

# Mathletics

## British Columbia Curriculum

### Activities (Courses) and Skill Quests



**Grades 3-6**

July, 2025

**Mathletics**

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British Columbia Curriculum  
Activities (Courses) & Skill Quests  
July, 2025

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# Grade 3

## 1 Number

### 1.1 Number

3.N.Number to 1000 Number concepts to 1000	
Course Topics	Activities
Numbers - Counting	Count Forward Patterns
	Count Backward Patterns
	Counting up in 4s
	Counting up in 6s
	Counting up in 7s
	Counting up in 8s
Numbers - Place value	Nearest Hundred?
	Compare Numbers to 20
	Compare Numbers to 100
	Model Numbers
	Which is Bigger?
	Which is Smaller?
	Place Value 2
	Understanding Place Value 1
	Place Value Partitioning
	Compare Numbers to 50
Topics	Skill Quests
Number concepts to 1000	Reading and writing numbers, up to 3 digits
	Identifying numbers before and after within 1000
	Comparing and ordering up to 4-digit numbers
	Counting by hundreds, tens and ones to 1000
	Counting by tens, off the decade
	Place value, 3-digit numbers
	Using a number line to round to nearest 10
	Using a number line to round to nearest 100
	Solving place value number problems

3.N.Fraction	
Fraction concepts	
Course Topics	Activities
Fractions	Halves and Quarters
	Shade Fractions
	Model Fractions
	Partition into Equal Parts
	Counting with Fractions on a Number Line
	Fraction Fruit Sets 1
	Halves
	Is it Half?
	Uneven partitioned shapes 2
Topics	Skill Quests
Fraction concepts	Finding halves (no symbols)
	Finding halves
	Finding fourths (no symbols)
	Finding fourths
	Finding halves and fourths
	Finding thirds
	Finding sixths
	Finding thirds and sixths
	Finding halves, thirds, fourths

## 2 Computational fluency

### 2.1 Fluency

3.F.Add subtraction to 1000 Addition and subtraction to 1000	
Course Topics	Activities
Adding and subtracting to 1000	Estimate Sums
	Estimate Differences
	Bump Add and Subtract
	Jump Add and Subtract
	Split Add and Subtract
	Compensation - Add
	Compensation - Subtract
	Magic Symbols 1
	Pyramid Puzzles 1
	Pyramid Puzzles 2
	Add 3 Numbers: Bonds to Multiples of 10
	Add 3 Numbers: Bonds to 100
Topics	Skill Quests
Addition and subtraction to 1000	Adding up to 3-digit numbers: number line
	Adding up to 3-digit numbers: using models
	Adding up to 3-digit numbers: place value
	Adding up to 3-digit numbers: split strategy
	Adding up to 3-digits: bridging to ten
	Adding up to 3-digits: rounding and compensating
	Subtracting up to 3-digit numbers: number line
	Subtracting up to 3-digit numbers: using models
	Subtracting up to 3-digit numbers: place value
	Subtracting up to 3-digit numbers: split strategy
	Subtracting up to 3-digit numbers: bridging to ten
	Subtract up to 3-digits: rounding and compensating
	Add/subtract up to 3-digit: number line
	Add/subtract up to 3-digit: bridging to ten
	Add/subtract up to 3-digit: place value
	Add/subtract up to 3-digit: split strategy
	Add/subtract: rounding and compensating
	Solving addition and subtraction word problems
	Estimating sums and differences to 1000

<b>3.F.Add and subtract facts</b> Addition and subtraction facts to 20 (emerging computational fluency)	
Course Topics	Activities
Adding and subtracting to 20	All about Ten
	All about Twenty
	Fact Families: Add and Subtract
	Related Facts 1
	Addition Facts
	Add 3 Numbers Using Bonds to 10
	Doubles and Halves to 20
	Doubles and Halves to 10
Topics	Skill Quests
Addition and subtraction facts to 20	Adding and subtracting to 20
	Adding and subtracting to 20 using a bar model



<b>3.F.Multiply and divide</b> Multiplication and division concepts	
Course Topics	Activities
Multiplying and dividing - Introduction	Share the Treasure
	Fill the Jars
	Divide Into Equal Groups
	Groups
Multiplying and dividing - 2, 3, 5, 10	Grouping in Twos
	Grouping in Fives
	Grouping in Tens
	Grouping in Threes
	Dividing Twos
	Dividing Fives
	Dividing Tens
	Dividing Threes
	Frog Jump Multiplication
	Frog Jump Division
	Grouping in Fours
	Grouping in Sixes
Multiplying and dividing - 4, 6, 7, 8, 9	Grouping in Sevens
	Grouping in Eights
	Grouping in Nines
	Dividing Fours
	Dividing Sixes
	Dividing Sevens
	Dividing Eights
	Dividing Nines
	Multiplication Arrays
	Model Multiplication to $5 \times 5$
	Arrays 1
	Arrays 2
Topics	Skill Quests
Multiplication and division concepts	Introducing multiplication through arrays
	Skip counting by 2s
	Skip counting by 3s
	Skip counting by 4s
	Skip counting by 5s
	Skip counting by 10s
	Using repeated addition to multiply
	Using repeated subtraction to divide
	Exploring multiplication by 2
	Exploring multiplication by 3
	Exploring multiplication by 4
	Exploring multiplication by 5
	Exploring multiplication by 10
	Dividing by 2
	Dividing by 3
	Dividing by 4
	Dividing by 5
	Dividing by 10
	Multiplication and division problems (x2, x5, x10)

