

B.C. AT A GLANCE CORRELATED WITH MATH MAKES SENSE: GRADE 3 (WESTERN) & 4 (WNCP)

NOTE: Text in UPPERCASE indicates outcomes that are not met in MATH MAKES SENSE Western. Text in *italics* is from the suggested achievement indicators.

STRAND: NUMBER

General Outcome: Develop number sense.

Use Unit and Cumulative Reviews Selectively

Grade 3 Prescribed Learning Outcomes	Western MMS 3 Meets	Exceeds	Grade 4 Prescribed Learning Outcomes	WNCP MMS Meets
A1 Say number sequence forward & backward from 0 to 1000 by: (a) 5s, 10s or 100s using any starting point (b) 3S USING STARTING POINTS THAT ARE MULTIPLES OF 3 (c) 4S USING STARTING POINTS THAT ARE MULTIPLES OF 4 (d) 25s using starting points that are multiples of 25.	Unit 1 Lessons 2, 3, 9 (limited) Unit 6 Lessons 5, 6 (money) have student say the number sequence when assessing		May be reviewed but do not assess	
A2 Represent and describe numbers to 1000, concretely, pictorially and symbolically.	Unit 1 Lessons 4 to 6, 9, 11, 13, Unit Problem; number words to 1000 limited		A1 Represent and describe whole numbers to 10 000 pictorially and symbolically.	Unit 2 Lesson 1
A3 Compare and order numbers to 1000.	Unit 1 Lessons 4, 5, 7, 10		A2 Compare and order numbers to 10 000.	Unit 2 Lessons 2, 3 Unit 2 Problem
A4 Estimate quantities less than 1000 using referents.	Unit 1 Lessons 4, 5, 13 Unit 6 Lesson 6 (money) do not assess decimal notation Cross Strand: 142-143	Unit 1 Lesson 14 rounding	May be reviewed but do not assess	
A5 Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000.	Unit 1 Lessons 5, 6, 8, 11, 12, Unit Problem			
A6 Describe and apply mental mathematics strategies for adding two 2-digit numerals, such as: (a) adding from left to right (b) taking one addend to the nearest multiple of ten and then compensating (c) USING DOUBLES.	Unit 2 Lessons 6, 7, 9 (limited) Front-ending is another name for adding from left to right			
A7 Describe and apply mental mathematics strategies for subtracting two 2-digit numerals, such as: (a) TAKING THE SUBTRAHEND TO THE NEAREST MULTIPLE OF TEN AND THEN COMPENSATING (b) THINKING OF ADDITION (c) USING DOUBLES.	Unit 2 Lessons 6, 8, 9 (limited) some alternate strategies are included			
A8 APPLY ESTIMATION STRATEGIES TO PREDICT SUMS AND DIFFERENCES OF TWO 2-DIGIT NUMERALS IN A PROBLEM-SOLVING CONTEXT.	strategies could be applied to problems involving 2-digit numerals in Unit 2	Unit 2 Lesson 10 uses 3-digit numerals		
A9 Demonstrate an understanding of addition & subtraction of numbers with answers to 1000 (limited to 1, 2 and 3-digit numerals) by: (a) using personal strategies for adding and subtracting with and without the support of manipulatives (b) creating and solving problems in contexts that involve addition and subtraction of numbers concretely, pictorially and symbolically.	Unit 1 Launch Unit 2 Lessons 6, 11 to 14, Unit Problem Unit 6 Lesson 7(money) do not assess decimal notation		A3 Demonstrate an understanding of addition of numbers with answers to 10 000 and their corresponding subtractions (limited to 3 and 4-digit numerals) by: (a) using personal strategies for adding & subtracting (b) estimating sums and differences (c) solving problems involving addition & subtraction.	Unit 2 Launch Unit 2 Lessons 4, 5, 6, 7, 8, 9, 10, 11, 12, 13 Unit 2 Problem

B.C. AT A GLANCE CORRELATED WITH MATH MAKES SENSE: GRADE 3 (WESTERN) & 4 (WNCP)

NOTE: **Text in UPPERCASE** indicates outcomes that are not met in **MATH MAKES SENSE Western**. Text in *italics* is from the suggested achievement indicators.

STRAND: NUMBER (continued)

General Outcome: Develop number sense.

