

# Mathletics

## The Ontario Curriculum

### Skill Quests & Activities



**Grades 1-3**  
September 2023

**Mathletics**

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Skill Quests & Activities

September 2023

<b>Grade 1 .....</b>	<b>5</b>
<b>B. Number .....</b>	<b>5</b>
B1. Number Sense: Whole Numbers .....	5
B1. Number Sense: Fractions .....	6
B2. Operations: Properties and Relationship .....	7
B2. Operations: Math Facts.....	8
B2. Operations: Mental Math.....	8
B2. Operations: Addition and Subtraction .....	9
B2. Operations: Multiplication and Division .....	9
<b>C. Algebra .....</b>	<b>9</b>
C1. Patterns and Relationships: Patterns.....	9
C2. Equations and Inequalities: Variables .....	10
C2. Equations and Inequalities: Equalities and Inequalities.....	11
C3. Coding: Coding skills.....	11
<b>D. Data.....</b>	<b>12</b>
D1. Data Literacy: Data Collection and Organization.....	12
D1. Data Literacy: Data Visualization.....	12
D1. Data Literacy: Data Analysis.....	12
D2 Probability .....	13
<b>E. Spatial Sense.....</b>	<b>14</b>
E1. Geometric and Spatial Reasoning: Geometric Reasoning .....	14
E1. Geometric and Spatial Reasoning: Location and Movement.....	15
E2. Measurement: Attributes .....	15
<b>F. Financial Literacy.....</b>	<b>16</b>
F.1 Money & Finances: Money concepts.....	16
<b>Grade 2 .....</b>	<b>17</b>
<b>B. Number .....</b>	<b>17</b>
B1. Number Sense: Whole Numbers .....	17
B1. Number Sense: Fractions .....	19
B2. Operations: Properties and Relationships .....	19
B2. Operations: Math Facts.....	20
B2. Operations: Mental Math.....	20

B2. Operations: Addition and Subtraction .....	20
B2. Operations: Multiplication and Division .....	21
<b>C. Algebra .....</b>	<b>21</b>
C1. Patterns and Relationships: Patterns.....	21
C2. Equations and Inequalities: Variables .....	23
C2. Equations and Inequalities: Equalities and Inequalities.....	23
C3. Coding: Coding Skills .....	23
<b>D. Data.....</b>	<b>24</b>
D1. Data Literacy: Data Collection and Organization.....	24
D1. Data Literacy: Data Visualization.....	25
D1. Data Literacy: Data Analysis.....	25
D2. Probability: Probability.....	26
<b>E. Spatial Sense .....</b>	<b>26</b>
E1. Geometry: Geometric Reasoning.....	26
E1. Geometry: Location and Movement.....	27
E2. Measurement: Length .....	28
E2. Measurement: Time .....	28
<b>F. Financial Literacy.....</b>	<b>29</b>
F1. Money and Finances: Money Concepts .....	29
<b>Grade 3 .....</b>	<b>30</b>
<b>B. Number .....</b>	<b>30</b>
B1. Number Sense: Whole Numbers .....	30
B1. Number Sense: Fractions .....	31
B2. Operations: Properties and Relationships.....	32
B2. Operations: Math Facts.....	32
B2. Operations: Mental Math.....	33
B2. Operations: Addition and Subtraction .....	33
B2. Operations: Multiplication and Division .....	34
<b>C. Algebra .....</b>	<b>36</b>
C1. Patterns and Relationships: Patterns.....	36
C2. Equations and Inequalities: Variables .....	37
C2. Equations and Inequalities: Equalities and Inequalities.....	37

C3. Coding: Coding Skills .....	37
<b>D. Data.....</b>	<b>38</b>
D1. Data Literacy: Data Collection and Organization.....	38
D1. Data Literacy: Data Visualization.....	39
D1. Data Literacy: Data Analysis.....	39
D2. Probability: Probability.....	40
<b>E. Spatial Sense .....</b>	<b>40</b>
E1. Geometric and Spatial Reasoning: Geometric and Spatial Reasoning.....	40
E1. Geometric and Spatial Reasoning: Location and Movement.....	41
E2. Measurement: Length, Mass, and Capacity .....	42
E2. Measurement: Mass .....	43
E2. Measurement: Time .....	43
E2. Measurement: Area .....	43
<b>F Financial Literacy.....</b>	<b>44</b>
F1 Money and Finances: Money Concepts.....	44

# Grade 1

## B. Number

### B1. Number Sense: Whole Numbers

<b>B1.1 read and represent whole numbers up to and including 50, and describe various ways they are used in everyday life</b>	
<b>Quests</b>	<b>Content</b>
Read and represent whole numbers to 50	Connect number names, numerals & collections to 50
<b>Course Topic</b>	<b>Activities Title</b>
B1 Whole Numbers	Matching Numbers to 10
	Counting Up to 20
	Counting Back Within 20
	Ordinal Numbers

<b>B1.2 compose and decompose whole numbers up to and including 50, using a variety of tools and strategies, in various contexts</b>	
<b>Quests</b>	<b>Content</b>
Compose and decompose numbers to 50	Partitioning 2-digit numbers to 50
	Non-standard partitioning: 2-digit numbers to 50
<b>Course Topic</b>	<b>Activities Title</b>
B1 Whole Numbers	Making Teen Numbers

<b>B1.3 compare and order whole numbers up to and including 50, in various contexts</b>	
<b>Quests</b>	<b>Content</b>
Compare and order whole numbers to 50	Comparing collections and numerals to 50
	Ordering collections and numerals to 50
<b>Course Topic</b>	<b>Activities Title</b>
B1 Whole Numbers	Before, After and Between to 20
	Make Numbers Count
	Compare Numbers to 20
	Order Numbers to 20
	Compare Numbers to 50

<b>B1.4 estimate the number of objects in collections of up to 50, and verify their estimates by counting</b>	
<b>Quests</b>	<b>Content</b>
Teacher directed	Teacher directed
<b>Course Topic</b>	<b>Activities Title</b>
B1 Whole Numbers	How Many Dots?

