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| **Unit –Time** | **BC Big Ideas (Understand)** | **BC Curricular Competencies (Do)** | **BC Content (Know)** | **Instructional Strategies/ Learning Activities** | **Materials & Resources** | **Assessment Methods/Assessment Date** | **Key Vocabulary** |
| **Unit 1:** Patterning (Week 1, 3 Weeks)  Aug. 29th-Sept. 20th | Repeating elements in patterns can be identified. | **Students are expected to do the following:**  Use reasoning to explore and make connections  Develop mental math strategies and abilities to make sense of quantities  Model mathematics in contextualized experiences  **Understanding and solving**  Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving  Visualize to explore mathematical concepts  Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures  **Communicating and representing**  Communicate mathematical thinking in many ways  Use mathematical vocabulary and language to contribute to mathematical discussions  Explain and justify mathematical ideas and decisions  Represent mathematical ideas in concrete, pictorial, and symbolic forms  **Connecting and reflecting**  Connect mathematical concepts to each other and to other areas and personal interests  Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts | **Students are expected to know the following:**  Repeating patterns with multiple elements and attributes | Creating, extending, and identifying patterns using math manipulative, shapes, letters, numbers and sounds or actions  Building, describing and recording repeating patterns and pattern rules  Teacher modelling  Communicating about patterns using appropriate math language  Think-aloud to describe, create and extend patterns.  Identifying pattern cores  Sorting objects based on specific attributes  Patterning Centers  Act Out Patterns  Friendship Chains | Math Makes Sense Teachers Guide (Unit 1: Patterning)  Math Makes Sense Student Workbook (pp. 1-12)  Math Makes Sense Math Big Book (pp. 1- 4)  Math Makes Sense Teachers Guide LM 1-3 pp. 32-35  Math PM books  Prodigy Math Online Resource  Xtramath Online mental Math games  BrainPop website for Math videos  Beads  Counters  Unfix Cubes  Pattern blocks  Buttons  Stickers  Stamps | Observe students creating, copying, describing and extending patterns (Assessment Master 1-Diagnostic Checklist p. 26 Teacher Guide)  Patterning Rubrics (Assessment Master 4 & 5 p. 29-30 Teacher Guide)  Record student progress using checklist (Assessment Master 3 p. 28 Teacher Guide)  Class work (workbook)  Weekly Cumulative quizzes  **Common Unit Test:** Thursday September 20th, 2018. | Attributes (shape, colour, size, texture)  Repeating patterns  Pattern  Pattern core  Pattern rule  AB, ABB, ABC, AABB patterns |
| **Unit 2:** Number Concepts to 20 (Week 4, 5 Weeks)  Sept. 23rd- Oct 24th | Numbers to 20 represent quantities that can be decomposed into 10s and 1s. | **Students are expected to do the following:**  Use technology to explore mathematics  Model mathematics in contextualized experiences  **Understanding and solving**  Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving  Visualize to explore mathematical concepts  Develop and use multiple strategies to engage in problem solving  **Communicating and representing**  Use mathematical vocabulary and language to contribute to mathematical discussions  Connecting and reflecting  Reflect on mathematical thinking  Connect mathematical concepts to each other and to other areas and personal interests | **Students are expected to know the following:**  Number concepts to 20  Meaning of equality and inequality | Math Centers  Communicate using spoken or written language to express numbers to 20  Identifying 1 more, 1 less, 10 more, 10 less  Recognizing equal and unequal numbers/quantities  Interpret numbers to 20 by describing and creating them in a variety of ways  Skip counting by 2s, 5s and 10s (Connect to patterning unit)  Comparing and ordering numbers to 20  Sequencing numbers to 20  Counting on to 20 and counting back from 20  The use of 5 frame and 10 frame to represent numbers from 1-20  Tens and ones blocks to represent numbers 1-20  Estimating quantities to 20 | Math Makes Sense Teacher Guide (Unit 2: Representing Numbers to 20)  Math Makes Sense Student Workbook (pp. 13-40)  Math Makes Sense Math Big Book (pp. 5-11)  Math Makes Sense Teacher Guide: Unit 2- Line