

Mathletics

Saskatchewan Curriculum

Activities (Courses) and Skill Quests



Grades 3-6

July, 2025

Mathletics

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Grade 3

1 Number

1.1 Count and Represent

N3.1 Demonstrate understanding of whole numbers to 1000 (concretely, pictorially, physically, orally, in writing, and symbolically) including: representing (including place value), describing, estimating with referents, comparing two numbers, ordering three or more, numbers.	
Course Topics	Activities
Number	Counting by Twos
	Counting by Fives
	Counting by Tens
	Place value to thousands
	Model Numbers
	Ascending Order
	Descending Order
	Which is Bigger?
	Which is Smaller?
	Skip Counting
	Place Value 2
	Skip Counting with Coins
	Understanding Place Value 1
	Place Value Partitioning
	Greater or Less to 100
Topics	Skill Quests
Read & write numbers to 1000	Reading & writing numbers up to 1000
	Connecting multiples of 10 & 100 to number words
	Identifying numbers before & after within 1000
Compare & order numbers to 1000	Comparing & ordering numbers up to 1000
Place value up to 1000	Identifying place value of numbers to 1000
	Using place value to partition 3-digit numbers
	Non-standard partitioning, 3-digit numbers
	Solving place value number problems
Count to 1000	Counting by 10s to 1000, forward & backward
	Counting by 2s to 1000, forward & backward
	Counting by 5s to 1000, forward & backward
	Counting by 3s to 1000, forward & backward
	Counting by 4 to 1000, forward & backward
	Counting by 25 to 1000, forward & backward
	Counting by 100s to 1000, forward & backward
	Counting by 10s & 1s to 1000
	Counting by 10s, off the decade
Estimating to 1000	Estimating quantities up to 1000 using referents

1.2 Problems and Strategies

N3.2 Demonstrate understanding of addition of whole numbers with answers to 1000 and their corresponding subtractions (limited to 1, 2, and 3-digit numerals) including: representing strategies for adding and subtracting concretely, pictorially, and symbolically, solving situational questions involving addition and subtraction, estimating using personal strategies for adding and subtracting.	
Course Topics	Activities
Addition and Subtraction	Magic Mental Addition
	Magic Mental Subtraction
	Columns that Add
	Add Two 2-Digit Numbers
	Columns that Subtract
	Problems: Add and Subtract
	Fact Families: Add and Subtract
	Commutative Property of Addition
	Add Multi-Digit Numbers 1
	Commutative Property of Addition
	Subtract Numbers: Regroup
	Add Numbers: Regroup a Ten
	Subtract Numbers: Regroup
	Complements to 50 and 100
	Compensation - Add
	Compensation - Subtract
	Bar Model Problems 2
	Add 3 numbers using bonds to 10
	Decompose Numbers to Subtract
Topics	Skill Quests
Addition & subtraction to 1000	Adding up to 1000 using a number line
	Adding up to 1000 using bridging to ten
	Adding up to 1000 using a jump strategy
	Adding up to 1000 using a split strategy
	Adding up to 1000 using rounding & compensating
	Subtracting up to 100 using a number line
	Subtracting up to 1000 using a split strategy
	Subtracting up to 1000 using a jump strategy
	Subtracting up to 1000 using bridging to ten
	Subtract up to 1000 using rounding & compensating
	Add/subtract up to 1000 using a number line
	Add/subtract up to 1000 using bridging to ten
	Add/subtract up to 1000 using a jump strategy
	Add/subtract up to 1000 using a split strategy
	Add/subtract to 1000 using rounding & compensating
	Represent add/subtract problems using a bar model
	Estimating sums & differences to 1000
	Estimating sums & differences in problem solving
	Solving addition & subtraction word problems

Mental strategies: add/sub facts to 18	Using the commutative property of addition
	Adding 3 single-digit numbers=
	Finding the difference between 2 numbers
	Using doubles & near doubles to add & subtract
	Mental strategies for addition & subtraction facts
	Adding & subtracting zero

N3.3 Demonstrate understanding of multiplication to 5×5 and the corresponding division statements including: representing and explaining using repeated addition or subtraction, equal grouping, and arrays, creating and solving situational questions, modelling processes using concrete, physical, and visual representations, and recording the process symbolically, relating multiplication and division.	
Course Topics	Activities
Multiplication and Division	Groups of Two
	Groups of Three
	Groups of Four
	Groups of Five
	Dividing Twos
	Dividing Threes
	Dividing Fours
	Dividing Fives
	Dividing Tens
	Making Equal Groups
	Fill the Jars
	Multiplication Arrays
	Model Multiplication to 5×5
	Frog Jump Multiplication
	Multiplication Problems 1
	Groups
	Frog Jump Division
Topics	Skill Quests
Multiplication concepts to 5×5	Using repeated addition to multiply
	Exploring multiplication by 2
	Exploring multiplication by 3
	Exploring multiplication by 4
	Exploring multiplication by 5
	Multiplication facts to 5×5
Division concepts (up to 5×5 facts)	Using repeated subtraction to divide
	Dividing by 2
	Dividing by 3
	Dividing by 4
	Dividing by 5
Multiplication & division (to 5×5)	Relationship between multiplication & division
	Solving problems using arrays
	Multiplication & division word problems

