



Mathology 2 Correlation (Number) – Newfoundland and Labrador

Specific Curriculum Outcomes	Mathology Grade 2 Classroom Activity Kit	Mathology Little Books	Pearson Canada K-3 Mathematics Learning Progression
<p>2N1a Say the number sequence from 0 to 100 by:</p> <ul style="list-style-type: none"> • 2s, 5s and 10s, forward and backward, using starting points that are multiples 	<p>Teacher Cards</p> <p>Cluster 1: Counting</p> <p>2: Skip-Counting Forward</p> <p>4: Skip-Counting Backward</p> <p>5: Counting Consolidation</p> <p>Cluster 3: Grouping and Place Value</p> <p>14: Making a Number Line</p> <p>15: Grouping to Count</p> <p>Cluster 5: Number Relationships 2</p> <p>24: Jumping on the Number Line</p> <p>Cluster 9: Financial Literacy</p> <p>43: Estimating Money</p> <p>44: Earning Money</p> <p>46: Saving Regularly</p> <p>Math Every Day Cards</p> <p>1A: Skip-Counting on a Hundred Chart</p> <p>1B: Skip-Counting with Actions What's Wrong? What's Missing?</p> <p>3A: Adding Ten Taking Away Ten</p> <p>3B: Thinking Tens</p> <p>9: Collections of Coins</p>	<ul style="list-style-type: none"> • What Would You Rather? • Ways to Count • Family Fun Day • Array's Bakery <p>To Scaffold:</p> <ul style="list-style-type: none"> • On Safari! • How Many is Too Many? <p>To Extend:</p> <ul style="list-style-type: none"> • Finding Buster • How Numbers Work • Calla's Jingle Dress 	<p>Big Idea: Numbers tell us how many and how much.</p> <p>Applying the principles of counting</p> <ul style="list-style-type: none"> - Fluently skip-counts by factors of 10 (e.g., 2, 5, 10) and multiples of 10 from any given number.
			<p>Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units.</p> <p>Unitizing quantities and comparing units to the whole</p> <ul style="list-style-type: none"> - Partitions into and skip-counts by equal-sized units and recognizes that the results will be the same when counted by ones (e.g., counting a set by 1s or by 5s gives the same result) - Recognizes that, for a given quantity, increasing the number of sets decreases the number of objects in each set. - Recognizes and describes equal-sized sets as units within a larger set.
			<p>Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically.</p>
			<p>Representing and generalizing increasing/decreasing patterns</p> <ul style="list-style-type: none"> - Identifies and extends familiar number patterns and makes connections to addition (e.g., skip-counting by 2s, 5s, 10s).

<p>2N1b Say the number sequence from 0 to 100 by:</p> <ul style="list-style-type: none"> • 10s, using starting points from 1 to 9 	<p>Teacher Cards</p> <p>Cluster 1: Counting 3: Skip-Counting Flexibly</p> <p>Cluster 3: Grouping and Place Value 14: Making a Number Line</p> <p>Math Every Day Cards 1A: Skip-Counting from Any Number 1B: Skip-Counting with Actions 3A: Adding Ten Taking Away Ten 3B: Thinking Tens 9: Collections of Coins</p>	<ul style="list-style-type: none"> • Ways to Count 	<p>Big Idea: Numbers tell us how many and how much.</p> <p>Applying the principles of counting - Fluently skip-counts by factors of 10 (e.g., 2, 5, 10) and multiples of 10 from any given number.</p> <p>Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units.</p> <p>Unitizing quantities into ones, tens, and hundreds place-value concepts - Determines 10 more/less than a given number without counting.</p> <p>Unitizing quantities and comparing units to the whole - Partitions into and skip-counts by equal-sized units and recognizes that the results will be the same when counted by ones (e.g., counting a set by 1s or by 5s gives the same result).</p>
<p>2N1c Say the number sequence from 0 to 100 by:</p> <ul style="list-style-type: none"> • 2s, starting from 1. 	<p>Teacher Card</p> <p>Cluster 1: Counting 3: Skip-Counting Flexibly</p> <p>Math Every Day Card 1A: Skip-Counting from Any Number</p>	<ul style="list-style-type: none"> • Ways to Count 	<p>Big Idea: Numbers tell us how many and how much.</p> <p>Applying the principles of counting - Fluently skip-counts by factors of 10 (e.g., 2, 5, 10) and multiples of 10 from any given number.</p> <p>Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units.</p> <p>Unitizing quantities and comparing units to the whole - Partitions into and skip-counts by equal-sized units and recognizes that the results will be the same when counted by ones (e.g., counting a set by 1s or by 5s gives the same result).</p>
<p>2N2 Demonstrate if a number (up to 100) is even or odd.</p>	<p>Teacher Cards</p> <p>Cluster 2: Number Relationships 1 8: Odd and Even Numbers 12: Number Relationships 1 Consolidation</p> <p>Math Every Day Cards 2A: Show Me in Different Ways Guess My Number 2B: Math Commander</p>	<ul style="list-style-type: none"> • Ways to Count 	<p>Big Idea: Numbers are related in many ways.</p> <p>Comparing and ordering quantities (multitude or magnitude)</p>

