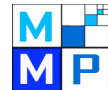
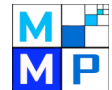


Houghton Mifflin Expressions Grade One 2007–2008 Mathematics Curriculum Guides

	Wisconsin Mathematics Standard	MPS Learning Target	Wisconsin Assessment Descriptors for Mathematics (For Beginning Grade 2)	Curriculum
Throughout The Year	A. Mathematical Processes	<i>Note: Mathematical processes need to be embedded in all mathematical strands throughout the school year. Math processes are assessed on the WKCE-CRT and reported as a separate proficiency area. For example, students are asked to provide written justifications and explanations, pose problems, and represent concepts.</i>	<p>1) Reasoning: Use reasoning and logic to:</p> <ul style="list-style-type: none"> • Perceive patterns • Formulate questions • Make conjectures • Test reasonableness of results • Identify relationships • Pose problems • Justify strategies <p>2) Communication: Communicate mathematical ideas and reasoning using the vocabulary of mathematics in a variety of ways (e.g., using words, numbers, symbols, pictures, charts, tables, diagrams, graphs, and models).</p> <p>3) Connections: Connect mathematics to the real world as well as within mathematics.</p> <p>4) Representations: Create and use representations to organize, record, and communicate mathematical ideas.</p> <p>5) Problem Solving: Solve and analyze routine and non-routine problems.</p>	



Time	Curricular Connections Units/Lessons	MPS Learning Targets	Wisconsin State Framework Assessment Descriptors	Connections District Model CABS
<p>January 3 teaching days</p>	<p>Take time to teach any lessons that have not yet been completed</p>			
<p>February 20 teaching days</p>	<p>Continue with Unit 5 Ten-Structured Applications</p> <p>5.4- Teen Coin Amounts (NO&R,AR) 5.5- Ten Amounts with Real Coins (NO&R,AR) 5.6- Create a Hundred Grid(NO&R,AR) 5.7 Explore the Hundred Grid(NO&R,AR) 5.8- Partners of 100 and Dollar Break-Aparts (NO&R,AR) 5.9- Solve Problems with Hundred Partners(NO&R,AR) 5.10- Coin Combinations (NO&R,AR) 5.11- Unknown Addends with Teen Totals(NO&R,AR) 5.12- Subtraction with Teen Numbers (NO&R,AR) 5.13- Mixed Practice with Teen Problems(NO&R,AR)</p>	<p>Number Operations and Relationships #1 Represent numbers, monetary values, and fractions (i.e., halves and fourths) to show equivalency (e.g., $5+5=8+2$, 10 dimes is worth \$1.00, 4 fourths is the same as 1 whole) and to compare them. (5.4, 5.5, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13,)</p> <p>Number Operations and Relationships #2 Use and explain strategies to solve addition and subtraction basic fact problems (e.g., doubles plus one, make a ten) and word problems (e.g., direct modeling) (5.4, 5.5, 5.6, 5.7, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14)</p> <p>Number Operations and Relationships #3 Estimate and explain strategies (e.g., make equal groups, skip count) to count collections of objects up to 100. (5.6, 5.7, 5.8, 5.9)</p>	<p>Number Operations and Relationship</p> <p>B.a:4 Count and compare collections of coins up to one dollar. (5.4, 5.5, 5.8, 5.9, 5.11, 5.12)</p> <p>B.a:3 Skip count by twos, fives, tens, hundreds and count on by ones and tens starting at various points (e.g., 23, 33, 43, 53, 63). (5.6, 5.7, 5.8, 5.11)</p> <p>B.b:6 Use and explain strategies (e.g., direct modeling, counting, numerical reasoning) to solve a variety of addition and subtraction word problems (e.g., change unknown, comparison, part-whole) and write number sentences that match the structure of the problems. (5.4, 5.5, 5.8, 5.9, 5.11, 5.12, 5.13, 5.14)</p> <p>B.b:7 Use numerical reasoning or number relationships (e.g., $8 + 5$, first add $8 + 2$, then add 3 