<b>B1.5 count to 50 by 1s, 2s, 5s, and 10s, using a variety of tools and strategies</b>	
<b>Quests</b>	<b>Content</b>
Count to 50	Counting by 1s to 50, forward and backward
	Counting by 2s to 50, forward and backward
	Counting by 5s to 50, forward and backward
	Counting by 10s to 50, forward and backward
	Counting by 2s, 5s, 10s to 50
<b>Course Topic</b>	<b>Activities Title</b>
B1 Whole Numbers	1 to 30
	1st to 31st
	Reading Numbers to 30
	Counting Backward
	Counting Forward
	Making Numbers Count
	Count by Twos
	Count by Fives
	Count by Tens

## **B1. Number Sense: Fractions**

<b>B1.6 use drawings to represent and solve fair-share problems that involve 2 and 4 sharers, respectively, and have remainders of 1 or 2</b>	
<b>Quests</b>	<b>Content</b>
Fair-share problems, 2 and 4 sharers	Solving fair-share problems, 2 and 4 sharers
<b>Course Topic</b>	<b>Activities Title</b>
B1 Fractions	Share the Treasure
	Dividing Twos
	Dividing Fours

<b>B1.7 recognize that one half and two fourths of the same whole are equal, in fair-sharing contexts</b>	
<b>Quests</b>	<b>Content</b>
Equivalence, one half and two fourths	Introducing the concept of half
<b>Course Topic</b>	<b>Activities Title</b>
B1 Fractions	Is it Half?
	Halves and Quarters

<b>B1.8 use drawings to compare and order unit fractions representing the individual portions that result when a whole is shared by different numbers of sharers, up to a maximum of 10</b>	
<b>Quests</b>	<b>Content</b>
Compare and order unit fractions	Comparing and ordering unit fractions with models
<b>Course Topic</b>	<b>Activities Title</b>
B1 Fractions	Shade fractions

## **B2. Operations: Properties and Relationship**

<b>B2.1 use the properties of addition and subtraction, and the relationship between addition and subtraction, to solve problems and check calculations</b>	
<b>Quests</b>	<b>Content</b>
Add/subtract properties & relationship	Introducing the commutative property of addition
	Fact families: addition/subtraction, within 30
<b>Course Topic</b>	<b>Activities Title</b>
B2 Addition and Subtraction	Adding In Any Order
	Adding to Make 5 and 10
	Adding to Ten
	Addition Facts
	All about Twenty
	Add 3 Single Digit Numbers
	Doubles and Near Doubles
	Additive Addition
	Model Subtraction
	Subtracting from Ten
	Subtraction Facts to 18
	Subtracting from 20
	Add and Subtract Using Graphs
	Doubles and Halves to 10



## B2. Operations: Math Facts

B2.2 recall and demonstrate addition facts for numbers up to 10, and related subtraction facts	
Quests	Content
Addition/subtraction facts to 10	Recognizing and recalling bonds to 10
	Adding and subtracting within 10 fluently
	Modelling and recording combinations to 5
	Modelling and recording combinations to 6
	Modelling and recording combinations to 7
	Modelling and recording combinations to 8
	Modelling and recording combinations to 9
Course Topic	Activities Title
B2 Addition and Subtraction	Adding to Make 5 and 10
	Adding to Ten
	Addition Facts
	All about Twenty
	Add 3 Single Digit Numbers
	Additive Addition
	Model Subtraction
	Subtracting from Ten
	Subtraction Facts to 18
	Subtracting from 20
	Add and Subtract Using Graphs
	Doubles and Halves to 10

## B2. Operations: Mental Math

B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 20, and explain the strategies used	
Quests	Content
Mental math: add/subtract to 20	Mental strategies: addition and subtraction to 18
Course Topic	Activities Title
B2 Addition and Subtraction	Addition Facts
	All about Twenty
	Add 3 Single Digit Numbers
	Doubles and Near Doubles
	Additive Addition
	Model Subtraction
	Subtraction Facts to 18
	Subtracting from 20
	Adding to 10 Word Problems

## B2. Operations: Addition and Subtraction

<b>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 50</b>	
<b>Quests</b>	<b>Content</b>
Add and subtract to 50	Bridging to ten to add, models
	Adding doubles or near doubles
	Adding using compatible numbers
	Adding 2-digit and 1-digit numbers, place value
	Bridging to ten to subtract, models
	Subtracting using doubles
	Addition and subtraction word problems within 20
<b>Course Topic</b>	<b>Activities Title</b>
B2 Addition and Subtraction	Doubles and Near Doubles
	Adding to 10 Word Problems

## B2. Operations: Multiplication and Division

<b>B2.5 represent and solve equal-group problems where the total number of items is no more than 10, including problems in which each group is a half, using tools and drawings</b>	
<b>Quests</b>	<b>Content</b>
Represent and solve equal-group problems	Representing and solving equal-group problems
<b>Course Topic</b>	<b>Activities Title</b>
B2 Multiplication and Division	Doubles and Halves to 10
	Adding to 10 Word Problems

## C. Algebra

### C1. Patterns and Relationships: Patterns

<b>C1.1 identify and describe the regularities in a variety of patterns, including patterns found in real-life contexts</b>	
<b>Quests</b>	<b>Content</b>
Identify and describe patterns	Identifying & describing repeating patterns
	Recognizing repeating patterns
<b>Course Topic</b>	<b>Activities Title</b>
C1 Patterns and Relationships	Complete the Pattern
	Colour Patterns

<b>C1.2 create and translate patterns using movements, sounds, objects, shapes, letters, and numbers</b>	
<b>Quests</b>	<b>Content</b>
Create patterns	Creating repeating patterns
<b>Course Topic</b>	<b>Activities Title</b>
C1 Patterns and Relationships	Complete the Pattern
	Simple Patterns
	Missing it!
	Colour Patterns
	Pattern Error

<b>C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns</b>	
<b>Quests</b>	<b>Content</b>
Patterns: extend, predict, identify	Extending a simple repeating pattern
	Identifying errors & missing elements in patterns
<b>Course Topic</b>	<b>Activities Title</b>
C1 Patterns and Relationships	Complete the Pattern
	Simple Patterns
	Missing it!
	Colour Patterns
	Pattern Error