<p>2N3 Describe order or relative position, using ordinal numbers (up to tenth).</p>	<p>Teacher Cards Cluster 2: Number Relationships 1 9: Ordinal Numbers 12: Number Relationships 1 Consolidation</p> <p>Math Every Day Card 2B: Math Commander</p>	<p>To Scaffold:</p> <ul style="list-style-type: none"> • At the Corn Farm 	<p>Big Idea: Numbers are related in many ways.</p> <p>Comparing and ordering quantities (multitude or magnitude) - Determines and describes the relative position of objects using ordinal numbers. - Uses ordinal numbers in context.</p> <p>Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units.</p> <p>Unitizing quantities and comparing units to the whole - Partitions and skip-counts by equal-sized units and recognizes that the results will be the same when counted by ones (e.g., counting a set by 1s or by 5s gives the same result).</p>
<p>2N4 Represent and describe numbers to 100, concretely, pictorially and symbolically.</p>	<p>Teacher Cards Cluster 1: Counting 1: Bridging Tens Cluster 2: Number Relationships 1 11: Decomposing to 20 12: Number Relationships 1 Consolidation Cluster 3: Grouping and Place Value 13: Building Numbers 15: Grouping to Count 16: Grouping and Place Value Consolidation Cluster 5: Number Relationships 2 23: Decomposing 50 24: Jumping on the Number Line 25: Number Relationships 2 Consolidation Cluster 9: Financial Literacy 43: Estimating Money 44: Earning Money</p> <p>Math Every Day Cards 2A: Show Me in Different Ways Guess My Number 2B: Building an Open Number Line 5A: Building Numbers 5B: How Many Ways? What's the Unknown Part? 9: Showing Money in Different Ways</p>	<p>• What Would You Rather? • Ways to Count • Family Fun Day • Back to Batoche • A Class-full of Projects • The Money Jar</p> <p>To Scaffold:</p> <ul style="list-style-type: none"> • That's 10! • Canada's Oldest Sport <p>To Extend:</p> <ul style="list-style-type: none"> • Fantastic Journeys • Finding Buster • How Numbers Work • Math Makes Me Laugh • The Street Party 	<p>Big Idea: Numbers tell us how many and how much.</p> <p>Applying the principles of counting - Fluently skip-counts by factors of 10 (e.g., 2, 5, 10) and multiples of 10 from any given number</p> <p>Recognizing and writing numerals - Names, writes, and matches two-digit numerals to quantities.</p> <p>Big idea: Numbers are related in many ways.</p> <p>Decomposing wholes into parts and composing wholes from parts - Decomposes/composes quantities to 20. - Composes two-digit numbers from parts (e.g., 14 and 14 is 28), and decomposes two-digit numbers into parts (e.g., 28 is 20 and 8)</p> <p>Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units.</p> <p>Unitizing quantities into ones, tens, and hundreds place-value concepts - Writes, reads, composes, and decomposes two-digit numbers as units of tens and leftover ones.</p> <p>Unitizing quantities and comparing units to the whole - Partitions into and skip-counts by equal-sized units and recognizes that the results will be the same when counted by ones (e.g., counting a set by 1s or by 5s gives the same result).</p>

<p>2N5 Compare and order numbers up to 100.</p>	<p>Teacher Cards</p> <p>Cluster 1: Counting 1: Bridging Tens</p> <p>Cluster 2: Number Relationships 1 6: Comparing Quantities 7: Ordering Quantities 12: Number Relationships 1 Consolidation</p> <p>Cluster 3: Grouping and Place Value 14: Making a Number Line</p> <p>Math Every Day Cards 2A: Show Me in Different Ways Guess My Number 2B: Building an Open Number Line 5A: Which Ten is Nearer?</p>	<ul style="list-style-type: none"> • What Would You Rather? • Back to Batoche • The Great Dogsled Race <p>To Scaffold:</p> <ul style="list-style-type: none"> • A Family Cookout • At the Corn Farm • How Many is Too Many? <p>To Extend:</p> <ul style="list-style-type: none"> • Fantastic Journeys • Finding Buster • Math Makes Me Laugh • The Street Party • Planting Seeds 	<p>Big idea: Numbers are related in many ways</p> <p>Comparing and ordering quantities (multitude or magnitude)</p> <ul style="list-style-type: none"> - Compares and orders quantities and written numbers using benchmarks. - Determines how many more/less one quantity is compared to another.
<p>2N6 Estimate quantities to 100, using referents.</p>	<p>Teacher Cards</p> <p>Cluster 2: Number Relationships 1 10: Estimating with Benchmarks</p> <p>Cluster 5: Number Relationships 2 22: Benchmarks on a Number Line</p> <p>Cluster 9: Financial Literacy 43: Estimating Money</p>	<ul style="list-style-type: none"> • What Would You Rather? • Ways to Count <p>To Scaffold:</p> <ul style="list-style-type: none"> • A Family Cookout • At the Corn Farm • How Many is Too Many? <p>To Extend:</p> <ul style="list-style-type: none"> • Fantastic Journeys Math Finding Buster • Makes Me Laugh • Planting Seeds • Sports Camp 	<p>Big Idea: Numbers are related in many ways.</p> <p>Estimating quantities and numbers</p> <ul style="list-style-type: none"> - Uses relevant benchmarks to compare and estimate quantities (e.g., more/less than 10; multiples of ten).

