

The Ontario Curriculum Grades 1 – 8 Mathematics Grade 1

The purpose of this comparison chart is to assist in understanding the revisions to the Mathematics Program. For the most part, this chart maintains the order of the 1997 curriculum expectations. The revised expectations (right hand column) are not presented in the order they will appear in the document, therefore it is important to refer to the 2005 document.

Mathematics Curriculum – Comparison Charts

1997 Curriculum Expectations Number Sense and Numeration: Grade 1	2005 Curriculum Expectations Number Sense and Numeration: Grade 1
<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p> <ul style="list-style-type: none"> ❖ understand whole numbers by exploring number relationships using concrete materials (e.g., demonstrate with blocks that 7 is one less than 8 or two more than 5); <i>Incorporated into overall for Quantity Relationships</i> ❖ understand numerals, ordinals, and the corresponding words, and demonstrate the ability to print them; <i>Incorporated into overall related for Quantity Relationships</i> ❖ represent fractions (halves as part of a whole) using concrete materials; <i>Incorporated into overall for Quantity Relationships</i> ❖ compare and order whole numbers using concrete materials and drawings to develop number meanings (e.g., to show place value, arrange 32 counters in groups of 3 tens and 2 ones); <i>Incorporated into overall for Quantity Relationships</i> ❖ estimate quantity in everyday life (e.g., guess, then count how many beans are in the jar); <i>Incorporated into overall for Quantity Relationships</i> 	<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p> <ul style="list-style-type: none"> ❖ read, represent, compare, and order whole numbers to 50, and use concrete materials to investigate fraction and money amounts;

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<ul style="list-style-type: none"> ❖ understand and explain basic operations (addition and subtraction) of whole numbers by modelling and discussing a variety of problem situations (e.g., show that addition involves joining <i>Incorporated into overall for Operational Sense</i>) ❖ develop proficiency in adding one-digit whole numbers; <i>Incorporated into overall for Operational Sense</i> 	<ul style="list-style-type: none"> ❖ solve problems involving the addition and subtraction of single-digit whole numbers, using a variety of strategies;
<ul style="list-style-type: none"> ❖ solve simple problems involving counting, joining, and taking one group away from another (e.g., how many buttons are on the table?), and describe and explain the strategies used; <i>Incorporated into overall for Counting</i> 	<ul style="list-style-type: none"> ❖ demonstrate an understanding of magnitude by counting forward to 100 and backwards from 20.
<ul style="list-style-type: none"> ❖ use a calculator to explore counting and to solve problems beyond the required pencil-and-paper skills. <i>Deleted</i> 	
<ul style="list-style-type: none"> ❖ understand the concept of order by sequencing events (e.g., the steps in washing a dog); <i>Deleted</i> 	
Understanding Number <i>Subheading revised</i>	Quantity Relationships
<p>Specific Expectations:</p> <ul style="list-style-type: none"> ❖ read and print numerals from 0 to 100; <i>Revised and combined</i> ❖ locate whole numbers to 10 on a number line; <i>Revised and combined</i> ❖ compare, order, and represent whole numbers to 50 using concrete materials and drawings; <i>Revised and</i> 	<p>Specific Expectations:</p> <ul style="list-style-type: none"> ❖ 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);

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<p><i>combined</i></p> <ul style="list-style-type: none"> ❖ use mathematical language to identify and describe numbers to 50 in real-life situations; <i>Revised and combined</i> ❖ discuss the use of number and arrangement in real-life situations (e.g., there are 21 children in my class, 11 girls and 10 boys); <i>Revised and combined</i> 	
	<ul style="list-style-type: none"> ❖ read and print in words whole numbers to ten, using meaningful contexts (e.g., story books, posters); <i>New</i>
<ul style="list-style-type: none"> ❖ demonstrate the conservation of number (e.g., 5 counters still represent the number 5 whether they are close together or far apart); <i>Revised</i> 	<ul style="list-style-type: none"> ❖ 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);
<ul style="list-style-type: none"> ❖ demonstrate the one-to-one correspondence between number and objects when counting; <i>Revised</i> 	<ul style="list-style-type: none"> ❖ demonstrate, using concrete materials, the concept of one-to-one correspondence between number and objects when counting;
	<ul style="list-style-type: none"> ❖ represent, money amounts up to 20 cents, through investigation using coin manipulatives; <i>New</i>
<ul style="list-style-type: none"> ❖ investigate number meanings (e.g., the concept of 5); <i>Revised</i> 	<ul style="list-style-type: none"> ❖ 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);
	<ul style="list-style-type: none"> ❖ 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

