Mathletics
Ontario Curriculum

Activities (Courses) and Skill Quests

Grades 3-6

September, 2025

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Activities (Courses), Skill Quests and eBooks

September, 2025

Grade 3

B Number

B1 Number Sense: Whole Numbers

3.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

📖 Activities	
B1 Whole Number	Model Numbers
	Place Value 2
	Understanding Place Value 1
	Place Value Decomposition

👑 Skill Quests	
Numbers up to 1000	Reading and writing 3-digit numbers
	Using place value to decompose 3-digit numbers
	Non-standard decomposition with 3-digit numbers

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

📖 Activities	
B1 Whole Number	Which is Bigger?
	Which is Smaller?
	Ascending Order
	Descending Order

👑 Skill Quests	
Compare and order numbers to 1000	Comparing numbers to 1000
	Ordering numbers to 1000

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

📖 Activities	
B1 Whole Number	Nearest 100?
	Nearest 10?

👑 Skill Quests	
Round numbers up to 1000	Rounding numbers to the nearest ten
	Rounding numbers to the nearest hundred

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

📖 Activities	

Teacher directed	
👑 **Skill Quests**	
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

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

🗒 **Activities**	
B1 Whole Number	Model Numbers
	Place Value 2
	Place Value Decomposition
👑 **Skill Quests**	
Place value to 1000	Identifying place value: 3-digit numbers
	Solving place value problems: 3-digit numbers

B1 Number Sense: Fractions

3.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

🗒 **Activities**	
B1 Fractions	Dividing Threes
	Dividing Fours
	Dividing Fives
	Dividing Sixes
	Dividing Eights
	Dividing Tens
👑 **Skill Quests**	
Fair-share problems	Fair-share problems

3.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

🗒 **Activities**	
B1 Fractions	Fractions of a Collection 2
	Fractions of a Collection
👑 **Skill Quests**	
Equivalent fraction fair-share problems	Equivalent fraction fair-share problems
	Investigating equivalent fractions

B2 Operations: Properties and Relationships

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

📖 **Activities**	
B2 Multiplication & Division	Multiplication Grids
	Related Facts 2
	Fact Families: Multiply and Divide

👑 **Skill Quests**	
Multiplication & division relationships	Properties of multiplication
	Understanding division, unknown-factor problem
	Modelling multiplication & division relationships

B2 Operations: Math Facts

3.B2.2
recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts

📖 **Activities**	
B2 Multiplication & Division	Groups of Two
	Groups of Five
	Groups of Ten

👑 **Skill Quests**	
Multiplication/division facts: 2, 5, 10	Multiplication facts: 2
	Multiplication facts: 5
	Multiplication facts: 10
	Division facts: 2
	Division facts: 5
	Division facts: 1

B2 Operations: Mental Math

3.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

📖 **Activities**	
B2 Addition & Subtraction	Estimate Sums
	Estimate Differences
	Jump Add and Subtract
	Split Add and Subtract
	Compensation – Add
	Add 3 Numbers: Bonds to 100
	Mental Subtraction
	Compensation - Subtract

👑 **Skill Quests**	

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

B2 Operations: Addition and Subtraction

3.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

📋 Activities	
B2 Addition & Subtraction	Add Three 1-Digit Numbers
	Columns that Add
	Column Addition 1
	Add Two 2-Digit Numbers: Exchanging (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
👑 **Skill Quests**	
Teacher directed	

3.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

📋 Activities	
B2 Addition & Subtraction	Add Three 1-Digit Numbers
	Columns that Add
	Column Addition 1
	Add Two 2-Digit Numbers: Exchanging (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
👑 **Skill Quests**	
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

B2 Operations: Multiplication and Division

3.B2.6
represent multiplication of numbers up to 10 × 10 and division up to 100 ÷ 10, using a variety of tools and drawings, including arrays

📖 Activities	
B2 Multiplication & Division	Frog Jump Multiplication
	Frog Jump Division
	Multiplication Grids
	Related Facts 2
	Fact Families: Multiply and Divide
	Bar Model ×÷
	Model Multiplication to 5 × 5
	Multiplication Arrays
	Arrays 1
	Arrays 2
	Groups of Two
	Groups of Five
	Groups of Ten
👑 **Skill Quests**	
Represent multiplication/ division to 100	Introducing and describing arrays
	Using arrays to add or subtract another group
	Representing multiplication up to 10 × 10, models
	Representing division up to 100 ÷ 10, models

3.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

📖 Activities	
B2 Multiplication & Division	Make Fair Shares
	Fraction Fruit Sets 1
👑 **Skill Quests**	
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

3.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

📖 Activities	
B2 Fractions	Model Fractions
	Uneven partitioned shapes 1
	Uneven partitioned shapes 2
👑 Skill Quests	
Understand the numerator	Using models to add unit fractions

3.B2.9

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

📖 Activities	
Teacher directed	
👑 Skill Quests	
Use ratios to scale up numbers	Using ratios to scale up numbers with models

C Algebra

C1 Patterns and Relationships: Patterns

3.C1.1

identify and describe repeating elements and operations in a variety of patterns, including patterns found in real-life contexts

📖 Activities	
Teacher directed	
👑 Skill Quests	
Identify/describe repeating patterns	Identify/describe repeating number patterns

3.C1.2

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

📖 Activities	
Teacher directed	
👑 Skill Quests	
Create repeating patterns	Creating repeating patterns using given attributes
	Identifying and creating number patterns

3.C1.4

create and describe patterns to illustrate relationships among whole numbers up to 1000

📖 Activities	
C1 Patterns	Odd and Even Numbers 1
👑 Skill Quests	
Describe patterns in numbers to 1000	Describing/recognizing patterns in numbers to 1000

C2 Equations and Inequalities: Variables

3.C2.1
describe how variables are used, and use them in various contexts as appropriate
📧 **Activities**
Teacher directed
👑 **Skill Quests**
Teacher directed

C2 Equations and Inequalities: Equations and Inequalities

3.C2.2	
determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not	
📧 **Activities**	
C2 Variables	Equivalent Facts: Multiply
👑 **Skill Quests**	
Recognize equivalent expressions	Recognizing equivalent expressions, 4 operations

C3 Coding: Coding Skills

3.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	
📧 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Write code for different types of events	Write code for different types of events

3.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	
📧 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Read code for different types of events	Read code for different types of events

D Data

D1 Data Literacy: Data Collection and Organization

3.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

🗔 Activities	
D1 Data	Venn Diagram 1
	Carroll Diagram
	Tree Diagram
👑 Skill Quests	
Sort data according to 2–3 attributes	Carroll and Venn diagrams
	Tree diagrams
	Sorting data in logic diagrams

3.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

🗔 Activities	
Teacher directed	
👑 Skill Quests	
Collect and organize data in tables	Collecting and organizing data in tables

D1 Data Literacy: Data Visualization

3.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

🗔 Activities	
D1 Data	Making Picture Graphs: With Scale
	Tally Charts
👑 Skill Quests	
Graphs: pictographs, bar graphs	Bar graphs, many-to-one correspondence
	Pictographs, many-to-one correspondence

D1 Data Literacy: Data Analysis

3.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

🗔 Activities	
D1 Data	Mode
	Mode from Frequency Table
👑 Skill Quests	
Mean and mode	Determining and explaining the mean
	Determining and explaining the mode

3.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

📖 Activities

D1 Data	Column Graphs
	Reading from a Column Graph
	Pictographs: with scale & half symbols
	Interpreting Tables
	Line Plots
	Mode from Frequency Table

👑 Skill Quests

Analyse data, various data displays	Analysing data in pictographs, different scales
	Analysing data in bar graphs, different scales
	Analysing data in tables and lists

D2 Probability: Probability

3.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

📖 Activities

D2 Probability	Chance Gauge
	Will it Happen?
	Most Likely and Least Likely
	Possible Outcomes

👑 Skill Quests

Use the language of probability	Using the language of probability

3.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

📖 Activities

Teacher directed

👑 Skill Quests

Teacher directed

E Spatial Sense

E1 Geometric and Spatial Reasoning: Geometric and Spatial Reasoning

3.E1.1

sort, construct, and identify cubes, prisms, pyramids, cylinders, and cones by comparing their faces, edges, vertices, and angles

📖 Activities

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

👑 Skill Quests	
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

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

📰 Activities
Teacher directed

👑 Skill Quests
Teacher directed

3.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

📰 Activities	
E1 Geometric & Spatial Reasoning	Congruent Figures: Find Values

👑 Skill Quests	
Give and follow multistep instructions	Giving instructions

E1 Geometric and Spatial Reasoning: Location and Movement

3.E1.4
give and follow multistep instructions involving movement from one location to another, including distances and half- and quarter-turns

📰 Activities	
E1 Geometric & Spatial Reasoning	Following Directions

👑 Skill Quests	
Identify congruency in 3D objects	Identifying congruency in 3D objects

E2 Measurement: Length, Mass, and Capacity

3.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

📖 Activities	
E2 Measurement	Perimeter of Shapes
	Perimeter: Triangles 2
	Which Unit of Measurement?
	Which Measuring Tool?