<p>2N7 Illustrate, concretely and pictorially, the meaning of place value for numbers to 100.</p>	<p>Teacher Cards Cluster 3: Grouping and Place Value 13: Building Numbers 16: Grouping and Place Value Consolidation</p> <p>Math Every Day Cards 3A: Adding Ten Taking Away Ten 3B: Thinking Tens Describe Me</p>	<ul style="list-style-type: none"> • Back to Batoche • A Class-full of Projects • The Money Jar <p>To Scaffold:</p> <ul style="list-style-type: none"> • At the Corn Farm <p>To Extend:</p> <ul style="list-style-type: none"> • Finding Buster • How Numbers Work 	<p>Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units.</p> <p>Unitizing quantities into ones, tens, and hundreds (place-value concepts) - Writes, reads, composes, and decomposes two-digit numbers as units of tens and leftover ones.</p>
<p>2N8 Demonstrate and explain the effect of adding zero to, or subtracting zero from, any number.</p>	<p>Teacher Cards Cluster 6: Conceptualizing Addition and Subtraction 26: Exploring Properties Cluster 7: Operational Fluency 32: Complements of 10</p>	<p>To Scaffold:</p> <ul style="list-style-type: none"> • That's 10! 	<p>Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.</p> <p>Developing conceptual meaning of addition and subtraction - Uses symbols and equations to represent addition and subtraction situations.</p> <p>Developing fluency of addition and subtraction computation - Fluently adds and subtracts with quantities to 10. - Fluently recalls complements to 10 (e.g., $6 + 4$; $7 + 3$).</p> <p>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</p> <p>Understanding equality and inequality, building on generalized properties of numbers and operations - Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition).</p>

<p>2N9a Demonstrate an understanding of addition (limited to one- and two-digit numerals) with answers to 100 and the corresponding subtraction by:</p> <ul style="list-style-type: none"> using personal strategies for adding and subtracting with and without the support of manipulatives 	<p>Teacher Cards</p> <p>Cluster 3: Grouping and Place Value</p> <p>14: Making a Number Line</p> <p>Cluster 6: Conceptualizing Addition and Subtraction</p> <p>27: Solving Problems 1 28: Solving Problems 2 29: Solving Problems 3 30: Solving Problems 4 31: Conceptualizing Addition and Subtraction Consolidation</p> <p>Cluster 9: Financial Literacy</p> <p>43: Estimating Money 44: Earning Money 46: Saving Regularly</p> <p>Math Every Day Cards</p> <p>3A: Adding Ten Taking Away Ten 7A: I Have... I Need... Hungry Bird</p>	<ul style="list-style-type: none"> Array’s Bakery Marbles, Alleys, Mibs, and Guli! A Class-full of Projects The Money Jar The Great Dogsled Race <p>To Scaffold:</p> <ul style="list-style-type: none"> On Safari! That’s 10! Hockey Time! Cats and Kittens Buy 1 – Get 1 Canada’s Oldest Sport <p>To Extend:</p> <ul style="list-style-type: none"> Math Makes Me Laugh The Street Party Planting Seeds Sports Camp Calla’s Jingle Dress 	<p>Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.</p> <p>Developing conceptual meaning of addition and subtraction</p> <ul style="list-style-type: none"> Uses symbols and equations to represent addition and subtraction situations. Models and symbolizes addition and subtraction problem types (i.e., join, separate, part-part-whole, and compare). <p>Developing fluency of addition and subtraction computation</p> <ul style="list-style-type: none"> Extends known sums and differences to solve other equations (e.g., using $5 + 5$ to add $5 + 6$). <p>Big idea: Numbers are related in many ways</p> <p>Decomposing wholes into parts and composing wholes from parts</p> <ul style="list-style-type: none"> Composes two-digit numbers from parts (e.g., 14 and 14 is 28), and decomposes two-digit numbers into parts (e.g., 28 is 20 and 8)
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<p>2N9b Demonstrate an understanding of addition (limited to one- and two-digit numerals) with answers to 100 and the corresponding subtraction by:</p> <ul style="list-style-type: none"> creating and solving problems that involve addition and subtraction 	<p>Teacher Cards</p> <p>Cluster 6: Conceptualizing Addition and Subtraction</p> <p>27: Solving Problems 1 28: Solving Problems 2 29: Solving Problems 3 30: Solving Problems 4 31: Conceptualizing Addition and Subtraction Consolidation</p> <p>Math Every Day Cards</p> <p>6: What Math Do You See? What Could the Story Be? 7B: Hungry Bird</p>	<ul style="list-style-type: none"> Array’s Bakery Marbles, Alleys, Mibs, and Guli! A Class-full of Projects The Money Jar The Great Dogsled Race <p>To Scaffold:</p> <ul style="list-style-type: none"> On Safari! That’s 10! Hockey Time! Cats and Kittens Buy 1 – Get 1 Canada’s Oldest Sport <p>To Extend:</p> <ul style="list-style-type: none"> Math Makes Me Laugh The Street Party Planting Seeds Sports Camp Calla’s Jingle Dress 	<p>Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.</p> <p>Developing conceptual meaning of addition and subtraction</p> <ul style="list-style-type: none"> Uses symbols and equations to represent addition and subtraction situations. Models and symbolizes addition and subtraction problem types (i.e., join, separate, part-part-whole, and compare). <p>Developing fluency of addition and subtraction computation</p> <ul style="list-style-type: none"> Extends known sums and differences to solve other equations (e.g., using $5 + 5$ to add $5 + 6$). <p>Big idea: Numbers are related in many ways</p> <p>Decomposing wholes into parts and composing wholes from parts</p> <ul style="list-style-type: none"> Composes two-digit numbers from parts (e.g., 14 and 14 is 28), and decomposes two-digit numbers into parts (e.g., 28 is 20 and 8)
<p>2N9c Demonstrate an understanding of addition (limited to one- and two-digit numerals) with answers to 100 and the corresponding subtraction by:</p> <ul style="list-style-type: none"> explaining that the order in which numbers are added does not affect the sum (commutative property) 	<p>Teacher Cards</p> <p>Cluster 6: Conceptualizing Addition and Subtraction</p> <p>26: Exploring Properties</p> <p>Cluster 7: Operational Fluency</p> <p>32: Complements of 10</p>	<ul style="list-style-type: none"> Array’s Bakery Marbles, Alleys, Mibs, and Guli! A Class-full of Projects The Money Jar The Great Dogsled Race <p>To Scaffold:</p> <ul style="list-style-type: none"> That’s 10! 	<p>Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.</p> <p>Developing conceptual meaning of addition and subtraction</p> <ul style="list-style-type: none"> Uses symbols and equations to represent addition and subtraction situations. <p>Developing fluency of addition and subtraction computation</p> <ul style="list-style-type: none"> Fluently adds and subtracts with quantities to 10. Fluently recalls complements to 10 (e.g., $6 + 4$; $7 + 3$). <p>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</p> <p>Understanding equality and inequality, building on generalized properties of numbers and operations</p> <ul style="list-style-type: none"> Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition). <p>Big idea: Numbers are related in many ways</p> <p>Decomposing wholes into parts and composing wholes from parts</p> <ul style="list-style-type: none"> Composes two-digit numbers from parts (e.g., 14 and 14 is 28), and decomposes two-digit numbers into parts (e.g., 28 is 20 and 8)