Use Unit and Cumulative Reviews Selectively

Grade 3 Prescribed Learning Outcomes	Western MMS 3 Meets	Exceeds	Grade 4 Prescribed Learning Outcomes	WNCP MMS Meets
A10 Apply mental mathematics strategies and number properties, such as: (a) using doubles (b) making 10 (c) using the commutative property (d) using the property of zero (e) thinking addition for subtraction to recall basic addition facts to 18 and related subtraction facts.	Unit 2 Launch, Lessons 1 to 5 Unit 5 Lesson 7 strategy (a) limited to <i>doubles plus one</i> ; include <i>doubles take away one, doubles plus 2 and doubles take away 2</i>		A5 Describe & apply mental mathematics strategies, such as: (a) skip counting from a known fact (b) using doubling or halving (c) using doubling or halving and adding or subtracting one more group (d) using patterns in the 9s facts (e) using repeated doubling to determine basic multiplication facts to 9x9 & related division facts.	Unit 1 Lesson 5 Unit 3 Launch Unit 3 Lessons 1, 2, 3, 4, 5 Game p. 101 Unit 3 Lessons 7, 8, 9, 10 Unit 3 Problem
May be explored informally but do not assess			A4 Explain the properties of 0 and 1 for multiplication, and the property of 1 for division.	Unit 3 Lesson 2
A11 Demonstrate an understanding of multiplication to 5×5 by: (a) representing and explaining using equal grouping and arrays (b) creating & solving problems in context that involve multiplication (c) modelling multiplication using concrete & visual representations and recording the process symbolically (d) relating multiplication to repeated addition (e) relating multiplication to division.	Unit 4 Launch, Lessons 1 to 3, 5 to 8, 12, Unit Problem assess facts to 5×5 ; explore multiplying by 0 and 1 but do not assess properties; explore multiplication tables and charts <i>Recall of facts not intended</i>	Unit 4 Lesson 4 multiplying by 10	A6 Demonstrate an understanding of multiplication (2 or 3-digit by 1-digit) to solve problems by: (a) using personal strategies for multiplication with and without concrete materials (b) using arrays to represent multiplication (c) connecting concrete to symbolic representations (d) estimating products.	Unit 8 Launch Unit 8 Lessons 1, 2, 3, 5, 6, 7 Unit 8 Problem
A12 Demonstrate an understanding of division by: (a) representing and explaining division using equal sharing and equal grouping (b) creating and solving problems in context that involve equal sharing and grouping (c) modelling equal sharing & equal grouping using concrete and visual representations and recording the process symbolically (d) relating division to repeated subtraction (e) relating division to multiplication (limited to division related to multiplication facts up to 5×5).	Unit 4 Lessons 8, 9, 11, 12, Unit Problem Cross Strand: 2-3 limit assessment to facts related to multiplication up to 5×5	Unit 4 Lesson 10 dividing by 2, 5 and 10	A7 Demonstrate an understanding of division (1-digit divisor and up to 2-digit dividend) to solve problems by: (a) using personal strategies for dividing with and without concrete materials (b) estimating quotients (c) relating division to multiplication. <i>It is not intended that remainders be expressed as decimals or fractions.</i>	Unit 3 Lessons 7, 8, 9, 10 Unit 3 Problem Unit 8 Lessons 8, 9, 10, 11 Game p. 311 Unit 8 Problem
A13 Demonstrate an understanding of fractions (<i>concretely or pictorially</i>) by: (a) explaining that a fraction represents a part of a whole (b) describing situations in which fractions are used (c) COMPARING FRACTIONS OF SAME WHOLE WITH LIKE DENOMINATORS.	Unit 8 Launch, Lessons 1, 2, 5, Unit Problem (part 1 only) terms denominator and numerator need to be introduced	Unit 8 Lessons 3, 4, 6, 7, Unit Problem (part 2 to 4) fraction of a set; mixed numbers	A8 Demonstrate an understanding of fractions less than or equal to one by using concrete & pictorial representations to: (a) name & record fractions for the parts of a whole or a set (b) compare and order fractions (c) model/explain for different wholes that two identical fractions may not represent same quantity (d) provide examples where fractions are used.	Unit 5 Launch Unit 5 Lessons 1, 2, 3, 4, 5, 6, 7, 8 Unit 5 Problem
May be explored informally but do not assess			A9 Describe and represent decimals (tenths and hundredths) concretely, pictorially and symbolically.	Unit 5 Lessons 9, 10, 11
			A10 Relate decimals to fractions (to hundredths).	Unit 5 Lessons 9, 10
			A11 Demonstrate an understanding of addition & subtraction of decimals (limited to 100ths) to solve problems by: (a) using compatible numbers (b) estimating sums and differences (c) using mental math strategies.	Unit 5 Lessons 12, 13, 14

B.C. AT A GLANCE CORRELATED WITH MATH MAKES SENSE: GRADE 3 (WESTERN) & 4 (WNCP)

NOTE: Text in **UPPERCASE** indicates outcomes that are not met in MATH MAKES SENSE Western. Text in *italics* is from the suggested achievement indicators.

