## mathology

## Mathology 3 Correlation (Number) - Northwest Territories

| Curriculum Expectations | Grade 3 Mathology.ca | Mathology Little Books | Mathology Practice Workbook 3 | Pearson Canada K-3 Mathematics Learning Progression |
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| General Outcome <br> Develop number sense. |  |  |  |  |
| Specific Outcomes <br> 1. Say the number sequence 0 to 1000 forward and backward by: <br> - $5 \mathrm{~s}, 10$ s or 100 s , using any starting point <br> - 3s, using starting points that are multiples of 3 <br> - 4s, using starting points that are multiples of 4 <br> - 25 s, using starting points that are multiples of 25 . | Number Unit 1: Counting <br> 3: Skip-Counting Forward and Backward <br> Number Unit 7: Financial Literacy <br> 34: Estimating and Counting Money | Calla's Jingle Dress <br> Planting Seeds <br> Sports Camp <br> Math Makes Me Laugh <br> How Numbers Work <br> Finding Buster <br> To Scaffold: <br> What Would You Rather? <br> Ways to Count <br> Family Fun Day <br> Array's Bakery <br> The Money Jar | Unit 2 Questions 1, 2, $3,4,5,6,7,8,9,10$ (pp. 8-12) <br> Unit 4 Question 7 <br> (p. 20) <br> Unit 8 Questions 1, 2, 4, 5, 10 (pp. 42-44, 47) | Big Idea: Numbers tell us how many and how much. <br> Applying the principles of counting <br> - Fluently skip-counts by factors of 10 (e.g., 2, 5, 10) and multiples of 10 from any given number. <br> - Fluently skip-counts by factors of 100 (e.g., 20, 25,50 ) and multiples of 100 from any given number. <br> Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units <br> Unitizing quantities and comparing units to the whole - Recognizes number patterns in repeated units (e.g., when skip-counting by $2 \mathrm{~s}, 5 \mathrm{~s}, 10 \mathrm{~s}$ ). |


| 2. Represent and describe numbers to 1000, concretely, pictorially and symbolically. | Number Unit 1: Counting <br> 1: Numbers All Around Us <br> 2: Counting to 1000 <br> 4: Consolidation <br> Number Unit 2: Number <br> Relationships <br> 6: Composing and Decomposing Quantities <br> Number Unit 3: Place Value <br> 9: Building Numbers | The Street Party Math Makes Me Laugh <br> How Numbers Work <br> Finding Buster <br> Fantastic Journeys <br> To Scaffold: <br> What Would You Rather? <br> Ways to Count <br> Family Fun Day <br> Back to Batoche <br> A Class-full of Projects <br> The Money Jar | Unit 3 Questions 1, 2, 3, 4, 10 (pp. 13-14, 16) <br> Unit 8 Questions 5, 6, 7, 8 <br> (pp. 44-46) | Big Idea: Numbers tell us how many and how much. <br> Applying the principles of counting <br> - Uses number patterns to bridge hundreds when counting forward and backward (e.g., 399, 400, 401). <br> Recognizing and writing numerals <br> - Names, writes, and matches three-digit numerals to quantities. <br> Big Idea: Numbers are related in many ways. <br> Decomposing wholes into parts and composing wholes from parts <br> - 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). <br> Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units. <br> Unitizing quantities into ones, tens, and hundreds (placevalue concepts) <br> - Writes, reads, composes, and decomposes three-digit numbers using ones, tens, and hundreds. |
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| 3. Compare and order numbers to 1000. | Number Unit 2: Number Relationships <br> 7: Comparing and Ordering Quantities <br> 8: Consolidation <br> Number Unit 3: Place Value <br> 9: Building Numbers <br> 10: Representing Numbers in Different Ways | The Street Party <br> Sports Camp <br> Planting Seeds <br> Math Makes Me Laugh <br> Finding Buster <br> Fantastic Journeys <br> To Scaffold: <br> What Would You Rather? <br> Ways to Count <br> Family Fun Day <br> Back to Batoche <br> A Class-full of Projects <br> The Money Jar | Unit 3 Questions 5, 6, 7, 8, 9, 10, 11 (pp. 1517) <br> Unit 4 Questions 6, 8 (pp. 20-21) | Big Idea: Numbers are related in many ways. <br> Comparing and ordering quantities (multitude or magnitude <br> - Orders three or more quantities using sets and/or numerals. <br> Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units. <br> Unitizing quantities into ones, tens, and hundreds (placevalue concepts) <br> - Writes, reads, composes, and decomposes three-digit numbers using ones, tens, and hundreds. |
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| 4. Estimate quantities less than 1000, using referents. | Number Unit 2: Number Relationships <br> 5: Estimating Quantities | Math Makes Me Laugh <br> The Street Party <br> Sports Camp <br> Planting Seeds <br> Finding Buster <br> Fantastic Journeys <br> To Scaffold: <br> What Would You Rather? <br> Ways to Count <br> Family Fun Day <br> Back to Batoche <br> A Class-full of Projects <br> The Money Jar | N/A | Big Idea: Numbers are related in many ways. <br> Estimating quantities and numbers <br> - Uses relevant benchmarks (e.g., multiples of 10 ) to compare and estimate quantities. <br> - Estimates large quantities using visual strategies (e.g., arrays). |