<p>2N9d Demonstrate an understanding of addition (limited to one- and two-digit numerals) with answers to 100 and the corresponding subtraction by:</p> <ul style="list-style-type: none"> explaining that the order in which numbers are subtracted may affect the difference 	<p>Teacher Cards Cluster 6: Conceptualizing Addition and Subtraction 26: Exploring Properties</p>	<ul style="list-style-type: none"> Array’s Bakery Marbles, Alleys, Mibs, and Guli! A Class-full of Projects The Money Jar The Great Dogsled Race 	<p>Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.</p> <p>Developing conceptual meaning of addition and subtraction - Uses symbols and equations to represent addition and subtraction situations.</p> <p>Developing fluency of addition and subtraction computation - Fluently adds and subtracts with quantities to 10. - Fluently recalls complements to 10 (e.g., $6 + 4$; $7 + 3$).</p> <p>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</p> <p>Understanding equality and inequality, building on generalized properties of numbers and operations - Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition).</p> <p>Big idea: Numbers are related in many ways</p> <p>Decomposing wholes into parts and composing wholes from parts - Composes two-digit numbers from parts (e.g., 14 and 14 is 28), and decomposes two-digit numbers into parts (e.g., 28 is 20 and 8)</p>
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<p>2N10 Apply mental mathematics strategies for the basic addition and related subtraction facts to 18.</p>	<p>Teacher Cards</p> <p>Cluster 2: Number Relationships 1 11: Decomposing to 20 12: Number Relationships 1 Consolidation</p> <p>Cluster 7: Operational Fluency 32: Complements of 10 33: Using Doubles 34: Fluency with 20 36: Operational Fluency Consolidation</p> <p>Cluster 8: Early Multiplicative Thinking 40: Exploring Repeated Addition 42: Early Multiplicative Thinking Consolidation</p> <p>Math Every Day Cards 6: What Math Do You See? 7A: Doubles and Near-Doubles I Have... I Need... 7B: Hungry Bird Make 10 Sequences</p>	<ul style="list-style-type: none"> • Array’s Bakery • Marbles, Alleys, Mibs, and Guli! • A Class-full of Projects • The Money Jar • The Great Dogsled Race • Kokum’s Bannock <p>To Scaffold:</p> <ul style="list-style-type: none"> • On Safari! • That’s 10! • Hockey Time! • Cats and Kittens • Buy 1 – Get 1 • Canada’s Oldest Sport <p>To Extend:</p> <ul style="list-style-type: none"> • Math Makes Me Laugh • Planting Seeds • Sports Camp 	<p>Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.</p> <p>Developing conceptual meaning of addition and subtraction</p> <ul style="list-style-type: none"> - Uses symbols and equations to represent addition and subtraction situations. - Models and symbolizes addition and subtraction problem types (i.e., join, separate, part-part-whole, and compare). <p>Developing fluency of addition and subtraction computation</p> <ul style="list-style-type: none"> - Fluently recalls complements to 10 (e.g., 6 + 4; 7 + 3). - Extends known sums and differences to solve other equations (e.g., using 5 + 5 to add 5 + 6). - Fluently adds and subtracts with quantities to 20. <p>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</p> <p>Understanding equality and inequality, building on generalized properties of numbers and operations</p> <ul style="list-style-type: none"> - Decomposes and combines numbers in equations to make them easier to solve - Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition).
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Mathology 2 Correlation (Patterns and Relations) – Newfoundland and Labrador