<b>C1.4 create and describe patterns to illustrate relationships among whole numbers up to 50</b>	
<b>Quests</b>	<b>Content</b>
Create/describe patterns, numbers to 50	Copy/extend additive & subtractive number patterns
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

## **C2. Equations and Inequalities: Variables**

<b>C2.1 identify quantities that can change and quantities that always remain the same in real-life contexts</b>	
<b>Quests</b>	<b>Content</b>
Teacher directed	Teacher directed
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

## C2. Equations and Inequalities: Equalities and Inequalities

C2.2 determine whether given pairs of addition and subtraction expressions are equivalent or not	
Quests	Content
Equivalence: addition and subtraction	Recognizing equality in addition and subtraction
Course Topic	Activities Title
C2 Equalities & Inequalities	Balance Numbers to 10/Composing numbers to 10
	Balance Numbers to 20/Composing Numbers to 20
	Balancing Act

C2.3 identify and use equivalent relationships for whole numbers up to 50, in various contexts	
Quests	Content
Identify & use equivalent relationships	Recognize the concept of equality, numbers to 50
Course Topic	Activities Title
C2 Equalities & Inequalities	Balance Numbers to 10/Composing numbers to 10
	Balance Numbers to 20/Composing Numbers to 20
	Balancing Act

## C3. Coding: Coding skills

C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential events	
Quests	Content
Write/execute code: sequential events	Write/execute code: sequential events
Course Topic	Activities Title
Teacher directed	Teacher directed

C3.2 read and alter existing code, including code that involves sequential events, and describe how changes to the code affect the outcomes	
Quests	Content
Read/alter code: sequential events	Read/alter code: sequential events
Course Topic	Activities Title
Teacher directed	Teacher directed

## D. Data

### D1. Data Literacy: Data Collection and Organization

<b>D1.1 sort sets of data about people or things according to one attribute, and describe rules used for sorting</b>	
<b>Quests</b>	<b>Content</b>
Sorting sets of data	Grouping simple data using 1 attribute
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data	Sort It
	Sorting Data
	Tallies

<b>D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on a single piece of information; record the data using methods of their choice; and organize the data in tally tables</b>	
<b>Quests</b>	<b>Content</b>
Data collection and recording	Asking simple questions to gather data
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data	Sorting Data
	Tallies

### D1. Data Literacy: Data Visualization

<b>D1.3 display sets of data, using one-to-one correspondence, in concrete graphs and pictographs with proper sources, titles, and labels</b>	
<b>Quests</b>	<b>Content</b>
Represent data using simple displays	Representing data using simple displays
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

### D1. Data Literacy: Data Analysis

<b>D1.4 order categories of data from greatest to least frequency for various data sets displayed in tally tables, concrete graphs, and pictographs</b>	
<b>Quests</b>	<b>Content</b>
Order category data	Ordering category data
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data	Picture Graphs: More or Less

	Picture Graphs: Comparing groups of objects (CAN)
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**D1.5 analyse different sets of data presented in various ways, including in tally tables, concrete graphs, and pictographs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions**

Quests	Content
Interpret basic data displays	Interpreting basic data displays
Course Topic	Activities Title
D1 Data	Picture Graphs: Comparing groups of objects (CAN)
	Picture Graphs: Single-Unit Scale
	Read Graphs

## D2 Probability

**D2.1 use mathematical language, including the terms “impossible”, “possible”, and “certain”, to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions**

Quests	Content
Use the basic language of probability	Using the basic language of probability
Course Topic	Activities Title
D2 Probability	Will it Happen?

**D2.2 make and test predictions about the likelihood that the categories in a data set from one population will have the same frequencies in data collected from a different population of the same size**

Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
Teacher directed	Teacher directed

## E. Spatial Sense

### E1. Geometric and Spatial Reasoning: Geometric Reasoning

E1.1 sort three-dimensional objects and two-dimensional shapes according to one attribute at a time, and identify the sorting rule being used	
Quests	Content
Sort 3D objects and 2D shapes	Sorting 3D objects, 1 attribute
	Sorting 3D objects, more than 1 attribute
	Sorting basic 2D shapes, 1 attribute
	Sorting basic 2D shapes, more than 1 attribute
Course Topic	Activities Title
E1 Geometry	Collect Simple Shapes
	Collect the Shapes
	Collect the Shapes 1
	Count Sides and Corners
	Relate Shapes and Solids
	How Many Faces?
	How many Edges?
	How many corners?
	Symmetry

E1.2 construct three-dimensional objects, and identify two-dimensional shapes contained within structures and objects	
Quests	Content
Construct three-dimensional structures	Constructing three-dimensional structures
Course Topic	Activities Title
E1 Geometry	Relate Shapes and Solids
	How Many Faces?
	How many Edges?
	How many corners?
	Symmetry

E1.3 construct and describe two-dimensional shapes and three-dimensional objects that have matching halves	
Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
E1 Geometry	Count Sides and Corners
	Relate Shapes and Solids
	How Many Faces?
	How many Edges?

	How many corners?
	Symmetry

## E1. Geometric and Spatial Reasoning: Location and Movement

E1.4 describe the relative locations of objects or people, using positional language	
Quests	Content
Describe relative locations	Describing position and movement
	Distinguishing between left and right
Course Topic	Activities Title
E1 Geometry	Where is it?
	Left or Right?

E1.5 give and follow directions for moving from one location to another	
Quests	Content
Give and follow directions	Giving directions
Course Topic	Activities Title
E1 Geometry	Left or Right?
	Following Directions

## E2. Measurement: Attributes

E2.1 identify measurable attributes of two-dimensional shapes and three-dimensional objects, including length, area, mass, capacity, and angle	
Quests	Content
Identify measurable attributes	Introducing the attribute of length
	Introducing the attribute of mass
	Introducing the attributes of volume and capacity
	Introducing the attribute of area
	Introducing angles as a measurable attribute
Course Topic	Activities Title
E2 Measurement	Everyday Length
	Balancing Objects
	Everyday Mass
	How Full?
	Filling Fast!



