

**MathWorks
Mathematics
Correlation
Grade One**



	Big Book Connections	Resource Unit Connections
Number Sense and Numeration		
Overall Expectations		
<ul style="list-style-type: none"> • read, represent, compare, and order whole numbers to 50, and use concrete materials to investigate fractions and money amounts; • demonstrate an understanding of magnitude by counting forward to 100 and backwards from 20; • solve problems involving the addition and subtraction of single-digit whole numbers, using a variety of strategies. 	The Money Book Solve It! Give It a Guess! Skip-Counting Fact Families Parts of a Whole Everyday Numbers	
Specific Expectations		
Quantity Relationships		
– represent, compare, and order whole numbers to 50, using a variety of tools (e.g., connecting cubes, ten frames, base ten materials, number lines, hundreds charts) and contexts (e.g., real-life experiences, number stories);		Unit 1: Numbers to 20 Unit 2: More About Numbers to 20 Unit 3: Revisiting Numbers to 20 Unit 9: Even More About Numbers to 20 Unit 10: Doubles Unit 11: Animal Math Unit 14: Chance Unit 17: Data Unit 21: Numbers to 99 Unit 22: Odd and Even Numbers Unit 29: Collecting Data Unit 32: More About Numbers to 99 Unit 38: Revisiting Numbers to 99 Unit 39: Number Patterns Unit 40: Looking Back
– read and print in words whole numbers to ten, using meaningful contexts (e.g., storybooks, posters);		Unit 1: Numbers to 20 Unit 2: More About Numbers to 20 Unit 3: Revisiting Numbers to 20
– demonstrate, using concrete materials, the concept of conservation of number (e.g., 5 counters represent the number 5, regardless whether they are close together or far apart);		Unit 6: Adding Groups
– relate numbers to the anchors of 5 and 10 (e.g., 7 is 2 more than 5 and 3 less than 10);		Unit 1: Numbers to 20 Unit 2: More About Numbers to 20 Unit 3: Revisiting Numbers to 20 Unit 6: Adding Groups Unit 7: Take Away Unit 10: Doubles

		Unit 12: It All Adds Up Unit 13: Subtraction Unit 15: Addition to 20 Unit 16: More About Addition to 20 Unit 21: Numbers to 99 Unit 24: Mental Strategies Unit 25: Subtraction to 20 Unit 26: More About Subtraction to 20 Unit 32: More About Numbers to 99 Unit 38: Revisiting Numbers to 99 Unit 39: Number Patterns
– identify and describe various coins (i.e., penny, nickel, dime, quarter, \$1 coin, \$2 coin), using coin manipulatives or drawings, and state their value (e.g., the value of a penny is one cent; the value of a toonie is two dollars);	The Money Book	Unit 7: Take Away Unit 35: Money
– represent money amounts to 20¢, through investigation using coin manipulatives;	The Money Book	Unit 35: Money Unit 40: Looking Back
– estimate the number of objects in a set, and check by counting (e.g., “I guessed that there were 20 cubes in the pile. I counted them and there were only 17 cubes. 17 is close to 20.”);	Solve It! Give It a Guess! Skip-Counting	Unit 3: Revisiting Numbers to 20 Unit 12: It All Adds Up Unit 33: Capacity
– compose and decompose numbers up to 20 in a variety of ways, using concrete materials (e.g., 7 can be decomposed using connecting cubes into 6 and 1, or 5 and 2, or 4 and 3);	Fact Families	Unit 6: Adding Groups Unit 7: Take Away Unit 12: It All Adds Up Unit 13: Subtraction Unit 15: Addition to 20 Unit 16: More About Addition to 20 Unit 24: Mental Strategies Unit 25: Subtraction to 20 Unit 26: More About Subtraction to 20 Unit 28: Addition and Subtraction Unit 34: Chance Events
– divide whole objects into parts and identify and describe, through investigation, equal-sized parts of the whole, using fractional names (e.g., halves; fourths or quarters).	Parts of a Whole	Unit 31: Fractions Unit 37: Telling Time
Counting		
– demonstrate, using concrete materials, the concept of one-to-one correspondence between number and objects when counting;		Unit 1: Numbers to 20 Unit 2: More About Numbers to 20 Unit 3: Revisiting Numbers to 20 Unit 4: Time Unit 9: Even More About Numbers to 20 Unit 11: Animal Math Unit 17: Data Unit 21: Numbers to 99 Unit 24: Mental Strategies Unit 29: Collecting Data
– count forward by 1’s, 2’s, 5’s, and 10’s to 100, using a variety of tools and strategies (e.g., move with steps;	Solve It! The Money Book Skip-Counting	Unit 1: Numbers to 20 Unit 2: More About Numbers to 20 Unit 3: Revisiting Numbers to 20