Specific Curriculum Outcomes	Mathology Grade 2 Classroom Activity Kit	Mathology Little Books	Pearson Canada K-3 Mathematics Learning Progression
Patterns and Relations (Patterns)			
<p>2PR1 Demonstrate an understanding of repeating patterns (three to five elements) by:</p> <ul style="list-style-type: none"> • describing • reproducing • extending • creating <p>patterns using manipulatives, diagrams, sounds and actions.</p>	<p>Teacher Cards</p> <p>Cluster 1: Repeating Patterns</p> <ol style="list-style-type: none"> 1: Exploring Patterns 2: Extending and Predicting 3: Errors and Missing Elements* 4: Combining Attributes 5: Repeating Patterns Consolidation <p>Math Every Day Card</p> <ol style="list-style-type: none"> 1: Show Another Way Repeating Patterns Around Us <p>*Use Student Cards 3B and 3D to find missing elements, as finding errors is not required by your curriculum.</p>	<ul style="list-style-type: none"> • Pattern Quest <p>To Scaffold:</p> <ul style="list-style-type: none"> • Midnight and Snowfall! 	<p>Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically.</p> <p>Identifying, reproducing, extending, and creating patterns that repeat</p> <ul style="list-style-type: none"> - Identifies the repeating unit (core) of a pattern. - Predicts missing element(s) and corrects errors in repeating patterns. - Reproduces, creates, and extends repeating patterns based on copies of the repeating unit (core). - Represents the same pattern in different ways (i.e., translating to different symbols, objects, sounds, actions). - Compares repeating patterns and describes how they are alike and different. - Recognizes, extends, and creates repeating patterns based on two or more attributes (e.g., shape and orientation). - Identifies the repeating unit of patterns in multiple forms (e.g., circular, 2-D, 3-D).

<p>2PR2 Demonstrate an understanding of increasing patterns by:</p> <ul style="list-style-type: none"> • describing • reproducing • extending • creating <p>numerical (numbers to 100) and non-numerical patterns using manipulatives, diagrams, sounds and actions.</p>	<p>Teacher Cards Cluster 2: Increasing/Decreasing Patterns 6: Increasing Patterns 1 7: Increasing Patterns 2 9: Extending Patterns 10: Reproducing Patterns 11: Creating Patterns 12: Errors and Missing Terms 13: Solving Problems 14: Consolidation</p> <p>Math Every Day Cards 2A: How Many Can We Make? Error Hunt 2B: Making Increasing Patterns</p>	<ul style="list-style-type: none"> • The Best Surprise <p>To Scaffold:</p> <ul style="list-style-type: none"> • Midnight and Snowfall! <p>To Extend:</p> <ul style="list-style-type: none"> • Namir’s Marvellous Masterpieces 	<p>Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically.</p> <p>Representing and generalizing increasing/decreasing patterns</p> <ul style="list-style-type: none"> - Identifies and extends non-numeric increasing/ decreasing patterns (e.g., jump-clap; jump-clap-clap; jump-clap-clap clap, etc.). - Identifies and extends familiar number patterns and makes connections to addition (e.g., skip-counting by 2s, 5s, 10s). - Identifies, reproduces, and extends increasing/ decreasing patterns concretely, pictorially, and numerically using repeated addition or subtraction. - Extends number patterns and finds missing elements (e.g., 1, 3, 5, __, 9, ...). <p>Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.</p> <p>Developing fluency of addition and subtraction computation</p> <ul style="list-style-type: none"> - Fluently adds and subtracts with quantities to 20.
<p>Patterns and Relations (Variables and Equations)</p>			
<p>2PR3 Demonstrate and explain the meaning of equality and inequality by using manipulatives and diagrams (0-100).</p> <p>2PR4 Record equalities and inequalities symbolically, using the equal symbol or the not equal symbol.</p>	<p>Teacher Cards Cluster 3: Equality and Inequality 15: Equal and Unequal Sets 16: Equal or Not Equal? 17: Exploring Number Sentences 20: Equality and Inequality Consolidation</p> <p>Math Every Day Cards 3A: Equal or Not Equal? How Many Ways? 3B: Which One Doesn’t Belong?</p>	<ul style="list-style-type: none"> • Kokum’s Bannock <p>To Scaffold:</p> <ul style="list-style-type: none"> • Nutty and Wolfy <p>To Extend:</p> <ul style="list-style-type: none"> • A Week of Challenges 	<p>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</p> <p>Understanding equality and inequality, building on generalized properties of numbers and operations</p> <ul style="list-style-type: none"> - Compares sets to determine more/less or equal. - Creates a set that is more/less or equal to a given set. - Models and describes equality (balance; the same as) and inequality (imbalance; not the same as). - Records different expressions of the same quantity as equalities (e.g., $2 + 4 = 5 + 1$). <p>Using symbols, unknowns, and variables to represent mathematical relations</p> <ul style="list-style-type: none"> - Uses the equal (=) symbol in equations and knows its meaning (i.e., equivalent; is the same as). - Understands and uses the equal (=) and not equal (\neq) symbols when comparing expressions.