3.F.Equations	
One-step addition and subtraction equations with an unknown number	
Course Topics	Activities
Numbers - Counting	Odd and Even Numbers 1
	Odd or Even
Equations	Missing Values
	Missing Numbers
	Complements to 50 and 100
	Complements to 10, 20, 50
	Composing Additions to 20
Topics	Skill Quests
Add & subtract: onestep equations	One-step number problems with unknowns: 2-digits
	Modelling odd and even numbers

## 3 Patterning

### 3.1 Patterns

<b>3.P.Patterns</b> Increasing and decreasing patterns	
Course Topics	Activities
Patterns	Increasing Patterns
	Decreasing Patterns
	Pick the Next Number
Topics	Skill Quests
Increasing and decreasing patterns	Increasing and decreasing number patterns
	Increasing and decreasing shape patterns

<b>3.P.Pattern rules</b> Pattern rules using words and numbers, based on concrete experiences	
Course Topics	Activities
Patterns	Describing Patterns
Topics	Skill Quests
Pattern rules	Pattern rules based on concrete experiences

## 4 Geometry and measurement

### 4.1 Geometry and measurement

<b>3.A.Measurement</b>	
Measurement, using standard units (linear, mass, and capacity)	
Course Topics	Activities
Measuring - Length, perimeter and area	Bigger or Smaller Shape
	Area of Shapes
	Equal Areas
	Perimeter of Shapes
Measuring - Capacity and mass	How Heavy?
	How Heavy is it?
	Using a Litre
	Ordering Mass (g)
	Ordering Volumes (l)
Topics	Skill Quests
Measurement, using standard units	Measuring in standard units: cm
	Selecting units of measurement: km, m, cm
	Ordering lengths in metres and centimetres
	Introducing capacity: litres and millilitres
	Selecting units of measure: capacity
	Measuring mass: kilograms and grams
	Selecting units of measure: mass
	Measuring area

<b>3.A.Time</b>	
Time concepts	
Course Topics	Activities
Time concepts	1st to 31st
	Days of the Week
	Months of the Year
	Calendar: Days and Dates
	Days: After and Before
	Tomorrow and Yesterday (Scaffolded)
	Tomorrow and Yesterday (without scaffold)
	Weekdays and Weekends
	Months After and Before
Topics	Skill Quests
Time concepts	Introducing months of the year
	Introducing seasons
	Using calendars
	Introducing time in hours, minutes and seconds

<b>3.A.3D</b> Construction of 3D objects	
<b>Course Topics</b>	<b>Activities</b>
Objects and shapes	Collect the Objects
	How Many Faces?
	How many Edges?
	How many Corners?
	Faces, Edges and Vertices
	Faces, Edges, and Vertices 1
<b>Topics</b>	<b>Skill Quests</b>
3D objects	Introducing the attributes of 3D objects
	Introducing cubes
	Introducing cylinders
	Introducing spheres
	Introducing cones
	Introducing prisms
	Introducing pyramids
	Describing the attributes of 3D objects
	Sorting 3D objects

## 5 Data and probability

### 5.1 Data and probability

<b>3.O.Graph</b>	
One-to-one correspondence with bar graphs, pictographs, charts, and tables	
Course Topics	Activities
Graphs	Analysing Data
	Tallies
	Picture Graphs: single-unit scale
	Interpreting Data Tables
	Picture Graphs: More or Less
Topics	Skill Quests
One-to-one correspondence	Introducing bar graphs
	Introducing pictographs
	Introducing tally charts
	Introducing tables
	Interpreting results

<b>3.O.Likelihood</b>	
Likelihood of simulated events, using comparative language	
Course Topics	Activities
Chance	Chance Dial
	Chance Gauge
Topics	Skill Quests
Probability	Exploring the language of probability

## 6 Financial literacy

### 6.1 Financial literacy

<b>3.A.Financial literacy</b>	
Financial literacy – fluency with coins and bills to 100 dollars, and earning and payment	
<b>Course Topics</b>	<b>Activities</b>
Teacher directed	
<b>Topics</b>	<b>Skill Quests</b>
Money	Recognizing and using bills and coins

# Grade 4

## 1 Number

### 1.1 Number

4.N.Number to 10 000 Number concepts to 10 000	
Course Topics	Activities
Numbers - Counting	Going Up
	Going Down
	Multiples
	Before, After & Between to 100
	Counting up in 4s
	Counting up in 6s
	Counting up in 7s
	Counting up in 8s
Numbers - Place value	Place Value - Thousands
	Expanding Numbers
	Nearest Thousand?
	Put in Order 1
	Descending Order
	Which Is Greater?
	Which Is Less?
	Place Value 3
	Greater Than or Less Than 1
	Missing Numbers 1
	Understanding Place Value 2
	Smallest and largest numbers
Topics	Skill Quests
Number concepts to 10 000	Reading and writing numbers, up to 4 digits
	Identifying numbers before and after within 10 000
	Comparing and ordering numbers to 10 000
	Understanding place value, 4- digit numbers
	Rounding to the nearest 1000
	Skip counting by 3s
	Skip counting by 4s
	Skip counting by 100s
	Skip counting by 50s
	Skip counting by 20s
	Skip counting by 25s
	Skip counting by 1000s



<b>4.N.Decimals</b> Decimals to hundredths	
Course Topics	Activities
Decimals - Concept, add and subtract	Decimals on the Number Line
	Decimals from Words to Digits 1
Topics	Skill Quests
Decimals to hundredths	Introducing decimal tenths
	Introducing decimal hundredths
	Connecting fractions and decimals