N3.4 Demonstrate understanding of fractions concretely, pictorially, physically, and orally including: representing, observing and describing situations, comparing, relating to quantity.	
Course Topics	Activities
Fractions	Halves and Quarters
	Thirds and Sixths
	What Fraction is Shaded?
	What Fraction Is Shaded 1?
	Comparing Fractions 1
	Shape Fractions
	Model Fractions
	Counting with Fractions on a Number Line
	Identifying Fractions on a Number Line
	Fraction Fruit Sets 1
Topics	Skill Quests
Fraction concepts	Finding halves
	Finding fourths
	Working with halves & fourths
	Working with thirds
	Working with sixths
	Working with thirds & sixths
	Working with fifths
	Working with eighths
	Working with halves, fourths & eighths
	Representing simple fractions
	Equivalent fractions

2 Patterns and Relations

2.1 Patterns and Relations

P3.1	
Demonstrate understanding of increasing and decreasing patterns including: observing and describing, extending, comparing, creating patterns using manipulatives, pictures, sounds, and actions.	
Course Topics	Activities
Patterns and Relations	Analyzing Data
	Making Graphs
	Increasing Patterns
	Pictographs
	Bar Graphs 1
	Reading from a Column Graph
	Count Forward Patterns
	Count Backward Patterns
	Tally Charts
Topics	Skill Quests
Increasing & decreasing patterns	Identifying & describing number patterns
	Identifying & creating number patterns
	Increasing & decreasing visual patterns

P3.2	
Demonstrate understanding of equality by solving one-step addition and subtraction equations involving symbols representing an unknown quantity.	
Course Topics	Activities
Patterns and Relations	Missing Values
	Missing Numbers
	Missing Numbers: Variables
Topics	Skill Quests
Add & subtract: One-step equations	One-step add/subtract problems with unknowns
Equivalent relationships to 100	Equivalent addition & subtraction number sentences

3 Shape and Space

3.1 Shape and Space

SS3.1	
Demonstrate understanding of the passage of time including: relating common activities to standard and nonstandard units, describing relationships between units, solving situational questions.	
Course Topics	Activities
Time	Days of the Week
	Months of the Year
	Using a Calendar
	Set Time to the Hour
	Set Time to the Half Hour
Topics	Skill Quests
Time concepts	Using calendars
	Introducing time in hours, minutes & seconds
	Recalling relationships between units of time
	Identifying activities completed in units of time

SS3.2	
Demonstrate understanding of measuring mass in g and kg by: selecting and justifying referents for g and kg, modelling and describing the relationship between g and kg, estimating mass using referents, measuring and recording mass.	
Course Topics	Activities
Mass and Length	Everyday Mass
	How Heavy?
Topics	Skill Quests
Measure mass	Measuring mass: kilograms & grams
	Selecting units of measure: mass
	Relationship between grams & kilograms

SS3.3	
Demonstrate understanding of linear measurement (cm and m) including: selecting and justifying referents, generalizing the relationship between cm and m, estimating length and perimeter using referents, measuring and recording length, width, height, and perimeter.	
Course Topics	Activities
Mass and Length	How Long is That?
	Centimetres and Metres
	Perimeter of Shapes
	Perimeter
	Measuring Length
Topics	Skill Quests
Measure length	Measuring and converting cm & m
	Ordering & comparing lengths in m & cm
	Measuring perimeter: regular & irregular shapes
	Measuring lengths of 3D objects

SS3.4	
Demonstrate understanding of 3-D objects by analyzing characteristics including faces, edges, and vertices.	
Course Topics	Activities
3-D Objects and 2-D Shapes	Collect the Objects
	Prisms and Pyramids
	Faces, Edges and Vertices
	Relate Shapes and Solids
	Count Sides and Corners
Topics	Skill Quests
3D objects	Introducing the attributes of 3D objects
	Introducing cubes
	Introducing cylinders
	Introducing spheres
	Introducing cones
	Introducing prisms & pyramids
	Describing the attributes of 3D objects
	Comparing & sorting 3D objects
	Making basic models of 3D objects

SS3.5	
Demonstrate understanding of 2-D shapes (regular and irregular) including triangles, quadrilaterals, pentagons, hexagons, and octagons including: describing, comparing, sorting.	
Course Topics	Activities
3-D Objects and 2-D Shapes	How Many Faces?
	How many Edges?
	How many Corners?
	Collect More Shapes
	Collect the Shapes 2
	Faces, Edges and Vertices
Topics	Skill Quests
Sort & identify 2D shapes	Comparing 2D shapes
	Identifying & naming 2D shapes
	Sorting 2D shapes
Regular & irregular polygons	Understanding regular & irregular polygons

4 Statistics and Probability

4.1 Statistics and Probability

SP3.1	
Demonstrate understanding of first-hand data using tally marks, charts, lists, bar graphs, and line plots (abstract pictographs), through: collecting, organizing, and representing, solving situational questions.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Understand first-hand data	Understanding & using line plots
	Understanding & using bar graphs
	Understanding & using data in lists & tables
	Understanding the statistical process

Grade 4

1 Number

1.1 Number

N4.1	
Demonstrate an understanding of whole numbers to 10 000 (pictorially, physically, orally, in writing, and symbolically) by: representing, describing, comparing two numbers, ordering three or more numbers.	
Course Topics	Activities
Number	Place Value to Thousands
	Expanding Numbers
	Understanding Place Value 2
	Ascending Order
	Descending Order
	Place value 2
	Place value 3
Topics	Skill Quests
Number concepts to 10 000	Reading & writing numbers to 10 000
	Identifying numbers before & after to 10 000
	Identifying missing numbers to 10 000
	Comparing & ordering numbers to 10 000
	Understanding place value, 4-digit numbers
	Partitioning 4-digit numbers

