

Kindergarten Grade New Mexico Mathematics Standards

Strand 1: NUMBER AND OPERATIONS					
Standard: Students will understand numerical concepts and mathematical operations					
Mathematics Benchmarks and Performance Standards	Expectations for Students in Mathematics				
	Mathematics Skills		Problem Solving		
	Recall Information	Apply Procedural Knowledge	Communicate & Represent Understanding	Analyze, Reason, & Prove	Make Connections & Evaluate
K-4 Benchmark 1: Understand numbers, ways of representing numbers, relationships among numbers, and number systems.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation				
Performance Standards					
1. Demonstrate an understanding of the place-value structure of the base ten number system:					
a. Count with understanding and recognize “how many” in sets of objects up to 20					
b. Read and write whole numbers up to 20					
c. Compare and order whole numbers up to 20					
d. Connect numerals to the quantities they represent using various physical models					
e. Use an organized counting method to keep track of quantities while counting (one-to-one correspondence) (e.g., touch object once and only once as counting a set)					
f. Order sets of objects and numbers from least to most or most to least					
K-4 Benchmark 2: Understands the meaning of operations and how they relate to one another.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation				
Performance Standards					
1. Represent numbers using pictures, objects, or numerals.					
2. Use concrete objects to solve simple addition and subtraction story problems (e.g., oral not written).					
K-4 Benchmark 3: Compute fluently and make reasonable estimates.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation				
Performance Standard					
1. Estimate quantities of objects up to 20.					

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Strand 2: ALGEBRA				
Standard: Students will understand algebraic concepts and applications.				
Mathematics Benchmarks and Performance Standards	Expectations for Students in Mathematics			
	Mathematics Skills		Problem Solving	
	Recall Information	Apply Procedural Knowledge	Communicate & Represent Understanding	Analyze, Reason, & Prove
K-4 Benchmark 1: Understand patterns, relations, and functions	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standards				
1. Identify the attributes of objects (e.g., the ability to identify attributes is a foundational skill for sorting and classifying).				
2. Sort, classify, and order objects by size, number, and other properties.				
3. Recognize, reproduce, describe, extend, and create repeating patterns (e.g., color, shape, size, sound, movement, simple numbers).				
K-4 Benchmark 2: Represent and analyze mathematical situations and structures using algebraic symbols.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standard				
1. Use concrete, pictorial, and verbal representation to develop an understanding of invented and conventional symbols.				
K-4 Benchmark 3: Use mathematical models to represent and understand quantitative relationships.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standard				
1. Model situations that involve whole numbers using objects or pictures.				
K-4 Benchmark 4: Analyze changes in various contexts.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standard				
1. Verbally describe changes in various contexts (e.g., plants or animals growing over time).				

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Strand 3: GEOMETRY					
Standard: Students will understand geometric concepts and applications.					
Mathematics Benchmarks and Performance Standards	Expectations for Students in Mathematics				
	Mathematics Skills		Problem Solving		
	Recall Information	Apply Procedural Knowledge	Communicate & Represent Understanding	Analyze, Reason, & Prove	Make Connections & Evaluate
K-4 Benchmark 1: Analyze characteristics and properties of two- and three-dimensional geometric shapes and develop mathematical arguments about geometric relationships	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation				
Performance Standards					
1. Identify common objects in their environments and describe their geometric features:					
a. Describe, identify, model, and draw common geometric objects (e.g., circle, triangle, square, rectangle, cube, sphere, cone)					
b. Compare familiar plane and solid objects by common attributes (e.g., shape, size, number of corners).					
K-4 Benchmark 2: Specify locations and describe spatial relationships using coordinate geometry and other representational systems	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation				
Performance Standards					
1. Follow simple directions to find a specific location in space.					
2. Use spatial vocabulary (e.g., left, right, above, below) to describe relative position.					

Strand 3: GEOMETRY				
Standard: Students will understand geometric concepts and applications.				
Mathematics Benchmarks and Performance Standards	Expectations for Students in Mathematics			
	Mathematics Skills		Problem Solving	
	Recall Information	Apply Procedural Knowledge	Communicate & Represent Understanding	Analyze, Reason, & Prove
K-4 Benchmark 3: Apply transformations and use symmetry to analyze mathematical situations.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standards				
1. Use manipulatives (e.g., puzzles, tangrams, blocks) to demonstrate rotation (i.e., flips), translations (i.e., slides), and reflection (i.e., turns).				
2. Investigate the symmetry of two-dimensional shapes (e.g., by folding or cutting paper, using mirrors).				
K-4 Benchmark 4: Use visualization, spatial reasoning, and geometric modeling to solve problems.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standards				
1. Describe how to get from one location to another (e.g., how to get to the library).				
2. Find and describe geometric shapes in nature or architecture.				

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Strand 4: MEASUREMENT					
Standard: Students will understand measurement systems and applications.					
Mathematics Benchmarks and Performance Standards	Expectations for Students in Mathematics				
	Mathematics Skills		Problem Solving		
	Recall Information	Apply Procedural Knowledge	Communicate & Represent Understanding	Analyze, Reason, & Prove	Make Connections & Evaluate
K-4 Benchmark 1: Understand measurable attributes of objects and the units, systems, and process of measurement.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation				
Performance Standards					
1. Describe and compare, using appropriate concepts and vocabulary, the measurable properties of length (e.g., shorter, longer, taller), volume (e.g., full, empty), weight (e.g., heavy, light), and time (e.g., before, after, morning, afternoon, days of week).					
2. Use tools to make predictions (e.g., using a balance scale, predicting how many cups a container will hold and then filling it to check the prediction).					
3. Measure using non-standard units of measurement (e.g., use pencils to measure desk top, use different lengths of rope to measure distance in classroom).					
4. Use digital and analog (face) clocks to tell time to the hour.					
K-4 Benchmark 2: Apply appropriate techniques, tools, and formulas to determine measurements.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation				
Performance Standard					
1. Explore measuring objects using a repeating non-standard unit of measurement (e.g., paper clips, cubes, etc.).					

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Strand 5: DATA ANALYSIS AND PROBABILITY				
Standard: Students will understand how to formulate questions, analyze data, and determine probabilities.				
Mathematics Benchmarks and Performance Standards	Expectations for Students in Mathematics			
	Mathematics Skills		Problem Solving	
	Recall Information	Apply Procedural Knowledge	Communicate & Represent Understanding	Analyze, Reason, & Prove
K-4 Benchmark 1: Formulate questions that can be addressed with data and collect, organize, and display relevant data to answer them.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standard				
1. Collect data about objects and events in the environment to answer simple questions (e.g., brainstorm questions about self and surroundings, collect data, and record the results using objects, pictures, and pictographs).				
K-4 Benchmark 2: Select and use appropriate statistical methods to analyze data.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standard				
1. Describe simple data and pose questions about the data.				
K-4 Benchmark 3: Develop and evaluate inferences and predictions that are based on data.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standard				
1. Make simple predictions.				
K-4 Benchmark 4: Understand and apply basic concepts of probability.	Time Spent in Each Performance Standard Indicate N (never), S (sometimes), or U (usually) for each expectation			
Performance Standard				
1. Answer questions that relate to the possibility of familiar events happening or not.				