<b>4.N.Fractions</b> Ordering and comparing fractions	
Course Topics	Activities
Fractions - Ordering and comparing	Comparing Fractions 1
	Compare Fractions 1a
	Compare Fractions 1b
	Compare Fractions 2
Topics	Skill Quests
Order and compare fractions	Ordering and comparing fractions

## 2 Computational fluency

### 2.1 Computational fluency

4.F.Add subtract to 10 000 Addition and subtraction to 10 000	
Course Topics	Activities
Adding and subtracting - Mentally	Estimate Sums
	Estimate Differences
	Bump Add and Subtract
	Jump Add and Subtract
	Split Add and Subtract
	Compensation - Add
	Compensation - Subtract
	Magic Symbols 1
	Add 3 Numbers: Bonds to Multiples of 10
	Add 3 Numbers: Bonds to 100
Adding - Algorithm (columns)	Columns that Add
	Add Three 1-Digit Numbers
	Add Two 2-Digit Numbers
	Adding Colossal Columns
	Add Two 2-Digit Numbers: Regroup
	Add Three 2-Digit Numbers: Regroup
	Add 3-Digit Numbers
	Add 3-Digit Numbers: Regroup
	Add Multi-Digit Numbers 1
	Add Three 3-Digit Numbers: Regroup
Subtracting - Algorithm (columns)	2-Digit Differences: Regroup
	Columns that Subtract
	Subtracting Colossal Columns
	3-Digit Differences
	3-Digit Differences: 1 Regrouping
	3-Digit Differences: 2 Regroupings
	3-Digit Differences with Zeros
	Subtract Numbers
	Subtract Numbers: Regroup
Topics	Skill Quests
Addition and subtraction to 10 000	Adding up to 4-digit numbers: number line
	Adding up to 4-digit numbers: place value
	Adding up to 4-digit numbers: split strategy
	Adding up to 4-digit numbers: round and compensate
	Subtracting up to 4-digit numbers: number line
	Subtracting up to 4-digit numbers: place value
	Subtract up to 4-digit numbers: split strategy
	Subtract up to 4-digit numbers: round & compensate
	Choosing mixed addition strategies
	Choosing mixed subtraction strategies
	Solving addition and subtraction word problems

<b>4.F.Multiply and divide</b> Multiplication and division of two- or three-digit numbers by one-digit numbers	
Course Topics	Activities
Multiplying and dividing - 2 and 3 digit	Problems: Times and Divide
	Multiply Multiples of 10
	Halve it!
	Multiply: 1-Digit Number
	Divide: 1-Digit Divisor 2
	Multiply: 1-Digit Number, Regroup
	Multiplication Properties
	Arithmetic Laws
	Divide: 1-Digit Divisor 1
	Grid Methods 1
	Multiply and Divide Problems 1
	Multiply 3 single-digit numbers
	Bar Model $\times \div$
Topics	Skill Quests
Multiplication and division	Multiplying up to 3-digits by 1-digit, place value
	Multiplying up to 3-digits by 1-digit, doubling
	Multiplying up to 3-digits by 1-digit, area model
	Multiplying up to 3-digits by 1-digit, factorizing
	Multiplying by 10 or 100
	Dividing up to 3-digits by 1-digit, models
	Dividing up to 3-digits by 1-digit, halving
	Interpreting word problems: mult/div
	Solving word problems: multiplication/division

<b>4.F.Add subtract decimals</b> Addition and subtraction of decimals to hundredths	
Course Topics	Activities
Decimals - Concept, add and subtract	Subtract Decimals 1
	Decimal Complements
	Magic Symbols 2
Topics	Skill Quests
Add and subtract decimals to hundredths	Adding decimals to tenths
	Subtracting decimals to tenths
	Adding decimals to hundredths
	Subtracting decimals to hundredths
	Estimating decimal sums and differences
	Adding and subtracting decimal word problems

<b>4.F. Add subtract facts to 20</b> Addition and subtraction facts to 20 (developing computational fluency)	
Course Topics	Activities
Adding and subtracting to 20	All about Twenty
	Fact Families: Add and Subtract
	Related Facts 1
	Doubles and Halves to 20
Topics	Skill Quests
Addition and subtraction facts to 20	Finding fact families: multiplication/division
	Understanding number bonds to 20
	Adding doubles to 20
	Adding near doubles
	Using doubles to subtract
	Addition and subtraction word problems within 20
	Addition problems with start or change unknown
	Subtraction problems with start or change unknown

<b>4.F.Multiply divide facts to 100</b> Multiplication and division facts to 100 (introductory computational strategies)	
Course Topics	Activities
Multiplying - Groups and Arrays	Grouping in Twos
	Grouping in Fives
	Grouping in Tens
	Grouping in Threes
	Grouping in Fours
	Grouping in Sixes
	Grouping in Sevens
	Grouping in Eights
	Grouping in Nines
	Groups
Dividing - Groups and arrays	Dividing Twos
	Dividing Fives
	Dividing Tens
	Dividing Threes
	Dividing Fours
	Dividing Sixes
	Dividing Sevens
	Dividing Eights
	Dividing Nines
Multiplying and dividing - Facts	Divide Into Equal Groups
	Multiplication Arrays
	Fact Families: Multiply and Divide
	Related Facts 2
	Times Tables
	Model Multiplication to $5 \times 5$
	Multiplication Grids
	Frog Jump Multiplication