👑 Skill Quests	
Perimeter: polygons and curved shapes	Introducing perimeter
	Calculating the perimeters of regular polygons

3.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

📖 Activities	
Teacher directed	

👑 Skill Quests	
Length: mm, cm, m, km	Introducing formal units for length: millimetres
	Introducing formal units for length: kilometres
	Metres and centimetres

3.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

📖 Activities	
E2 Measurement	Using a Litre

👑 Skill Quests	
Capacity: non-standard units	Comparing and ordering capacity

E2 Measurement: Mass

3.E2.4

compare, estimate, and measure the mass of various objects, using a pan balance and non-standard units

📖 Activities	
E2 Measurement	How Heavy?

👑 Skill Quests	
Compare, estimate, and measure mass	Compare and order mass, informal units
	Compare, describe, and order mass, pan balance

3.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

📖 **Activities**
Teacher directed

👑 **Skill Quests**
Teacher directed

E2 Measurement: Time

3.E2.6

use analog and digital clocks and timers to tell time in hours, minutes, and seconds

📖 **Activities**	
E2 Measurement	Five Minute Times

👑 **Skill Quests**	
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

E2 Measurement: Area

3.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

📖 **Activities**	
E2 Measurement	Equal Areas
	Bigger or Smaller Shape

👑 **Skill Quests**	
Compare areas using direct comparison	Comparing areas using direct comparison

3.E2.8

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

📖 **Activities**	
E2 Measurement	Equal Areas
	Bigger or Smaller Shape

👑 **Skill Quests**	
Measure area using non-standard units	Measuring area using non-standard units

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

📖 Activities	
E2 Measurement	Area of Shapes
👑 **Skill Quests**	
Estimate/measure/compare area: cm², m²	Introducing formal units for area: cm²
	Introducing formal units for area: m²
	Estimate and measure areas of rectangles
	Compare and order rectangular areas
	Approximate/compare areas, non-rectilinear shapes

F Financial Literacy

F1 Money and Finances: Money Concepts

3.F1.1
estimate and calculate the change required for various simple cash transactions involving whole-dollar amounts and amounts of less than one dollar

📖 Activities	
F1 Financial Literacy	How much Change?
👑 **Skill Quests**	
Estimate and calculate change	Estimating and calculating change

Grade 4

B Number

B1 Number Sense: Whole Numbers

4.B1.1
read, represent, compose, and decompose whole numbers up to and including 10 000, using appropriate tools and strategies, and describe various ways they are used in everyday life

▦ Activities	
B1 Whole Number	Expanding Numbers
	Place Value – Thousands
	Place Value 3
	Understanding Place Value 2
	Smallest and largest numbers

♛ Skill Quests	
Numbers up to 1000	Reading and writing 3-digit numbers
	Using place value to partition 3-digit numbers
	Non-standard decomposition with 3-digit numbers

4.B1.2
compare and order whole numbers up to and including 10 000, in various contexts

▦ Activities	
B1 Whole Number	Put in Order 1
	Which Is Greater?
	Which Is Less?
	Greater Than or Less Than?
	Ascending Order
	Descending Order
	Missing Numbers 1
	Greater Than or Less Than 1

♛ Skill Quests	
Compare & order 4-digit numbers	Compare & order 4-digit

4.B1.3
round whole numbers to the nearest ten, hundred, or thousand, in various contexts

▦ Activities	
B1 Whole Number	Nearest Hundred?
	Nearest Thousand?

♛ Skill Quests	
Round numbers up to 1000	Rounding numbers to the nearest ten
	Rounding numbers to the nearest hundred

B1 Number Sense: Fractions and Decimals

4.B1.4
represent fractions from halves to tenths using drawings, tools, and standard fractional notation, and explain the meanings of the denominator and the numerator

📖 Activities

B1 Fractions	Compare Fractions 1a
	Counting with Fractions on a Number Line
	Uneven partitioned shapes 2
	What Fraction Is Shaded 1
	Fraction Length Models 1

👑 Skill Quests

Represent fractions, halves to tenths	Introducing the terms numerator & denominator
	Representing halves, fourths & eighths
	Representing thirds & sixths
	Representing fifths & tenths

4.B1.5
use drawings and models to represent, compare, and order fractions representing the individual portions that result from two different fair-share scenarios involving any combination of 2, 3, 4, 5, 6, 8, and 10 sharers

📖 Activities

B1 Fractions	Comparing Fractions 1
	Compare Fractions 1a
	Fractions of a Collection 2
	Partition into Equal Parts
	Fraction Fruit Sets 2

👑 Skill Quests

Compare & order fractions with models	Comparing & ordering fractions with models
	Comparing fractions, same numerator or denominator

4.B1.6
count to 10 by halves, thirds, fourths, fifths, sixths, eighths, and tenths, with and without the use of tools

📖 Activities

B1 Fractions	Counting with Fractions on a Number Line

👑 Skill Quests

Counting in fractions	Counting up to 10 in halves & fourths
	Counting in thirds on a number line up to 3
	Counting in tenths
	Counting in fractions

4.B1.7
read, represent, compare, and order decimal tenths, in various contexts

📖 Activities

Teacher directed

👑 Skill Quests	
Decimal tenths	Introducing decimal tenths
	Comparing & ordering decimal tenths

4.B1.8
round decimal numbers to the nearest whole number, in various contexts
📋 **Activities**
Teacher directed
👑 **Skill Quests**

Comparing & ordering decimal tenths	Round decimal tenths, nearest whole

4.B1.9
describe relationships and show equivalences among fractions and decimal tenths, in various contexts
📋 **Activities**
Teacher directed
👑 **Skill Quests**

Equivalence, fractions & decimal tenths	Connecting decimal tenths to common fractions

B2 Operations: Properties and Relationships

4.B2.1
use the properties of operations, and the relationships between addition, subtraction, multiplication, and division, to solve problems involving whole numbers, including those requiring more than one operation, and check calculations
📋 **Activities**

B2 Multiplication & Division Facts	Multiplication Turn-Abouts
	Related Facts 2
	Fact Families: Multiply and Divide
B2 Addition & Subtraction	Fact Families: Add and Subtract

👑 **Skill Quests**	
Inverse operations & properties	The distributive property
	The commutative property
	The associative property
	Inverse relationships, addition & subtraction
	Inverse relationships, multiplication & division

B2 Operations: Math Facts

4.B2.2
recall and demonstrate multiplication facts for 1 × 1 to 10 × 10, and related division facts
📋 **Activities**

B2 Multiplication & Division	Groups of Three
	Groups of Four
	Groups of Six

	Groups of Seven
	Groups of Eight
	Groups of Nine
	Dividing by Seven
	Dividing by Eight
	Dividing by Nine
	Times Tables
	Multiplication Turn-Abouts
	Related Facts 2
	Fact Families: Multiply and Divide
	Division Facts 1
	Problems: Times and Divide
	Multiply and Divide Problems 1
	Remainders by Arrays

👑 Skill Quests	
Multiplication/division facts, 1–10	Recalling multiplication facts for 2, 5 & 10
	Recalling multiplication facts for 3, 6 & 9
	Recalling multiplication facts for 4 & 8
	Recalling multiplication facts for 7
	Recalling multiplication facts up to 10 × 10
	Recalling the division facts for 2, 5 & 10
	Recalling the division facts for 3, 6 & 9
	Recalling division facts for 4 & 8
	Recalling division facts for 7