<b>E2.2 compare several everyday objects and order them according to length, area, mass, and capacity</b>	
<b>Quests</b>	<b>Content</b>
Compare and order objects by attributes	Compare areas using direct comparison
	Compare/order mass of 2 objects, pan balance
	Compare/order volume and capacity, informal units
	Compare capacities, direct comparison
<b>Course Topic</b>	<b>Activities Title</b>
E2 Measurement	Comparing Length
	Biggest Shape
	Which Holds More?

<b>E2.3 read the date on a calendar, and use a calendar to identify days, weeks, months, holidays, and seasons</b>	
<b>Quests</b>	<b>Content</b>
The calendar	Introducing the days of the week
	Introducing the months of the year
	Introducing the seasons
	Using calendars
<b>Course Topic</b>	<b>Activities Title</b>
E2 Measurement	Days of the Week
	Months of the Year
	Calendar: Days and Dates
	Tomorrow and Yesterday (Scaffolded)
	Using a Calendar

## F. Financial Literacy

### F.1 Money & Finances: Money concepts

<b>F1.1 identify the various Canadian coins up to 50¢ and coins and bills up to \$50, and compare their values</b>	
<b>Quests</b>	<b>Content</b>
Identifying coins and bills	Identifying coins
	Identifying bills
<b>Course Topic</b>	<b>Activities Title</b>
F1 Financial Literacy	Everyday Money

# Grade 2

## B. Number

### B1. Number Sense: 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	
Quests	Content
Numbers up to 200	Reading and writing 3-digit numbers to 200
	Reading and writing 2-digit numbers
	Using place value to partition 2-digit numbers
	Identifying place value: 2-digit numbers
	Partitioning 3-digit numbers to 200
	Identifying place value: 3-digit numbers to 200
	Non-standard partitioning: 2-digit numbers
	Non-standard partitioning: 3-digit numbers to 200
Course Topic	Activities Title
B1 Whole Numbers	Nearest 10?
	Matching Numbers to 20
	Making Big Numbers Count
	Going Up
	Going Down
	Arranging Numbers
	Place Value 1
	Repartition Two-digit Numbers
	Before, After & Between to 100
	1 More, 2 Less
	1 More, 10 Less

B1.2 compare and order whole numbers up to and including 200, in various contexts	
Quests	Content
Compare and order numbers to 200	Comparing and ordering numbers to 200
Course Topic	Activities Title
B1 Whole Numbers	Matching Numbers to 20
	Making Big Numbers Count
	Going Up
	Going Down
	Arranging Numbers

	Number Lines (to 100)
	Which is Bigger?
	Which is Smaller?
	Greater or Less to 100
	Compare Numbers to 100
	Before, After & Between to 100
	1 More, 2 Less
	1 More, 10 Less
	Number Line Order

<b>B1.3 estimate the number of objects in collections of up to 200 and verify their estimates by counting</b>	
<b>Quests</b>	<b>Content</b>
Teacher directed	Teacher directed
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

<b>B1.4 count to 200, including by 20s, 25s, and 50s, using a variety of tools and strategies</b>	
<b>Quests</b>	<b>Content</b>
Count to 200	Counting by 1s to 200, forward and backward
	Counting by 10s to 200, forward and backward
	Counting by 2s to 200, forward and backward
	Counting by 5s to 200, forward and backward
	Counting by 20s to 200, forward and backward
	Counting by 25s to 200, forward and backward
	Counting by 50s to 200, forward and backward
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

<b>B1.5 describe what makes a number even or odd</b>	
<b>Quests</b>	<b>Content</b>
Odd and even numbers	Modelling odd and even number patterns up to 20
<b>Course Topic</b>	<b>Activities Title</b>
B1 Whole Numbers	Odd or Even
	Odd and Even Numbers 1

## B1. Number Sense: 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	
Quests	Content
Fair-share problems: 2, 3, 4, 6 sharers	Fair-share problems with models, 2 or 4 sharers
	Fair-share problems with models, 3 sharers
	Fair-share problems with models, 6 sharers
Course Topic	Activities Title
B1 Fractions	Dividing Threes
	Dividing Sixes
	Make Fair Shares
	Fractions of a Collection 1

B1.7 recognize that one third and two sixths of the same whole are equal, in fair-sharing contexts	
Quests	Content
Equivalence, one third and two sixths	Equivalence, one third and two sixths
Course Topic	Activities Title
B1 Fractions	Halves and Quarters
	Thirds and Sixths

## B2. Operations: 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	
Quests	Content
Properties and operational relationships	Using the commutative property of addition to 20
	Using repeated addition to multiply
	Using repeated subtraction to divide
Course Topic	Activities Title
B2 Addition & Subtraction to 100	Related Facts 1

## B2. Operations: Math Facts

B2.2 recall and demonstrate addition facts for numbers up to 20, and related subtraction facts	
Quests	Content
Addition/subtraction facts to 20	Adding and subtracting within 20 fluently
Course Topic	Activities Title
B2 Addition & Subtraction to 100	All about Twenty
	Subtracting from 20
	Addition
	Add 3 Numbers Using Bonds to 10
	Complements to 10, 20, 50
	Model Addition

## B2. Operations: 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	
Quests	Content
Mental math: add/subtract to 50	Bridging to ten to mentally add or subtract
	Using place value to mentally add numbers
Course Topic	Activities Title
B2 Addition & Subtraction to 100	Addition
	Add 3 Numbers Using Bonds to 10
	Complements to 10, 20, 50
	Simple Subtraction
	Model Addition
	Add and Subtract Problems
	Subtract Tens
	Repartition to Subtract/Decompose numbers to subtract
	Bar Model Problems 1
	Bar Model Problems 2
	Add 3 Numbers: Bonds to Multiples of 10

## B2. Operations: 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	
Quests	Content
Add and subtract to 100	Add/subtract numbers using efficient strategies
	Add 2-digit numbers, number line

	Subtract 2-digit numbers, number line
	Add tens to a 2-digit number, models
Course Topic	Activities Title
B2 Addition & Subtraction to 100	Add and Subtract Problems
	Subtract Tens
	Repartition to Subtract/Decompose numbers to subtract
	Bar Model Problems 1
	Bar Model Problems 2
	Add 3 Numbers: Bonds to Multiples of 10

