**[C]** Communication **[PS]** Problem Solving **[CN]** Connections **[R]** Reasoning

**[ME]** Mental Mathematics **[V]** Visualization and Estimation **[T]** Technology

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| **Number Strand**  |
| **Student Learning Outcome**  | **Math Makes Sense**  |
| **N6.1** Demonstrate understanding of place value including:* greater than one million
* less than one thousandth
* solving situational questions using technology.

[C, CN, R, PS, T] | Unit 2, Lesson 1, pp. 46–50Unit 2, Lesson 2, pp. 51–54Unit Problem, pp. 84, 85Unit 2, Lesson 3, pp. 55–58 Unit 3, Lesson 1, pp. 88–91  |
| **N6.2** Demonstrate understanding of factors and multiples (concretely, pictorially, and symbolically) including:* determining factors and multiples of numbers less than 100
* relating factors and multiples to multiplication and division
* determining and relating prime and composite numbers
* solving situational questions.

[C, CN, ME, PS, R] | Unit 2, Lesson 3, pp. 55–58Unit 2, Lesson 4, pp. 59–62 Unit 2, Lesson 5, pp. 63–66 Unit 2, Game, p. 67Unit 2, Lesson 6, pp. 68-69  |
| **N6.3** Demonstrate understanding of the order of operations on whole numbers (excluding exponents) with and without technology. | Unit 2, Lesson 7, pp. 70–73 |
| **N6.4** Extend understanding of multiplication and division to decimals (1-digit whole number multipliers and 1-digit natural number divisors).[C, CN, ME, PS, R] | Unit 3, Lesson 2, pp. 92–94 Unit 3, Lesson 3, pp. 95–98 Unit 3, Lesson 4, pp. 99–102 Unit 3, Lesson 5, pp. 103–107 Unit 3, Lesson 6, pp. 108–111 Unit 3, Lesson 7, pp. 112–114 Unit 3, Game, p. 115Unit 3, Lesson 8, pp. 116, 117Unit 3, Unit Problem, pp. 120, 121 |
| **N6.5.** Demonstrate understanding of percent (limited to whole numbers to 100) concretely, pictorially, and symbolically.[C, CN, PS, R, V] | Unit 5, Lesson 7, pp. 186–189Unit 5, Lesson 8, pp. 190–193Unit 5, Unit Problem, pp. 196, 197 |
| **N6.6** Demonstrate understanding of integers, concretely, pictorially, and symbolically.[C, CN, R, V] | Unit 2, Lesson 8, pp. 74–77Unit 2, Lesson 9, pp. 78–81 Unit 2, Unit Problem, pp. 84, 85 |
| **N6.7** Extend understanding of fractions to improper fractions and mixed numbers.[CN, ME, R, V] | Unit 5, Lesson 1, pp. 162–165Unit 5, Lesson 2, pp. 166–169 Unit 5, Game, p. 170Unit 5, Lesson 3, pp. 171–175Unit 5, Lesson 6, pp. 184, 185Unit 5, Unit Problem, pp. 196, 197  |
| **N6.8** Demonstrate an understanding of ratio, concretely, pictorially, and symbolically.[C, CN, PS, R, V] | Unit 5, Lesson 4, pp. 176–179; Unit 5, Lesson 5, pp. 180–183; Unit 5, Lesson 6, pp. 184, 185; Unit 5, Unit Problem, pp. 196, 197 |

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|  **Patterns and Relation Strand** |
| **Student Learning Outcome**  | **Math Makes Sense**  |
| **P6.1** Extend understanding of patterns and relationships in tables of values and graphs.[C, CN, PS, R] |  Unit 1, Lesson 1, pp. 6–10 Unit 1, Lesson 2, pp. 11–15 Unit 1, Lesson 3, pp. 16, 17 Unit 1, Game, p. 18 Unit 1, Lesson 4, pp. 19–23 Unit Problem, pp. 42, 43 |
| **P6.2** Extend understanding of preservation of equality concretely, pictorially, physically, and symbolically.[C, CN, R] |  Unit 1, Lesson 8, pp. 36–39 Unit Problem, p. 180 |
| **P6.3** Extend understanding of patterns and relationships by using expressions and equations involving variables.[C, CN, R] | Unit 1, Lesson 4, pp. 19–23Unit 1, Lesson 7, pp. 33–35Unit 1, Unit Problem, pp. 42, 43 Unit 6, Lesson 7, pp. 226–230 Unit 6, Lesson 8, pp. 231–234 |

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| **Shape and Space Strand** |
| **Student Learning Outcome**  | **Math Makes Sense**  |
| **SS6.1** Demonstrate understanding of angles including:* identifying examples
* classifying angles
* estimating the measure
* determining angle measures in degrees
* drawing angles
* applying angle relationships in triangles and quadrilaterals.

