## **Grade 6**

The following are highlights of student learning in Grade 6. They are provided to give teachers and parents a quick overview of the mathematical knowledge and skills that students are expected to acquire in each strand in this grade. The expectations on the pages that follow outline the required knowledge and skills in detail and provide information about the ways in which students are expected to demonstrate their learning, how deeply they will explore concepts and at what level of complexity they will perform procedures, and the mathematical processes they will learn and apply throughout the grade.

**Number Sense and Numeration:** representing and ordering numbers to 1 000 000; developing the concept of place value to thousandths; comparing and ordering fractional amounts with unlike denominators; estimating 10%, 25%, 50%, and 75% of a quantity; adding and subtracting decimal amounts to thousandths; multiplying and dividing four-digit whole numbers by two-digit whole numbers; multiplying and dividing decimals to tenths by whole numbers and two-digit by two-digit whole numbers; dividing three-digit whole numbers by one-digit whole numbers; applying order of operations in expressions without brackets; relating simple fractions, decimals, and percents

**Measurement:** measuring quantities using metric units; converting from larger to smaller metric units, including square metres to square centimetres; developing and applying area relationships for a parallelogram and a triangle; developing and applying the volume relationships for a triangular prism; determining and applying surface area relationships for rectangular and triangular prisms; relating square metres and square centimetres

**Geometry and Spatial Sense:** classifying quadrilaterals by geometric properties; sorting polygons by lines of symmetry and by rotational symmetry; measuring angles to 180° with a protractor; constructing polygons; representing figures using views and isometric sketches; performing and describing rotations; plotting points in the first quadrant

**Patterning and Algebra:** representing patterns using ordered pairs and graphs; describing pattern rules in words; calculating any term when given the term number; investigating variables as changing quantities; solving equations using concrete materials and guess and check

**Data Management and Probability:** collecting and organizing discrete and continuous data; displaying data using continuous line graphs; selecting appropriate graphical representations; using continuous line graphs and mean to compare sets of data; finding theoretical probabilities; predicting the frequency of an outcome based on the theoretical probability