Mathology 2 Correlation (Shape and Space) – Newfoundland and Labrador

Specific Curriculum Outcomes	Mathology Grade 2 Classroom Activity Kit	Mathology Little Books	Pearson Canada K-3 Mathematics Learning Progression
Shape and Space (Measurement)			
2SS1 Relate the number of days to a week and the number of months to a year in a problem-solving context.	Teacher Cards Measurement Cluster 3: Time and Temperature 13: Days and Weeks 14: Months in a Year Math Every Day Cards 3A: Calendar Questions 3B: Monthly Mix-Up	To Extend: <ul style="list-style-type: none"> Goat Island 	Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons.
			Understanding relationships among measurement units - Understands relationship of units of length (mm, cm, m), mass (g, kg), capacity (mL, L), and time (e.g., seconds, minutes, hours).
			Big Idea: Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared.
			Understanding attributes that can be measured - Explores measurement of visible attributes (e.g., length, capacity, area) and non-visible attributes (e.g., mass, time, temperature)
			Big Idea: Numbers are related in many ways.
Comparing and ordering quantities (multitude or magnitude) - Uses ordinal numbers in context (e.g., days on a calendar: the 3rd of March)			
2SS2 Relate the size of a unit of measure to the number of units (limited to non-standard units) used to measure length and mass.	Teacher Cards Measurement Cluster 1: Using Non-Standard Units 1: Measuring Length 1 4: Measuring Mass	<ul style="list-style-type: none"> The Discovery To Scaffold: <ul style="list-style-type: none"> The Amazing Seed Animal Measures To Extend: <ul style="list-style-type: none"> Goat Island The Bunny Challenge Measurements About YOU! 	Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons
			Understanding relationships among measurement units - Understands the inverse relationship between the size of the unit and the number of units (length, area, capacity, and mass).

<p>2SS3 Compare and order objects by length, height, distance around and mass, using non-standard units, and make statements of comparison.</p>	<p>Teacher Cards Measurement Cluster 1: Using Non-Standard Units 1: Measuring Length 1 2: Measuring Length 2 3: Measuring Distance Around 4: Measuring Mass 7: Using Non-Standard Units Consolidation</p> <p>Math Every Day Card 1: Estimation Scavenger Hunt Estimation Station</p>	<ul style="list-style-type: none"> • Getting Ready for School • The Discovery <p>To Scaffold:</p> <ul style="list-style-type: none"> • The Amazing Seed • Animal Measures <p>To Extend:</p> <ul style="list-style-type: none"> • Goat Island • The Bunny Challenge • Measurements About YOU! 	<p>Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons.</p> <p>Selecting and using non-standard units to estimate, measure, and make comparisons</p> <ul style="list-style-type: none"> - Understands that there should be no gaps or overlaps when measuring. - Demonstrates ways to estimate, measure, compare, and order objects by length, area, capacity, and mass with non-standard units by <ul style="list-style-type: none"> • using an intermediary object • using multiple copies of a unit • iterating a single unit - Selects and uses appropriate non-standard units to estimate, measure, and compare length, area, capacity, and mass. <p>Big Idea: Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared.</p> <p>Understanding attributes that can be measured</p> <ul style="list-style-type: none"> - Understands that some things have more than one attribute that can be measured (e.g., an object can have both length and mass). - Extends understanding of length to other linear measurements (e.g., height, width, distance around).
<p>2SS4 Measure length to the nearest non-standard unit by:</p> <ul style="list-style-type: none"> • using multiple copies of a unit • using a single copy of a unit (iteration process). 	<p>Teacher Cards Measurement Cluster 1: Using Non-Standard Units 1: Measuring Length 1 2: Measuring Length 2 7: Using Non-Standard Units Consolidation</p>	<ul style="list-style-type: none"> • Getting Ready for School • The Discovery <p>To Scaffold:</p> <ul style="list-style-type: none"> • The Amazing Seed • Animal Measures <p>To Extend:</p> <ul style="list-style-type: none"> • Goat Island • The Bunny Challenge • Measurements About YOU! 	<p>Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons.</p> <p>Selecting and using non-standard units to estimate, measure, and make comparisons</p> <ul style="list-style-type: none"> - Understands that there should be no gaps or overlaps when measuring. - Demonstrates ways to estimate, measure, compare, and order objects by length, area, capacity, and mass with non-standard units by <ul style="list-style-type: none"> • using multiple copies of a unit • iterating a single unit
<p>2SS5 Demonstrate that changing the orientation of an object does not alter the measurements of its attributes.</p>	<p>Teacher Card Measurement Cluster 1: Using Non-Standard Units 1: Measuring Length</p>	<p>To Extend:</p> <ul style="list-style-type: none"> • Goat Island • The Bunny Challenge • Measurements About YOU! 	<p>Big Idea: Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared.</p> <p>Understanding attributes that can be measured</p> <ul style="list-style-type: none"> - Understands conservation of length (e.g., a string is the same length when straight and not straight), capacity (e.g., two differently shaped containers may hold the same amount), and area (e.g., two surfaces of different shapes can have the same area).