	Missing Numbers: $\times$ and $\div$ facts
	Arrays 1
	Arrays 2
	Frog Jump Division
	Multiplication Turn-Abouts
Topics	Skill Quests
Multiplication & division facts to 100	Exploring multiplication by 2
	Exploring multiplication by 3
	Exploring multiplication by 4
	Exploring multiplication by 5
	Exploring multiplication by 6
	Exploring multiplication by 7
	Exploring multiplication by 8
	Exploring multiplication by 9
	Exploring multiplication by 10
	Recalling multiplication facts for 2
	Recalling multiplication facts for 5
	Recalling multiplication facts for 10
	Recalling the division facts for 2
	Recalling the division facts for 5
	Recalling the division facts for 10
	Multiplying and dividing by 2
	Multiplying and dividing by 5
	Multiplying and dividing by 10
	Multiplying by 2s, 5s and 10s
	Dividing by 2s, 5s and 10s
	Multiplying and dividing by 2s, 5s and 10s

4.P.Algebraic relationships	
Algebraic relationships among quantities	
Course Topics	Activities
Algebraic relationships and equations	Composing Numbers to 20
	Composing Additions to 20
Topics	Skill Quests
Algebraic relationship among quantities	Matching equations to word problems
	Describing pattern rules

4.P.One-step equations	
One-step equations with an unknown number, using all operations	
Course Topics	Activities
Algebraic relationships and equations	Missing Values
	Missing Numbers
	Find the Missing Number 1
Topics	Skill Quests
One-step equations using all operations	One-step equations: addition and subtraction
	One-step equations: multiplication and division

## 3 Patterning

### 3.1 Patterns

<b>4.P.Patterns</b>	
Increasing and decreasing patterns, using tables and charts	
Course Topics	Activities
Patterns	Describing Patterns
	Skip Counting
	Counting on a 100 grid
Topics	Skill Quests
Increasing and decreasing patterns	Exploring increasing and decreasing patterns
	Using increasing and decreasing number patterns

## 4 Geometry and measurement

### 4.1 Geometry and measurement

<b>4.A.Time</b>	
How to tell time with analog and digital clocks, using 12- and 24-hour clocks	
Course Topics	Activities
Telling the time	Hour Times
	Half Hour Times
	What is the Time?
	24 Hour Time
	Tell Time to the Hour
	Tell Time to the Half Hour
	Five Minute Times
	Set Time to the Hour
	Set Time to the Half Hour
	Time Conversions: Whole Numbers 1
Topics	Skill Quests
How to tell time	Telling time to the hour and half hour
	Telling time to the quarter hour
	Relating halves and quarters to telling time
	Telling time to five minutes
	Telling time to the minute
	Recalling relationships between units of time
	Using am and pm notation
	Matching 12-hour and 24-hour times

<b>4.A.Polygons</b>	
Regular and irregular polygons	
Course Topics	Activities
Shapes and symmetry	Collect the Polygons
Topics	Skill Quests
Regular and irregular polygons	Understanding regular and irregular polygons

<b>4.A.Perimeter</b>	
Perimeter of regular and irregular shapes	
Course Topics	Activities
Length and perimeter	Perimeter of Shapes
	Measuring Length
	Perimeter: Squares and Rectangles
	Perimeter: Triangles 2
Topics	Skill Quests
Perimeter: regular and irregular shapes	Measuring perimeter: regular and irregular shapes

4.A.Line symmetry	
Line symmetry	
Course Topics	Activities
Shapes and symmetry	Symmetry or Not?
	Symmetry
Topics	Skill Quests
Line symmetry	Recognizing line symmetry



## 5 Data and probability

### 5.1 Data and probability

<b>4.D.Graph</b>	
One-to-one correspondence and many-to-one correspondence, using bar graphs and pictographs	
Course Topics	Activities
Graphs	Making Picture Graphs: With Scale
	Analysing Data
	Tallies
	Picture Graphs: with scale & half symbols
	Pictographs
	Picture Graphs: single-unit scale
	Bar Graphs 1
	Bar Graphs 2
	Picture Graphs: More or Less
Topics	Skill Quests
Bar graphs and pictographs	Using pictographs
	Using bar graphs

<b>4.D.Probability</b>	
Probability experiments	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Probability experiments	Introducing probability (with unequal outcomes)

## 6 Financial Literacy

### 6.1 Financial Literacy

<b>4.A.Financial literacy</b>	
Financial literacy – monetary calculations, including making change with amounts to 100 dollars and making simple financial decisions	
<b>Course Topics</b>	<b>Activities</b>
Money and financial mathematics	Who's got the Money?
	How much Change?
	Money
	Money Problems: Four Operations
<b>Topics</b>	<b>Skill Quests</b>
Money	Estimating and calculating change
	Using decimals in money
	Solving word problems involving money

# Grade 5

## 1 Number

### 1.1 Number

<b>5.N.Number to 1 000 000</b> Number concepts to 1 000 000	
<b>Course Topics</b>	<b>Activities</b>
Numbers concepts	Numbers in Words
	Numbers from Words to Digits 1
	Multiples
	Increasing Patterns
	Decreasing Patterns
	Rounding Numbers
	Understanding Place Value 3
	Place Value to Millions
<b>Topics</b>	<b>Skill Quests</b>
Number concepts to 1 000 000	Reading and writing numbers, up to 6 digits
	Comparing and ordering numbers up to 6 digits
	Identifying place value, 6-digit numbers
	Skip counting to 1 000 000
	Rounding 6-digit numbers

<b>5.N.Decimals</b> Decimals to thousandths	
<b>Course Topics</b>	<b>Activities</b>
Decimals - Concept, compare, order	Decimals from Words to Digits 2
<b>Topics</b>	<b>Skill Quests</b>
Decimals to thousandths	Understanding decimals to thousandths
	Rounding decimal thousandths