B2 Operations: Mental Math

4.B2.3
use mental math strategies to multiply whole numbers by 10, 100, and 1000, divide whole numbers by 10, and add and subtract decimal tenths, and explain the strategies used

🖥 Activities	
Teacher directed	

👑 Skill Quests	
Mental math: add/subtract decimal tenths	Adding & subtracting tenths, mental strategies
Multiply & divide by 10, 100, 1000	Multiply/divide whole numbers by 10, 100 & 1000
	Dividing whole numbers by 10

B2 Operations: Addition and Subtraction

4.B2.4
represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 10 000 and of decimal tenths, using appropriate tools and strategies, including algorithms

🖥 Activities	
B2 Addition & Subtraction	Compensation – Add
	Compensation – Subtract
	Column Addition Method

	Add Two 2-Digit Numbers
	Add 3-Digit Numbers
	Add Two 2-Digit Numbers: Regroup
	Add Numbers: Regroup a Ten
	Add Three 2-Digit Numbers: Regroup
	Add 3-Digit Numbers: Regroup
	3-Digit Differences
	2-Digit Differences: Regroup
	3-Digit Differences: 1 Regrouping
	3-Digit Differences: 2 Regroupings
	3-Digit Differences with Zeros
	Estimation: Add and Subtract
Add & subtract decimal tenths	Adding decimal tenths
	Subtracting decimal tenths
Add & subtract whole numbers to 10 000	Add numbers up to 5 digits, mental strategies
	Add numbers up to 4 digits, algorithm
	Subtract numbers up to 5 digits, mental strategies
	Subtract numbers up to 4 digits, algorithm

B2 Operations: Multiplication and Division

4.B2.5
represent and solve problems involving the multiplication of two- or three-digit whole numbers by one-digit whole numbers and by 10, 100, and 1000, using appropriate tools, including arrays

🔲 **Activities**	
B2 Multiplication & Division Facts	Multiply Multiples of 10
	Multiplying Whole Numbers by 10, 100, and 1000
👑 **Skill Quests**	
Multiply 2-digit & 3-digit numbers	Multiplying by 100
	Multiplication strategies

4.B2.6
represent and solve problems involving the division of two- or three-digit whole numbers by one-digit whole numbers, expressing any remainder as a fraction when appropriate, using appropriate tools, including arrays

🔲 **Activities**	
B2 Multiplication & Division Facts	Remainders by Arrays
👑 **Skill Quests**	
Divide 2-digits & 3-digits by 1-digit	Division strategies
	Dividing using place value
	Dividing with remainders

4.B2.7
represent the relationship between the repeated addition of a unit fraction and the multiplication of that unit fraction by a whole number, using tools, drawings, and standard fractional notation

⊞ Activities	
Teacher directed	
👑 Skill Quests	
Multiply unit fractions by whole numbers	Multiply unit fractions by whole numbers, models

4.B2.8
show simple multiplicative relationships involving whole-number rates, using various tools and drawings

⊞ Activities	
Teacher directed	
👑 Skill Quests	
Solve problems involving rates	Solving problems involving rates

C Algebra

C1 Patterns and Relationships: Patterns

4.C1.1
identify and describe repeating and growing patterns, including patterns found in real-life contexts

⊞ Activities	
Teacher directed	
👑 Skill Quests	
ID/describe repeating & growing patterns	Identifying & describing growing patterns
	Identifying & describing repeating patterns

4.C1.2
create and translate repeating and growing patterns using various representations, including tables of values and graphs

⊞ Activities	
Teacher directed	
👑 Skill Quests	
Create repeating & growing patterns	Creating growing patterns
	Creating repeating patterns

4.C1.3
determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating and growing patterns

⊞ Activities	
C1 and C2 Patterns & Variables	Table of Values
👑 Skill Quests	
Pattern rules: repeating & growing	Investigating number patterns
	Finding a rule for a given shape pattern

4.C1.4
create and describe patterns to illustrate relationships among whole numbers and decimal tenths
▤ Activities
Teacher directed
♛ Skill Quests

Patterns: whole numbers & decimal tenths	Patterns: whole numbers & decimal tenths

C2 Equations and Inequalities: Variables

4.C2.1	
identify and use symbols as variables in expressions and equations	
▤ Activities	
B2 Multiplication & Division	Frog Jump Multiplication
	Frog Jump Division
	Multiplication Grids
	Related Facts 2
	Fact Families: Multiply and Divide
	Bar Model ×÷
	Model Multiplication to 5 × 5
	Multiplication Arrays
	Arrays 1
	Arrays 2
	Groups of Two
	Groups of Five
	Groups of Ten
♛ Skill Quests	
Represent multiplication/ division to 100	Introducing and describing arrays
	Using arrays to add or subtract another group
	Representing multiplication up to 10 × 10, models
	Representing division up to 100 ÷ 10, models

C2 Equations and Inequalities: Equations and Inequalities

4.C2.3	
solve inequalities that involve addition and subtraction of whole numbers up to 20, and verify and graph the solutions	
▤ Activities	
Teacher directed	
♛ Skill Quests	
Solve inequalities	Solving inequalities

C3 Coding: Coding Skills

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

▦ **Activities**
Teacher directed

👑 **Skill Quests**
Teacher directed

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

▦ **Activities**
Teacher directed

👑 **Skill Quests**
Teacher directed

D Data

D1 Data Literacy: Data Collection and Organization

4.D1.1
describe the difference between qualitative and quantitative data, and describe situations where each would be used

▦ **Activities**	
Teacher directed	

👑 **Skill Quests**	
Qualitative & quantitative data	Identifying qualitative & quantitative data

4.D1.2
collect data from different primary and secondary sources to answer questions of interest that involve comparing two or more sets of data, and organize the data in frequency tables and stem-and-leaf plots

▦ **Activities**	
Teacher directed	

👑 **Skill Quests**	
Collect & compare data	Collecting & recording category data in tables
	Stem-and-leaf plots

D1 Data Literacy: Data Visualization

4.D1.3
select from among a variety of graphs, including multiple-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs

⊞ Activities	
Teacher directed	
👑 **Skill Quests**	
Graphs: multiple-bar graphs	Representing data in a multiple-bar graph
	Representing data in a pictograph

4.D1.4

create an infographic about a data set, representing the data in appropriate ways, including in frequency tables, stem-and-leaf plots, and multiple-bar graphs, and incorporating any other relevant information that helps to tell a story about the data

⊞ Activities	
Teacher directed	
👑 **Skill Quests**	
Teacher directed	

4.D1.5

determine the mean and the median and identify the mode(s), if any, for various data sets involving whole numbers, and explain what each of these measures indicates about the data

⊞ Activities	
D1 Data	Median
	Median from Frequency Table
	Median from Stem and Leaf Plot
	Finding the Average
	The Mean
	Mode from Stem and Leaf Plot
👑 **Skill Quests**	
Mean, median & mode	Understanding & calculating the mean
	Understanding & calculating the median
	Understanding & calculating the mode

D1 Data Literacy: Data Analysis

4.D1.6

analyse different sets of data presented in various ways, including in stem-and-leaf plots and multiple-bar graphs, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions

⊞ Activities	
D1 Data	Line Graphs: Explanation
	Stem and Leaf Plots: Concept
👑 **Skill Quests**	
Analyse data	Analysing data in stem-and-leaf plots
	Analysing data in multiple-bar graphs
	Analysing data in bar graphs, pictographs & tables

D2 Probability: Probability

4.D2.1
use mathematical language, including the terms "impossible", "unlikely", "equally likely", "likely", and "certain", to describe the likelihood of events happening, represent this likelihood on a probability line, and use it to make predictions and informed decisions

📖 **Activities**	
D2 Probability	What are the Chances?
	Introductory Probability

👑 **Skill Quests**	
Probability language	Describe the chances of everyday events occurring

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

📖 **Activities**
Teacher directed

👑 **Skill Quests**
Teacher directed

E Spatial Sense

E1 Geometric and Spatial Reasoning: Geometric and Spatial Reasoning

4.E1.1
identify geometric properties of rectangles, including the number of right angles, parallel and perpendicular sides, and lines of symmetry

📖 **Activities**
Teacher directed

👑 **Skill Quests**
Teacher directed

E1 Geometric and Spatial Reasoning: Location and Movement

4.E1.2
plot and read coordinates in the first quadrant of a Cartesian plane, and describe the translations that move a point from one coordinate to another

📖 **Activities**	
E1 Geometry	Coordinate Graphs: 1st Quadrant
	Coordinate Meeting Place
	Map Coordinates

👑 **Skill Quests**	
The Cartesian plane	The Cartesian coordinate system, 1st quadrant
	Investigating translations in the 1st quadrant

4.E1.3
describe and perform translations and reflections on a grid, and predict the results of these transformations
📖 **Activities**
Teacher directed
👑 **Skill Quests**

Translations & reflections	Translations & reflections

E2 Measurement: The Metric System

4.E2.1	
explain the relationships between grams and kilograms as metric units of mass, and between litres and millilitres as metric units of capacity, and use benchmarks for these units to estimate mass and capacity	
📖 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Mass & capacity	Introducing units of mass: the gram & kilogram
	Introducing capacity units: millilitres & litres
	Estimating capacities using millilitres & litres

4.E2.2	
use metric prefixes to describe the relative size of different metric units, and choose appropriate units and tools to measure length, mass, and capacity	
📖 **Activities**	
E2 Measure	Which Unit of Measurement?
	Which Measuring Tool?
	Measure to the Nearest Half Centimetre
👑 **Skill Quests**	
Length, mass, capacity: units & tools	Select & use metric units & tools, mass
	Select & use metric units & tools, capacity
	Select metric units, length

E2 Measurement: Time

4.E2.3	
solve problems involving elapsed time by applying the relationships between different units of time	
📖 **Activities**	
E2 Measure	Time Mentals
	Elapsed Time
	What Time Will it Be?
👑 **Skill Quests**	
Solve problems involving	Calculating elapsed time

E2 Measurement: Angles

4.E2.4
identify angles and classify them as right, straight, acute, or obtuse

📋 Activities	
E2 Measure	What Type of Angle?
	What Type of Angle 2?
👑 **Skill Quests**	
Identify & classify angles	Classifying angles

E2 Measurement: Area

4.E2.5
use the row and column structure of an array to measure the areas of rectangles and to show that the area of any rectangle can be found by multiplying its side lengths

📋 Activities	
Teacher directed	
👑 **Skill Quests**	
Area of rectangles, models	Finding the area of a rectangle, arrays
	Finding the area of a rectangle, area model

4.E2.6
apply the formula for the area of a rectangle to find the unknown measurement when given two of the three

📋 Activities	
E2 Measure	Area: Squares and Rectangles
👑 **Skill Quests**	
Area of rectangles, formula	Finding the area of rectangles, formula

F Financial Literacy

F1 Money and Finances: Money Concepts

4.F1.1
identify various methods of payment that can be used to purchase goods and services

📋 Activities	
Teacher directed	
👑 **Skill Quests**	
Teacher directed	

4.F1.2
estimate and calculate the cost of transactions involving multiple items priced in whole-dollar amounts, not including sales tax, and the amount of change needed when payment is made in cash, using mental math

Activities	
F1 Financial Literacy	How much Change?
	Net Pay
Skill Quests	
Calculate the purchase cost	Calculating the purchase cost & change

F1 Money and Finances: Financial Management

4.F1.3
explain the concepts of spending, saving, earning, investing, and donating, and identify key factors to consider when making basic decisions related to each
Activities
Teacher directed
Skill Quests
Teacher directed

4.F1.4
explain the relationship between spending and saving, and describe how spending and saving behaviours may differ from one person to another
Activities
Teacher directed
Skill Quests
Teacher directed

F1 Money and Finances: Consumer and Civic Awareness

4.F1.5
describe some ways of determining whether something is reasonably priced and therefore a good purchase
Activities
Teacher directed
Skill Quests
Teacher directed

Grade 5

B Number

B1 Number Sense: Whole Numbers

<table>
<tr><td colspan="2" align="center">5.B1.1
read, represent, compose, and decompose whole numbers up to and including 100 000, using appropriate tools and strategies, and describe various ways they are used in everyday life</td></tr>
<tr><td colspan="2">▦ Activities</td></tr>
<tr><td>B1 Whole Number</td><td>Numbers in Words</td></tr>
<tr><td></td><td>Numbers from Words to Digits 1</td></tr>
<tr><td></td><td>Expanding Numbers</td></tr>
<tr><td></td><td>Understanding Place Value 3</td></tr>
<tr><td></td><td>Expanded Notation</td></tr>
<tr><td></td><td>Factors</td></tr>
<tr><td></td><td>Find the Factor</td></tr>
<tr><td></td><td>Rounding Numbers</td></tr>
<tr><td colspan="2">♛ Skill Quests</td></tr>
<tr><td>Numbers up to 100 000</td><td>Reading & writing 5-digit numbers</td></tr>
<tr><td></td><td>Identifying place value: 5-digit numbers</td></tr>
<tr><td></td><td>Using place value to partition 5-digit numbers</td></tr>
<tr><td></td><td>Rounding 5-digit numbers</td></tr>
</table>

<table>
<tr><td colspan="2" align="center">5.B1.2
compare and order whole numbers up to and including 100 000, in various contexts</td></tr>
<tr><td colspan="2">▦ Activities</td></tr>
<tr><td>B1 Whole Number</td><td>Put in Order 1</td></tr>
<tr><td></td><td>Missing Numbers 2</td></tr>
<tr><td colspan="2">♛ Skill Quests</td></tr>
<tr><td>Compare & order 5-digit</td><td>Comparing & ordering 5-digit numbers</td></tr>
</table>

B1 Number Sense: Fractions, Decimals, and Percents

<table>
<tr><td colspan="2" align="center">5.B1.3
represent equivalent fractions from halves to twelfths, including improper fractions and mixed numbers, using appropriate tools, in various contexts</td></tr>
<tr><td colspan="2">▦ Activities</td></tr>
<tr><td>B1 Fractions, Decimals, & Percents</td><td>Equivalent Fraction Wall 1</td></tr>
<tr><td></td><td>Equivalent Fraction Wall 2</td></tr>
<tr><td></td><td>Shading Equivalent Fractions</td></tr>
<tr><td></td><td>Equivalent Fractions on a Number Line 1</td></tr>
<tr><td></td><td>What Mixed Number Is Shaded?</td></tr>
<tr><td></td><td>Mixed and Improper Fractions on a Number Line</td></tr>
</table>

👑 Skill Quests	
Equivalent fractions	Finding equivalent fractions using multiplication
	Finding equivalent fractions using a number line

5.B1.4

compare and order fractions from halves to twelfths, including improper fractions and mixed numbers, in various contexts

🗐 Activities	
B1 Fractions, Decimals, & Percents	Part-Whole Rods 1
	Part-Whole Rods 2
	Fraction Length Models 2

👑 Skill Quests	
Compare & order fractions	Comparing & ordering fractions
	Comparing & ordering fractions using models

5.B1.5

read, represent, compare, and order decimal numbers up to hundredths, in various contexts

🗐 Activities	
B1 Fractions, Decimals, & Percents	Decimals from Words to Digits 1
	Decimal Place Value
	Comparing Decimals 1

👑 Skill Quests	
Decimal hundredths	Introducing decimal hundredths

5.B1.6

round decimal numbers to the nearest tenth, in various contexts

🗐 Activities	
B1 Fractions, Decimals, & Percents	Nearest Whole Number
	Rounding Decimals 1

👑 Skill Quests	
Round decimal hundredths	Round decimal hundredths, nearest whole & tenth

5.B1.7

describe relationships and show equivalences among fractions, decimal numbers up to hundredths, and whole number percents, using appropriate tools and drawings, in various contexts

🗐 Activities	
B1 Fractions, Decimals, & Percents	Mixed to Improper
	Improper to Mixed
	Converting Mixed and Improper
	Modelling Percentages
	Match Decimals and Percentages
	Complementary Percentages

👑 Skill Quests	
Fractions, decimals &	Connecting decimals & fractions

Percents	Representing fractions as percents
	Representing percents & decimals
	Fraction, decimal & percent equivalence

B2 Operations: Properties and Relationships

5.B2.1
use the properties of operations, and the relationships between operations, to solve problems involving whole numbers and decimal numbers, including those requiring more than one operation, and check calculations

🗐 **Activities**	
B2 Multiplication & Division	Mental Methods Multiplication 1
	Mental Methods Multiplication 2

👑 **Skill Quests**	
Inverse operations & properties	Using inverse operations to solve problems

B2 Operations: Math Facts

5.B2.2
recall and demonstrate multiplication facts from 0 × 0 to 12 × 12, and related division facts

🗐 **Activities**	
B2 Multiplication & Division	Multiplication Facts
	Division Facts 1

👑 **Skill Quests**	
Multiplication & division facts, 0–12	Multiplication properties
	Multiplication facts for 2, 5 & 10
	Multiplication facts for 3, 6 & 9
	Multiplication facts for 4 & 8
	Multiplication facts for 7
	Multiplication facts for 11 & 12
	Division facts for 2, 5 & 10
	Division facts for 3, 6 & 9
	Division facts for 7
	Division facts for 4 & 8
	Division facts for 11 & 12
	Recalling multiplication facts up to 12 × 12

B2 Operations: Mental Math

5.B2.3
use mental math strategies to multiply whole numbers by 0.1 and 0.01 and estimate sums and differences of decimal numbers up to hundredths, and explain the strategies used

🗐 **Activities**	
B2 Addition & Subtraction	Estimate Decimal Differences 1
	Estimate Decimal Sums 2
	Add Decimals 1

👑 Skill Quests	
Mental math strategies, decimals	Adding & subtracting decimals, mental strategies
	Dividing whole numbers by 10
	Multiplying whole numbers by 0.1 & 0.01

B2 Operations: Addition and Subtraction

5.B2.4
represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 100 000, and of decimal numbers up to hundredths, using appropriate tools, strategies, and algorithms

📖 Activities	
B2 Addition & Subtraction	Adding Colossal Columns
	Add Multi-Digit Numbers 1

👑 Skill Quests	
Add & subtract whole numbers & decimals	Adding & subtracting 5-digit numbers, algorithm
	Adding & subtracting 5-digit numbers, mentally
	Adding & subtracting decimals to hundredths

5.B2.5
add and subtract fractions with like denominators, in various contexts

📖 Activities	
B2 Addition & Subtraction	Common Denominator
	One Take Fraction
	Subtract Like Fractions
	Add Subtract Fractions 1

👑 Skill Quests	
Add/subtract fractions, like denominator	Add fractions with like denominators
	Subtract fractions with like denominators

B2 Operations: Multiplication and Division

5.B2.6
represent and solve problems involving the multiplication of two-digit whole numbers by two-digit whole numbers using the area model and using algorithms, and make connections between the two methods

📖 Activities	
B2 Multiplication & Division	Grid Methods 2
	Multiply 2 Digits Area Model

👑 Skill Quests	
Multiply 2-digit by 2-digit	Multiplying 2-digit numbers by 2-digit numbers

5.B2.7
represent and solve problems involving the division of three-digit whole numbers by two-digit whole numbers using the area model and using algorithms, and make connections between the two methods, while expressing any remainder appropriately

Activities	
B2 Multiplication & Division	Long Division by Whole Numbers
	Divide: 2-Digit Divisor, Remainder

👑 Skill Quests	
Divide 3-digits by 2-digits	Dividing 2 & 3-digit numbers by 2-digit numbers

5.B2.8
multiply and divide one-digit whole numbers by unit fractions, using appropriate tools and drawings

Activities	
B2 Multiplication & Division	Unit Fractions
	Divide by a Unit Fraction

👑 Skill Quests	
Multiply & divide unit fractions	Multiplying unit fractions by whole numbers
	Dividing unit fractions by whole numbers

5.B2.9
represent and create equivalent ratios and rates, using a variety of tools and models, in various contexts

Activities	
B2 Multiplication & Division	Ratio
	Ratios
	Equivalent Ratios
	Ratio Word Problems
	Rates Word Problems

👑 Skill Quests	
Equivalent ratios & rates	Equivalent ratios & rates

C Algebra

C1 Patterns and Relationships: Patterns

5.C1.1
identify and describe repeating, growing, and shrinking patterns, including patterns found in real-life contexts

Activities	
Teacher directed	

👑 Skill Quests	
Identify & describe patterns	Identify/create growing & shrinking patterns

5.C1.2
create and translate growing and shrinking patterns using various representations, including tables of values and graphs

Activities	
Teacher directed	

👑 Skill Quests	
Create growing & shrinking	Creating growing & shrinking patterns

5.C1.3
determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating, growing, and shrinking patterns

📖 Activities

Teacher directed

👑 Skill Quests

Determine rules & extend patterns	Extending repeating, growing & shrinking patterns
	Determining & using pattern rules

5.C1.4
create and describe patterns to illustrate relationships among whole numbers and decimal tenths and hundredths

📖 Activities

Teacher directed

👑 Skill Quests

Teacher directed

C2 Equations and Inequalities: Variables and Expressions

5.C2.1
translate among words, algebraic expressions, and visual representations that describe equivalent relationships

📖 Activities

C2 Variables & Expressions	I am Thinking of a Number!
	Writing Algebraic Expressions
	Write an Equation: Word Problems

👑 Skill Quests

Translate algebraic expressions	Translate among words & algebraic expressions

5.C2.2
evaluate algebraic expressions that involve whole numbers

📖 Activities

Teacher directed

👑 Skill Quests

Evaluate algebraic expressions	Evaluating algebraic expressions

C2 Equations and Inequalities: Equations and Inequalities

5.C2.3
solve equations that involve whole numbers up to 100 in various contexts, and verify solutions

📖 Activities

C2 Variables & Expressions	I am Thinking of a Number!
	Write an Equation: Word Problems
	Find the Missing Number 2

Solve equations, numbers up to 100	Solving equations
	Solving equations using models

5.C2.4
solve inequalities that involve one operation and whole numbers up to 50, and verify and graph the solutions

▦ Activities	
C2 Variables & Expressions	Inequalities on a Number Line: Basics
	Inequalities on a Number Line: Mixed Basics

♛ Skill Quests	
Solve inequalities	Solving inequalities

C3 Coding: Coding Skills

5.C3.1
solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves conditional statements and other control structures

▦ Activities
Teacher directed

♛ Skill Quests
Teacher directed

5.C3.2
read and alter existing code, including code that involves conditional statements and other control structures, and describe how changes to the code affect the outcomes

▦ Activities
Teacher directed

♛ Skill Quests
Teacher directed

D Data

D1 Data Literacy: Data Collection and Organization

5.D1.1
explain the importance of various sampling techniques for collecting a sample of data that is representative of a population

▦ Activities
Teacher directed

♛ Skill Quests
Teacher directed

5.D1.2

collect data, using appropriate sampling techniques as needed, to answer questions of interest about a population, and organize the data in relative-frequency tables

📋 Activities	
D1 Data	Relative Frequency
👑 **Skill Quests**	
Relative-frequency tables	Finding the relative frequency in a table

D1 Data Literacy: Data Visualization

5.D1.3

select from among a variety of graphs, including stacked-bar graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs

📋 Activities	
Teacher directed	
👑 **Skill Quests**	
Data displays	Understanding stacked-bar graphs

5.D1.4

create an infographic about a data set, representing the data in appropriate ways, including in relative-frequency tables and stacked-bar graphs, and incorporating any other relevant information that helps to tell a story about the data

📋 Activities	
Teacher directed	
👑 **Skill Quests**	
Teacher directed	

D1 Data Literacy: Data Analysis

5.D1.5

determine the mean and the median and identify the mode(s), if any, for various data sets involving whole numbers and decimal numbers, and explain what each of these measures indicates about the data

📋 Activities	
D1 Data	Mean from Frequency Table
	Median from Frequency Table
👑 **Skill Quests**	
Measures of central tendency	Understanding & calculating the mean
	Understanding & calculating the median
	Understanding & calculating the mode

5.D1.6

analyse different sets of data presented in various ways, including in stacked-bar graphs and in misleading graphs, by asking and answering questions about the data, challenging preconceived notions, and drawing conclusions, then make convincing arguments and informed decisions

🖿 Activities	
D1 Data	Frequency Histograms
	Divided Bar Graphs
	Bar Chart
👑 Skill Quests	
Analyse data displays	Interpreting stacked-bar graphs
	Interpreting bar graphs
	Interpreting data in tables
	Interpreting line plots

D2 Probability: Probability

5.D2.1
use fractions to express the probability of events happening, represent this probability on a probability line, and use it to make predictions and informed decisions

🖿 Activities	
D2 Probability	Find the Probability
	Probability Scale
👑 Skill Quests	
Express probability with fractions	Expressing probability on a probability line
	Expressing probability with fractions

5.D2.2
determine and compare the theoretical and experimental probabilities of an event happening

🖿 Activities	
D2 Probability	Possible Outcomes
	Find the Probability
👑 Skill Quests	
Theoretical & experimental probability	Comparing theoretical & experimental probability

E Spatial Sense

E1 Geometric and Spatial Reasoning: Geometric and Spatial Reasoning

5.E1.1
identify geometric properties of triangles, and construct different types of triangles when given side or angle measurements

🖿 Activities	
E1 Geometry	Congruent Figures (Grid)
👑 Skill Quests	
Classify triangles	Classifying triangles

5.E1.2
identify and construct congruent triangles, rectangles, and parallelograms

⊞ Activities	
E1 Geometry	Triangle Tasters
👑 **Skill Quests**	
Identify congruent shapes	Identifying congruent shapes

5.E1.3
draw top, front, and side views of objects, and match drawings with objects

⊞ Activities	
Teacher directed	
👑 **Skill Quests**	
Top, front & side views of objects	Matching drawings with objects
	Top, front & side views of objects

E1 Geometric and Spatial Reasoning: Location and Movement

5.E1.4
plot and read coordinates in the first quadrant of a Cartesian plane using various scales, and describe the translations that move a point from one coordinate to another

⊞ Activities	
E1 Geometry	Coordinate Graphs: 1st Quadrant
👑 **Skill Quests**	
The Cartesian plane, 1st quadrant	The Cartesian plane, 1st quadrant
	Investigating translations in the 1st quadrant

5.E1.5
describe and perform translations, reflections, and rotations up to 180° on a grid, and predict the results of these transformations

⊞ Activities	
Teacher directed	
👑 **Skill Quests**	
Translations, reflections & rotations	Translations, reflections & rotations

E2 Measurement: The Metric System

5.E2.1
use appropriate metric units to estimate and measure length, area, mass, and capacity

⊞ Activities	
E2 Measurement	Measuring Length
	Perimeter: Squares and Rectangles
	Perimeter: Triangles
	Perimeter: Triangles 1
	Perimeter Detectives 1
👑 **Skill Quests**	

Measure in metric units	Measuring length using metric units
	Measuring mass using metric units

5.E2.2
solve problems that involve converting larger metric units into smaller ones, and describe the base ten relationships among metric units

▤ Activities

E2 Measurement	Converting cm and mm
	Metres and Kilometres
	Converting Units of Length
	Converting Units of Area
	Grams and Kilograms
	Converting Units of Mass
	Grams and Milligrams
	Mass Addition
	Litre Conversions
	Capacity Addition

♛ Skill Quests

Convert metric units	Converting metric units of length
	Converting metric units of mass
	Converting metric units of capacity

E2 Measurement: Angles

5.E2.3
compare angles and determine their relative size by matching them and by measuring them using appropriate non-standard units

▤ Activities

E2 Angles	Equal Angles
	Comparing Angles

♛ Skill Quests

Compare angles	Comparing angles

5.E2.4
explain how protractors work, use them to measure and construct angles up to 180°, and use benchmark angles to estimate the size of other angles

▤ Activities

E2 Angles	What Type of Angle?
	What Type of Angle 2?
	Classifying Angles
	Estimating Angles
	Labelling Angles
	Measuring Angles

♛ Skill Quests

Teacher directed

E2 Measurement: Area

5.E2.5

use the area relationships among rectangles, parallelograms, and triangles to develop the formulas for the area of a parallelogram and the area of a triangle, and solve related problems

📖 Activities	
E2 Measurement	Area: Squares and Rectangles
	Area: Triangles
	Area: Right Triangles
	Area: Parallelograms (Metric)
👑 **Skill Quests**	
Area: parallelograms & triangles	Finding the area of a triangle
	Finding the area of a parallelogram

5.E2.6

show that two-dimensional shapes with the same area can have different perimeters, and solve related problems

📖 Activities	
Teacher directed	
👑 **Skill Quests**	
Area & perimeter relationships	Comparing area & perimeter of rectangles
	Solving perimeter & area problems

F Financial Literacy

F1 Money and Finances: Money Concepts

5.F1.1

describe several ways money can be transferred among individuals, organizations, and businesses

📖 Activities
Teacher directed
👑 **Skill Quests**
Teacher directed

5.F1.2

estimate and calculate the cost of transactions involving multiple items priced in dollars and cents, including sales tax, using various strategies

📖 Activities	
F1 Financial Literacy	Money Problems: Four Operations
	Purchase Options
	Net Pay
👑 **Skill Quests**	
Money problems, dollars & cents	Solving money problems

F1 Money and Finances: Financial Management

5.F1.3
design sample basic budgets to manage finances for various earning and spending scenarios

▦ **Activities**	
F1 Financial Literacy	Budgeting
♛ **Skill Quests**	
Teacher directed	

5.F1.4
explain the concepts of credit and debt, and describe how financial decisions may be impacted by each

▦ **Activities**	
Teacher directed	
♛ **Skill Quests**	
Teacher directed	

F1 Money and Finances: Consumer and Civic Awareness

5.F1.5
calculate unit rates for various goods and services, and identify which rates offer the best value

▦ **Activities**	
Teacher directed	
♛ **Skill Quests**	
Unit rate & best value	Calculating unit rate to determine the best value

5.F1.6
describe the types of taxes that are collected by the different levels of government in Canada, and explain how tax revenue is used to provide services in the community

▦ **Activities**	
Teacher directed	
♛ **Skill Quests**	
Teacher directed	

Grade 6

B Number

B1 Number Sense: Rational Numbers

6.B1.1
read and represent whole numbers up to and including one million, using appropriate tools and strategies, and describe various ways they are used in everyday life

📖 **Activities**	
B1 Rational numbers, fractions, decimals & percents	Place Value to Millions
	Numbers from Words to Digits 1
	Numbers from Words to Digits 2
	Equal, less or Greater Than?

👑 **Skill Quests**	
Numbers to one million	Reading & writing 6-digit numbers
	Identifying place value: 6-digit numbers
	Using place value to partition 6-digit numbers

6.B1.2
read and represent integers, using a variety of tools and strategies, including horizontal and vertical number lines

📖 **Activities**	
B1 Rational numbers, fractions, decimals & percents	Integers on a Number Line
	What's the Temperature (Celsius)?

👑 **Skill Quests**	
Read & represent integers	Investigating integers

6.B1.3
compare and order integers, decimal numbers, and fractions, separately and in combination, in various contexts

📖 **Activities**	
B1 Rational numbers, fractions, decimals & percents	Ordering Integers (Number Line)
	Comparing Integers
	Compare Fractions 1b

👑 **Skill Quests**	
Compare/order: integer/decimal/fraction	Comparing & ordering integers
	Comparing & ordering fractions & mixed numbers
	Ordering fractions & decimals

B1 Number Sense: Fractions, Decimals, and Percents

6.B1.4
read, represent, compare, and order decimal numbers up to thousandths, in various contexts

📖 Activities	
B1 Rational numbers, fractions, decimals & percents	Decimals from Words to Digits 2
	Decimals on a Number Line
	Comparing Decimals
	Decimal Order 1
	Decimal Order
👑 **Skill Quests**	
Decimals up to thousandths	Decimals up to thousandths

6.B1.5

round decimal numbers, both terminating and repeating, to the nearest tenth, hundredth, or whole number, as applicable, in various contexts

📖 Activities	
B1 Rational numbers, fractions, decimals & percents	Nearest Whole Number
	Rounding Decimals 1
👑 **Skill Quests**	
Round decimals: tenth, hundredth, whole	Rounding decimals: tenth, hundredth, whole

6.B1.6

describe relationships and show equivalences among fractions and decimal numbers up to thousandths, using appropriate tools and drawings, in various contexts

📖 Activities	
B1 Rational numbers, fractions, decimals & percents	Fractions to Decimals
	Decimals to Fractions 1
	Decimals to Fractions 2
	Fraction to Terminating Decimal
👑 **Skill Quests**	
Relate fractions & decimals, thousandths	Relating fractions & decimals up to thousandths

B2 Operations: Properties and Relationships

6.B2.1

use the properties of operations, and the relationships between operations, to solve problems involving whole numbers, decimal numbers, fractions, ratios, rates, and whole number percents, including those requiring multiple steps or multiple operations

📖 Activities	
Teacher directed	
👑 **Skill Quests**	
Properties & inverse operations	Using inverse operations, whole numbers
	The commutative property
	The associative property
	The distributive property

B2 Operations: Math Facts

6.B2.2	
understand the divisibility rules and use them to determine whether numbers are divisible by 2, 3, 4, 5, 6, 8, 9, and 10	
📋 **Activities**	
B2 Multiplication & Division.	Divisibility Tests (2, 5, 10)
	Divisibility Tests (3, 4, 9)
	Divisibility Tests
	Tests of Divisibility 1
	Multiples
👑 **Skill Quests**	
Divisibility rules	Divisibility rules for dividing by 2
	Divisibility rules for dividing by 3
	Divisibility rules for dividing by 4
	Divisibility rules for dividing by 5
	Divisibility rules for dividing by 6
	Divisibility rules for dividing by 8
	Divisibility rules for dividing by 9
	Divisibility rules for dividing by 10
	Divisibility rules: dividing by 2, 3, 4, 5, 6, 10

B2 Operations: Mental Math

6.B2.3	
use mental math strategies to calculate percents of whole numbers, including 1%, 5%, 10%, 15%, 25%, and 50%, and explain the strategies used	
📋 **Activities**	
B2 Operations - decimals, fractions, ratios & percents	Calculating Percentages (Mental)
	Percents and Decimals
	Percentage to Fraction
	Quantities to Percentages (no units)
	Fractions to Percentages (Non-Calculator)
	Calculating Percentages (Mental)
👑 **Skill Quests**	
Divisibility rules: dividing by 2, 3, 4, 5, 6, 10	Calculating simple percentages

B2 Operations: Addition and Subtraction

6.B2.4	
represent and solve problems involving the addition and subtraction of whole numbers and decimal numbers, using estimation and algorithms	
📋 **Activities**	
B2 Operations - decimals, fractions, ratios & percents	Adding Decimals
	Add Decimals 2
	Subtracting Decimals

	Subtract Decimals 2
	Adding and Subtracting Decimals
	Estimate Decimal Sums 1
	Estimate Decimal Differences 2
👑 **Skill Quests**	
Add & subtract whole numbers & decimals	Adding whole numbers & decimals
	Subtracting whole numbers & decimals

6.B2.5
add and subtract fractions with like and unlike denominators, using appropriate tools, in various contexts

🗒 **Activities**	
B2 Operations - decimals, fractions, ratios & percents	Add: Common Denominator
	Subtract: Common Denominator
	Simplifying Fractions
	Add: No Common Denominator
	Subtract: No Common Denominator
👑 **Skill Quests**	
Add fractions	Adding fractions, like denominator
	Adding a whole number & a fraction
	Adding fractions, unlike denominator
Subtract fractions	Subtracting fractions, like denominator
	Subtracting a fraction from a whole number
	Subtracting fractions, unlike denominator

B2 Operations: Multiplication and Division

6.B2.6
represent composite numbers as a product of their prime factors, including through the use of factor trees

🗒 **Activities**	
B2 Multiplication & Division.	Factors
	Find the Factor
	Prime or Composite?
👑 **Skill Quests**	
Prime & composite numbers	Introducing prime & composite numbers
Prime factors	Using prime factors

6.B2.7
represent and solve problems involving the multiplication of three-digit whole numbers by decimal tenths, using algorithms

🗒 **Activities**	
B2 Multiplication & Division.	Multiply Decimals: 10, 100, 1000
👑 **Skill Quests**	
Multiply whole numbers by tenths	Multiplying 3-digit whole numbers by tenths

6.B2.8

represent and solve problems involving the division of three-digit whole numbers by decimal tenths, using appropriate tools, strategies, and algorithms, and expressing remainders as appropriate

📖 Activities

Teacher directed

👑 Skill Quests

Divide whole numbers by tenths	Dividing 3-digit whole numbers by tenths

6.B2.9

multiply whole numbers by proper fractions, using appropriate tools and strategies

📖 Activities

B2 Multiplication & Division.	Model Fractions to Multiply
	Multiply Fraction by Whole Number
	More Fraction Problems

👑 Skill Quests

Multiply whole numbers & fractions	Multiplying whole numbers & proper fractions

6.B2.10

divide whole numbers by proper fractions, using appropriate tools and strategies

📖 Activities

B2 Multiplication & Division.	Divide Whole Number by Fraction
	More Fraction Problems

👑 Skill Quests

Divide whole numbers by fractions	Dividing whole numbers by proper fractions

6.B2.11

represent and solve problems involving the division of decimal numbers up to thousandths by whole numbers up to 10, using appropriate tools and strategies

📖 Activities

B2 Multiplication & Division.	Divide Decimals: 10, 100, 1000

👑 Skill Quests

Divide decimals by whole numbers	Dividing decimals to thousandths by whole numbers

6.B2.12

solve problems involving ratios, including percents and rates, using appropriate tools and strategies

📖 Activities

B2 Multiplication & Division.	Rates Calculations
	Proportional Relationships
	Solve Proportions

👑 Skill Quests

Solve problems involving ratios	Solving problems with unit rates
	Solving ratio problems

	Expressing simple ratios as percents
	Dividing a quantity into a given ratio
	Simplifying & comparing rates
	Solving rate problems

C Algebra

C1 Patterns and Relationships: Patterns

6.C1.1
identify and describe repeating, growing, and shrinking patterns, including patterns found in real-life contexts, and specify which growing patterns are linear

📖 **Activities**	
Teacher directed	

👑 **Skill Quests**	
Identify linear growing patterns	Identifying linear growing patterns

6.C1.2
create and translate repeating, growing, and shrinking patterns using various representations, including tables of values, graphs, and, for linear growing patterns, algebraic expressions and equations

📖 **Activities**	
Teacher directed	

👑 **Skill Quests**	
Create patterns	Representing linear growing patterns
	Creating tables of values for linear relations
	Matching graphs & linear relations

6.C1.3
determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating, growing, and shrinking patterns, and use algebraic representations of the pattern rules to solve for unknown values in linear growing patterns

📖 **Activities**	
C1 Patterns	Find the Pattern Rule
	Function Rules and Tables
	Number Sequences Up to 1 Million
	Linear Expressions for the Nth Term

👑 **Skill Quests**	
Linear pattern rules	Linear pattern rules

6.C1.4
create and describe patterns to illustrate relationships among whole numbers and decimal numbers

📖 **Activities**	
Teacher directed	

👑 **Skill Quests**	

Patterns with decimals	Multiplying decimals by 10, 100, 1000
	Dividing decimals by 10, 100, 1000

C2 Equations and Inequalities: Variables and Expressions

6.C2.1
add monomials with a degree of 1 that involve whole numbers, using tools

📋 Activities	
C2 Expressions, Equalities & Inequalities	Algebra Tiles
👑 **Skill Quests**	
Add monomials	Adding monomials

6.C2.2
evaluate algebraic expressions that involve whole numbers and decimal tenths

📋 Activities	
C2 Expressions, Equalities & Inequalities	Simple Substitution
	Simple Substitution 1
	Simple Substitution 2
	Simple Substitution 3
	Simplifying Expressions
👑 **Skill Quests**	
Evaluate algebraic expressions	Evaluating algebraic expressions

C2 Equations and Inequalities: Equations and Inequalities

6.C2.3
solve equations that involve multiple terms and whole numbers in various contexts, and verify solutions

📋 Activities	
C2 Expressions, Equalities & Inequalities	Solve One-Step Equations
	Solving More Equations
👑 **Skill Quests**	
Linear equations, whole numbers	Solving 1-step & 2-step equations
	Solving 1-step & 2-step equations, algebra tiles
	Modelling real-life scenarios using equations

6.C2.4
solve inequalities that involve two operations and whole numbers up to 100, and verify and graph the solutions

📋 Activities	
C2 Expressions, Equalities & Inequalities	Graphing Inequalities 2
	Graphing Inequalities on Number Line
	Solve One-Step Inequalities 1
👑 **Skill Quests**	
Solve inequalities	Solving inequalities

C3 Coding: Coding Skills

6.C3.1

solve problems and create computational representations of mathematical situations by writing and executing efficient code, including code that involves conditional statements and other control structures

📖 **Activities**

Teacher directed

👑 **Skill Quests**

Teacher directed

6.C3.2

read and alter existing code, including code that involves conditional statements and other control structures, and describe how changes to the code affect the outcomes and the efficiency of the code

📖 **Activities**

Teacher directed

👑 **Skill Quests**

Teacher directed

D Data

D1 Data Literacy: Data Collection and Organization

6.D1.1

describe the difference between discrete and continuous data, and provide examples of each

📖 **Activities**

Teacher directed

👑 **Skill Quests**

Teacher directed

6.D1.2

collect qualitative data and discrete and continuous quantitative data to answer questions of interest about a population, and organize the sets of data as appropriate, including using intervals

📖 **Activities**

Teacher directed

👑 **Skill Quests**

| Statistical investigations | Conducting a statistical investigation |

D1 Data Literacy: Data Visualization

6.D1.3

select from among a variety of graphs, including histograms and broken-line graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graphs

🗏 **Activities**	
Teacher directed	
👑 **Skill Quests**	
Construct graphs	Constructing broken-line graphs
	Constructing histograms
	Selecting appropriate data displays

6.D1.4 create an infographic about a data set, representing the data in appropriate ways, including in tables, histograms, and broken-line graphs, and incorporating any other relevant information that helps to tell a story about the data	
🗏 **Activities**	
D1 Data	Grouped Frequency
👑 **Skill Quests**	
Teacher directed	

D1 Data Literacy: Data Analysis

6.D1.5 determine the range as a measure of spread and the measures of central tendency for various data sets, and use this information to compare two or more data sets	
🗏 **Activities**	
D1 Data	Data Extremes and Range
	Which Measure of Central Tendency?
	Line Graphs: Interpretation
👑 **Skill Quests**	
Measures of central tendency & spread	Measure of spread: range
	Comparing measures of central tendency & spread
	Recognising appropriate statistical measures
	Understand measures of central tendency & spread

6.D1.6 analyse different sets of data presented in various ways, including in histograms and broken-line graphs and in misleading graphs, by asking and answering questions about the data, challenging preconceived notions, and drawing conclusions, then make convincing arguments and informed decisions	
🗏 **Activities**	
D1 Data	Stem and Leaf Plots with Range
👑 **Skill Quests**	
Analyse histograms & broken-line graphs	Evaluating graphs for misleading information
	Reading & interpreting data in a histogram
	Interpreting data in a broken-line graph

D2 Probability: Probability

6.D2.1
use fractions, decimals, and percents to express the probability of events happening, represent this probability on a probability line, and use it to make predictions and informed decisions

📖 Activities

D2 Probability	Dice and Coins
	Find the Probability
	Probability Tables
	Complementary Events
	Probability Scale

👑 Skill Quests

Probability: fractions/decimals/percents	Probability: fractions, decimals & percents
	Expressing probability with fractions

6.D2.2
determine and compare the theoretical and experimental probabilities of two independent events happening

📖 Activities

D2 Probability	Probability Scale

👑 Skill Quests

Probability: two independent events	Identifying the sample space: 2 independent events
	Understanding independent events
	Interpreting & constructing tree diagrams

E Spatial Sense

E1 Geometric and Spatial Reasoning: Geometric and Spatial Reasoning

6.E1.1
create lists of the geometric properties of various types of quadrilaterals, including the properties of the diagonals, rotational symmetry, and line symmetry

📖 Activities

E1 Geometry	Properties of Quadrilaterals
	Symmetry or Not?
	Rotational Symmetry
	Plane Figure Theorems

👑 Skill Quests

Properties of quadrilaterals	Classifying quadrilaterals
	Investigating diagonals of special quadrilaterals
	Line & rotational symmetry

6.E1.2
construct three-dimensional objects when given their top, front, and side views

📖 Activities

Teacher directed

E1 Geometric and Spatial Reasoning: Location and Movement

6.E1.3
plot and read coordinates in all four quadrants of a Cartesian plane, and describe the translations that move a point from one coordinate to another

🖼 Activities	
E1 Geometry	Number Plane
	Ordered Pairs
	Vertical and horizontal shift
👑 **Skill Quests**	
The Cartesian plane, 4 quadrants	Plotting & reading coordinates in all 4 quadrants
	Translations of points on the Cartesian plane

6.E1.4
describe and perform combinations of translations, reflections, and rotations up to 360° on a grid, and predict the results of these transformations

🖼 Activities	
E1 Geometry	Rotations: Coordinate Plane
	Transformations: Coordinate Plane
👑 **Skill Quests**	
Combinations of transformations	Identifying combinations of transformations

E2 Measurement: The Metric System

6.E2.1
measure length, area, mass, and capacity using the appropriate metric units, and solve problems that require converting smaller units to larger ones and vice versa

🖼 Activities	
E2 Measurement	Metres and Kilometres
	Converting Units of Length
	Converting Units of Area
	Converting Volume
	Capacity Word Problems
👑 **Skill Quests**	
Convert metric units	Converting metric units of length
	Converting metric units of mass
	Converting metric units of capacity

E2 Measurement: Angles

6.E2.2

use a protractor to measure and construct angles up to 360°, and state the relationship between angles that are measured clockwise and those that are measured counter clockwise

📖 Activities	
E2 Measurement	Measuring Angles
	Angles in a Revolution

👑 Skill Quests	
Measure angles	Measuring angles up to 360°

6.E2.3

use the properties of supplementary angles, complementary angles, opposite angles, and interior and exterior angles to solve for unknown angle measures

📖 Activities	
E2 Measurement	Equal, Complementary or Supplementary Angles?
	Angle Sum of a Triangle
	Angle Measures in a Triangle
	Quadrilaterals: Angle Sum with Equations
	Exterior Angles of a Triangle
	Vertically Opposite Angles: Unknown Values

👑 Skill Quests	
Solve for unknown angle measures	Supplementary angles
	Complementary angles
	Opposite angles
	Interior & exterior angles of a triangle

E2 Measurement: Area and Surface Area

6.E2.4

determine the areas of trapezoids, rhombuses, kites, and composite polygons by decomposing them into shapes with known areas

📖 Activities	
E2 Measurement	Area: Quadrilaterals
	Area: Parallelograms (Metric)
	Prisms and Pyramids

👑 Skill Quests	
Area: quadrilaterals, composite polygons	Finding the area of a trapezoid
	Finding the area of a rhombus
	Finding the area of a kite
	Finding the area of composite shapes

6.E2.5

create and use nets to demonstrate the relationship between the faces of prisms and pyramids and their surface areas

📧 Activities	
E2 Measurement	Nets
👑 Skill Quests	
Teacher directed	

6.E2.6
determine the surface areas of prisms and pyramids by calculating the areas of their two-dimensional faces and adding them together

📧 Activities	
E2 Measurement	Surface Area: Rectangular Prisms
	Surface Area: Triangular Prisms 1
	Surface Area: Square Pyramids
👑 Skill Quests	
Teacher directed	

F Financial Literacy

F1 Money and Finances: Money Concepts

6.F1.1
describe the advantages and disadvantages of various methods of payment that can be used to purchase goods and services

📧 Activities	
F1 Financial Literacy	Best Buy
👑 Skill Quests	
Teacher directed	

F1 Money and Finances: Financial Management

6.F1.2
identify different types of financial goals, including earning and saving goals, and outline some key steps in achieving them

📧 Activities	
F1 Financial Literacy	Budgeting
👑 Skill Quests	
Teacher directed	

6.F1.3
identify and describe various factors that may help or interfere with reaching financial goals

📧 Activities	
Teacher directed	
👑 Skill Quests	
Teacher directed	

F1 Money and Finances: Consumer and Civic Awareness

6.F1.4

explain the concept of interest rates, and identify types of interest rates and fees associated with different accounts and loans offered by various banks and other financial institutions

📖 Activities

F1 Financial Literacy	Comparing Loans

👑 Skill Quests

Teacher directed

6.F1.5

describe trading, lending, borrowing, and donating as different ways to distribute financial and other resources among individuals and organizations

📖 Activities

Teacher directed

👑 Skill Quests

Teacher directed

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