



# Math Teachers Press, Inc.

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CP 4/06

## Correlation of *Moving with Math*® Extensions Grade 4 To Wisconsin Model Academic Standards

		Student Book	Skill Builders
	By the end of grade four, students will:		
<b>A.4.1</b>	Use reasoning abilities to		
	<ul style="list-style-type: none"> <li>perceive patterns</li> </ul>	6, 8	3-1
	<ul style="list-style-type: none"> <li>identify relationships</li> </ul>	Concrete - pictorial - abstract throughout	
	<ul style="list-style-type: none"> <li>formulate questions for further exploration</li> </ul>		
	<ul style="list-style-type: none"> <li>justify strategies</li> </ul>		
	<ul style="list-style-type: none"> <li>test reasonableness of results</li> </ul>		
<b>A.4.2</b>	Communicate mathematical ideas in a variety of ways, including words, numbers, symbols, pictures, charts, graphs, tables, diagrams, and models	Manipulatives used throughout	
<b>A.4.3</b>	Connect mathematical learning with other subjects, personal experiences, current events, and personal interests		
	<ul style="list-style-type: none"> <li>see relationships between various kinds of problems and actual events</li> </ul>	21, 36, 44	14-1, 19-1, 24-1, 29-1, 48-1, 49-1, 49-3
	<ul style="list-style-type: none"> <li>use mathematics as a way to understand other areas of the curriculum (e.g., measurement in science, map skills in social studies)</li> </ul>		
<b>A.4.4</b>	Use appropriate mathematical vocabulary, symbols, and notation with understanding based on prior conceptual work	Vocabulary and glossary	
<b>A.4.5</b>	Explain solutions to problems clearly and logically in oral and written work and support solutions with evidence	Vocabulary and glossary	
<b>B.4.1</b>	Represent and explain whole numbers, decimals, and fractions with		
	<ul style="list-style-type: none"> <li>physical materials</li> </ul>		
	<ul style="list-style-type: none"> <li>number lines and other pictorial models</li> </ul>	48	30-1, 31-1
	<ul style="list-style-type: none"> <li>verbal descriptions</li> </ul>		5-1

		Student Book	Skill Builders
	<ul style="list-style-type: none"> <li>place-value conceptions and notations</li> </ul>	1-4	1-1, 6-1
	<ul style="list-style-type: none"> <li>symbolic renaming (e.g., <math>43 = 40 + 3 = 30 + 13</math>)</li> </ul>		
<b>B.4.2</b>	Determine the number of things in a set by		
	<ul style="list-style-type: none"> <li>grouping and counting (e.g., by threes, fives, hundreds)</li> </ul>	46	
	<ul style="list-style-type: none"> <li>combining and arranging (e.g., all possible coin combinations amounting to thirty cents)</li> </ul>		
	<ul style="list-style-type: none"> <li>estimation, including rounding</li> </ul>	9, 10, 22, 23, 34	7-1, 8-1
<b>B.4.3</b>	Read, write, and order whole numbers, simple fractions (e.g., halves, fourths, tenths, unit fractions) and commonly-used decimals (monetary units)	2-5, 7, 45-47	1-1, 2-1, 4-1, 5-1, 30-1, 31-1, 32-1
<b>B.4.4</b>	Identify and represent equivalent fractions for halves, fourths, eighths, tenths, sixteenths		
<b>B.4.5</b>	In problem-solving situations involving whole numbers, select and efficiently use appropriate computational procedures such as		
	<ul style="list-style-type: none"> <li>recalling the basic facts of addition, subtraction, multiplication, and division</li> </ul>	13-20, 25-33, 35, 37-43, 49, 50	10-1, 11-1, 12-1, 13-1, 15-1, 15-2, 16-1, 17-1, 18-1, 20-1 to 20-3, 21-1, 21-2, 22-1, 23-1, 25-1, 25-2, 5-4, 26-1, 27-1, 27-2, 28-1
	<ul style="list-style-type: none"> <li>using mental math (e.g., <math>37 + 25</math>, <math>40 \times 7</math>)</li> </ul>	27	
	<ul style="list-style-type: none"> <li>estimation</li> </ul>	9, 10, 22, 23, 34	7-1, 8-1
	<ul style="list-style-type: none"> <li>selecting and applying algorithms for addition, subtraction, multiplication, and division</li> </ul>		
	<ul style="list-style-type: none"> <li>using a calculator</li> </ul>		
<b>B.4.6</b>	Add and subtract fractions with like denominators		33-1, 33-2, 34-1
<b>B.4.7</b>	In problem-solving situations involving money, add and subtract decimals	24, 33	47-1 to 47-3
<b>C.4.1</b>	Describe two- and three-dimensional figures (e.g., circles, polygons, trapezoids, prisms, spheres) by		
	<ul style="list-style-type: none"> <li>naming them</li> </ul>	51, 52	35-1, 39-2, 40-1
	<ul style="list-style-type: none"> <li>comparing, sorting, and classifying them</li> </ul>		40-1