| 5. Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000. | Number Unit 3: Place Value <br> 9: Building Numbers <br> 10: Representing Numbers in Different Ways <br> 11: What's the Number? <br> 13: Consolidation | The Street Party Math Makes Me Laugh How Numbers Work Finding Buster <br> To Scaffold: <br> Back to Batoche A Class-full of Projects The Money Jar What Would You Rather? The Great Dogsled Race | Unit 4 Questions 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 (pp. 18-22) | Big Idea: Numbers are related in many ways. <br> Comparing and ordering quantities (multitude or magnitude) <br> - Orders three or more quantities using sets and/or numerals. <br> Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units. <br> Unitizing quantities into ones, tens, and hundreds (placevalue concepts) <br> - Writes, reads, composes, and decomposes three-digit numbers using ones, tens, and hundreds. |
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| 6. Describe and apply mental mathematics strategies for adding two 2-digit numerals. | Number Unit 5: Addition and Subtraction <br> 22: Using Mental Math to Add and Subtract | Calla's Jingle Dress <br> The Street Party <br> Sports Camp <br> Planting Seeds <br> Math Makes Me Laugh | Unit 5 Questions 1, 2, 3 (pp. 25-26) | Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much. Developing conceptual meaning of addition and subtraction <br> - Relates addition and subtraction as inverse operations. <br> Developing fluency of addition and subtraction computation <br> - Develops efficient mental strategies and algorithms to solve equations with multi-digit numbers. <br> Big Idea: Patterns and relations can be represented with symbols, equations, and expressions. |


|  |  |  |  | Understanding equality and inequality, building on generalized properties of numbers and operations <br> - Decomposes and combines numbers in equations to make them easier to solve (e.g., $8+5=3+5+5$ ). |
| :---: | :---: | :---: | :---: | :---: |
| 7. Describe and apply mental mathematics strategies for subtracting two 2-digit numerals. | Number Unit 5: Addition and Subtraction <br> 22: Using Mental Math to Add and Subtract | The Street Party <br> Sports Camp <br> Planting Seeds <br> Math Makes Me Laugh | Unit 5 Questions 1, 2, 3, 11 (pp. 25-26, 30) | Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much. <br> Developing conceptual meaning of addition and subtraction <br> - Relates addition and subtraction as inverse operations. <br> Developing fluency of addition and subtraction computation <br> - Develops efficient mental strategies and algorithms to solve equations with multi-digit numbers. <br> Big Idea: Patterns and relations can be represented with symbols, equations, and expressions. <br> Understanding equality and inequality, building on generalized properties of numbers and operations <br> - Decomposes and combines numbers in equations to make them easier to solve (e.g., $8+5=3+5+5$ ). |


