Mathletics Nova Scotia Curriculum

Activities (Courses) and Skill Quests



Grades 1-2

July, 2025



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Kindergarten

1 Number

1.1 Students will be expected to demonstrate number sense.

K.N01	
Students will be expected to s	ay the number sequence by: 1s, from 1 to 20; 1s, starting anywhere
from 1 to 10 and from 10 to 1	
Course Topic	Activities Title
Count to 20	Order Numbers to 10
	Before, After and Between to 20
	Counting Up to 20
	Making Teen Numbers

K.N02	
Students will be expected to recognize, at a glance, and name the quantity represented by	
familiar arrangements of one to five objects or dots.	
Course Topic	Activities Title
Count to 20	Count to 5

K.N03	
Students will be expected to relate a numeral, 1 to 10, to its respective quantity.	
Course Topic	Activities Title
Count to 20	How Many?

K.N04	
Students will be expected to r	epresent and describe numbers 2 to 10 in two parts, concretely and
pictorially	
Course Topic	Activities Title
Count to 20	Matching Numbers to 10

K.N05	
Students will be expected to compare quantities, 1 to 10, using one-to-one correspondence.	
Course Topic	Activities Title
Count to 20	1 More, 2 Less
	Comparing Groups of Objects
	More, Less or the Same to 10

K.N06	
Students will be expected to demonstrate an understanding of counting to 10.	
Course Topic	Activities Title
Count to 20	Order Numbers to 10
	How Many?
	How many dots?

2 Patterns and Relations

2.1 Students will be expected to use patterns to describe the world and solve problems.

K.PR01 Students will be expected to demonstrate an understanding of repeating patterns (two or three elements) by identifying, reproducing, extending, and creating patterns using manipulatives, sounds, and actions.	
Course Topic	Activities Title
Patterns	Complete the Pattern
	Missing it!
	Colour Patterns
	Simple Patterns

3 Measurement

3.1 Students will be expected to use direct and indirect measure to solve problems.

K.G02 Students will be expected to use direct comparison to compare two objects based on a single attribute, such as length, mass, volume, and capacity.	
Course Topic	Activities Title
Measurement	Which Holds More?
	Filling Fast!
	Everyday Length
	Everyday Mass
	Balancing Act
	Same and Different

4 Geometry

4.1 Students will be expected to describe the characteristics of 3-D objects and 2-D shapes and analyze the relationships among them.

K.G01	
Students will be expected to sort 3-D objects using a single attribute.	
Course Topic	Activities Title
3-D objects	Collect the Objects
	Match the Object
	Match the Solid 1
	Match the Solid 2

	K.G02	
Students will be expected to build and describe 3-D objects.		ill be expected to build and describe 3-D objects.
	Course Topic	Activities Title
	Teacher directed	Teacher directed

Grade 1

1 Number

1.1 Students will be expected to demonstrate number sense

1.N01

Students will be expected to say the number sequence by: 1s, forward and backward between any two given numbers, 0 to 100; 2s to 20, forward starting at 0; 5s to 100, forward starting at 0, using a hundred chart or a number line; 10s to 100, forward starting at 0, using a hundred chart or a number line.

Skill Quests	Skills
Number sequences to 100	Counting by 1s to 100
	Skip counting by 2s to 20
	Skip counting by 5s to 100
	Skip counting by 10s to 100
	Skip counting by 2s, 5s & 10s
Course Topic	Activities Title
Numbers to 100	1 to 30
	The Number Line
	Counting by Fives
	Counting by Tens
	Count by 2s, 5s and 10s
	Going Up
	Going Down
Compare & order to 20	Order Numbers to 20
	Before, After and Between to 20
	Number Line Order

1.N02 Students will be expected to recognize, at a glance, and name the quantity represented by familiar arrangements of one to ten objects or dots.

Skill Quests	Skills
Teacher directed	Teacher directed
Course Topic	Activities Title
Numbers to 100	How Many?
Compare & order to 20	Matching Numbers to 10

1.N03 Students will be expected to demonstrate an understanding of counting to 20 by: indicating that the last number said identifies "how many"; showing that any set has only one count; using the counting-on strategy.	
Skill Quests	Skills
Counting strategies	Sequencing numbers to 20
	Counting collections to 20
Course Topic	Activities Title
Compare & order to 20	Matching Numbers to 10
	Matching Numbers to 20
	Before, After and Between to 20

1.N04	
Students will be expected to represent and partition numbers to 20.	
Skill Quests	Skills
Represent & partition numbers to 20	Represent & partition numbers to 20
Course Topic	Activities Title
Numbers to 100	Making Numbers Count
Compare & order to 20	Making Teen Numbers

