## Ontario

| Curriculum <br> Expectations | Mathology Grade 2 Classroom <br> Activity Kit | Mathology Little Books | Pearson Canada K-3 Mathematics Learning <br> Progression |
| :--- | :--- | :--- | :--- |
| Overall Expectation |  |  |  |
| P2 Expressions and Equality: demonstrate an understanding of the concept of equality between pairs of expressions, using concrete materials, |  |  |  |
| symbols, and addition and subtraction to 18. |  |  |  |
| Cross Strand: Number |  |  |  |
| N1 Quantity Relationships: read, represent, compare, and order whole numbers to 100, and use concrete materials to represent fractions and money |  |  |  |
| amounts to 100¢; |  |  |  |
| N2 Operational Sense: solve problems involving the addition and subtraction of one- and two-digit whole numbers, using a variety of strategies, and |  |  |  |
| investigate multiplication and division. |  |  |  | investigate multiplication and division.



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## Curriculum Correlation

Patterning and Algebra Cluster 3: Equality and Inequality

## Ontario (continued)

P2.4 identify, through investigation, and use the commutative property of addition to facilitate computation with whole numbers

P2.5 identify, through investigation, the properties of zero in addition and subtraction

N1.3 compose and decompose two-digit numbers in a variety of ways, using concrete materials

N3.1 solve problems involving the addition and subtraction of whole numbers to 18 , using a variety of mental strategies

## On Grade: Math Every Day

 Card 3A:Equal or Not Equal? (P2.2, N N3.1)
How Many Ways?
(P2.1, P2.1, N1.3)
Card 3B:
Which One Doesn't Belong? (P2.2, N3.1)
What's Missing? (P2.3, N3.1)

- Solves for an unknown value in a one-step addition and subtraction problem (e.g., $\mathrm{n}+5=15$ ). (Activity 19)

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)


## British Columbia/Yukon Territories

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

## 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 <br> Wholes from Parts <br> - Composes and decomposes quantities to 20. <br> (Activities 20, MED 3A: 2) |
| :---: | :--- | :--- | :--- |
| Big Idea: Quantities and numbers can be added |  |  |
| and subtracted to determine how many or |  |  |
| how much. |  |  |

## Curriculum Correlation

## Patterning and Algebra Cluster 3: Equality and Inequality

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

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

## Curriculum Correlation

## Patterning and Algebra Cluster 3: Equality and Inequality

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


## Manitoba



[^2]
## Patterning and Algebra Cluster 3: Equality and Inequality

## Nova Scotia

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

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## Patterning and Algebra Cluster 3: Equality and Inequality

## Nova Scotia (continued)

addition (limited to 1and 2-digit numerals) with answers to 100 and the corresponding subtraction by

- 2N09c explaining and demonstrating that the order in which numbers are added does not affect the sum
- 2N09d explaining and demonstrating that the order in which numbers are subtracted matters when finding a difference

N10 Students will be expected to apply mental mathematics strategies to quickly recall basic addition facts to 18 and determine related subtraction facts.

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)


## Curriculum Correlation

## Patterning and Algebra Cluster 3: Equality and Inequality

## Alberta/Northwest Territories/Nunavut



## Curriculum Correlation

## Patterning and Algebra Cluster 3: Equality and Inequality

## Alberta/Northwest Territories/Nunavut (continued)

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

## Saskatchewan

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

## Curriculum Correlation

Patterning and Algebra Cluster 3: Equality and Inequality
Saskatchewan (continued)

N2.2 Demonstrate understanding of addition (limited to 1 and 2-digit numerals) with answers to 100 and the corresponding subtraction by:

- N2.2a representing strategies for adding and subtracting concretely, pictorially, and symbolically
- N2.2b creating and solving problems involving addition and subtraction
- N2.2c estimating
- N2.2d using personal strategies for adding and subtracting with and without the support of manipulatives
- N2.2e analyzing the effect of adding or subtracting zero
- N2.2f analyzing the effect of the ordering of the quantities (addends, minuends, and subtrahends) in addition and subtraction statements.

Card 3B:
Which One Doesn't Belong? (P2.3a, P2.3c, P2.3d, N2.2d)
What's Missing? (P2.3a, P2.3e)

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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