Shape and Space (3-D Objects and 2-D Shapes)			
<p>2SS6 Sort 2-D shapes and 3-D objects, using two attributes, and explain the sorting rule.</p>	<p>Teacher Cards Geometry Cluster 1: 2-D Shapes 1: Sorting 2-D Shapes Geometry Cluster 2: 3-D Solids 6: Sorting 3-D Solids</p> <p>Math Every Day Card 2B: Which Solid Does Not Belong?</p>	<ul style="list-style-type: none"> • I Spy Awesome Buildings • Sharing Our Stories <p>To Scaffold:</p> <ul style="list-style-type: none"> • What Was Here? 	<p>Big Idea: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes.</p> <p>Investigating geometric attributes and properties of 2-D shapes and 3-D solids</p> <ul style="list-style-type: none"> - Compares 2-D shapes and 3-D solids to find the similarities and differences. - Analyzes geometric attributes of 2-D shapes and 3-D solids (e.g., number of sides, corners). - Classifies and names 2-D shapes based on common attributes <p>Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically.</p> <p>Identifying, sorting, and classifying attributes and patterns mathematically (e.g., number of sides, shape, size)</p> <ul style="list-style-type: none"> - Identifies the sorting rule used to sort sets. - Sorts a set of objects based on two attributes.
<p>2SS7 Describe, compare, and construct 3-D objects, including:</p> <ul style="list-style-type: none"> • cubes • spheres • cones • cylinders • pyramids • prisms. 	<p>Teacher Cards Geometry Cluster 2: 3-D Solids 6: Sorting 3-D Solids 8: Constructing 3-D Solids 9: Constructing Skeletons 10: 3-D Solids Consolidation Geometry Cluster 3: Geometric Relationships 13: Visualizing Shapes and Solids</p> <p>Math Every Day Cards 2A: Geometry in Poetry What Do You See? 3B: Name the Solid</p>	<ul style="list-style-type: none"> • I Spy Awesome Buildings <p>To Scaffold:</p> <ul style="list-style-type: none"> • What Was Here? <p>To Extend:</p> <ul style="list-style-type: none"> • WONDERful Buildings 	<p>Big Idea: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes.</p> <p>Investigating geometric attributes and properties of 2-D shapes and 3-D solids</p> <ul style="list-style-type: none"> - Compares 2-D shapes and 3-D solids to find the similarities and differences. - Analyzes geometric attributes of 2-D shapes and 3-D solids (e.g., number of sides, corners). - Classifies and names 2-D shapes based on common attributes - Constructs and compares 3-D solids with given attributes (e.g., number of vertices, faces).

<p>2SS8 Describe, compare and construct 2-D shapes, including:</p> <ul style="list-style-type: none"> • triangles • squares • rectangles • circles. 	<p>Teacher Cards Geometry Cluster 1: 2-D Shapes 1: Sorting 2-D Shapes 2: Exploring 2-D Shapes 3: Constructing 2-D Shapes 5: 2-D Shapes Consolidation Geometry Cluster 3: Geometric Relationships 13: Visualizing Shapes and Solids</p> <p>Math Every Day Cards 1: Visualizing Shapes Comparing Shapes 3B: Draw the Shape</p>	<ul style="list-style-type: none"> • I Spy Awesome Buildings • Sharing Our Stories <p>To Scaffold:</p> <ul style="list-style-type: none"> • What Was Here? • The Tailor Shop <p>To Extend:</p> <ul style="list-style-type: none"> • WONDERful Buildings • Gallery Tour 	<p>Big Idea: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes.</p> <p>Investigating geometric attributes and properties of 2-D shapes and 3-D solids</p> <ul style="list-style-type: none"> - Compares 2-D shapes to find the similarities and differences. - Analyzes geometric attributes of 2-D shapes (e.g., number of sides, corners). - Classifies and names 2-D shapes based on common attributes. - Constructs and compares 2-D shapes with given attributes (e.g., number of vertices). <p>Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically.</p> <p>Identifying, sorting, and classifying attributes and patterns mathematically (e.g., number of sides, shape, size)</p> <ul style="list-style-type: none"> - Identifies the sorting rule used to sort sets. - Sorts a set of objects based on two attributes.
<p>2SS9 Identify 2-D shapes as parts of 3-D objects in the environment.</p>	<p>Teacher Cards Geometry Cluster 2: 3-D Solids 7: 3-D Solids Around Us Geometry Cluster 3: Geometric Relationships 12: Building with Solids</p> <p>Math Every Day Card 2B: Solids Around Us</p>	<ul style="list-style-type: none"> • I Spy Awesome Buildings • Sharing Our Stories <p>To Scaffold:</p> <ul style="list-style-type: none"> • What Was Here? • The Tailor Shop <p>To Extend:</p> <ul style="list-style-type: none"> • WONDERful Buildings • Gallery Tour 	<p>Big Idea: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes.</p> <p>Investigating geometric attributes and properties of 2-D shapes and 3-D solids</p> <ul style="list-style-type: none"> - Compares 2-D shapes and 3-D solids to find the similarities and differences. - Analyzes geometric attributes of 2-D shapes and 3-D solids (e.g., number of sides, corners). - Identifies 2-D shapes in 3-D objects in the environment. - Classifies and names 2-D shapes based on common attributes



