Mathology Grade 3 Correlation (Number) – Alberta

Materials referenced from other grades can be found in mathology.ca

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.ca** *(Suggested ways to align with 2022 curriculum)*	**Mathology Little Books**
For numbers in base-10, each place has 10 times the value of the place to its right. The digits 0 to 9 indicate the number of groups in each place in a number. The value of each place in a number is the product of the digit and its place value. Numbers can be composed in	Place value is the basis for the base-10 system. Place value determines the value of a digit based on its place in a number, relative to the ones place. Place value is used to read, write, and compare numbers.	Identify the place value of each digit in a natural number.	*Link to other grades:* ***Grade 4 Number Unit 1: Number Relationships and Place Value*** *1: Representing Numbers to 10 000* ***Grade 5 Number Unit 1: Number Relationships and Place Value*** *1: Representing Larger Numbers* *(Part A addresses numbers to 100 000. Omit Part B as numbers go beyond 100 000.)*	How Numbers Work
		Relate the values of adjacent places.	*Link to other grades:* ***Grade 4 Number Unit 1: Number Relationships and Place Value*** *1: Representing Numbers to 10 000* ***Grade 5 Number Unit 1: Number Relationships and Place Value*** *1: Representing Larger Numbers*	Finding Buster How Numbers Work

various ways using place value. Numbers can be rounded in contexts where an exact count is not needed. The less than sign, <, and the greater than sign, >, are used to show the relationship between two unequal numbers. A zero in the leftmost place of a natural number does not change the value of the number. The dollar sign, $, is placed to the left of the dollar value in English and to the right of the dollar value in French. The cent sign, ¢, is placed to the right of the cent value in English and in French.			*(Part A addresses numbers to 100 000. Omit Part B as numbers go beyond 100 000.)*	
		Determine the value of each digit in a natural number.	*Link to other grades:* ***Grade 4 Number Unit 1: Number Relationships and Place Value*** *1: Representing Numbers to 10 000* ***Grade 5 Number Unit 1: Number Relationships and Place Value*** *1: Representing Larger Numbers* *(Part A addresses numbers to 100 000. Omit Part B as numbers go beyond 100 000.)*	How Numbers Work
		Express natural numbers using words and numerals.	*Link to other grades:* ***Grade 4 Number Unit 1: Number Relationships and Place Value*** *1: Representing Numbers to 10 000* ***Grade 5 Number Unit 1: Number Relationships and Place Value*** *1: Representing Larger Numbers* *(Part A addresses numbers to 100 000. Omit Part B as numbers go beyond 100 000.)*	
		Express various compositions of a natural number using place value.	*Link to other grades:* ***Grade 4 Number Unit 1: Number Relationships and Place Value*** *2: Composing and Decomposing Larger Numbers (to 10 000)* *(Currently to 10 000; include numbers to 100 000. Edit Practice line master to include numbers to 100 000.)*	Finding Buster Fantastic Journeys
		Round natural numbers to various places.	*New Lesson to Come: Rounding Numbers*	
		Compare and order natural numbers.	*Link to other grades:* ***Grade 4 Number Unit 1: Number Relationships and Place Value***	Fantastic Journeys Finding Buster Math Makes Me Laugh

			4: Comparing and Ordering Numbers (to 10 000) *(Currently to 10 000; include numbers to 100 000. Edit Practice line master to include numbers to 100 000.)*	The Street Party
		Express the relationship between two numbers using <, >, or =.	*Link to other grades:* ***Grade 4 Number Unit 1: Number Relationships and Place Value*** *4: Comparing and Ordering Numbers (to 10 000)* *(Currently to 10 000; include numbers to 100 000. Edit Practice line master to include numbers to 100 000.)*	
		Count and represent the value of a collection of nickels, dimes, and quarters as cents.	**Number Unit 7: Financial Literacy** 34: Estimating and Counting Money	
		Count and represent the value of a collection of loonies, toonies, and bills as dollars.	**Number Unit 7: Financial Literacy** 34: Estimating and Counting Money *(Currently addresses English symbolic representation of monetary values. Include French symbolic representation where the dollar sign is placed to the right of the dollar value.)*	
		Recognize French and English symbolic representations of monetary values.	**Number Unit 7: Financial Literacy** 34: Estimating and Counting Money *(Currently addresses English symbolic representation of monetary values. Include French symbolic representation where the dollar sign is placed to the right of the dollar value.)*	

