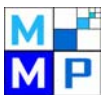


## B. Number Operations and Relationships Grade 2

MPS Learning Target #1 (Grade 2)	MPS Learning Target #2 (Grade 2)	MPS Learning Target #3 (Grade 2)
Use and explain strategies to compare and rename numbers and to solve addition and subtraction basic facts and word problems while applying place-value concepts and using money.	Represent concepts of multiplication (e.g., grouping, skip counting, repeated addition) and division (i.e., sharing, measuring, repeated subtraction) in everyday situations.	Represent fractions as part of a whole and as part of a set to solve problems (e.g., equal sharing or partitioning) in everyday situations.
<b>Descriptors</b> Concepts: 1, 2, 3, 5 Computation: 8, 9, 14, 15	<b>Descriptors</b> Concepts: 4 Computation: 10, 11	<b>Descriptors</b> Concepts: 6, 7 Computation: 12, 13

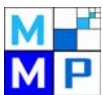
Wisconsin Sub-skill Descriptors (Beginning of Grade 3)	
<b>Sub-skill B.a: Concepts</b>	
	1) Recognize and apply place-value concepts to whole numbers less than 1,000.
	2) Read, write, and represent numbers using words, numerals, pictures (e.g., base-ten blocks), number lines, arrays, expanded forms (e.g., $24=20+4$ ) and symbolic renaming (e.g., $24=30-6$ ).
	3) Compare and order whole numbers less than 1,000.
	4) Count by 2s, 3s, 5s, 10s, 25s, and 100s.
	5) Count, compare, and make change using a collection of coins (up to one dollar) and one-dollar bills.
	6) Identify a fractional part of a collection/set.
	7) Read, write, and represent fractional parts of a whole (e.g., $1/4$ , $1/2$ ).
<b>Sub-skill B.b: Computation</b>	
	8) Use addition and subtraction in everyday situations and solve one-step word problems.
	9) Solve single and double-digit addition and subtraction problems with regrouping including horizontal format in problems with and without context.
	10) Demonstrate the context of multiplication as grouping or repeated addition in context with products up to 50.
	11) Demonstrate understanding of the concept of division as repeated subtraction, partitioning/sharing or measuring (dividends up to 30 and divisors up to 5).
	12) Use fractions to represent quantities when solving problems involving equal sharing or partitioning.
	13) Represent fractions with shaded circles, rods, squares, pictorial representations of a whole.
	14) Estimate sums to tens and hundreds and differences to ten.
	15) Determine reasonableness of answers.



## C. Geometry Grade 2

MPS Learning Target #4 (Grade 2)	MPS Learning Target #5 (Grade 2)
Describe and compare properties (e.g., sides, faces, corners, edges) of two- and three-dimensional shapes, and represent figures on a simple coordinate systems.	Predict the results of combining and decomposing shapes, and recognize and apply slides, flips, and turns to two-dimensional shapes.
<b>Descriptors</b> Describe figures: 1 Coordinate systems: 4	<b>Descriptors</b> Spatial relationships and transformations: 2, 3

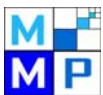
Wisconsin Sub-skill Descriptors (Beginning of Grade 3)	
<b><i>Sub-skill C.a: Describing Figures</i></b>	
	1) Identify, describe, and compare properties of 2 and 3 dimensional figures such as squares, triangles, rectangles, circles, pattern block shapes, cubes, pyramids, rectangular prisms, cylinders, and spheres (e.g., comparing sides, faces, corners, and edges).
<b><i>Sub-skill C.b: Spatial relationships and transformations</i></b>	
	2) Identify 2-dimensional geometric shapes created by combining or decomposing other shapes (e.g., square/triangle, trapezoid/rhombus, hexagon/triangle, triangle, rhombus, trapezoid).
	3) Apply concepts of single-motion geometry (e.g., slides, flips, and turns) to match two identical shapes.
<b><i>Sub-skill C.c: Coordinate systems</i></b>	
	4) Use simple 2-dimensional coordinate systems to find locations on maps and to represent points and simple figures with coordinates of letters and numbers (e.g., (E,3)).