<b>5.N.Equivalent fractions</b> Equivalent fractions	
<b>Course Topics</b>	<b>Activities</b>
Fractions - Equivalence	Selecting Equivalent Fractions
	The Equivalent Fraction
	Simplify Fractions
	Equivalent Fractions on a Number Line 2
	Equivalent Fraction Wall 1
	Equivalent Fraction Wall 2
<b>Topics</b>	<b>Skill Quests</b>
Equivalent fractions	Finding equivalent fractions with models
	Finding equivalent fractions using multiplication

<b>5.N.Benchmarks</b> Whole-number, fraction, and decimal benchmarks	
<b>Course Topics</b>	<b>Activities</b>
Fractions - Comparing and ordering	Arranging Fractions
	Comparing Fractions 1
	Comparing Fractions 2
	Compare Fractions 1a
	Compare Fractions 1b
	Compare Fractions 2
Decimals - Concept, compare, order	Nearest Whole Number
	Comparing Decimals
	Comparing Decimals 1
	Decimals to Fractions 1
	Decimal Order
	Decimal Order 1
	Decimals on a Number Line
	Decimals to Fractions 2
<b>Topics</b>	<b>Skill Quests</b>
Fraction and decimal benchmarks	Comparing and ordering fractions
	Comparing and ordering decimals to thousandths

## 2 Computational fluency

### 2.1 Computational fluency

5.F.Add subtract to 1 000 000	
Addition and subtraction of whole numbers to 1 000 000	
Course Topics	Activities
Adding and subtracting to 1000 - Mental	Estimate Sums
	Estimate Differences
	Bump Add and Subtract
	Jump Add and Subtract
	Split Add and Subtract
	Compensation - Add
	Compensation - Subtract
	Magic Symbols 1
	Add 3 Numbers: Bonds to Multiples of 10
	Add 3 Numbers: Bonds to 100
Adding and subtracting - Algorithm	Column Subtraction
	Adding Colossal Columns
	Subtracting Colossal Columns
	Add Multi-Digit Numbers 2
	Add Multi-Digit Numbers 1
Topics	Skill Quests
Addition and subtraction to 1 000 000	Adding numbers up to 1 000 000
	Subtracting numbers up to 1 000 000
	Estimating sums and differences to 10 000
	Solving addition and subtraction word problems

<b>5.F.Multiply and divide</b> Multiplication and division to three digits, including division with remainders	
Course Topics	Activities
Dividing by 1-digit number	Remainders by Arrays
	Halve it!
	Remainders by Tables
	Divide: 1-Digit Divisor 2
	Estimate Quotients
	Divide: 1-Digit Divisor, Remainder
	Divide: 1-Digit Divisor 1
Multiplying by 1-digit number	Multiply Multiples of 10
	Multiply: 1-Digit Number
	Multiply: 1-Digit Number, Regroup
	Multiplication Properties
	Arithmetic Laws
	Grid Methods 1
	Multiply 3 single-digit numbers
Multiplying & dividing by 1-digit number	Problems: Times and Divide
	Long Multiplication
	Estimation: Multiply and Divide
	Estimate Products
	Multiply More Multiples of 10
	Mental Methods Division
	Mental Methods Division 1
	Mental Methods Multiplication 1
	Multiply 2 Digits Area Model
	Multiply and Divide Problems 1
Topics	Skill Quests
Multiplication and division to 3 digits	Multiplying 3-digits by 1-digit, split method
	Multiplying 3-digits by 1-digit, area model
	Multiplying up to 3-digits, area model
	Multiplying 2-digits by 2- digits, factorizing
	Multiplying 2-digits by 2- digits, facts
	Multiplying up to 3-digits, commutative property
	Solving multiplication word problems
	Dividing 2 and 3 digits by 1- digit, partitioning
	Dividing 2 and 3 digit numbers by 1-digit, models
	Dividing 2 and 3 digit numbers by 2-digits, models
	Finding the remainder, 2 digits by 1 digit
	Solving division word problems

<b>5.F.Add subtract decimals</b>	
Addition and subtraction of decimals to thousandths	
<b>Course Topics</b>	<b>Activities</b>
Decimals - Adding and subtracting	Adding Decimals
	Add Decimals 2
	Subtract Decimals 2
	Adding and Subtracting Decimals
	Estimate Decimal Differences 1
	Estimate Decimal Sums 1
	Decimal Complements
<b>Topics</b>	<b>Skill Quests</b>
Add/subtract: decimals to thousandths	Adding decimals to thousandths
	Subtracting decimals to thousandths
	Adding and subtracting decimal word problems
	Estimating sums and differences to thousandths
	Adding decimals to thousandths, models
	Adding decimals to thousandths, compensation
	Subtracting decimals to thousandths, models
	Subtracting decimals to thousandths, compensation

<b>5.F.Add subtract facts to 20</b>	
Addition and subtraction facts to 20 (extending computational fluency)	
<b>Course Topics</b>	<b>Activities</b>
Adding and subtracting to 20	All about Ten
	All about Twenty
	Problems: Addition and Subtraction
	Fact Families: Add and Subtract
	Related Facts 1
	Addition Facts
	Add 3 Numbers Using Bonds to 10
	Doubles and Halves to 20
	Doubles and Halves to 10
<b>Topics</b>	<b>Skill Quests</b>
Addition and subtraction facts to 20	Using addition and subtraction facts to 20