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.ca** ***(Suggested ways to align with 2022 curriculum)***	**Mathology Little Books**
Recall of addition and subtraction number facts facilitates addition and subtraction strategies. Standard algorithms for addition and subtraction are conventional procedures based on place value. Estimation can be used to support addition and subtraction in everyday situations, including • when an exact sum or difference is not needed • to check if an answer is reasonable	Addition and subtraction strategies can be chosen based on the nature of the numbers. Standard algorithms for addition and subtraction may be used for any natural numbers.	Relate strategies for the addition and subtraction of two-digit numbers to strategies for the addition and subtraction of three-digit numbers.	**Number Unit 5: Addition and Subtraction** 19: Modeling Addition and Subtraction 22: Using Mental Math to Add and Subtract	Math Makes Me Laugh Planting Seeds The Street Party
		Model regrouping by place value for addition and subtraction.	**Number Unit 5: Addition and Subtraction** 19: Modeling Addition and Subtraction	
		Explain the standard algorithms for addition and subtraction of natural numbers.	**Number Unit 5: Addition and Subtraction** 19: Modeling Addition and Subtraction	Math Makes Me Laugh The Street Party
		Add and subtract natural numbers using standard algorithms.	**Number Unit 5: Addition and Subtraction** 19: Modeling Addition and Subtraction	Math Makes Me Laugh
		Estimate sums and differences.	**Number Unit 5: Addition and Subtraction** 20: Estimating Sum and Differences 22: Using Mental Math to Add and Subtract	Calla's Jingle Dress
		Solve problems using addition and subtraction.	**Number Unit 5: Addition and Subtraction** 24: Creating and Solving Problems 25: Creating and Solving Problems with Larger Numbers 26: Consolidation	Calla's Jingle Dress

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.ca *(Suggested ways to align with 2022 curriculum)*	Mathology Little Books
Multiplication and division are inverse mathematical operations. Multiplication is repeated addition. Multiplication can be interpreted in various ways according to context, such as • equal groups • an array • an area Division can be interpreted in various ways according to context, such as • equal sharing • equal grouping • repeated subtraction The order in which two quantities are multiplied does not affect the product (commutative property). The order in which	Quantities can be composed and decomposed through multiplication and division.	Compose a product using equal groups of objects.	**Number Unit 6: Multiplication and Division** 27: Exploring Multiplication	Planting Seeds Sports Camp Calla's Jingle Dress *Link to other grades: (Grade 2)* *Array's Bakery* *Marbles, Alleys, Mibs, and Guli!*
		Relate multiplication to repeated addition.	**Number Unit 6: Multiplication and Division** 27: Exploring Multiplication *Link to other grades:* ***Grade 2 Number Cluster 8: Early Multiplicative Thinking*** *40: Exploring Repeated Addition* *41: Repeated Addition and Multiplication* *42: Consolidation*	Calla's Jingle Dress Planting Seeds Sports Camp
		Relate multiplication to skip counting.	**Number Unit 6: Multiplication and Division** 27: Exploring Multiplication *Link to other grades:* ***Grade 2 Number Cluster 8: Early Multiplicative Thinking*** *40: Exploring Repeated Addition* *41: Repeated Addition and Multiplication* *42: Consolidation*	Planting Seeds *Link to other grades: (Grade 2)* *Calla's Jingle Dress* *Array's Bakery* *Marbles, Alleys, Mibs, and Guli!*
		Investigate multiplication by 0.	*Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *24: Strategies for Multiplication* *(Explore what happens when a number is multiplied by 1 and by 0.)*	
		Model a quotient by partitioning a	**Number Unit 6: Multiplication and Division** 28: Exploring Division	Sports Camp