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	two dollars); <i>New</i>
	❖ relate numbers to the anchors of 5 and 10 (e.g., 7 is 2 more than 5 and 3 less than 10); <i>New</i>
❖ use a seriation line to display relationships of order (e.g., order of events in a story); <i>Deleted</i>	
❖ model numbers grouped in 10's and 1's and use zero as a place holder; <i>Deleted</i>	
❖ use a calculator to explore counting, to solve problems, and to operate with numbers larger than 10; <i>Deleted</i>	
❖ use ordinal numbers to tenth; <i>Revised</i>	❖ use ordinal numbers to thirty-first in meaningful contexts (e.g., identify the days of the month on a calendar).
❖ represent and explain halves as part of a whole using concrete materials and drawings (e.g., colour one-half of a circle); <i>Revised</i>	❖ 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)
❖ estimate the number of objects and check the reasonableness of an estimate by counting; <i>Revised</i>	❖ estimate the number of objects in a set, and check by read (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.”);
	Counting <i>New Subheading</i>
❖ count by 1's, 2's, 5's, and 10's to 100 using a variety of ways (e.g., counting board, abacus, rote); <i>Revised</i>	❖ 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, 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);

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❖ count backwards from 10; <i>Revised</i>	❖ 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 or number lines;
	❖ count backwards from 20 by 2's and 5's, using a variety of tools (e.g., number line, hundreds chart); <i>New</i>
Computations <i>Subheading revised</i>	Operational Sense
<p>Specific Expectations:</p> <ul style="list-style-type: none"> ❖ demonstrate that addition involves joining and that subtraction involves taking one group away from another; <i>Revised and combined</i> ❖ demonstrate addition and subtraction facts to 20 using concrete materials; <i>Revised and combined</i> ❖ pose and solve simple number problems orally (e.g., how many students wore boots today?); <i>Revised and combined</i> ❖ use concrete materials to help in solving simple number problems; <i>Revised and combined</i> 	<p>Specific Expectations:</p> <ul style="list-style-type: none"> ❖ 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.);
❖ mentally add one-digit numbers; <i>Revised</i>	❖ 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);
❖ represent addition and subtraction sentences (e.g., $5 + 6 = 11$) using concrete materials (e.g., counters); <i>Deleted</i>	

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❖ identify the effect of zero in addition and subtraction; <i>Moved to Grade 2: Patterning and Algebra</i>	
❖ add and subtract money amounts to 10¢ using concrete materials, drawings, and symbols; <i>Revised</i>	❖ add and subtract money amounts to 10 cents, using coin manipulatives and drawings.
Applications <i>Subheading Deleted</i>	
Specific Expectations: ❖ describe their thinking as they solve problems. <i>Incorporated into Mathematical Process Expectation - Reflecting</i>	Specific Expectations:

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1997 Curriculum Expectations Measurement: Grade 1	2005 Curriculum Expectations Measurement: Grade 1
<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p> <ul style="list-style-type: none"> ❖ demonstrate an understanding of and ability to apply measurement terms: height, length, width, time (hour, half-hour), money (pennies, nickels, dimes), temperature; <i>Revised with money moved to Number Sense and Numeration.</i> 	<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p> <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;
<ul style="list-style-type: none"> ❖ identify relationships between and among measurement concepts (e.g., winter time – colder temperatures); <i>Revised</i> 	<ul style="list-style-type: none"> ❖ compare, describe, and order objects, using attributes measured in non-standard units.
<ul style="list-style-type: none"> ❖ solve problems related to their day-to-day environment using concrete experiences of measurement and estimation; <i>Revised and incorporated into specific expectations under Attributes, Units and Measurements</i> 	
<ul style="list-style-type: none"> ❖ compare the areas of shapes using non-standard units; <i>Deleted</i> 	
<ul style="list-style-type: none"> ❖ estimate, measure, and record the capacity of containers and the mass of familiar objects using non-standard units, and compare the measures. <i>Revised and incorporated into specific expectations under Attributes, Units and Measurements..</i> 	

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Units of Measure <i>Subheading Revised</i>	Attributes, Units, and Measurement Sense
<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ compare two objects and identify similarities and differences (e.g., compare the length and width of two pencils); <i>Revised</i> 	<p>Specific Expectations:</p>
<ul style="list-style-type: none"> ❖ represent the results of measurement activities using concrete materials and drawings; <i>Revised and combined with several specific expectations</i> 	<ul style="list-style-type: none"> ❖ 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);
<ul style="list-style-type: none"> ❖ demonstrate that a non-standard unit is used repeatedly to measure (e.g., count the number of floor tiles to measure the length of the classroom); <i>Revised and combined.</i> 	<ul style="list-style-type: none"> ❖ 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);
<ul style="list-style-type: none"> ❖ estimate, measure, and record the linear dimensions (e.g., length, height) of objects using non-standard units, and compare and order objects by their linear dimensions; <i>Revised and combined.</i> 	<ul style="list-style-type: none"> ❖ 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.).

