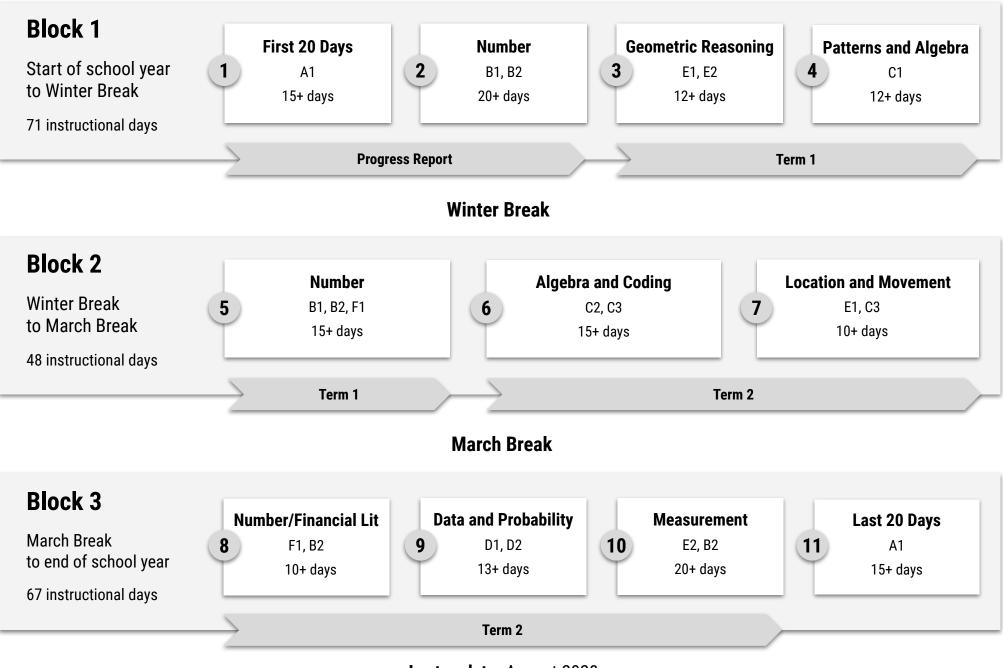
Grade 3: Scope and Sequence



Last update: August 2020

Simcoe County District School Board Grade 3: Course of Study

Welcome to the updated SCDSB Math Course of Study, revised to reflect the expectations found in <u>The Ontario Curriculum, Grades</u> <u>1–8: Mathematics (2020)</u>.

The Scope and Sequence is split into three distinct "blocks", with natural breaks (Winter Break and March Break) separating them. Educators are encouraged to use their professional judgement and consider the total number of instructional days in a block, minimum unit lengths, reporting periods (indicated by the grey arrows), as well as the remaining "flex days" and how they can be used to support their students' achievement in mathematics. These "flex" days allow educators to tailor their programs to their students' needs, while ensuring they stay on course, so that sufficient time is dedicated to each unit.

This Scope and Sequence emphasizes a common focus across all grades at the same time, although unit lengths may vary from grade to grade due to shifts in emphasis in knowledge and skill development throughout the grades. Please note that because of this alignment, consideration will need to be given to the strategic organization, distribution, and sharing of resources (i.e., manipulatives) among classes.

Units are sequenced to allow for fundamental skills and concepts to be introduced early and then applied in later units, providing opportunities to deepen understanding and make connections between mathematical concepts.

The specific expectations that are to be the focus of instruction and assessment, as well as any relevant cross-strand connections are listed for each unit. Each grade has expectations that are an ongoing focus throughout the year. Previous grade expectations may be noted in this section for continued practice, however, only grade level expectations will be assessed.

