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## **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### Ontario

| Curriculum<br>Expectations  | Mathology Grade 2 Classroom<br>Activity Kit  | Mathology Little Books  | Pearson Canada K-3 Mathematics Learning<br>Progression   |
|---|--|---|--|
| Overall Expectation<br>P2 Expressions and Equa<br>symbols, and addition and s<br>Cross Strand: Number<br>N1 Quantity Relationships<br>amounts to 100¢;<br>N2 Operational Sense: so<br>investigate multiplication and<br>P2.1 demonstrate an   | lity: demonstrate an understanding of<br>subtraction to 18.<br>s: read, represent, compare, and orde<br>lve problems involving the addition ar<br>ad division.<br>Below Grade: Intervention  | of the concept of equality betwee<br>er whole numbers to 100, and us<br>nd subtraction of one- and two-di<br>Below Grade:   | en pairs of expressions, using concrete materials,<br>se concrete materials to represent fractions and money<br>git whole numbers, using a variety of strategies, and<br><b>Big Idea: Patterns and relations can be</b>  |
| concept of equality by<br>partitioning whole<br>numbers to 18 in a<br>variety of ways, using<br>concrete materials  | 6: Balancing Sets<br>On Grade: Teacher Cards<br>15: Equal and Unequal Sets   | <ul> <li>Nutty and Wolfy<br/>(Activities 15, 16, 20)</li> <li>On Grade:</li> <li>Kokum's Bannock<br/>(Activities 15, 16, 17, 18, 15, 16, 16, 17, 18, 15, 16, 16, 17, 18, 15, 16, 17, 18, 15, 16, 17, 18, 15, 16, 17, 18, 15, 16, 16, 17, 18, 15, 16, 16, 17, 18, 15, 16, 17, 18, 15, 16, 17, 18, 15, 15, 16, 17, 18, 15, 15, 16, 17, 18, 15, 15, 16, 17, 18, 15, 15, 16, 17, 18, 15, 15, 15, 16, 17, 18, 15, 15, 15, 15, 15, 15, 15, 15, 15, 15</li></ul> | expressions.<br>Understanding Equality and Inequality, Building<br>on Generalized Properties of Numbers and<br>Operations<br>- Compares sets to determine more/less or equal.  |
| <ul> <li>P2.2 represent, through investigation with concrete materials and pictures, two number expressions that are equal, using the equal sign</li> <li>P2.3 determine the missing number in equations involving addition and subtraction to 18, using a variety of tools and strategies</li> </ul>                 | <ul> <li>16: Equal or Not Equal?<br/>(P2.2, N3.1)</li> <li>17: Exploring Number Sentences<br/>(P2.1, P2.2, N3.1)</li> <li>18: Exploring Properties<br/>(P2.4, P2.5, N3.1)</li> <li>19: Missing Numbers<br/>(P2.3, N3.1)</li> <li>20. Equality and Inequality<br/>Consolidation (P2.1, P2.2,<br/>P2.3, P2.4, N2.5, N3.1)</li> </ul> | 19, 20)<br><b>Above Grade:</b><br>• A Week of Challenges<br>(Activities 17, 18, 19, 20)   | <ul> <li>(Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Models and describes equality (balance; the same as) and inequality (imbalance; not the same as). (Activities 16, 17, 20, MED 3A: 1)</li> <li>Records different expressions of the same quantity as equalities (e.g., 2 + 4 = 5 + 1). (Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition). (Activities 18, 20)</li> <li>Using Symbols, Unknowns, and Variables to Represent Mathematical Relations</li> <li>Uses the equal (=) symbol in equations and knows its meaning (i.e., equivalent; is the same as). (Activities 16, 17, 19, 20)</li> </ul>            |
| <ul> <li>investigation with<br/>concrete materials and<br/>pictures, two number<br/>expressions that are<br/>equal, using the equal<br/>sign</li> <li>P2.3 determine the<br/>missing number in<br/>equations involving<br/>addition and subtraction<br/>to 18, using a variety of<br/>tools and strategies</li> </ul> | <ul> <li>17: Exploring Number Sentences<br/>(P2.1, P2.2, N3.1)</li> <li>18: Exploring Properties<br/>(P2.4, P2.5, N3.1)</li> <li>19: Missing Numbers<br/>(P2.3, N3.1)</li> <li>20. Equality and Inequality<br/>Consolidation (P2.1, P2.2,<br/>P2.3, P2.4, N2.5, N3.1)</li> </ul>   | Above Grade:<br>• A Week of Challenges<br>(Activities 17, 18, 19, 20)   | <ul> <li>set. (Activity 15)</li> <li>Models and describes equality (balance; the as) and inequality (imbalance; not the same (Activities 16, 17, 20, MED 3A: 1)</li> <li>Records different expressions of the same of as equalities (e.g., 2 + 4 = 5 + 1). (Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtract adding or subtracting 0, commutativity of ad (Activities 18, 20)</li> <li>Using Symbols, Unknowns, and Variables Represent Mathematical Relations</li> <li>Uses the equal (=) symbol in equations and its meaning (i.e., equivalent; is the same as) (Activities 16, 17, 19, 20)</li> <li>Understands and uses the equal (=) and nc (≠) symbols when comparing expressions. (Activities 16, 17, 19, 20: MED 3A: 1)</li> </ul> |