Masters 1-24 (pp. 76-99)  TpT counting practice worksheets (Google Drive)  Teaching Student-Centered Mathematics Grades 1-3 Chapter 2  Two-Part Mats  100’s chart  Dot cards  Ten Frames  Number Lines  Counters  Numeral cards  Pocket chart  Dice  Stamps  Stickers  Paper clips | Record student progress using checklist (Assessment Master 1 p. 67, Teacher Guide)  Observe students demonstrating counting, identifying numbers, grouping objects into tens and ones, and writing numbers (Assessment Masters 3.1-3.4 pp. 69-72, Teacher Guide)  Performance Task Rubric (Assessment Master 4, p. 73, Teacher Guide)  Representing Numbers to 20 Rubric (Assessment Master 5, p. 74, Teacher Guide)  Investigation 1: Teacher Guide pp. 60-64  Weekly Cumulative Quizzes (4 quizzes)  **Common Unit Test: Wednesday October, 24th** | Equal  Unequal  Count  Number  Number words 0-20 (One, two...etc)  Estimate  Two-Part Mat  Equal groups  Singles  More  Fewer  Same as  as many as  less |
| **Unit 3:** Using Place Value to Add and Subtract (Week 9, 4 Weeks)  October 28th- Nov. 22nd | Addition and subtraction with numbers to 10 can be modelled concretely, pictorially, and symbolically to develop computational fluency. | **Students are expected to do the following:**  Estimate reasonably  **Understanding and solving**  Develop and use multiple strategies to engage in problem solving  Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures  **Communicating and representing**  Communicate mathematical thinking in many ways  Represent mathematical ideas in concrete, pictorial, and symbolic forms  **Connecting and reflecting**  Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts | **Students are expected to know the following:**  Ways to make 10 | Using mental math strategies to solve problems  Connecting thinking to real world addition and subtraction situations through role play and/or inquiry  Making 10  Model and record addition and subtraction stories  Identifying missing parts in subtraction and addition  Using mental math strategies to add and subtract  Using double facts to find sums  Building and identifying different combinations of numbers  Using appropriate vocabulary to explain thinking (more, less, as many) | Math Makes Sense Teacher Guide (Unit 3: Addition and Subtraction to 12)  Math Makes Sense Student Workbook (pp. 59-84)  Math Makes Sense Math Big Book (pp. 13-18)  Math Makes Sense Teacher Guide: Unit 2- Line Masters 1-19 (pp. 64-82)  Tpt addition and Subtraction practice worksheets (Google Drive)  Teaching Student-Centered Mathematics Grades 1-3 Chapters 3-5  Dominoes  Pattern Blocks  2-colour counters  Snap Cubes  Paper clips  2-Part Mat  Number lines  Dot Cards  Ten Frames  Grid paper | Diagnostic Checklist (Assessment Master 1 p. 56, Teacher Guide)  Observe student learning (Assessment Masters 3.1-3.3 pp. 58-60, Teachers Guide)  Performance Task Rubric (Assessment Master 4, p. 61, Teacher Guide)  Addition and Subtraction to 12 Rubric (Assessment Master 5, p. 62, Teacher Guide)  Weekly Cumulative Quizzes (3 quizzes)  **Common Unit Test: Thursday November, 22nd** | Place value  Number  Ones  Tens  Estimate  Number line  Doubles  Doubles facts  Addition  Adding  Addition story  Number Sentence  Addition sentence  Subtraction  Take away  Subtraction sentence  Subtraction story  2-Part Mat  Missing part  Mental math |
| **Unit 4:** Addition and Subtraction to 20 (Week 13, 5 Weeks)  Nov 25th - Jan. 10th | Numbers to 20 represent quantities that can be decomposed into 10s and 1s. | **Students are expected to do the following:**  Develop mental math strategies and abilities to make sense of quantities  Use technology to explore mathematics  Model mathematics in contextualized experiences  **Understanding and solving**  Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving  Visualize to explore mathematical concepts  Develop and use multiple strategies to engage in problem solving  Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures  **Communicating and representing**  Communicate mathematical thinking in many ways  Use mathematical vocabulary and language to contribute to mathematical discussions  Explain and justify mathematical ideas and decisions  Represent mathematical ideas in concrete, pictorial, and symbolic forms  **Connecting and reflecting**  Reflect on mathematical thinking | **Students are expected to know the following:**  Number concepts