## GRADE 7

## Number Sense and Numeration:

- Show and order decimals (to hundredths), fractions, and integers
- Show squares and square roots
- Divide whole numbers by simple fractions and decimals
- Add and subtract simple fractions and integers
- Multiply and divide decimal numbers to thousandths by one-digit whole numbers
- Apply order of operations in expressions with brackets
- Compare fractions, decimals, and percents
- Solve problems involving whole-number percents and unit rates


## Measurement:

- Convert between metric units, including converting between square centimetres and square metres
- Develop the area relationship for a trapezoid
- Develop and applying the formula for the volume of a prism
- Determine and apply surface-area relationships for prisms
- Connect millilitres and cubic centimetres


## Geometry and Spatial Sense:

- Build parallel, perpendicular, and intersecting lines
- Sort and classify triangles and quadrilaterals by geometric properties
- Build angle bisectors and perpendicular bisectors
- Investigate relationships among congruent shapes
- Connect enlarging and reducing to similar shapes
- Compare similar and congruent shapes
- Perform and describe dilatations
- Tilt a plane
- Plot points in all four quadrants


## Patterning and Algebra:

- Show linear growing patterns
- Show patterns algebraically
- Model real-life relationships involving constant rates graphically and algebraically
- Translate phrases, using algebraic expressions
- Find the term in a pattern algebraically when given any term number
- Solve linear equations using concrete materials or inspection and guess and check


## Data Management and Probability:

- Collect and organize categorical, discrete, and continuous data
- Show data in relative frequency tables and circle graphs
- Identify bias in data
- Compare changes in data to changes in central tendency
- Make inferences based on data
- Investigate real-world applications of probability
- Determine the theoretical probability of two independent events

