

My Math Path 4 – 2020 Ontario Curriculum Correlation*

Strand/Expectation			Module/Chapter/Lesson
Strand A: Social-Emotional Learning (SEL) Skills and the Mathematical Processes			
By the end of Grade 4, students will:			
1. Identify and manage emotions	<ul style="list-style-type: none"> <i>problem solving</i>: develop, select, and apply problem-solving strategies <i>reasoning and proving</i>: develop and apply reasoning skills (e.g., classification, recognition of relationships, use of counter-examples) to justify thinking, make and investigate conjectures, and construct and defend arguments 	1. express and manage their feelings, and show understanding of the feelings of others, as they engage positively in mathematics activities	Throughout chapters
2. recognize sources of stress and cope with challenges	<ul style="list-style-type: none"> <i>reflecting</i>: demonstrate that as they solve problems, they are pausing, looking back, and monitoring their thinking to help clarify their understanding (e.g., by comparing and adjusting strategies used, by explaining why they think their results are reasonable, by recording their thinking in a math journal) 	2. work through challenging math problems, understanding that their resourcefulness in using various strategies to respond to stress is helping them build personal resilience	Throughout chapters
3. maintain positive motivation and perseverance	<ul style="list-style-type: none"> <i>connecting</i>: make connections among mathematical concepts, procedures, and representations, and relate mathematical ideas to other contexts (e.g., other curriculum areas, daily life, sports) 	3. recognize that testing out different approaches to problems and learning from mistakes is an important part of the learning process, and is aided by a sense of optimism and hope	Throughout chapters
4. build relationships and communicate effectively	<ul style="list-style-type: none"> <i>communicating</i>: express and understand mathematical thinking, and engage in mathematical arguments using everyday language, language resources as necessary, appropriate mathematical terminology, a variety of representations, and mathematical conventions 	4. work collaboratively on math problems – expressing their thinking, listening to the thinking of others, and practising inclusivity – and in that way fostering healthy relationships	Throughout chapters
5. develop self-awareness and sense of identity	<ul style="list-style-type: none"> <i>representing</i>: select from and create a variety of representations of mathematical ideas (e.g., representations involving physical models, pictures, numbers, variables, graphs), and apply them to solve problems 	5. see themselves as capable math learners, and strengthen their sense of ownership of their learning, as part of their emerging sense of identity and belonging	Throughout chapters
6. think critically and creatively	<ul style="list-style-type: none"> <i>selecting tools and strategies</i>: select and use a variety of concrete, visual, and electronic learning tools and appropriate strategies to investigate mathematical ideas and to solve problems 	6. make connections between math and everyday contexts to help them make informed judgements and decisions	Throughout chapters

Overall expectation	Specific expectations	Module/Chapter/Lesson
Strand B: Number		
By the end of Grade 4, students will:		
B1. Number Sense demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life	Whole Numbers B1.1 read, represent, compose, and decompose whole numbers up to and including 10 000, using appropriate tools and strategies, and describe various ways they are used in everyday life	Chapter 1, Lesson 1-2
	B1.2 compare and order whole numbers up to and including 10 000, in various contexts	Chapter 1, Lesson 3
	B1.3 round whole numbers to the nearest ten, hundred, or thousand, in various contexts	Chapter 1, Lesson 4-5
	Fractions and Decimals B1.4 represent fractions from halves to tenths using drawings, tools, and standard fractional notation, and explain the meanings of the denominator and the numerator	Chapter 12, Lesson 1
	B1.5 use drawings and models to represent, compare, and order fractions representing the individual portions that result from two different fair-share scenarios involving any combination of 2, 3, 4, 5, 6, 8, and 10 sharers	Chapter 12, Lesson 1, 3
	B1.6 count to 10 by halves, thirds, fourths, fifths, sixths, eighths, and tenths, with and without the use of tools	Chapter 12, Lesson 1
	B1.7 read, represent, compare, and order decimal tenths, in various contexts	Chapter 13, Lesson 1-2
	B1.8 round decimal numbers to the nearest whole number, in various contexts	Chapter 13, Lesson 6
	B1.9 describe relationships and show equivalences among fractions and decimal tenths, in various contexts	Chapter 13, Lesson 3
B2. Operations use knowledge of numbers and operations to solve mathematical problems encountered in everyday life	Properties and Relationships B2.1 use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations	Chapter 6, Lesson 4 Chapter 8, Lesson 1-4
	Math Facts B2.2 recall and demonstrate multiplication facts for 1×1 to 10×10 , and related division facts	TBC
	Mental Math B2.3 use mental math strategies to multiply whole numbers by 10, 100, and 1000, divide whole numbers by 10, and add and subtract decimal tenths, and explain the strategies used	Chapter 6, Lesson 2 Chapter 7, RPK Chapter 7, Lesson 6 Chapter 13, Lesson 4-5
	Addition and Subtraction B2.4 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 10 000 and of decimal tenths, using appropriate tools and strategies, including algorithms	Chapter 2, Lesson 1-3 Chapter 3, Lesson 1-4 Chapter 4, Lesson 1 Chapter 13, Lesson 4-5, 7
	Multiplication and Division B2.5 represent and solve problems involving the multiplication of two- or three-digit whole numbers by one-digit whole numbers and by 10, 100, and 1000, using appropriate tools, including arrays	Chapter 6, Lesson 2-3, 5-6 Chapter 7, RPK Chapter 8, Lesson 1-2

	B2.6 represent and solve problems involving the division of two- or three-digit whole numbers by one-digit whole numbers, expressing any remainder as a fraction when appropriate, using appropriate tools, including arrays	Chapter 7, Lesson 1, 3-5 Chapter 8, Lesson 3-4
	B2.7 represent the relationship between the repeated addition of a unit fraction and the multiplication of that unit fraction by a whole number, using tools, drawings, and standard fractional notation	Chapter 12, Lesson 1
	B2.8 show simple multiplicative relationships involving whole-number rates, using various tools and drawings	Chapter 8, Lesson 1-4

