

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

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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.