<b>5.F.Multiply divide facts to 100</b> Multiplication and division facts to 100 (emerging computational fluency)	
Course Topics	Activities
Multiplication and division facts	Multiplication Arrays
	Fact Families: Multiply and Divide
	Related Facts 2
	Times Tables
	Multiplication Grids
	Frog Jump Multiplication
	Model Multiplication to $5 \times 5$
	Missing Numbers: $\times$ and $\div$ facts
	Missing Numbers: $\times$ and $\div$ facts
	Arrays 1
	Arrays 2
	Frog Jump Division
	Multiplication Turn-Abouts
Topics	Skill Quests
Multiplication and division facts to 100	Finding the missing number
	Recalling and using multiplication facts for 2
	Recalling and using multiplication facts for 10
	Recalling and using multiplication facts for 5
	Multiplying by 2s, 5s and 10s
	Recalling and using multiplication facts for 3
	Recalling and using multiplication facts for 4
	Multiplying by 2, 5, 3 and 4
	Recalling multiplication facts to $5 \times 5$
	Relating multiplication and division facts
	Recalling and using multiplication facts for 6
	Recalling and using multiplication facts for 7
	Recalling and using multiplication facts for 8
	Recalling and using multiplication facts for 9
	Using multiplication properties
	Representing and using known facts to multiply
	Multiplying using doubling
	Recalling and using division facts for 2
	Recalling and using division facts for 10
	Recalling and using division facts for 5
	Dividing by 2s, 5s and 10s
	Recalling and using division facts for 3
	Recalling and using division facts for 4
	Dividing by 2, 5, 3 and 4
	Recalling and using division facts for 6
	Recalling and using division facts for 7
	Recalling and using division facts for 8
	Recalling and using division facts for 9
	Representing and using known facts to divide



5.P.One-step equations	
One-step equations with variables	
Course Topics	Activities
Equations	Missing Values
	Find the Missing Number 1
	Solve Equations: Multiply, Divide 1
	Write an Equation: Word Problems
	Missing Numbers: Variables
Topics	Skill Quests
One-step equations with variables	Writing 1-step equations using variables
	Solving 1-step equations
	Introducing variables

## 3 Patterning

### 3.1 Patterns

<b>5.P.Patterns</b>	
Rules for increasing and decreasing patterns with words, numbers, symbols, and variables	
<b>Course Topics</b>	<b>Activities</b>
Patterns	Describing Patterns
	Table of Values
	Number Sequences Up to 1 Million
<b>Topics</b>	<b>Skill Quests</b>
Rules for increasing/decreasing patterns	Describing and continuing patterns
	Writing pattern rules as algebraic expressions

## 4 Geometry and measurement

### 4.1 Geometry and measurement

5.A.Area	
Area measurement of squares and rectangles	
Course Topics	Activities
Area	Bigger or Smaller Shape
	Area of Shapes
	Equal Areas
	Area: Squares and Rectangles
Topics	Skill Quests
Area measurement of squares & rectangles	Area of a rectangle, additive formula
	Estimating & measuring area of rectangles

5.A.Area perimeter relationship	
Relationships between area and perimeter	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Relationships between area and perimeter	Solving perimeter and area problems

5.A.Time	
Duration, using measurement of time	
Course Topics	Activities
Time	Using Timetables
	Time Mentals
	Elapsed Time
	What Time Will it Be?
	Time Zones
	Time Conversions: Whole Numbers 1
	Time Conversions: Whole Numbers 2
	Time Conversions: Simple Fractions
	Time Conversions: Simple Decimals (0.25, 0.5, 0.75)
Topics	Skill Quests
Duration, using measurement of time	Calculating elapsed time
	Using timetables (12-hour and 24-hour time)

<b>5.A.Prisms and pyramids</b> Classification of prisms and pyramids	
<b>Course Topics</b>	<b>Activities</b>
Objects, shapes and transformations	Collect the Objects
	What Prism am I?
	What Pyramid am I?
	Collect More Shapes
	Collect the Shapes 2
	Prisms and Pyramids
<b>Topics</b>	<b>Skill Quests</b>
Classification of prisms and pyramids	Classifying quadrilaterals
	Identifying prisms and pyramids in the environment
	Introducing rectangular prisms
	Investigating properties of prisms and pyramids

<b>5.A.Transformations</b> Single transformations	
<b>Course Topics</b>	<b>Activities</b>
Objects, shapes and transformations	Flip, Slide, Turn
<b>Topics</b>	<b>Skill Quests</b>
Single transformations	Introducing slides/translations
	Introducing flips/reflections
	Introducing turns/rotations

## 5 Data and probability

### 5.1 Data and probability

<b>5.D.Graphs</b>	
One-to-one correspondence and many-to-one correspondence, using double bar graphs	
Course Topics	Activities
Graphs	Analysing Data
	Bar Graphs 1
	Bar Graphs 2
Topics	Skill Quests
Double bar graphs	Interpreting/representing data, double bar graphs

<b>5.D.Probability</b>	
Probability experiments, single events or outcomes	
Course Topics	Activities
Probability	Introductory Probability
	Find the Probability
Topics	Skill Quests
Probability experiments, single events	Probability experiments, single events

## 6 Financial literacy

### 6.1 Financial literacy

<b>5.F.Financial literacy</b>	
Financial literacy – monetary calculations, including making change with amounts to 1000 dollars and developing simple financial plans	
<b>Course Topics</b>	<b>Activities</b>
Money and financial mathematics	Budgeting
	Money Problems: Four Operations
<b>Topics</b>	<b>Skill Quests</b>
Financial mathematics	Solving money problems
	Creating simple financial plans

