

**MATHEMATICS CROSSWALK  
2008 MATHEMATICS STANDARD TO 2003 MATHEMATICS STANDARD  
KINDERGARTEN**

<b>MATHEMATICS STANDARD ARTICULATED BY GRADE LEVEL</b>				
<b>Strand 1: Number and Operations</b>				
<b>CONCEPT</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>	<b>2003 PO</b>	<b>ITEM DESCRIPTION</b>
<b>1. Number Sense</b>	1	Express whole numbers 0 to 20 using and connecting multiple representations.	1	Make a model to represent a given whole number 0 through 20.
			2	Identify orally a whole number represented by a model with a word name and symbol 0 through 20. (Say 3 and write number 3 when presented with three objects.)
			4	Identify whole numbers through 20 in or out of order.
			5	Write whole numbers through 20 in or out of order.
	2	Count forward to 20 and backward from 10 with or without objects using different starting points.	3	Count aloud, forward to 20 or backward from 10, in consecutive order (0 through 20).
	3	*Identify numbers which are one more or less than a given number to 20.*		
	4	Compare and order whole numbers through 20.	7	Compare two whole numbers through 20.
			9	Order three or more whole numbers through 20 (least to greatest or greatest to least).
	5	Recognize and compare the ordinal position of at least five objects.	8	Recognize the ordinal numbers through fifth (e.g., first, second, third).
	M00-S3C3-01	<b>Moved to Strand 3 Concept 3</b>	6	Construct equivalent forms of whole numbers, using manipulatives, through 10. (e.g., $\square\square + \square\square = \square\square\square + \square$ )
		<b>REMOVED</b>	10	Identify penny, nickel, dime, quarter, and dollar by using manipulatives or pictures.

\* This performance objective is new to the 2008 Mathematics Standard Articulated by Grade Level.

**MATHEMATICS CROSSWALK  
2008 MATHEMATICS STANDARD TO 2003 MATHEMATICS STANDARD  
KINDERGARTEN**

<b>Strand 1: Number and Operations</b>				
<b>CONCEPT</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>	<b>2003 PO</b>	<b>ITEM DESCRIPTION</b>
<b>2. Numerical Operations</b>	1	Solve contextual problems by developing, applying, and recording strategies with sums and minuends to 10 using objects, pictures, and symbols.	3	Select the operation to solve word problems using numbers 0 through 9.
			4	Solve word problems presented orally using addition or subtraction with numbers through 9.
	2	Develop and use multiple strategies to determine <ul style="list-style-type: none"> <li>• sums to 10 and</li> <li>• differences with minuends to 10.</li> </ul>	1	Model addition through sums of 10 using manipulatives.
			2	Model subtraction with minuends of 10 using manipulatives.
			5	Identify the symbols: +, -, =.
	3	*Create word problems based on sums to 10 and differences with minuends to 10.*		
		<b>REMOVED (This skill is required throughout the standard).</b>	6	Use grade-level appropriate mathematical terminology.
<b>3. Estimation</b>	1	*Identify quantities to 20 as more or less than 5 or as more or less than 10.*		
	M03-S1C3-01	<b>Moved to Grade 3</b>	1	Solve problems using a variety of mental computations and reasonable estimations.

\* This performance objective is new to the 2008 Mathematics Standard Articulated by Grade Level.

**MATHEMATICS CROSSWALK  
2008 MATHEMATICS STANDARD TO 2003 MATHEMATICS STANDARD  
KINDERGARTEN**

<b>Strand 2: Data Analysis, Probability, and Discrete Mathematics</b>				
<b>CONCEPT</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>	<b>2003 PO</b>	<b>ITEM DESCRIPTION</b>
<b>1. Data Analysis (Statistics)</b>	1	Construct simple displays of data using objects or pictures.	M01-S2C1-02	Make a simple pictograph or tally chart with appropriate labels from organized data.
	2	Ask and answer questions by counting, comparing quantities, and interpreting simple displays of data.	2	Interpret a pictograph.
			3	Answer questions about a pictograph.
			4	Formulate questions based on data displayed in graphs, charts, and tables.
		<b>REMOVED</b>	1	Formulate questions to collect data in contextual situations.
	M01-S2C1-02	<b>Moved to Grade 1</b>	5	Solve problems based on simple graphs, charts, and tables.
<b>2. Probability</b>		<b>No performance objectives at this grade level.</b>		
<b>3. Systematic Listing and Counting</b>	1	Sort, classify, count, and represent up to 20 objects and justify the sorting rule.	M00-S5C2-01	Sort objects according to observable attributes.
			M00-S5C2-02	Provide rationale for classifying objects according to observable attributes (color, size, shape, weight, etc.).
	M02-S2C3-01	<b>Moved to Grade 2</b>	1	Make arrangements that represent the number of combinations that can be formed by pairing items taken from 2 sets, using manipulatives (e.g., How many outfits can one make with 2 different color shirts and 2 different pairs of pants?).
<b>4. Vertex-Edge Graphs</b>		<b>No performance objectives at this grade level.</b>		
	M02-S2C4-01	<b>Moved to Grade 2</b>	1	Color pictures with the least number of colors so that no common edges share the same color (increased complexity throughout grade levels).

