Correlation of *Math Makes Sense 6* to the new Ontario Curriculum

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Ontario Grade 6 Curriculum	*Math Makes Sense 6* Student Text	Comments
B. Number		
B1. Number Sense		
Rational Numbers		
B1.1 read and represent whole numbers up to and including one million, using appropriate tools and strategies, and describe various ways they are used in everyday life	Unit 2, Lesson 1, pages 32-34	
B1.2 read and represent integers, using a variety of tools and strategies, including horizontal and vertical number lines	Unit 1, Lesson 5, pages 20-22	
B1.3 compare and order integers, decimal numbers, and fractions, separately and in combination, in various contexts	Unit 4, Lesson 3, pages 121-124 Unit 8, Lesson 3, pages 294-297	Comparing and ordering integers is not addressed. See *Math Makes Sense 7* Student Text, Unit 9, Lesson 9.2. Comparing and ordering a combination of integers, decimals, and fractions is not addressed.
Fractions, Decimals, and Percents		
B1.4 read, represent, compare, and order decimal numbers up to thousandths, in various contexts	Unit 4, Lesson 2, pages 117-120; Lesson 3, pages 121-124	
B1.5 round decimal numbers, both terminating and repeating, to the nearest tenth, hundredth, or whole number, as applicable, in various contexts	Unit 4, Lesson 4, pages 126-128; Lesson 12, pages 155-157	
B1.6 describe relationships and show equivalences among fractions and decimal numbers up to thousandths, using appropriate tools and drawings, in various contexts	Unit 4, Lesson 2, pages 117-120 Unit 8, Technology, page 299; Lesson 7, pages 312-315	

B2. Operations		
Properties and Relationships		
B2.1 use the properties of operations, and the relationships between operations, to solve problems involving whole numbers, decimal numbers, fractions, ratios, rates, and whole number percents, including those requiring multiple steps or multiple operations	Unit 2, Lesson 7, pages 50-52; Lesson 8, pages 54-57; Lesson 9, pages 60-63; Lesson 10, pages 64-67; Lesson 11, pages 68-71; Lesson 12, pages 72-75 Unit 4, Lesson 5, pages 129-131; Lesson 6, pages 132-136; Lesson 7, pages 137-139; Lesson 8, pages 140-142; Lesson 9, pages 143-145; Lesson 10, pages 147-150; Lesson 11, pages 151-154; Lesson 12, pages 155-157 Unit 8, Lesson 4, pages 300-303; Lesson 5, pages 304-306; Lesson 8, pages 316-319; Lesson 9, pages 320-323; Lesson 10, pages 324-327; Lesson 11, pages 328-331	
Math Facts		
B2.2 understand and use the divisibility rules to determine whether numbers are divisible by 2, 3, 4, 5, 6, 8, 9, and 10	Unit 1, Lesson 3, pages 13-15	
Mental Math		
B2.3 use mental math strategies to calculate percents of whole numbers, including 1%, 5%, 10%, 15%, 25%, and 50%, and explain the strategies used	Unit 8, Lesson 6, pages 308-311; Lesson 7, pages 312-315; Lesson 8, pages 316-319	

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Addition and Subtraction		
B2.4 represent and solve problems involving the addition and subtraction of whole numbers and decimal numbers up to hundredths, using estimation and algorithms	Unit 2, Lesson 7, pages 50-52; Lesson 8, pages 54-57; Lesson 9, pages 60-63 Unit 4, Lesson 5, pages 129-131; Lesson 6, pages 132-136	
B2.5 add and subtract fractions with like and unlike denominators, using appropriate tools, in various contexts	Unit 8, Lesson 4, pages 300-303; Lesson 5, pages 304-306	
Multiplication and Division		
B2.6 represent composite numbers as a product of their prime factors, including through the use of factor trees	Unit 2, Lesson 5, pages 45-47	Factor trees are not addressed.
B2.7 represent and solve problems involving the multiplication of three-digit whole numbers by decimal tenths, using algorithms	Unit 4, Lesson 9, pages 143-145	An algorithm for multiplying 3-digit whole numbers by decimal tenths is not addressed.
B2.8 represent and solve problems involving the division of three-digit whole numbers by decimal tenths, using appropriate tools, strategies, and algorithms, and expressing remainders as appropriate		Dividing 3-digit whole numbers by decimal tenths is not addressed.
B2.9 multiply whole numbers by proper fractions, using appropriate tools and strategies		Multiplying whole numbers by proper fractions is not addressed. See *Math Makes Sense 7* Student Text, Unit 4, Lesson 4.6 for multiplying whole numbers by proper fractions.
B2.10 divide whole numbers by proper fractions, using appropriate tools and strategies		Dividing whole numbers by proper fractions is not addressed. See *Math Makes Sense 8* Student Text, Unit 4, Lesson 4.6 for dividing whole numbers by proper fractions.