# Grade 6

## 1 Number

### 1.1 Number

6.N.Small to large numbers	
Small to large numbers (thousandths to billions)	
Course Topics	Activities
Small to large numbers - Place value	Equal, less or Greater Than?
	Nearest Whole Number
	Comparing Decimals
	Rounding Numbers
	Decimals to Fractions 1
	Decimal Order
	Decimal Order 1
	Rounding Decimals 1
	Numbers from Words to Digits 2
	Decimals from Words to Digits 1
	Place Value to Billions
	Numbers from Words to Digits 3
	Comparing Numbers
	Decimal Place Value
Topics	Skill Quests
Number concepts to billions	Reading and writing numbers up to billions
	Comparing and ordering numbers up to millions
	Identifying place value, numbers up to billions
Decimal concepts to thousandths	Comparing and ordering decimals to thousandths
	Understanding decimal concepts to thousandths
Operations, thousandths to billions	Solving add/sub word problems: decimals
	Multiplying up to 4 digits by 1 and 2 digits
	Multiplying 4 digits by 2 digits, algorithm
	Dividing up to 4 digits by 1 digit
	Dividing 3 digits by 2 digits, algorithm
	Dividing up to 4 digits by 2 digits, place value
	Dividing up to 4 digits by 2 digits, algorithm
	Solving multiplication and division word problems
	Adding decimals to thousandths
	Subtracting decimals to thousandths

<b>6.F.Factors and multiples</b> Factors and multiples – greatest common factor and least common multiple	
Course Topics	Activities
Number concepts - Multiples and factors	Multiples
	Prime or Composite?
	Greatest Common Factor
	Least Common Multiple
	Product of Prime Factors
	Prime Factoring
	Factors
	Venn Diagram 1
	Fit the Conditions 1
	Find the Factor
Topics	Skill Quests
Prime and composite numbers	Introducing prime and composite numbers
Factors and multiples	Finding multiples up to 100, including LCM
	Finding factors up to 100, including GCF
Divisibility rules	Introducing divisibility rules for dividing by 2
	Introducing divisibility rules for dividing by 3
	Introducing divisibility rules for dividing by 4
	Introducing divisibility rules for dividing by 5
	Introducing divisibility rules for dividing by 6
	Introducing divisibility rules for dividing by 8
	Introducing divisibility rules for dividing by 9
	Introducing divisibility rules for dividing by 10
Prime factors	Using prime factors

<b>6.N.Improper fractions and mixed numbers</b> Improper fractions and mixed numbers	
Course Topics	Activities
Fractions - Improper and mixed numbers	Mixed to Improper Fractions
	Improper Fraction to Mixed Numeral
	Converting Mixed and Improper
	What Mixed Number Is Shaded?
	Identifying Fractions Beyond 1
	Mixed and Improper Fractions on a Number Line
Topics	Skill Quests
Improper fractions and mixed numbers	Comparing and ordering fractions
	Comparing and ordering mixed numbers
	Comparing and ordering improper fractions
	Comparing and ordering fractions and mixed numbers



<b>6.N.Ratios</b> Introduction to ratios	
<b>Course Topics</b>	<b>Activities</b>
Ratios	Equivalent Ratios
	Ratio Word Problems
	Word Problems: Ratio
	Simplify Ratios: 2 Whole Numbers
<b>Topics</b>	<b>Skill Quests</b>
Introduction to ratios	Introducing ratios
	Simplifying ratios
	Dividing a quantity into a given ratio
	Identifying equivalent ratios

<b>6.N.Percents</b> Whole-number percents and percentage discounts	
<b>Course Topics</b>	<b>Activities</b>
Percents	Percent of a Number (Mental)
	Percents and Decimals
	Percents to Fractions
	Modelling Percentages
	Match Decimals and Percentages
	Fractions to Percentages (Non-Calculator)
	Percentages to Fractions (with and without simplification)
<b>Topics</b>	<b>Skill Quests</b>
Introducing whole number percents	Introducing percents
	Representing percent and fraction equivalents
	Representing percent and decimal equivalents
	Fraction, decimal and percent equivalents
Calculating percentage discounts	Calculating percentage discounts

## 2 Computational fluency

### 2.1 Computational fluency

6.F.Multiply divide facts	
Multiplication and division facts to 100 (developing computational fluency)	
Course Topics	Activities
Multiplying & dividing - Mental methods	Dividing by 10, 100, 1000
	Multiplying by 10, 100, 1000
	Multiply Multiples of 10
	Halve it!
	Estimation: Multiply and Divide
	Estimate Products
	Multiply More Multiples of 10
	Estimate Quotients
	Mental Methods Division
	Mental Methods Division 1
	Mental Methods Division 3
	Mental Methods Multiplication 1
	Mental Methods Multiplication 2
	Multiply 3 single-digit numbers
Multiplying & dividing - Facts	Fact Families: Multiply and Divide
	Related Facts 2
	Times Tables
	Multiplication Grids
	Missing Numbers: $\times$ and $\div$ facts
	Multiplication Turn-Abouts
Topics	Skill Quests
Multiplication and division facts to 100	Multiplying using doubling and repeated doubling
	Multiplying using place value understanding
	Dividing using the inverse relationship
	Dividing using halving and repeated halving

6.F.Order of operations	
Order of operations with whole numbers	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Order of operations with whole numbers	Order of operations, addition and subtraction
	Order of operations, multiplication and division
	Order of operations, 4 operations
	Order of operations, grouping symbols
	Applying order of operations to real-life contexts