Simcoe County District School Board Grade 3: Block 1 Overview

1 First 20 Days	2 Number	3 Geometric Reasoning	4 Patterns and Algebra
15+ days	20+ days	12+ days	12+ days
Social-Emotional Learning Skills: A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum	Number: B1. demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life Number: B2. use knowledge of numbers and operations to solve mathematical problems encountered in everyday life (B1.1 - B1.5, B2.1 - B2.3)	 Spatial Sense: E1. describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them Spatial Sense: E2. compare, estimate, and determine measurements in various contexts (E1.1 - E1.3, E2.1, E2.2, E2.5) 	Algebra: C1. identify, describe, extend, create, and make predictions about a variety of patterns, including those found in real-life contexts (C1.1 - C1.4)
Progres	ss Report	Ter	rm 1

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills mathematical to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical

Modelling: C4. apply the process of modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and

Relationships: B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations

Math Facts: B2.2 (Grade 2) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (Grade 3) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000. and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Time: E2.4 use units of time, including seconds, minutes, hours, and nonstandard units. to describe the duration of various events

Grade 3: Unit 1 - First 20 Days (15+ days)

Social-Emotional Learning A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

To the best of their ability, students will learn to:	as they apply the mathematical processes:	so they can:
1. identify and manage emotions	mathematical ideas to other contexts (e.g., other curriculum areas, daily life, sports)	1. express and manage their feelings, and show understanding of the feelings of others, as they engage positively in mathematics activities
2. recognize sources of stress and cope with challenges		2. work through challenging math problems, understanding that their resourcefulness in using various strategies to respond to stress is helping them build personal resilience
3. maintain positive motivation and perseverance		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
4. build relationships and communicate effectively		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
5. develop self-awareness and sense of identity	representing: 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
6. think critically and creatively	selecting tools and strategies: 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

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Unit 2 - Number (20+ days)

Specific Expectations:

Whole Numbers: B1.1 read, represent, compose, and decompose whole numbers up to and including 1000, using a variety of tools and strategies, and describe various ways they are used in everyday life

Whole Numbers: B1.2 compare and order whole numbers up to and including 1000, in various contexts

Whole Numbers: B1.3 round whole numbers to the nearest ten or hundred, in various contexts

Whole Numbers: B1.4 count to 1000, including by 50s, 100s, and 200s, using a variety of tools and strategies

Whole Numbers: B1.5 use place value when describing and representing multi-digit numbers in a variety of ways, including with base ten materials

Properties and Relationships: B2.1 use the properties of operations (addition and subtraction), and the relationships between multiplication and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Cross-Strand Connections:

Patterns: C1.4 create and describe patterns to illustrate relationships among whole numbers up to 1000

Variables: C2.1 describe how variables are used, and use them in various contexts as appropriate

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts

Length, Mass, Capacity E2.2 explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Unit 3 - Geometric Reasoning (12+ days)

Specific Expectations:

Geometric Reasoning: E1.1 sort, construct, and identify cubes, prisms, pyramids, cylinders, and cones by comparing their faces, edges, vertices, and angles

Geometric Reasoning: E1.2 compose and decompose various structures, and identify the two-dimensional shapes and three-dimensional objects that these structures contain

Geometric Reasoning: E1.3 identify congruent lengths, angles, and faces of three-dimensional objects by mentally and physically matching them, and determine if the objects are congruent

Length: E2.1 use appropriate units of length to estimate, measure, and compare the perimeters of polygons and curved shapes, and construct polygons with a given perimeter

Length:E2.2 explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths

Length: E2.5 use various units of different sizes to measure the same attribute of a given item, and demonstrate that even though using different-sized units produces a different count, the size of the attribute remains the same

Cross-Strand Connections:

Equalities and Inequalities: C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts

Data Collection and Organization: D1.1 sort sets of data about people or things according to two and three attributes, using tables and logic diagrams, including Venn, Carroll, and tree diagrams, as appropriate

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Unit 4 - Patterns (12+ days)

Specific Expectations:

Patterns: C1.1 identify and describe repeating elements and operations in a variety of patterns, including patterns found in real-life contexts

Patterns: C1.2 create and translate patterns that have repeating elements, movements, or operations using various representations, including shapes, numbers, and tables of values

Patterns: C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns that have repeating elements, movements, or operations

Patterns: C1.4 create and describe patterns to illustrate relationships among whole numbers up to 1000

Cross-Strand Connections:

Whole Numbers: B1.1 read, represent, compose, and decompose whole numbers up to and including 1000, using a variety of tools and strategies, and describe various ways they are used in everyday life*

Whole Numbers B1.4 count to 1000, including by 50s, 100s, and 200s, using a variety of tools and strategies*

Whole Numbers B1.5 use place value when describing and representing multi digit numbers in a variety of ways, including with base ten materials*