to 20  Addition and subtraction to 20 (understanding of operation and process) | Using mental math strategies to solve problems  Connecting thinking to real world addition and subtraction situations through role play and/or inquiry  Addition and subtraction facts to 20  Review of- counting on, making 10, doubles  Doubles plus 1  Using a number line, number chart  Problem solving language  Describing and using mental math strategies for addition and subtraction to 20  Identifying and recording addition and subtraction sentences to 20  Using the strategy “use addition to subtract” to relate addition and subtraction facts  Creating and solving number story problems | Math Makes Sense Teacher Guide (Unit 7: Addition and Subtraction to 20)  Math Makes Sense Student Workbook (pp. 157-172, pp 173-184)  Math Makes Sense Math Big Book (pp. 40-43)  Math Makes Sense Teacher Guide: Unit 2- Line Masters 1-10 (pp. 56-65)  Tpt addition and Subtraction practice worksheets (Google Drive)  Teaching Student-Centered Mathematics Grades 1-3 Chapters 3-4  Counters  2-colour counters  Geoboards  Geobands  Snap cubes  Pattern blocks  Buttons  Paper clips  Ten Frames | Diagnostic Checklist (Assessment Master 1 p. 48, Teacher Guide)  Observe student learning: Ongoing Observations Checklist: Addition and Subtraction (Assessment Masters 3.1-3.3 pp. 50-52, Teacher Guide)  Performance Task Rubric (Assessment Master 4, p. 53, Teacher Guide)  Addition and Subtraction to 20 Rubric (Assessment Master 5, p. 54, Teacher Guide)  Weekly Cumulative Quizzes (4 quizzes)  **Common Unit Test: Thursday January 10th, 2019** | Doubles Fact  Addition Fact  Subtraction Fact  Number sentence  Addition sentence  Sum  Subtraction sentence  Difference  Related  Addition  Subtraction  Take away  All  Altogether  In all  Number facts  Story problems (Word problems)  Solve  Estimate |
| **Unit 5:** Measurement (Week 18, 5 Weeks)  Jan. 13th- Feb. 14th | Objects and shapes have attributes that can be described, measured, and compared. | **Students are expected to do the following:**  Use reasoning to explore and make connections  Estimate reasonably  **Understanding and solving**  Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving  Visualize to explore mathematical concepts  **Communicating and representing**  Explain and justify mathematical ideas and decisions  **Connecting and reflecting**  Reflect on mathematical thinking | **Students are expected to know the following:**  Direct measurement with non-standard units (nonuniform and uniform) | Estimating the length of a given object reasonably  Comparing the lengths of straight objects directly, by lining up the ends  Comparing the weights of objects by using a balance scale  Comparing widths (the distance across, or from side to side) directly using different materials  Comparing the capacity of objects depending on size  Using measurement terms such as long and short, wide and narrow, tall or short, heavy and light  Measuring length in non-standard units including: non-uniform (hands, pencils etc.) and uniform units (cubes, paperclips etc.)  Measuring width and height in non-standard units  Understanding that measurement is relative and depends on perspective  Measuring using nonstandard units  Estimating measurements by estimating and by comparing to objects already measured  Understanding why certain objects make better units of measurement than others and how to use them | Math Makes Sense Teacher Guide (Unit 4: Measurement)  Math Makes Sense Student Workbook (pp. 85-102)  Math Makes Sense Math Big Book (pp. 19-25)  Math Makes Sense Teacher Guide: Unit 4- Line Masters 1-7 (pp. 47-53)  Tpt Measurement practice worksheets (Google Drive)  Teaching Student-Centered Mathematics Grades 1-3 Chapter 8  Pattern blocks  String or Yarn  modeling clay  straws  Snap cubes  paper clips  toy cars  ramps  masking tape  Containers of different capacity  Balance Scale | Diagnostic Checklist (Assessment Master 1 p. 40, Teacher Guide)  Observe student learning: Ongoing Observations Checklist: Measurement (Assessment Masters 3.1-3.2 pp. 42--43, Teacher Guide)  Performance Task Rubric (Assessment Master 4, p. 44, Teacher Guide)  Measurement Rubric (Assessment Master 5, p. 45, Teacher Guide)  Investigation 2: Teacher Guide pp. 34-37  Unit Summary (Assessment Master 6, p. 46 Teacher Guide)  Weekly Cumulative Quizzes (4 quizzes)  **Common Unit Test: Thursday February 14th, 2019** | Length  Area  Capacity  Mass  Weight  Compare    Order  longer than  Shorter than  Heavier than  Lighter than  About the same as  long  Longer  Longest  Short  Shorter  Shortest    Heaviest  Lightest  Far  Farther  Farthest  Cover  Surface  Greater than  Less than  Holds more  Balance Scale  Holds less |
