Simcoe County District School Board

Grade 2: Scope and Sequence

Block 1

Start of school year
to Winter Break

71 instructional days

1. **First 20 Days**
   A1
   15+ days
2. **Number**
   B1, B2
   20+ days
3. **Geometric Reasoning**
   E1, E2
   12+ days
4. **Patterns and Algebra**
   C1
   12+ days

Progress Report → **Term 1**

Winter Break

Block 2

Winter Break
to March Break

48 instructional days

5. **Number**
   B1, B2, F1
   15+ days
6. **Algebra and Coding**
   C2, C3
   15+ days
7. **Location and Movement**
   E1, C3
   10+ days

Term 1 → **Term 2**

March Break

Block 3

March Break
to end of school year

67 instructional days

8. **Number/Financial Lit**
   F1, B2
   10+ days
9. **Data and Probability**
   D1, D2
   15+ days
10. **Measurement**
    E2, B2
    20+ days
11. **Last 20 Days**
    A1
    15+ days

Term 2

Last update: August 2020

Simcoe County District School Board

Grade 2: Course of Study

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

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 2: Block 1 Overview

1 First 20 Days

15+ 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

2 Number

20+ 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 operations to solve mathematical problems encountered in everyday life

(B1.1 - B1.5, B2.1 - B2.3)

Progress Report

3 Geometric Reasoning

12+ days

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

(E.1.1 - E1.3, E2.1 - E 2.3)

4 Patterns and Algebra

12+ days

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)

Term 1

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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: 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	**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 **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 **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	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		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		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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

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

Specific Expectations:

Whole Numbers: B1.1 read, represent, compose, and decompose whole numbers up to and including ~~200~~, (100) 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 ~~200~~, (100) in various contexts

Whole Numbers: B1.3 estimate the number of objects in collections of up to ~~200~~ (100) and verify their estimates by counting

Whole Numbers: B1.4 count to~~ 200~~, (100) including by 20s, 25s, and 50s, using a variety of tools and strategies

Whole Numbers: B1.5 describe what makes a number even or odd

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

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Cross-Strand Connections:

Patterns: C1.4 create and describe patterns to illustrate relationships among whole numbers up to 100

Variables and Expressions: C2.1 identify when symbols are being used as variables, and describe how they are being used

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 100, 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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 3 - Geometric Reasoning (12+ days)

Specific Expectations:

Spatial Sense: E1.1 sort and identify two dimensional shapes by comparing number of sides, side lengths, angles, and number of lines of symmetry

Spatial Sense: E1.2 compose and decompose two dimensional shapes, and show that the area of a shape remains constant regardless of how its parts are rearranged

Spatial Sense: E1.3 identify congruent lengths and angles in two dimensional shapes by mentally and physically matching them, and determine if the shapes are congruent

Length: E2.1 choose and use non-standard units appropriately to measure lengths, and describe the inverse relationship between the size of a unit and the number of units needed

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

Length: E2.3 measure and draw lengths in centimetres and metres, using a measuring tool, and recognize the impact of starting at points other than zero

Cross-Strand Connections:

Equalities and Inequalities: C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 100, in various contexts

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

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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 4 - Patterns (12+ days)

Specific Expectations:

Patterns: C1.1 identify and describe a variety of patterns involving geometric designs, including patterns found in real-life contexts

Patterns: C1.2 create and translate patterns using various representations, including shapes and numbers

Patterns: C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns represented with shapes and numbers

Patterns: C1.4 create and describe patterns to illustrate relationships among whole numbers up to 100

Cross-Strand Connections:

Whole Numbers: B1.1 read, represent, compose, and decompose whole numbers up to and including 200, using a variety of tools and strategies, and describe various ways they are used in everyday life*

Whole Numbers: B1.3 estimate the number of objects in collections of up to 200 and verify their estimates by counting*

Whole Numbers: B1.4 count to 200, including by 20s, 25s, and 50s, using a variety of tools and strategies*

Whole Numbers: B1.5 describe what makes a number even or odd*

Addition and Subtraction: B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100

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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Block 2 Overview

5 Number

15+ 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 operations to solve mathematical problems encountered in everyday life

