>Represent groups of 0-10 with illustrations, manipulatives, art, movement, numbers, tallies, unifix cubes and number grids</p> <p>Order numbers</p> <p>Demonstrate the same number of objects in different ways (conservation of numbers)</p> <p>Show different ways to make parts of a whole</p> <p>Compare and record sets and numbers with groupings, one-to-one correspondence</p> <p>Identify ordinal positions 1-10</p> <p>Complete probability experiments and tallying in a table</p>	<p>Instructional Skills and Strategies</p>
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# Math Curriculum Map for Kindergarten

Primary Resources	EveryDay Math Math Their Way Manipulatives Trade books	Everyday Math Math Their Way Manipulatives Trade books	Everyday Math Math Their Way Number lines Manipulatives	Everyday Math Math Their Way Number lines Manipulatives	Everyday Math Math Their Way Number lines Manipulatives	Primary Resources
Links with CCSS/NCTM	CCSS K.MD, K.G NCTM Algebra, Geometry, Measurement, Problem Solving, Communications, Connections, Representation	NCTM Algebra, Problem Solving, Communications, Connections, Representation	CCSS K.CC, K.MD NCTM Numbers and Operations, Data Analysis and Probability, Problem Solving, Communications, Connections, Representation	CCSS K. MD, K.G NCTM Geometry, Measurement, Problem Solving, Reasoning and Proof Communications, Connections, Representation,	CCSS K.CC, K.OA, K.MD, K. NBT NCTM Number and Operations, Data Analysis and Probability, Problem Solving, Communications, Connections, Representation	Links with CCSS/NCTM

# Math Curriculum Map for Kindergarten

	February	March	April	May	June	
Unit Name or Theme	Measurement	Time and Money	Exploring Greater Numbers	Addition>>>	<<<and Subtraction	Unit Name or Theme
Enduring Understandings and Performance Indicators	<p>Some attributes of objects and shapes can be measured</p> <p>Objects and shapes can be measured according to distance, weight, length, height, time and temperature</p> <p>I use different tools to measure length, width and capacity</p> <p>Standard and non-standard units of measurement can be represented, compared, described and ordered</p>	<p>Time is a unit of measurement</p> <p>Events can be ordered and described in terms of time and place</p> <p>Money represents units of measurement</p> <p>Money has value, can be compared &amp; represented in multiple ways</p> <p>Sums &amp; differences of quantities can be estimated with monetary values</p>	<p>Numbers have sequence and represent values</p> <p>Numbers can be compared and ordered</p>	<p>Mathematical situations can be represented by operations</p> <p>Addition can be represented in many forms</p> <p>Numbers can be compared</p>	<p>Numbers can be compared and ordered</p> <p>Inverse relationships exist between addition and subtraction statements</p> <p>Mathematical situations can be represented by operations</p>	Enduring Understandings and Performance Indicators
Essential Questions	<p>How can I compare and represent shapes and objects with a unit of measurement?</p> <p>What can I use to measure?</p>	<p>How does time impact my day and night?</p> <p>Why is telling time important?</p> <p>How does money represent value?</p> <p>Why is it important for me to identify coins?</p>	<p>What is the relationship among numbers?</p> <p>How can I identify and communicate number values?</p>	<p>What happens when we combine sets of objects or numbers?</p> <p>How can I represent the operation used to determine a sum of two sets and numbers?</p>	<p>Why should a mathematical operation be chosen to represent a solution to a problem?</p> <p>What is the relationship between addition and subtraction?</p>	Essential Questions
Assessment Strategies Formative & Summative	<p>Observations</p> <p>Anecdotal records</p> <p>Self-reflection and discussion</p> <p>Participation checks</p>	<p>Observations</p> <p>Anecdotal records</p> <p>Self-reflection and discussion</p> <p>Participation checks</p>	<p>Observations</p> <p>Anecdotal records</p> <p>Self-reflection and discussion</p> <p>Participation checks</p>	<p>Observations</p> <p>Anecdotal records</p> <p>Self-reflection and discussion</p> <p>Participation checks</p>	<p>Observations</p> <p>Anecdotal records</p> <p>Self-reflection and discussion</p> <p>Participation checks</p>	Assessment Strategies Formative & Summative