1.N05	
Students will be expected to compare sets containing up to 20 objects to solve problems using	
referents and one-to-one correspondence.	
Skill Quests	Skills
Compare & order sets up to 20	Comparing & ordering sets up to 20
	Exploring change in quantity up to 20
Course Topic	Activities Title
Compare & order to 20	Picture Graphs: More or Less
	Comparing Groups of Objects

1.N06	
Students will be expected to estimate quantities to 20 by using referents.	
Skill Quests	Skills
Teacher directed	Teacher directed
Course Topic	Activities Title
Teacher directed	Teacher directed

1.N07

Students will be expected to demonstrate an understanding of conservation of number for up to 20 objects.

Skill Quests	Skills
Conservation of numbers to 20	Conservation of numbers to 20
	Skip counting by 2s to 20
	Skip counting by 5s to 100
Course Topic	Activities Title
Teacher directed	Teacher directed

1.N08

Students will be expected to identify the number, up to 20, that is one more, two more, one less, and two less than a given number.

Skill Quests	Skills	
Numbers more than & less than	Numbers more than & less than	
Course Topic	Activities Title	
Numbers to 100	Counting Forward	
Compare & order to 20	1 More, 2 Less	

1.N09

Students will be expected to demonstrate an understanding of the addition of two one-digit numbers and the corresponding subtraction, concretely, pictorially, and symbolically, in join, separate, equalize/compare, and part-part-whole situations.

Skill Quests	Skills
Add & subtract two 1-digit numbers	Adding & subtracting two 1-digit numbers
Course Topic	Activities Title
Compare & order to 20	Balance Numbers to 10
	Balance Numbers to 20
Addition to 20	Adding to Ten
	Model Addition
	Adding to 10 Word Problems
	Addition Facts
	Addictive Addition
	Composing Additions to 20
	Adding to make 5 and 10
	Doubles and Halves to 10
	Doubles and Halves to 20
	Doubles and Near Doubles
Subtraction within 20	Subtract Tens
	Subtracting from Ten
	Subtraction facts to 18
	Subtracting from 20
	Simple Subtraction
	Model Subtraction

All about Ten
All about Twenty
Add and Subtract Using Graphs
Fact Families: Add and Subtract
Related Facts 1

1.N10

Students will be expected to use and describe strategies to determine sums and differences using manipulatives and visual aids. Strategies include: counting on or counting back; one more or one less; making ten; doubles or near doubles.

less; making ten; doubles or near doubles.	
Skill Quests	Skills
Number bonds to 10	Recognizing & recalling bonds to 10
	Doubles up to 10 + 10
Add & subtract using doubles	Adding using doubles
	Subtracting using doubles
Add & subtract using near doubles	Adding & subtracting using doubles
Course Topic	Activities Title
Addition to 20	Adding to Ten
	Model Addition
	Adding to 10 Word Problems
	Addition Facts
	Addictive Addition
	Composing Additions to 20
	Adding to make 5 and 10
	Doubles and Halves to 10
	Doubles and Halves to 20
	Doubles and Near Doubles
Subtraction within 20	Subtract Tens
	Subtracting from Ten
	Subtraction facts to 18
	Subtracting from 20
	Simple Subtraction
	Model Subtraction
	All about Ten
	All about Twenty
	Add and Subtract Using Graphs
	Fact Families: Add and Subtract
	Related Facts 1

2 Patterns and Relations

2.1 Students will be expected to use patterns to describe the world and solve problems.

1.PR01 Students will be expected to demonstrate an understanding of repeating patterns (two to four elements) by identifying, describing, reproducing, extending, and creating patterns using manipulatives, diagrams, sounds, and actions.	
Skill Quests	Skills
Repeating patterns	Recognizing repeating patterns
	Reproducing repeating patterns
	Manipulating repeating patterns
	Extending repeating patterns
	Replicating repeating patterns
	Describing creating repeating patterns
Course Topic	Activities Title
Patterns	Simple Patterns
	Missing it!
	Pattern Error
	Colour Patterns
	Increasing Patterns
	Decreasing Patterns

1.PR03	
Students will be expected to describe equality as a balance and inequality as an imbalance,	
concretely and pictorially (0 to 20).	
Skill Quests	Skills
Equality inequality	Exploring equality inequality
Course Topic	Activities Title
Patterns	Balancing Act
	More, less or the same to 10
	More, less or the same to 20

1.PR04	
Students will be expected to record equalities using the equal symbol.	
Skill Quests	Skills
Record equalities	Recording equalities
	Solving addition subtraction equality problems
Course Topic	Activities Title
Teacher directed	Teacher directed