Financial Literacy: F1. demonstrate the knowledge and skills needed to make informed financial decisions

(B1.1 - B1.7, B2.1 - B2.6, F1.1)

6 Algebra and Coding

15+ days

Algebra: C2. demonstrate an understanding of variables, expressions, equalities, and inequalities, and apply this understanding in various contexts

Algebra: C3. solve problems and create computational representations of mathematical situations using coding concepts and skills

(C2.1 - C2.3, C3.1 - C3.3)

7 Location and Movement

10+ days

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

Algebra: C3. solve problems and create computational representations of mathematical situations using coding concepts and skills

(E1.4, E1.5, C3.1, C3.2)

Term 1

Term 2

Ongoing Focus:

Social-Emotional Learning: A1. apply, to the best of their ability, a variety of social-emotional learning skills 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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 5 - Number (15+ days)

Specific Expectations:

Whole Numbers: B1.1 read, represent, compose, and decompose whole numbers up to and including 200, 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 200, in various contexts*

Whole Numbers: B1.3 estimate the number of objects in collections of up to 200 and verify their estimates by counting*

Whole Numbers: B1.4 count to 200, including by 20s, 25s, and 50s, using a variety of tools and strategies*

Whole Numbers: B1.5 describe what makes a number even or odd*

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

Fractions: B1.7 recognize that one third and two sixths of the same whole are equal, in fair-sharing contexts

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

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts*

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used*

Addition and Subtraction: B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100

Multiplication and Division: B2.5 represent multiplication as repeated equal groups, including groups of one half and one fourth, and solve related problems, using various tools and drawings

Multiplication and Division: B2.6 represent division of up to 12 items as the equal sharing of a quantity, and solve related problems, using various tools and drawings

Money Concepts: F1.1 identify different ways of representing the same amount of money up to Canadian 200¢ using various combinations of coins, and up to $200 using various combinations of $1 and $2 coins and $5, $10, $20, $50, and $100 bills

Cross-Strand Connections:

Variables and Expressions: C2.1 identify when symbols are being used as variables, and describe how they are being used

Equalities and Inequalities: C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 100, 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

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 6 - Algebra and Coding (15+ days)

Specific Expectations:

Variables and Expressions: C2.1 identify when symbols are being used as variables, and describe how they are being used

Equalities and Inequalities: C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 100, 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 and concurrent events

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

Cross-Strand Connections:

Geometric Reasoning: E1.2 compose and decompose two dimensional shapes, and show that the area of a shape remains constant regardless of how its parts are rearranged

Location and Movement: E1.4 create and interpret simple maps of familiar places

Location and Movement: E1.5 describe the relative positions of several objects and the movements needed to get from one object to another

Addition and Subtraction: B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100

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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 7 - Location and Movement (10+ days)

Specific Expectations:

Location and Movement: E1.4 create and interpret simple maps of familiar places

Location and Movement: E1.5 describe the relative positions of several objects and the movements needed to get from one object to another

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

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

Cross-Strand Connections:

Addition and Subtraction: B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100

Length: E2.1 choose and use non-standard units appropriately to measure lengths, and describe the inverse relationship between the size of a unit and the number of units needed

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

Length: E2.3 measure and draw lengths in centimetres and metres, using a measuring tool, and recognize the impact of starting at points other than zero

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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Block 3 Overview

8 Number/Financial Lit

10+ days

Financial Literacy: F1. demonstrate an understanding of the value of Canadian currency

Number: B2. use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

(F1.1, B2.1 - B2.6, B1.6, B1.7)

9 Data and Probability

15+ days

Data: D1. manage, analyse, and use data to make convincing arguments and informed decisions, in various contexts drawn from real life

Data: D2. describe the likelihood that events will happen, and use that information to make predictions

(D1.1 - D1.5, D2.2)

10 Measurement

20+ days

Spatial Sense: E2. compare, estimate, and determine measurements in various contexts

Number: B2. use knowledge of numbers and operations to solve mathematical problems encountered in everyday life

(E2.11 - E2.3, E1.1 - E1.3, B2.4 - B2.6)