		Student Book	Skill Builders
	<ul style="list-style-type: none"> <li>drawing and constructing physical models to specifications</li> </ul>		
	<ul style="list-style-type: none"> <li>identifying their properties (e.g., number of sides or faces, two- or three-dimensionality, equal sides, number of right angles)</li> </ul>		
	<ul style="list-style-type: none"> <li>predicting the results of combining or subdividing two-dimensional figures</li> </ul>		
	<ul style="list-style-type: none"> <li>explaining how these figures are related to objects in the environment</li> </ul>		
<b>C.4.2</b>	Use physical materials and motion geometry (such as slides, flips, and turns) to identify properties and relationships, including but not limited to		
	<ul style="list-style-type: none"> <li>symmetry</li> </ul>		38-1
	<ul style="list-style-type: none"> <li>congruence</li> </ul>	54	39-1
	<ul style="list-style-type: none"> <li>similarity</li> </ul>		
<b>C.4.3</b>	Identify and use relationships among figures, including but not limited to		
	<ul style="list-style-type: none"> <li>location (e.g., between, adjacent to, interior of)</li> </ul>		
	<ul style="list-style-type: none"> <li>position (e.g., parallel, perpendicular)</li> </ul>	53	36-1, 37-1
	<ul style="list-style-type: none"> <li>intersection (of two-dimensional figures)</li> </ul>		37-1
<b>C.4.4</b>	Use simple two-dimensional coordinate systems to find locations on maps and to represent points and simple figures		50-5
<b>D.4.1</b>	Recognize and describe measurable attributes, such as length, liquid capacity, time, weight (mass), temperature, volume, monetary value, and angle size, and identify the appropriate units to measure them	55-57	41-1, 41-2, 42-1, 43-1, 45-1, 46-1
<b>D.4.2</b>	Demonstrate understanding of basic facts, principles, and techniques of measurement, including		
	<ul style="list-style-type: none"> <li>appropriate use of arbitrary and standard units (metric and US Customary)</li> </ul>	57	43-1
	<ul style="list-style-type: none"> <li>appropriate use and conversion of units within a system (such as yards, feet, and inches; kilograms and grams; gallons, quarts, pints, and cups)</li> </ul>	58, 59	44-1
	<ul style="list-style-type: none"> <li>judging the reasonableness of an obtained measurement as it relates to prior experience and familiar benchmarks</li> </ul>		
<b>D.4.3</b>	Read and interpret measuring instruments (e.g., rulers, clocks, thermometers)	55, 56	41-1, 41-2, 43-1, 45-1
<b>D.4.4</b>	Determine measurements directly by using standard tools to these suggested degrees of accuracy		