Mathology 2 Correlation (Statistics and Probability) – Newfoundland and Labrador

Specific Curriculum Outcomes	Mathology Grade 2 Classroom Activity Kit	Mathology Little Books	Pearson Canada K-3 Mathematics Learning Progression
Statistics and Probability (Data Analysis)			
<p>2SP1 Gather and record data about self and others to answer questions.</p>	<p>Teacher Card Data Management and Probability Cluster 1: Data Management 3: Creating a Survey</p> <p>Math Every Day Card 1: Conducting Surveys</p>	<ul style="list-style-type: none"> • Big Buddy Days • Marsh Watch <p>To Scaffold:</p> <ul style="list-style-type: none"> • Graph It! <p>To Extend:</p> <ul style="list-style-type: none"> • Welcome to The Nature Park 	<p>Big Idea: Formulating questions, collecting data, and consolidating data in visual and graphical displays help us understand, predict, and interpret situations that involve uncertainty, variability, and randomness.</p> <p>Formulating questions to learn about groups, collections, and events by collecting relevant data - Formulates questions that can be addressed through simple surveys.</p> <p>Collecting data and organizing it into categories - Collects data from simple surveys concretely (e.g., shoes, popsicle sticks) or using simple records (e.g., check marks, tallies).</p>
<p>SP2 Construct and interpret concrete graphs and pictographs to solve problems.</p>	<p>Teacher Cards Data Management and Probability Cluster 1: Data Management 1: Interpreting Graphs 1 4: Making Graphs 1 6: Data Management Consolidation</p> <p>Math Every Day Card 1: Reading and Interpreting Graphs*</p> <p>*Use Master 21a (pictograph) as bar graphs and lines plots are not required by your curriculum.</p>	<ul style="list-style-type: none"> • Big Buddy Days • Marsh Watch <p>To Scaffold:</p> <ul style="list-style-type: none"> • Graph It! <p>To Extend:</p> <ul style="list-style-type: none"> • Welcome to The Nature Park 	<p>Big Idea: Formulating questions, collecting data, and consolidating data in visual and graphical displays help us understand, predict, and interpret situations that involve uncertainty, variability, and randomness.</p> <p>Creating graphical displays of collected data - Creates displays using objects or simple pictographs (may use symbol for data). - Displays data collected in more than one way and describes the differences (e.g., bar graph, pictograph).</p> <p>Reading and interpreting data displays - Interprets displays by noting how many more/less than other categories.</p> <p>Drawing conclusions by making inferences and justifying decisions based on collected data - Poses and answers questions about data collected and displayed.</p>

Note: The following activities are not specifically correlated to the Newfoundland and Labrador curriculum outcomes for Grade 2 but may be of interest to teachers in preparing a strong foundation for mathematics:

Number

Activities 17 – 21: Early Fractional Thinking
Activity 35: Multi-Digit Fluency
Activities 37 – 42: Early Multiplicative Thinking
Activity 45: Spending Money
Activity 47: Financial Literacy Consolidation
Math Every Day Card 4A: Equal Parts from Home, Modelling Fraction Amounts
Math Every Day Card 4B: Regrouping Equal Parts, Naming Equal Parts
Math Every Day Card 8A: Counting Equal Groups to Find How Many, I Spy
Math Every Day Card 8B: How Many Blocks?, How Many Ways?

Patterning and Algebra

Activity 8: Decreasing Patterns
Activity 19: Missing Numbers
Math Every Day Card 3B: What's Missing?

Measurement

Activity 5: Measuring Area
Activity 6: Measuring Capacity
Activities 8 – 12: Using Standard Units
Math Every Day Card 2: What Am I?; Which Unit?
Activity 15: Measuring Time
Activity 16: Time to the Quarter-Hour
Activity 17: Changes in Temperature
Activity 18: Time and Temperature Consolidation
Math Every Day Card 3A: Hula Hoop Clock
Math Every Day Card 3B: Thermometer Drop or Pop

Geometry

Activity 4: Symmetry in 2-D Shapes
Activity 11: Making Shapes
Activity 14: Creating Pictures and Designs
Activity 15: Covering Outlines
Activity 16: Creating Symmetrical Designs
Activity 17: Geometric Relationships: Consolidation
Math Every Day Card 3A: Fill Me In!, Make Me a Picture
Activities 18 – 21: Location and Movement
Math Every Day Card 4A: Our Design, Treasure Map
Math Every Day Card 4B: Crazy Creatures, Perspective Matching Game
Activities 22 – 25: Coding
Math Every Day Card 5: Code of the Day, Wandering Animals

Data Management and Probability

Activity 2: Interpreting Graphs 2
Activity 5: Making Graphs 2
Activities 7 – 9: Probability and Chance
Math Every Day Card 2: What's in the Bag?, Word of the Day