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## **Curriculum Correlation** Patterning and Algebra Cluster 3: Equality and Inequality

#### **Ontario (continued)**

| P2.4 identify, through     | On Grade: Math Every Day     | - Solves for an unknown value in a one-step addition    |
|----------------------------|------------------------------|---|
| investigation, and use     | Card 3A:                     | and subtraction problem (e.g., n + 5 = 15). (Activity   |
| the commutative property   | Equal or Not Equal? (P2.2, N | 19)   |
| of addition to facilitate  | N3.1)                        | Big Idea: Numbers are related in many ways.             |
| computation with whole     | How Many Ways?               | Decomposing Wholes into Parts and Composing             |
| numbers                    | (P2.1, P2.1, N1.3)           | Wholes from Parts                                       |
|                            | Card 3B:                     | - Composes and decomposes quantities to 20.             |
| P2.5 identify, through     | Which One Doesn't Belong?    | (Activities 20, MED 3A: 2)                              |
| investigation, the         | (P2.2, N3.1)                 | Big Idea: Quantities and numbers can be added           |
| properties of zero in      | What's Missing? (P2.3, N3.1) | and subtracted to determine how many or                 |
| addition and subtraction   |                              | how much.   |
|                            |                              | Developing Conceptual Meaning of Addition and           |
| N1.3 compose and           |                              | Subtraction   |
| decompose two-digit        |                              | - Models add-to and take-from situations with           |
| numbers in a variety of    |                              | quantities to 10. (Activities 17, 18, 20, MED 3A: 1)    |
| ways, using concrete       |                              | - Uses symbols and equations to represent addition      |
| materials                  |                              | and subtraction situations. (Activities 16, 17, 18, 20; |
|                            |                              | MED 3A: 1, 2; MED 3B: 1)                                |
| N3.1 solve problems        |                              | Developing Fluency of Addition and Subtraction          |
| involving the addition and |                              | Computation   |
| subtraction of whole       |                              | - Fluently adds and subtracts with quantities to 20.    |
| numbers to 18, using       |                              | (Activities 16, 17, 18, 19, 20; MED 3A: 1; MED 3B: 1,   |
| a variety of mental        |                              | 2)  |
| strategies                 |                              |   |
|                            |                              |   |

# **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### **British Columbia/Yukon Territories**

| Learning Standards  | Mathology Grade 2 Classroom<br>Activity Kit   | Mathology Little Books  | Pearson Canada K-3 Mathematics Learning<br>Progression   |
|---|---|---|--|
| <b>Big Idea</b><br>The regular change in increa<br><b>Cross Strand:</b> Number<br>Development of computation                                      | sing patterns can be identified and us<br>al fluency in addition and subtraction  | ed to make generalizations.<br>with numbers to 100 requires   | an understanding of place value.   |
| P2 Change in<br>quantity using pictorial<br>and symbolic<br>representation<br>• P2.1 numerically<br>describing a change<br>in quantity (e.g., for | <ul> <li>Below Grade: Intervention</li> <li>5: Exploring 10</li> <li>6: Balancing Sets</li> <li>On Grade: Teacher Cards</li> <li>15: Equal and Unequal Sets</li> </ul>                    | <ul> <li>Below Grade:</li> <li>Nutty and Wolfy<br/>(Activities 15, 16, 20)</li> <li>On Grade:</li> <li>Kokum's Bannock<br/>(Activities 15, 16, 17, 16, 17)</li> </ul> | Big Idea: Patterns and relations can be         represented with symbols, equations, and         expressions.         Understanding Equality and Inequality, Building         on Generalized Properties of Numbers and         Operations         - Compares sets to determine more/less or equal.   |
| 6 + n = 10, visualize<br>the change in<br>quantity by using<br>ten-frames, hundred<br>charts, etc.)   | <ul> <li>16: Equal or Not Equal? (P3.1, N3.1)</li> <li>17: Exploring Number Sentences (P3.1, N3.1)</li> <li>18: Exploring Properties</li> <li>10: Missing Numbers (P0.4, N2.4)</li> </ul> | <ul> <li>Above Grade:</li> <li>A Week of Challenges<br/>(Activities 17, 18, 19, 20)</li> </ul>  | <ul> <li>(Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Models and describes equality (balance; the same as) and inequality (imbalance; not the same as). (Activities 16, 17, 20, MED 3A: 1)</li> </ul>  |
| P3 symbol representation<br>of equality and inequality<br>• P3.1 Symbolic<br>representation of<br>equality and<br>inequality                      | <ul> <li>19: Missing Numbers (P2.1, N3.1)</li> <li>20. Equality and Inequality<br/>Consolidation (P3.1, N3.1,<br/>N4.1)</li> <li>On Grade: Math Every Day</li> </ul>                      |   | <ul> <li>Records different expressions of the same quantity<br/>as equalities (e.g., 2 + 4 = 5 + 1).<br/>(Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtraction (e.g.,<br/>adding or subtracting 0, commutativity of addition).<br/>(Activities 18, 20)</li> </ul>   |
| N3 addition and<br>subtraction facts to 20<br>• N3.1 adding and<br>subtracting numbers<br>to 20   | Card 3A:<br>Equal or Not Equal? (P3.1, N3.1)<br>How Many Ways? (P3.1, N4.1)<br>Card 3B:<br>Which One Doesn't Belong?<br>(P3.1, N3.1)<br>What's Missing? (P2.1, N3.1,                      |   | <ul> <li>Using Symbols, Unknowns, and Variables to<br/>Represent Mathematical Relations</li> <li>Uses the equal (=) symbol in equations and knows<br/>its meaning (i.e., equivalent; is the same as).<br/>(Activities 16, 17, 19, 20)</li> <li>Understands and uses the equal (=) and not equal<br/>(≠) symbols when comparing expressions.</li> </ul> |
| N4 Addition and<br>subtraction to 100<br>• N4.1 decomposing<br>numbers to 100   | N4.7)   |   | <ul> <li>(Activities 16, 17, 19, 20; MED 3A: 1)</li> <li>Solves for an unknown value in a one-step addition and subtraction problem (e.g., n + 5 = 15). (Activity 19)</li> <li>Big Idea: Numbers are related in many ways.</li> </ul>  |