| **Unit 6:** Financial Literacy (Week 23, 4 Weeks)  Feb. 18th- Mar. 14th |  | **Students are expected to do the following:**  Use reasoning to explore and make connections  Use technology to explore mathematics  Model mathematics in contextualized experiences  **Understanding and solving**  Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving  Visualize to explore mathematical concepts  Develop and use multiple strategies to engage in problem solving  Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures  **Communicating and representing**  Use mathematical vocabulary and language to contribute to mathematical discussions  Explain and justify mathematical ideas and decisions  Represent mathematical ideas in concrete, pictorial, and symbolic forms  **Connecting and reflecting**  Reflect on mathematical thinking  Connect mathematical concepts to each other and to other areas and personal interests | **Students are expected to know the following:**  Change in quantity to 20, concretely and verbally  financial literacy — values of coins, and monetary exchanges | * Identify the value of a nickel, a dime, and a quarter in terms of pennies. * Recognize the characteristics of pennies, nickels, and dimes (e.g., color, size). * Count by ones to determine the value of a * collection of pennies whose total value is 100 * cents or less. * Count by fives to determine the value of a * collection of nickels whose total value is 100 * cents or less. * Count by tens to determine the value of a * collection of dimes whose total value is 100 * cents or less.   Count by ones, fives, and tens to determine the value of a collection of pennies, nickels, and dimes whose total value is 100 cents or less. | Tpt Financial literacy Resources (Google Drive): Mindful Math Lessons 1-5  Teaching Student-Centered Mathematics Grades 1-3 Chapter 5 p. 150  No Specific Unit in the MMS but could use Unit 5 as a guide/supplemental resource  Math Makes Sense Teacher Guide (Unit 5: Numbers to 100)  Math Makes Sense Student Workbook (pp. 119-138)  Math Makes Sense Math Big Book (pp. 27-33)  Math Makes Sense Teacher Guide: Unit 5- Line Masters 1-7 (pp. 50-60)  Coins  Play money  Hundreds Chart  Number lines  Counters  Snap cubes   * www.jmathpage.com | Observe students counting a collection of coins and record on a checklist  Diagnostic Checklist (Assessment Master 1 p. 42, Teacher Guide)  Observe student learning: Ongoing Observations Checklist: Numbers to 100 (Assessment Masters 3.1-3.3 pp. 44-46, Teacher Guide)  Performance Task Rubric (Assessment Master 4, p. 47, Teacher Guide)  Numbers to 100 Rubric (Assessment Master 5, p. 48, Teacher Guide)  Unit Summary (Assessment Master 6, p. 49 Teacher Guide)  Weekly Cumulative Quizzes (3 quizzes)  **Common Unit Test: Thursday March 14th, 2019** | Coins  Dime  Nickel  Quarter  Loonie  Toonie  Penny  Change  Money  Total value  Value  Equal  Count by 5’s, 10’s 2’s  Skip counting |
| **Unit 7:** Representing and Interpreting Data (Week 28, 3 Weeks)  Mar. 17th- Apr. 4th | Concrete graphs help us to compare and interpret data and show one-to-one correspondence. | **Students are expected to do the following:**  Use reasoning to explore and make connections  **Understanding and solving**  Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving  Visualize to explore mathematical concepts  Engage in problem-solving experiences that are connected to place, story, cultural practices, and perspectives relevant to local First Peoples communities, the local community, and other cultures  **Communicating and representing**  Communicate mathematical thinking in many ways  Use mathematical vocabulary and language to contribute to mathematical discussions  Represent mathematical ideas in concrete, pictorial, and symbolic forms  **Connecting and reflecting**  Reflect on mathematical thinking  Connect mathematical concepts to each other and to other areas and personal interests | **Students are expected to know the following:**  concrete graphs, using one-to-one correspondence  Likelihood of familiar life events, using