		<b>Student Book</b>	<b>Skill Builders</b>
	<ul style="list-style-type: none"> <li>length to the nearest half-inch or nearest cm</li> </ul>	57-59	43-1, 45-1, 46-1
	<ul style="list-style-type: none"> <li>weight (mass) to the nearest ounce or nearest 5 grams</li> </ul>		
	<ul style="list-style-type: none"> <li>temperature to the nearest 5</li> </ul>		
	<ul style="list-style-type: none"> <li>time to the nearest minute</li> </ul>	55, 56	41-1, 41-2
	<ul style="list-style-type: none"> <li>monetary value to dollar and cents</li> </ul>		
	<ul style="list-style-type: none"> <li>liquid capacity to the nearest fluid ounce</li> </ul>		
<b>D.4.5</b>	Determine measurements by using basic relationships (such as perimeter and area) and approximate measurements by using estimation techniques	60-62	46-2
<b>E.4.1</b>	Work with data in the context of real-world situations by		
	<ul style="list-style-type: none"> <li>formulating questions that lead to data collection and analysis</li> </ul>	63, 64	50-1 to 50-3
	<ul style="list-style-type: none"> <li>determining what data to collect and when and how to collect them</li> </ul>	63, 64	50-1 to 50-3
	<ul style="list-style-type: none"> <li>collecting, organizing, and displaying data</li> </ul>	63, 64	50-1 to 50-3
	<ul style="list-style-type: none"> <li>drawing reasonable conclusions based on data</li> </ul>	63, 64	50-1 to 50-3
<b>E.4.2</b>	Describe a set of data using		
	<ul style="list-style-type: none"> <li>high and low values, and range</li> </ul>		
	<ul style="list-style-type: none"> <li>most frequent value (mode)</li> </ul>		
	<ul style="list-style-type: none"> <li>middle value of a set of ordered data (median)</li> </ul>		50-6
<b>E.4.3</b>	In problem-solving situations, read, extract, and use information presented in graphs, tables, or charts		
<b>E.4.4</b>	Determine if future events are more, less, or equally likely, impossible, or certain to occur		50-4, 50-7
<b>E.4.5</b>	Predict outcomes of future events and test predictions using data from a variety of sources		50-4, 50-7
<b>F.4.1</b>	Use letters, boxes or other symbols to stand for any number, measured quantity, or object in simple situations (e.g., $N + O = N$ is true for any number)		49-2
<b>F.4.2</b>	Use the vocabulary, symbols, and notation of algebra accurately (e.g., correct use of the symbol "="; effective use of the associative property of multiplication )		25-2, 49-2
<b>F.4.3</b>	Work with simple linear patterns and relationships in a variety of ways, including	8	3-1
	<ul style="list-style-type: none"> <li>recognizing and extending number patterns</li> </ul>		
	<ul style="list-style-type: none"> <li>describing them verbally</li> </ul>		

		Student Book	Skill Builders
	<ul style="list-style-type: none"> <li>representing them with pictures, tables, charts, graphs</li> </ul>		
	<ul style="list-style-type: none"> <li>recognizing that different models can represent the same pattern or relationship</li> </ul>	T.G. p. 8	
	<ul style="list-style-type: none"> <li>using them to describe real-world phenomena</li> </ul>		
<b>F.4.4</b>	Recognize variability in simple functional relationships by describing how a change in one quantity can produce a change in another (e.g., number of bicycles and the total number of wheels)	25, 27	
<b>F.4.5</b>	Use simple equations and inequalities in a variety of ways, including		
	<ul style="list-style-type: none"> <li>using them to represent problem situations</li> </ul>		
	<ul style="list-style-type: none"> <li>solving them by different methods (e.g., use of manipulatives, guess and check strategies, recall of number facts)</li> </ul>	Used throughout	
	<ul style="list-style-type: none"> <li>recording and describing solution strategies</li> </ul>		
<b>F.4.6</b>	Recognize and use generalized properties and relationships of arithmetic (e.g., commutativity of addition, inverse relationship of multiplication and division)	11, 12, 39	9-1, 9-2, 20-2, 25-3