N4.2	
Demonstrate an understanding of addition of whole numbers with answers to 10 000 and their corresponding subtractions (limited to 3 and 4- digit numerals) by: using personal strategies for adding and subtracting, estimating sums and differences, solving problems involving addition and subtraction.	
Course Topics	Activities
Addition and Subtraction	Add Two 2-Digit Numbers
	2-Digit Differences: Regroup
	2-Digit Differences
	Problems: Add and Subtract
	Adding Colossal Columns
	Subtracting Colossal Columns
	Estimation: Add and Subtract
	Estimate Sums
	Add Two 2-Digit Numbers: Regroup
	Add Three 2-Digit Numbers: Regroup
	Add 3-Digit Numbers
	Add 3-Digit Numbers: Regroup
	Estimate Differences
	Strategies for Column Addition
	Add Three 3-Digit Numbers: Regroup
	Complements to 50 and 100

Topics	Skill Quests
Addition to 10 000	Adding up to 10 000 using a number line
	Adding up to 10 000 using place value
	Adding up to 10 000 using a split strategy
	Adding up to 10 000 using rounding & compensating
	Adding up to 10 000 using algorithms
	Choosing mixed addition strategies
Subtraction to 10 000	Subtracting up to 10 000 using a number line
	Subtracting up to 10 000 using place value
	Subtracting up to 10 000 using a split strategy
	Subtracting up to 10 000 using round & compensate
	Subtracting up to 10 000 using algorithms
	Choosing mixed subtraction strategies
Add & subtract word problems to 10 000	Solving addition & subtraction word problems

N4.3	
Demonstrate an understanding of multiplication of whole numbers (limited to numbers less than or equal to 10) by: applying mental mathematics strategies, explaining the results of multiplying by 0 and 1.	
Course Topics	Activities
Multiplication and Division	Multiplication Arrays
	Multiplication Grids
	Arrays 1
	Equivalent Facts: Multiply
Topics	Skill Quests
Multiplication 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
	Multiplying by 1 or 0
	Recalling multiplication facts for 2, 5 & 10
	Recalling multiplication facts for 3 & 6
	Recalling multiplication facts for 7
	Recalling multiplication facts for 4 & 8
Division facts to 100	Recalling multiplication facts for 9
	Recalling multiplication facts to 10 x 10
	Recalling the division facts for 2, 5 & 10
	Recalling division facts for 3
	Recalling division facts for 4
	Recalling division facts for 6
Multiplication & division facts to 100	Recalling division facts for 7
	Recalling division facts for 8
	Recalling division facts for 9
	Multiplying & dividing by 2s, 5s & 10s

N4.4	
Demonstrate an understanding of multiplication (2- or 3-digit by 1-digit) by: using personal strategies for multiplication, with and without concrete materials, using arrays to represent multiplication, connecting concrete representations to symbolic representations, estimating products, solving problems.	
Course Topics	Activities
Multiplication and Division	Multiply Multiples of 10
	Multiply: 1-Digit Number
	Multiply: 2-Digit by 1-Digit
	Multiply: 1-Digit Number, Regroup
	Multiplication Properties
	Missing Numbers: \times and \div facts
Topics	Skill Quests
Multiplication, 2- or 3-digit by 1-digit	Multiplying 2- or 3-digits by 1-digit, place value
	Multiplying 2- or 3-digits by 1-digit, doubling
	Multiplying 2- or 3-digits by 1-digit, area model
	Multiplying 2- or 3-digits by 1-digit, factoring
	Multiply 2- or 3-digits \times 1-digit round & estimate
	Multiplying by multiples of 10 & 100

N4.5	
Demonstrate an understanding of division (1-digit divisor and up to 2-digit dividend) to solve problems by: using personal strategies for dividing with and without concrete materials, estimating quotients, explaining the results of dividing by 1, solving problems involving division of whole numbers, relating division to multiplication.	
Course Topics	Activities
Multiplication and Division	Division Facts
	Remainders by Arrays
	Problems: Multiply and Divide
	Halve it!
	Remainders by Tables
	Bar model $\times \div$
	Divide: 1-Digit Divisor, Remainder
	Divide: 1-Digit Divisor 1
	Divide: 2-Digit Divisor, Remainder
	Related Facts 2
Topics	Skill Quests
Division, 2-digit by 1-digit	Dividing 2-digits by 1-digit, models
	Dividing 2-digits by 1-digit, halving
	Dividing 2-digits by 1-digit, related facts
	Dividing 2-digits by 1-digit, inverse relationship
	Dividing 2-digit by 1-digit, round to estimate
	Dividing by 1 using bar models

N4.6	
Demonstrate an understanding of fractions less than or equal to one by using concrete and pictorial representations to: name and record fractions for the parts of a whole or a set, compare and order fractions, model and explain that for different wholes, two identical fractions may not represent the same quantity, provide examples of where fractions are used.	
Course Topics	Activities
Fractions	Shape Fractions
	Model Fractions
	Identifying Fractions on a Number Line
	Compare Fractions 1a
	Compare Fractions 1b
Topics	Skill Quests
Represent fractions less or equal to 1	Introducing the terms numerator & denominator
	Understanding fractions
	Representing halves, fourths & eighths
	Representing thirds & sixths
	Representing fifths
	Representing tenths
	Representing eighths
Compare & order fractions with models	Comparing & ordering unit fractions with models
	Comparing & ordering common fractions with models

N4.7	
Demonstrate an understanding of decimal numbers in tenths and hundredths (pictorially, orally, in writing, and symbolically) by: describing, representing, relating to fractions.	
Course Topics	Activities
Decimals	Comparing Decimals 1
	Decimal Order 1
	Decimals on the Number Line
	Decimals from Words to Digits 1
	Decimal Place Value
Topics	Skill Quests
Decimals to hundredths	Introducing decimal notation
	Introducing decimal tenths
	Introducing decimal hundredths
	Connecting fractions & decimals to hundredths
	Comparing & ordering decimals to hundredths

N4.8

Demonstrate an understanding of addition and subtraction of decimals limited to hundredths (concretely, pictorially, and symbolically) by: using compatible numbers, estimating sums and differences, using mental math strategies, solving problems.