STRAND: STATISTICS & PROBABILITY (DATA ANALYSIS)

General Outcome: Collect, display and analyze data to solve problems. Use Unit and Cumulative Reviews Selectively

Grade 3 Prescribed Learning Outcomes	Western MMS 3 Meets	Exceeds	Grade 4 Prescribed Learning Outcomes	WNCP MMS Meets
D1 Collect first-hand data and organize it to answer questions using: (a) tally marks (b) LINE PLOTS (c) charts (d) lists	Unit 5 Launch, Lessons 3, 6, 8, 9 Unit Problem		May be reviewed but do not assess	
May be explored informally but do not assess			D1 Demonstrate an understanding of many-to-one correspondence.	Unit 7 Launch Unit 7 Lessons 1, 2, 3, 4 Unit 7 Problem
D2 Construct, label and interpret bar graphs to solve problems.	Unit 5 Launch, Lessons 3, 6, 9, Unit Problem Lesson 1 reviews sorting by 2 attributes (grade 2 outcome)	Unit 5 Lesson 2, 4, 5 sort by 3 attributes; pictographs; circle graphs	D2 Construct and interpret pictographs and bar graphs involving many-to-one correspondence to draw conclusions.	Unit 7 Launch Unit 7 Lessons 1, 2, 3, 4 Unit 7 Problem

Probability outcomes begin in grade 5

Unit 11

STRAND: PATTERNS AND RELATIONS (PATTERNS)

General Outcome: Use patterns to describe the world and solve problems.

B1 Demonstrate an understanding of increasing patterns by: (a) describing (b) extending (c) comparing (d) creating patterns using manipulatives, diagrams, SOUNDS, AND ACTIONS (numbers to 1000).	Unit 1 Launch, Lessons 1 to 3, 9 (limited to counting patterns) Unit 10 Launch, Lessons 1, 3, 4 (limited) increasing patterns are referred to as growth patterns	Unit 10: Lesson 2 patterns in tables (gr. 4 outcome)	B1 Identify and describe patterns found in tables and charts, including a multiplication chart.	Unit 1 Launch Unit 1 Lessons 1, 2, 3 Unit 1 Problem Unit 3 Lessons 3, 5 Unit 8 Lesson 6, 7
B2 Demonstrate an understanding of decreasing patterns by: (a) describing (b) extending (c) comparing (d) creating patterns using manipulatives, diagrams, SOUNDS, AND ACTIONS (numbers TO 1000).	Unit 1 Lessons 2, 3 limited to counting patterns to 100 only Unit 10 Lessons 5 to 7, Technology p. 395 and Unit Problem review repeating patterns (grade 2 outcomes)		B2 Reproduce a pattern shown in a table or chart using concrete materials. B3 Represent and describe patterns and relationships using charts and tables to solve problems.	Unit 1 Lessons 2, 3 Investigation p. 2-3 Unit 1 Lessons 1, 2, 3 Unit 1 Problem Unit 3 Lesson 6 Unit 8 Lesson 4
May be explored informally but do not assess			B4 Identify and explain mathematical relationships using charts and diagrams to solve problems.	Investigation p. 2-3 Unit 2 Lesson 3 Unit 6 Lesson 1 Investigation p. 316-317

STRAND: PATTERNS & RELATIONS (VARIABLES & EQUATIONS)

General Outcome: Represent algebraic expressions in multiple ways.

May be explored informally but do not assess			B5 Express a given problem as an equation in which a symbol is used to represent an unknown number (<i>concretely, pictorially or symbolically</i>).	Unit 1 Lessons 4, 5 Unit 1 Problem
B3 SOLVE ONE-STEP ADDITION AND SUBTRACTION EQUATIONS INVOLVING SYMBOLS REPRESENTING AN UNKNOWN NUMBER (USING MANIPULATIVES).			B6 Solve one-step equations involving a symbol to represent an unknown number (<i>using manipulatives</i>).	Unit 1 Lessons 4, 5, 6 Unit 1 Problem Unit 2 Lesson 2

B.C. AT A GLANCE CORRELATED WITH MATH MAKES SENSE: GRADE 3 (WESTERN) & 4 (WNCP)

NOTE: Text in **UPPERCASE** indicates outcomes that are not met in MATH MAKES SENSE Western. Text in *italics* is from the suggested achievement indicators.

