

# MINNESOTA ACADEMIC STANDARDS KINDERGARTEN

## MATH

Strand	Sub-Strand	Standard	Benchmarks
<b>Strand: MATHEMATICAL REASONING</b>	<b>Sub-Strand:</b>	<b>Standard:</b> Apply skills of mathematical representation, communication and reasoning throughout the remaining four content strands.	<b>Benchmarks:</b> 1. Create and solve word problems using actions, objects, words, pictures, or numbers. 2. Estimate and check that answers are reasonable. 3. Explain to others how a problem was solved.
<b>Strand: NUMBER SENSE, COMPUTATION, AND OPERATIONS</b>	<b>Sub-Strand: A. Number Sense</b>	<b>Standard:</b> Represent quantities using whole numbers and understand relationships among whole numbers.	<b>Benchmarks:</b> 1. Count forward to 31, backward from 10. 2. Count the number of objects in a set and identify the quantity. 3. Compare the number of objects in two or more sets. 4. Given a number, identify one more or one less.
<b>Strand: NUMBER SENSE, COMPUTATION, AND OPERATIONS</b>	<b>Sub-Strand: B. Computation and Operation</b>	<b>Standard:</b> Add and subtract whole numbers up to 6 in real-world and mathematical problems.	<b>Benchmarks:</b> 1. Recognize the number of objects up to 6, without counting. 2. Add and subtract whole numbers up to 6, using concrete objects.
<b>Strand: PATTERNS, FUNCTIONS AND ALGEBRA</b>	<b>Sub-Strand: A. Patterns and Functions</b>	<b>Standard:</b> Sort, classify and compare objects based on their attributes. Understand simple repeating patterns.	<b>Benchmarks:</b> 1. Sort objects in a set by one attribute such as size, shape, color or thickness. 2. Identify an object that does not belong in a set. 3. Recognize, describe and extend repeating patterns involving up to three elements using objects, pictures, sounds or movements.
<b>Strand: PATTERNS, FUNCTIONS AND ALGEBRA</b>	<b>Sub-Strand: B. Algebra (Algebraic Thinking)</b>	<b>Standard:</b> (Standards under this heading may be locally determined.)	<b>Benchmarks:</b>

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<b>Strand:</b> <b>DATA ANALYSIS, STATISTICS AND PROBABILITY</b>	<b>Sub-Strand:</b> <b>A. Data and Statistics</b>	<b>Standard:</b> Depict data with objects and pictures.	<b>Benchmarks:</b> 1. Represent data about classmates or their surroundings by using objects or pictures.
<b>Strand:</b> <b>DATA ANALYSIS, STATISTICS AND PROBABILITY</b>	<b>Sub-Strand:</b> <b>B. Probability</b>	<b>Standard:</b> (Standards under this heading may be locally determined.)	<b>Benchmarks:</b>
<b>Strand:</b> <b>SPATIAL SENSE, GEOMETRY, AND MEASUREMENT</b>	<b>Sub-Strand:</b> <b>A. Spatial Sense</b>	<b>Standard:</b> Understand meaning of terms used to describe location and placement of objects.	<b>Benchmarks:</b> 1. Locate and describe placement of objects with terms such as: on, inside, outside, above, below, over, under, beside, between, in front of, behind, next to, top, bottom.
<b>Strand:</b> <b>SPATIAL SENSE, GEOMETRY, AND MEASUREMENT</b>	<b>Sub-Strand:</b> <b>B. Geometry</b>	<b>Standard:</b> Sort two- and three-dimensional shapes.	<b>Benchmarks:</b> 1. Sort two- and three-dimensional shapes according to their geometrical attributes.
<b>Strand:</b> <b>SPATIAL SENSE, GEOMETRY, AND MEASUREMENT</b>	<b>Sub-Strand:</b> <b>C. Measurement</b>	<b>Standard:</b> Understand terms and comparative language used in various measurement situations. Identify tools to measure time. Identify coins.	<b>Benchmarks:</b> 1. Compare and order objects by length, weight, volume, temperature or size and use appropriate vocabulary such as longer than, holds more, smaller. 2. Know that clocks and calendars are instruments to measure time. 3. Recognize the following coins: penny, nickel, dime and quarter. 4. Compare and order events based on time and use appropriate vocabulary such as yesterday, today or tomorrow to describe relative time.