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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 connectionsDevelop mental math strategies and abilities to make sense of quantitiesModel mathematics in contextualized experiences**Understanding and solving**Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solvingVisualize to explore mathematical conceptsEngage 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 waysUse mathematical vocabulary and language to contribute to mathematical discussions Explain and justify mathematical ideas and decisionsRepresent mathematical ideas in concrete, pictorial, and symbolic forms**Connecting and reflecting**Connect mathematical concepts to each other and to other areas and personal interestsIncorporate 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 actionsBuilding, 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. 32-35Math PM booksProdigy Math Online Resource Xtramath Online mental Math games BrainPop website for Math videos BeadsCountersUnfix CubesPattern 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 mathematicsModel mathematics in contextualized experiences**Understanding and solving**Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solvingVisualize to explore mathematical conceptsDevelop and use multiple strategies to engage in problem solving**Communicating and representing**Use mathematical vocabulary and language to contribute to mathematical discussionsConnecting and reflectingReflect on mathematical thinkingConnect 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 CentersCommunicate 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 waysSkip counting by 2s, 5s and 10s (Connect to patterning unit)Comparing and ordering numbers to 20Sequencing numbers to 20Counting on to 20 and counting back from 20The use of 5 frame and 10 frame to represent numbers from 1-20 Tens and ones blocks to represent numbers 1-20Estimating 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 2Two-Part Mats  100’s chart Dot cards Ten Frames  Number Lines  Counters  Numeral cards  Pocket chart Dice StampsStickers 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. 60-64Weekly Cumulative Quizzes (4 quizzes) **Common Unit Test: Wednesday October, 24th**  | Equal Unequal Count Number Number words 0-20 (One, two...etc) Estimate Two-Part MatEqual groupsSingles 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 solvingEngage 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 waysRepresent 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 problemsConnecting thinking to real world addition and subtraction situations through role play and/or inquiryMaking 10 Model and record addition and subtraction stories Identifying missing parts in subtraction and additionUsing 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 3-5Dominoes Pattern Blocks 2-colour countersSnap CubesPaper 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 awaySubtraction 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 quantitiesUse technology to explore mathematicsModel mathematics in contextualized experiences**Understanding and solving**Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solvingVisualize to explore mathematical conceptsDevelop and use multiple strategies to engage in problem solvingEngage 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 waysUse mathematical vocabulary and language to contribute to mathematical discussionsExplain and justify mathematical ideas and decisionsRepresent 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 20Addition and subtraction to 20 (understanding of operation and process) | Using mental math strategies to solve problemsConnecting thinking to real world addition and subtraction situations through role play and/or inquiryAddition and subtraction facts to 20Review of- counting on, making 10, doublesDoubles plus 1Using a number line, number chart Problem solving languageDescribing 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 GeoboardsGeobands 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 FactAddition FactSubtraction 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 connectionsEstimate reasonably**Understanding and solving**Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solvingVisualize 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 reasonablyComparing the lengths of straight objects directly, by lining up the endsComparing the weights of objects by using a balance scale Comparing widths (the distance across, or from side to side) directly using different materialsComparing 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 unitsUnderstanding that measurement is relative and depends on perspectiveMeasuring using nonstandard unitsEstimating measurements by estimating and by comparing to objects already measuredUnderstanding 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 8Pattern blocks String or Yarn modeling claystraws 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. 34-37Unit Summary (Assessment Master 6, p. 46 Teacher Guide) Weekly Cumulative Quizzes (4 quizzes) **Common Unit Test: Thursday February 14th, 2019**  | Length AreaCapacity Mass Weight Compare Order longer thanShorter than Heavier than Lighter than About the same as longLonger Longest Short Shorter Shortest  Heaviest Lightest Far FartherFarthest 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 connectionsUse technology to explore mathematicsModel mathematics in contextualized experiences**Understanding and solving**Develop, demonstrate, and apply mathematical understanding through play, inquiry, and problem solvingVisualize to explore mathematical conceptsDevelop and use multiple strategies to engage in problem solvingEngage 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 discussionsExplain and justify mathematical ideas and decisionsRepresent mathematical ideas in concrete, pictorial, and symbolic forms**Connecting and reflecting**Reflect on mathematical thinkingConnect 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 verballyfinancial 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 1-5Teaching Student-Centered Mathematics Grades 1-3 Chapter 5 p. 150No 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 ChartNumber lines Counters Snap cubes * www.jmathpage.com
 | Observe students counting a collection of coins and record on a checklistDiagnostic 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**  | CoinsDimeNickel 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 solvingVisualize to explore mathematical conceptsEngage 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 waysUse mathematical vocabulary and language to contribute to mathematical discussionsRepresent mathematical ideas in concrete, pictorial, and symbolic forms**Connecting and reflecting**Reflect on mathematical thinkingConnect 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 correspondenceLikelihood 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)
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* 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**  | DataGraphs TitleTally marksSurveyVotingRecordTableObject GraphPicture GraphBar Graph MoreLessEqualGreater thanLess thanFewer |
| **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 solvingVisualize to explore mathematical conceptsDevelop and use multiple strategies to engage in problem solving**Communicating and representing**Communicate mathematical thinking in many waysUse mathematical vocabulary and language to contribute to mathematical discussionsRepresent mathematical ideas in concrete, pictorial, and symbolic forms**Connecting and reflecting**Connect mathematical concepts to each other and to other areas and personal interestsIncorporate 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 ClaySorting 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 CornersVertices Points Curves SlideRoll StackFlat faces Bottom Top Pointed CurvedLong Tall/TallerThin/ThinnerWide/Wider Tangram 2D shapes3D shapesCircle, square, rectangle, triangle, rhombus, pentagon, octagon, hexagonSphere, cube, pyramid, rectangular prism, triangular prism  |