**Mathology Grade 2 Correlation – Alberta**

**Master 16a**

**Patterning Cluster 2: Increasing/Decreasing Patterns**

**Organizing Idea:**

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

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| **Guiding Question:** How can quantity contribute to a sense of number?  **Learning Outcome:** Students analyze quantity to 1000. | | | | |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Grade 2 Mathology** | **Mathology Little Books** |
| A quantity can be skip counted in various ways according to context.  Quantities of money can be skip counted in amounts that are represented by coins and bills (denominations). | A quantity can be interpreted as a composition of groups. | Skip count by 20s, 25s, or 50s, starting at 0. | *Link to other strands:*  ***Patterning Intervention***  *3: Skip-Counting*  *4: Repeated Addition and Subtraction* |  |
| Skip count by 2s and 10s, starting at any number. | *Link to other strands:*  ***Patterning Intervention***  *3: Skip-Counting*  *4: Repeated Addition and Subtraction* |  |
| Words that can describe a comparison between two unequal quantities include   * not equal * greater than * less than   The less than sign, <, and the greater than sign, >, are used to indicate inequality between two quantities.  Equality and inequality can be modelled using a balance. | Inequality is an imbalance between two quantities. | Model equality and inequality between two quantities, including with a balance. | *Link to Other Strands:*  ***Patterning Math Every Day***  *2A: Equal or Not Equal?* | Nutty and Wolfy |

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| **Guiding Question:** How can addition and subtraction be interpreted?  **Learning Outcome:** Students investigate addition and subtraction within 100. | | | | |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Grade 2 Mathology** | **Mathology Little Books** |
| The order in which more than two numbers are added does not affect the sum (associative property). | A sum can be composed in multiple ways. | Compose a sum in multiple ways, including with more than two addends. | *Link to other strands:*  ***Patterning Math Every Day***  *2A: How Many Ways?*  *2B: Which One* *Doesn’t Belong?* |  |
| Familiar addition and subtraction number facts facilitate addition and subtraction strategies.  Addition and subtraction strategies for two-digit numbers include making multiples of ten and using doubles. | Addition and subtraction can represent the sum or difference of countable quantities or measurable lengths. | Add and subtract numbers within 100. | *Link to other strands:*  ***Patterning Cluster 2: Increasing/Decreasing Patterns***  *7: Increasing Patterns 1* |  |
| Verify a sum or difference using inverse operations. |
| Determine a missing quantity in a sum or difference, within 100, in a variety of ways. |

**Master 16b**

**Master 16c**

**Organizing Idea:**

Patterns: Awareness of patterns supports problem solving in various situations.

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| **Guiding Question:** How can patterns characterize change?  **Learning Outcome:** Students explain and analyze patterns in a variety of contexts. | | | | |
| **Knowledge** | **Understanding** | **Skills & Procedures** | **Grade 2 Mathology** | **Mathology Little Books** |
| Change can be an increase or a decrease in the number and size of elements.  A hundreds chart is an arrangement of natural numbers that illustrates multiple patterns.  Patterns can be found and created in cultural designs. | A pattern can show increasing or decreasing change.  A pattern is more evident when the elements are represented, organized, aligned, or oriented in familiar ways. | Investigate patterns in a hundreds chart. | **Patterning Intervention**  3: Skip-Counting |  |
| Create and express growing patterns using sounds, objects, pictures, or actions. | **Patterning Cluster 2: Increasing/Decreasing Patterns**  7: Increasing Patterns 1  8: Increasing Patterns 2  9: Reproducing Patterns  10: Creating Patterns  11: Errors and Missing Terms  12: Solving Problems  13: Consolidation  **Patterning Intervention**  3: Skip-Counting  4: Repeated Addition and Subtraction | The Best Surprise |