| 8. Apply estimation strategies to predict sums and differences of two 2-digit numerals in a problem-solving context. | Number Unit 5: Addition and Subtraction <br> 20: Estimating Sums and Differences | Math Makes Me Laugh <br> Calla's Jingle Dress <br> The Street Party <br> Sports Camp <br> Planting Seeds | Unit 5 Question 2 (p. 26) | Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much. Developing conceptual meaning of addition and subtraction <br> - Models and symbolizes addition and subtraction problem types (i.e., join, separate, part-part- whole, and compare). <br> Developing fluency of addition and subtraction computation <br> - Estimates sums and differences of multi-digit numbers. |
| :---: | :---: | :---: | :---: | :---: |
| 9. Demonstrate an understanding of addition and subtraction of numbers with answers to 1000 (limited to 1-, 2- and 3digit numerals), concretely, pictorially and symbolically, by: <br> - using personal strategies for adding and subtracting with and without the support of manipulatives <br> - creating and solving problems in context that involve addition and subtraction of numbers | Number Unit 5: Addition and Subtraction <br> 19: Modelling Addition and Subtraction <br> 24: Creating and Solving Problems <br> 25: Creating and Solving Problems with Larger Numbers <br> 26: Consolidation <br> Number Unit 7: Financial Literacy <br> 36: Purchasing and Making Change | Calla's Jingle Dress <br> The Street Party <br> Sports Camp <br> Planting Seeds <br> Math Makes Me Laugh <br> How Numbers Work <br> Finding Buster <br> To Scaffold: <br> Array's Bakery <br> Marbles, Alleys, Mibs, and <br> Guli! <br> A Class-full of Projects <br> The Money Jar <br> The Great Dogsled Race | Unit 5 Questions 4, 5, $6,7,8,9,10,11,12$ (pp. 27-30) <br> Unit 8 Questions 9, 10 (pp. 46-47) | Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units. <br> Unitizing quantities into ones, tens, and hundreds (placevalue concepts) <br> - Writes, reads, composes, and decomposes three-digit numbers using ones, tens, and hundreds. <br> Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much. <br> Developing conceptual meaning of addition and subtraction <br> - Models and symbolizes addition and subtraction problem types (i.e., join, separate, part-part- whole, and |


|  |  |  | compare). <br> - Relates addition and <br> subtraction as inverse <br> operations. |
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| - Uses properties of addition $^{\text {and subtraction to solve }}$problems (e.g., adding or <br> subtracting 0, commutativity of <br> addition). <br> Developing fluency of addition <br> and subtraction computation |  |  |  |


| 11. Demonstrate an understanding of multiplication to $5 \times 5$ by: <br> - representing and explaining multiplication using equal grouping and arrays <br> - creating and solving problems in context that involve multiplication <br> - modelling multiplication using concrete and visual representations, and recording the process symbolically <br> - relating multiplication to repeated addition <br> - relating multiplication to division. Understand and recall multiplication facts to $5 \times 5$. | Number Unit 6: <br> Multiplication and Division <br> 27: Exploring Multiplication <br> 29: Relating Multiplication and Division <br> 30: Properties of Multiplication <br> 31: Creating and Solving Problems <br> 32: Building Fluency: The Games Room | Calla's Jingle Dress <br> Sports Camp <br> Planting Seeds | Unit 16 Questions 1, 2, 3, 4, 5, 6, 7, 8a, 9, 10, 11 (pp. 96-101) | Big Idea: Quantities and numbers can be grouped by, or partitioned into units to determine how many or how much. <br> Developing conceptual meaning of multiplication and division <br> - Models and symbolizes singledigit multiplication problems involving equal groups or measures (i.e., equal jumps on a number line), and relates them to addition. <br> - Uses properties of multiplication and division to solve problems (e.g., multiplying and dividing by 1 , commutativity of multiplication). <br> - Models and symbolizes equal sharing and grouping division problems and relates them to subtraction. |
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| 12. Demonstrate an understanding of division (limited to division related to multiplication facts up to $5 \times 5$ ) by: <br> - representing and explaining division using equal sharing and equal grouping <br> - creating and solving problems in context that involve equal sharing and equal grouping <br> - modelling equal sharing and equal grouping using concrete and visual representations, and recording the process symbolically <br> - relating division to repeated subtraction <br> - relating division to multiplication. | Number Unit 6: <br> Multiplication and Division <br> 28: Exploring Division <br> 29: Relating Multiplication and Division <br> 31: Creating and Solving Problems <br> 32: Building Fluency: The Games Room <br> 33: Consolidation | Calla's Jingle Dress <br> Sports Camp <br> Planting Seeds | Unit 16 Questions 1, 4, 5, 6, 10, 11 (pp. 96-98, 100-101) | Big Idea: Quantities and numbers can be grouped by, or partitioned into units to determine how many or how much. <br> Developing conceptual meaning of multiplication and division <br> - Models and symbolizes singledigit multiplication problems involving equal groups or measures (i.e., equal jumps on a number line), and relates them to addition. <br> - Uses properties of |