comparative language | * Investigate various forms of data collection, including counting and tallying, informal surveys, observations, and voting. * Identify and describe various forms of data collection in practical situations (e.g., recording daily temperature, lunch count, attendance, and favorite ice cream.) * Compare one category to another in a graph, indicating which has more or which has less, or which is equal to. * Interpret information displayed in object graphs and picture graphs, using the words more,less, fewer, greater than, less than, and equal to. * Find answers to questions, using graphs (e.g., “Which category has more?”, “How many more?”, and “How many in all?”).   Create surveys and display findings on a graph. | Tpt Financial literacy Resources (Google Drive): Mindful Math Lessons 6-9 (Graphing)  Graphing Practice and Analyzing Data (Google Drive Resource)  Math Task Cards (Could use in math centers) (Google Drive)  Spin and Graph Math centers (Google Drive)  Graphing Unit 5 (Google Drive)   * Best Vacation Ever, by Stuart J. Murphy (Library) * Tally O’Malley, by Stuart J. Murphy (Library)   Teaching Student-Centered Mathematics Grades 1-3 Chapter 11 and 12 pp. 310-348   * www.jmathpage.com | **Data Management rubric (Google Drive)**  **Grade 1 Data Management Rubric (Google Drive)**  Weekly Cumulative Quizzes (2 quizzes)  **Common Unit Test: Thursday April 4th, 2019** | Data  Graphs  Title  Tally marks  Survey  Voting  Record  Table  Object Graph  Picture Graph  Bar Graph  More  Less  Equal  Greater than  Less than  Fewer |
| **Unit 8:** Attributes of Geometric Shapes (Week 31, 5 Weeks)  Apr. 14th - May 16th | Objects and shapes have attributes that can be described, measured, and compared. | **Students are expected to do the following:**  Use reasoning to explore and make connections  **Understanding and solving**  Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solving  Visualize to explore mathematical concepts  Develop and use multiple strategies to engage in problem solving  **Communicating and representing**  Communicate mathematical thinking in many ways  Use mathematical vocabulary and language to contribute to mathematical discussions  Represent mathematical ideas in concrete, pictorial, and symbolic forms  **Connecting and reflecting**  Connect mathematical concepts to each other and to other areas and personal interests  Incorporate First Peoples worldviews and perspectives to make connections to mathematical concepts | **Content**  **Students are expected to know the following:**  Comparison of 2D shapes and 3D objects | Identifying 2d and 3D shape names and structures  Comparing 2D and 3D structures  Identifying squares, rectangles, triangles, circles, rhombuses, pentagons, octagons, hexagons,  Identifying the number of sides and corners in squares, rectangles, triangles, rhombuses, circles, pentagons, octagons, hexagons.  Identify the similarities and the differences between squares, rectangles, triangles, circles, rhombuses, octagons, hexagons, and pentagons.  Identifying , sorting and describing 2-D shapes and 3-D objects  -how to recognize 3D objects in their environment | Math Makes Sense Teacher Guide (Unit 6: Geometry)  Math Makes Sense Student Workbook (pp. 139-156)  Math Makes Sense Math Big Book (pp. 34-39)  Math Makes Sense Teacher Guide: Unit 6- Line Masters 1-15 (pp. 46-60)  Tpt Geometry practice worksheets (Google Drive)  Teaching Student-Centered Mathematics Grades 1-3 Chapter 7  Attribute blocks  2-D shapes  3-D shapes  tangrams  Geoboards  Geobands  Modelling Clay  Sorting Mats (2 hula hoops)  Paper bags | Diagnostic Checklist (Assessment Master 1 p. 39, Teacher Guide)  Observe student learning: Ongoing Observations Checklist: Geometry (Assessment Masters 3.1-3.2 pp. 41--42,, Teacher Guide)  Performance Task Rubric (Assessment Master 4, p. 43, Teacher Guide)  Geometry Rubric (Assessment Master 5, p. 44, Teacher Guide)  Unit Summary (Assessment Master 6, p. 45 Teacher Guide)  Weekly Cumulative quizzes (4 quizzes)  **Common Unit Test: Thursday May 14th, 2019** | Objects  Attributes  Edges  Corners  Vertices  Points  Curves  Slide  Roll  Stack  Flat faces  Bottom  Top  Pointed  Curved  Long  Tall/Taller  Thin/Thinner  Wide/Wider  Tangram  2D shapes  3D shapes  Circle, square, rectangle, triangle, rhombus, pentagon, octagon, hexagon  Sphere, cube, pyramid, rectangular prism, triangular prism |