3 Measurement

3.1 Students will be expected to use direct and indirect measure to solve problems.

1.M01	
Students will be expected to demonstrate an understanding of measurement as a process of	
comparing by: identifying attributes that can be compared; ordering objects; making statements	
of comparison; filling, covering, or matching.	
Skill Quests	Skills
Measurement	Exploring length
	Exploring area
	Exploring volume
	Exploring mass
Course Topic	Activities Title
Measurement	Biggest Shape
	Filling Fast!
	Which Holds More?
	Everyday Length
	Sort It

4 Geometry

4.1 Students will be expected to describe the characteristics of 3-D objects and 2-D shapes and analyze the relationships among them.

1.G01 Students will be expected to sort 3-D objects and 2-D shapes using one attribute and explain the sorting rule.	
Skill Quests	Skills
Sort 2-D shapes & 3-D objects	Sorting 2-D shapes
	Sorting 3-D objects
Course Topic	Activities Title
2-D shapes & 3-D objects	Collect the Shapes
	Collect Simple Shapes
	Collect the Objects

1.G02	
Students will be expected to replicate composite 2-D shapes and 3-D objects.	
Skill Quests	Skills
Replicate composite 2-D shapes	Replicating composite 2-D shapes
Replicate composite 3-D objects	Replicating composite 3-D objects
Course Topic	Activities Title
2-D shapes & 3-D objects	Match the Object
	Match the Solid 1

1.G03	
Students will be expected to identify 2-D shapes in 3-D objects.	
Skill Quests	Skills
Compare 2-D shapes to 3-D	Comparing 2-D shapes to parts of 3-D objects
objects	
Course Topic	Activities Title
2-D shapes & 3-D objects	Relate Shapes and Solids

Grade 2

1 Number

1.1 Students will be expected to demonstrate number sense.

2.N01	
Students will be expected to say the number sequence by: 1s, forward and backward, starting	
from any point to 200; 2s, forward and backward, starting from any point to 100; 5s and 10s,	
forward and backward, using starting points that are multiples of 5 and 10 respectively to 100;	
,	10s, starting from any point, to 100.
Skill Quests	Skills
Number sequences	Counting by 1s to 200
	Counting by 2s to 100
	Counting by 2s to 100 from any number
	Counting by 5s to 100
	Counting by 10s to 100
	Counting by 10s to 100 from any number
	Counting in 2s, 5s or 10s
	Counting a sum of money to 100¢
Course Topic	Activities Title
Count in 2s, 5s & 10s	Counting by Twos
	Counting by Fives
	Counting by Tens
	Count by 2s, 5s and 10s
	Counting on a 100 grid
	Skip Counting
	Skip Counting with coins
	Going Up
	Going Down
	Reading Numbers to 30

2.N02	
Students will be expected to demonstrate if a number (up to 100) is even or odd.	
Skill Quests	Skills
Even odd numbers	Even odd numbers to 20
	Even odd numbers to 100
Course Topic	Activities Title
Compare & order to 100	Odd or Even
	Odd and Even Numbers 1

2.N04		
Students will be	Students will be expected to represent and partition numbers to 100.	
Skill Quests	Skills	
Represent and partition	Represent and partition numbers to 100	
numbers to 100	Counting to 100	
	Numbers to 100 using a tally	
	Using coins to represent numbers to 100	
Recognize number names to	Number names to 20	
100	Number names to 50	
	Number names to 100	
Course Topic	Activities Title	
Compare & order to 100	Place value 1	
	Making Numbers Count	
	Making Big Numbers Count	
	Make Numbers Count	

2.N05	
Students will be expected to compare and order numbers up to 100.	
Skill Quests	Skills
Compare and order numbers to	Comparing and ordering numbers to 100
100	Identifying numbers before and after up to 100
Course Topic	Activities Title
Compare & order to 100	Number Line Order
	Greater or Less to 100
	Before, After & Between to 100
	Arranging Numbers

2.N06	
Students will be expected to estimate quantities to 100 by using referents.	
Skill Quests	Skills
Teacher directed	Teacher directed
Course Topic	Activities Title
Subtraction within 100	Repartition to Subtract

2.N07 Students will be expected to illustrate, concretely and pictorially, the meaning of place value for numerals to 100.	
Skill Quests	Skills
Place value partitioning up to	Place value partitioning of numbers to 50
100	Non-standard partitioning of numbers to 100
Count collections to 100	Counting collections to 50
	Counting collections to 100
Solve 2-digit place value	Solving problems using place value
problems	
Course Topic	Activities Title