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## **Curriculum Correlation** Patterning and Algebra Cluster 3: Equality and Inequality

#### British Columbia/Yukon Territories (continued)

| N4.7 whole-class<br>number talks | Decomposing Wholes into Parts and Composing         Wholes from Parts         - Composes and decomposes quantities to 20.         (Activities 20, MED 3A: 2)         Big Idea: Quantities and numbers can be added and subtracted to determine how many or how much.  |
|----------------------------------|---|
|                                  | <ul> <li>Developing Conceptual Meaning of Addition and<br/>Subtraction</li> <li>Models add-to and take-from situations with<br/>quantities to 10. (Activities 17, 18, 20, MED 3A: 1)</li> <li>Uses symbols and equations to represent addition<br/>and subtraction situations. (Activities 16, 17, 18, 20;<br/>MED 3A: 1, 2; MED 3B: 1)</li> <li>Developing Fluency of Addition and Subtraction<br/>Computation</li> <li>Fluently adds and subtracts with quantities to 20.<br/>(Activities 16, 17, 18, 19, 20; MED 3A: 1; MED 3B: 1,<br/>2)</li> </ul> |

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# **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### New Brunswick/Prince Edward Island/Newfoundland and Labrador

| Specific Outcomes   | Mathology Grade 2 Classroom<br>Activity Kit  | Mathology Little Books  | Pearson Canada K-3 Mathematics Learning<br>Progression  |
|---|--|---|---|
| General Outcome<br>Patterns and Relations: R<br>Cross Strand<br>Number: Develop number  | epresent algebraic expressions in mu   | ultiple ways.   |   |
| <ul> <li>PR3 Demonstrate and<br/>explain the meaning of<br/>equality and inequality by<br/>using manipulatives and<br/>diagrams (0 to 100).</li> <li>PR4 Record equalities<br/>and inequalities<br/>symbolically using the<br/>equal symbol or the not<br/>equal symbol or the not<br/>equal symbol.</li> <li>N8 Demonstrate and<br/>explain the effect of<br/>adding zero to or<br/>subtracting zero from any<br/>number.</li> <li>N9 Demonstrate an<br/>understanding of addition<br/>(limited to 1 and 2-digit<br/>numerals) with answers<br/>to 100 and the<br/>corresponding<br/>subtraction.</li> <li>N10 Apply mental<br/>mathematics strategies<br/>to determine basic<br/>addition facts to 18 and<br/>related subtraction facts.</li> </ul> | <ul> <li>Below Grade: Intervention</li> <li>5: Exploring 10</li> <li>6: Balancing Sets</li> <li>On Grade: Teacher Cards</li> <li>15: Equal and Unequal Sets <ul> <li>(PR3, PR4)</li> </ul> </li> <li>16: Equal or Not Equal? (2PR3, 2PR4, N10)</li> <li>17: Exploring Number Sentences <ul> <li>(2PR4, N10)</li> </ul> </li> <li>17: Exploring Properties <ul> <li>(N8)</li> </ul> </li> <li>19: Missing Numbers</li> <li>20. Equality and Inequality <ul> <li>Consolidation (PR3, PR4, 2N8, N9, 2N10)</li> </ul> </li> <li>On Grade: Math Every Day <ul> <li>Card 3A:</li> <li>Equal or Not Equal? (PR3, PR4, N10)</li> <li>How Many Ways? (PR4)</li> <li>Card 3B:</li> <li>Which One Doesn't Belong?</li> <li>(PR4, N10)</li> <li>What's Missing?</li> </ul> </li> </ul> | <ul> <li>Nutty and Wolfy<br/>(Activities 15, 16, 20)</li> <li>On Grade: <ul> <li>Kokum's Bannock<br/>(Activities 15, 16, 17, 18, 19, 20)</li> </ul> </li> <li>Above Grade: <ul> <li>A Week of Challenges<br/>(Activities 17, 18, 19, 20)</li> </ul> </li> </ul> | <ul> <li>Big idea: Patterns and relations can be represented with symbols, equations, and expressions.</li> <li>Understanding Equality and Inequality, Building on Generalized Properties of Numbers and Operations <ul> <li>Compares sets to determine more/less or equal. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Models and describes equality (balance; the same as) and inequality (imbalance; not the same as). (Activities 16, 17, 20, MED 3A: 1)</li> <li>Records different expressions of the same quantity as equalities (e.g., 2 + 4 = 5 + 1). (Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition). (Activities 18, 20)</li> </ul> </li> <li>Using Symbols, Unknowns, and Variables to Represent Mathematical Relations <ul> <li>Uses the equal (=) symbol in equations and knows its meaning (i.e., equivalent; is the same as). (Activities 16, 17, 19, 20)</li> <li>Understands and uses the equal (=) and not equal (≠) symbols when comparing expressions. (Activities 16, 17, 19, 20; MED 3A: 1)</li> <li>Solves for an unknown value in a one-step addition and subtraction problem (e.g., n + 5 = 15). (Activity 19)</li> </ul> </li> </ul> |