two numbers are divided affects the quotient. Multiplication or division by 1 results in the same number (identity property).		quantity into equal groups or groups of a certain size, with or without remainders.		*Link to other grades: (Grade 2) Marbles, Alleys, Mibs, and Guli!*
		Visualize and model products and quotients as arrays.	**Number Unit 6: Multiplication and Division** 28: Exploring Division *New Lesson to Come: Multiplying and Dividing Larger Numbers* *Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *26: Relating Multiplication and Division*	*Link to other grades: (Grade 2) Array's Bakery*
		Recognize interpretations of multiplication and division in various contexts.	*Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *25: Solving Multiplication Problems (Include division word problems as well; discuss situations when multiplication and division would be used in real life.)*	
Numbers can be multiplied or divided in parts (distributive property). Multiplication strategies include • repeated addition • multiplying in parts • compensation Division strategies include	Sharing and grouping situations can be interpreted as multiplication or division. Multiplication and division strategies can be supported by addition and subtraction.	Investigate multiplication and division strategies.	*Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *24: Strategies for Multiplication* *26: Relating Multiplication and Division* *27: Strategies for Division* ***Grade 2 Number Cluster 8:*** ***Early Multiplicative Thinking*** *41: Repeated Addition and Multiplication* *New Lesson to Come: Repeated Subtraction and Division*	Sports Camp
		Multiply and divide within 100.	**Number Unit 6: Multiplication and Division** *New Lesson to Come: Multiplying and Dividing Larger Numbers* 32: Building Fluency: The Games Room	

• repeated subtraction • partitioning the dividend Products can be expressed symbolically using the multiplication sign, x, factors, and the equal sign. Quotients can be expressed symbolically using the division sign, ÷, dividend, divisor, and the equal sign. A missing quantity in a product or quotient can be represented in different ways, including • a × b = □ • a × □ = c • □ × b = c • e ÷ f = □ • e ÷ □ = g • □ ÷ f = g A remainder is the quantity left over after division.			*Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *24: Strategies for Multiplication* *27: Strategies for Division*	
		Verify a product or quotient using inverse operations.	*Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *26: Relating Multiplication and Division (Encourage the use of inverse operation to check solutions.)*	
		Determine a missing quantity in a product or quotient in a variety of ways.	*Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *26: Relating Multiplication and Division*	
		Express multiplication and division symbolically.	**Number Unit 6: Multiplication and Division** 32: Building Fluency: The Games Room	Sports Camp
		Explain the meaning of the remainder in various situations.	*Link to other grades:* ***Grade 4 Number Unit 6: Multiplying and Dividing Larger Numbers*** *34: Dividing with Remainders (Remove division of a 3-digit number by a 1-digit number.)*	
		Solve problems using multiplication and division in sharing or grouping situations.	*Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *25: Solving Multiplication Problems (Include division word problems as well.)* *26: Relating Multiplication and Division*	Sports Camp
A multiplication table shows both multiplication and	Multiplication number facts have related division facts.	Examine patterns in multiplication and division,	**Number Unit 6: Multiplication and Division** 32: Building Fluency: The Games Room	

division facts. Fact families are groups of related multiplication and division number facts.		including patterns in multiplication tables and skip counting.		
		Recognize families of related multiplication and division number facts.	**Number Unit 6: Multiplication and Division** 29: Relating Multiplication and Division *(Stress fact families when teaching this lesson.)* 32: Building Fluency: The Games Room 33: Consolidation	
		Recall multiplication number facts, with factors to 10, and related division facts.	**Number Unit 6: Multiplication and Division** 32: Building Fluency: The Games Room *Link to other grades:* ***Grade 4 Number Unit 5: Fluency with Multiplication and Division Facts*** *24: Strategies for Multiplication*	

