**Mathology Kindergarten Correlation (Number) – Alberta**

**Organizing Idea:**

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

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| **Guiding Question:** How can quantity contribute meaning to daily life?**Learning Outcome:** Children investigate quantity to 10. |
| **Knowledge**  | **Understanding** | **Skills & Procedures** | **Mathology Little Books** |
| Quantity can be represented using* objects
* pictures
* words
* numerals
 | Quantity can be the number of objects in a set. | Recognize a number of familiar objects as a quantity. | A Warm, Cozy NestLots of Dots! |
| Represent a quantity in different ways. | Lots of Dots! |
| Relate a numeral to a specific quantity. | A Warm, Cozy Nest Lots of Dots! |
| Quantity can be determined by counting. | A quantity is always counted using the same sequence of words (counting principle: stable order).A quantity remains the same no matter the order in which the objects are counted (counting principle: order irrelevance).A quantity can be determined by counting each object in a set once and only once (counting principle: one-to-one correspondence).The last number used to count represents the quantity (counting principle: cardinality).Any quantity of like or unlike objects can be counted as a set (counting principle: abstraction). | Count within 10, forward and backward, starting at any number, according to the counting principles. | A Warm, Cozy Nest Lots of Dots!Animals HideDan’s Doggy DaycareAcorns for Wilaiya |
| A small quantity can be recognized at a glance (subitized). | Quantity can be determined without counting. | Subitize quantities to 5. | A Warm, Cozy Nest Lots of Dots! |
| Comparisons of quantity can bedescribed by using words such as* more
* less
* same
* enough
* not enough
 | A quantity can be described relative to another quantity.A quantity can be described in relation to a purpose or need. | Compare the size of two sets using one-to-one correspondence. | Acorns for WilaiyaSpot Check!Time for GamesLet’s Play Waltes! |
| Describe quantities relative to each other using comparative language. | Acorns for WilaiyaSpot Check!Time for GamesLet’s Play Waltes! |
| Describe a quantity in relation to a purpose or need using comparative language. | A Warm, Cozy NestAcorns for Wilaiya |
| Solve problems in familiar situations by counting. | Dan’s Doggy DaycareTime for GamesLet’s Play Waltes! |

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| **Guiding Question:** In what ways can quantity be composed?**Learning Outcome:** Children interpret compositions of quantities within 10. |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Mathology Little Books** |
| Quantity can be arranged in various ways. | A quantity remains the same no matter how the objects are grouped or arranged (counting principle: conservation). | Identify a quantity in various groups or arrangements. | Lots of Dots!Spot Check! |
| Compose quantities within 10. | Lots of Dots!Dan’s Doggy DaycareLet’s Play Waltes! |
| 1. Recognize various ways to make 5 and 10.
 | 1. Spot Check!
2. Lots of Dots!
3. Dan’s Doggy Daycare
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**Mathology Kindergarten Correlation (Geometry) – Alberta**

**Organizing Idea:**

Shapes are defined and related by geometric attributes.

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| **Guiding Question:** How can shape bring meaning to the space in an environment?**Learning Outcome:** Children investigate shape. |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Mathology Little Books** |
| A shape can be represented using objects, pictures, or words.Familiar two- and three- dimensional shapes can be found in nature, such as* circles
* triangles
* cubes
* cylinders

First Nations, Métis, and Inuit relate specific shapes to those found in nature. | Shape is structured two-dimensional or three-dimensional space. | Relate shapes in nature to various two-dimensional and three-dimensional shapes. | The Castle WallZoom In, Zoom Out |
| Identify familiar two- and three-dimensional shapes. | The Castle WallZoom In, Zoom Out |
| Investigate three-dimensional shapes by rolling, stacking, or sliding. | The Castle Wall |
| Describe a shape using words such as flat, curved, straight, or round. | The Castle WallZoom In, Zoom Out |

**Mathology Kindergarten Correlation (Measurement) – Alberta**

**Organizing Idea:**

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

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| **Guiding Question:** In what ways can size be distinguished?**Learning Outcome:** Children explore size through direct comparison. |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Mathology Little Books** |
| Size can be interpreted in many ways (according to measurable attributes), such as * the length of an object
* how much flat space an object covers (area)
* how much a container holds (capacity)
* the heaviness of an object (weight)
 | Size describes the amount of one measurable attribute of an object or a space. | Identify measurable attributes of familiar objects to which size may refer. | To Be Long *(Addresses length)*The Best in Show *(Addresses height, length, weight, and distance)*Grade 1The Amazing Seed *(Addresses height, length, capacity)* |
| Comparisons of size can be described by using words such as* longer
* shorter
* heavier
* lighter
* too big
* too small
 | Size may refer to only one measurable attribute at a time.The size of two objects can be compared directly.The size of an object can be described in relation to a purpose or need. | Compare the length, area, weight, or capacity of two objects directly. | To Be Long *(Addresses length)*The Best in Show *(Addresses height, length, weight, and distance)* |
| Describe the size of an object in relation to another object, using comparative language. | To Be Long *(Addresses length)*The Best in Show *(Addresses height, length, weight, and distance)* |
| Describe the size of an object in relation to a purpose or need, using comparative language. | To Be Long *(Addresses length)*The Best in Show *(Addresses height, length, weight, and distance)*Grade 1The Amazing Seed *(Addresses height, length, capacity)* |

**Mathology Kindergarten Correlation (Patterns) – Alberta**

**Organizing Idea:**

Awareness of patterns supports problem solving in various situations.

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| **Guiding Question:** How can patterns be recognized?**Learning Outcome:** Children identify and create repeating patterns. |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Mathology Little Books** |
| Patterns exist everywhere.A pattern can involve elements such as* sounds
* objects
* pictures
* symbols
* actions

Repeating patterns have one or more elements that repeat. | A pattern is characterized by how the elements change or remain constant. | Recognize repeating patterns encountered in daily routines and play, including songs or dances. | A Lot of Noise |
| Recognize change or constancy between elements in a repeating pattern. | A Lot of NoiseWe Can Bead! |
| Predict the next elements in a repeating pattern. | A Lot of NoiseWe Can Bead! |
| Create a repeating pattern with up to three repeating elements. | A Lot of NoiseWe Can Bead! |

**Mathology Kindergarten Correlation (Time) – Alberta**

**Organizing Idea:**

Duration is described and quantified by time.

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| **Guiding Question:** In what ways can time be described?**Learning Outcome:** Children interpret time as a sequence of events. |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Mathology Little Books** |
| Sequence in time can be described in words, such as * first
* next
* today

Ordinal numbers can indicate order in time. | Time can be perceived as a sequence. | Sequence events, limited to two events, according to time using words or ordinal numbers. |  |
| Describe daily events as occurring yesterday, today, or tomorrow. |  |

**Mathology Kindergarten Correlation (Financial Literacy) – Alberta**

**Organizing Idea:**

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

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| **Guiding Question:** What is money?**Learning Outcome:** Children explore money. |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Mathology Little Books** |
| Canadian money comes in many forms, such as* coins
* bills

Canadian coins and bills come indifferent denominations, such as* loonies
* toonies
* $5
* $10

Canadian coins and bills have different features, such as* colour
* number
* images
* size
 | Money has unique features to represent its value. | Explore the value of Canadian coins and bills.Identify features of Canadian coins and bills. |  |