skip count on a number line; place counters on a hundreds chart; connect cubes to show equal groups; count groups of pennies, nickels, or dimes);		Unit 9: Even More About Numbers to 20 Unit 10: Doubles Unit 12: It All Adds Up Unit 14: Chance Unit 15: Addition to 20 Unit 16: More About Addition to 20 Unit 17: Data Unit 21: Numbers to 99 Unit 22: Odd and Even Numbers Unit 24: Mental Strategies Unit 28: Addition and Subtraction Unit 29: Collecting Data Unit 32: More About Numbers to 99 Unit 34: Chance Events Unit 35: Money Unit 38: Revisiting Numbers to 99 Unit 39: Number Patterns Unit 40: Looking Back
– count backwards by 1’s from 20 and any number less than 20 (e.g., count backwards from 18 to 11), with and without the use of concrete materials and number lines;		Unit 1: Numbers to 20 Unit 2: More About Numbers to 20 Unit 3: Revisiting Numbers to 20 Unit 9: Even More About Numbers to 20 Unit 10: Doubles Unit 13: Subtraction Unit 21: Numbers to 99 Unit 25: Subtraction to 20 Unit 26: More About Subtraction to 20 Unit 28: Addition and Subtraction Unit 32: More About Numbers to 99 Unit 38: Revisiting Numbers to 99
– count backwards from 20 by 2’s and 5’s, using a variety of tools (e.g., number lines, hundreds charts);		Unit 10: Doubles Unit 26: More About Subtraction to 20 Unit 28: Addition and Subtraction Unit 32: More About Numbers to 99 Unit 38: Revisiting Numbers to 99
– use ordinal numbers to thirty-first in meaningful contexts (e.g., identify the days of the month on a calendar).	Everyday Numbers Give It a Guess!	Unit 20: More About 3D Figures
Operational Sense		
– solve a variety of problems involving the addition and subtraction of whole numbers to 20, using concrete materials and drawings (e.g., pictures, number lines) (Sample problem: Miguel has 12 cookies. Seven cookies are chocolate. Use counters to determine how many cookies are not chocolate.);	Solve It! Fact Families	Unit 6: Adding Groups Unit 7: Take Away Unit 10: Doubles Unit 12: It All Adds Up Unit 13: Subtraction Unit 15: Addition to 20 Unit 16: More About Addition to 20 Unit 22: Odd and Even Numbers Unit 25: Subtraction to 20 Unit 26: More About Subtraction to 20 Unit 28: Addition and Subtraction Unit 34: Chance Events
– solve problems involving the addition and subtraction of single-digit whole numbers, using a variety of mental strategies (e.g., one more than, one less than, counting on, counting back, doubles);	Fact Families	Unit 6: Adding Groups Unit 7: Take Away Unit 10: Doubles Unit 12: It All Adds Up Unit 13: Subtraction Unit 15: Addition to 20 Unit 16: More About Addition to 20