Addition and Subtraction: B2.4 demonstrate an understanding of algorithms for adding and subtracting whole numbers by making connections to and describing the way other tools and strategies are used to add and subtract

Addition and Subtraction: B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms*

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Block 2 Overview

5 Number	6 Algebra and Coding	7 Location and Movement	
15+ days	15+ days	10+ days	
Number: B1. demonstrate an understanding of numbers and make connections to the way numbers are used in everyday life Number: B2. use knowledge of numbers and	Algebra: C2. demonstrate an understanding of variables, expressions, equalities, and inequalities, and apply this understanding in various contexts Algebra: C3. solve problems and create	Spatial Sense: E1. describe and represent shape, location, and movement by applying geometric properties and spatial relationships in order to navigate the world around them	
operations to solve mathematical problems encountered in everyday life Financial Literacy: F1. demonstrate the knowledge and skills needed to make informed financial decisions	computational representations of mathematical situations using coding concepts and skills (C2.1 - C2.3, C3.1, C3.2)	Algebra: C3. solve problems and create computational representations of mathematical situations using coding concepts and skills (E1.4, C3.1, C3.2)	
(B1.6, B1.7, B2.1 - B2.9, F1.1)	(62.1 - 62.3, 63.1, 63.2)		
Term 1	Term 2		

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills mathematical to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical

Modelling: C4. apply the process of modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and

Relationships: B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations

Math Facts: B2.2 (Grade 2) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (Grade 3) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000. and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Time: E2.4 use units of time, including seconds, minutes, hours, and nonstandard units. to describe the duration of various events

Grade 3: Unit 5 - Number (15+ days)

Specific Expectations:

Fractions: B1.6 use drawings to represent, solve, and compare the results of fair-share problems that involve sharing up to 20 items among 2, 3, 4, 5, 6, 8, and 10 sharers, including problems that result in whole numbers, mixed numbers, and fractional amounts

Fractions: B1.7 represent and solve fair-share problems that focus on determining and using equivalent fractions, including problems that involve halves, fourths, and eighths; thirds and sixths; and fifths and tenths

Properties and Relationships: B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts*

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used*

Addition and Subtraction: B2.4 demonstrate an understanding of algorithms for adding and subtracting whole numbers by making connections to and describing the way other tools and strategies are used to add and subtract*

Addition and Subtraction: B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms*

Multiplication and Division: B2.6 represent multiplication of numbers up to 10×10 and division up to $100 \div 10$, using a variety of tools and drawings, including arrays

Multiplication and Division: B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one half, one fourth, and one third, using tools and drawings

Multiplication and Division: B2.8 represent the connection between the numerator of a fraction and the repeated addition of the unit fraction with the same denominator using various tools and drawings, and standard fractional notation

Multiplication and Division: B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems

Money Concepts: F1.1 estimate and calculate the change required for various simple cash transactions involving wholedollar amounts and amounts of less than one dollar

Ongoing Focus:

Social-Emotional Learning: A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling: C4.

apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations **Probability:** D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Time: E2.6 use analog and digital clocks and timers to tell time in hours, minutes, and seconds

Cross-Strand Connections:

Whole Numbers: B1.1 read, represent, compose, and decompose whole numbers up to and including 1000, using a variety of tools and strategies, and describe various ways they are used in everyday life*

Whole Numbers: B1.2 compare and order whole numbers up to and including 1000, in various contexts*

Variables and Expressions: C2.1 describe how variables are used, and use them in various contexts as appropriate*

Equalities and Inequalities:

C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not*

Equalities and Inequalities:

C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts*

Grade 3: Unit 6 - Algebra and Coding (15+ days)

Specific Expectations:

Patterns: C1.4 create and describe patterns to illustrate relationships among whole numbers up to 1000*

Variables and Expressions: C2.1 describe how variables are used, and use them in various contexts as appropriate

Equalities and Inequalities: C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts

Coding Skills: C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential, concurrent, and repeating events

Coding Skills: C3.2 read and alter existing code, including code that involves sequential, concurrent, and repeating events, and describe how changes to the code affect the outcomes

Cross-Strand Connections:

Location and Movement: E1.4 give and follow multi step instructions involving movement from one location to another, including distances and half and quarter-turns

Mass: E2.4 compare, estimate, and measure the mass of various objects, using a pan balance and non-standard units

