Grade 4

The following are highlights of student learning in Grade 4. 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 10 000; representing money amounts to \$100; developing the concept of place value to tenths; representing and comparing fractions using fractional notation; adding and subtracting three-digit numbers in a variety of ways; multiplying and dividing two-digit whole numbers by one-digit whole numbers; relating halves, fifths, and tenths to decimals

Measurement: measuring length using millimetres; measuring time intervals to the nearest minute; determining elapsed time; measuring mass in grams and capacity in millilitres; measuring volume using concrete materials; determining area and perimeter relationships for rectangles; comparing the mass and capacity of objects using standard units; relating years to decades and decades to centuries

Geometry and Spatial Sense: identifying geometric properties of parallelograms; classifying two-dimensional shapes by geometric properties (number of sides, angles, and symmetry); identifying a straight angle, a right angle, and half a right angle; classifying prisms and pyramids by geometric properties; constructing three-dimensional figures in a variety of ways; describing location using a grid system; performing and describing reflections

Patterning and Algebra: relating the term and the term number in a numeric sequence; generating patterns that involve addition, subtraction, multiplication, and reflections; determining the missing numbers in equations involving multiplication of one- and two-digit numbers; using the commutative and distributive properties to facilitate computation

Data Management and Probability: collecting and organizing discrete data; reading and displaying data using stem-and-leaf plots and double bar graphs; understanding median; comparing two related sets of data; predicting the frequency of an outcome; investigating how the number of repetitions of a probability experiment affects the conclusion drawn