		Unit 24: Mental Strategies Unit 25: Subtraction to 20 Unit 26: More About Subtraction to 20 Unit 28: Addition and Subtraction Unit 34: Chance Events
– add and subtract money amounts to 10¢, using coin manipulatives and drawings.	Solve It! Give It a Guess! The Money Book	Unit 7: Take Away Unit 35: Money
Measurement		
Overall Expectations		
<ul style="list-style-type: none"> • estimate, measure, and describe length, area, mass, capacity, time, and temperature, using non-standard units of the same size; • compare, describe, and order objects, using attributes measured in non-standard units. 	Units of Measure Everyday Numbers	
Specific Expectations		
Attributes, Units, and Measurement Sense		
– demonstrate an understanding of the use of non-standard units of the same size (e.g., straws, index cards) for measuring (Sample problem: Measure the length of your desk in different ways; for example, by using several different non-standard units or by starting measurements from opposite ends of the desk. Discuss your findings.);	Units of Measure	Unit 11: Animal Math Unit 23: Length Unit 40: Looking Back
– estimate, measure (i.e., by placing non standard units repeatedly, without overlaps or gaps), and record lengths, heights, and distances (e.g., a book is about 10 paper clips wide; a pencil is about 3 toothpicks long);	Units of Measure	Unit 11: Animal Math Unit 23: Length Unit 40: Looking Back
– construct, using a variety of strategies, tools for measuring lengths, heights, and distances in non-standard units (e.g., footprints on cash register tape or on connecting cubes);	Units of Measure	Unit 23: Length Unit 40: Looking Back
– estimate, measure (i.e., by minimizing overlaps and gaps), and describe area, through investigation using non-standard units (e.g., “It took about 15 index cards to cover my desk, with only a little bit of space left over.”);		Unit 12: It All Adds Up
– estimate, measure, and describe the capacity and/or mass of an object, through investigation using non-standard units (e.g., “My journal has the same mass as 13 pencils.” “The juice can has the same capacity as 4 pop cans.”);	Units of Measure	Unit 33: Capacity
– estimate, measure, and describe	Everyday Numbers	Unit 4: Time

the passage of time, through investigation using non standard units (e.g., number of sleeps; number of claps; number of flips of a sand timer);		Unit 20: More About 3D Figures Unit 30: Location Unit 37: Telling Time Unit 38: Revisiting Numbers to 99
– read demonstration digital and analogue clocks, and use them to identify benchmark times (e.g., times for breakfast, lunch, dinner; the start and end of school; bedtime) and to tell and write time to the hour and half-hour in everyday settings;		Unit 4: Time Unit 11: Animal Math Unit 27: More About Time Unit 37: Telling Time
– name the months of the year in order, and read the date on a calendar;		Unit 11: Animal Math Unit 27: More About Time
– relate temperature to experiences of the seasons (e.g., “In winter, we can skate because it’s cold enough for there to be ice.”).		Unit 27: More About Time
Measurement Relationships		
– compare two or three objects using measurable attributes (e.g., length, height, width, area, temperature, mass, capacity), and describe the objects using relative terms (e.g., taller, heavier, faster, bigger, warmer; “If I put an eraser, a pencil, and a metre stick beside each other, I can see that the eraser is shortest and the metre stick is longest.”);		Unit 11: Animal Math Unit 23: Length Unit 27: More About Time Unit 40: Looking Back
– compare and order objects by their linear measurements, using the same non-standard unit (Sample problem: Using a length of string equal to the length of your forearm, work with a partner to find other objects that are about the same length.);		Unit 23: Length Unit 40: Looking Back
– use the metre as a benchmark for measuring length, and compare the metre with non-standard units (Sample problem: In the classroom, use a metre stick to find objects that are taller than one metre and objects that are shorter than one metre.);		Unit 23: Length
– describe, through investigation using concrete materials, the relationship between the size of a unit and the number of units needed to measure length (Sample problem: Compare the numbers of paper clips and pencils needed to measure the length of the same table.).		Unit 23: Length
Geometry and Spatial Sense		
Overall Expectations		
• identify common two-dimensional	Solid Figures!	