Course Topics	Activities
Decimals	Nearest Whole Number
	Rounding Decimals 1
	Add Decimals 1
	Subtract Decimals 1
	Decimal Complements
Topics	Skill Quests
Add & subtract decimals to hundredths	Adding decimals to tenths
	Subtracting decimals to tenths
	Adding decimals to hundredths
	Subtracting decimals to hundredths
	Estimating decimal sums & differences
	Adding & subtracting decimal word problems
Add & subtract decimals, money problems	Estimating & calculating change
	Using decimals in money
	Solving word problems involving money

2 Patterns and Relations

2.1 Patterns and Relations

P4.1	
Demonstrate an understanding of patterns and relations by: identifying and describing patterns and relations in a chart, table or diagram, reproducing patterns and relations in a chart, table, or diagram using manipulatives, creating charts, tables, or diagrams to represent patterns and relations, solving problems involving patterns and relations.	
Course Topics	Activities
Patterns and Relations	Pick the Next Number
	Venn Diagrams
Topics	Skill Quests
Understand patterns & relations	Identifying & creating additive number patterns
	Identifying & creating subtractive number patterns
	Exploring number patterns in tables & charts
	Creating addition patterns from a given rule
	Creating subtraction patterns from a given rule
	Understanding number patterns using multiplication
	Creating multiplication patterns from a given rule
	Understanding repeating patterns
	Exploring visual patterns
	Understanding shape patterns & rules
	Using patterns to solve problems
Use Venn & Carroll diagrams	Introducing Venn diagrams
	Introducing Carroll diagrams
	Relating Carroll & Venn diagrams

P4.2	
Demonstrate an understanding of equations involving symbols to represent an unknown value by: writing an equation to represent a problem, solving one step equations.	
Course Topics	Activities
Patterns and Relations	Missing Values
	Missing Numbers
	I am Thinking of a Number!
	Write an Equation: Word Problems
Topics	Skill Quests
One-step equations using all operations	Finding unknown values in add/subtract equations
	One-step equations: addition & subtraction
	One-step equations: multiplication & division
	One-step equations: balancing number sentences
Write equations to represent problems	Writing equations to represent problems

3 Shape and Space

3.1 Shape and Space

SS4.1	
Demonstrate an understanding of time by: reading and recording time using digital and analog clocks (including 24 hour clocks), reading and recording calendar dates in a variety of formats.	
Course Topics	Activities
Shape and Space	using a Calendar
	What is the Time?
	24 Hour Time
	Five Minute Times
Topics	Skill Quests
Read & record time	Telling time to the hour & half hour
	Telling time to the quarter hour
	Telling time to five minutes
	Telling time to the minute
	Using am & pm notation
	Using 24-hour time
Read & record calendar dates	Reading & writing calendar dates

SS4.2	
Demonstrate an understanding of area of regular and irregular 2-D shapes by: recognizing that area is measured in square units, selecting and justifying referents for the units cm ² or m ² , estimating area by using referents for cm ² or m ² , determining and recording area (cm ² or m ²), constructing different rectangles for a given area (cm ² or m ²) in order to demonstrate that many different rectangles may have the same. area.	
Course Topics	Activities
Shape and Space	Area of Shapes (inches, feet, yards)
	Area of Shapes
	Equal Areas
	Biggest Shape
	Area: Squares and Rectangles
Topics	Skill Quests
Understand area	Measuring area using nonstandard units
	Introducing formal units for area: cm ²
	Introducing formal units for area: m ²
Measure the area of rectangles	Estimating & measuring areas of rectangles
	Comparing & ordering rectangular areas
	Finding the area of a rectangle, arrays
	Finding the area of a rectangle, area model
	Finding the area of rectangles, formula
Approximate area, non-rectilinear shapes	Approximating areas, nonrectilinear shapes

SS4.3	
Demonstrate an understanding of rectangular and triangular prisms by: identifying common attributes, comparing, constructing models.	
Course Topics	Activities
Shape and Space	How Many Faces?
	How many Edges?
	How many Corners?
	What Prism am I?
	Prisms and Pyramids
	Faces, Edges, and Vertices 1
Topics	Skill Quests
Understand prisms	Identifying prisms in the environment
	Introducing rectangular & triangular prisms
	Comparing & describing prisms
	Connecting nets to rectangular & triangular prisms

SS4.4	
Demonstrate an understanding of line symmetry by: identifying symmetrical 2-D shapes, creating symmetrical 2-D shapes, drawing one or more lines of symmetry in a 2-D shape.	
Course Topics	Activities
Shape and Space	Symmetry or Not?
	Lines of Symmetry
	Symmetry
Topics	Skill Quests
Line symmetry	Recognizing line symmetry
	Identifying & drawing lines of symmetry