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❖ use mathematical language to describe dimensions (e.g., height, length); <i>Incorporated into Mathematical Process Expectation - Communication</i>	
❖ select an appropriate non-standard unit to measure length; <i>Revised</i>	❖ 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.);
	❖ 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.); <i>New</i>
	❖ 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.); <i>New</i>
❖ order sequences of events orally and with pictures; <i>Deleted</i>	
❖ demonstrate an understanding of the passage of time by comparing the duration of various activities (e.g., walking home will take as long as watching one television show); <i>Deleted</i>	

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❖ name the days of the week in order, and the seasons; <i>Revised</i>	❖ name the months of the year in order, and read the date on a calendar;
❖ estimate and measure the passage of time using non-standard units; <i>Revised</i>	❖ estimate, measure, and describe 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);
❖ read analog clocks, and tell and write time to the hour and half-hour; <i>Revised</i>	❖ 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;
❖ relate temperature to their daily activities; <i>Revised</i>	❖ relate temperature to experiences of the seasons (e.g., “In winter, we can skate because it’s cold enough for there to be ice”).
❖ demonstrate an understanding of the value of some coins (1¢, 5¢, 10¢); <i>Revised and moved to Number Sense and Numeration</i>	
❖ represent a given value of coins up to 10¢ using concrete materials or drawings; <i>Revised and moved to Number Sense and Numeration</i>	
❖ name coins up to \$2 and state the value of pennies, nickels, and dimes; <i>Revised and moved to Number Sense and Numeration</i>	
❖ use appropriate language to describe relative times, sizes, temperatures, amounts of money, areas, masses, and capacities (e.g., tallest, warmer); <i>Incorporated into</i>	

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<i>Mathematical Process Expectation – Communication</i>	
❖ use non-standard units to solve oral measurement problems related to everyday issues; <i>Deleted</i>	
Perimeter and Area <i>Subheading Revised</i>	Measurement Relationships
<ul style="list-style-type: none"> ❖ demonstrate an understanding of the relationship between the tiling of a surface and the number of units needed to cover the surface; <i>Revised and combined</i> ❖ estimate and count the number of uniform and non-uniform shapes that will cover a surface; <i>Revised and combined</i> 	<ul style="list-style-type: none"> ❖ 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”);
	<ul style="list-style-type: none"> ❖ 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.”); <i>New</i>
Capacity, Volume, and Mass <i>Subheading Revised</i>	
<ul style="list-style-type: none"> ❖ estimate, measure, and record the capacity of containers using non-standard units, and compare the measures; <i>Revised and combined</i> 	<ul style="list-style-type: none"> ❖ 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”); <i>Revised and moved from overall to specific</i>
<ul style="list-style-type: none"> ❖ estimate, measure, and record the mass of objects 	

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using non-standard units, and compare the measures. <i>Revised and combined</i>	<i>expectation.</i>

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1997 Curriculum Expectations Geometry and Spatial Sense: Grade 1	2005 Curriculum Expectations Geometry and Spatial Sense: Grade 1
<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p> <ul style="list-style-type: none"> ❖ describe and classify three-dimensional figures and two-dimensional shapes using concrete materials and drawings; <i>Revised</i> ❖ build three-dimensional objects and models; <i>Revised</i> ❖ understand basic concepts in transformational geometry using concrete materials and drawings. <i>Deleted</i> 	<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p> <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;
	<ul style="list-style-type: none"> ❖ describe the relative locations of objects using positional language <i>New</i>
Three- and Two Dimensional Geometry <i>Subheading Revised</i>	Geometric Properties
<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ explore and identify three-dimensional figures using concrete materials and drawings (e.g., cube, cone, cylinder, sphere); <i>Revised and combined</i> 	<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ identify and describe common three-dimensional figures (e.g., cubes, cones, cylinders, spheres, rectangular prisms) and sort and classify them by their attributes