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.ca** *(Suggested ways to align with 2022 curriculum)*	**Mathology Little Books**
The same fraction can represent • 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 The name of a fraction describes its composition as a number of unit fractions. Fraction notation, $(\frac{a}{b})$, relates the numerator, *a*, as a number of equal parts, to the denominator, *b*, as the total number of equal parts in the whole.	Fractions are numbers between natural numbers. Fractions can represent part-to-whole relationships. A unit fraction describes the size of the equal parts of a fraction. The size of the parts and the total number of equal parts in the whole are inversely related.	Model fractions of a whole quantity, length, shape or object, in various ways, limited to denominators of 12 or less.	**Number Unit 4: Fractions** 14: Exploring Equal Parts 15: Comparing Fractions 1 *Link to other grades:* ***Grade 4 Unit 3: Fractions*** *15: Different Representations of Fractions*	
		Visualize fractions as compositions of a unit fraction.	**Number Unit 4: Fractions** 14: Exploring Equal Parts 15: Comparing Fractions 1 16: Comparing Fractions 2	
		Identify the numerator and denominator of a fraction in various representations.	**Number Unit 4: Fractions** 14: Exploring Equal Parts	
		Name a given fraction.	**Number Unit 4: Fractions** 14: Exploring Equal Parts	
		Express fractions, including one whole, symbolically, limited to denominators of 12 or less.	**Number Unit 4: Fractions** 14: Exploring Equal Parts 15: Comparing Fractions 1 16: Comparing Fractions 2	Hockey Homework
		Relate various representations of the same fraction, limited to denominators of 12 or less.	*Link to other grades:* ***Grade 4 Unit 3: Fractions*** *15: Different Representations of Fractions*	

Equal numerators or equal denominators can facilitate the comparison of fractions. A fraction with a numerator that is equal to its denominator is one whole. Each fraction is associated with a point on the number line.		Compare the same fraction of different-sized wholes.	**Number Unit 4: Fractions** 15: Comparing Fractions 1 16: Comparing Fractions 2 *Link to other grades:* ***Grade 4 Unit 3: Fractions*** *15: Different Representations of Fractions* *(Include the exploration of the same fraction of different-sized wholes.)*	Hockey Homework
		Compare different fractions of the same whole that have the same denominator.	**Number Unit 4: Fractions** 15: Comparing Fractions 1 16: Comparing Fractions 2	
		Compare different fractions of the same whole that have the same numerator and different denominators.	**Number Unit 4: Fractions** 15: Comparing Fractions 1 16: Comparing Fractions 2	
		Express the relationship between two fractions of the same whole, using <, >, or =.	**Number Unit 4: Fractions** 15: Comparing Fractions 1 16: Comparing Fractions 2 *(Incorporate use of <, >, and = when comparing pairs of fractions.)*	
		Relate a fraction less than one to its position on the number line, limited to denominators of 12 or less.	**Number Unit 4: Fractions** 15: Comparing Fractions 1 *Link to other grades:* ***Grade 4 Unit 3: Fractions*** *15: Different Representations of Fractions*	

		Compare fractions to benchmarks of 0, $\frac{1}{2}$, and 1.	**Number Unit 4: Fractions** 15: Comparing Fractions 1 *(Include benchmarks on the number line to help with comparison of fractions.)* *Link to other grades:* ***Grade 4 Unit 3: Fractions*** *15: Different Representations of Fractions*	Hockey Homework

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.ca** ***(Suggested ways to align with 2022 curriculum)***	**Mathology Little Books**
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** 8: Solving Equations Concretely *Link to other grades:* ***Grade 2 Patterning Cluster 3: Equality and Inequality*** *19: Exploring Number Sentences for Larger Numbers*	A Week of Challenges
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** 8: Solving Equations Concretely 9: Strategies for Solving Equations 11: Creating Equations 12: Consolidation	A Week of Challenges
		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** 8: Solving Equations Concretely 9: Strategies for Solving Equations 11: Creating Equations 12: Consolidation	A Week of Challenges