4 Statistics and Probability

4.1 Statistics and Probability

SP4.1	
Demonstrate an understanding of many-to-one correspondence by: comparing correspondences on graphs, justifying the use of many-to-one correspondences, interpreting data shown using a many-to-one correspondence, creating bar graphs and pictographs using many-to one correspondence.	
Course Topics	Activities
Statistics and Probability	Making Graphs
	Column Graphs
	Bar Chart
	Interpreting Tables
	Line Graphs: Interpretation
Topics	Skill Quests
Understand many-to-one correspondence	Using pictographs with many-to-one correspondence
	Compare pictographs with different correspondence
	Using bar graphs with many-to-one correspondence

Grade 5

1 Number

1.1 Number

N5.1	
Represent, compare, and describe whole numbers to 1 000 000 within the contexts of place value and the base ten system, and quantity.	
Course Topics	Activities
Number-Place Value	Place Value to Millions
	Numbers from Words to Digits 1
	Expanding Numbers
	Dividing by 10, 100, 1000
	Multiplying by 10, 100, 1000
	Expanded Notation
	Place value 3
	Understanding Place Value 3
	Place Value 1 ($\times 10$ and $\div 10$)
	Place Value 2 ($\times 10$ and $\div 10$)
Topics	Skill Quests
Number concepts to 1 000 000	Reading & writing numbers up to 6 digits
	Comparing & ordering numbers up to 6 digits
	Identifying place value of 6-digit numbers
	Using place value to partition 6-digit numbers
	Skip counting by 100s, 1000s, 10 000 & 100 000

N5.2	
Analyze models of, develop strategies for, and carry out multiplication of whole numbers.	
Course Topics	Activities
Number-Multiplication & Division	Times Tables
	Multiply: 2-Digit by 1-Digit
	Multiplication Properties
	Multiply More Multiples of 10
	Mental Methods Multiplication 1
	Mental Methods Multiplication 2
	Multiply 2 Digits Area Model
	Multiply 3 single-digit numbers
	Double and Halve to Multiply
Topics	Skill Quests
Multiplication facts to 9×9	Multiplication facts for 2
	Multiplication facts for 3
	Multiplication facts for 4
	Multiplication facts for 5

	Multiplication facts for 6
	Multiplication facts for 7
	Multiplication facts for 8
	Multiplication facts for 9
	Multiplying by 1 or 0
	Recalling multiplication facts to 9×9
	Relationship between multiplication & division
Multiply 2-digits by up to 2-digits	Multiplying 2-digits by 2-digits, area model
	Multiplying 2-digits by 2-digits, factoring
	Multiplying 2-digits by 2-digits, use known facts
Mental strategies to multiply	Multiplying by multiples of 10, 100 & 1000
	Multiplying using doubling
	Multiplying using doubling & halving
	Multiplying using distributive property

N5.3 Demonstrate, with and without concrete materials, an understanding of division (3-digit by 1-digit) and interpret remainders to solve problems.	
Course Topics	Activities
Number-Multiplication & Division	Division Facts 1
	Remainders by Arrays
	Remainders by Tables
	Divide: 1-Digit Divisor 2
	Fact Families: Multiply and Divide
	Divide: 1-Digit Divisor, Remainder
	Divide: 1-Digit Divisor 1
	Divide: 2-Digit Divisor, Remainder
Topics	Skill Quests
Divide up to 3-digits by 1-digit	Dividing up to 3-digit by 1-digit, no remainders
	Dividing by partitioning, no remainders
	Dividing 3-digits by 1-digit, factoring
	Finding the remainder, 2 digits by 1 digit
	Dividing by partitioning with remainders
Division facts to $81 \div 9$	Dividing by 2 & 5
	Dividing by 3 & 6
	Dividing by 4 & 8
	Dividing by 9
	Recall multiplication & division facts to 9×9

N5.4	
Develop and apply personal strategies for estimation and computation including: front-end rounding, compensation, compatible numbers.	
Course Topics	Activities
Number-Estimation & Computation	Rounding Numbers
	Estimation: Add and Subtract
	Estimate Sums
	Estimation: Multiply and Divide
	Estimate Products
	Estimate Differences
	Estimate Quotients
	Rounding Numbers for Division
	Compensation - Add
	Compensation - Subtract
Topics	Skill Quests
Strategies for estimation & computation	Rounding numbers up to 6-digits
	Round numbers to estimate - addition & subtraction
	Using compensation to add & subtract
	Checking calculations when adding & subtracting
	Round numbers to estimate - multiply & divide
	Checking calculations when multiplying & dividing

N5.5	
Demonstrate an understanding of fractions by using concrete and pictorial representations to: create sets of equivalent fractions, compare fractions with like and unlike denominators.	
Course Topics	Activities
Number-Fractions	Shading Equivalent Fractions
	Equivalent Fraction Wall 1
	Comparing Fractions 1
	Comparing Fractions 2
	Equivalent Fractions on a Number Line 1
	Equivalent Fractions on a Number Line 2
	Equivalent Fraction Wall 2
Topics	Skill Quests
Equivalent fractions	Finding equivalent fractions with models
	Finding equivalent fractions using multiplication
	Finding equivalent fractions using a number line
Compare & order fractions	Comparing unit fractions, different denominators
	Comparing & ordering proper fractions