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# **Curriculum Correlation** Patterning and Algebra Cluster 3: Equality and Inequality

New Brunswick/Prince Edward Island/Newfoundland and Labrador (continued)

| Big Idea: Numbers are related in many ways.             |
|---|
| Decomposing Wholes into Parts and Composing             |
| Wholes from Parts                                       |
| - Composes and decomposes quantities to 20.             |
| (Activities 20, MED 3A: 2)                              |
| Big Idea: Quantities and numbers can be added           |
| and subtracted to determine how many or                 |
| how much.   |
| Developing Conceptual Meaning of Addition and           |
| Subtraction   |
| - Models add-to and take-from situations with           |
| quantities to 10. (Activities 17, 18, 20, MED 3A: 1)    |
| - Uses symbols and equations to represent addition      |
| and subtraction situations. (Activities 16, 17, 18, 20; |
| MED 3A: 1, 2; MED 3B: 1)                                |
| Developing Fluency of Addition and Subtraction          |
| Computation   |
| - Fluently adds and subtracts with quantities to 20.    |
| (Activities 16, 17, 18, 19, 20; MED 3A: 1; MED 3B: 1,   |
| 2)  |

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# **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### Manitoba

| Specific Outcomes Ma<br>Cla   | athology Grade 2<br>assroom Activity Kit   | Mathology Little Books  | Pearson Canada K-3 Mathematics Learning Progression  |
|---|--|---|--|
| General Outcome<br>Patterns and Relations: Repre<br>Cross Strand:<br>Number: Develop number sens  | esent algebraic expressions i  | in multiple ways.   | Big Idea, Dettorne and relations can be represented with   |
| <ul> <li>2.N.9 Demonstrate and explain the meaning of equality and inequality by using manipulatives and diagrams (0 to 100).</li> <li>2.PR.4 Record equalities and inequalities symbolically using the equal symbol or the not-equal symbol.3</li> <li>2.N.8 Demonstrate and explain the effect of adding zero to or subtracting zero from any number.</li> <li>2.N.9 Demonstrate an understanding of addition (limited to 1- and 2-digit numerals) with answers to 100 and the corresponding subtraction by</li> <li>explaining that the order in which numbers are added does not affect the sum.</li> <li>explaining that the order in which numbers are subtracted may affect the difference.</li> </ul> | <ul> <li>a Grade: Intervention</li> <li>Exploring 10</li> <li>Balancing Sets</li> <li>a Grade: Teacher Cards</li> <li>Equal and Unequal Sets</li> <li>(2.PR.3, 2.PR.4)</li> <li>Equal or Not Equal?</li> <li>(2.PR.3, 2.PR.4)</li> <li>Exploring Number</li> <li>Sentences (2.PR.2)</li> <li>Exploring Properties</li> <li>(2.N.8, 2.N.9)</li> <li>Missing Numbers</li> <li>Equality and Inequality</li> <li>Consolidation (2.PR.3, 2.PR.4)</li> <li>ard 3A:</li> <li>qual or Not Equal?</li> <li>.PR.3, 2.PR.4)</li> <li>bw Many Ways? (2.PR.3, PR.4)</li> <li>ard 3B:</li> <li>hich One Doesn't Belong?</li> <li>.PR.3, 2.PR.4)</li> <li>hat's Missing?</li> </ul> | <ul> <li>Nutty and Wolfy<br/>(Activities 15, 16, 20)</li> <li>On Grade: <ul> <li>Kokum's Bannock<br/>(Activities 15, 16, 17, 18, 19, 20)</li> </ul> </li> <li>Above Grade: <ul> <li>A Week of<br/>Challenges (Activities 17, 18, 19, 20)</li> </ul> </li> </ul> | <ul> <li>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</li> <li>Understanding Equality and Inequality, Building on Generalized Properties of Numbers and Operations <ul> <li>Compares sets to determine more/less or equal. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Models and describes equality (balance; the same as) and inequality (imbalance; not the same as).</li> <li>(Activities 16, 17, 20, MED 3A: 1)</li> <li>Records different expressions of the same quantity as equalities (e.g., 2 + 4 = 5 + 1).</li> <li>(Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition). (Activities 18, 20)</li> <li>Using Symbols, Unknowns, and Variables to Represent Mathematical Relations</li> <li>Uses the equal (=) symbol in equations and knows its meaning (i.e., equivalent; is the same as).</li> <li>(Activities 16, 17, 19, 20)</li> <li>Understands and uses the equal (=) and not equal (≠) symbols when comparing expressions.</li> <li>(Activities 16, 17, 19, 20; MED 3A: 1)</li> <li>Solves for an unknown value in a one-step addition and subtraction problem (e.g., n + 5 = 15). (Activity 19)</li> </ul> Big Idea: Quantities and numbers can be added and subtraction problem (e.g., n + 5 = 15). (Activity 19) Big Idea: Quantities and numbers can be added and subtraction situations. (Activities 16, 17, 18, 20; MED 3A: 1, 2; MED 3B: 1) Developing Conceptual Meaning of Addition and Subtraction <ul> <li>Uses symbols and equations to represent addition and subtraction situations. (Activities 16, 17, 18, 20; MED 3A: 1, 2; MED 3B: 1)</li> </ul> </li> </ul> |

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## **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

Nova Scotia

| Specific Outcomes   | Mathology Grade 2 Classroom<br>Activity Kit   | Mathology Little Books  | Pearson Canada K-3 Mathematics Learning<br>Progression  |
|---|---|---|---|
| General Outcome<br>Patterns and Relations: Stu<br>Cross Strand<br>Number: Students will be ex   | udents will be expected to represent  | algebraic expressions in multip   | le ways.  |
| <ul> <li>PR03 Students will be expected to demonstrate and explain the meaning of equality and inequality by using manipulatives and diagrams (0 to 100).</li> <li>PR04 Students will be expected to record equalities and inequalities symbolically, using the equal symbol or the not equal symbol.</li> <li>N04 Students will be expected to represent and partition numbers to 100.</li> <li>N08 Students will be expected to adding zero to or subtracting zero from any number.</li> <li>2N09 Students will be expected to</li> </ul> | <ul> <li>Below Grade: Intervention</li> <li>5: Exploring 10</li> <li>6: Balancing Sets</li> <li>On Grade: Teacher Cards</li> <li>15: Equal and Unequal Sets <ul> <li>(PR03, PR04)</li> </ul> </li> <li>16: Equal or Not Equal? (PR03, PR04, N10)</li> <li>17: Exploring Number Sentences <ul> <li>(PR03, PR04, N10)</li> </ul> </li> <li>18: Exploring Properties <ul> <li>(N08, N09c, N09d, N10)</li> </ul> </li> <li>19: Missing Numbers</li> <li>20. Equality and Inequality <ul> <li>Consolidation (PR03, PR04, N04, N08, N09c, N10)</li> </ul> </li> <li>On Grade: Math Every Day <ul> <li>Card 3A:</li> <li>Equal or Not Equal? (PR03, PR04, N10)</li> <li>How Many Ways? (PR03, PR04, 2\N04)</li> <li>Card 3B:</li> <li>Which One Doesn't Belong?</li> </ul> </li> </ul> | <ul> <li>Below Grade: <ul> <li>Nutty and Wolfy (Activities 15, 16, 20)</li> </ul> </li> <li>On Grade: <ul> <li>Kokum's Bannock (Activities 15, 16, 17, 18, 19, 20)</li> </ul> </li> <li>Above Grade: <ul> <li>A Week of Challenges (Activities 17, 18, 19, 20)</li> </ul> </li> </ul> | <ul> <li>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</li> <li>Understanding Equality and Inequality, Building on Generalized Properties of Numbers and Operations <ul> <li>Compares sets to determine more/less or equal. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Models and describes equality (balance; the same as) and inequality (imbalance; not the same as) and inequality (imbalance; not the same quantity as equalities (e.g., 2 + 4 = 5 + 1).</li> <li>(Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition). (Activities 18, 20)</li> <li>Using Symbols, Unknowns, and Variables to Represent Mathematical Relations</li> <li>Uses the equal (=) symbol in equations and knows its meaning (i.e., equivalent; is the same as). (Activities 16, 17, 19, 20)</li> <li>Understands and uses the equal (=) and not equal (≠) symbols when comparing expressions. (Activities 16, 17, 19, 20; MED 3A: 1)</li> </ul> </li> </ul> |