B2.11 represent and solve problems involving the division of decimal numbers up to thousandths by whole numbers up to 10, using appropriate tools and strategies	Unit 4, Lesson 11, pages 151-154; Lesson 12, pages 155-157	
B2.12 solve problems involving ratios, including percents and rates, using appropriate tools and strategies	Unit 8, Lesson 6, pages 308-311; Lesson 7, pages 312-315; Lesson 8, pages 316-319; Lesson 9, pages 320-323; Lesson 10, pages 324-327; Lesson 11, pages 328-331 Unit 10, Lesson 4, pages 393-396	
C. Algebra		
C1. Patterns and Relationships		
Patterns		
C1.1 identify and describe repeating, growing, and shrinking patterns, including patterns found in real-life contexts, and specify which growing patterns are linear	Unit 1, Lesson 1, pages 6-9; Lesson 2, pages 10-12 Unit 10, Lesson 1, pages 380-383; Lesson 2, pages 384-387; Lesson 3, pages 388-391; Lesson 4, pages 393-396	Repeating patterns are not addressed.
C1.2 create and translate repeating, growing, and shrinking patterns using various representations, including tables of values, graphs, and, for linear growing patterns, algebraic expressions and equations	Unit 1, Lesson 1, pages 6-9; Lesson 2, pages 10-12 Unit 10, Lesson 1, pages 380-383; Lesson 2, pages 384-387; Lesson 3, pages 388-391; Lesson 4, pages 393-396	Repeating patterns are not addressed. Algebraic expressions and equations for linear patterns are not addressed. See *Math Makes Sense 8* Student Text, Unit 10, Lessons 10.2 and 10.3 for writing algebraic expressions for patterns.

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C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in repeating, growing, and shrinking patterns, and use algebraic representations of the pattern rules to solve for unknown values in linear growing patterns	Unit 1, Lesson 1, pages 6-9; Lesson 2, pages 10-12 Unit 10, Lesson 1, pages 380-383; Lesson 2, pages 384-387; Lesson 3, pages 388-391; Lesson 4, pages 393-396	Repeating patterns are not addressed. Algebraic representations of pattern rules are not addressed. See *Math Makes Sense 8* Student Text, Unit 10, Lesson 10.2 and 10.3 for writing algebraic expressions for patterns.
C1.4 create and describe patterns to illustrate relationships among whole numbers and decimal numbers	Unit 1, Lesson 2, pages 10-12; Lesson 3, pages 13-15 Unit 2, Lesson 4, pages 43, 44 Unit 4, Lesson 7, pages 137-139; Lesson 8, pages 140-142; Lesson 9, pages 143-145	
C2. Equations and Inequalities		
Variables and Expressions		
C2.1 add monomials with a degree of 1 that involve whole numbers, using tools		Adding monomials is not addressed.
C2.2 evaluate algebraic expressions that involve whole numbers and decimal tenths		Evaluating algebraic expressions is not addressed. See *Math Makes Sense 7* Student Text, Unit 10, Lesson 10.4 for evaluating algebraic expressions.
Equalities and Inequalities		
C2.3 solve equations that involve multiple terms and whole numbers in various contexts, and verify solutions	Unit 1, Lesson 4, pages 16-18; Games, page 23	See *Math Makes Sense 7* Student Text, Unit 10, Lesson 10.6 for solving equations involving variables.
C2.4 solve inequalities that involve two operations and whole numbers up to 100, and verify and graph the solutions		Inequalities are not addressed.

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C3. Coding		
Coding Skills		
C3.1 solve problems and create computational representations of mathematical situations by writing and executing efficient code, including code that involves conditional statements and other control structures		Coding is not addressed.
C3.2 read and alter existing code, including code that involves conditional statements and other control structures, and describe how changes to the code affect the outcomes and the efficiency of the code		Coding is not addressed.
D. Data		
D1. Data Literacy		
Data Collection and Organization		
D1.1 describe the difference between discrete and continuous data, and provide examples of each		Discrete and continuous data is not addressed.
D1.2 collect qualitative data and discrete and continuous quantitative data to answer questions of interest about a population, and organize the sets of data as appropriate, including using intervals	Unit 5, Lesson 7, pages 197-199	Qualitative data is not addressed. The collection of continuous data is not addressed. The use of intervals is not addressed. See *Math Makes Sense 8* Student Text, Unit 5, Lesson 5.5 for examples of continuous data and the use of intervals.
Data Visualization		
D1.3 select from among a variety of graphs, including histograms and broken-line graphs, graphs, the type of graph best suited to represent various sets of data; display the data in the graphs with proper sources, titles, and labels, and appropriate scales; and justify their choice of graph	Unit 5, Lesson 4, pages 178-181	Histograms are not addressed. See *Math Makes Sense 8* Student Text, Unit 5, Lesson 5.5 for drawing histograms.