| Understand and recall division facts related to multiplication facts to $5 \times 5$. |  |  |  | multiplication and division to solve problems (e.g., multiplying and dividing by 1 , commutativity of multiplication). <br> - Models and symbolizes equal sharing and grouping division problems and relates them to subtraction. |
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| 13. Demonstrate an understanding of fractions by: <br> - explaining that a fraction represents a part of a whole <br> - describing situations in which fractions are used <br> - comparing fractions of the same whole that have like denominators. | Number Unit 4: Fractions <br> 14: Exploring Equal Parts <br> 15: Comparing Fractions 1 <br> 16: Comparing Fractions 2 <br> 18: Consolidation | Hockey Homework | Unit 12 Questions 1, 2, $\begin{aligned} & 3,4,5,6,13 a \\ & \text { (pp. 70-72, 75) } \end{aligned}$ | Big Idea: Quantities and numbers can be grouped by or partitioned into equal-sized units. <br> Partitioning quantities to form fractions <br> - Partitions wholes into equalsized parts to make fair shares or equal groups. <br> - Partitions wholes (e.g., intervals, sets) into equal parts and names the unit fractions. <br> - Relates the size of parts to the number of equal parts in a whole (e.g., a whole cut into 2 equal pieces has larger parts than a whole cut into 3 equal pieces). <br> - Compares unit fractions to determine relative size. <br> - Counts by unit fractions (e.g., counting by $\frac{1}{4}: \frac{1}{4}, \frac{2}{4}, \frac{3}{4}$ ). <br> - Uses fraction symbols to name fractional quantities. <br> - Compares related fractions (e.g., same numerator, same denominator, unit fractions, familiar fractions) to determine more/less or equal. |

Mathology 3 Integrated Curriculum Correlation - Northwest Territories

## Pearson <br> mathology

Mathology 3 Correlation (Patterns and Relations: Patterns) - Northwest Territories

| Curriculum Expectations | Grade 3 Mathology.ca | Mathology Little Books | Mathology Practice Workbook 3 | Pearson Canada K-3 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: | :---: |
| General Outcome <br> Use patterns to describe the world and to solve problems. |  |  |  |  |
| Specific Outcomes <br> 1. Demonstrate an understanding of increasing patterns by: <br> - describing <br> - extending <br> - comparing <br> - creating <br> numerical (numbers to 1000) and nonnumerical patterns using manipulatives, diagrams, sounds and actions. | Pattern Unit 1: Increasing and Decreasing Patterns <br> 1: Describing and Extending Patterns <br> 2: Representing Patterns <br> 3: Creating Patterns <br> 4: Identifying Errors and Missing Terms <br> 5: Solving Problems | Namir's Marvellous <br> Masterpieces <br> To Scaffold: <br> The Best Surprise | Unit 1 Questions 3, 4, 5, 6, 7, 9 (pp. 3-7) | Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically. Representing and generalizing increasing/decreasing patterns - Identifies and extends nonnumeric increasing/decreasing patterns (e.g., jump-clap; jump-clap-clap; jump-clap-clap-clap, etc.). <br> - Identifies and extends familiar number patterns and makes connections to addition (e.g., skip-counting by $2 \mathrm{~s}, 5 \mathrm{~s}, 10 \mathrm{~s}$ ). <br> - Identifies, reproduces, and extends increasing/decreasing patterns concretely, pictorially, and numerically using repeated addition or subtraction. <br> - Extends number patterns and finds missing elements (e.g., 1, 3, 5, $\qquad$ , $9, \ldots$ ). <br> - Creates an increasing/decreasing pattern (concretely, pictorially, and/or |


