Number

General Outcome

Develop number sense.

6.N.1. Demonstrate an understanding of place value for numbers
- greater than one million
- less than one thousandth.

[C, CN, R, T]

6.N 2. Solve problems involving large numbers, using technology.
[ME, PS, T]

6.N 3. Demonstrate an understanding of factors and multiples by
- determining multiples and factors of numbers less than 100
- identifying prime and composite numbers
- solving problems involving factors or multiples.

[PS, R, V]

6.N 4. Relate improper fractions to mixed numbers.
[CN, ME, R, V]

6.N 5. Demonstrate an understanding of ratio, concretely, pictorially, and symbolically.
[C, CN, PS, R, V]

6.N 6. Demonstrate an understanding of percent (limited to whole numbers) concretely, pictorially, and symbolically.
[C, CN, PS, R, V]

6.N 7. Demonstrate an understanding of integers, concretely, pictorially and symbolically.
[C, CN, R, V]

6.N 8. Demonstrate an understanding of multiplication and division of decimals involving
- 1-digit whole-number multipliers
- 1-digit natural number divisors
- Multipliers and divisors that are multiples of 10.

[C, CN, ME, PS, R, V]

6.N 9. Explain and apply the order of operations, excluding exponents (limited to whole numbers).
[CN, ME, PS, T]

Statistics and Probability

General Outcome

Collect, display, and analyze data to solve problems.

6.SP.1.Create, label, and interpret line graphs to draw conclusions.
[C, CN, PS, R, V]

6.SP.2. Select, justify, and use appropriate methods of collecting data, including
- questionnaires
- experiments
- databases
- electronic media.

[C, PS, T]

6.SP.3. Graph collected data and analyze the graph to solve problems.
[C, CN, PS]

General Outcome

Use experimental or theoretical probabilities to represent and solve problems involving uncertainty.

6.SP.4. Demonstrate an understanding of probability by
- identifying all possible outcomes of a probability experiment
- differentiating between experimental and theoretical probability
- determining the theoretical probability of outcomes in a probability experiment
- determining the experimental probability of outcomes in a probability experiment
- comparing experimental results with the theoretical probability for an experiment.

[C, ME, PS, T]

Shape and Space

General Outcome

Use direct or indirect measurement to solve problems.

6.SS.1. Demonstrate an understanding of angles by
- identifying examples of angles in the environment
- classifying angles according to their measure
- estimating the measure of angles using 45°, 90°, and 180° as reference angles
- determining angle measures in degrees
- drawing and labelling angles when the measure is specified.

[C, CN, ME, V]

6.SS.2. Demonstrate that the sum of interior angles is
- 180° in a triangle
- 360° in a quadrilateral.

[C, R]

6.SS.3. Develop and apply a formula for determining the
- perimeter of polygons
- area of rectangles
- volume of right rectangular prisms.

[C, CN, PS, R, V]

General Outcome

Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

6.SS.4. Construct, and compare triangles, including
- scalene
- isosceles
- equilateral
- right
- obtuse
- acute

in different orientations.
[C, PS, R, V]

6.SS.5. Describe and compare the sides and angles of regular and irregular polygons.
[C, PS, R, V]

Shape and Space (cont.)

General Outcome

Describe and analyze position and motion of objects and shapes.

6.SS.6. Perform a combination of transformations (translations, rotations, or reflections) on a single 2-D shape, and draw and describe the image.
[C, CN, PS, T, V]

6.SS.7. Perform a combination of successive transformations of 2-D shapes to create a design, and identify and describe the transformations.
[C, CN, T, V]

6.SS. 8. Identify and plot points in the first quadrant of a Cartesian plane using whole number ordered pairs.
[C, CN, V]

6.SS.9. Perform and describe single transformations of a 2-D shape in the first quadrant of a Cartesian plane (limited to whole number vertices).
[C, CN, PS, T, V]

Patterns and Relations

General Outcome

Use patterns to describe the world and solve problems.

6.PR.1. Demonstrate an understanding of the relationships within tables of values to solve problems.
[C, CN, PS, R]

6.PR.2. Represent and describe patterns and relationships using graphs and tables.
[C, CN, ME, PS, R, V]

General Outcome

Represent algebraic expressions in multiple ways.

6.PR.3. Represent generalizations arising from number relationships using equations with letter variables.
[C, CN, PS, R, V]

6.PR.4. Demonstrate and explain the meaning of preservation of equality concretely, pictorially, and symbolically.
[C, CN, PS, R, V]

Processes:
C – Communication
CN – Connections
ME – Mental Mathematics and Estimation
PS – Problem Solving
R – Reasoning
T – Technology
V - Visualization