Addition and Subtraction: B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms*

Multiplication and Division: B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one half, one fourth, and one third, using tools and drawings*

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Unit 7 - Location and Movement (10+ days)

Specific Expectations:

Location and Movement: E1.4 give and follow multi step instructions involving movement from one location to another, including distances and half and quarter-turns

Coding Skills: C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential, concurrent, and repeating events*

Coding Skills: C3.2 read and alter existing code, including code that involves sequential, concurrent, and repeating events, and describe how changes to the code affect the outcomes*

Cross-Strand Connections:

Addition and Subtraction: B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms*

Patterns: C1.2 create and translate patterns that have repeating elements, movements, or operations using various representations, including shapes, numbers, and tables of values*

Length: E2.1 use appropriate units of length to estimate, measure, and compare the perimeters of polygons and curved shapes, and construct polygons with a given perimeter

Length: E2.2 explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

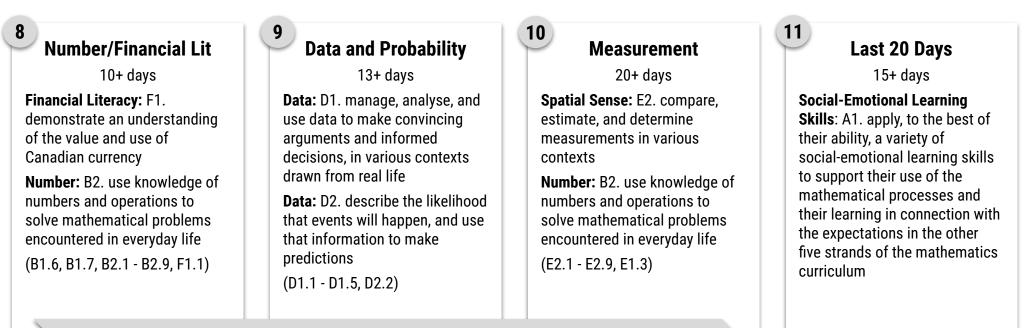
Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Block 3 Overview



Term 2

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills mathematical to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical

Modelling: C4. apply the process of modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and

Relationships: B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations

Math Facts: B2.2 (Grade 2) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (Grade 3) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000. and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Time: E2.4 use units of time, including seconds, minutes, hours, and nonstandard units. to describe the duration of various events

Grade 3: Unit 8 - Number (10+ days)

Specific Expectations:

Fractions: B1.6 use drawings to represent, solve, and compare the results of fair-share problems that involve sharing up to 20 items among 2, 3, 4, 5, 6, 8, and 10 sharers, including problems that result in whole numbers, mixed numbers, and fractional amounts*

Fractions: B1.7 represent and solve fair-share problems that focus on determining and using equivalent fractions, including problems that involve halves, fourths, and eighths; thirds and sixths; and fifths and tenths*

Properties and Relationships: B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts*

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used*

Addition and Subtraction: B2.4 demonstrate an understanding of algorithms for adding and subtracting whole numbers by making connections to and describing the way other tools and strategies are used to add and subtract*

Addition and Subtraction: B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms*

Multiplication and Division: B2.6 represent multiplication of numbers up to 10×10 and division up to $100 \div 10$, using a variety of tools and drawings, including arrays*

Multiplication and Division: B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one half, one fourth, and one third, using tools and drawings*

Multiplication and Division: B2.8 represent the connection between the numerator of a fraction and the repeated addition of the unit fraction with the same denominator using various tools and drawings, and standard fractional notation*

Multiplication and Division: B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems*

Money Concepts: F1.1 estimate and calculate the change required for various simple cash transactions involving wholedollar amounts and amounts of less than one dollar **Ongoing Focus:**

Social-Emotional Learning: A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling: C4.

apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations **Probability:** D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Cross-Strand Connections:

Variables and Expressions:

C2.1 describe how variables are used, and use them in various contexts as appropriate*

Equalities and Inequalities:

C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not*

Equalities and Inequalities:

C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts*

Data Analysis: D1.5 analyse different data sets presented in various ways, including in frequency tables and in graphs with different scales, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions

Grade 3: Unit 9 - Data and Probability (13+ days)

Specific Expectations:

Data Collection and Organization: D1.1 sort sets of data about people or things according to two and three attributes, using tables and logic diagrams, including Venn, Carroll, and tree diagrams, as appropriate

Data Collection and Organization: D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on qualitative and quantitative data, and organize the data using frequency tables

Data Visualization: D1.3 display sets of data, using many-to-one correspondence, in pictographs and bar graphs with proper sources, titles, and labels, and appropriate scales

Data Analysis: D1.4 determine the mean 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

Data Analysis: D1.5 analyse different data sets presented in various ways, including in frequency tables and in graphs with different scales, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions

Probability: D2.2 make and test predictions about the likelihood that the mean and the mode(s) of a data set will be the same for data collected from different populations

Cross-Strand Connections:

Addition and Subtraction: B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms*

Multiplication and Division: B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one half, one fourth, and one third, using tools and drawings*

Multiplication and Division: B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems*

Variables and Expressions: C2.1 describe how variables are used, and use them in various contexts as appropriate*

Equalities and Inequalities: C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not*

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts*

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Unit 10 - Measurement (20+ days)

Specific Expectations:

Length, Capacity and Mass: E2.1 use appropriate units of length to estimate, measure, and compare the perimeters of polygons and curved shapes, and construct polygons with a given perimeter

Length, Capacity and Mass: E2.2 explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths

Length, Capacity and Mass: E2.3 use nonstandard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy

Length, Capacity and Mass: E2.4 compare, estimate, and measure the mass of various objects, using a pan balance and non-standard units

Length, Capacity and Mass: E2.5 use various units of different sizes to measure the same attribute of a given item, and demonstrate that even though using different-sized units produces a different count, the size of the attribute remains the same

Area: E2.7 compare the areas of two-dimensional shapes by matching, covering, or decomposing and recomposing the shapes, and demonstrate that different shapes can have the same area

Area: E2.8 use appropriate non-standard units to measure area, and explain the effect that gaps and overlaps have on accuracy

Area: E2.9 use square centimetres (cm2) and square metres (m2) to estimate, measure, and compare the areas of various two dimensional shapes, including those with curved sides

Geometric Reasoning: E1.3 identify congruent lengths, angles, and faces of three-dimensional objects by mentally and physically matching them, and determine if the objects are congruent

Ongoing Focus:

Social-Emotional Learning: A1.

apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical

Modelling: C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations Properties and Relationships: B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations Math Facts: B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Cross-Strand Connections:

Variables and Expressions:

C2.1 describe how variables are used, and use them in various contexts as appropriate*

Multiplication and Division:

B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one half, one fourth, and one third, using tools and drawings*

Multiplication and Division:

B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems*

Addition and Subtraction: B2.5 represent and solve problems involving the addition and

subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms*

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions

Grade 3: Unit 11 - Last 20 Days (15+ days)

Social-Emotional Learning A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

To the best of their ability, students will learn to:	as they apply the mathematical processes:	so they can:
1. identify and manage emotions	 problem solving: develop, select, and apply problem-solving strategies reasoning and proving: 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 reflecting: 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) connecting: make connections among mathematical concepts, procedures, and representations, and relate mathematical ideas to other contexts (e.g., other curriculum areas, daily life, sports) communicating: 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 	1. express and manage their feelings, and show understanding of the feelings of others, as they engage positively in mathematics activities
2. recognize sources of stress and cope with challenges		2. work through challenging math problems, understanding that their resourcefulness in using various strategies to respond to stress is helping them build personal resilience
3. maintain positive motivation and perseverance		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
4. build relationships and communicate effectively		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
5. develop self-awareness and sense of identity	representing: 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
6. think critically and creatively	selecting tools and strategies: 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

Ongoing Focus:

Social-Emotional Learning:

A1. apply, to the best of their ability, a variety of social-emotional learning skills to support their use of the mathematical processes and their learning in connection with the expectations in the other five strands of the mathematics curriculum

Mathematical Modelling:

C4. apply the process of mathematical modelling to represent, analyse, make predictions, and provide insight into real-life situations

Properties and Relationships:

B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations **Math Facts:** B2.2 (*Grade 2*) recall and demonstrate addition facts for numbers up to 20, and related subtraction facts; (*Grade 3*) recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions