**Mathology Grade 2 Correlation – Alberta**

**Master 27a**

**Number Cluster 3: Place Value**

**Organizing Idea:**

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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** |
| Any number of objects in a set can be represented by a natural number.  The values of the places in a four-digit natural number are thousands, hundreds, tens, and ones.  Places that have no value within a given number use zero as a placeholder.  The number line is a spatial representation of quantity. | There are infinitely many natural numbers.  Every digit in a natural number has a value based on its place.  Each natural number is associated with exactly one point on the number line. | Represent quantities using words and natural numbers. | **Number Cluster 3: Place Value**  9: Building Numbers  10: Representing Numbers in Different Ways  11: What’s the Number? | Ways to Count |
| Identify the digits representing thousands, hundreds, tens, and ones based on place in a natural number. | **Number Cluster 3: Place Value**  9: Building Numbers  10: Representing Numbers in Different Ways  11: What’s the Number?  **Number Math Every Day**  3A: Adding Ten  3A: Taking Away Ten  3B: Thinking Tens  3B: Describe Me | Ways to Count |
| Relate a number, including zero, to its position on the number line. | **Number Cluster 3: Place Value**  12: Making a Number Line |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| 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. | Decompose quantities into groups of 100s, 10s, and 1s. | **Number Cluster 3: Place Value**  9: Building Numbers  10: Representing Numbers in Different Ways  11: What’s the Number  13: Consolidation | Family Fun Day  (numbers to 100)  Back to Batoche  (numbers to 100)  The Money Jar  (numbers to 100)  Grade 3  Fantastic Journeys (numbers to 1000)  Finding Buster  (numbers to 1000)  How Numbers Work  (3-digit numbers) |

**Master 27b**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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** |
| 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. | **Number Intervention**  3: Adding Tens  4: Taking Away Tens | A Class-full of Projects  Array’s Bakery  Marbles, Alleys, Mibs, and Guli! |
| 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 27c**

**Organizing Idea:**

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

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **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. | *Link to other strands:*  ***Number Cluster 3: Place Value***  *12: Making a Number Line* |  |