<ul style="list-style-type: none"> • identify common two-dimensional shapes and three-dimensional figures and sort and classify them by their attributes;* • compose and decompose common two-dimensional shapes and three-dimensional figures; • describe the relative locations of objects using positional language. 	Solid Figures!	
Specific Expectations		
Geometric Properties By the end of Grade 1, students will:		
– identify and describe common two dimensional shapes (e.g., circles, triangles, rectangles, squares) and sort and classify them by their attributes (e.g., colour; size; texture; number of sides), using concrete materials and pictorial representations (e.g., “I put all the triangles in one group. Some are long and skinny, and some are short and fat, but they all have three sides.”);		Unit 5: 3D Figures Unit 18: Patterns Unit 19: 2D Shapes Unit 40: Looking Back
– trace and identify the two-dimensional faces of three-dimensional figures, using concrete models (e.g., “I can see squares on the cube.”);	Solid Figures!	Unit 5: 3D Figures Unit 20: More About 3D Figures Unit 36: More About Location
– identify and describe common three dimensional figures (e.g., cubes, cones, cylinders, spheres, rectangular prisms) and sort and classify them by their attributes (e.g., colour; size; texture; number and shape of faces), using concrete materials and pictorial representations (e.g., “I put the cones and the cylinders in the same group because they all have circles on them.”);	Solid Figures!	Unit 5: 3D Figures Unit 20: More About 3D Figures
– describe similarities and differences between an everyday object and a three dimensional figure (e.g., “A water bottle looks like a cylinder, except the bottle gets thinner at the top.”);	Solid Figures!	Unit 5: 3D Figures Unit 20: More About 3D Figures
– locate shapes in the environment that have symmetry, and describe the symmetry.		
Geometric Relationships		
– compose patterns, pictures, and designs, using common two-dimensional shapes (Sample problem: Create a picture of a flower using pattern blocks.);		Unit 18: Patterns Unit 19: 2D Shapes Unit 20: More About 3D Figures Unit 40: Looking Back
– identify and describe shapes within other shapes (e.g., shapes within a		Unit 40: Looking Back

– build three-dimensional structures using concrete materials, and describe the two dimensional shapes the structures contain;	Solid Figures!	Unit 5: 3D Figures Unit 20: More About 3D Figures
– cover outline puzzles with two-dimensional shapes (e.g., pattern blocks, tangrams) (Sample problem: Fill in the outline of a boat with tangram pieces.);		Unit 19: 2D Shapes Unit 40: Looking Back
Location and Movement		
– describe the relative locations of objects or people using positional language (e.g., over, under, above, below, in front of, behind, inside, outside, beside, between, along);		Unit 8: Making Maps Unit 30: Location Unit 36: More About Location
– describe the relative locations of objects on concrete maps created in the classroom (Sample problem: Work with your group to create a map of the classroom in the sand table, using smaller objects to represent the classroom objects. Describe where the teacher’s desk and the bookshelves are located.);		Unit 8: Making Maps Unit 20: More About 3D Figures Unit 36: More About Location
– create symmetrical designs and pictures, using concrete materials (e.g., pattern blocks, connecting cubes, paper for folding), and describe the relative locations of the parts.		
Patterning and Algebra		
Overall Expectations		
• identify, describe, extend, and create repeating patterns; • demonstrate an understanding of the concept of equality, using concrete materials and addition and subtraction to 10.	Skip-Counting Solve It! Give It a Guess!	
Specific Expectations		
– identify, describe, and extend, through investigation, geometric repeating patterns involving one attribute (e.g., colour, size, shape, thickness, orientation);		Unit 18: Patterns Unit 31: Fractions
– identify and extend, through investigation, numeric repeating patterns (e.g., 1, 2, 3, 1, 2, 3, 1, 2, 3, ...);	Skip-Counting	Unit 13: Subtraction Unit 15: Addition to 20 Unit 18: Patterns Unit 21: Numbers to 99 Unit 22: Odd and Even Numbers Unit 24: Mental Strategies Unit 26: More About Subtraction to 20 Unit 28: Addition and Subtraction Unit 39: Number Patterns
– describe numeric repeating patterns in a hundreds chart;		Unit 21: Numbers to 99 Unit 22: Odd and Even Numbers Unit 32: More About Numbers to 99 Unit 38: Revisiting Numbers to 99 Unit 39: Number Patterns

