

2008 B.C. GRADE 7 AT A GLANCE CORRELATED WITH MATH MAKES SENSE (WNCP)

STRAND: NUMBER

General Outcome: Develop number sense.

Grade 7 Prescribed Learning Outcomes	MMS 7 (WNCP)	Additional Notes
A1 Determine and explain why a number is divisible by 2, 3, 4, 5, 6, 8, 9 or 10 and why a number cannot be divided by 0.	Unit 1: Lessons 1.1, 1.2 Investigation p. 174-175	NOTE: Investigation p. 2-3 reviews previous grade outcomes Unit 1 Launch activates prior knowledge
A2 Demonstrate an understanding of the addition, subtraction, multiplication and division of decimals (for more than 1-digit divisors or 2-digit multipliers, the use of technology is expected) to solve problems.	Unit 3: Lessons 3.3, 3.4, 3.5, 3.6 Reading & Writing in Math p. 118-119	NOTE: Unit 3 Launch activates prior knowledge
A3 Solve problems involving percent from 1% to 100%.	Unit 3: Lessons 3.7, 3.8 World of Work p. 117 Unit 3 Problem	
A4 Demonstrate an understanding of the relationship between positive repeating decimals and positive fractions, and positive terminating decimals and positive fractions.	Unit 3: Lesson 3.1	
A5 Demonstrate an understanding of adding and subtracting positive fractions and mixed numbers, with like and unlike denominators, concretely, pictorially and symbolically (limited to positive sums and differences).	Unit 5: Lessons 5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7 World of Work p. 209 Reading & Writing in Math p. 211 Unit 5 Problem	NOTE: Unit 5 Launch activates prior knowledge
A6 Demonstrate an understanding of addition and subtraction of integers, concretely, pictorially and symbolically.	Unit 2: Lessons 2.1, 2.2, 2.3, 2.4, 2.5 Reading & Writing in Math p. 76-77 Unit 2 Problem Unit 8 Investigation p. 340-341	NOTE: Unit 2 Launch activates prior knowledge
A7 Compare and order positive fractions, positive decimals (to 1000ths) and whole numbers, by using: (a) benchmarks (b) place value (c) equivalent fractions and /or decimals	Unit 3: Lessons 3.2, 3.7 Unit 5 Reading & Writing in Math p. 211-212	

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NOTE: Text in *italics* is from the suggested achievement indicators.

STRAND: STATISTICS & PROBABILITY (DATA ANALYSIS)

General Outcome: Collect, display and analyze data to solve problems.

Grade 7 Prescribed Learning Outcomes	MMS 7 (WNCP)	Additional Notes
D1 Demonstrate an understanding of central tendency and range by: (a) determining the measures of central tendency (mean, median, mode) and range (b) determining the most appropriate measures of central tendency to report findings.	Unit 7: Lessons 7.1, 7.2, 7.4 Technology p. 276-277 Reading & Writing in Math p. 290-291	
D2 Determine the effect on the mean, median and mode when an outlier is included in a data set.	Unit 7: Lesson 7.3 Technology p. 276-277 Reading & Writing in Math p. 290-291	
D3 Construct, label and interpret circle graphs to solve problems.	Unit 4: Lessons 4.6, 4.7 Technology p. 165 Reading & Writing in Math p. 290-291	

STRAND: STATISTICS & PROBABILITY (CHANCE AND UNCERTAINTY)

General Outcome: Use experimental or theoretical probabilities to represent & solve problems involving uncertainty.