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## **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### Nova Scotia (continued)

| addition (limited to 1-              |  | Big Idea: Numbers are related in many ways.                            |
|--------------------------------------|--|--|
| and 2-digit numerals)                |  | Decomposing Wholes into Parts and Composing                            |
| with answers to 100 and              |  | Wholes from Parts  |
| the corresponding                    |  | <ul> <li>Composes and decomposes quantities to 20.</li> </ul>          |
| subtraction by                       |  | (Activities 20, MED 3A: 2)   |
| <ul> <li>2N09c explaining</li> </ul> |  | Big Idea: Quantities and numbers can be added                          |
| and demonstrating                    |  | and subtracted to determine how many or                                |
| that the order in                    |  | how much.  |
| which numbers are                    |  | Developing Conceptual Meaning of Addition and                          |
| added does not                       |  | Subtraction  |
| affect the sum                       |  | <ul> <li>Models add-to and take-from situations with</li> </ul>        |
| <ul> <li>2N09d explaining</li> </ul> |  | quantities to 10. (Activities 17, 18, 20, MED 3A: 1)                   |
| and demonstrating                    |  | <ul> <li>Uses symbols and equations to represent addition</li> </ul>   |
| that the order in                    |  | and subtraction situations. (Activities 16, 17, 18, 20;                |
| which numbers are                    |  | MED 3A: 1, 2; MED 3B: 1)   |
| subtracted matters                   |  | Developing Fluency of Addition and Subtraction                         |
| when finding a                       |  | Computation  |
| difference                           |  | <ul> <li>Fluently adds and subtracts with quantities to 20.</li> </ul> |
|                                      |  | (Activities 16, 17, 18, 19, 20; MED 3A: 1; MED 3B: 1,                  |
| N10 Students will be                 |  | 2)   |
| expected to apply                    |  |  |
| mental mathematics                   |  |  |
| strategies to quickly                |  |  |
| recall basic addition                |  |  |
| facts to 18 and                      |  |  |
| determine related                    |  |  |
| subtraction facts.                   |  |  |
|                                      |  |  |

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# **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### Alberta/Northwest Territories/Nunavut

| Learning Outcomes   | Mathology Grade 2 Classroom<br>Activity Kit  | Mathology Little Books  | Pearson Canada K-3 Mathematics Learning<br>Progression  |
|---|--|---|---|
| General Outcome<br>Patterns and Relations: R<br>Cross Strand<br>Number: Develop number  | epresent algebraic expressions in m  | ultiple ways.   |   |
| <ul> <li>Patterns and Relations</li> <li>4. Demonstrate and<br/>explain the meaning of<br/>equality and inequality,<br/>concretely and pictorially.</li> <li>5. Record equalities and<br/>inequalities symbolically,<br/>using the equal symbol or<br/>the not equal symbol.</li> <li>Number</li> <li>4 Represent and describe<br/>numbers to 100,<br/>concretely, pictorially<br/>and symbolically.</li> <li>8. Demonstrate and<br/>explain the effect of<br/>adding zero to, or<br/>subtracting zero from,<br/>any number.</li> <li>9. Demonstrate an<br/>understanding of<br/>addition (limited to 1-<br/>and 2-digit numerals)<br/>with answers to 100<br/>and the corresponding<br/>subtraction by:</li> </ul> | <ul> <li>Below Grade: Intervention</li> <li>5: Exploring 10</li> <li>6: Balancing Sets</li> <li>On Grade: Teacher Cards</li> <li>15: Equal and Unequal Sets <ul> <li>(PR4)</li> </ul> </li> <li>16: Equal or Not Equal? (PR4, PR5, N10)</li> <li>17: Exploring Number Sentences <ul> <li>(PR5, N10)</li> </ul> </li> <li>17: Exploring Properties <ul> <li>(N8, N9c, N9e, N10)</li> </ul> </li> <li>19: Missing Numbers</li> <li>20. Equality and Inequality <ul> <li>Consolidation (PR4, PR5, N4, N8, N9c, N10)</li> </ul> </li> <li>On Grade: Math Every Day <ul> <li>Card 3A:</li> <li>Equal or Not Equal? (PR4, RP5, N4)</li> <li>Card 3B:</li> <li>Which One Doesn't Belong?</li> <li>(PR5, N10)</li> </ul> </li> </ul> | <ul> <li>Below Grade: <ul> <li>Nutty and Wolfy (Activities 15, 16, 20)</li> </ul> </li> <li>On Grade: <ul> <li>Kokum's Bannock (Activities 15, 16, 17, 18, 19, 20)</li> </ul> </li> <li>Above Grade: <ul> <li>A Week of Challenges (Activities 17, 18, 19, 20)</li> </ul> </li> </ul> | <ul> <li>Big Idea: Patterns and relations can be represented with symbols, equations, and expressions.</li> <li>Understanding Equality and Inequality, Building on Generalized Properties of Numbers and Operations <ul> <li>Compares sets to determine more/less or equal. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Models and describes equality (balance; the same as) and inequality (imbalance; not the same as). (Activities 16, 17, 20, MED 3A: 1)</li> <li>Records different expressions of the same quantity as equalities (e.g., 2 + 4 = 5 + 1). (Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition). (Activities 18, 20)</li> </ul> </li> <li>Using Symbols, Unknowns, and Variables to Represent Mathematical Relations <ul> <li>Uses the equal (=) symbol in equations and knows its meaning (i.e., equivalent; is the same as). (Activities 16, 17, 19, 20)</li> <li>Understands and uses the equal (=) and not equal (≠) symbols when comparing expressions. (Activities 16, 17, 19, 20; MED 3A: 1)</li> <li>Solves for an unknown value in a one-step addition and subtraction problem (e.g., n + 5 = 15). (Activity 19)</li> </ul> </li> </ul> |

