## mathôlogy

## Correlation of New Brunswick Program of Studies with Mathology Grade 6 (Number)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: Develop number sense. |  |  |  |
| Specific Curriculum Outcomes <br> N1: Demonstrate an understanding of place value for numbers: <br> - greater than one million <br> - less than one thousandth. | Number Unit 1: Number <br> Relationships and Place Value <br> 1: Representing Larger Numbers (to 1000000 and Beyond) <br> 2: Representing Numbers in Different Forms <br> 5: Consolidation of Number Relationships and Place Value <br> Number Unit 3: Fractions, Decimals, Percents, and Integers <br> 15: Representing Decimals <br> 16: Comparing and Ordering Decimals <br> 21: Consolidation of Fractions, Decimals, Percents, and Integers | Unit 2 Questions 1, 2, 3, 4, 5, 6 (pp. 9-10) <br> Unit 7 Questions 6, 7, 8, 15, 16 (pp. 47-48, 50-51) | Big Idea: The set of real numbers is infinite. Extending whole number understanding to the set of real numbers <br> - Extends whole number understanding to 1000 000. <br> - Extends decimal number understanding to thousandths. <br> Big Idea: Numbers are related in many ways. Comparing and ordering quantities (multitude or magnitude) <br> - Compares, orders, and locates whole numbers based on place-value understanding, and records using <, =, and > symbols. <br> - Compares, orders, and locates decimal numbers using place-value understanding. <br> Decomposing and composing numbers to investigate equivalencies <br> - Composes and decomposes whole numbers using standard and non-standard partitioning (e.g., 1000 is 10 hundreds or 100 tens). <br> - Composes and decomposes decimal numbers using standard and non-standard partitioning (e.g., |

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\begin{array}{|l|l|l|l|}\hline & & & \begin{array}{l}\text { Big Idea: Quantities and numbers can be grouped } \\
\text { by or partitioned into equal-sized units. } \\
\text { Unitizing quantities into base-ten units } \\
\text { - Writes and reads whole numbers in multiple forms } \\
\text { (e.g., 1358; one thousand three hundred fifty-eight; } \\
\text { 1000 + 300 + 50 + 8). } \\
\text { - Understands that the value of a digit is ten times } \\
\text { the value of the same digit one place to the right. }\end{array}
$$ <br>
- Understands that the value of a digit is one-tenth <br>

the value of the same digit one place to the left.\end{array}\right\}\)| - Writes and reads decimal numbers in multiple |
| :--- |
| forms (e.g., numerals, number names, expanded |
| form). |

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|  |  |  | - Distinguishes between and investigates properties of prime and composite numbers (e.g., prime factorization). <br> Developing fluency of operations <br> - Fluently recalls multiplication and division facts to 100. |
| :---: | :---: | :---: | :---: |
| N4: Relate improper fractions to mixed numbers. | Number Unit 3: Fractions, Decimals, Percents, and Integers <br> 13: Representing Fractions <br> 14: Comparing and Ordering Fractions <br> 21: Consolidation of Fractions, Decimals, Percents, and Integers | Unit 7 Questions 1, 2, 3, 4, 5, 15, 16 (pp. 45-46, 50-51) | Big Idea: Numbers are related in many ways. Comparing and ordering quantities (multitude or magnitude) <br> - Compares, orders, and locates fractions using flexible strategies (e.g., comparing models; creating common denominators or numerators). <br> Estimating quantities and numbers <br> - Estimates the size and magnitude of fractions by comparing to benchmarks. <br> Decomposing and composing numbers to investigate equivalencies <br> - Models equivalent forms of improper fractions and mixed numbers using flexible strategies. |
| N5: Demonstrate an understanding of ratio, concretely, pictorially and symbolically. | Number Unit 2: Fluency with Whole Numbers <br> 11: Exploring Ratios <br> 12: Consolidation of Fluency with Whole Numbers | Unit 3 Questions 9, 10, 11, 12, 13, 14 (pp. 18-20) | Big Idea: Numbers are related in many ways. Using ratios, rates, proportions, and percents creates a relationship between quantities - Understands the concept of ratio as a relationship between two quantities (e.g., 3 wins to 2 losses). |
| N6: Demonstrate an understanding of percent (limited to whole numbers), concretely, pictorially and symbolically. | Number Unit 3: Fractions, Decimals, Percents, and Integers 18: Relating Fractions, Decimals, and Percents <br> 21: Consolidation of Fractions, Decimals, Percents, and Integers | Unit 7 Questions 9, 10, 16 (pp. 48-49, 51) <br> Unit 12 Questions 7, 8, 9, 10, 14 (pp. 84-85, 87) | Big Idea: Numbers are related in many ways. Decomposing and composing numbers to investigate equivalencies <br> - Models and explains the relationships among fractions, decimals, and percents. <br> - Translates flexibly between representations. |
| N7: Demonstrate an understanding of integers, concretely, pictorially and symbolically. | Number Unit 3: Fractions, Decimals, Percents, and Integers <br> 19: Representing Integers <br> 20: Comparing and Ordering Integers <br> 21: Consolidation of Fractions, Decimals, Percents, and Integers | Unit 7 Questions $11,12,13,14$, 15, 16 (pp. 49-51) | Big Idea: The set of real numbers is infinite Extending whole number understanding to the set of real numbers <br> - Extends whole number understanding to negative numbers. |


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| N8: Demonstrate an <br> understanding of <br> multiplication and division of <br> decimals (1-digit whole <br> number multipliers and 1- <br> digit natural number <br> divisors). | Number Unit 4: Operations with <br> Fractions, Decimals, and <br> Percents <br> 22: Multiplying Decimals by 1- <br> Digit Numbers <br> 24: Dividing Decimals by 1-Digit <br> Numbers <br> 30: Consolidation of Operations <br> with Fractions, Decimals, and <br> Percents | Unit 12 Questions 1, 2, 3, 4, 14 <br> (pp. 81-83, 87) | Big Idea: Quantities and numbers can be operated <br> on to determine how many and how much. <br> Developing conceptual meaning of operations <br> - Demonstrates an understanding of decimal <br> number computation through modelling and flexible <br> strategies. <br> Developing fluency of operations <br> - Solves decimal number computation using efficient <br> strategies. |
| N9: Explain and apply the <br> order of operations, <br> excluding exponents, with <br> and without technology <br> (limited to whole numbers). | Number Unit 2: Fluency with <br> Whole Numbers <br> 8: The Order of Operations <br> 12: Consolidation of Fluency with <br> Whole Numbers | Unit 3 Questions 1, 2, 3, 4, 14 <br> (pp. 15-16, 20) | Big Idea: Quantities and numbers can be operated <br> on to determine how many and how much. <br> Investigating number and arithmetic properties <br> - Applies order of operations for whole numbers and <br> explains the effect when order is not followed. |

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## mathổlogy

## Correlation of New Brunswick Program of Studies with Mathology Grade 6 <br> (Patterns and Relations: Patterns)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: Use patterns to describe the world and solve problems. |  |  |  |
| Specific Curriculum Outcomes <br> PR1: Demonstrate an understanding of the relationships within tables of values to solve problems. | Patterning Unit 1: Patterning <br> 1: Investigating Patterns and Relationships in Tables and Graphs <br> 2: Solving Problems <br> 4: Consolidation of Patterning | Unit 1 Questions 1, 2, 3, 5, 6, 7, 8 (pp. 2-4, 6-8) | Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically. <br> Representing patterns, relations, and functions <br> - Represents a numeric or shape pattern using a table of values by pairing the term value with a term number. <br> - Represents a mathematical context or problem with expressions and equations using variables to represent unknowns. <br> Generalizing and analyzing patterns, relations, and functions <br> - Explains the rule for numeric patterns including the starting point and change (e.g., given: 16, 22, 28, 34, .... Start at 16 and add 6 each time). <br> - Describes numeric and shape patterns using words and numbers. <br> - Predicts the value of a given element in a numeric or shape pattern using pattern rules. <br> - Describes the relationship between two numeric patterns (e.g., for every 4 steps, she travels 3 metres). |


| PR2: Represent and describe patterns and relationships using graphs and tables. | Patterning Unit 1: Patterning <br> 1: Investigating Patterns and Relationships in Tables and Graphs <br> 2: Solving Problems <br> 4: Consolidation of Patterning | Unit 1 Questions 1, 2, 3, 5, 8 (pp. 2-4, 6, 8) | Big Idea: Regularity and repetition form patterns that can be generalized and predicted mathematically. <br> Representing patterns, relations, and functions <br> - Represents a numeric or shape pattern using a table of values by pairing the term value with a term number. <br> - Represents a mathematical context or problem with expressions and equations using variables to represent unknowns. <br> Generalizing and analyzing patterns, relations, and functions <br> - Explains the rule for numeric patterns including the starting point and change (e.g., given: 16, 22, 28, 34, .... Start at 16 and add 6 each time). <br> - Describes numeric and shape patterns using words and numbers. <br> - Predicts the value of a given element in a numeric or shape pattern using pattern rules. <br> - Describes the relationship between two numeric patterns (e.g., for every 4 steps, she travels 3 metres). |
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Mathology 6 Curriculum Correlation - New Brunswick

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## Correlation of New Brunswick Program of Studies with Mathology Grade 6 (Patterns and Relations: Variables and Equations)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: <br> Represent algebraic expressions in multiple ways. |  |  |  |
| Specific Curriculum Outcomes <br> PR3: Represent generalizations arising from number relationships using equations with letter variables. | Patterning Unit 2: Variables and Equations <br> 7: Representing Generalizations in Patterns <br> 10: Consolidation of Variables and Equations <br> Measurement Unit 1A: Perimeter, Area, Volume, and Capacity <br> 1: Determining the Perimeter of Polygons <br> 2: Determining the Area of Rectangles | Unit 1 Questions 1, 2, 3, 7, 8 (pp. 2-4, 7-8) <br> Unit 13 Questions 3, 4, 8, 9, 10, 11, 13 (pp. 89-90, 92-93, 95) | Big Idea: Patterns and relations can be represented with symbols, equations, and expressions. <br> Using variables, algebraic expressions, and equations to represent mathematical relations <br> - Understands an unknown quantity (i.e., variable) may be represented by a symbol or letter (e.g., 13 $-\square=8 ; 4 n=12$ ). <br> - Flexibly uses symbols and letters to represent unknown quantities in equations (e.g., knows that $4+\square=7 ; 4+x=7$; and $4+y=7$ all represent the same equation with $\square, x$, and $y$ representing the same value). <br> - Interprets and writes algebraic expressions (e.g., $2 n$ means two times a number; subtracting a number from 7 can be written as $7-n$ ). <br> - Understands a variable as a changing quantity <br> (e.g., $5 s$, where $s$ can be any value). |
| PR4: Demonstrate and explain the meaning of preservation of equality, concretely, pictorially and symbolically. | Patterning Unit 2: Variables and Equations <br> 6: Investigating Equality in Equations <br> 10: Consolidation of Variables and Equations | Unit 14 Questions 4, 5, 7, 11, 13 (pp. 98-99, 101-102) | 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 |

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|  |  |  | - Recognizes that an equal sign between two <br> expressions with variables indicates that the <br> expressions are equivalent (e.g., $5 n-4=3 n ; 3 r=2$ <br> $+s)$. <br> - Investigates and models the meaning of <br> preservation of equality of single variable <br> equations (e.g., $3 x=12)$. |
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Mathology 6 Curriculum Correlation - New Brunswick

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## Correlation of New Brunswick Program of Studies with Mathology Grade 6 <br> (Shape and Space: Measurement)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: <br> Use direct and indirect measure to solve problems. |  |  |  |
| Specific Curriculum Outcomes <br> SS1: Demonstrate an understanding of angles by: <br> - identifying examples of angles in the environment <br> - classifying angles according to their measure <br> - estimating the measure of angles using $45^{\circ}, 90^{\circ}$ and $180^{\circ}$ as reference angles <br> - determining angle measures in degrees <br> - drawing and labelling angles when the measure is specified. | Geometry Unit 1A: 2-D Shapes and Angles <br> 1: Classifying and Measuring Angles <br> 2: Measuring and Constructing Angles <br> 6: Consolidation of 2-D Shapes and Angles | Unit 4 Questions 1, 2, 3, 12 (pp. 23-25, 29) | 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, compared, and ordered <br> - Understands angle as an attribute that can be measured and compared. <br> - Understands angle is additive (e.g., $90^{\circ}$ can be visualized as nine sectors that are $10^{\circ}$ each). <br> Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons. <br> Selecting and using units to estimate, measure, construct, and make comparisons <br> - Measures, constructs, and estimates angles using degrees. <br> Big Idea: 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 2-D shapes and 3-D solids <br> - Draws, compares, and classifies angles (i.e., right, acute, obtuse, straight, reflex). |


| SS2: Demonstrate that the sum of interior angles is: <br> - $180^{\circ}$ in a triangle <br> - $360^{\circ}$ in a quadrilateral. | Geometry Unit 1A: 2-D Shapes and Angles <br> 3: Classifying Triangles <br> 4: Identifying and Constructing Triangles <br> 6: Consolidation of 2-D Shapes and Angles | Unit 4 Question 3 (pp. 24-25) | Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons. <br> Understanding relationships among measured units <br> - Investigates and generalizes sum of interior angles of triangles (i.e., sum of angles of a triangle is $180^{\circ}$ ). |
| :---: | :---: | :---: | :---: |
| SS3: Develop and apply a formula for determining the: <br> - perimeter of polygons <br> - area of rectangles <br> - volume of right rectangular prisms. | Measurement Unit 1A: <br> Perimeter, Area, Volume, and <br> Capacity <br> 1: Determining the Perimeter of Polygons <br> 2: Determining the Area of Rectangles <br> 4: Determining the Volume of Right Rectangular Prisms <br> 6: Consolidation of Perimeter, Area, Volume, and Capacity | Unit 13 Questions 3, 4, 5, 8, 9, 10, 11, 13 (pp. 89-93, 95) <br> omit parts related to surface area | Big Idea: Patterns and relations can be represented with symbols, equations, and expressions. <br> Using variables, algebraic expressions, and equations to represent mathematical relations <br> - Uses expressions and equations with variables to represent generalized relations and algorithms (e.g., $P=2 /+2 w$ ). <br> Big Idea: Assigning a unit to a continuous attribute allows us to measure and make comparisons. <br> Selecting and using units to estimate, measure, construct, and make comparisons <br> - Measures, constructs, and estimates perimeter and area of regular and irregular polygons. <br> Understanding relationships among measured units <br> - Develops and generalizes strategies to compute area and perimeter of rectangles. <br> - Develops and generalizes strategies and formulas to compute volumes of right rectangular prisms. |

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## Correlation of New Brunswick Program of Studies with Mathology Grade 6 (Shape and Space: 3-D Objects and 2-D Shapes)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: <br> Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them. |  |  |  |
| Specific Curriculum Outcomes <br> SS4: Construct and compare triangles, including: <br> - scalene <br> - isosceles <br> - equilateral <br> - right <br> - obtuse <br> - acute <br> in different orientations. | Geometry Unit 1A: 2-D Shapes and Angles <br> 3: Classifying Triangles <br> 4: Identifying and Constructing Triangles <br> 6: Consolidation of 2-D Shapes and Angles | Unit 4 Questions 5, 6, 7, 12 (pp. 25-26, 29) | Big Ideas: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes. Investigating geometric attributes and properties of 2-D shapes and 3-D solids <br> - Sorts, describes, constructs, and classifies polygons based on side attributes (e.g., parallel, perpendicular, regular/irregular). <br> - Sorts, describes, and classifies 2-D shapes based on their geometric properties (e.g., side length, angles, diagonals). <br> - Classifies 2-D shapes within a hierarchy based on their properties (e.g., rectangles are a subset of parallelograms). |
| SS5: Describe and compare the sides and angles of regular and irregular polygons. | Geometry Unit 1A: 2-D Shapes and Angles <br> 5: Investigating Polygons <br> 6: Consolidation of 2-D Shapes and Angles | Unit 4 Questions 8, 10a, 10b, 11, 12 (pp. 27-29) | Big Ideas: 2-D shapes and 3-D solids can be analyzed and classified in different ways by their attributes. Investigating geometric attributes and properties of 2-D shapes and 3-D solids <br> - Sorts, describes, constructs, and classifies polygons based on side attributes (e.g., parallel, perpendicular, regular/irregular). <br> - Sorts, describes, and classifies 2-D shapes based on their geometric properties (e.g., side lengths, angles, diagonals). |