		Solve problems using equations, limited to equations with one operation.	**Patterning Unit 2: Variables and Equations** 11: Creating Equations	A Week of Challenges

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.ca** *(Suggested ways to align with 2022 curriculum)*	**Mathology Little Books**
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.	*New Lesson to Come: Geometric Relationships*	
		Investigate the relationships between vertices of a polygon, including equal or right angles, using direct comparison or referents for 90°.	*New Lesson to Come: Geometric Relationships*	
		Describe geometric	**Geometry Unit 1: 2-D Shapes** 1: Sorting Polygons	Gallery Tour WONDERful Buildings

various referents, such as • the corner of a piece of paper • the angle between the hands on an analog clock at 3:00 • a capital letter L Polygons include • triangles • quadrilaterals • pentagons • hexagons • octagons Regular polygons have sides of equal length and interior angles of equal measure.		properties of regular and irregular polygons.	2: What's the Sorting Rule?	
		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? 4: Exploring Quadrilaterals 5: Consolidation	WONDERful Buildings
		Classify polygons as regular or irregular using geometric properties.	**Geometry Unit 1: 2-D Shapes** 1: Sorting Polygons 2: What's the Sorting Rule?	
Transformations include • translations • rotations • reflections The distance between any two vertices of a shape is maintained in the image created by a transformation.	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.	*New Lesson to Come: Transformations*	Gallery Tour

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.ca *(Suggested ways to align with 2022 curriculum)*	Mathology Little Books
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 • milli: one thousand millimetres in one metre • centi: one hundred centimetres in one metre • deci: ten decimetres in one metre	Length is measured in standard units according to the metric system and the imperial system. Length can be expressed in various units according to context and desired precision.	Relate millimetres, centimetres, and metres.	*Link to other grades:* ***Grade 2 Measurement Cluster 2: Using Standard Units*** *10: The Centimetre* *(Include the relationship between metres and centimetres.)* ***Grade 4 Measurement Unit 1: Length, Perimeter, and Area*** *1: Estimating and Measuring in Millimetres*	Measurements About YOU! *(Addresses length, mass, capacity, and area.)*
		Relate inches to feet and yards.	*New Lesson to Come: Imperial Units*	
		Justify the choice of millimetres, centimetres or metres to measure various lengths.	*Link to other grades:* ***Grade 2 Measurement Cluster 2: Using Standard Units*** *11: Metres or Centimetres? (Include objects that would be measured in millimetres and have students choose among metres, centimetres, and millimetres.)*	
		Measure lengths of straight lines and curves, with millimetres,	**Measurement Unit 1: Length and Perimeter** 3: Measuring Length *(Currently addresses measuring length around 2-D shapes and 3-D objects. Add*	

Metric units are abbreviated for convenience, including • m: metre • dm: decimetre • cm: centimetre • mm: millimetre Standard measuring tools show iterations of a standard unit from an origin. Units of length in the imperial system include inch, foot, and yard, related in these ways: • 12 inches in one foot • 36 inches in one yard • 3 feet in one yard Approximate conversions between metric and imperial are useful in real-world situations, including • $2\frac{1}{2}$ centimetres are approximately 1 inch		centimetres, or metres.	*straight lines and curves. Edit Practice line master to include a heart, oval, blob.)* 7: Consolidation *Link to other grades:* ***Grade 2 Measurement Cluster 2: Using Standard Units*** *9: The Metre* *10: The Centimetre* ***Grade 4 Measurement Unit 1: Length, Perimeter, and Area*** *1: Estimating and Measuring in Millimetres*	
		Recognize length expressed in metric or imperial units.	*New Lesson to Come: Imperial Units*	
		Approximate a measurement in inches, feet, or yards using centimetres or metres.	*New Lesson to Come: Imperial Units*	