## B2. Operations: 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	
Quests	Content
Multiplication as repeated equal groups	Use repeated addition with arrays (2, 5, 10)
	Connect multiplication, arrays, repeated addition
	Repeated addition with one half and one fourth
Course Topic	Activities Title
B2 Multiplication & Division	Groups

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	
Quests	Content
Represent division up to 12	Sharing objects to divide up to 12, models
Course Topic	Activities Title
B2 Multiplication & Division	Share the Treasure
	Fill the Jars
	Multiplication Arrays
	Divide Into Equal Groups

## C. Algebra

### C1. Patterns and Relationships: Patterns

C1.1 identify and describe a variety of patterns involving geometric designs, including patterns found in real-life contexts	
Quests	Content
Identify/describe geometric patterns	Exploring visual patterns
	Exploring simple patterns with transformations

Course Topic	Activities Title
C 1 Patterns	Count by Twos
	Colour Patterns
	Pattern Error

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

Quests	Content
Create patterns with shapes and numbers	Create repeating shape patterns
	Identify/extend/describe repeating number patterns
Course Topic	Activities Title
C 1 Patterns	Count by Twos
	Count by Fives
	Count by Tens
	Count by 2s, 5s and 10s
	Counting on a 100 grid
	Colour Patterns
	Pattern Error
	Missing it!
	Count Forward Patterns
	Count Backward 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**

Quests	Content
Pattern rules, repeating patterns	ID errors/missing elements, repeating patterns
	Identify the structure of repeating patterns
	Extend repeating patterns
Course Topic	Activities Title
C 1 Patterns	Counting on a 100 grid
	Colour Patterns
	Pattern Error
	Missing it!
	Count Forward Patterns
	Count Backward Patterns

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

Quests	Content
Create/describe patterns, numbers to 100	Growing/shrinking/repeating number patterns to 100
	Identify and describe number patterns to 100

Course Topic	Activities Title
Teacher directed	Teacher directed

## C2. Equations and Inequalities: Variables

C2.1 identify when symbols are being used as variables, and describe how they are being used	
Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
C2. Equations and Inequalities	Missing Values
	All about Ten

## C2. Equations and Inequalities: Equalities and Inequalities

C2.2 determine what needs to be added to or subtracted from addition and subtraction expressions to make them equivalent	
Quests	Content
Explore equality, addition/subtraction	Exploring equality, addition/subtraction
Course Topic	Activities Title
C2. Equations and Inequalities	Balance Numbers to 20/Composing Numbers to 20
	Missing Values

C2.3 identify and use equivalent relationships for whole numbers up to 100, in various contexts	
Quests	Content
Equivalent relationships to 100	Equivalent addition/subtraction relationships
Course Topic	Activities Title
C2. Equations and Inequalities	Fact Families: Add and Subtract

## C3. Coding: 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	
Quests	Content
Write code: sequential/concurrent events	Write/execute code: sequential/concurrent events



Course Topic	Activities Title
Teacher directed	Teacher directed

**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**

Quests	Content
Read code: sequential/concurrent events	Read/alter code: sequential/concurrent events
Course Topic	Activities Title
Teacher directed	Teacher directed

## D. Data

### D1. Data Literacy: 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	
Quests	Content
Sort data according to 2 attributes	Introducing Venn diagrams
	Introducing Carroll diagrams
	Relating Carroll and Venn diagrams
	Sorting data using logic diagrams
Course Topic	Activities Title
D1 Data Collection & organisation	Line Plots
	Tally Charts

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

Quests	Content
Collect/organize data, two-way tables	Organizing data in a two-way tally table
Course Topic	Activities Title
Teacher directed	Teacher directed

## D1. Data Literacy: Data Visualization

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Pictographs, line plots, and bar graphs	Representing and reading data in pictographs
	Representing and reading data in line plots
	Representing and reading data in bar graphs
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data Collection & organisation	Read Graphs
	Column Graphs
	Interpreting Tables

## D1. Data Literacy: Data Analysis

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Identify and explain the mode	Identifying and explaining the mode
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data Collection & organisation	Mode

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Analyse data	Analysing data in a line plot
	Analysing data in a bar graph
	Analysing data in a logic diagram
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data Collection & organisation	Line Plots
	Tally Charts

## D2. Probability: 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	
Quests	Content
Probability: complementary events	Exploring complementary events
	Using probability language, complementary events
Course Topic	Activities Title
D2 Probability	Will it Happen?
	Fair Games

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	
Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
Teacher directed	Teacher directed

## E. Spatial Sense

### E1. Geometry: Geometric Reasoning

E1.1 sort and identify two-dimensional shapes by comparing number of sides, side lengths, angles, and number of lines of symmetry	
Quests	Content
Sort and identify two-dimensional shapes	Comparing two-dimensional shapes
	Identifying and naming two-dimensional shapes
	Sorting two-dimensional shapes
	Recognizing line symmetry
Course Topic	Activities Title
E1 Geometry	Count Sides and Corners
	Sides, Angles and Diagonals
	Collect the Shapes 2
	Shapes
	Congruent Figures (Dot Grid)
	Symmetry
	Rotational Symmetry of Shapes
	Equal Areas

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Teacher directed	Teacher directed
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

<b>E1.3 identify congruent lengths and angles in two-dimensional shapes by mentally and physically matching them, and determine if the shapes are congruent</b>	
<b>Quests</b>	<b>Content</b>
Introduce congruent shapes	Introducing congruent shapes
<b>Course Topic</b>	<b>Activities Title</b>
E1 Geometry	Count Sides and Corners
	Sides, Angles and Diagonals
	Collect the Shapes 2
	Shapes
	Congruent Figures (Dot Grid)
	Equal Areas

## **E1. Geometry: Location and Movement**

<b>E1.4 create and interpret simple maps of familiar places</b>	
<b>Quests</b>	<b>Content</b>
Create and interpret simple maps	Creating and interpreting simple maps
<b>Course Topic</b>	<b>Activities Title</b>
E1 Geometry	Where is it?
	Left or Right?

