

Kindergarten Math Pacing Guide

ES = Essential Skill

Strands

N&NS = Number & Number Sense

C&E = Computation & Estimation

M&G = Measurement & Geometry

P&S = Probability & Statistics

Strand	SOL	Envision Unit	Standards and Essential Skills (ES = Essential Skill)	Time
M&G	K.10a K.10 b	Topic 7: Geometry	<p>The student will a) identify and describe plane figures (circle, triangle, square, and rectangle); ES Identify a circle, triangle, square, and rectangle. ES Describe the characteristics of triangles, squares, and rectangles, including number of sides and number of vertices. ES Describe a circle using terms such as <i>round</i> and <i>curved</i>. ES Identify pictorial representations of a circle, triangle, square, and rectangle, regardless of their position and orientation in space.</p> <p>The Student will b) compare the size (smaller, larger) and shape of plane figures (circle, triangle, square, and rectangle) ES Compare and group plane figures (circle, triangle, square, and rectangle) according to their relative sizes (smaller, larger). ES Compare and group plane figures (circle, triangle, square, and rectangle) according to their shapes. ES Distinguish between examples and nonexamples of identified plane figures (circle, triangle, square, and rectangle).</p>	9 days
PF&A	K.12	Topic 1: Sorting and Classifying	<p>The student will sort and classify objects according to one attribute. ES Identify the attributes of an object (e.g., color, size, shape, thickness) ES Sort objects into appropriate groups (categories) based on one attribute (e.g., size – large bears and small bears). ES Classify sets of objects into groups (categories) of one attribute. ES Label attributes of a set of objects that has been sorted. ES Name multiple ways to sort a set of objects</p>	8 days

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M&G	K.10 c	Topic 2: Position and Location	<p>The student will describe the location of one object relative to another (above, below, next to) and identify representations of plane figures (circle, triangle, square, and rectangle) regardless of their positions and orientations in space.</p> <p>ES Identify pictorial representations of a circle, triangle, square, and rectangle, regardless of their position and orientation in space.</p> <p>ES Describe the location of one object relative to another, using the terms <i>above</i>, <i>below</i>, and <i>next to</i></p>	9 days
PF&A	K.13	Topic 3: Patterns	<p>The student will identify, describe, extend, create, and transfer repeating patterns.</p> <p>ES Identify and describe the core (the part of the sequence that repeats) found in repeating patterns of common objects, sounds, movements, and pictures.</p> <p>ES Extend a repeating pattern by adding at least two complete repetitions of the core to the pattern.</p> <p>ES Create a repeating pattern.</p> <p>ES Compare similarities and differences between patterns.</p> <p>ES Transfer a repeating pattern from one representation to another.</p>	9 days

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N&NS	K.1	Topic 4: Zero to Five	<p>The student will a)tell how many are in a given set of 20 or fewer objects by counting orally; and</p> <p>ES Count orally to tell how many are in a given set containing 20 or fewer concrete objects, using one-to-one correspondence, and identify the corresponding numeral.</p> <p>The student will b)read, write, and represent numbers from 0 through 20.</p> <p>ES Read, write, and represent numbers from 0-20</p> <p>ES Construct a set of objects that corresponds to a given numeral, including an empty set</p> <p>ES Read and write the numerals from 0 through 20</p> <p>ES Identify written numerals from 0 through 20 represented in random order</p> <p>ES Identify the numeral that corresponds to the total number of objects in a given set of 20 or fewer concrete objects</p> <p>ES Write a numeral that corresponds to a set of 20 or fewer concrete objects</p>	10 days
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N&NS	K.1	Topic 5 Six to Ten	<p>The student will a) tell how many are in a given set of 20 or fewer objects by counting orally ES Count orally to tell how many are in a given set containing 20 or fewer concrete objects, using one-to-one correspondence, and identify the corresponding numeral.</p> <p>The student will b) read, write, and represent numbers from 0 through 20.</p> <p>ES Read, write, and represent numbers from 0-20 ES Construct a set of objects that corresponds to a given numeral, including an empty set ES Read and write the numerals from 0 through 20 ES Identify written numerals from 0 through 20 represented in random order ES Identify the numeral that corresponds to the total number of objects in a given set of 20 or fewer concrete objects ES Write a numeral that corresponds to a set of 20 or fewer concrete objects</p>	11 days
N&NS	K.2	Topic 6: Comparing Numbers	<p>a) The student, given no more than three sets, each set containing 10 or fewer concrete objects, will compare and describe one set as having more, fewer, or the same number of objects as the other set(s)</p> <p>ES Compare and describe no more than three sets of 10 or fewer objects, using the terms <i>more</i>, <i>fewer</i>, and <i>the same</i>. ES Given a set of objects, construct a second set which has more, fewer, or the same number of objects.</p> <p>b) The student, given no more than three sets, each set containing 10 or fewer concrete objects, compare and order sets from least to greatest and greatest to least.</p> <p>ES Compare and order three or fewer sets, each set containing 10 or fewer concrete objects, from least to greatest and greatest to least.</p>	7 days