– identify a rule for a repeating pattern (e.g., “We’re lining up boy, girl, boy, girl, boy, girl.”);	Skip-Counting	Unit 15: Addition to 20 Unit 18: Patterns Unit 21: Numbers to 99 Unit 22: Odd and Even Numbers Unit 24: Mental Strategies Unit 26: More About Subtraction to 20 Unit 28: Addition and Subtraction Unit 39: Number Patterns
– create a repeating pattern involving one attribute (e.g., colour, size, shape, sound) (Sample problem: Use beads to make a string that shows a repeating pattern involving one attribute.);		Unit 18: Patterns Unit 20: More About 3D Figures Unit 31: Fractions
– represent a given repeating pattern in a variety of ways (e.g., pictures, actions, colours, sounds, numbers, letters) (Sample problem: Make an ABA,ABA,ABA pattern using actions like clapping or tapping.).		Unit 18: Patterns
Expressions and Equality		
– create a set in which the number of objects is greater than, less than, or equal to the number of objects in a given set;		Unit 1: Numbers to 20 Unit 2: More About Numbers to 20 Unit 3: Revisiting Numbers to 20 Unit 6: Adding Groups Unit 9: Even More About Numbers to 20 Unit 22: Odd and Even Numbers Unit 35: Money
– demonstrate examples of equality, through investigation, using a “balance” model (Sample problem: Demonstrate, using a pan balance, that a train of 7 attached cubes on one side balances a train of 3 cubes and a train of 4 cubes on the other side.);	Solve It! Give It a Guess!	Unit 15: Addition to 20
– determine, through investigation using a “balance” model and whole numbers to 10, the number of identical objects that must be added or subtracted to establish equality (Sample problem: On a pan balance, 5 cubes are placed on the left side and 8 cubes are placed on the right side. How many cubes should you take off the right side so that both sides balance?).	Solve It! Give It a Guess!	Unit 15: Addition to 20
Data Management & Probability		
Overall Expectations		
• collect and organize categorical primary data and display the data using concrete graphs and pictographs, without regard to the order of labels on the horizontal axis; • read and describe primary data	Numbers Every Day Solid Figures! The Money Book Graph It!	

<ul style="list-style-type: none"> • collect and organize categorical primary data and display the data using concrete graphs and pictographs, without regard to the order of labels on the horizontal axis; • read and describe primary data presented in concrete graphs and pictographs; • describe the likelihood that everyday events will happen. 	<p>Numbers Every Day Solid Figures! The Money Book Graph It!</p>	
Specific Expectations		
Collection and Organization of Data		
<p>– demonstrate an ability to organize objects into categories by sorting and classifying objects using one attribute (e.g., colour, size), and by describing informal sorting experiences (e.g., helping to put away groceries) (Sample problem: Sort a collection of attribute blocks by colour. Re-sort the same collection by shape.);</p>	<p>Numbers Every Day Solid Figures! The Money Book</p>	<p>Unit 5: 3D Figures Unit 11: Animal Math Unit 17: Data Unit 19: 2D Shapes Unit 20: More About 3D Figures Unit 22: Odd and Even Numbers Unit 25: Subtraction to 20 Unit 29: Collecting Data Unit 31: Fractions Unit 35: Money</p>
<p>– collect and organize primary data (e.g., data collected by the class) that is categorical (i.e., that can be organized into categories based on qualities such as colour or hobby), and display the data using one-to-one correspondence, prepared templates of concrete graphs and pictographs (with titles and labels), and a variety of recording methods (e.g., arranging objects, placing stickers, drawing pictures, making tally marks) (Sample problem: Collect and organize data about the favourite fruit that students in your class like to eat.).</p>	<p>Solid Figures! Graph It!</p>	<p>Unit 11: Animal Math Unit 14: Chance Unit 17: Data Unit 19: 2D Shapes Unit 27: More About Time Unit 29: Collecting Data Unit 34: Chance Events Unit 40: Looking Back</p>
Data Relationships		
<p>– read primary data presented in concrete graphs and pictographs, and describe the data using comparative language (e.g., more students chose summer than winter as their single favourite season);</p>	<p>Graph It!</p>	<p>Unit 11: Animal Math Unit 17: Data Unit 19: 2D Shapes Unit 29: Collecting Data</p>
<p>– pose and answer questions about collected data (Sample problem: What was the most popular fruit chosen by the students in your class?).</p>	<p>Graph It!</p>	<p>Unit 11: Animal Math Unit 14: Chance Unit 17: Data Unit 19: 2D Shapes Unit 29: Collecting Data Unit 34: Chance Events</p>
Probability		
<p>– describe the likelihood that everyday events will occur, using mathematical language (i.e.,</p>		<p>Unit 12: It All Adds Up Unit 13: Subtraction Unit 14: Chance</p>