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Strand C: Algebra

By the end of Grade 4, students will:

C1. Patterns and Relationships identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts	Patterns C1.1 identify and describe repeating and growing patterns, including patterns found in real-life contexts	Chapter 16, Lesson 3 Chapter 19, Lesson 1
	C1.2 create and translate repeating and growing patterns using various representations, including tables of values and graphs	Chapter 19, Lesson 1
	C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating and growing patterns	Chapter 16, Lesson 3 Chapter 19, Lesson 1
	C1.4 create and describe patterns to illustrate relationships among whole numbers and decimal tenths	Chapter 19, Lesson 1
C2. Equations and Inequalities demonstrate an understanding of variables, expressions, equalities, and inequalities, and apply this understanding in various contexts	Variables C2.1 identify and use symbols as variables in expressions and equations	Chapter 19, Lesson 2
	Equalities and Inequalities C2.2 solve equations that involve whole numbers up to 50 in various contexts, and verify solutions	Chapter 19, Lesson 3
	C2.3 solve inequalities that involve addition and subtraction of whole numbers up to 20, and verify and graph the solutions	Chapter 19, Lesson 4
C3. Coding solve problems and create computational representations of mathematical situations using coding concepts and skills	Coding Skills C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential, concurrent, repeating, and nested events	Coding Toolkit
	C3.2 read and alter existing code, including code that involves sequential, concurrent, repeating, and nested events, and describe how changes to the code affect the outcomes	Coding Toolkit
C4. Mathematical Modelling apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations		

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Strand D: Data		
By the end of Grade 4, students will:		
D1. Data Literacy manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life	Data Collection and Organization D1.1 describe the difference between qualitative and quantitative data, and describe situations where each would be used	Chapter 18, Lesson 1-2
	D1.2 collect data from different primary and secondary sources to answer questions of interest that involve comparing two or more sets of data, and organize the data in frequency tables and stem-and-leaf plots	Chapter 18, Lesson 1, 5-6
	Data Visualization D1.3 select from among a variety of graphs, including multiple-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs	Chapter 18, Lesson 2, 6
	D1.4 create an infographic about a data set, representing the data in appropriate ways, including in frequency tables, stem-and-leaf plots, and multiple-bar graphs, and incorporating any other relevant information that helps to tell a story about the data	Chapter 18, Lesson 3, 6
	Data Analysis D1.5 determine the mean and the median and identify the mode(s), if any, for various data sets involving whole numbers, and explain what each of these measures indicates about the data	Chapter 18, Lesson 4-6
	D1.6 analyse different sets of data presented in various ways, including in stem-and-leaf plots and multiple-bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions	Chapter 18, Lesson 2, 4-6
D2. Probability describe the likelihood that events will happen, and use that information to make predictions	Probability D2.1 use mathematical language, including the terms “impossible”, “unlikely”, “equally likely”, “likely”, and “certain”, to describe the likelihood of events happening, represent this likelihood on a probability line, and use it to make predictions and informed decisions	Chapter 17, Lesson 1
	D2.2 make and test predictions about the likelihood that the mean, median, and mode(s) of a data set will be the same for data collected from different populations	Chapter 18, Lesson 4

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Strand E: Spatial Sense		
By the end of Grade 4, students will:		
E1. Geometric and Spatial Reasoning describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them	Geometric Reasoning E1.1 identify geometric properties of rectangles, including the number of right angles, parallel and perpendicular sides, and lines of symmetry	Chapter 16, Lesson 1
	Location and Movement E1.2 plot and read coordinates in the first quadrant of a Cartesian plane, and describe the translations that move a point from one coordinate to another	Chapter 16, Lesson 5
	E1.3 describe and perform translations and reflections on a grid, and predict the results of these transformations	Chapter 16, Lesson 2, 4
E2. Measurement compare, estimate, and determine measurements in various contexts	The Metric System E2.1 explain the relationships between grams and kilograms as metric units of mass, and between litres and millilitres as metric units of capacity, and use benchmarks for these units to estimate mass and capacity	Chapter 9, Lesson 2-3
	E2.2 use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity	Chapter 9, Lesson 1-3

	Time E2.3 solve problems involving elapsed time by applying the relationships between different units of time	Chapter 11, Lesson 2-5
	Angles E2.4 identify angles and classify them as right, straight, acute, or obtuse	Chapter 15, Lesson 1
	Area E2.5 use the row and column structure of an array to measure the areas of rectangles and to show that the area of any rectangle can be found by multiplying its side lengths	Chapter 14, Lesson 1
	E2.6 apply the formula for the area of a rectangle to find the unknown measurement when given two of the three	Chapter 14, Lesson 1

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Strand F: Financial Literacy		
By the end of Grade 4, students will:		
F1. Money and Finances demonstrate the knowledge and skills needed to make informed financial decisions	Money Concepts F1.1 identify various methods of payment that can be used to purchase goods and services	TBC
	F1.2 estimate and calculate the cost of transactions involving multiple items priced in whole-dollar amounts, not including sales tax, and the amount of change needed when payment is made in cash, using mental math	Chapter 10, Lesson 1-2
	Financial Management F1.3 explain the concepts of spending, saving, earning, investing, and donating, and identify key factors to consider when making basic decisions related to each	TBC
	F1.4 explain the relationship between spending and saving, and describe how spending and saving behaviours may differ from one person to another	TBC
	Consumer and Civic Awareness F1.5 describe some ways of determining whether something is reasonably priced and therefore a good purchase	TBC

*manuscript still in development