Compare & order to 100	Place value 1
	Making Numbers Count
	Making Big Numbers Count
	Make Numbers Count
	Repartition Two-digit Numbers

2.N08	
Students will be expected to demonstrate and explain the effect of adding zero to or subtracting	
zero from any number.	
Skill Quests	Skills
Add & subtract a zero	Adding a zero
	Subtracting a zero
Course Topic	Activities Title
Compare & order to 100	Concept of zero

2.N09

Students will be expected to demonstrate an understanding of addition (limited to 1- and 2-digit numerals) with answers to 100 and the corresponding subtraction by: using personal strategies for adding and subtracting with and without the support of manipulates; creating and solving problems that involve addition and subtraction; explaining and demonstrating that the order in which numbers are added does not affect the sum; explaining and demonstrating that the order in which numbers are subtracted matters when finding a difference.

Skill Quests	Skills
Addition within 100	Adding 2-digit & 1-digit numbers using place value
	Adding by bridging to 10 with 2 & 1-digit numbers
	Adding tens to a 2-digit number using models
	Adding two 2-digit numbers using place value
	Adding two 2-digit numbers using a number line
	Adding by compensating
	Adding using compatible numbers
	Using number bonds to 100
Subtraction within 100	Subtracting by bridging to 10
	Subtracting 2 & 1-digit numbers using place value
	Subtracting using mixed strategies
	Subtracting tens from a 2-digit number
	Subtracting two 2-digit numbers using place value
	Subtracting two 2-digit numbers, number line
	Subtracting by compensating
Addition & subtraction within	Adding up to find the difference
100	Add/subtract place value patterns
	Add/subtract using mixed strategies
	Add/subtract two 2-digit numbers using place value
	Solving addition & subtraction word problems
	Number sentences to solve word problems
	Estimating sums & differences
	Judging the reasonableness of answers
Course Topic	Activities Title

Addition to 100	Add Three 1-Digit Numbers
	Commutative Property of Addition
	Adding In Any Order
	Complements to 10, 20, 50
	Add Two 2-Digit Numbers
	Adding to 2-digit numbers
	Columns that Add
	Bar Model Problems 1
	Model Addition
Subtraction within 100	Subtract Numbers
	Subtract Numbers: Regroup
	Magic Mental Subtraction
	Columns that Subtract

2.N10

Students will be expected to apply mental mathematics strategies to quickly recall basic addition facts to 18 and determine related subtraction facts.

facts to 18 and determine related subtraction facts.	
Skill Quests	Skills
Addition & subtraction to 18	Addition & subtraction to 18
	Adding using doubles
	Subtracting using doubles
	Adding doubles or near doubles
	Finding fact families for addition & subtraction
	Using the commutative property of addition
	Counting on by bridging to 10
	Addition & subtraction facts — word problems
Course Topic	Activities Title
Addition to 100	Magic Mental Addition
	Addictive Addition
	Related Facts 1
	Doubles and Halves to 10
	Doubles and Halves to 20
	Doubles and Near Doubles
	Add 3 Numbers Using Bonds to 10
Subtraction within 100	Simple Subtraction

2 Patterns and Relations (Patterns)

2.1 Students will be expected to use patterns to describe the world and solve problems.

2.PR01	
Students will be expected to demonstrate an understanding of repeating patterns (three to five	
elements) by describing, extending, comparing, and creating, patterns using manipulatives,	
diagrams, sounds, and actions.	
Skill Quests	Skills
Explore repeating patterns	Creating & extending repeating patterns
	Identifying repeating patterns
	Numeric patterns
Course Topic	Activities Title
Patterns	Simple Patterns
	Colour Patterns
	Pattern Error

2.PR02		
Students will be expected to demonstrate an understanding of increasing patterns by describing,		
extending, and creating num	extending, and creating numerical patterns (numbers to 100) and non-numerical patterns using	
manipulatives, diagrams, sounds, and actions.		
Skill Quests	Skills	
Explore increasing number	Exploring addition & subtraction patterns to 100	
patterns	Exploring patterns to 100 using multiples	
	Connecting objects & symbols to number patterns	
	Exploring growing number patterns up to 100	
Course Topic	Activities Title	
Patterns	Count Backward Patterns	
	Count Forward Patterns	
	Increasing Patterns	
	Decreasing Patterns	
	Describing Patterns	
	Missing it!	
	Pick the Next Number	
	Find the Missing Number 1	
	I am Thinking of a Number!	