<b>Strand 3: Patterns, Algebra, and Functions</b>
---

\* This performance objective is new to the 2008 Mathematics Standard Articulated by Grade Level.

**MATHEMATICS CROSSWALK  
2008 MATHEMATICS STANDARD TO 2003 MATHEMATICS STANDARD  
KINDERGARTEN**

CONCEPT	2008 PO	ITEM DESCRIPTION	2003 PO	ITEM DESCRIPTION
<b>1. Patterns</b>	1	Recognize, describe, extend, create, and record simple repeating patterns.	1	Communicate orally a grade-level appropriate pattern.
			2	Extend simple repetitive patterns using manipulatives.
			3	Create grade-level appropriate patterns.
	2	*Recognize, describe, extend, and record simple growing patterns.*		
<b>2. Functions and Relationships</b>		<b>No performance objectives at this grade level.</b>		
<b>3. Algebraic Representations</b>	1	Record equivalent forms of whole numbers to 10 by constructing models and using numbers.	M00-S1C1-06	Construct equivalent forms of whole numbers, using manipulatives, through 10. (e.g., $\square\square+\square\square=\square\square\square+\square$ )
	2	Compare expressions using spoken words and the symbol =.	M01-S1C2-12	Apply the symbols: +, -, =. ( <b>= symbol only</b> )
<b>4. Analysis of Change</b>		<b>No performance objectives at this grade level.</b>		

\* This performance objective is new to the 2008 Mathematics Standard Articulated by Grade Level.

**MATHEMATICS CROSSWALK  
2008 MATHEMATICS STANDARD TO 2003 MATHEMATICS STANDARD  
KINDERGARTEN**

<b>Strand 4: Geometry and Measurement</b>				
<b>CONCEPT</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>	<b>2003 PO</b>	<b>ITEM DESCRIPTION</b>
<b>1. Geometric Properties</b>	1	Identify, analyze, and describe circles, triangles, and rectangles (including squares) in different orientations and environments.	2	Identify concepts and terms of position and size in contextual situations: <ul style="list-style-type: none"> <li>• Inside/outside</li> <li>• Above/below/between</li> <li>• Smaller/larger</li> <li>• Longer/shorter.</li> </ul>
			3	Identify shapes in different environments (e.g., nature, buildings, classroom).
			M01-S4C1-03	Use concepts and terms of position and size in contextual situations: <ul style="list-style-type: none"> <li>• Inside/outside,</li> <li>• Left/right,</li> <li>• Above/below/between,</li> <li>• Smaller/larger, and</li> <li>• Longer/shorter.</li> </ul>
	2	Build, draw, compare, describe, and sort 2-dimensional figures (including irregular figures) using attributes.	1	Identify 2-dimensional shapes by attribute (size, shape, number of sides).
<b>2. Transformation of Shapes</b>		<b>No performance objectives at this grade level.</b>		
<b>3. Coordinate Geometry</b>		<b>No performance objectives at this grade level.</b>		
<b>4. Measurement</b>	1	Compare and order objects according to observable and measurable attributes.	3	Order objects according to observable and measurable attributes.
			2	Verbally compare objects according to observable and measurable attributes.
			M01-S1C3-02	Communicate orally how different attributes of an object can be measured.
	2	Use the attribute of length to describe and compare objects using non-standard units.	1	Estimate the measure of an object using U.S. customary standard and non-standard units of measure.

\* This performance objective is new to the 2008 Mathematics Standard Articulated by Grade Level.

**MATHEMATICS CROSSWALK  
2008 MATHEMATICS STANDARD TO 2003 MATHEMATICS STANDARD  
KINDERGARTEN**

<b>Strand 5: Structure and Logic</b>				
<b>CONCEPT</b>	<b>2008 PO</b>	<b>ITEM DESCRIPTION</b>	<b>2003 PO</b>	<b>ITEM DESCRIPTION</b>
<b>1. Algorithms and Algorithmic Thinking</b>		<b>No performance objectives at this grade level.</b>		
<b>2. Logic, Reasoning, Problem Solving, and Proof</b>	1	*Identify the question(s) asked and any other questions that need to be answered in order to find a solution.*		
	2	*Identify the given information that can be used to find a solution.*		
	3	*Select from a variety of problem-solving strategies and use one or more strategies to arrive at a solution.*		
	4	*Represent a problem situation using any combination of words, numbers, pictures, physical objects, or symbols.*		
	5	*Explain and clarify mathematical thinking.*		
	6	*Determine whether a solution is reasonable.*		
	M00-S2C3-01	<b>Moved to Strand 2 Concept 3</b>	1	Sort objects according to observable attributes.
			2	Provide rationale for classifying objects according to observable attributes (color, size, shape, weight, etc.).

\* This performance objective is new to the 2008 Mathematics Standard Articulated by Grade Level.