 [C, CN, ME, PS, R, V | Unit 4, Lesson 1, pp. 126–129 Unit 4, Lesson 2, pp. 130–132 Unit 4, Lesson 3, pp. 133–138Unit 4, Lesson 4, pp. 139–142Unit 4, Game, p. 143Unit 4, Lesson 5, pp. 144, 145 Unit 4, Lesson 6, pp. 146–149 Unit 4, Lesson 7, pp. 150–153 Unit 4, Unit Problem, pp. 156, 157 |
| **SS6.2** Extend and apply understanding of perimeter of polygons, area of rectangles, and volume of right rectangular prisms (concretely, pictorially, and symbolically) including:* relating area to volume
* comparing perimeter and area
* comparing area and volume
* generalizing strategies and formulae
* analyzing the effect of orientation
* solving situational questions.

[CN, PS, R, V] | Unit 6, Lesson 7, pp. 226–230 Unit 6, Lesson 8, pp. 231–234Unit 6, Lesson 9, pp. 235–238Unit 6, Game, p. 239 Unit 6, Unit Problem, pp. 242, 243  |
| **SS6.3** Demonstrate understanding of regular and irregular polygons including:* classifying types of triangles
* comparing side lengths
* comparing angle measures
* differentiating between regular and irregular polygons
* analyzing for congruence.

[C, CN, R, V] | Unit 6, Lesson 1, pp. 200–204 Unit 6, Lesson 2, pp. 205–208 Unit 6, Lesson 3, pp. 209–213 Unit 6, Lesson 4, pp. 214–218 Unit 6, Lesson 5, pp. 219–223 Unit 6, Lesson 6, pp. 224, 225Unit 6, Unit Problem, pp. 242, 243 |
| **SS6.4** Demonstrate understanding of the first quadrant of the Cartesian plane and ordered pairs with whole number coordinates.[C,CN, V] | Unit 1, Lesson 5, pp. 24–28Unit 1, Unit Problem, pp. 42, 43Unit 8, Lesson 1, pp. 290–294Unit 8, Lesson 2, pp. 295–300Unit 8, Technology Lesson, pp. 301, 302 Unit 8, Game, p. 321 |
| **SS6.5** Demonstrate understanding of single and combination transformations of 2-D shapes (with and without the use of technology) including:* identifying
* describing
* analyzing
* performing.

[C, CN, R, T, V] | Unit 8, Lesson 3, pp. 303–307 Unit 8, Lesson 4, pp. 308–312 Unit 8, Lesson 5, pp. 313–317 Unit 8, Lesson 6, pp. 318, 319Unit 8, Technology Lesson, p. 320Unit 8, Game, p. 321Unit 8, Unit Problem, pp. 324, 325  |

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| **Statistics and Probability Strand** |
| **Student Learning Outcome**  | **Math Makes Sense**  |
| **SP6.1** Extend understanding of data analysis to include:* line graphs
* graphs of discrete data
* data collection through questionnaires, experiments, databases, and electronic media
* interpolation and extrapolation.

[C, CN, PS, R, V, T]  | Unit 7, Lesson 1, pp. 248–251Unit 7, Lesson 2, pp. 255–258Unit 7, Lesson 3, pp. 259–262Unit 7, Lesson 4, pp. 263–266Unit 7, Lesson 5, pp. 267–270Unit 7, Technology Lesson, pp. 252–254Unit Problem, pp. 286, 287 |
| **SP6.2** Demonstrate understanding of probability by:* determining sample space
* differentiating between experimental and theoretical probability
* determining the theoretical probability
* determining the experimental probability
* comparing experimental and theoretical probabilities.

[C, PS, R, T] | Unit 7, Lesson 6, pp. 271–275Unit 7, Lesson 7, pp. 276–279 Unit 7, Lesson 8, pp. 282, 283 Unit 7, Technology Lesson, p. 280Unit 7, Game, p. 281Unit 7, Unit Problem, pp. 286, 287 |