11 Last 20 Days

15+ 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

Term 2

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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 8 - Number (10+ days)

Specific Expectations:

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

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts*

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used*

Addition and Subtraction: B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100*

Multiplication and Division: B2.5 represent multiplication as repeated equal groups, including groups of one half and one fourth, and solve related problems, using various tools and drawings*

Multiplication and Division: B2.6 represent division of up to 12 items as the equal sharing of a quantity, and solve related problems, using various tools and drawings*

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

Fractions: B1.7 recognize that one third and two sixths of the same whole are equal, in fair-sharing contexts*

Money Concepts: F1.1 identify different ways of representing the same amount of money up to Canadian 200¢ using various combinations of coins, and up to $200 using various combinations of $1 and $2 coins and $5, $10, $20, $50, and $100 bills*

Cross-Strand Connections:

Data Analysis: D1.5 analyse different sets of data presented in various ways, including in logic diagrams, line plots, and bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions

Variables and Expressions: C2.1 identify when symbols are being used as variables, and describe how they are being used

Equalities and Inequalities: C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 100, 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

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 9 - Data and Probability (15+ days)

Specific Expectations:

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

Data Collection and Organization: D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on two pieces of information, and organize the data in two-way tally tables

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

Data Analysis: D1.4 identify the mode(s), if any, for various data sets presented in concrete graphs, pictographs, line plots, bar graphs, and tables, and explain what this measure indicates about the data

Data Analysis: D1.5 analyse different sets of data presented in various ways, including in logic diagrams, line plots, and bar graphs, 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 mode(s) of a data set from one population will be the same for data collected from a different population

Cross-Strand Connections:

Addition and Subtraction: B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100*

Multiplication and Division: B2.5 represent multiplication as repeated equal groups, including groups of one half and one fourth, and solve related problems, using various tools and drawings*

Multiplication and Division: B2.6 represent division of up to 12 items as the equal sharing of a quantity, and solve related problems, using various tools and drawings*

Variables and Expressions: C2.1 identify when symbols are being used as variables, and describe how they are being used

Equalities and Inequalities: C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 100, 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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: Unit 10 - Measurement (20+ days)

Specific Expectations:

Length: E2.1 choose and use non-standard units appropriately to measure lengths, and describe the inverse relationship between the size of a unit and the number of units needed*

Length: E2.2 explain the relationship between centimetres and metres as units of length, and use benchmarks for these units to estimate lengths*

Length: E2.3 measure and draw lengths in centimetres and metres, using a measuring tool, and recognize the impact of starting at points other than zero*

Geometric Reasoning: E1.1 sort and identify two dimensional shapes by comparing number of sides, side lengths, angles, and number of lines of symmetry*

Geometric Reasoning: E1.2 compose and decompose two dimensional shapes, and show that the area of a shape remains constant regardless of how its parts are rearranged*

Geometric Reasoning: E1.3 identify congruent lengths and angles in two dimensional shapes by mentally and physically matching them, and determine if the shapes are congruent*

Addition and Subtraction: B2.4 use objects, diagrams, and equations to represent, describe, and solve situations involving addition and subtraction of whole numbers that add up to no more than 100*

Multiplication and Division: B2.5 represent multiplication as repeated equal groups, including groups of one half and one fourth, and solve related problems, using various tools and drawings*

Multiplication and Division: B2.6 represent division of up to 12 items as the equal sharing of a quantity, and solve related problems, using various tools and drawings*

Cross-Strand Connections:

Variables and Expressions: C2.1 identify when symbols are being used as variables, and describe how they are being used

Equalities and Inequalities: C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent

Equalities and Inequalities: C2.3 identify and use equivalent relationships for whole numbers up to 100, in various contexts

Whole Numbers:B1.1 read, represent, compose, and decompose whole numbers up to and including 200, 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 200, 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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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

Simcoe County District School Board

Grade 2: 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 **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 **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	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		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		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 addition and subtraction, and the relationships between addition and multiplication and between subtraction and division, to solve problems and check calculations

Math Facts: B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts

Mental Math: B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 50, and explain the strategies used

Probability: D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of complementary 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