• 1 metre is approximately 3 feet • 30 centimetres are approximately 1 foot • 1 metre is approximately 1 yard				
The perimeter of a polygon is the sum of the lengths of its sides.	Length remains the same when decomposed or rearranged.	Determine perimeter of polygons.	**Measurement Unit 1: Length and Perimeter** 5: Measuring Perimeter 6: How Many Can We Make?	The Bunny Challenge *(Addresses perimeter and area.)*
		Determine the length of an unknown side given the perimeter of a polygon.	**Measurement Unit 1: Length and Perimeter** 5: Measuring Perimeter *(Add determining the length of an unknown side given perimeter of a polygon: for example, perimeter of a triangle is 23 cm and 2 side lengths are 8 cm and 6 cm.)*	The Bunny Challenge *(Addresses perimeter and area.)*
A benchmark is a known length to which another length can be compared. Length can be estimated using a personal or familiar referent.	Length can be estimated when less accuracy is required.	Identify referents for a centimetre and a metre.	**Measurement Unit 1: Length and Perimeter** 1: Estimating Length	
		Estimate length by comparing to a benchmark.	**Measurement Unit 1: Length and Perimeter** 1: Estimating Length	
		Estimate length by visualizing the iteration of a referent for a centimetre or metre.	**Measurement Unit 1: Length and Perimeter** 1: Estimating Length	

Guiding Question: How can angles broaden an understanding of space? **Learning Outcome:** Students interpret angles.				
Knowledge	**Understanding**	**Skills & Procedures**	**Grade 3 mathology.ca** *(Suggested ways to align with 2022 curriculum)*	**Mathology Little Books**
Angle defines the space in • corners • bends • turns or rotations • intersections • slopes The arms of an angle can be line segments or rays. The end point of a line segment or ray is called a vertex.	An angle is the union of two arms with a common vertex. An angle can be interpreted as the motion of a length rotated about a vertex.	Recognize various angles in surroundings.	*New Lesson to Come: Investigating Angles*	
		Recognize situations in which an angle can be perceived as motion.	*New Lesson to Come: Investigating Angles*	
Superimposing is the process of placing one angle over another to compare angles. A referent is a personal or familiar representation of a known angle.	Two angles can be compared directly or indirectly.	Compare two angles directly by superimposing.	*New Lesson to Come: Comparing Angles*	
		Compare two angles indirectly by superimposing a third angle.	*New Lesson to Come: Comparing Angles*	
		Estimate which of two angles is greater.	*New Lesson to Come: Comparing Angles*	
		Identify referents for 90°.	*New Lesson to Come: Investigating Angles* *New Lesson to Come: Comparing Angles*	
		Identify 90° angles in the environment using a referent.	*New Lesson to Come: Investigating Angles* *New Lesson to Come: Comparing Angles*	

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.ca** *(Suggested ways to align with 2022 curriculum)*	**Mathology Little Books**
Ordinal numbers can indicate position in a sequence. Finite sequences, such as a countdown, have a definite end. Infinite sequences, such as the natural numbers, never end.	A sequence is a list of terms arranged in a certain order. Sequences may be finite or infinite.	Recognize familiar numerical sequences, including the sequence of even or odd numbers.	*New Lesson to Come: Finite and Infinite Number Sequences*	Namir's Marvellous Masterpieces How Numbers Work The Best Surprise
		Describe position in a sequence using ordinal numbers.	**Patterning Unit 1: Increasing and Decreasing Patterns** 1: Describing and Extending Patterns *(Describe position of terms using ordinal numbers.)*	
		Differentiate between finite and infinite sequences.	*New Lesson to Come: Finite and Infinite Number Sequences*	
Numerical sequences can be constructed using addition, subtraction, multiplication, or division.	A sequence can progress according to a pattern.	Recognize skip-counting sequences in various representations, including rows or columns of a multiplication table.	**Patterning Unit 1: Increasing and Decreasing Patterns** 3: Creating Patterns 6: Exploring Multiplicative Patterns	Namir's Marvellous Masterpieces
		Determine any missing term in a	**Patterning Unit 1: Increasing and Decreasing Patterns**	

		skip-counting sequence using multiplication.	4: Identifying Errors and Missing Terms 6: Exploring Multiplicative Patterns	
		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 2: Representing Patterns 3: Creating Patterns 5: Solving Problems	Namir's Marvellous Masterpieces The Best Surprise

