

Curriculum Correlation

Number Cluster 5: Composing and Decomposing

ON

Kindergarten
<ul style="list-style-type: none"> – 15.8: explore different Canadian coins, using coin manipulatives (e.g., role-play the purchasing of items at the store in the dramatic play area; determine which coin will purchase more – a loonie or a quarter) – 15.9: compose and decompose quantities to 10 (e.g., make multiple representations of numbers using two or more colours of linking cubes, blocks, dot strips, and other manipulatives; play “shake and spill” games)
Grade 1
<p>Number</p> <p>Quantity Relationships</p> <ul style="list-style-type: none"> – relate numbers to the anchors of 5 and 10 (e.g., 7 is 2 more than 5 and 3 less than 10) (Activities 17, 18, 19, 23) – identify and describe various coins (i.e., penny, nickel, dime, quarter, \$1 coin, \$2 coin), using coin manipulatives or drawings, and state their value (e.g., the value of a penny is one cent; the value of a toonie is two dollars) (Activities 20, 23) – represent money amounts to 20¢, through investigation using coin manipulatives (Activities 20, 23) – compose and decompose numbers up to 20 in a variety of ways, using concrete materials (e.g., 7 can be decomposed using connecting cubes into 6 and 1, or 5 and 2, or 4 and 3) (Activities 17, 18, 19, 23) – divide whole objects into parts and identify and describe, through investigation, equal-sized parts of the whole, using fractional names (e.g., halves; fourths or quarters) (Activities 22, 23) <p>Operational Sense</p> <ul style="list-style-type: none"> – add and subtract money amounts to 10¢, using coin manipulatives and drawings (Activities 20, 23) <p>Cross Strand: Patterning and Algebra</p> <p>Expressions and Equality</p> <ul style="list-style-type: none"> – demonstrate examples of equality, through investigation, using a “balance” model (Sample problem: Demonstrate, using a pan balance, that a train of 7 attached cubes on one side balances a train of 3 cubes and a train of 4 cubes on the other side.)

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ON (con'd)

Grade 2**Number****Quantity and Relationships**

- compose and decompose two-digit numbers in a variety of ways, using concrete materials (e.g., place 42 counters on ten frames to show 4 tens and 2 ones; compose 37¢ using one quarter, one dime, and two pennies) (Sample problem: Use base ten blocks to show 60 in different ways.)
- determine, through investigation using concrete materials, the relationship between the number of fractional parts of a whole and the size of the fractional parts (e.g., a paper plate divided into fourths has larger parts than a paper plate divided into eighths) (Sample problem: Use paper squares to show which is bigger, one half of a square or one fourth of a square.)
- regroup fractional parts into wholes, using concrete materials (e.g., combine nine fourths to form two wholes and one fourth)
- compare fractions using concrete materials, without using standard fractional notation (e.g., use fraction pieces to show that three fourths are bigger than one half, but smaller than one whole)
- estimate, count, and represent (using the ¢ symbol) the value of a collection of coins with a maximum value of one dollar.

Operational Sense

- add and subtract money amounts to 100¢, using a variety of tools (e.g., concrete materials, drawings) and strategies (e.g., counting on, estimating, representing using symbols).

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BC/YT

Kindergarten
<p>Ways to make 5</p> <ul style="list-style-type: none"> Using concrete materials to show ways to make 5 <p>Decomposition of numbers to 10</p> <ul style="list-style-type: none"> Decomposing and recomposing quantities to 10 Numbers can be arranged and recognized Making 10 Using concrete materials to show ways to make 10
Grade 1
<p>Ways to make 10</p> <ul style="list-style-type: none"> Decomposing 10 into parts (Activities 17, 18, 21, 23) Numbers to 10 can be arranged and recognized (Activities 17, 18, 21, 23) <p>Addition and subtraction to 20 (understanding of operation and process)</p> <ul style="list-style-type: none"> Decomposing 20 into parts (Activities 19, 21, 23) <p>Financial literacy – values of coins and monetary exchanges</p> <ul style="list-style-type: none"> Counting multiples of the same denomination (nickels, dimes, loonies, and toonies) (Activities 20, 23) <p>Cross Strands:</p> <p>Change in quantity to 20, concretely and verbally</p> <ul style="list-style-type: none"> verbally describing a change in quantity (e.g., I can build 7 and make it 10 by adding 3) <p>Meaning of equality and inequality</p> <ul style="list-style-type: none"> demonstrating and explaining the meaning of equality and inequality
Grade 2
<p>Number concepts to 100</p> <ul style="list-style-type: none"> Counting <ul style="list-style-type: none"> Quantities to 100 can be arranged and recognized Decomposing two-digit numbers into 10s and 1s <p>Addition and subtraction to 100</p> <ul style="list-style-type: none"> Decomposing numbers to 100 <p>Financial literacy – coin combinations to 100 cents, and spending and saving</p> <ul style="list-style-type: none"> Counting simple mixed combinations of coins to 100 cents

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NB/PEI/SK/MB/NWT/AB/NU

Kindergarten
Number KN04. Represent and describe numbers 2 to 10, concretely and pictorially.
Grade 1
Number 1N04. Represent and describe numbers to 20 concretely, pictorially and symbolically. (Activities 17, 18, 19, 23) 1N07. Demonstrate, concretely and pictorially, how a given number can be represented by a variety of equal groups with and without singles. (Activities 21, 23) Cross Strand: Patterns and Relations (Variables and Equations) 1PR3. Describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20).
Grade 2
Number 2N04. Represent and describe numbers to 100 concretely, pictorially and symbolically. 2N07. Illustrate, concretely and pictorially, the meaning of place value for numerals to 100.

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NS

Kindergarten
<p>Number</p> <p>KN04. Students will be expected to represent and describe numbers 2 to 10 in two parts, concretely and pictorially.</p>
Grade 1
<p>Number</p> <p>1N04. Students will be expected to represent and partition numbers to 20. (Activities 17, 18, 19, 23)</p> <p>1N07. Students will be expected to demonstrate an understanding of conservation of number for up to 20 objects. (Activities 21, 23)</p> <p>Cross Strand:</p> <p>Patterns and Relations (Variables and Equations)</p> <p>1PR3. Students will be expected to describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20).</p>
Grade 2
<p>Number</p> <p>2N04. Students will be expected to represent and partition numbers to 100.</p> <p>2N07. Students will be expected to illustrate, concretely and pictorially, the meaning of place value for numerals to 100.</p>

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NFL

Kindergarten
Number KN04. Represent and describe numbers 2 to 10, concretely and pictorially.
Grade 1
Number 1N04. Represent and describe numbers to 20 concretely, pictorially and symbolically. (Activities 17, 18, 19, 21, 23)
Cross Strand: Patterns and Relations (Variables and Equations) 1PR3. Describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20).
Grade 2
Number 2N04. Represent and describe numbers to 100 concretely, pictorially and symbolically. 2N07. Illustrate, concretely and pictorially, the meaning of place value for numerals to 100.