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# **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### Alberta/Northwest Territories/Nunavut (continued)

| • 2N9c using the                             | Big Idea: Numbers are related in many ways.                            |
|--|--|
| commutative property                         | Decomposing Wholes into Parts and Composing                            |
| of addition (the order in                    | Wholes from Parts  |
| which numbers are                            | <ul> <li>Composes and decomposes quantities to 20.</li> </ul>          |
| added does not affect                        | (Activities 20, MED 3A: 2)   |
| the sum)                                     | Big Idea: Quantities and numbers can be added                          |
| <ul> <li>2N9d explaining that the</li> </ul> | and subtracted to determine how many or                                |
| order in which numbers                       | how much.  |
| are subtracted may                           | Developing Conceptual Meaning of Addition and                          |
| affect the difference.                       | Subtraction  |
|  | <ul> <li>Models add-to and take-from situations with</li> </ul>        |
| <b>10.</b> Apply mental                      | quantities to 10. (Activities 17, 18, 20, MED 3A: 1)                   |
| mathematics strategies                       | <ul> <li>Uses symbols and equations to represent addition</li> </ul>   |
| for basic addition facts                     | and subtraction situations. (Activities 16, 17, 18, 20;                |
| and related subtraction                      | MED 3A: 1, 2; MED 3B: 1)   |
| facts to 18.                                 | Developing Fluency of Addition and Subtraction                         |
|  | Computation  |
|  | <ul> <li>Fluently adds and subtracts with quantities to 20.</li> </ul> |
|  | (Activities 16, 17, 18, 19, 20; MED 3A: 1; MED 3B: 1,                  |
|  | 2)   |

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# **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### Saskatchewan