|  |  |  |  | numerically) and explains the pattern rule. <br> - Generalizes and explains the rule for arithmetic patterns including the starting point and change (e.g., for $28,32,36$, the rule is start at 28 and add 4 each time). |
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| 2. Demonstrate an understanding of decreasing patterns by: <br> - describing <br> - extending <br> - comparing <br> - creating <br> numerical (numbers to 1000) and nonnumerical patterns using manipulatives, diagrams, sounds and actions. | Pattern Unit 1: Increasing and <br> Decreasing Patterns <br> 1: Describing and Extending <br> Patterns <br> 2: Representing Patterns <br> 3: Creating Patterns <br> 4: Identifying Errors and <br> Missing Terms <br> 5: Solving Problems <br> 7: Consolidation | Namir's Marvellous Masterpieces <br> To Scaffold: <br> The Best Surprise | Unit 1 Questions 4, 7-9 (pp. 4, 6-7) | Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically. Representing and generalizing increasing/decreasing patterns - Identifies and extends nonnumeric increasing/decreasing patterns (e.g., jump-clap; jump-clap-clap; jump-clap-clap-clap, etc.). <br> - Identifies and extends familiar number patterns and makes connections to addition (e.g., skip-counting by $2 \mathrm{~s}, 5 \mathrm{~s}, 10 \mathrm{~s}$ ). <br> - Identifies, reproduces, and extends increasing/decreasing patterns concretely, pictorially, and numerically using repeated addition or subtraction. <br> - Extends number patterns and finds missing elements (e.g., 1, 3, 5, $\qquad$ , $9, \ldots$.$) .$ <br> - Creates an increasing/decreasing pattern (concretely, pictorially, and/or numerically) and explains the pattern rule. <br> - Generalizes and explains the rule for arithmetic patterns including the starting point and |


|  |  |  | change (e.g., for 28, 32, 36, the <br> rule is start at 28 and add 4 <br> each time). |  |
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| 3. Sort objects or numbers, using one <br> or more than one attribute. | Pattern Unit 3: Repeating <br> Patterns <br> $13:$ Sorting with Attributes | To Scaffold: <br> Big Buddy Days <br> Marsh Watch | Bnit 9 Questions 1, 4, <br> 5 (pp. 50-52) | Big Idea: Regularity and <br> repetition form patterns that <br> can be generalized and <br> predicted mathematically. <br> Identifying, sorting, and <br> classifying attributes and <br> paterns mathematically (e.g., <br> number of sides, shape, size) <br> (p. 61) Question 10 |

## mathology

Mathology 3 Correlation (Patterns and Relations: Variables and Equations) - Northwest Territories

| Curriculum Expectations | Grade 3 Mathology.ca | Mathology Little Books | Mathology Practice Workbook 3 | Pearson Canada K-3 <br> Mathematics Learning Progression |
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| General Outcome <br> Represent algebraic expressions in multiple ways. |  |  |  |  |
| Specific Outcomes <br> 4. Solve one-step addition and subtraction equations involving a symbol to represent an unknown number. | Patterning Unit 2: Variables and Equations <br> 8: Solving Equations Concretely <br> 9: Strategies for Solving Equations <br> 11: Creating Equations <br> 12: Consolidation | A Week of Challenges | Unit 7 Questions 1, 2, 3, 4, 6, 7, 10 (pp. 37-41) | Big Idea: Patterns and relations can be represented with symbols, equations, and expressions. <br> Understanding equality and inequality, building on generalized properties of numbers and operations <br> - Investigates addition and subtraction as inverse operations. <br> - Explores properties of addition and subtraction (e.g., adding or subtracting 0 , commutativity of addition). <br> Using symbols, unknowns, and variables to represent mathematical relations <br> - Uses placeholders (e.g., ㅁ) for unknown values in equations. - Solves for an unknown value in a one-step addition and subtraction problem (e.g., $n+5$ = 15). |

