Medicine Hat Catholic Board of Education

Grade 6 Mathematics - At A Glance		
Organizing Idea	**Grade 6 Learning Outcome**	**Highlights of your Child's Learning *(by the end of Grade 6)***
Number	Students investigate magnitude with positive and negative numbers.	● Identify negative numbers in familiar contexts, including contexts that use vertical or horizontal models of the number line. ● Compare and order positive and negative numbers. ● Model and add any two negative or positive numbers (integers).
	Students solve problems using standard algorithms for addition and subtraction.	● Solve problems in various contexts (Example: money and measurement) using standard algorithms for addition and subtraction.
	Students analyze numbers using prime factorization and exponentiation.	● Compose a product in multiple ways, including with more than two factors. ● Determine divisibility of a number from its prime factorization. ● Express the product of identical factors as a power
	Students apply standard algorithms to multiplication and division of decimal and natural numbers.	● Multiply and divide numbers using standard algorithms ● Check the reasonableness of a product or quotient by estimating.. ● Solve problems using multiplication and division, including problems involving money.
	Students relate fractions to quotients.	● Model and describe an equal-sharing situation in more than one way. ● Express a fraction as a division statement and vice versa. ● Change a fraction to a decimal using division.
	Students add and subtract fractions with denominators within 100.	● Express two fractions with common denominators. ● Add and subtract fractions. ● Solve problems involving addition and subtraction of fractions.

	Students interpret the multiplication of natural numbers by fractions.	● Multiply a number by a fraction. ● Relate multiplication by a unit fraction to division. ● Solve problems using multiplication of a fraction and a natural number.

	Students apply equivalence to the interpretation of ratios and rates.	● Determine whether two ratios are equivalent. ● Relate the percentage of a number to a proportion. ● Determine a percent of a number, limited to percentages within 100%. ● Solve problems involving ratios, rates, and proportions.
Algebra	Students analyze expressions and solve algebraic equations.	● Evaluate expressions involving operations in brackets and powers according to the order of operations. ● Simplify algebraic expressions by combining like terms. ● Determine different strategies for solving equations. ● Solve problems using equations limited to one or two operations.
Geometry	Students analyze shapes through symmetry and congruence.	● Describe the symmetry between two shapes as reflection symmetry or rotational symmetry. ● Symmetry is a relationship between two shapes that can be mapped exactly onto
Coordinate Geometry	Students explain location and movement in relation to position in the Cartesian plane.	● Location can be described using coordinates on a grid. (includes all 4 quadrants) ● Create an image of a polygon in the Cartesian plane by reflecting, rotating or translating (sliding).
Measurement	Students analyze areas of parallelograms and triangles.	● Understand the characteristics of triangles and parallelograms related to length and area ● Describe the relationship between the area of a triangle and the area of a parallelogram with the same base and height. ● Determine the area of composite shapes using the areas of triangles and parallelograms.
Patterns	Students investigate functions to enhance understanding of change.	● Create a table of values related to the function. ● Create a graph from the table of values. ● Write an algebraic expression that represents a function. ● Solve problems involving a function.

Statistics	Students investigate relative frequency using experimental data.	● Express relative frequencies as decimals, fractions, or percentages. ● Collect categorized data through experiments. ● Analyze relative frequency statistics from experiments with different sample sizes.