<b>E1.5 describe the relative positions of several objects and the movements needed to get from one object to another</b>	
<b>Quests</b>	<b>Content</b>
Describe relative positions & movements	Describing relative positions & movements
<b>Course Topic</b>	<b>Activities Title</b>
E1 Geometry	Flip, Slide, Turn

## E2. Measurement: Length

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Measure length, non-standard units	Measuring length, non-standard units
	Measuring length using unit iteration
<b>Course Topic</b>	<b>Activities Title</b>
E2 Measurement	Measuring Length with Blocks
	Compare Length
	Ordering Lengths (cm)
	Compare Length 1

<b>E2.2 explain the relationship between centimetres and metres as units of length, and use benchmarks for these units to estimate lengths</b>	
<b>Quests</b>	<b>Content</b>
Introduce centimetres and metres	Introducing formal units for length: centimetres
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Measure in metres and centimetres	Measuring in metres and centimetres
<b>Course Topic</b>	<b>Activities Title</b>
E2 Measurement	How Long is That?

## E2. Measurement: Time

<b>E2.4 use units of time, including seconds, minutes, hours, and non-standard units, to describe the duration of various events</b>	
<b>Quests</b>	<b>Content</b>
Use units of time to describe duration	Introducing formal units for time: hours
	Introducing formal units for time: minutes
	Introducing formal units for time: seconds
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

## F. Financial Literacy

### F1. Money and Finances: Money Concepts

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Represent amounts of money	Using bills and coins to make amounts
<b>Course Topic</b>	<b>Activities Title</b>
F1 Money Concepts	Skip Counting with Coins
	Money
	Who's got the Money?

# Grade 3

## B. Number

### B1. Number Sense: 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	
Quests	Content
Numbers up to 1000	Reading and writing 3-digit numbers
	Using place value to partition 3-digit numbers
	Non-standard partitioning, 3-digit numbers
Course Topic	Activities Title
B1 Whole Number	Model Numbers
	Place Value 2
	Understanding Place Value 1 (CAN)
	Place Value Partitioning

B1.2 compare and order whole numbers up to and including 1000, in various contexts	
Quests	Content
Compare and order numbers to 1000	Comparing numbers to 1000
	Ordering numbers to 1000
Course Topic	Activities Title
B1 Whole Number	Which is Bigger?
	Which is Smaller?
	Ascending Order
	Descending Order

B1.3 round whole numbers to the nearest ten or hundred, in various contexts	
Quests	Content
Round numbers up to 1000	Rounding numbers to the nearest ten
	Rounding numbers to the nearest hundred
Course Topic	Activities Title
B1 Whole Number	Nearest 100?
	Rounding Numbers 1

<b>B1.4 count to 1000, including by 50s, 100s, and 200s, using a variety of tools and strategies</b>	
<b>Quests</b>	<b>Content</b>
Count to 1000	Counting by 10s to 1000, forward and backward
	Counting by 2s to 1000, forward and backward
	Counting by 5s to 1000, forward and backward
	Counting by 100s to 1000, forward and backward
	Counting by 20s to 1000, forward and backward
	Counting by 50s to 1000, forward and backward
	Counting by 200s to 1000, forward and backward
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

<b>B1.5 use place value when describing and representing multi-digit numbers in a variety of ways, including with base ten materials</b>	
<b>Quests</b>	<b>Content</b>
Place value to 1000	Identifying place value: 3-digit numbers
	Solving place value problems: 3-digit numbers
<b>Course Topic</b>	<b>Activities Title</b>
B1 Whole Number	Model Numbers
	Place Value 2
	Understanding Place Value 1 (CAN)
	Place Value Partitioning

## **B1. Number Sense: Fractions**

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Fair-share problems	Fair-share problems
<b>Course Topic</b>	<b>Activities Title</b>
B1 Fractions	Dividing Threes
	Dividing Fours
	Dividing Fives
	Dividing Sixes
	Dividing Eights
	Dividing Tens



<b>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</b>	
<b>Quests</b>	<b>Content</b>
Equivalent fraction fair-share problems	Equivalent fraction fair-share problems
	Investigating equivalent fractions
<b>Course Topic</b>	<b>Activities Title</b>
B1 Fractions	Halve it!
	Model Fractions
	Uneven partitioned shapes 1
	Fractions of a Collection 2
	Uneven partitioned shapes 2 (includes 12ths)
	Fractions of a Collection (includes 7ths)

## B2. Operations: Properties and Relationships

<b>B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations</b>	
<b>Quests</b>	<b>Content</b>
Multiplication & division relationships	Properties of multiplication
	Understanding division, unknown-factor problem
	Modelling multiplication & division relationships
<b>Course Topic</b>	<b>Activities Title</b>
B2 Multiplication & Division	Frog Jump Multiplication
	Frog Jump Division

## B2. Operations: Math Facts

<b>B2.2 recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts</b>	
<b>Quests</b>	<b>Content</b>
Multiplication/division facts: 2, 5, 10	Multiplication facts: 2
	Multiplication facts: 5
	Multiplication facts: 10
	Division facts: 2
	Division facts: 5
	Division facts: 10
<b>Course Topic</b>	<b>Activities Title</b>
B2 Multiplication & Division	Multiplication Grids (CAN)
	Related Facts 2
	Fact Families: Multiply and Divide
	Bar model $\times \div$

	Model multiplication to $5 \times 5$
	Multiplication Arrays
	Arrays 1
	Arrays 2
	Groups of Two
	Groups of Five
	Groups of Ten

## B2. Operations: 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	
Quests	Content
Mental math: add/subtract to 1000	Add 2-/3-digit numbers mentally, place value
	Subtract 2-/3-digit numbers mentally, place value
	Add and subtract 2-/3-digit number, place value
	Subtract two 3-digit numbers mentally, place value
	Estimation: addition/subtraction
Course Topic	Activities Title
B2 Addition and Subtraction	Estimate Sums
	Estimate Differences

## B2. Operations: 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	
Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
B2 Addition and Subtraction	Jump Add and Subtract
	Split Add and Subtract
	Compensation - Add
	Add 3 Numbers: Bonds to 100
	Magic Mental Subtraction/Mental Subtraction (US)
	Compensation - Subtract
	Add Three 1-Digit Numbers
	Columns that Add
	Column Addition 1
	Add Two 2-Digit Numbers: Regroup (UK)
	Add 3-Digit Numbers
	Subtract Numbers
	Subtract Numbers: Regroup
	Columns that Subtract