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.ca** *(Suggested ways to align with 2022 curriculum)*	**Mathology Little Books**
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. Time of day can be expressed as a	Clocks are standard measuring tools used to communicate time.	Investigate relationships between seconds, minutes, and hours using an analog clock.	**Measurement Unit 3: Time and Temperature** 9: Relationship Among Units of Time *(Remove days, weeks, months, and years. Only seconds, minutes, and hours required.)*	
		Relate minutes past the hour to minutes until the next hour.	*Link to other grades:* ***Grade 4 Measurement Unit 3: Time*** *13: Telling Time in One- and Five-Minute Intervals* *(Add a.m. and p.m. when describing time: before or after noon.)*	
		Describe time of day as a.m. or p.m. relative to 12-hour cycles of day and night.	*Link to other grades:* ***Grade 4 Measurement Unit 3: Time*** *14: Telling Time on a 24-Hour Clock*	
		Tell time using analog and digital clocks.	*Link to other grades:* ***Grade 4 Measurement Unit 3: Time*** *13: Telling Time in One- and Five-Minute Intervals*	
		Express time of day in relation to one 24-hour cycle.	*Link to other grades:* ***Grade 4 Measurement Unit 3: Time*** *14: Telling Time on a 24-Hour Clock*	

duration relative to 12:00 in two 12-hour cycles. 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.				

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.ca** ***(Suggested ways to align with 2022 curriculum)***	**Mathology Little Books**
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** 3A: Collecting Data	Welcome to The Nature Park
		Predict the answer to a statistical question.	**Data Unit 1: Data Management** 3A: Collecting Data *(Have students predict the answer to a question before collecting data.)*	
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. Representation tells a story about data.	Collect data using digital or non-digital tools and resources.	**Data Unit 1: Data Management** 3A: Collecting Data *(Currently uses non-digital resources; include use of digital resources as well (e.g., websites, social media).)*	Welcome to The Nature Park
		Represent first-hand and second-hand data in a dot plot or bar graph with one-to-one correspondence.	**Data Unit 1: Data Management** 4A: Drawing Bar Graphs 5A: Drawing Line Plots *(May want to refer to line plots as dot plots.)* 6A: Consolidation	
		Describe the story that a representation tells about a collection of	**Data Unit 1: Data Management** 1A: Interpreting Bar Graphs 2A: Interpreting Line Plots *(May want to refer to line plots as dot plots.)*	Welcome to The Nature Park

		data in relation to a statistical question.		
		Examine First Nations, Métis, or Inuit representations of data.	*New Lesson to Come: First Nations, Métis, or Inuit Representations of Data*	
		Consider possible answers to a statistical question based on the data collected.	**Data Unit 1: Data Management** 3A: Collecting Data *(Have students use collected data to consider possible answers to a statistical question.)*	

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.ca** ***(Suggested ways to align with 2022 curriculum)***	**Mathology Little Books**
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 • 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.	*New Lesson to Come: Good Money Habits*	

• buying items that are affordable • taking time when making purchases • not purchasing more than is needed Saving means not spending in order to keep money aside for unexpected expenses and to pay for purchases, activities, and future plans or goals. Responsible saving can be supported through strategies, such as • considering needs and wants • setting financial goals • establishing a savings account • putting earned money aside on a regular basis Responsible money management can allow individuals to help others in need through donation.	Donating money can have a significant impact on the well-being of others.	Identify possible short-term and long-term saving goals.	*New Lesson to Come: Short-term and Long-term Saving Goals*	