more) and counting strategies (e.g., $7 - 5$, start at 5, count up to 7, keep track of the counts) to solve addition and subtraction basic fact problems. (5.4, 5.6, 5.7, 5.8, 5.9, 5.11, 5.12, 5.13, 5.14)</p> <p>B.b:8 Explain strategies for estimating, organizing, and counting collections of objects up to 100, emphasizing groups of ten and five. (5.6, 5.7)</p> <p>B.b:9 Explain and show the relationship between addition and subtraction using objects and pictures. (5.12, 5.13, 5.14)</p>	<p>Number Operation & Relationships</p> <ul style="list-style-type: none"> • Bracelets • Money, Money, Money • Counting Objects • Number Sense <p>Algebraic Relationships</p> <ul style="list-style-type: none"> • How Many Cards? • Toy Cars • What's the Equation



	<p>5.14- Small Group Practice: Teen Story Problems (NO&R,AR)</p> <p>Unit 5 Review and Unit Test (2 days)</p>	<p>Algebraic Relationships #8 Describe and extend repeating patterns, growing patterns, and relationships in tables and charts, including odd and even numbers. (5.6, 5.7, 5.9)</p> <p>Algebraic Relationships #9 Explain use of notation to show equality and model word problems, and solve simple open number sentences and true-false statements. (5.4, 5.5, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14)</p>	<p>Algebraic Relationships</p> <p>F.a:1 Recognize, describe, and extend repeating and growing patterns, including attribute, numeric, and geometric patterns, and “What’s My Rule?” relationships in tables and charts. (5.6, 5.7, 5.9)</p> <p>F.b:3 Demonstrate understanding that the equals sign means “the same as” by solving open number sentences (e.g., $3 + 2 = + 4$, $5 = 1 + \square$); $3 + \square = 6$) and true-false statements. (5.4, 5.5, 5.8, 5.9, 5.10, 5.11, 5.12, 5.13, 5.14)</p>	
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<p>March 14 teaching days</p>	<p>Unit 6- Comparisons and Data Formats</p> <p>6.1- Simple Comparisons and Graphs (SP) 6.2- Construct Picture Graphs (SP) 6.3- Quick Graphs and Comparisons(SP) 6.4- Graphs with Multiple Rows(SP) 6.5- Data Collection and Graphing(SP) 6.6- Student-Generated Graphs(SP) 6.7- From Picture Graphs to Tables(SP) 6.8- Story Problems with Comparisons(NO&R) 6.9- Comparison Story Problems Strategies (NO&R,AR)</p>	<p>Number Operations and Relationships #2 Use and explain strategies to solve addition and subtraction basic fact problems (e.g., doubles plus one, make a ten) and word problems (e.g., direct modeling)(6.8, 6.9)</p> <p>Statistics and Probability #7 Pose questions for collecting numerical and categorical data, display and draw conclusions to answer questions, and identify the likelihood of events. (6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7)</p> <p>Algebraic Relationships #9 Explain use of notation to show equality and model word problems, and solve simple open number sentences and true-false statements. (6.9)</p>	<p>Number Operation and Relationships</p> <p>B.b:6 Use and explain strategies (e.g., direct modeling, counting, numerical reasoning) to solve a variety of addition and subtraction word problems (e.g., change unknown, comparison, part-whole) and write number sentences that match the structure of the problems (6.8, 6.9)</p> <p>B.b:7 Use numerical reasoning or number relationships (e.g., $8 + 5$, first add $8 + 2$, then add 3 more) and counting strategies (e.g., $7 - 5$, start at 5, count up to 7, keep track of the counts) to solve addition and subtraction basic fact problems. (6.8, 6.9)</p> <p>Statistics and Probability</p> <p>E.a:1 Pose questions that can be answered by collecting numerical and categorical data. (6.1, 6.4, 6.5, 6.6, 6.7)</p> <p>E.a:2 Determine and then carry out ways to collect and organize