

SCHOOL DISTRICT OF BAYFIELD

K-5 MATHEMATICS CURRICULUM

GRADE	OUTCOMES	BENCHMARKS
K	<ol style="list-style-type: none"> 1) Counting 2) Building Numbers 3) Sophisticated Shapes 4) Addition and Subtraction 5) Further Investigating Addition and Subtraction 6) Measuring and Analyzing Data 	<ol style="list-style-type: none"> 1) Know number names and the count sequence. Count to 100 by ones and tens. Count forward from a given number other than one. Write numbers 0 through 20. Count to tell the number of objects. Classify objects and count the number of objects in each category. Compare numbers. 2) Work with numbers 11-19 to gain a foundation for place value. Compose and decompose numbers 11-19 into tens and ones. 3) Identify, describe shapes and relative positions of objects (squares, circles, triangles, hexagons, cubes, cones, cylinders and spheres). Analyze, compare, create and compose 2D and 3D shapes. 4) Understand addition as putting together and adding to, and understand subtraction as taking apart and taking from. 5) Fluently add and subtract within 5. Solve addition and subtraction word problems within 10 using drawings or objects. 6) Describe and compare measurable attributes, such as length and weight.
1st	<ol style="list-style-type: none"> 1) Creating Routines Using Data 2) Developing Base Ten Number Sense 3) Understanding Shapes and Fraction 4) Measurement, Length, Time and Money 5) Operations and Algebraic Thinking 6) Understanding Place Value 	<ol style="list-style-type: none"> 1) Represent and Interpret Data (Pose questions, collect, sort, organize, and record data. Interpret tables and charts). 2) Extend the Counting Sequence by reading, writing, and counting to 120. Represent and Interpret Data. 3) Reason with shapes and their attributes. Partition circles and rectangles into two and four equal shares. Represent and Interpret Data (sort, compose and decompose, locate and find shapes). 4) Measure lengths indirectly and by iterating length units. Tell and Write Time in hour and half hour. Identify quarter, nickel, dime, and penny and their value. Represent and Interpret Data. 5) Represent and solve problems involving addition of three whole numbers. Understand and apply properties of operations and the relationship between addition and subtraction. Fluently Add and Subtract within 20. Work with addition and subtraction equations. Understand the meaning of the equal sign. Represent and Interpret Data. 6) Understand place value of tens and ones for a two digit number. Use place value understanding and properties of operations to add and subtract. Represent and Interpret Data.

<p>2nd</p>	<ol style="list-style-type: none"> 1) Extending Base Ten Understanding 2) Applying Base Ten Understandings 3) Fluent with Addition and Subtraction 4) Understanding Measurement, Length, Time, and Money 5) Shapes and Partitions (Geometry) 6) Developing Multiplication 	<ol style="list-style-type: none"> 1) Understand place value for a three digit number. Read, write and count within 1000 Relate addition and subtraction to length 2) Understand place value of hundreds, tens, ones for a three digit number Use place value understanding and properties of operations to add and subtract within 1000 Represent and Interpret Data 3) Represent and solve problems involving addition and subtraction Fluently add and subtract within 100 Represent and Interpret Data 4) Measure and estimate lengths in standard units Work with time and money Tell and write time to the nearest five minutes, using a.m. and p.m. Relate addition and subtraction to length Represent and Interpret Data 5) Reason with shapes and their attributes to gain an understanding of fractions Represent and Interpret Data 6) Work with equal groups of objects to gain foundations for multiplication Represent and Interpret Data
<p>3rd</p>	<ol style="list-style-type: none"> 1) Numbers and Operations in Base Ten 2) Operations and algebraic thinking: the relationship and properties of multiplication and division 3) Operations and algebraic thinking: patterns in addition and multiplication 4) Geometry 5) Representing and comparing fractions 6) Measurement 	<ol style="list-style-type: none"> 1) Use place value understanding and properties of operations to perform multi-digit arithmetic-rounding whole numbers to the nearest 10 or 100 Add and subtract fluently within 1000 Represent and interpret data 2) Represent and solve problems involving multiplication and division within 100 Represent and interpret data Understand properties of multiplication and the relationship between multiplication and division Represent and interpret data 3) Solve problems involving the 4 operations, and identify and explain patterns in arithmetic 4) Reason with shapes and their attributes Measure and relate area to square units and the operations of multiplication and addition Represent and Interpret Data 5) Develop understanding of fractions as numbers as part of a whole and part of a group Explain equivalent fractions Represent fractions as numbers on a number line Represent and Interpret data 6) Solve problems involving measurement and estimation of intervals of time to the nearest minute. Develop an understanding of standard and metric units, liquid volumes, and masses of objects Represent and interpret data using pictographs and bar graphs Geometric measurement: recognize perimeter as an attribute of plane figures and distinguish between linear and area measures

4th	<ol style="list-style-type: none"> 1) Numbers, Operations in Base Ten, and Algebraic Thinking 2) Operations and algebraic thinking: the relationship between multiplication and division 3) Fraction Equivalents 4) Measurement and Data 5) Geometry 	<ol style="list-style-type: none"> 1) Use the four operations with whole numbers to solve problems. Gain familiarity with factors and multiples Generalize place value understanding for multi-digit whole numbers Use place value and understanding properties of operations to perform multi-digit arithmetic: rounding whole numbers to any place Generate and analyze patterns 2) Understand properties of and relationship between multiplication and division. Understand multiplication up to four digits by a one digit whole number and multiply two two-digit whole numbers Find whole-number quotients and remainders with up to four-digit dividends and one-digit divisors 3) Extend understanding of fraction equivalence and ordering Build fractions from unit fractions by applying and extending previous understanding of operations on whole numbers Understand decimal notation for fractions, and compare decimal fractions 4) Solve problems involving measurement and conversion of measurements from a larger unit to a smaller unit within a given measurement system. Represent and Interpret data. 5) Draw and identify lines and angles Classify shapes by properties of their lines and shapes Geometric measurement: Understand the concept of angle and measure angles
5th	<ol style="list-style-type: none"> 1) Order of Operations and Whole Numbers 2) Decimals 3) Multiplying and Dividing With Decimals 4) Adding, Subtracting, Multiplying, and Dividing Fractions 5) Measurement and Data 6) Geometry and the Coordinate Plane 	<ol style="list-style-type: none"> 1) Write and interpret numerical expressions. Analyze patterns and relationships 2) Understand the place value of reading, writing, and comparing decimals to the thousandths. Use place value understanding to round decimals to any place 3) Perform operations with multi-digit whole numbers and with decimals to hundredths. 4) Use equivalent fractions as a strategy to add and subtract fractions Apply and extend previous understandings of multiplication and division to multiply a fraction or whole number by a fraction and divide unit fractions by whole numbers and whole numbers by unit fractions. 5) Convert like measurement units within a given measurement system. Represent and interpret data Geometric measurement: Recognize, measure and relate volume to multiplication and addition using whole numbers 6) Graph points on the coordinate plane to solve real world and mathematical problems Classify two-dimensional figures into categories based on their properties