**D. Measurement  
Grade 2**

<b>MPS Learning Target #6 (Grade 2)</b>
Determine estimates and exact measurements of length, weight, area, temperature, and time, by using appropriate standard and non-standard units, appropriate tools, and common referents.
<b>Descriptors</b> Measurable attributes: 1, 2 Direct measurement: 3, 4, 5, 6 Indirect measurement: 7

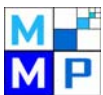
<b>Wisconsin Sub-skill Descriptors (Beginning of Grade 3)</b>	
<b><i>Sub-skill D.a: Measurable attributes</i></b>	
	1) Describe attributes of length, time, temperature, and identify appropriate units to measure them. Units include inches, feet, yards, centimeters, meters, seconds, minutes, hours, days, months, years, and degrees Fahrenheit/Celsius.
	2) Compare attributes of length and weight by observation or when given actual measurements.
<b><i>Sub-skill D.b: Direct measurement</i></b>	
	3) Read and interpret measuring instruments to determine the measurement of objects with non-standard and standard units to the nearest centimeter or half-inch.
	4) Read thermometers to the nearest 5 degrees F/C.
	5) Tell time to the nearest minute using analog and digital clocks; translate time from analog to digital clocks and vice versa.
	6) Investigate measurements of area.
<b><i>Sub-skill D.c: Indirect measurement</i></b>	
	7) Apply estimation techniques using non-standard units.



## E. Statistics and Probability Grade 2

<b>MPS Learning Target #7 (Grade 2)</b>
Pose and answer questions about real-world situations by collecting and displaying data from surveys and experiments (e.g., spinners), and draw reasonable conclusions including the likelihood of events.
<b>Descriptors</b> Data analysis and statistics: 1, 2, 3, 4 Probability: 5, 6

<b>Wisconsin Sub-skill Descriptors (Beginning of Grade 3)</b>	
<b><i>Sub-skill E.a: Data analysis and statistics</i></b>	
	1) Answer and pose questions about collecting, organizing and displaying data. Work with data in the context of real-world situations by determining what data to collect and when and how to collect it to answer questions.
	2) Collect, organize and display data in simple bar graphs and charts including translating data from one form to the other.
	3) Draw reasonable conclusions based on simple interpretations of data.
	4) Read, use information and draw reasonable conclusions from data in graphs, tables, charts, and Venn diagrams.
<b><i>Sub-skill E.b: Probability</i></b>	
	5) Determine if the occurrence of future events are more, less, or equally likely to occur.
	6) Choose a fair and an unfair spinner.



## F. Algebraic Relationships Grade 2

MPS Learning Target #8 (Grade 2)	MPS Learning Target #9 (Grade 2)
Describe and analyze how patterns (attribute, number, and geometric) are generated through repetition, increase, or decrease, and describe rules for relationships.	Explain and use equality, properties, and relationships to solve open and true-false number sentences and use notation to communicate mathematical ideas.
<b>Descriptors</b> Patterns, relations, & functions: 1, 2	<b>Descriptors</b> Expression, equations, & inequalities: 3, 4 Properties: 5, 6, 7

Wisconsin Sub-skill Descriptors (Beginning of Grade 3)	
<b><i>Sub-skill F.a: Patterns, relations, and functions</i></b>	
	1) Recognize, extend, describe, create and replicate a variety of patterns including attribute, number and geometric patterns, such as picture patterns, patterns in tables and charts, “What’s My Rule?” patterns, patterns using addition and subtraction rules. Focus on relationships within patterns as well as extending patterns e.g., patterns and relationships represented with pictures, tables, and charts, and “What’s My Rule?” patterns using addition and subtraction rules.
	2) Determine odd or even with a total set of 20 or less.
<b><i>Sub-skill F.b: Expressions, equations and inequalities</i></b>	
	3) Demonstrate an understanding that the “=” sign means “the same as” by solving open or true/false number sentences.
	4) Use notation to represent mathematical thinking: letter or box (variable); operation symbols (+, -, =).
<b><i>Sub-skill F.c: Properties</i></b>	
	5) Use properties and/or relationships of arithmetical thinking to determine and to reason about what number goes in a “box” to make a numbers sentence true.
	6) Identify zero property (e.g., $12+0=$ ”box”).
	7) Use simple equations in a variety of ways to demonstrate the properties above.