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❖ compare and sort three-dimensional figures according to observable attributes (e.g., size, slide, roll); <i>Revised and combined</i>	(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”);
❖ describe similarities and differences between an object and a three-dimensional figure; <i>Revised</i>	❖ 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”);
	❖ trace and identify the two-dimensional faces of three-dimensional figures, using concrete models (e.g., “I can see squares on the cube”); <i>New</i>
<ul style="list-style-type: none"> ❖ compare and sort two-dimensional shapes according to attributes they choose; <i>Revised and combined</i> ❖ describe and name two-dimensional shapes (e.g., circle, square, rectangle, triangle); <i>Revised and combined</i> ❖ identify attributes of two-dimensional shapes; <i>Revised and combined</i> 	❖ identify and describe common two-dimensional shapes (e.g., circles, triangles, rectangles, squares) and sort and classify them by attributes (e.g., colour; size; texture; number of sides), using concrete materials and pictorial representations (e.g., “I put the triangles in one group. Some are long and skinny, and some are short and fat, but they all have three sides”);
❖ compare the size and shape of two-dimensional shapes by superimposing (e.g., this triangle is taller, this triangle is the same); <i>Deleted</i>	
	❖ locate shapes in the environment that have symmetry, and describe the symmetry
	Geometric Relationships <i>New</i>

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Specific Expectations	Specific Expectations
❖ explore and identify two-dimensional shapes using concrete materials and drawings (e.g., circle, rectangle, triangle); <i>Revised</i>	❖ identify and describe shapes within other shapes (e.g., shapes within a geometric design);
❖ create structures using three-dimensional figures and model three-dimensional figures using concrete materials (e.g., building blocks, construction sets); <i>Revised and combined</i>	❖ build three-dimensional structures using concrete materials, and describe the two-dimensional shapes the structures contain;
❖ observe and construct a given three-dimensional model (e.g., re-create a structure given by the teacher); <i>Revised and combined</i>	
❖ use two-dimensional shapes to construct a picture of objects in the environment (e.g., stickers, stamps); <i>Revised</i>	❖ cover outline puzzles with two-dimensional shapes (e.g., pattern blocks, tangrams) (Sample problem: Fill in the outline of a boat with tangram pieces.).
Transformational Geometry	Location and Movement <i>Revised</i>
Specific Expectations	Specific Expectations
❖ recognize symmetry in the environment; <i>Revised</i>	
❖ create symmetrical figures using concrete materials and drawings; <i>Revised</i>	❖ create symmetrical designs and pictures, using concrete materials (e.g., pattern blocks, connecting cubes, paper folding), and describe the relative locations of the parts.
	❖ compose patterns, pictures, and designs, using common two-dimensional shapes (Sample problem: Create a

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	picture of a flower using pattern blocks.); <i>New</i>
❖ follow directions to move or place an object in relation to another object (e.g., beside, to the right); <i>Deleted</i>	
<ul style="list-style-type: none"> ❖ describe an object in relation to another using positional language (e.g., over, to the left of). <i>Revised and combined.</i> ❖ demonstrate spatial sense in relation to self and to objects in the environment (e.g., inside, to the right); <i>Revised and combined</i> 	❖ 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);
	❖ 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.);

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<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p>	<p>Overall Expectations</p> <p>By the end of Grade 1, students will:</p>
<ul style="list-style-type: none"> ❖ explore patterns and pattern rules; <i>Revised and combined</i> ❖ identify relationships between and among patterns. <i>Revised and combined</i> 	<ul style="list-style-type: none"> ❖ identify, describe, extend, and create repeating patterns;
	<ul style="list-style-type: none"> ❖ demonstrate an understanding of the concept of equality, using concrete materials and addition and subtraction to 10. <i>New</i>
	<p>Patterns and Relationships <i>New</i></p>
<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ describe, draw, and make models of patterns using actions, objects, diagrams, and words; <i>Revised</i> 	<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ 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 and snapping.).
<ul style="list-style-type: none"> ❖ recognize similarities and differences in a variety of attributes (e.g., size, shape, colour); <i>Deleted</i> 	

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Mathematics Curriculum – Comparison Charts