data. (6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7)</p> <p>E.a:3 Display data using tables, tally marks, and bar graphs. (6.1, 6.2, 6.3, 6.4, 6.5, 6.6, 6.7)</p> <p>E.a:4 Analyze data displays to draw reasonable conclusions and answer questions in the context of the data (e.g., most people in our class like chocolate ice cream). (6.1, 6.2, 6.3, 6.4,6.5, 6.6, 6.7)</p> <p>Algebraic Relationships</p> <p>F.b:3 Demonstrate understanding that the equals sign means “the same as” by solving open number sentences (e.g., $3 + 2 = + 4$, $5 = 1 + \square$); $3 + \square = 6$) and true-false statements. (6.9)</p> <p>F.b:4 Write number sentences that match the structure of one-step word problems (e.g., write $5 + \square = 9$ for a change unknown word problem). (6.9)</p>	
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<p>April 9 teaching days</p>	<p>Unit 6- Comparisons and Data Formats</p> <p>6.10- Measurement with Inches (M) 6.11- Measurement Tables(M) 6.12 Comparison and Rotation of Shapes(G) 6.13- Shape Combinations(G) 6.14- Patten Day(G,AR) 6.15- Exploration of Solid Shapes(G)</p>	<p>Measurement #6 Describe measurable attributes and identify, estimate, and use non-standard and standard units to measure attributes of objects, time, and temperature. (6.10, 6.11)</p> <p>Geometry # 4 Describe, list, and compare geometric properties of two-dimensional and three-dimensional shapes and objects. (6.12, 6.15)</p> <p>Geometry #5 Describe relationships between shapes when they have been combined or decomposed and between objects on a simple coordinate map.(6.13)</p>	<p>Geometry</p> <p>C.b:5 Recognize that the orientation of a shape does not change its identify (e.g., a rotated square is still a square). (6.12,6.14)</p> <p>C.b: 3 Describe how to combine and decompose two-dimensional shapes to make other shapes (e.g., use pattern blocks to build a hexagon from triangles). (6.13)</p> <p>C.a: 1 Identify and describe properties of polygons (e.g., closed, number of sides and angles, symmetry) and polyhedra (e.g., faces, edges, vertices). (6.15)</p> <p>C.a:2 Describe, sort, and classify everyday objects by geometric properties. (6.15)</p> <p>Measurement</p> <p>D.a:1 Use everyday language to describe measurable attributes of objects (e.g., height, length, distance around, weight, mass, capacity), time, and temperature (6.10, 6.11)</p> <p>D.a:2Identify appropriate non-standard units (e.g., paper clips, cubes) and standard units (e.g., inches, minutes, hours, days, months, degrees Fahrenheit) to quantify measurable attributes.(6.10, 6.11)</p> <p>D.b:3 Read and interpret measuring instruments to quantify measurable attributes of objects using non-standard units and standard units to the nearest whole unit (e.g., nearest inch or nearest number of paper clips). (6.10, 6.11)</p> <p>Algebraic Relationships</p> <p>F.a:1 Recognize, describe, and extend repeating and growing patterns, including attribute, numeric, and geometric patterns, and “What’s My Rule?” relationships in tables and charts. (6.14)</p>	<p>Geometry</p> <ul style="list-style-type: none"> • Shapes and Faces • Shapes in Motion
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<p><i>Adjustments made to the 3rd quarter curriculum guide reflect feedback from teachers regarding the pacing in the 1st & 2nd quarter guide. Please note that continuing at this pace could inhibit completion of the math program as it is written. The committee recommends teachers to consider combining similar mathematical ideas. This may assist students in developing a deeper conceptual understanding of mathematics as well as help to improve the current pacing as outlined in the 3rd quarter curriculum guide.</i></p>				