# Math Curriculum Map for Kindergarten

Instructional Skills and Strategies	<p><b>Calendar Activities:</b> Songs, rhymes, counting on, grouping</p> <p><b>Instructional Skills and Strategies:</b> Explore concept of length using a variety of tools i.e. nonstandard units (e.g. yarn, rulers, popsicle sticks)</p> <p>Sort and compare objects by length; identifying “longest and shortest” length</p> <p>Solve problems using guess-and-check to estimate</p> <p>Examine, compare, and order the weight of objects; identifying the “heaviest and lightest” weight</p> <p>Observe and participate in capacity experimentation; fill containers and make predictions to identify “more or less”</p>	<p><b>Calendar Activities:</b> Songs, rhymes, counting on, grouping</p> <p><b>Instructional Skills and Strategies:</b> Order three events (e.g. first, next, last)</p> <p>Identify time of day (e.g. morning, afternoon, evening)</p> <p>Compare time intervals (e.g. more or less time taken)</p> <p>Tell time to the hour on analog clocks</p> <p>Identify coins and values(e.g. penny, nickel, dime, quarter, half dollar)</p> <p>Count groups of coins</p> <p>Identify and write the value of coins</p> <p>Solve word problems with real-world situations involving money</p>	<p><b>Calendar Activities:</b> Recognize number words, songs, rhymes, counting on, grouping</p> <p><b>Instructional Skills and Strategies:</b> Print numbers from 0 to 20 in sequence</p> <p>Compare groups of objects and match with corresponding numbers</p> <p>Recognize the pattern of numbers (including calendar pieces 1-31)</p> <p>Compose and decompose numbers into tens, fives, ones</p> <p>Skip count to solve a problem</p> <p>Identify numbers 0-100 on a hundreds chart</p> <p>Identify numbers of objects as greater than, less than or equal to</p> <p>Use symbols to represent comparisons</p>	<p><b>Calendar Activities:</b> Read number words, songs, rhymes, counting on, grouping</p> <p><b>Instructional Skills and Strategies:</b> Use models to add, count on, use pictures to add, use mental math, organize numbers to add, join sets</p> <p>Find patterns in numbers</p> <p>Use symbols to compare numbers</p> <p>Explain why addition strategies work</p>	<p><b>Calendar Activities:</b> Read number words, songs, rhymes, counting on, grouping</p> <p><b>Instructional Skills and Strategies:</b> Use models to subtract, count back, regroup, use pictures to subtract, use mental math, organize numbers to subtract</p> <p>Find patterns in numbers</p> <p>Use symbols to compare numbers</p> <p>Explain why addition and subtraction strategies work</p>	Instructional Skills and Strategies
Primary Resources	<p>Everyday Math Silver-Burdett and Ginn (Chapter 6) Trade books Manipulatives</p>	<p>Workmats &amp; manipulatives Everyday Math Silver-Burdett and Ginn (Chapter 7) Trade books Manipulatives Coin sets</p>	<p>Workmats &amp; manipulatives Everyday Math Silver-Burdett and Ginn (Chapter 8) Trade books Manipulatives Calendars Hundreds chart</p>	Everyday Math	Everyday Math	Primary Resources
Links with CCSS/ NCTM	<p>CCSS K.MD, K.G NCTM Measurement, Data Analysis and Probability, Problem Solving, Communications, Connections and Representation</p>	<p>NCTM Problem Solving, Communications, Connections, Representation</p>	<p>CCSS K.CC, K.NBT, KMD NCTM Numbers and Operations, Algebra, Problem Solving, Communications, Connections, Representation</p>	<p>CCSS K.CC, K.OA, K.NBT NCTM Number and Operations, Algebra, Problem Solving, Communications, Connections, Representation</p>	<p>CCSS K.CC, K.OA, K.NBT NCTM Number and Operations, Algebra, Problem Solving, Reasoning and Proof, Communications, Connections, Representation</p>	Links with CCSS/NCTM