## mathology

## Mathology 3 Correlation (Shape and Space: Measurement) - Northwest Territories

| Curriculum Expectations | Grade 3 Mathology.ca | Mathology Little Books |  | Pearson Canada K-3 Mathematics Learning Progression |
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| General Outcome <br> Use direct and indirect measurement to solve problems. |  |  |  |  |
| Specific Outcomes <br> 1. Relate the passage of time to common activities, using nonstandard and standard units (minutes, hours, days, weeks, months, years). | Measurement Unit 2: Time and Temperature <br> 8: Measuring the Passage of Time | Goat Island | Unit 13 Questions 1, 2, 5 (pp. 76-77) | Big Idea: Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared. <br> Understanding attributes that can be measured <br> - Explores measurement of visible attributes (e.g., length, capacity, area) and non-visible attributes (e.g., mass, time, temperature). <br> - Uses language to describe attributes (e.g., long, tall, short, wide, heavy). <br> Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons. <br> Selecting and using standard units to estimate, measure, and make comparisons <br> - Selects and uses appropriate standard units to estimate, |

Mathology 3 Integrated Curriculum Correlation - Northwest Territories

|  |  |  |  | measure, and compare length, perimeter, area, capacity, mass, and time. <br> - Uses the measurement of familiar objects as benchmarks to estimate another measure in standard units (e.g., doorknob is 1 m from the ground; room temperature is $21^{\circ} \mathrm{C}$ ). |
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| 2. Relate the number of seconds to a minute, the number of minutes to an hour and the number of days to a month in a problem-solving context. | Measurement Unit 2: Time and Temperature <br> 9: Relationships Among Units of Time | Goat Island | Unit 13 Questions 3, 4, 11 (pp. 77, 81) | Big Idea: Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared. <br> Understanding attributes that can be measured <br> - Explores measurement of visible attributes (e.g., length, capacity, area) and non-visible attributes (e.g., mass, time, temperature). <br> - Uses language to describe attributes (e.g., long, tall, short, wide, heavy). <br> 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 ( $\mathrm{mm}, \mathrm{cm}, \mathrm{m}$ ), mass ( $\mathrm{g}, \mathrm{kg}$ ), capacity ( $\mathrm{mL}, \mathrm{L}$ ), and time (e.g., seconds, minutes, hours). |


| 3. Demonstrate an understanding of measuring length ( $\mathrm{cm}, \mathrm{m}$ ) by: <br> - selecting and justifying referents for the units cm and m <br> - modelling and describing the relationship between the units cm and m <br> - estimating length, using referents <br> - measuring and recording length, width and height. | Measurement Unit 1: Length and Perimeter <br> 1: Estimating Length <br> 2: Relating Centimetres and Metres <br> 3: Measuring Length | Goat Island <br> Measurements About YOU! <br> To Scaffold: <br> Getting Ready for School <br> The Discovery | Unit 6 Questions 1, 2, 3, 4, 5, 6 (pp. 31-33) | Big Idea: Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared. <br> Understanding attributes that can be measured <br> - Extends understanding of length to other linear measurements (e.g., height, width, distance around). <br> Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons. <br> Selecting and using standard units to estimate, measure, and make comparisons <br> - Demonstrates ways to estimate, measure, compare, and order objects by length, perimeter, area, capacity, and mass with standard units by: using an intermediary object of a known measure; using multiple copies of a unit; iterating a single unit. <br> - Selects and uses appropriate standard units to estimate, measure, and compare length, perimeter, area, capacity, mass, and time. <br> - Uses the measurement of familiar objects as benchmarks to estimate another measure in standard units (e.g., doorknob is 1 m from the ground; room temperature is $21^{\circ} \mathrm{C}$ ). |
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4. Demonstrate an understanding of measuring mass ( $\mathrm{g}, \mathrm{kg}$ ) by:

- selecting and justifying referents for the units $g$ and $k g$
- modelling and describing the
relationship between the units $g$ and kg
- estimating mass, using referents
- measuring and recording mass.

| Measurement Unit 3: Area, Mass, and Capacity <br> 15: Measuring Mass | Measurements About YOU! | Unit 17 Questions 5, 6, 7, 8 (pp. 104-106) | Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons. <br> Selecting and using standard units to estimate, measure, and make comparisons <br> - Uses standard sized objects to measure (e.g., 10 centicube rod). <br> - Demonstrates ways to estimate, measure, compare, and order objects by length, perimeter, area, capacity, and mass with standard units by: using an intermediary object of a known measure; using multiple copies of a unit; iterating a single unit. <br> - Selects and uses appropriate standard units to estimate, measure, and compare length, perimeter, area, capacity, mass and time. <br> - Uses the measurement of familiar objects as benchmarks to estimate another measure in standard units (e.g., doorknob is 1 m from the ground; room temperature is $21^{\circ} \mathrm{C}$ ). <br> Understanding relationships among measurement units <br> - Understands that decomposing and rearranging does not change the measure of an object. <br> - Understands relationship of units of length ( $\mathrm{mm}, \mathrm{cm}, \mathrm{m}$ ), mass ( $\mathrm{g}, \mathrm{kg}$ ), capacity ( $\mathrm{mL}, \mathrm{L}$ ), |
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Pearson

|  |  |  |  | and time (e.g., seconds, minutes, hours). |
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| 5. Demonstrate an understanding of perimeter of regular and irregular shapes by: <br> - estimating perimeter, using referents for cm or m <br> - measuring and recording perimeter ( $\mathrm{cm}, \mathrm{m}$ ) <br> - constructing different shapes for a given perimeter ( $\mathrm{cm}, \mathrm{m}$ ) to demonstrate that many shapes are possible for a perimeter. | Measurement Unit 1: Length and Perimeter <br> 4: Introducing Perimeter <br> 5: Measuring Perimeter <br> 7: Consolidation | The Bunny Challenge <br> To Scaffold: <br> The Discovery | Unit 6 Questions 7, 8, $9,10,11,12$ (pp. 33-36) <br> Unit 17 Question 2 (p. 103) | Big Idea: Many things in our world (e.g., objects, spaces, events) have attributes that can be measured and compared. <br> Understanding attributes that can be measured <br> - 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). <br> - Extends understanding of length to other linear measurements (e.g., height, width, distance around). <br> Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons. <br> Selecting and using nonstandard units to estimate, measure, and make comparisons <br> - Demonstrates ways to estimate, measure, compare, and order objects by length, area, capacity, and mass with non-standard units by: using an intermediary object; using multiple copies of a unit; iterating a single unit. <br> - Selects and uses appropriate |


|  |  |  | non-standard units to estimate, <br> measure, and compare length, <br> area, capacity, and mass. <br> - Uses non-standard units as <br> referents to estimate length <br> (e.g., paper clips), area (e.g., <br> square tiles), mass (e.g., cubes), <br> and capacity (e.g., cups). |
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Mathology 3 Integrated Curriculum Correlation - Northwest Territories

## mathólogy

## Mathology 3 Correlation (Shape and Space: 3-D Objects and 2-D Shapes) - Northwest Territories

| Curriculum Expectations | Grade 3 Mathology.ca | Mathology Little Books | Mathology Practice Workbook 3 | Pearson Canada K-3 Mathematics Learning Progression |
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| General Outcome <br> Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them. |  |  |  |  |
| Specific Outcomes <br> 6. Describe 3-D objects according to the shape of the faces and the number of edges and vertices. | Geometry Unit 2: 3-D Solids <br> 6: Exploring Geometric <br> Attributes of Solids | WONDERful Buildings <br> To Scaffold: <br> I Spy Awesome Buildings | Unit 10 Questions 1, 2, 3, 4, 5, 6, 7, 8, 10 (pp. 56-59, 61) | Big Ideas: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes. <br> Investigating geometric attributes and properties of 2D shapes and 3-D solids <br> - Analyzes geometric attributes of 2-D shapes and 3-D solids (e.g., number of sides/edges, faces, corners). <br> - Classifies and names 2-D shapes and 3-D solids based on common attributes. <br> - Classifies and names 2-D shapes and 3-D solids using geometric properties (e.g., a rectangle has 4 right angles). |