❖ use one attribute to create a pattern (e.g., thick or thin, open or closed); <i>Revised</i>	❖ create a repeating pattern involving one attribute (e.g., colour, size, shape, sound) (Sample problem: Use beads to make a necklace that shows a repeating pattern involving one attribute.);
❖ identify counting patterns in hundreds charts; <i>Revised</i>	❖ describe numeric repeating patterns in a hundreds chart;
❖ given a rule expressed in informal language, extend a pattern; <i>Revised and expanded</i>	❖ identify, describe, and extend, through investigation, geometric repeating patterns involving one attribute (e.g., colour, size, shape, thickness, orientation); ❖ identify and extend, through investigation, numeric repeating patterns (e.g., 1, 2, 3, 1, 2, 3, 1, 2, 3, ...);
❖ talk about a pattern rule; <i>Revised</i>	❖ identify a rule for a repeating pattern (e.g., “We’re lining up boy, girl, boy, girl, boy, girl.”);
❖ compare patterns using objects, pictures, actions, and spoken words. <i>Deleted</i>	
❖ use a calculator and a computer application to explore patterns; <i>Deleted</i>	
	Expressions and Equality <i>New</i>
	Specific Expectations
	❖ 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; <i>New</i>
	❖ 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.); <i>New</i>

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	<ul style="list-style-type: none">❖ determine, through investigation using a “balance” model and whole number 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?). <i>New</i>
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Mathematics Curriculum – Comparison Charts

1997 Curriculum Expectations Data Management and Probability: Grade 1	2005 Curriculum Expectations Data Management and Probability: Grade 1
Overall Expectations	Overall Expectations
By the end of Grade 1, students will:	By the end of Grade 1, students will:
❖ collect, organize, and describe data using concrete materials and drawings; <i>Revised</i>	❖ 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;
❖ interpret displays of data using concrete materials, and discuss the data; <i>Revised</i>	❖ read and describe primary data presented in concrete graphs and pictographs;
❖ demonstrate an understanding of probability and demonstrate the ability to apply probability in familiar day-to-day situations. <i>Revised</i>	❖ describe the likelihood that everyday events will happen.
Collecting, Organizing, and Analysing Data <i>Revised</i>	Collecting and Organizing Data
Specific Expectations	Specific Expectations
❖ compare, sort, and classify concrete objects according to a specific attribute (e.g., colour, size); <i>Revised and combined</i>	❖ 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.);
❖ identify relationships between objects by stating shared attributes (e.g., shape, colour); <i>Revised and combined</i>	

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Mathematics Curriculum – Comparison Charts

1997 Curriculum Expectations Data Management and Probability: Grade 1	2005 Curriculum Expectations Data Management and Probability: Grade 1
<ul style="list-style-type: none"> ❖ generate yes/no questions for a given topic; <i>Revised and combined</i> ❖ collect first-hand data by counting objects, conducting surveys, measuring, and performing simple experiments; <i>Revised and combined</i> ❖ conduct an inquiry using appropriate methods (e.g., ask one another, "What is your favourite kind of ice cream?"); <i>Revised and combined</i> ❖ record data on charts or grids given by the teacher using various recording methods (e.g., drawing pictures, placing stickers); <i>Revised and combined</i> ❖ organize materials on concrete graphs and pictographs using one-to-one correspondence; <i>Revised and combined</i> 	<ul style="list-style-type: none"> ❖ 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, 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.).
<ul style="list-style-type: none"> ❖ pose questions about data gathered (e.g., why are so many students wearing running shoes?); <i>Revised</i> 	<ul style="list-style-type: none"> ❖ pose and answer questions about collected data (<i>Sample problem:</i> What was the most popular fruit chosen by the students in our class?).

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Mathematics Curriculum – Comparison Charts

Concluding and Reporting <i>Revised</i>	Data Relationships
<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ related objects to number on a graph with one-to-one correspondence; <i>Revised and combined</i> ❖ read and discuss data from graphs made with concrete materials and express understanding in a variety of informal ways (e.g., tell a story, draw a picture); <i>Revised and combined</i> 	<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ 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);
Probability	Probability
<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ demonstrate understanding that an event may or may not occur; <i>Revised and combined</i> ❖ use events from meaningful experiences to discuss probability (e.g., it will never snow here in July); <i>Revised and combined</i> ❖ use mathematical language (e.g., never, sometimes, always) in informal discussion to describe probability <i>Revised and combined</i> 	<p>Specific Expectations</p> <ul style="list-style-type: none"> ❖ describe the likelihood that everyday events will occur, using mathematical language (i.e., impossible, unlikely, less likely, more likely, certain) (e.g., “It’s unlikely that I will win the contest shown on the cereal box.”).

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