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## mathôlogy

## Correlation of New Brunswick Program of Studies with Mathology Grade 6 (Shape and Space: Transformations)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: <br> Describe and analyze position and motion of objects and shapes. |  |  |  |
| Specific Curriculum <br> Outcomes <br> SS6: Perform a combination of translation(s), rotation(s) and/or reflection(s) on a single 2-D shape, with and without technology, and draw and describe the image. | Geometry Unit 2A: <br> Transformations <br> 7: Rotating 2-D Shapes on a Grid <br> 8: Single Transformations on a <br> Grid <br> 9: Combining Transformations on <br> a Grid <br> 12: Consolidation of <br> Transformations | Unit 5 Questions 3, 4, 9 (pp. 31-32, 36) | Big Ideas: 2-D shapes and 3-D solids can be transformed in many ways and analyzed for change. <br> Exploring 2-D shapes and 3-D solids by applying and visualizing transformations <br> - Identifies, describes, and performs single transformations (i.e., translation, reflection, rotation) on 2-D shapes. <br> - Identifies, describes, applies, and creates a combination of successive transformations on 2-D shapes. |
| SS7: Perform a combination of successive transformations of 2-D shapes to create a design, and identify and describe the transformations. | Geometry Unit 2A: <br> Transformations <br> 9: Combining Transformations on <br> a Grid <br> 12: Consolidation of <br> Transformations | N/A | Big Ideas: 2-D shapes and 3-D solids can be transformed in many ways and analyzed for change. <br> Exploring 2-D shapes and 3-D solids by applying and visualizing transformations <br> - Identifies, describes, and performs single transformations (i.e., translation, reflection, rotation) on 2-D shapes. <br> - Identifies, describes, applies, and creates a combination of successive transformations on 2-D shapes. |


| SS8: Identify and plot points <br> in the first quadrant of a <br> Cartesian plane using whole <br> number ordered pairs. | Geometry Unit 2A: <br> Transformations <br> 10: Plotting and Reading <br> Coordinates <br> 11: Transformations on a <br> Coordinate Plane <br> 12: Consolidation of <br> Transformations | Unit 5 Questions 1a, 2a <br> (pp. 30-31) | Big Idea: Objects can be located in space and <br> viewed from multiple perspectives. <br> Locating and mapping objects in space <br> - Develops understanding of a Cartesian plane as a <br> coordinate system using perpendicular axes. <br> - Plots and locates points on a Cartesian plane, and <br> relates the location to the two axes. (Limited to the <br> first quadrant.) |
| :--- | :--- | :--- | :--- |
| SS9: Perform and describe <br> single transformations of a <br> 2-D shape in the first <br> quadrant of a Cartesian <br> plane (limited to whole <br> number vertices). | Geometry Unit 2A: <br> Transformations <br> $11:$ Transformations on a <br> Coordinate Plane <br> 12: Consolidation of <br> Transformations | Unit 5 Questions 5, 6 (p. 33) | Big Idea: Objects can be located in space and <br> viewed from multiple perspectives. <br> Locating and mapping objects in space <br> - Plots and locates points on a Cartesian plane, and <br> relates the location to the two axes. (Limited to the <br> first quadrant.) |
| - Analyzes and locates the vertices of 2-D shapes |  |  |  |
| after transformation on a Cartesian plane. (Limited |  |  |  |
| to the first quadrant.) |  |  |  |