D4 Express probabilities as ratios, fractions and percents.	Unit 7: Lesson 7.5 Reading & Writing in Math p. 290-291	NOTE: Unit 7 Launch activates prior knowledge
D5 Identify the sample space (where the combined sample space has 36 or fewer elements) for a probability experiment involving two independent events.	Unit 7: Lesson 7.6 Unit 7 Problem Reading & Writing in Math p. 290-291	
D6 Conduct a probability experiment to compare the theoretical probability (determined using a tree diagram, table or other graphic organizer) and experimental probability of two independent events (<i>with and without technology</i>).	Unit 7: Lesson 7.6 Game p. 289 Unit 7 Problem Reading & Writing in Math p. 290-291 Unit 8 Investigation p. 340-341	

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STRAND: PATTERNS AND RELATIONS (PATTERNS)

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

Grade 7 Prescribed Learning Outcomes	MMS 7 (WNCP)	Additional Notes
B1 Demonstrate an understanding of oral and written patterns and their equivalent linear relations	Unit 1: Lessons 1.3, 1.4, 1.5 Unit 1 Problem	NOTE: Unit 6 Launch activates prior knowledge
B2 Create a table of values from a linear relation, graph the table of values and analyze the graph to draw conclusions to solve problems.	Unit 1: Lessons 1.5, 1.6 Unit 1 Problem	

STRAND: PATTERNS & RELATIONS (VARIABLES & EQUATIONS)

General Outcome: Represent algebraic expressions in multiple ways.

B3 Demonstrate and explain the meaning of preservation of equality by: (a) modeling preservation of equality concretely, pictorially, and symbolically (b) applying preservation of equality to solve equations.	Unit 6: Lessons 6.2, 6.3, 6.4, 6.5	
B4 Explain the difference between an expression and an equation.	Unit 1: Lessons 1.6, 1.7	
B5 Evaluate an expression given the value of the variable(s).	Unit 1: Lessons 1.3, 1.4, 1.5 Unit 6 Problem	
B6 Model and solve problems that can be represented by one-step linear equations of the form $x + a = b$, concretely, pictorially and symbolically, where a and b are integers.	Unit 6: Lessons 6.3, 6.5	NOTE: Game p. 245 and Reading & Writing in Math p. 246-247 review previous grade outcomes
B7 Model and solve problems that can be represented by linear equations of the form: $ax + b = c$ $ax = b$ $\frac{x}{a} = b$ $a \neq 0$ concretely, pictorially and symbolically, where a , b and c are whole numbers.	Unit 1: Lesson 1.8 Unit 1 Problem Unit 6: 6.1, 6.2, 6.4, 6.5	

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STRAND: SHAPE AND SPACE (MEASUREMENT)

General Outcome: Use direct or indirect measurement to solve problems.

Grade 7 Prescribed Learning Outcomes	MMS 7 (WNCP)	Additional Notes
C1 Demonstrate an understanding of circles by: <ul style="list-style-type: none"> (a) describing the relationships among radius, diameter and circumference of circles (b) relating circumference to pi (c) determining the sum of the central angles (d) constructing circles with a given radius or diameter (e) solving problems involving the radii, diameters and circumferences of circles. 	Unit 4: Lessons 4.1, 4.2, 4.7 Game p. 153 Unit 4 Problem	NOTE: Unit 4 Launch activates prior knowledge
C2 Develop & apply a formula for determining the area of: <ul style="list-style-type: none"> (a) triangles (b) parallelograms (c) circles. 	Unit 4: Lessons 4.3, 4.4, 4.5 Game p. 153 Unit 4 Problem	

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.

C3 Perform geometric constructions including: <ul style="list-style-type: none"> (a) perpendicular and (b) parallel line segments (c) perpendicular and (d) angle bisectors. 	Unit 8: Lessons 8.1, 8.2, 8.3, 8.4 Unit 8 Problem	NOTE: Unit 8 Launch activates prior knowledge
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STRAND: SHAPE AND SPACE (TRANSFORMATIONS)

General Outcome: Describe and analyze position and motion.

C4 Identify and plot points in the four quadrants of a Cartesian plane using integral ordered pairs.	Unit 8: Lessons 8.5, 8.6, 8.7 Technology p. 330-331 Unit 8 Problem	NOTE: Reading & Writing in Math p. 332-333 can be applied to all outcomes
C5 Perform and describe transformations (translations, rotations or reflections) of a 2-D shape in all 4 quadrants of a Cartesian plane (limited to integral number vertices).	Unit 8: Lessons 8.6, 8.7 Technology p. 330-331 Unit 8 Problem	