	Column Subtraction Method
	2-Digit Differences
	3-Digit Differences
	3-Digit Differences: 1 Regrouping

**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**

Quests	Content
Add and subtract within 1000	Create/solve addition & subtraction word problems
	Add/subtract using the number line
	Add/subtract using place value
	Add/subtract using rounding and compensating
	Add/subtract using expanded form
	Represent add/subtract problems using a bar model
	Add/subtract using an algorithm
Course Topic	Activities Title
B2 Addition and Subtraction	Jump Add and Subtract
	Split Add and Subtract
	Compensation - Add
	Add 3 Numbers: Bonds to 100
	Magic Mental Subtraction/Mental Subtraction (US)
	Compensation – Subtract
	Add Three 1-Digit Numbers
	Columns that Add
	Column Addition 1
	Add Two 2-Digit Numbers: Regroup (UK)
	Add 3-Digit Numbers
	Subtract Numbers
	Subtract Numbers: Regroup
	Columns that Subtract
	Column Subtraction Method
	2-Digit Differences
	3-Digit Differences
	3-Digit Differences: 1 Regrouping

**B2. Operations: Multiplication and Division**

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

Quests	Content
Represent multiplication/division to 100	Introducing and describing arrays
	Using arrays to add or subtract another group
	Representing multiplication up to $10 \times 10$ , models

	Representing division up to $100 \div 10$ , models
Course Topic	Activities Title
B2 Multiplication & Division	Related Facts 2
	Fact Families: Multiply and Divide
	Bar model $\times \div$
	Model multiplication to $5 \times 5$
	Multiplication Arrays
	Arrays 1
	Arrays 2
	Groups of Two
	Groups of Five
	Groups of Ten

**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**

Quests	Content
Solve multiplication/division problems	Use repeated addition to multiply
	Divide by sharing and grouping
	Create/solve problems, sharing and grouping
	Use repeated subtraction to divide
	Multiply/divide, models (2x, 5x, 10x)
	Solve multiplication problems, sharing/grouping
	Solve multiplication/division problems, arrays
	Repeated addition/subtraction, unit fractions
Course Topic	Activities Title
B1 Fractions	Halve it!
B2 Multiplication & Division	Make Fair Shares

**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**

Quests	Content
Understand the numerator	Using models to add unit fractions
Course Topic	Activities Title
B1 Fractions	Model Fractions
	Uneven partitioned shapes 1
B2 Multiplication & Division	Fraction Fruit Sets 1

<b>B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems</b>	
<b>Quests</b>	<b>Content</b>
Use ratios to scale up numbers	Using ratios to scale up numbers with models
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

## C. Algebra

### C1. Patterns and Relationships: Patterns

<b>C1.1 identify and describe repeating elements and operations in a variety of patterns, including patterns found in real-life contexts</b>	
<b>Quests</b>	<b>Content</b>
Identify/describe repeating patterns	Identify/describe repeating number patterns
<b>Course Topic</b>	<b>Activities Title</b>
C1 Patterns	Pick the Next Number

<b>C1.2 create and translate patterns that have repeating elements, movements, or operations using various representations, including shapes, numbers, and tables of values</b>	
<b>Quests</b>	<b>Content</b>
Create repeating patterns	Creating repeating patterns using given attributes
	Identifying and creating number patterns
<b>Course Topic</b>	<b>Activities Title</b>
C1 Patterns	Pick the Next Number

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Create/extend/describe repeating pattern	Creating/extending/describing repeating patterns
<b>Course Topic</b>	<b>Activities Title</b>
C1 Patterns	Describing Patterns
	Increasing Patterns
	Decreasing Patterns
	Odd and Even Numbers 1

<b>C1.4 create and describe patterns to illustrate relationships among whole numbers up to 1000</b>	
<b>Quests</b>	<b>Content</b>
Describe patterns in numbers to 1000	Describing/recognizing patterns in numbers to 1000
<b>Course Topic</b>	<b>Activities Title</b>
C1 Patterns	Increasing Patterns
	Decreasing Patterns
	Odd and Even Numbers 1

## **C2. Equations and Inequalities: Variables**

<b>C2.1 describe how variables are used, and use them in various contexts as appropriate</b>	
<b>Quests</b>	<b>Content</b>
Teacher directed	Teacher directed
<b>Course Topic</b>	<b>Activities Title</b>
C2 Variables	Commutative Property of Addition

## **C2. Equations and Inequalities: Equalities and Inequalities**

<b>C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not</b>	
<b>Quests</b>	<b>Content</b>
Recognize equivalent expressions	Recognizing equivalent expressions, 4 operations
<b>Course Topic</b>	<b>Activities Title</b>
C2 Variables	Equivalent Facts: Multiply

## **C3. Coding: Coding Skills**

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Write code for different types of events	Write code for different types of events
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Read code for different types of events	Read code for different types of events
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

## D. Data

### D1. Data Literacy: Data Collection and Organization

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Sort data according to 2–3 attributes	Carroll and Venn diagrams
	Tree diagrams
	Sorting data in logic diagrams
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data	Column Graphs
	Reading from a Column Graph
	Venn Diagram 1
	Carroll Diagram
	Tree Diagram
	Line Plots
	Tally Charts

<b>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</b>	
<b>Quests</b>	<b>Content</b>
Collect and organize data in tables	Collecting and organizing data in tables
<b>Course Topic</b>	<b>Activities Title</b>
D1 Data	Column Graphs
	Reading from a Column Graph
	Interpreting Tables
	Venn Diagram 1
	Carroll Diagram
	Tree Diagram

	Line Plots
	Tally Charts

## D1. Data Literacy: 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	
Quests	Content
Graphs: pictographs, bar graphs	Bar graphs, many-to-one correspondence
	Pictographs, many-to-one correspondence
Course Topic	Activities Title
D1 Data	Picture Graphs: with scale & half symbols
	Making Picture Graphs: With Scale
	Venn Diagram 1
	Carroll Diagram
	Tree Diagram
	Line Plots
	Tally Charts