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## Correlation of New Brunswick Program of Studies with Mathology Grade 6 (Statistics and Probability: Data Analysis)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: <br> Collect, display and analyze data to solve problems. |  |  |  |
| Specific Curriculum Outcomes SP1: Create, label and interpret line graphs to draw conclusions. | Data Management Unit 1: Data Management <br> 1: Exploring Line Graphs <br> 6: Consolidation of Data Management | Unit 9 Questions 1, 4, 5, 8 (pp. 61-64, 66) | 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> Collecting data and organizing it into categories - Differentiates between discrete (e.g., votes) and continuous (e.g., height) data. <br> Creating graphical displays of collected data - Represents data graphically using many-to-one correspondence with appropriate scales and intervals (e.g., each symbol on pictograph represents 10 people). <br> - Chooses and justifies appropriate visual representations for displaying discrete (e.g., bar graph) and continuous (e.g., line graph) data. |
| SP2: Select, justify and use appropriate methods of collecting data, including: <br> - questionnaires <br> - experiments <br> - databases <br> - electronic media. | Data Management Unit 1: <br> Data Management <br> 3: Collecting and Organizing Data <br> 6: Consolidation of Data <br> Management | Unit 9 Questions 3, 8 (pp. 63, 66) | 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> Collecting data and organizing it into categories <br> - Constructs data organizers to support data collection (e.g., creates tally chart or line plot on a grid to collect survey data). |


|  |  |  | - Selects and justifies an appropriate method of <br> data collection (e.g., experiment, observation, <br> survey) based on question posed. |
| :--- | :--- | :--- | :--- |
| SP3: Graph collected data <br> and analyze the graph to <br> solve problems. | Data Management Unit 1: <br> Data Management <br> 3: Collecting and Organizing Data <br> 4: Interpreting Graphs to Solve <br> Problems <br> 6: Consolidation of Data <br> Management | Unit 9 Questions 1, 5, 8 <br> (pp. 61-62, 64-66) | Big Idea: Formulating questions, collecting data, <br> and consolidating data in visual and graphical <br> displays help us understand, predict, and <br> interpret situations that involve uncertainty, <br> variability, and randomness. <br> Creating graphical displays of collected data <br> - Represents data graphically using many-to-one <br> correspondence with appropriate scales and <br> intervals (e.g., each symbol on pictograph <br> represents 10 people). <br> - Chooses and justifies appropriate visual <br> representations for displaying discrete (e.g., bar <br> graph) and continuous (e.g., line graph) data. <br> Reading and interpreting data displays and <br> analyzing variability |

## Correlation of New Brunswick Program of Studies with Mathology Grade 6 (Statistics and Probability: Chance and Uncertainty)

| Curriculum Expectations | Grade 6 Mathology.ca | Mathology Practice Workbook 6 | Pearson Canada Grades 4-6 Mathematics Learning Progression |
| :---: | :---: | :---: | :---: |
| General Curriculum Outcome: <br> Use experimental or theoretical probabilities to represent and solve problems involving uncertainty. |  |  |  |
| Specific Curriculum Outcomes <br> SP4: Demonstrate an understanding of probability by: <br> - identifying all possible outcomes of a probability experiment <br> - differentiating between experimental and theoretical probability <br> - determining the theoretical probability of outcomes in a probability experiment <br> - determining the experimental probability of outcomes in a probability experiment <br> - comparing experimental results with the theoretical probability for an experiment. | Data Management Unit 2: <br> Probability <br> 7: Exploring Theoretical Probability <br> 8: Independent Events <br> 9: Conducting Experiments <br> 10: Consolidation of Probability | Unit 10 Questions 1, 2, 5, 6, 8 (pp. 67-68, 70, 72) | 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> Collecting data and organizing it into categories <br> - Records the results of multiple trials of simple events. <br> Using the language and tools of chance to describe and predict events <br> - Locates the likelihood of outcomes on a vocabulary-based probability continuum (e.g., impossible, unlikely, likely, certain). <br> - Distinguishes between equally likely events (e.g., heads or tails on a fair coin) unequally likely events (e.g., spinner with differently sized sections). <br> - Identifies the sample space of independent events in an experiment (e.g., flipping a cup, drawing a coloured cube from a bag). <br> - Investigates and calculates the experimental probability (i.e., relative frequency) of simple events (e.g., 3 heads in 5 coins tosses is $\frac{3}{5}$ ). |

