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| <h2>Number</h2> |
| General Outcome <i>Develop number sense.</i> |
| 4.N.1. Represent and describe whole numbers to 10 000, pictorially and symbolically. [C, CN, V] |
| 4.N.2. Compare and order numbers to 10 000. [C, CN] |
| 4.N.3. Demonstrate an understanding of addition of numbers with answers to 10 000 and their corresponding subtractions (limited to 3- and 4-digit numerals) by <ul style="list-style-type: none"> • using personal strategies for adding and subtracting • estimating sums and differences • solving problems involving addition and subtraction. [C, CN, ME, PS, R] |
| 4.N.4. Explain the properties of 0 and 1 for multiplication and the property of 1 for division. [C, CN, R] |
| 4.N.5. Describe and apply mental mathematics strategies such as <ul style="list-style-type: none"> • skip counting from a known fact • using doubling or halving • using doubling and adding one more group • using patterns in the 9s facts • using repeated doubling to develop recall of basic multiplication facts to 9×9 and related division facts. [C, CN, ME, PS, R] |
| 4.N.6. Demonstrate an understanding of multiplication (2- or 3-digit numerals by 1-digit numerals) to solve problems by <ul style="list-style-type: none"> • using personal strategies for multiplication with and without concrete materials • using arrays to represent multiplication • connecting concrete representations to symbolic representations • estimating products [C, CN, ME, PS, R, V] |
| 4.N.7. Demonstrate an understanding of division (1-digit divisor and up to 2-digit dividend) to solve problems by <ul style="list-style-type: none"> • using personal strategies for dividing with and without concrete materials • estimating quotients • relating division to multiplication [C, CN, ME, PS, R, V] |

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| <h2>Number (cont.)</h2> |
| 4.N.8. Demonstrate an understanding of fractions less than or equal to one by using concrete and pictorial representations to <ul style="list-style-type: none"> • name and record fractions for the parts of a whole or a set • compare and order fractions • model and explain that for different wholes, two identical fractions may not represent the same quantity • provide examples of where fractions are used. [C, CN, PS, R, V] |
| 4.N.9. Describe and represent decimals (tenths and hundredths) concretely, pictorially, and symbolically. [C, CN, R, V] |
| 4.N.10. Relate decimals to fractions (to hundredths). [CN, R, V] |
| 4.N.11. Demonstrate an understanding of addition and subtraction of decimals (limited to hundredths) by <ul style="list-style-type: none"> • using compatible numbers • estimating sums and differences • using mental math strategies to solve problems. [C, ME, PS, R, V] |

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| <h2>Shape and Space</h2> |
| General Outcome <i>Use direct or indirect measurement to solve problems.</i> |
| 4.SS.1. Read and record time using digital and analog clocks, including 24-hour clocks. [C, CN, V] |
| 4.SS.2. Read and record calendar dates in a variety of formats. [C, V] |
| 4.SS.3. Demonstrate an understanding of area of regular and irregular 2-D shapes by <ul style="list-style-type: none"> • recognizing that area is measured in square units • selecting and justifying referents for the units cm^2 or m^2 • estimating area by using referents for cm^2 or m^2 • determining and recording area (cm^2 or m^2) • constructing different rectangles for a given area (cm^2 or m^2) in order to demonstrate that many rectangles may have the same area. [C, CN, ME, PS, R, V] |
| General Outcome <i>Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.</i> |
| 4.SS.4. Solve problems involving 2-D shapes and 3-D objects. [CN, PS, V] |
| 4.SS.5. Describe and construct rectangular and triangular prisms. [C, CN, R, V] |
| General Outcome <i>Describe and analyze position and motion.</i> |
| 4.SS.6. Demonstrate an understanding of line symmetry by <ul style="list-style-type: none"> • identifying symmetrical 2-D shapes • creating symmetrical 2-D shapes • drawing one or more lines of symmetry in a 2-D shape [C, CN, V] |

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| <h2>Statistics and Probability</h2> |
| General Outcome <i>Collect, display and analyze data to solve problems.</i> |
| 4.SP.1. Demonstrate an understanding of many-to-one correspondence. [C, R, T, V] |
| 4.SP.2. Construct and interpret pictographs and bar graphs involving many-to-one correspondence to draw conclusions. [C, PS, R, V] |

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| <h2>Patterns and Relations</h2> |
| General Outcome <i>Use patterns to describe the world and solve problems.</i> |
| 4.PR.1. Identify and describe patterns found in tables and charts, including a multiplication chart. [C, CN, PS, V] |
| 4.PR.2. Reproduce a pattern shown in a table or chart using concrete materials. [C, CN, V] |
| 4.PR.3. Represent and describe patterns and relationships using charts and tables to solve problems. [C, CN, PS, R, V] |
| 4.PR.4. Identify and explain mathematical relationships using charts and diagrams to solve problems. [CN, PS, R, V] |
| General Outcome <i>Represent algebraic expressions in multiple ways.</i> |
| 4.PR.5. Express a problem as an equation in which a symbol is used to represent an unknown number. [CN, PS, R] |
| 4.PR.6. Solve one-step equations involving a symbol to represent an unknown number. [C, CN, PS, R, V] |

Processes:

- C – Communication
- PS – Problem Solving
- V – Visualization

- CN – Connections
- R – Reasoning

- ME – Mental Mathematics and Estimation
- T – Technology