N5.6 Demonstrate understanding of decimals to thousandths by: describing and representing, relating to fractions, comparing and ordering.	
Course Topics	Activities
Number-Decimals	Comparing Decimals
	Decimals on a Number Line=
	Decimals from Words to Digits 2
	Decimal Place Value
Topics	Skill Quests
Decimals to thousandths	Understanding decimals to thousandths
	Comparing & ordering decimals to thousandths
	Partitioning decimal numbers to thousandths
	Relating fractions & decimals up to thousandths

N5.7 Demonstrate an understanding of addition and subtraction of decimals (limited to thousandths).	
Course Topics	Activities
Number-Decimals	Adding Decimals
	Subtracting Decimals
	Adding and Subtracting Decimals
	Estimate Decimal Differences 1
	Estimate Decimal Sums 1
	Estimate Decimal Operations
	Decimal Complements
Topics	Skill Quests
Add & subtract decimals to thousandths	Adding decimals to thousandths
	Subtracting decimals to thousandths
	Adding & subtracting decimal word problems
	Estimating sums & differences to thousandths

2 Patterns and Relations

2.1 Patterns and Relations

P5.1	
Represent, analyse, and apply patterns using mathematical language and notation.	
Course Topics	Activities
Patterns and Relations	Describing Patterns
Topics	Skill Quests
Represent, analyze & apply patterns	Additive & subtractive number patterns
	Generating add/subtract patterns from a given rule
	Working with repeating number & shape patterns
	Multiplication & division number patterns
	Modelling number patterns from a table of values
	Writing pattern rules as algebraic expressions
	Working with shape patterns & rules
	Solving one-step equations using a bar model

P5.2	
Write, solve, and verify solutions of single-variable, one-step equations with whole number coefficients and whole number solutions.	
Course Topics	Activities
Patterns and Relations	Missing Values
	Find the Missing Number 1
	I am Thinking of a Number!
	Missing Numbers: Variables
Topics	Skill Quests
One-step equations with variables	Writing one-step equations using variables
	Solving one-step equations & word problems

3 Shape and Space

3.1 Shape and Space

SS5.1	
Design and construct different rectangles given either perimeter or area, or both (whole numbers), and draw conclusions.	
Course Topics	Activities
Length, Area and Perimeter	Area of Shapes
	Equal Areas
	Perimeter of Shapes
	Perimeter
	Perimeter: Squares and Rectangles
	Calculate Perimeter of Squares and Rectangles
	Perimeter Detectives 1
Topics	Skill Quests
Perimeter of rectangles	Introducing perimeter
Area of rectangles, formula	Finding the area of rectangles, formula
Relationship between area & perimeter	Solving perimeter & area problems

SS5.2	
Demonstrate understanding of measuring length (mm) by: selecting and justifying referents for the unit mm, modelling and describing the relationship between mm, cm, and m units.	
Course Topics	Activities
Length, Area and Perimeter	Centimetres and Metres
	Converting cm and mm
	Converting Units of Length
	Which unit of Measurement?
Topics	Skill Quests
Measure length in millimetres	Introducing millimetres
	Recording length in decimal notation
Relationship between mm, cm & m	Comparing & ordering lengths in mm & cm
	Converting between mm & cm
	Converting between m & cm
	Selecting appropriate units of length: mm, cm & m

SS5.3	
Demonstrate an understanding of volume by: selecting and justifying referents for cm^3 or m^3 units, estimating volume by using referents for cm^3 or m^3 , measuring and recording volume (cm^3 or m^3), constructing rectangular prisms for a given volume.	
Course Topics	Activities
Volume and Capacity	Comparing Volume
	How many Blocks?
Topics	Skill Quests
Measure volume in cubic units	Introducing volume
	Using cubic cm & m to measure volume
	Estimating volume using cubic cm & m

SS5.4	
Demonstrate an understanding of line symmetry by: identifying symmetrical 2-D shapes, creating symmetrical 2-D shapes, drawing one or more lines of symmetry in a 2-D shape.	
Course Topics	Activities
Volume and Capacity	Millilitres and Litres
	Comparing Volume
	Litre Conversions
	using a Litre
Topics	Skill Quests
Measure capacity in L & mL	Introducing litres & millilitres
	Using millilitres & litres as references
	Measuring capacity in mL
	Estimating capacity using mL & L
	Selecting units to measure capacity (mL, L)

SS5.5	
Describe and provide examples of edges and faces of 3-D objects, and sides of 2-D shapes that are: parallel, intersecting, perpendicular, vertical, horizontal.	
Course Topics	Activities
2D Shapes and 3D Objects	What Line am I?
	Faces, Edges and Vertices
Topics	Skill Quests
Features of 2-D shapes & 3-D objects	Identifying features on 3-D objects
	Identifying features on 2-D objects

SS5.6	
Identify and sort quadrilaterals, including: rectangles, squares, trapezoids, parallelograms, rhombuses according to their attributes.	
Course Topics	Activities
2D Shapes and 3D Objects	Collect the Objects 2
Topics	Skill Quests
Identify & sort quadrilaterals	Sorting & naming quadrilaterals
	Classifying quadrilaterals

SS5.7 Identify, create, and analyze single transformations of 2-D shapes (with and without the use of technology).	
Course Topics	Activities
2D Shapes and 3D Objects	Transformations
	Flip, Slide, Turn
Topics	Skill Quests
Single transformations of 2-D shapes	Introducing slides/translations
	Introducing flips/reflections
	Introducing turns/rotations
	One-step translations, reflections & rotations