## D1. Data Literacy: 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	
Quests	Content
Mean and mode	Determining and explaining the mean
	Determining and explaining the mode
Course Topic	Activities Title
D1 Data	Mode
	Mode from Frequency Table

D1.5 analyse different sets of data 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	
Quests	Content
Analyse data, various data displays	Analysing data in pictographs, different scales
	Analysing data in bar graphs, different scales
	Analysing data in tables and lists
Course Topic	Activities Title
D1 Data	Mode from Frequency Table



## D2. Probability: 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	
Quests	Content
Use the language of probability	Using the language of probability
Course Topic	Activities Title
D2 Probability	Chance Gauge
	Will it Happen?
	Most Likely and Least Likely
	Possible Outcomes

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	
Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
D2 Probability	Chance Gauge
	Will it Happen?
	Most Likely and Least Likely
	Possible Outcomes

## E. Spatial Sense

### E1. Geometric and Spatial Reasoning: Geometric and Spatial Reasoning

E1.1 sort, construct, and identify cubes, prisms, pyramids, cylinders, and cones by comparing their faces, edges, vertices, and angles	
Quests	Content
Three-dimensional objects	Introducing cones
	Introducing cubes
	Introducing cylinders
	Introducing prisms
	Introducing pyramids
	Comparing, sorting, and naming prisms and pyramids
	Making basic models of three-dimensional objects

	Faces, edges, and vertices
	Sorting three-dimensional objects
	Comparing three-dimensional objects
Course Topic	Activities Title
E1 Geometric & Spatial Reasoning	Faces, Edges and Vertices
	Collect the Objects
	Collect the Objects 2
	What Prism am I?
	What Pyramid am I?
	Naming 3D Objects

E1.2 compose and decompose various structures, and identify the two-dimensional shapes and three-dimensional objects that these structures contain	
Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
E1 Geometric & Spatial Reasoning	Collect the Objects
	Collect the Objects 2
	What Prism am I?
	What Pyramid am I?
	Naming 3D Objects

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	
Quests	Content
Identify congruency in 3D objects	Identifying congruency in 3D objects
Course Topic	Activities Title
E1 Geometric & Spatial Reasoning	Congruent Figures: Find Values

## E1. Geometric and Spatial Reasoning: Location and Movement

E1.4 give and follow multistep instructions involving movement from one location to another, including distances and half- and quarter-turns	
Quests	Content
Give and follow multistep instructions	Giving instructions
Course Topic	Activities Title
E1 Geometric & Spatial Reasoning	Following Directions

## E2. Measurement: Length, Mass, and Capacity

**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**

Quests	Content
Perimeter: polygons and curved shapes	Introducing perimeter
	Calculating the perimeters of regular polygons
Course Topic	Activities Title
E2 Measurement	How Long is That?
	Perimeter of Shapes
	Perimeter: Triangles 2
	Which Unit of Measurement?
	Which Measuring Tool?

**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**

Quests	Content
Length: mm, cm, m, km	Introducing formal units for length: millimetres
	Introducing formal units for length: kilometres
	Metres and centimetres
Course Topic	Activities Title
E2 Measurement	How Long is That?
	Perimeter of Shapes
	Perimeter: Triangles 2
	Centimeters and Millimeters
	Kilometre Conversions
	Mass Word Problems

**E2.3 use non-standard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy**

Quests	Content
Capacity: non-standard units	Comparing and ordering capacity
Course Topic	Activities Title
E2 Measurement	Comparing Volume
	Using a Litre
	Volume of Solids and Prisms - 1 cm <sup>3</sup> blocks

## E2. Measurement: Mass

E2.4 compare, estimate, and measure the mass of various objects, using a pan balance and non-standard units	
Quests	Content
Compare, estimate, and measure mass	Compare and order mass, informal units
	Compare, describe, and order mass, pan balance
Course Topic	Activities Title
E2 Measurement	How Heavy?

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	
Quests	Content
Teacher directed	Teacher directed
Course Topic	Activities Title
Teacher directed	Teacher directed

## E2. Measurement: Time

E2.6 use analog and digital clocks and timers to tell time in hours, minutes, and seconds	
Quests	Content
Tell time	Telling time to the hour
	Telling time to the hour and half hour
	Telling time to the quarter hour
	Telling time to five minutes
	Telling time to the minute
Course Topic	Activities Title
E2 Measurement	Five Minute Times

## E2. Measurement: 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	
Quests	Content
Compare areas using direct comparison	Comparing areas using direct comparison
Course Topic	Activities Title
E2 Measurement	Area of Shapes

	Equal Areas
	Biggest Shape/Bigger or smaller shape

<b>E2.8 use appropriate non-standard units to measure area, and explain the effect that gaps and overlaps have on accuracy</b>	
<b>Quests</b>	<b>Content</b>
Measure area using non-standard units	Measuring area using non-standard units
<b>Course Topic</b>	<b>Activities Title</b>
E2 Measurement	Area of Shapes
	Equal Areas
	Biggest Shape/Bigger or smaller shape

<b>E2.9 use square centimetres (cm<sup>2</sup>) and square metres (m<sup>2</sup>) to estimate, measure, and compare the areas of various two-dimensional shapes, including those with curved sides</b>	
<b>Quests</b>	<b>Content</b>
Estimate/measure/compare area: cm <sup>2</sup> , m <sup>2</sup>	Introducing formal units for area: cm <sup>2</sup>
	Introducing formal units for area: m <sup>2</sup>
	Estimate and measure areas of rectangles
	Compare and order rectangular areas
	Approximate/compare areas, non-rectilinear shapes
<b>Course Topic</b>	<b>Activities Title</b>
Teacher directed	Teacher directed

## F Financial Literacy

### F1 Money and Finances: Money Concepts

<b>F1.1 estimate and calculate the change required for various simple cash transactions involving whole-dollar amounts and amounts of less than one dollar</b>	
<b>Quests</b>	<b>Content</b>
Estimate and calculate change	Estimating and calculating change
<b>Course Topic</b>	<b>Activities Title</b>
F1 Financial Literacy	How much Change?



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