| Specific Outcomes   | Mathology Grade 2 Classroom<br>Activity Kit  | Mathology Little Books  | Pearson Canada K-3 Mathematics Learning<br>Progression  |  |  |
|---|--|---|---|--|--|
| Goals<br>Number Sense, Logical Thinl<br>Cross Strand: Number  | Goals<br>Number Sense, Logical Thinking, Spatial Sense, Mathematics as a Human Endeavour<br>Cross Strand: Number   |   |   |  |  |
| <ul> <li>Patterns and Relations</li> <li>P2.3 Demonstrate <ul> <li>understanding of equality</li> <li>and inequality concretely</li> <li>and pictorially (0 to 100) by:</li> <li>P2.3a relating equality</li> <li>and inequality to balance</li> <li>P2.3b comparing sets</li> <li>P2.3c recording <ul> <li>equalities with an equal</li> <li>sign</li> </ul> </li> <li>P2.3d recording <ul> <li>inequalities with a not</li> <li>equal sign</li> </ul> </li> <li>P2.3e solving problems <ul> <li>involving equality and</li> <li>inequality</li> </ul> </li> <li>Number <ul> <li>N2.1 Demonstrate</li> <li>understanding of whole</li> <li>numbers to 100</li> <li>(concretely, pictorially, physically, orally, in writing, and symbolically) by: <ul> <li>N2.1a representing</li> <li>(including place value)</li> </ul> </li> </ul></li></ul></li></ul> | <ul> <li>below Grade: Intervention</li> <li>5: Exploring 10</li> <li>6: Balancing Sets</li> <li>On Grade: Teacher Cards</li> <li>15: Equal and Unequal Sets <ul> <li>(P2.3a, P2.3b)</li> </ul> </li> <li>16: Equal or Not Equal? (P2.3a, P2.3c, P2.3d, P2.3e, N2.2d)</li> <li>17: Exploring Number Sentences <ul> <li>(P2.3a, P2.3c, P2.3d, P2.3e, N2.2d)</li> </ul> </li> <li>17: Exploring Properties <ul> <li>(P2.3b, P2.3c, N2.2d, N2.2e, N2.2f)</li> </ul> </li> <li>19: Missing Numbers (P2.3a)</li> <li>20. Equality and Inequality <ul> <li>Consolidation (P2.3a, P2.3c, P2.3d, N2.1a, N2.2d, N2.2e, N2.2f)</li> </ul> </li> <li>On Grade: Math Every Day <ul> <li>Card 3A:</li> <li>Equal or Not Equal? (P2.3a, P2.3c, P2.3d, N2.2d)</li> <li>How Many Ways? (P2.3c, P2.3d, N2.1a)</li> </ul> </li> </ul> | <ul> <li>Nutty and Wolfy<br/>(Activities 15, 16, 20)</li> <li>On Grade: <ul> <li>Kokum's Bannock<br/>(Activities 15, 16, 17, 18, 19, 20)</li> </ul> </li> <li>Above Grade: <ul> <li>A Week of Challenges<br/>(Activities 17, 18, 19, 20)</li> </ul> </li> </ul> | <ul> <li>Big idea: Patterns and relations can be represented with symbols, equations, and expressions.</li> <li>Understanding Equality and Inequality, Building on Generalized Properties of Numbers and Operations <ul> <li>Compares sets to determine more/less or equal. (Activity 15)</li> <li>Creates a set that is more/less or equal to a given set. (Activity 15)</li> <li>Models and describes equality (balance; the same as) and inequality (imbalance; not the same as). (Activities 16, 17, 20, MED 3A: 1)</li> <li>Records different expressions of the same quantity as equalities (e.g., 2 + 4 = 5 + 1). (Activities 20, MED 3A: 1, 2)</li> <li>Explores properties of addition and subtraction (e.g., adding or subtracting 0, commutativity of addition). (Activities 18, 20)</li> </ul> </li> <li>Using Symbols, Unknowns, and Variables to Represent Mathematical Relations <ul> <li>Uses the equal (=) symbol in equations and knows its meaning (i.e., equivalent; is the same as). (Activities 16, 17, 19, 20)</li> <li>Understands and uses the equal (=) and not equal (≠) symbols when comparing expressions. (Activities 16, 17, 19, 20; MED 3A: 1)</li> <li>Solves for an unknown value in a one-step addition and subtraction problem (e.g., n + 5 = 15). (Activity 19)</li> </ul> </li> </ul> |  |  |

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# **Curriculum Correlation**

### Patterning and Algebra Cluster 3: Equality and Inequality

#### Saskatchewan (continued)

| N2.2 Demonstrate                         | Card 3B:                       | Big Idea: Numbers are related in many ways.                            |
|--|--------------------------------|--|
| understanding of addition                | Which One Doesn't Belong?      | Decomposing Wholes into Parts and Composing                            |
| (limited to 1 and 2-digit                | (P2.3a, P2.3c, P2.3d, N2.2d)   | Wholes from Parts  |
| numerals) with answers to                | What's Missing? (P2.3a, P2.3e) | <ul> <li>Composes and decomposes quantities to 20.</li> </ul>          |
| 100 and the corresponding                |                                | (Activities 20, MED 3A: 2)   |
| subtraction by:                          |                                | Big Idea: Quantities and numbers can be added                          |
| <ul> <li>N2.2a representing</li> </ul>   |                                | and subtracted to determine how many or                                |
| strategies for adding                    |                                | how much.  |
| and subtracting                          |                                | Developing Conceptual Meaning of Addition and                          |
| concretely, pictorially,                 |                                | Subtraction  |
| and symbolically                         |                                | <ul> <li>Models add-to and take-from situations with</li> </ul>        |
| <ul> <li>N2.2b creating and</li> </ul>   |                                | quantities to 10. (Activities 17, 18, 20, MED 3A: 1)                   |
| solving problems                         |                                | <ul> <li>Uses symbols and equations to represent addition</li> </ul>   |
| involving addition and                   |                                | and subtraction situations. (Activities 16, 17, 18, 20;                |
| subtraction                              |                                | MED 3A: 1, 2; MED 3B: 1)   |
| <ul> <li>N2.2c estimating</li> </ul>     |                                | Developing Fluency of Addition and Subtraction                         |
| <ul> <li>N2.2d using personal</li> </ul> |                                | Computation  |
| strategies for adding                    |                                | <ul> <li>Fluently adds and subtracts with quantities to 20.</li> </ul> |
| and subtracting with                     |                                | (Activities 16, 17, 18, 19, 20; MED 3A: 1; MED 3B: 1,                  |
| and without the support                  |                                | 2)   |
| of manipulatives                         |                                |  |
| <ul> <li>N2.2e analyzing the</li> </ul>  |                                |  |
| effect of adding or                      |                                |  |
| subtracting zero                         |                                |  |
| <ul> <li>N2.2f analyzing the</li> </ul>  |                                |  |
| effect of the ordering of                |                                |  |
| the quantities                           |                                |  |
| (addends, minuends,                      |                                |  |
| and subtrahends) in                      |                                |  |
| addition and subtraction                 |                                |  |
| statements.                              |                                |  |