4 Statistics and Probability

4.1 Statistics and Probability

SP5.2 Construct and interpret double bar graphs to draw conclusions.	
Course Topics	Activities
Statistics and Probability	Reading from a Column Graph
Topics	Skill Quests
Double bar graphs	Interpreting data, double bar graphs
	Representing data, double bar graphs

SP5.3 Describe, compare, predict, and test the likelihood of outcomes in probability situations.	
Course Topics	Activities
Statistics and Probability	Possible Outcomes
	What are the Chances?
	Most Likely and Least Likely
	Probability Scale
	Counting Techniques 1
	Fair Games
Topics	Skill Quests
Probability	Exploring the language of probability
	Describing chances of everyday events
	Understanding chance experiments, equal outcomes
	Understanding chance experiments, unequal outcomes
	Understand chance experiments, independent events

Grade 6

1 Number

1.1 Number

N6.1 Demonstrate understanding of place value including: greater than one million, less than one thousandth with and without technology	
Course Topics	Activities
Number-Place Value, Integers	Place Value to Millions
	Multiply Decimals: 10, 100, 1000
	Divide Decimals: 10, 100, 1000
	Numbers from Words to Digits 2
	Place Value to Billions
	Numbers from Words to Digits 3
	Decimals from Words to Digits 2
	Decimal Place Value
Topics	Skill Quests
Place value to billions	Reading & writing numbers up to billions Identifying place value up to billions
Place value smaller than thousandths	Understanding place value smaller than thousandths
Situational questions	Situational questions, larger than one million
	Situational questions, smaller than one thousandth

N6.2 Demonstrate understanding of factors and multiples (concretely, pictorially, and symbolically) including: determining factors and multiples of numbers less than 100, relating factors and multiples to multiplication and division, determining and relating prime and composite numbers.	
Course Topics	Activities
Factors and Multiples	Multiples
	Prime or Composite?
	Greatest Common Factor
	Least Common Multiple
	Product of Prime Factors
	Factors
	Find the Factor
	Divisibility - Tests
Topics	Skill Quests
Prime & composite numbers	Introducing prime & composite numbers
Prime factors	Using prime factors
Factors & multiples	Finding multiples up to 100, including LCM
	Finding factors up to 100, including GCF
	Situational questions, factors & multiples

N6.3	
Demonstrate understanding of the order of operations on whole numbers (excluding exponents) with and without technology.	
Course Topics	Activities
Number-Place Value, Integers	Order of Operations 1 (BEDMAS)
	Ordering Integers
	Comparing Integers
	Integers on a Number Line
	Integers: Order of Operations (BEDMAS)
Topics	Skill Quests
Order of operations with whole numbers	Order of operations, addition & subtraction
	Order of operations, multiplication & division
	Order of operations, 4 operations
	Order of operations, grouping symbols
	Situational questions, order of operations

N6.4	
Extend understanding of multiplication and division to decimals (1-digit whole number multipliers and 1-digit natural number divisors).	
Course Topics	Activities
Decimals, Fractions, Percents & Ratios	Divide by Powers of 10
	Decimal by Whole Number
	Divide Decimal by Whole Number
	Multiply Decimals and Powers of 10
Topics	Skill Quests
Multiply decimals to thousandths	Multiplying decimals & whole numbers
	Multiplying decimals, base 10 blocks
	Situational questions, multiplying decimals
Divide decimals to thousandths	Dividing decimals, base 10 blocks
	Dividing whole numbers & decimals
	Situational questions, dividing decimals

N6.5 Demonstrate understanding of percent (limited to whole numbers to 100) concretely, pictorially, and symbolically.	
Course Topics	Activities
Decimals, Fractions, Percents & Ratios	Fractions to Decimals
	Percent of a Number
	Decimal to Percentage
	Percents and Decimals
	Percents to Fractions
	Modelling Percentages
Topics	Skill Quests
Whole number percentages	Introducing percentages
Percentage equivalents	Representing percentage & fraction equivalents
	Representing percentage & decimal equivalents
	Fraction, decimal & percentage equivalents
Calculate percentage discounts	Calculating percentage discounts
Calculate percentages of whole numbers	Calculating simple percentages

N6.6 Demonstrate understanding of integers concretely, pictorially, and symbolically.	
Course Topics	Activities
Number-Place Value, Integers	Order of Operations 1 (BEDMAS)
	Ordering Integers
	Comparing Integers
	Integers on a Number Line
Topics	Skill Quests
Read & represent integers	Investigating integers
	Understanding integers in real-life contexts
	Comparing & ordering integers

N6.7 Extend understanding of fractions to improper fractions and mixed numbers.	
Course Topics	Activities
Decimals, Fractions, Percents & Ratios	Mixed to Improper
	Improper to Mixed
	What Mixed Number Is Shaded?
	Identifying fractions beyond 1
	Mixed and Improper Fractions on a Number Line
Topics	Skill Quests
Improper fractions & mixed numbers	Comparing & ordering mixed numbers
	Comparing & ordering improper fractions
	Comparing & ordering fractions & mixed numbers
	Converting improper fractions to mixed numbers
	Converting mixed numbers to improper fractions

N6.8 Demonstrate an understanding of ratio concretely, pictorially, and symbolically	
Course Topics	Activities
Decimals, Fractions, Percents & Ratios	Ratios
	Ratio Word Problems
	Simplify Ratios: 2 Whole Numbers
Topics	Skill Quests
Introduction to ratios	Introducing ratios
	Simplifying ratios
	Dividing a quantity into a given ratio
	Identifying equivalent ratios