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N&NS	K.5	Topic 8: Fractions and Ordinals	<p>The student will investigate fractions by representing and solving practical problems involving equal sharing with two sharers.</p> <p>ES Share a whole equally with two sharers, when given a practical situation. ES Represent fair shares concretely or pictorially, when given a practical situation. ES Describe shares as equal pieces or parts of the whole (e.g., halves), when given a practical situation.</p>	11 days
N&NS	K.3	Topic 12: Larger Numbers	<p>a) The student will count forward orally by ones from 0-100 ES Count forward orally by ones from 0 to 100</p> <p>b) The student will count backward orally by ones when given any number between 1 and 10 ES Count backward orally by ones when given any number between 1 and 10.</p> <p>c) The student will identify the number after, without counting, when given any number between 0 and 100 and identify the number before, without counting, when given any number between 1 and 10 ES Identify the number after, without counting, when given any number between 0 and 100. ES Identify the number before, without counting, when given any number between 1 and 10</p> <p>d) count forward by tens to determine the total number of objects to 100 ES Count forward orally by tens, starting at 0, to determine the total number of objects up to 100.</p>	10 days

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M&G	K.9	Topic: 9 Measurement	<p>The student will compare two objects or events, using direct comparisons, according to one or more of the following attributes: length (longer, shorter), height (taller, shorter), weight (heavier, lighter), temperature (hotter, colder), volume (more, less).</p> <p>ES Compare and describe lengths of two objects as longer or shorter, using direct comparison (e.g., the bus is longer than the car).</p> <p>ES Compare and describe heights of two objects (as taller or shorter), using direct comparison.</p> <p>ES Compare and describe weights of two objects (as heavier or lighter), using direct comparison.</p> <p>ES Compare and describe temperatures of two objects or environment (as hotter or colder), using direct comparison.</p> <p>ES Compare and describe volumes of two containers (as more or less), using direct comparison.</p> <p>ES Compare and describe the amount of time spent on two events (as longer or shorter), using direct comparison.</p>	11 days
M&G	K.8	Topic 15: Calendar	<p>The student will investigate the passage of time by reading and interpreting a calendar.</p> <p>ES Name the twelve months of the year.</p> <p>ES Name the seven days in a week.</p> <p>ES Determine the day before and after a given day (e.g., yesterday, today, tomorrow).</p>	<p>9 days</p> <p>(These skills will be taught daily from the beginning of school)</p>
M&G	K.11	Topic 16: Graphing and Tallying	<p>The student will collect, organize, and represent data.</p> <p>ES Collect data on categories identified by the teacher and/or student (e.g., number of siblings, types/numbers of pets, types of flowers in the garden). Data points, collected by students, should be limited to 16 or fewer for no more than four categories.</p> <p>ES Represent data by arranging concrete objects into organized groups to form a simple object graph.</p>	<p>9 days</p> <p>(These skills will be taught daily from the beginning of</p>

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			<p>ES Represent gathered data, using pictures to form a simple picture graph (e.g., a picture graph of the weather for a month)</p> <p>ES Represent gathered data in tables (vertically or horizontally).</p> <p>The student will read and interpret data in object graphs, picture graphs, and tables.</p> <p>ES Answer questions related to the gathered data displayed in object graphs, picture graphs, and tables: Read the graph to determine the categories of data and the data as a whole (e.g., the total number of responses) and its parts (e.g., five people are wearing sneakers); and Interpret the data that represents numerical relationships, including categories with the greatest, the least, or the same.</p>	school)
C&E	K.4 K.6	Topic 10: Addition	<p>The student will recognize and describe with fluency part-whole relationships for numbers up to 5.</p> <p>ES Recognize and describe with fluency part-whole relationships for numbers up to 5 in a variety of configurations.</p> <p>The student will investigate and describe part-whole relationships for numbers up to 10.</p> <p>ES Investigate and describe part-whole relationships for numbers up to 10 using a variety of configurations</p> <p>The student will model and solve single-step story and picture problems with sums to 10, using concrete objects.</p> <p>ES Model and solve various types of story and picture problems using 10 or fewer concrete objects. (Types of problems should include joining, separating, and part-part-whole scenarios.)</p>	<p>11 days (These skills are covered throughout the school year using Number Talks and Math Journals)</p>
C&E	K.4 K.6	Topic 11: Subtraction	<p>The student will recognize and describe with fluency part-whole relationships for numbers up to 5.</p> <p>ES Recognize and describe with fluency part-whole relationships for numbers up to 5 in a variety of configurations.</p> <p>The student will investigate and describe part-whole relationships for numbers up to 10.</p> <p>ES Investigate and describe part-whole relationships for numbers up to 10 using a variety of</p>	<p>11 days (These skills are covered throughout the school year using</p>

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			<p>configurations</p> <p>The student will model and solve single-step story and picture problems with differences to 10, using concrete objects.</p> <p>ES Model and solve various types of story and picture problems using 10 or fewer concrete objects. (Types of problems should include joining, separating, and part-part-whole scenarios.)</p>	Number Talks and Math Journals)
M&G	K.7	Topic 13: Money	<p>The student will recognize the attributes of a penny, nickel, dime, and quarter and identify the number of pennies equivalent to a nickel, a dime, and a quarter.</p> <p>ES Describe the attributes (e.g., color, relative size) of a penny, nickel, dime, and quarter.</p> <p>ES Identify a penny, nickel, dime, and quarter.</p> <p>ES Identify the number of pennies equivalent to a nickel, a dime, and a quarter (i.e., a nickel has the same value as five pennies.)</p>	9 days
M&G	K.9	Topic 14: Time	<p>The student will compare and describe events as longer and shorter.</p> <p>ES Compare and describe the amount of time spent on two events (as longer or shorter), using direct comparison.</p>	8 days