<b>6.N.Multiply divide decimals</b> Multiplication and division of decimals	
Course Topics	Activities
Metric conversions - Applying decimals	Grams and Kilograms
	Millilitres and Litres
	Centimetres and Metres
	Converting cm and mm
	Metres and Kilometres
	Converting Units of Length
	Converting Units of Mass
	Operations with Length
	Kilometre Conversions
Multiplying & dividing - Decimals	Multiply Decimals: 10, 100, 1000
	Divide Decimals: 10, 100, 1000
	Divide Decimals by Powers of 10 100 1000
	Multiply Decimal by Whole Number
	Divide Decimal by Whole Number
	Estimate Decimal Operations
	Multiply Decimals and Powers of 10
	Multiply Decimals: Area Model
	Multiply Decimals 1
Topics	Skill Quests
Multiply decimals to thousandths	Multiplying decimals and whole numbers
	Multiplying decimals by 10 and 100
	Multiplying decimals to thousandths, base 10
Divide decimals to thousandths	Dividing decimals to thousandths, base 10
	Dividing whole numbers and decimals to thousandths
	Dividing decimals by 10 and 100

<b>6.L.One-step equations</b> One-step equations with whole number coefficients and solutions	
Course Topics	Activities
Equations	Solve Equations: Multiply, Divide 1
	Write an Equation: Word Problems
	Missing Numbers: Variables
Topics	Skill Quests
Solve one-step equations	Solving 1-step equations
	Solving 1-step equations using a balance
	Solving 1-step equations using algebra tiles

## 3 Patterning

### 3.1 Patterning

<b>6.L.Patterns</b>	
Increasing and decreasing patterns, using expressions, tables, and graphs as functional relationships	
<b>Course Topics</b>	<b>Activities</b>
Patterns	Increasing Patterns
	Decreasing Patterns
	Describing Patterns
	Table of Values
	Pattern Rules and Tables
	Count Backward Patterns
<b>Topics</b>	<b>Skill Quests</b>
Increasing and decreasing patterns	Recording number patterns with shapes using tables
	Interpreting tables with number patterns
	Representing linear growing patterns, rules

## 4 Geometry and measurement

### 4.1 Geometry and measurement

6.P.Perimeter Perimeter of complex shapes	
Course Topics	Activities
Perimeter	Perimeter Detectives 1
	Perimeter Detectives 2
Topics	Skill Quests
Perimeter of complex shapes	Calculating the perimeter of rectilinear shapes

6.P.Area Area of triangles, parallelograms, and trapezoids	
Course Topics	Activities
Area	Area: Squares and Rectangles
	Area: Triangles
	Area: Parallelograms (Metric)
Topics	Skill Quests
Area: triangle, parallelogram, trapezoid	Calculating area of a triangle
	Calculating area of a parallelogram
	Calculating area of a trapezoid

6.P.Angles Angle measurement and classification	
Course Topics	Activities
Angles and triangles	Equal Angles
	What Type of Angle 2?
	Comparing Angles
	Classifying Angles
	Measuring Angles
	Estimating Angles
	Right Angle Relation
Topics	Skill Quests
Angle measurement and classification	Classifying angles
	Finding the missing angle of a triangle
	Finding the missing angle of a quadrilateral
	Exploring interior angles in regular polygons

6.P.Volume and capacity Volume and capacity	
Course Topics	Activities
Volume and capacity	How many Blocks?
	Capacity Word Problems
	Volume of Solids and Prisms - 1cm <sup>3</sup> blocks
Topics	Skill Quests
Volume and capacity	Using unit cubes to measure volume
	Using millilitres and litres as references
	Using cubic metres/centimetres as references

6.P.Triangles Triangles	
Course Topics	Activities
Angles and triangles	Triangle - Tasters
	Triangles: Acute, Right, Obtuse
Topics	Skill Quests
Triangles	Classifying triangles by their sides and angles

6.P.Transformations Combinations of transformations	
Course Topics	Activities
Cartesian plane, transformations, graphs	Coordinate Graphs: 1st Quadrant
Topics	Skill Quests
Combinations of transformations	Investigating translations in the first quadrant
	Identifying reflections in the first quadrant
	Identifying rotations in the first quadrant
	Identifying combinations of transformations
	Plotting points in the first quadrant
	Finding the missing coordinate of a figure

6.D.Line graphs Line graphs	
Course Topics	Activities
Cartesian plane, transformations, graphs	Line Graphs: Reading
Topics	Skill Quests
Line graphs	Constructing a line graph
	Interpreting data in a line graph

## 5 Data and probability

### 5.1 Data and probability

<b>6.D.Probability</b>	
Single-outcome probability, both theoretical and experimental	
Course Topics	Activities
Probability	Possible Outcomes
	Introductory Probability
	Find the Probability
	Counting Techniques 1
Topics	Skill Quests
Theoretical and experimental probability	Comparing observed and expected frequencies
	Describing probability, fraction/decimal/percent

## 6 Financial literacy

### 6.1 Financial literacy

<b>6.F.Financial literacy</b> Financial literacy – simple budgeting and consumer math	
<b>Course Topics</b>	<b>Activities</b>
Money and financial literacy	Budgeting
	Money Problems: Four Operations
<b>Topics</b>	<b>Skill Quests</b>
Creating simple budgets	Creating simple budgets



## 7 Reasoning and analyzing

### 7.1 Reasoning and analyzing

6.F.Logic and patterns	
Use logic and patterns to solve puzzles and play games	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Logic and patterns	Introducing coding concepts
	Introducing logical reasoning



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