Medicine Hat Catholic Board of Education

Grade 4 Mathematics - At A Glance		
Organizing Idea	**Grade 4 Learning Outcome**	**Highlights of your Child's Learning** ***(by the end of Grade 4)***
Number	Children investigate decimal numbers.	● Write and say decimal numbers (Example 4.36) ● Round numbers to various places, including tenths (Example, 4.7 rounds to 5) ● Compare and order numbers, including decimal numbers ● Express money in cents and dollars
	Students add and subtract within 10 000, including decimal numbers to hundredths.	● Add and subtract numbers, including decimal numbers, using standard algorithms, based on place value. ● Estimation can be used to check the reasonableness of a sum or difference. ● Solve problems using addition and subtraction, including problems involving money.
	Students explain properties of prime and composite numbers using multiplication and division.	● Determine the factors of a number within 100. ● Describe a number as prime or composite. ● Determine the first five multiples of a given number within 100. ● Recognize the greatest common factor (greatest common divisor) of two numbers within 100.
	Students multiply and divide natural numbers within 10 000.	● Multiply and divide larger numbers using known multiplication and division facts of smaller numbers. ● Choose the multiplication or division strategy based on the numbers involved. ● Understand that the standard algorithm can be used to multiply and divide larger numbers.
	Students apply equivalence to the interpretation of fractions.	● Show that equivalent fractions represent the same point on a number line. ● Simplify a given fraction by dividing the numerator and denominator by a common factor. ● Show that a fraction and the equivalent decimal number are on the same point on a number line.

		● Convert fractions to decimals and decimals to fractions.
	Students interpret percentages.	● Express the fraction, decimal, and percentage representations of the same relationship. ● Investigate percentage in familiar situations.

Algebra	Students visualize and apply equality in multiple ways.	● Evaluate expressions following order of operations ● Solve an equation by determining an unknown value that makes the left and right sides of an equation equal.
Geometry	Students interpret and explain geometric properties.	● Classify triangles according to side length and angles ● Classify quadrilaterals according to appropriate properties ● Determine if the side lengths and angle measures of one shape are the same as a second shape by reflecting, rotating or sliding one of the shapes.
Measurement	Students interpret and express area.	● Understand that area is the amount of space inside a closed shape. ● Measure area with non-standard units or standard units. ● Determine area of a rectangle.
Patterns	Students interpret and explain arithmetic and geometric sequences.	● Create and explain increasing or decreasing sequences
Time	Students communicate duration with standard units of time.	● Relate durations of 15 minutes, 20 minutes, 30 minutes, 40 minutes, and 45 minutes to fractions of a circle. ○ Apply addition and subtraction to the calculation of duration. ○ Convert between hours, minutes, and seconds
Statistics	Students evaluate the use of scale in graphical representations of data.	● Formulating statistical questions ● Collecting data ● Representing data ● Interpreting data