**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 Nest  Lots 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 Hide  Dan’s Doggy Daycare  Acorns 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 be  described 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 Wilaiya  Spot Check!  Time for Games  Let’s Play Waltes! |
| Describe quantities relative to each other using comparative language. | Acorns for Wilaiya  Spot Check!  Time for Games  Let’s Play Waltes! |
| Describe a quantity in relation to a purpose or need using comparative language. | A Warm, Cozy Nest  Acorns for Wilaiya |
| Solve problems in familiar situations by counting. | Dan’s Doggy Daycare  Time for Games  Let’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 Daycare  Let’s Play Waltes! |
| 1. Recognize various ways to make 5 and 10. | 1. Spot Check! 2. Lots of Dots! 3. Dan’s Doggy Daycare |

**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 Wall  Zoom In, Zoom Out |
| Identify familiar two- and three-dimensional shapes. | The Castle Wall  Zoom 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 Wall  Zoom 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 1  The 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 1  The 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 Noise  We Can Bead! |
| Predict the next elements in a repeating pattern. | A Lot of Noise  We Can Bead! |
| Create a repeating pattern with up to three repeating elements. | A Lot of Noise  We 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. |  |

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**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 in  different 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. |  |