| 7. Sort regular and irregular polygons, including: <br> - triangles <br> - quadrilaterals <br> - pentagons <br> - hexagons <br> - octagons <br> according to the number of sides. | Geometry Unit 1: 2-D Shapes <br> 1: Sorting Polygons <br> 2: What's the Sorting Rule? | Gallery Tour WONDERful Buildings <br> To Scaffold: <br> I Spy Awesome Buildings Sharing Our Stories | Unit 9 Questions 1, 2, 3, 4, 5, 10 (pp. 50-52, 55) | Big Ideas: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes. <br> Investigating geometric attributes and properties of 2D shapes and 3-D solids - Analyzes geometric attributes of 2-D shapes and 3-D solids (e.g., number of sides/edges, faces, corners). <br> - Classifies and names 2-D shapes and 3-D solids based on common attributes. <br> - Classifies and names 2-D shapes and 3-D solids using geometric properties (e.g., a rectangle has 4 right angles). |
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Mathology 3 Correlation (Statistics and Probability: Data Analysis) - Northwest Territories

| Curriculum Expectations | Grade 3 Mathology.ca | Mathology Little Books | Mathology Practice Workbook 3 | Pearson Canada K-3 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: | :---: |
| General Outcome <br> Collect, display and analyze data to solve problems. |  |  |  |  |
| Specific Outcomes <br> 1. Collect first-hand data and organize it using: <br> - tally marks <br> - line plots <br> - charts <br> - lists <br> to answer questions. | Data Management and <br> Probability Unit 1A: Data <br> Management <br> 2: Interpreting Line Plots <br> 3: Collecting Data <br> 5: Drawing Line Plots | Welcome to The Nature Park <br> To Scaffold: <br> Marsh Watch <br> Big Buddy Days | Unit 14 Questions 2, 3 (p. 85) | 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. <br> Formulating questions to learn about groups, collections, and events by collecting relevant data <br> - Formulates questions that can be addressed by counting collections (e.g., How many of us come to school by bus, by car, walking?) and questions that can be addressed through observation (e.g., How many people do/do not use the crosswalk?). <br> Collecting data and organizing them into categories <br> - Collects data by determining (most) categories in advance (e.g., yes/no; list of choices). <br> - Orders categories by frequency |


|  |  |  |  | (e.g., most to least). <br> Creating graphical displays of collected data <br> - Creates one-to-one displays <br> (e.g., line plot, dot plot, bar graph). <br> Reading and interpreting data displays <br> - Reads and interprets information from data displays (e.g., orders by frequency, compares frequencies, determines total number of data points). <br> - Describes the shape of data in informal ways (e.g., range, spread, gaps, mode). <br> - Critiques whether the display used is appropriate for the data collected. |
| :---: | :---: | :---: | :---: | :---: |
| 2. Construct, label and interpret bar graphs to solve problems. | Data Management and Probability Unit 1A: Data Management <br> 1: Interpreting Bar Graphs <br> 4: Drawing Bar Graphs <br> 6: Consolidation | Welcome to The Nature Park <br> To Scaffold: <br> Marsh Watch <br> Big Buddy Days | Unit 14 Questions 1, 4, 5, 8a (pp. 84, 86, 88) | 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. <br> Creating graphical displays of collected data <br> Creates one-to-one displays (e.g., line plot, dot plot, bar graph). <br> Reading and interpreting data displays <br> - Reads and interprets information from data displays (e.g., orders by frequency, compares frequencies, |

Mathology 3 Integrated Curriculum Correlation - Northwest Territories

|  |  |  | determines total number of <br> data points). <br> - Describes the shape of data in <br> informal ways (e.g., range, <br> spread, gaps, mode). <br> - Critiques whether the display <br> used is appropriate for the data <br> collected. |
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