



Mathology Grade 3 Correlation (Number) – Alberta

Organizing Idea:

Quantity is measured with numbers that enable counting, labelling, comparing, and operating.

Guiding Question: How can place value support organization of number? Learning Outcome: Students interpret place value within 100 000.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
<p>For numbers in base-10, each place has 10 times the value of the place to its right.</p> <p>The digits 0 to 9 indicate the number of groups in each place in a number.</p> <p>The value of each place in a number is the product of the digit and its place value.</p> <p>Numbers can be composed in various ways using place value.</p>	<p>Place value is the basis for the base-10 system.</p> <p>Place value determines the value of a digit based on its place in a number, relative to the ones place.</p>	<p>Identify the place value of each digit in a natural number.</p>	<p>Number Unit 1: Number Relationships and Place Value</p> <p>1: Representing Numbers to 10 000</p> <p>3: Representing Larger Numbers</p>	<p>How Numbers Work</p>	<p>Unit 4 Questions 1, 3, 4, 7 (pp. 18-20)</p>
		<p>Relate the values of adjacent places.</p>	<p>Number Unit 1: Number Relationships and Place Value</p> <p>1: Representing Numbers to 10 000</p> <p>3: Representing Larger Numbers</p>	<p>Finding Buster</p> <p>How Numbers Work</p>	<p>N/A</p>
	<p>Place value is used to read, write, and compare numbers.</p>	<p>Determine the value of each digit in a natural number.</p>	<p>Number Unit 1: Number Relationships and Place Value</p> <p>1: Representing Numbers to 10 000</p> <p>3: Representing Larger Numbers</p>	<p>How Numbers Work</p>	<p>Unit 4 Questions 1, 3, 7 (pp. 18-20)</p>
		<p>Express natural numbers using words and numerals.</p>	<p>Number Unit 1: Number Relationships and Place Value</p> <p>1: Representing Numbers to 10 000</p> <p>3: Representing Larger Numbers</p>		<p>Unit 4 Questions 2, 3, 4, 5 (pp. 18-19)</p>

<p>Numbers can be rounded in contexts where an exact count is not needed.</p> <p>The less than sign, $<$, and the greater than sign, $>$, are used to show the relationship between two unequal numbers.</p> <p>A zero in the leftmost place of a natural number does not change the value of the number.</p> <p>The dollar sign, \$, is placed to the left of the dollar value in English and to the right of the dollar value in French.</p> <p>The cent sign, ¢, is placed to the right of the cent value in English and in French.</p>	Express various compositions of a natural number using place value.	Number Unit 1: Number Relationships and Place Value 2: Composing and Decomposing Numbers to 10 000 6: Consolidation	Finding Buster Fantastic Journeys	Unit 3 Questions 1, 2, 3, 4, 10 (pp. 13-14, 16) Unit 4 Questions 3, 4, 5, 10 (pp. 19-20, 22)
	Round natural numbers to various places.	Number Unit 1: Number Relationships and Place Value 4: Rounding Numbers		Unit 4 Question 9 (p. 21)
	Compare and order natural numbers.	Number Unit 1: Number Relationships and Place Value 5: Comparing and Ordering Numbers	Fantastic Journeys Finding Buster Math Makes Me Laugh The Street Party	Unit 3 Questions 5, 6, 8, 9, 10, 11 (pp. 15-17) Unit 4 Questions 6, 8 (pp. 20-21)
	Express the relationship between two numbers using $<$, $>$, or $=$.	Number Unit 1: Number Relationships and Place Value 5: Comparing and Ordering Numbers		Unit 3 Question 7 (p. 15)
	Count and represent the value of a collection of nickels, dimes, and quarters as cents.	Number Unit 6: Financial Literacy 32: Counting Money		Unit 8 Questions 1, 2, 4, 5, 6, 7 (pp. 42-45)
	Count and represent the value of a collection of loonies, toonies, and bills as dollars.	Number Unit 6: Financial Literacy 32: Counting Money		Unit 8 Questions 1, 4, 6 (pp. 42, 44-45)
	Recognize French and English symbolic representations of monetary values.	Number Unit 6: Financial Literacy 32: Counting Money		N/A

Guiding Question: How can processes be established for addition and subtraction?

Learning Outcome: Students apply strategies for addition and subtraction within 1000.

Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
<p>Recall of addition and subtraction number facts facilitates addition and subtraction strategies.</p> <p>Standard algorithms for addition and subtraction are conventional procedures based on place value.</p> <p>Estimation can be used to support addition and subtraction in everyday situations, including</p> <ul style="list-style-type: none"> when an exact sum or difference is not needed to check if an answer is reasonable 	<p>Addition and subtraction strategies can be chosen based on the nature of the numbers.</p> <p>Standard algorithms for addition and subtraction may be used for any natural numbers.</p>	<p>Relate strategies for the addition and subtraction of two-digit numbers to strategies for the addition and subtraction of three-digit numbers.</p>	<p>Number Unit 3: Addition and Subtraction 12: Modeling Addition and Subtraction 14: Using Mental Math to Add and Subtract</p>	<p>Math Makes Me Laugh Planting Seeds The Street Party</p>	<p>Unit 5 Question 1 (p. 25)</p>
		<p>Model regrouping by place value for addition and subtraction.</p>	<p>Number Unit 3: Addition and Subtraction 12: Modeling Addition and Subtraction</p>		<p>Unit 5 Questions 3, 7, 8, 9, 10 (pp. 26, 28-29)</p>
		<p>Explain the standard algorithms for addition and subtraction of natural numbers.</p>	<p>Number Unit 3: Addition and Subtraction 12: Modeling Addition and Subtraction</p>	<p>Math Makes Me Laugh The Street Party</p>	<p>N/A</p>
		<p>Add and subtract natural numbers using standard algorithms.</p>	<p>Number Unit 3: Addition and Subtraction 12: Modeling Addition and Subtraction 15: Creating and Solving Problems 16: Creating and Solving Problems with Larger Numbers 17: Consolidation</p>	<p>Math Makes Me Laugh</p>	<p>Unit 5 Questions 3, 5, 7, 8, 9, 10, 11, 12 (pp. 26-30)</p>
		<p>Estimate sums and differences.</p>	<p>Number Unit 3: Addition and Subtraction 13: Estimating Sum and Differences 14: Using Mental Math to Add and Subtract</p>	<p>Calla's Jingle Dress</p>	<p>Unit 5 Questions 2, 4, 9 (pp. 26-27, 29)</p>

			15: Creating and Solving Problems 16: Creating and Solving Problems with Larger Numbers 17: Consolidation		
		Solve problems using addition and subtraction.	Number Unit 3: Addition and Subtraction 15: Creating and Solving Problems with Larger Numbers 16: Creating and Solving Problems with Larger Numbers 17: Consolidation	Calla's Jingle Dress	Unit 5 Questions 6, 9, 10, 12 (pp. 27, 29-30)

Guiding Question: How can multiplication and division provide new perspectives of number?

Learning Outcome: Students analyze and apply strategies for multiplication and division within 100.

Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
<p>Multiplication and division are inverse mathematical operations.</p> <p>Multiplication is repeated addition.</p> <p>Multiplication can be interpreted in various ways according to context, such as</p> <ul style="list-style-type: none"> • equal groups • an array • an area <p>Division can be interpreted in various ways according to context, such as</p> <ul style="list-style-type: none"> • equal sharing 	Quantities can be composed and decomposed through multiplication and division.	Compose a product using equal groups of objects.	Number Unit 4: Early Multiplicative Thinking 20: Exploring Multiplication	Planting Seeds Sports Camp Calla's Jingle Dress <u>Grade 2</u> Array's Bakery Marbles, Alleys, Mibs, and Guli!	Unit 16 Questions 1, 5, 8, 10 (pp. 96, 98-100)
		Relate multiplication to repeated addition.	Number Unit 4: Early Multiplicative Thinking 18: Exploring Repeated Addition 19: Repeated Addition and Multiplication 20: Exploring Multiplication 23: Consolidation	Calla's Jingle Dress Planting Seeds Sports Camp	Unit 16 Questions 1, 2, 4, 5, 8, 10 (pp. 96-100)
		Relate multiplication to skip counting.	Number Unit 4: Early Multiplicative Thinking 18: Exploring Repeated Addition 19: Repeated Addition and Multiplication 20: Exploring Multiplication 23: Consolidation	Planting Seeds <u>Grade 2</u> Array's Bakery Marbles, Alleys, Mibs, and Guli!	Unit 16 Questions 2, 5, 10 (pp. 97-98, 100)

<ul style="list-style-type: none"> • equal grouping • repeated subtraction <p>The order in which two quantities are multiplied does not affect the product (commutative property).</p> <p>The order in which two numbers are divided affects the quotient.</p> <p>Multiplication or division by 1 results in the same number (identity property).</p>		Investigate multiplication by 0.	Number Unit 5: Multiplication and Division 25: Strategies for Multiplication		N/A
		Model a quotient by partitioning a quantity into equal groups or groups of a certain size, with or without remainders.	Number Unit 4: Early Multiplicative Thinking 21: Repeated Subtraction and Division 22: Exploring Division Number Unit 5: Multiplication and Division 28: Dividing with Remainders	Sports Camp <u>Grade 2</u> Marbles, Alleys, Mibs, and Guli!	Unit 16 Questions 8b, 9 (pp. 99-100)
		Visualize and model products and quotients as arrays.	Number Unit 4: Early Multiplicative Thinking 20: Exploring Multiplication 21: Repeated Subtraction and Division 22: Exploring Division 23: Consolidation Number Unit 5: Multiplication and Division 26: Relating Multiplication and Division 27: Strategies for Division	<u>Grade 2</u> Array's Bakery	Unit 16 Questions 1, 3, 4, 5, 8 (pp. 96-99)
		Recognize interpretations of multiplication and division in various contexts.	Number Unit 5: Multiplication and Division 29: Solving Multiplication and Division Problems		Unit 16 Questions 2, 3, 8, 9 (pp. 97, 99-100)
Numbers can be multiplied or divided in parts (distributive property).	Sharing and grouping situations can be interpreted as multiplication or division.	Investigate multiplication and division strategies.	Number Unit 4: Early Multiplicative Thinking 19: Repeated Addition and Multiplication 20: Exploring Multiplication	Sports Camp	Unit 16 Questions 2, 3, 8, 9, 11 (pp. 99-101)

<p>Multiplication strategies include</p> <ul style="list-style-type: none"> repeated addition multiplying in parts compensation <p>Division strategies include</p> <ul style="list-style-type: none"> repeated subtraction partitioning the dividend <p>Products can be expressed symbolically using the multiplication sign, \times, factors, and the equal sign.</p> <p>Quotients can be expressed symbolically using the division sign, \div, dividend, divisor, and the equal sign.</p> <p>A missing quantity in a product or quotient can be represented in different ways, including</p> <ul style="list-style-type: none"> $a \times b = \square$ 	<p>Multiplication and division strategies can be supported by addition and subtraction.</p>	<p>21: Repeated Subtraction and Division</p> <p>22: Exploring Division</p> <p>Number Unit 5: Multiplication and Division</p> <p>25: Strategies for Multiplication</p> <p>26: Relating Multiplication and Division</p> <p>27: Strategies for Division</p>			
		<p>Multiply and divide within 100.</p>	<p>Number Unit 5: Multiplication and Division</p> <p>30: Building Fluency: The Games Room</p> <p>25: Strategies for Multiplication</p> <p>27: Strategies for Division</p>		<p>Unit 16 Questions 2, 5, 7, 8, 9, 10, 11 (pp. 97-100)</p>
		<p>Verify a product or quotient using inverse operations.</p>	<p>Number Unit 5: Multiplication and Division</p> <p>26: Relating Multiplication and Division</p> <p>29: Solving Multiplication and Division Problems</p>		<p>N/A</p>
		<p>Determine a missing quantity in a product or quotient in a variety of ways.</p>	<p>Number Unit 5: Multiplication and Division</p> <p>26: Relating Multiplication and Division</p>		<p>Unit 16 Question 8b (p. 99)</p>
		<p>Express multiplication and division symbolically.</p>	<p>Number Unit 5: Multiplication and Division</p> <p>30: Building Fluency: The Games Room</p>	<p>Sports Camp</p>	<p>Unit 16 Questions 2, 4, 5, 6, 8, 9, 10 (pp. 97-100)</p>
		<p>Explain the meaning of the remainder in various situations.</p>	<p>Number Unit 5: Multiplication and Division</p> <p>28: Dividing with Remainders</p>		<p>N/A</p>
		<p>Solve problems using multiplication and division in</p>	<p>Number Unit 5: Multiplication and Division</p>	<p>Sports Camp</p>	<p>Unit 16 Questions 2, 3, 8, 9, 10 (pp. 97, 99-100)</p>

<ul style="list-style-type: none"> • $a \times \square = c$ • $\square \times b = c$ • $e \div f = \square$ • $e \div \square = g$ • $\square \div f = g$ <p>A remainder is the quantity left over after division.</p>		sharing or grouping situations.	26: Relating Multiplication and Division 29: Solving Multiplication and Division Problems		
<p>A multiplication table shows both multiplication and division facts.</p> <p>Fact families are groups of related multiplication and division number facts.</p>	Multiplication number facts have related division facts.	Examine patterns in multiplication and division, including patterns in multiplication tables and skip counting.	Number Unit 5: Multiplication and Division 30: Building Fluency: The Games Room		N/A
		Recognize families of related multiplication and division number facts.	Number Unit 5: Multiplication and Division 26: Relating Multiplication and Division 30: Building Fluency: The Games Room 31: Consolidation		Unit 16 Questions 5, 6 (p. 98)
		Recall multiplication number facts, with factors to 10, and related division facts.	Number Unit 5: Multiplication and Division 24: Multiplication and Division Fact Families 25: Strategies for Multiplication 30: Building Fluency: The Games Room		Unit 16 Question 11 (p. 101)

Guiding Question: How can fractions contribute to a sense of number?

Learning Outcome: Students interpret fractions in relation to one whole.

Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
<p>The same fraction can represent</p> <ul style="list-style-type: none"> equal parts of one whole length, shape, or object equal groups of one whole quantity equal parts of each equal group in one whole quantity <p>The name of a fraction describes its composition as a number of unit fractions.</p> <p>Fraction notation, $\left(\frac{a}{b}\right)$, relates the numerator, a, as a number of equal parts, to the denominator, b, as the total number of equal parts in the whole.</p>	<p>Fractions are numbers between natural numbers.</p> <p>Fractions can represent part-to-whole relationships.</p> <p>A unit fraction describes the size of the equal parts of a fraction.</p> <p>The size of the parts and the total number of equal parts in the whole are inversely related.</p>	Model fractions of a whole quantity, length, shape, or object, in various ways, limited to denominators of 12 or less.	Number Unit 2: Fractions 7: Exploring Equal Parts 8: Comparing Fractions 1 10: Comparing and Ordering Fractions		Unit 12 Questions 1, 2, 3, 7, 8, 9 (pp. 70-71, 73)
		Visualize fractions as compositions of a unit fraction.	Number Unit 2: Fractions 7: Exploring Equal Parts 8: Comparing Fractions 1 9: Comparing Fractions 2		Unit 12 Questions 1, 2, 5 (pp. 70-72)
		Identify the numerator and denominator of a fraction in various representations.	Number Unit 2: Fractions 7: Exploring Equal Parts		Unit 12 Question 5 (p. 72)
		Name a given fraction.	Number Unit 2: Fractions 7: Exploring Equal Parts		Unit 12 Question 1, 2, 3, 5 (pp. 70-72)
		Express fractions, including one whole, symbolically, limited to denominators of 12 or less.	Number Unit 2: Fractions 7: Exploring Equal Parts 8: Comparing Fractions 1 9: Comparing Fractions 2	Hockey Homework	Unit 12 Question 1, 2, 3, 5, 7, 8, 9 (pp. 70-73)
		Relate various representations of the same fraction, limited to denominators of 12 or less.	Number Unit 2: Fractions 9: Comparing Fractions 2		Unit 12 Questions 1, 3 (pp. 70-71)

<p>Equal numerators or equal denominators can facilitate the comparison of fractions.</p> <p>A fraction with a numerator that is equal to its denominator is one whole.</p> <p>Each fraction is associated with a point on the number line.</p>	<p>Compare the same fraction of different-sized wholes.</p>	<p>Number Unit 2: Fractions 8: Comparing Fractions 1 9: Comparing Fractions 2</p>	<p>Hockey Homework</p>	<p>Unit 12 Question 4 (p. 71)</p>
	<p>Compare different fractions of the same whole that have the same denominator.</p>	<p>Number Unit 2: Fractions 8: Comparing Fractions 1 9: Comparing Fractions 2 10: Comparing and Ordering Fractions 11: Consolidation</p>		<p>Unit 12 Questions 5, 6 (p. 72)</p>
	<p>Compare different fractions of the same whole that have the same numerator and different denominators.</p>	<p>Number Unit 2: Fractions 8: Comparing Fractions 1 9: Comparing Fractions 2 10: Comparing and Ordering Fractions 11: Consolidation</p>		<p>Unit 12 Question 6 (p. 72)</p>
	<p>Express the relationship between two fractions of the same whole, using $<$, $>$, or $=$.</p>	<p>Number Unit 2: Fractions 8: Comparing Fractions 1 9: Comparing Fractions 2 10: Comparing and Ordering Fractions</p>		<p>N/A</p>
	<p>Relate a fraction less than one to its position on the number line, limited to denominators of 12 or less.</p>	<p>Number Unit 2: Fractions 8: Comparing Fractions 1 10: Comparing and Ordering Fractions</p>		<p>N/A</p>
	<p>Compare fractions to benchmarks of 0, $\frac{1}{2}$, and 1.</p>	<p>Number Unit 2: Fractions 8: Comparing Fractions 1 10: Comparing and Ordering Fractions</p>	<p>Hockey Homework</p>	<p>Unit 12 Questions 5, 6 (p. 72)</p>



Mathology Grade 3 Correlation (Algebra) – Alberta

Organizing Idea:

Equations express relationships between quantities.

Guiding Question: How can equality facilitate agility with number? Learning Outcome: Students illustrate equality with equations.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
An equation uses the equal sign to indicate equality between two expressions. The left and right sides of an equation are interchangeable.	Two expressions are equal if they represent the same number.	Write equations that represent equality between a number and an expression or between two different expressions of the same number.	Patterning Unit 2: Variables and Equations 9: Exploring Number Sentences for Larger Numbers 10: Solving Equations Concretely	A Week of Challenges	Unit 7 Questions 2, 3, 4c, 7 (pp. 38-40)
Equations can be modelled using a balance. A symbol may represent an unknown value in an equation.	Equations can include unknown values.	Model equations that include an unknown value, including with a balance.	Patterning Unit 2: Variables and Equations 10: Solving Equations Concretely 11: Strategies for Solving Equations 12: Creating Equations 13: Consolidation	A Week of Challenges	Unit 7 Questions 1, 2 (pp. 37-38)
		Determine an unknown value on the left or right side of an equation, limited to equations with one operation.	Patterning Unit 2: Variables and Equations 10: Solving Equations Concretely 11: Strategies for Solving Equations 12: Creating Equations 13: Consolidation	A Week of Challenges	Unit 7 Questions 1, 2, 3, 4, 5, 10 (pp. 37-39, 41)

		Solve problems using equations, limited to equations with one operation.	Patterning Unit 2: Variables and Equations 12: Creating Equations	A Week of Challenges	Unit 7 Questions 6, 8 (pp. 39-40)
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Mathology Grade 3 Correlation (Geometry) – Alberta

Organizing Idea:

Shapes are defined and related by geometric attributes.

Guiding Question: In what ways might geometric properties refine interpretation of shape? Learning Outcome: Students relate geometric properties to shape.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
Geometric properties can describe relationships, including perpendicular, parallel, and equal. Parallel lines or planes are always the same distance apart. Perpendicular lines or planes intersect at a 90° (right) angle. Right angles can be identified using	Geometric properties are relationships between geometric attributes. Geometric properties define a class of polygon.	Investigate the relationships between the sides of a polygon, including perpendicular, parallel, and equal, using referents for 90° or by measuring.	Geometry Unit 1: 2-D Shapes 3: Geometric Relationships		Unit 9 Questions 3, 6, 7 (pp. 51, 53)
		Investigate the relationships between vertices of a polygon, including equal or right angles, using direct comparison or referents for 90°.	Geometry Unit 1: 2-D Shapes 3: Geometric Relationships		Unit 9 Questions 3, 6, 7, 9 (pp. 51, 53-54)

<p>various referents, such as</p> <ul style="list-style-type: none"> the corner of a piece of paper the angle between the hands on an analog clock at 3:00 a capital letter L <p>Polygons include</p> <ul style="list-style-type: none"> triangles quadrilaterals pentagons hexagons octagons <p>Regular polygons have sides of equal length and interior angles of equal measure.</p>		Describe geometric properties of regular and irregular polygons.	Geometry Unit 1: 2-D Shapes 1: Sorting Polygons 2: What's the Sorting Rule?	Gallery Tour WONDERful Buildings	Unit 9 Questions 1, 2, 3 (pp. 50-51)
		Sort polygons according to geometric properties and describe the sorting rule.	Geometry Unit 1: 2-D Shapes 1: Sorting Polygons 2: What's the Sorting Rule? 5: Consolidation	WONDERful Buildings	Unit 9 Questions 4, 5 (pp. 51-52)
		Classify polygons as regular or irregular using geometric properties.	Geometry Unit 1: 2-D Shapes 1: Sorting Polygons 2: What's the Sorting Rule?		Unit 9 Questions 1, 2, 3 (p. 50-51)
<p>Transformations include</p> <ul style="list-style-type: none"> translations rotations reflections <p>The distance between any two vertices of a shape is maintained in the image created by a transformation.</p>	Geometric properties do not change when a polygon undergoes a transformation.	Examine geometric properties of polygons by translating, rotating, or reflecting using hands-on materials or digital applications.	Geometry Unit 1: 2-D Shapes 4: Transformations	Gallery Tour	Unit 11 Question 3 (p. 63)



Mathology Grade 3 Correlation (Measurement) – Alberta

Organizing Idea:

Attributes such as length, area, volume, and angle are quantified by measurement.

Guiding Question: In what ways can length be communicated? Learning Outcome: Students determine length using standard units.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
The basic unit of length in the metric system is the metre. Metric units are named using prefixes that indicate the relationship to the basic unit, including <ul style="list-style-type: none"> • milli: one thousand millimetres in one metre • centi: one hundred centimetres in one metre 	Length is measured in standard units according to the metric system and the imperial system.	Relate millimetres, centimetres, and metres.	Measurement Unit 1: Length and Perimeter 3: The Centimetre 4: Estimating and Measuring in Millimetres 10: Consolidation	Measurements About YOU!	Unit 6 Questions 2, 3 (p. 32)
		Relate inches to feet and yards.	Measurement Unit 1: Length and Perimeter 7: Imperial Measures		N/A
	Length can be expressed in various units according to context and desired precision.	Justify the choice of millimetres, centimetres, or metres to measure various lengths.	Measurement Unit 1: Length and Perimeter 9: How many Can you Make? 10: Consolidation		Unit 6 Question 1 (p. 31)
		Measure lengths of straight lines and curves, with millimetres, centimetres, or metres.	Measurement Unit 1: Length and Perimeter 2: The Metre 3: The Centimetre 4: Estimating and Measuring in Millimetres		Unit 6 Questions 4, 5, 6, 7, 9, 11, 12 (pp. 32-36)

<ul style="list-style-type: none"> • deci: ten decimetres in one metre <p>Metric units are abbreviated for convenience, including</p> <ul style="list-style-type: none"> • m: metre • dm: decimetre • cm: centimetre • mm: millimetre <p>Standard measuring tools show iterations of a standard unit from an origin.</p> <p>Units of length in the imperial system include inch, foot, and yard, related in these ways:</p> <ul style="list-style-type: none"> • 12 inches in one foot • 36 inches in one yard • 3 feet in one yard <p>Approximate conversions between metric and imperial are useful in real-world situations, including</p> <ul style="list-style-type: none"> • $2\frac{1}{2}$ centimetres are 			<p>5: Metres, Centimetres, or Millimetres? 6: Measuring Length 10: Consolidation</p>		
	Recognize length expressed in metric or imperial units.	<p>Measurement Unit 1: Length and Perimeter 7: Imperial Measures</p>			Unit 6 Questions 2, 3, 6 (pp. 32-33)
	Approximate a measurement in inches, feet, or yards using centimetres or metres.	<p>Measurement Unit 1: Length and Perimeter 7: Imperial Measures</p>			N/A

<p>approximately 1 inch</p> <ul style="list-style-type: none"> • 1 metre is approximately 3 feet • 30 centimetres are approximately 1 foot • 1 metre is approximately 1 yard 					
<p>The perimeter of a polygon is the sum of the lengths of its sides.</p>	<p>Length remains the same when decomposed or rearranged.</p>	<p>Determine perimeter of polygons.</p>	<p>Measurement Unit 1: Length and Perimeter 8: Measuring Perimeter 9: How Many Can You Make? 10: Consolidation</p>	<p>The Bunny Challenge</p>	<p>Unit 6 Questions 7, 8, 9, 10, 12 (pp. 33-36)</p> <p>Unit 17 Question 2 (p. 103)</p>
		<p>Determine the length of an unknown side given the perimeter of a polygon.</p>	<p>Measurement Unit 1: Length and Perimeter 8: Measuring Perimeter</p>	<p>The Bunny Challenge</p>	<p>Unit 6 Questions 9, 10, 11 (pp. 34-35)</p>
<p>A benchmark is a known length to which another length can be compared.</p> <p>Length can be estimated using a personal or familiar referent.</p>	<p>Length can be estimated when less accuracy is required.</p>	<p>Identify referents for a centimetre and a metre.</p>	<p>Measurement Unit 1: Length and Perimeter 1: Estimating Length</p>		<p>Unit 6 Questions 4, 6 (32-33)</p>
		<p>Estimate length by comparing to a benchmark.</p>	<p>Measurement Unit 1: Length and Perimeter 1: Estimating Length</p>		<p>Unit 6 Questions 4, 6 (32-33)</p>
		<p>Estimate length by visualizing the iteration of a referent for a centimetre or metre.</p>	<p>Measurement Unit 1: Length and Perimeter 1: Estimating Length 10: Consolidation</p>		<p>Unit 6 Questions 4, 6 (32-33)</p>

Guiding Question: How can angles broaden an understanding of space?

Learning Outcome: Students interpret angles.

Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
<p>Angle defines the space in</p> <ul style="list-style-type: none"> • corners • bends • turns or rotations • intersections • slopes <p>The arms of an angle can be line segments or rays.</p> <p>The end point of a line segment or ray is called a vertex.</p>	<p>An angle is the union of two arms with a common vertex.</p> <p>An angle can be interpreted as the motion of a length rotated about a vertex.</p>	Recognize various angles in surroundings.	Geometry Unit 2: Angles 6: Investigating Angles 8: Consolidation		Unit 9 Question 10 (p. 55)
		Recognize situations in which an angle can be perceived as motion.	Geometry Unit 2: Angles 6: Investigating Angles		N/A
<p>Superimposing is the process of placing one angle over another to compare angles.</p> <p>A referent is a personal or familiar representation of a known angle.</p>	<p>Two angles can be compared directly or indirectly.</p>	Compare two angles directly by superimposing.	Geometry Unit 2: Angles 7: Comparing Angles		Unit 9 Question 8 (p. 54)
		Compare two angles indirectly by superimposing a third angle.	Geometry Unit 2: Angles 7: Comparing Angles		Unit 9 Question 8 (p. 54)
		Estimate which of two angles is greater.	Geometry Unit 2: Angles 7: Comparing Angles		Unit 9 Question 10 (p. 55)
		Identify referents for 90°.	Geometry Unit 2: Angles 6: Investigating Angles 7: Comparing Angles		Unit 9 Questions 8, 10 (p. 54)
		Identify 90° angles in the environment using a referent.	Geometry Unit 2: Angles 6: Investigating Angles 7: Comparing Angles		Unit 9 Question 8 (p. 54)



Mathology Grade 3 Correlation (Patterns) – Alberta

Organizing Idea:

Awareness of patterns supports problem solving in various situations.

Guiding Question: How can diverse representations of patterns contribute to interpretation of change? Learning Outcome: Students analyze patterns in numerical sequences.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
Ordinal numbers can indicate position in a sequence.	A sequence is a list of terms arranged in a certain order.	Recognize familiar numerical sequences, including the sequence of even or odd numbers.	Patterning Unit 1: Increasing and Decreasing Patterns 2: Numerical Sequences	Namir’s Marvellous Masterpieces How Numbers Work The Best Surprise	Unit 1 Questions 4, 7, 9 (pp. 4, 6-7)
Finite sequences, such as a countdown, have a definite end.	Sequences may be finite or infinite.	Describe position in a sequence using ordinal numbers.	Patterning Unit 1: Increasing and Decreasing Patterns 1: Describing and Extending Patterns 3: Representing Patterns 4. Creating Patterns 5: Identifying Errors and Missing Terms 8: Consolidation		Unit 1 Questions 3, 4, 5, 6, 7, 8, 9 (pp. 3-7)
Infinite sequences, such as the natural numbers, never end.		Differentiate between finite and infinite sequences.	Patterning Unit 1: Increasing and Decreasing Patterns 2: Numerical Sequences		N/A
Numerical sequences can be constructed using addition, subtraction,	A sequence can progress according to a pattern.	Recognize skip-counting sequences in various representations,	Patterning Unit 1: Increasing and Decreasing Patterns 4: Creating Patterns 7: Exploring Multiplicative Patterns	Namir’s Marvellous Masterpieces	Unit 2 Questions 4, 5, 6, 7, 8, 9, 10 (pp. 10-12)

multiplication, or division.		including rows or columns of a multiplication table.	8: Consolidation		Unit 8 Questions 1, 2, 4, 5, 10 (pp. 42-44, 47)
		Determine any missing term in a skip-counting sequence using multiplication.	Patterning Unit 1: Increasing and Decreasing Patterns 5: Identifying Errors and Missing Terms 7: Exploring Multiplicative Patterns		Unit 2 Questions 4, 6 (p. 10)
		Describe the change from term to term in a numerical sequence using mathematical operations.	Patterning Unit 1: Increasing and Decreasing Patterns 1: Describing and Extending Patterns 3: Representing Patterns 4: Creating Patterns 5: Identifying Errors and Missing Terms 6: Solving Problems 7: Exploring Multiplicative Patterns 8: Consolidation	Namir’s Marvellous Masterpieces The Best Surprise	Unit 1 Questions 3, 4, 5, 6, 7, 8, 9 (pp. 3-7)



Mathology Grade 3 Correlation (Time) – Alberta

Organizing Idea:

Duration is described and quantified by time.

Guiding Question: How can duration be communicated? Learning Outcome: Students tell time using clocks.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
Clocks relate seconds to minutes and hours according to a base-60 system. The basic unit of time is the second. One second is $\frac{1}{60}$ of a minute. One minute is $\frac{1}{60}$ of an hour. Analog and digital clocks represent time of day.	Clocks are standard measuring tools used to communicate time.	Investigate relationships between seconds, minutes, and hours using an analog clock.	Measurement Unit 2: Time 11: Relationship Among Units of Time		Unit 13 Question 3, 5, 11 (pp. 77, 81)
		Relate minutes past the hour to minutes until the next hour.	Measurement Unit 2: Time 12: Telling Time in One- and Five-Minute Intervals		Unit 13 Question 6, 9, 11 (pp. 78-80)
		Describe time of day as a.m. or p.m. relative to 12-hour cycles of day and night.	Measurement Unit 2: Time 12: Telling Time in One- and Five-Minute Intervals 13: Telling Time on a 24-Hour Clock		Unit 13 Question 8, 9, 11 (pp. 79-80)
		Tell time using analog and digital clocks.	Measurement Unit 2: Time 12: Telling Time in One- and Five-Minute Intervals 14: Consolidation		Unit 13 Question 6, 8, 9, 11 (pp. 78-80)

<p>Time of day can be expressed as a duration relative to 12:00 in two 12-hour cycles.</p> <p>Time of day can be expressed as a duration relative to 0:00 in one 24-hour cycle in some contexts, including French-language contexts.</p>		<p>Express time of day in relation to one 24-hour cycle.</p>	<p>Measurement Unit 2: Time 13: Telling Time on a 24-Hour Clock 14: Consolidation</p>		<p>Unit 13 Question 9, 10, 11 (pp. 79-80)</p>
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Mathology Grade 3 Correlation (Statistics) – Alberta

Organizing Idea:

The science of collecting, analyzing, visualizing, and interpreting data can inform understanding and decision making.

Guiding Question: How can representation support communication? Learning Outcome: Students interpret and explain representations of data.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
Statistical questions are questions that can be answered by collecting data.	Representation connects data to a statistical question.	Formulate statistical questions for investigation.	Data Unit 1: Data Management 3: Collecting Data	Welcome to The Nature Park	N/A
		Predict the answer to a statistical question.	Data Unit 1: Data Management 3: Collecting Data		Unit 14 Question 3 (p. 85)
First-hand data is collected by the person using the data. Second-hand data is data collected by others from sources such as websites and social media.	Representation expresses data specific to a unique time and place.	Collect data using digital or non-digital tools and resources.	Data Unit 1: Data Management 3: Collecting Data	Welcome to The Nature Park	N/A
		Represent first-hand and second-hand data in a dot plot or bar graph with one-to-one correspondence.	Data Unit 1: Data Management 4: Drawing Bar Graphs 5: Drawing Dot Plots 7: Consolidation		Unit 14 Questions 4, 5 (p. 86)
	Representation tells a story about data.	Describe the story that a representation tells about a collection of data in relation to a statistical question.	Data Unit 1: Data Management 1: Interpreting Bar Graphs 2: Interpreting Dot Plots	Welcome to The Nature Park	Unit 14 Question 1, 2, 4, 8a (pp. 84-86, 88)

		Examine First Nations, Métis, or Inuit representations of data.	Data Unit 1: Data Management 6: First Nations, Métis, or Inuit Representations of Data		N/A
		Consider possible answers to a statistical question based on the data collected.	Data Unit 1: Data Management 3: Collecting Data		Unit 14 Question 3 (p. 85)



Mathology Grade 3 Correlation (Financial Literacy) – Alberta

Organizing Idea:

Informed financial decision making contributes to the well-being of individuals, groups, and communities.

Guiding Question: In what ways can money management be supported? Learning Outcome: Students describe strategies that support responsible money management.					
Knowledge	Understanding	Skills & Procedures	Grade 3 Mathology	Mathology Little Books	Mathology Practice Workbook 3
Good money habits allow individuals to appreciate the value of money and the importance of managing it. Responsible spending can be supported through strategies, such as <ul style="list-style-type: none"> buying needed items first 	Individuals can develop good habits early in life to make responsible money decisions now and in the future. Saving is essential for personal short-term and long-term goals.	Discuss the importance of responsible spending and saving.	Number Unit 6: Financial Literacy 33: Good Money Habits 35: Consolidation		Unit 8 Questions 9, 10 (pp. 46-47)

<ul style="list-style-type: none"> • buying items that are affordable • taking time when making purchases • not purchasing more than is needed <p>Saving means not spending in order to keep money aside for unexpected expenses and to pay for purchases, activities, and future plans or goals.</p> <p>Responsible saving can be supported through strategies, such as</p> <ul style="list-style-type: none"> • considering needs and wants • setting financial goals • establishing a savings account • putting earned money aside on a regular basis <p>Responsible money management can allow individuals to help others in need through donation.</p>	<p>Donating money can have a significant impact on the well-being of others.</p>	<p>Identify possible short-term and long-term saving goals.</p>	<p>Number Unit 6: Financial Literacy 34: Short-Term and Long-Term Savings Goals 35: Consolidation</p>		<p>N/A</p>
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