3 Patterns and Relations (Variables and Equations)

3.1 Students will be expected to represent algebraic expressions in multiple ways.

2.PR03	
Students will be expected to demonstrate and explain the meaning of equality and inequality by	
using manipulatives and diagrams (0 to 100).	
Skill Quests	Skills
Equality & inequality	Introducing equality & inequality
Course Topic	Activities Title
Patterns	Balancing Act
	Missing Values

2.PR04 Students will be expected to record equalities and inequalities symbolically, using the equal symbol.	
Skill Quests	Skills
Use the equal & not-equal symbols	Using the equal & not-equal symbols
Course Topic	Activities Title
Patterns	Compare Numbers to 100
	Compare Numbers to 20

4 Shape and Space (Measurement)

4.1 Use direct and indirect measurement to solve problems.

2.M01 Students will be expected to demonstrate an understanding of the calendar and the relationships among days, weeks, months, and years.	
Skill Quests	Skills
Explore the passing of time	Calendars
	Days of the week & months of the year
Course Topic	Activities Title
Time: Calendars	Using a Calendar
	Days of the Week
	Months of the Year

5 Measurement

5.1 Students will be expected to use direct and indirect measure to solve problems.

2.M02	
Students will be expected to relate the size of a unit of measure to the number of units (limited to	
non-standard units) used to measure length and mass.	
Skill Quests	Skills
Non-standard measurement	Non-standard measurement of length
	Non-standard measurement of mass
Course Topic	Activities Title
Teacher directed	Teacher directed

2.M03	
Students will be expected to compare and order objects by length, height, distance around, and	
mass using non-standard units and make statements of comparison.	
Skill Quests	Skills
Compare & order objects	Comparing & ordering objects by length
	Comparing & ordering objects by mass
Course Topic	Activities Title
Length	Everyday Length
	Comparing Length
	Everyday Mass

2.M04 Students will be expected to measure length to the nearest non-standard unit by using multiple copies of a unit.	
Skill Quests	Skills
Measure length using non- standard units	Measuring length using non-standard units
Course Topic	Activities Title
Length	How Long is That?
	Measuring Length with Blocks

6 Geometry

6.1 Students will be expected to describe the characteristics of 3-D objects and 2-D shapes and analyze the relationships among them.

2.G01 Students will be expected to sort 2-D shapes and 3-D objects using two attributes and explain the sorting rule.	
Skill Quests	Skills
Sort 2-D shapes & 3-D objects	Sorting 2-D shapes
	Sorting 3-D objects
Course Topic	Activities Title
Teacher directed	Teacher directed

2.G02 Students will be expected to recognize, name, describe, compare, and build 3-D objects, including cubes and other prisms, spheres, cones, cylinders, and pyramids.		
Skill Quests	Skills	
3-D objects	Introducing cubes	
	Introducing prisms	
	Introducing cylinders	
	Introducing pyramids	
	Introducing cones	
	Introducing spheres	
	Identifying 3-D objects	
	Identifying attributes of 3-D objects	
	Comparing 3-D objects	
Course Topic	Activities Title	
2-D Shapes & 3-D objects	Collect the Shapes 1	
	Collect the Shapes 2	
	Collect the Objects 1	

2.G03	
Students will be expected to recognize, name, describe, compare and build 2-D shapes, including triangles,	
squares, rectangles, and circles.	
Skill Quests	Skills
2-D shapes	Naming 2-D shapes
	Comparing 2-D shapes
Course Topic	Activities Title
2-D Shapes & 3-D objects	Collect the Objects 2

2.G04	
Students will be expected to identify 2-D shapes as part of 3-D objects in the environment.	
Skill Quests	Skills
Identify 2-D shapes in the	Identifying 2-D shapes in the environment
environment	
Course Topic	Activities Title
2-D Shapes & 3-D objects	Match the Solid 2

7 Statistics and Probability

7.1 Students will be expected to collect, display, and analyze data to solve problems.

2.SP01		
Students will be expected to gather and record data about self and others to answer questions.		
Skill Quests	Skills	
Gather & record data	Gathering, sorting & recording data	
Course Topic	Activities Title	
Collect, display & analyze data	Tallies	

2.SP02 Students will be expected to construct and interpret concrete graphs and pictographs to solve problems.		
Skill Quests	Skills	
Interpret data	Using pictographs	
	Using basic graphs	
	Using a tally	
	Making a graph	
	Answering questions about a graph	
Course Topic	Activities Title	
Collect, display & analyze data	Tally Charts	
	Making Picture Graphs: With Scale	
	Pictographs	
	Picture Graphs: Single-Unit Scale	
	Read Graphs	



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