N6.9 Research and present how First Nations and Métis peoples, past and present, envision, represent, and use quantity in their lifestyles and worldviews.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Teacher directed	

2 Patterns and Relationships

2.1 Patterns and Relationships

P6.1	
Extend understanding of patterns and relationships in tables of values and graphs.	
Course Topics	Activities
Patterns and Relationships	Table of Values
	Find the Missing Number 2
	Missing Values: Decimals
	Graphing from a Table of Values
	Writing Algebraic Expressions
	Write an Equation: Word Problems
	Venn Diagram1
Topics	Skill Quests
Patterns in tables of values & graphs	Creating a table of values, visual pattern
	Determining missing values in a table of values
	Representing linear patterns, tables & graphs

P6.2	
Extend understanding of preservation of equality concretely, pictorially, physically, and symbolically.	
Course Topics	Activities
Teacher directed	
Topics	Skill Quests
Preservation of equality	Solving 1-step equations
	Solving 1-step equations using a balance
	Solving 1-step equations using algebra tiles
	Understanding the preservation of equality
	Creating equivalent forms of an equation

P6.3	
Extend understanding of patterns and relationships by using expressions and equations involving variables.	
Course Topics	Activities
Patterns and Relationships	Writing Equations
Topics	Skill Quests
Patterns, expressions & equations	Writing an equation to represent a table of values
	Writing expressions, rule for a pattern

3 Shape and Space

3.1 Shape and Space

SS6.1	
Demonstrate understanding of angles including: identifying examples, classifying angles, estimating the measure, determining angle measures in degrees, drawing angles, applying angle relationships in triangles and quadrilaterals.	
Course Topics	Activities
Shape and Space	What Type of Angle?
	Classifying Angles
	Measuring Angles
	Labelling Angles
	Angle Sum of a Triangle
	Angle Measures in a Triangle
	Angle Sum of a Quadrilateral
Topics	Skill Quests
Angle measurement & classification	Classifying angles
	Finding the missing angle of a triangle
	Finding the missing angle of a quadrilateral
Angles up to 360°	Measuring angles with a circular protractor

SS6.2	
Extend and apply understanding of perimeter of polygons, area of rectangles, and volume of right rectangular prisms (concretely, pictorially, and symbolically) including: relating area to volume, comparing perimeter and area, comparing area and volume, generalizing strategies and formulae, analyzing the effect of orientation, solving situational questions.	
Course Topics	Activities
Shape and Space	Perimeter: Squares and Rectangles
	Perimeter: Triangles
	Area: Squares and Rectangles
	Volume: Rectangular Prisms 1
	Perimeter: Composite Shapes
	Perimeter Detectives 1
	Perimeter Detectives 2
Topics	Skill Quests
Relationships between area & perimeter	Solving perimeter & area problems
Volume of rectangular prisms	Finding the volume of rectangular prisms
	Finding the missing dimension, rectangular prisms
Area of rectangles	Finding the area of rectangles
Perimeter of polygons	Determining the perimeter of polygons

SS6.3 Demonstrate understanding of regular and irregular polygons including: classifying types of triangles, comparing side lengths, comparing angle measures, differentiating between regular and irregular polygons, analyzing for congruence.	
Course Topics	Activities
Shape and Space	Triangle Tasters
	Congruent Figures
	Triangles: Acute, Right, Obtuse
Topics	Skill Quests
Regular & irregular polygons	Understanding regular & irregular polygons
Triangles	Classifying triangles by their sides & angles

SS6.4 Demonstrate understanding of the first quadrant of the Cartesian plane and ordered pairs with whole number coordinates.	
Course Topics	Activities
Location and Transformation	Transformations
	Ordered Pairs
	Coordinate Graphs
	Map Coordinates
	Coordinate Graphs: 1st Quadrant
Topics	Skill Quests
The Cartesian plane, 1st quadrant	Plotting points in the first quadrant
	Plotting points that create a shape

SS6.5 Demonstrate understanding of single, and combinations of, transformations of 2-D shapes (with and without the use of technology) including: identifying, describing, performing.	
Course Topics	Activities
Location and Transformation	Transformations: Coordinate Plane
	Rotations: Coordinate Plane
Topics	Skill Quests
Transformations	Translations in the first quadrant
	Reflections in the first quadrant
	Rotations in the first quadrant
	Identifying combinations of transformations

4 Statistics and Probability

4.1 Statistics and Probability

SP6.1	
Extend understanding of data analysis to include: line graphs, graphs of discrete data, data collection through questionnaires, experiments, databases, and electronic media, interpolation and extrapolation.	
Course Topics	Activities
Statistics and Probability	Line Graphs: Interpretation
	Pie Chart Calculations
	Travel Graphs
	Dot Plots
Topics	Skill Quests
Line graphs	Constructing a line graph
	Interpreting data in a line graph
	Continuous vs discrete data
Data collection	Data collection: questionnaires
	Selecting data displays

SP6.2	
Demonstrate understanding of probability by: determining sample space, differentiating between experimental and theoretical probability, determining the theoretical probability, determining the experimental probability, comparing experimental and theoretical probabilities.	
Course Topics	Activities
Statistics and Probability	How many Combinations?
	Simple Probability
	Probability Scale
	Complementary Events
	Find the Probability
Topics	Skill Quests
Theoretical & experimental probability	Comparing observed & expected frequencies
	Probability of 0 and 1
	Predicting the probability of a specific outcome
	Listing the sample space for an event



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