STRAND: SHAPE AND SPACE (MEASUREMENT)

General Outcome: Use direct or indirect measurement to solve problems. Use Unit and Cumulative Reviews Selectively

Grade 3 Prescribed Learning Outcomes	Western MMS 3 Meets	Exceeds	Grade 4 Prescribed Learning Outcomes	WNCP MMS Meets
C1 RELATE PASSAGE OF TIME TO COMMON ACTIVITIES USING NON-STANDARD AND STANDARD UNITS (MINA, HRS, DAYS, WEEKS, MONTHS, YEARS).		Unit 6 Lessons 2, 3, Unit Problem telling time	C1 Read and record time using digital and analog clocks, including 24-hour clocks.	Unit 4 Launch Unit 4 Lessons 2, 3, 4, 5, 6
C2 Relate NUMBER OF SECONDS TO A MINUTE, MINUTES TO AN HOUR & number of days to a month in a problem-solving context.	Unit 6 Lesson 1 (limited)		C2 Read and record calendar dates in a variety of formats.	Unit 4 Lesson 1
C3 Demonstrate an understanding of measuring length (cm / m) by: (a) selecting & justifying referents for the units cm and m (b) modelling and describing relationship between units cm & m (c) estimating length using referents (d) measuring and recording length, width and height.	Unit 5 Lesson 8 Unit 9 Launch, Lessons 1, 2 Cross Strand: 300	Unit 6 Launch, Lessons 2 to 4, 8 to 11 time, temperature, add and subtract money, capacity Unit 9 Lesson 3, 6 to 9, Unit Problem km, area no separate money outcomes; use to meet number outcomes	May be reviewed but do not assess	
C4 Demonstrate an understanding of measuring mass (g / kg) by: (a) selecting and justifying referents for the units g and kg (b) modelling and describing relationship between units g & kg (c) estimating mass using referents (d) measuring/recording mass.	Unit 6 Lessons 12, 13 limited			
C5 Demonstrate understanding of perimeter of regular and irregular shapes by: (a) estimating perimeter using referents for centimetre or metre (b) measuring and recording perimeter (cm and m) (c) constructing different shapes for a given perimeter (cm & m) to demonstrate many shapes are possible for a perimeter.	Unit 9 Launch, Lessons 4, 5 Cross Strand: 2-3, 422 (do not assess area) Integrate Lesson 4 (temperature) with science		C3 Demonstrate understanding of area of regular and irregular 2-D shapes by: (a) recognizing area is measured in square units (b) selecting/justifying referents (cm ² or m ²) (c) estimating area using referents for cm ² or m ² (d) determining and recording area (cm ² or m ²) (e) constructing different rectangles for a given area (cm ² or m ²) to demonstrate many rectangles may have same area.	Unit 3 Game p. 101 Unit 4 Lessons 7, 8, 9, 10, 11, 12, 13 Unit 4 Problem Investigation p. 170-171

STRAND: SHAPE AND SPACE (3-D OBJECTS & 2-D SHAPES)

General Outcome: Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

C6 Describe 3-D objects (<i>cubes, spheres, cones, cylinders, pyramids, prisms</i>) according to the shape of faces, number of edges and vertices.	Unit 3 Lessons 8, 9 limited; Launch and Unit Problem do not assess outcomes C6 and C7	Unit 3 Launch, Lessons 2, 5, 7, 10, 11, Unit Problem, Lessons 1, 3, 4, 6 Connect and Practices; angles, parallel sides, congruency, parallelograms	C4 Describe and construct rectangular and triangular prisms.	Unit 6 Launch Unit 6 Lessons 1, 2, 3, 4
C7 Sort regular and irregular polygons, including: (a) triangles (b) QUADRILATERALS (c) pentagons (d) hexagons (e) octagons; according to number of sides.	Unit 3 Explore & Show and Shares in Lessons 1, 3, 4, 6 limited			

STRAND: SHAPE AND SPACE (TRANSFORMATIONS)

General Outcome: Describe and analyze position and motion.

May be explored informally but do not assess	Unit 7 Motion Geometry	C5 Demonstrate an understanding of line symmetry by: (a) identifying (b) creating symmetrical 2-D shapes (c) drawing one or more lines of symmetry in a 2-D shape.	Unit 6 Lessons 5, 6, 7 Game p. 245 Unit 6 Problem
---	-------------------------------------	---	---