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D1.4 create an infographic about a data set, representing the data in appropriate ways, including in tables, histograms, and broken-line graphs, and incorporating any other relevant information that helps to tell a story about the data		Creating infographics is not addressed.
Data Analysis		
D1.5 determine the range as a measure of spread and the measures of central tendency for various data sets, and use this information to compare two or more data sets	Unit 5, Lesson 2, pages 172-175	Determining the range is not addressed. Using the measures of central tendency to compare two sets of data is not addressed. See *Math Makes Sense 7* Student Text, Unit 5, Lesson 5.5 for using the measures of central tendency to compare two or more data sets.
D1.6 analyse different sets of data presented in various ways, including in histograms and broken-line graphs, and in misleading graphs, by asking and answering questions about the data, challenging preconceived notions, and drawing conclusions, then make convincing arguments and informed decisions	Unit 5, Lesson 1, pages 168-171; Lesson 4, pages 178-181; Lesson 6, pages 190-193	Histograms are not addressed. See *Math Makes Sense 8* Student Text, Unit 5, Lesson 5.5 for analyzing data in histograms.
D2. Probability		
Probability		
D2.1 use fractions, decimals, and percents to express the probability of events happening, represent this probability on a probability line, and use it to make predictions and informed decisions	Unit 11, Lesson 1, pages 408-411; Lesson 2, pages 412-415; Lesson 3, pages 416-419; Lesson 4, pages 420, 421; Lesson 5, pages 422-425	A probability line is not addressed. See *Math Makes Sense 8* Student Text, Unit 11, Lesson 11.1 for a probability line.
D2.2 determine and compare the theoretical and experimental probabilities of two independent events happening	Unit 11, Lesson 1, pages 408-411; Lesson 5, pages 422-425	The probability of two independent events is not addressed.

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E. Spatial Sense		
E1. Geometric and Spatial Reasoning		
Geometric Reasoning		
E1.1 create lists of the geometric properties of various types of quadrilaterals, including the properties of the diagonals, rotational symmetry, and line symmetry	Unit 7, Lesson 5, pages 267-269; Lesson 6, pages 270-273	Geometric properties of quadrilaterals related to diagonals is not addressed. See *Math Makes Sense 5* Student Text, Unit 3, Lesson 4 for angle properties of quadrilaterals.
E1.2 construct three-dimensional objects when given their top, front, and side views	Unit 3, Lesson 6, pages 102-105	
Location and Movement		
E1.3 plot and read coordinates in all four quadrants of a Cartesian plane, and describe the translations that move a point from one coordinate to another	Unit 7, Lesson 1, pages 248-251	Graphing in 4 quadrants of a Cartesian plane is not addressed. See *Math Makes Sense 8* Student Text, Unit 9, Lesson 9.7 for graphing in 4 quadrants on a coordinate grid.
E1.4 describe and perform combinations of translations, reflections, and rotations up to 360° on a grid, and predict the results of these transformations	Unit 7, Lesson 2, pages 252-255	
E2. Measurement		
The Metric System		
E2.1 measure length, area, mass, and capacity using the appropriate metric units, and solve problems that require converting smaller units to larger units, and vice versa	Unit 6, Lesson 8, pages 232-235; Lesson 9, pages 238-241	Measuring length and area are not addressed. See *Math Makes Sense 5* Student Text, Unit 9, Lessons 1, 2, 5, and 6 for measuring length and area.
Angles		
E2.2 use a protractor to measure and construct angles up to 360°, and state the relationship between angles that are measured clockwise and those that are measured counterclockwise	Unit 3, Lesson 1, pages 82-85	

E2.3 use the properties of supplementary angles, complementary angles, opposite angles, and interior and exterior angles to solve for unknown angle measures		Different types of angles are not addressed. See *Math Makes Sense 8* Student Text, Unit 7, Lesson 7.1 for supplementary angles, complementary angles, and opposite angles.
Area and Surface Area		
E2.4 determine the areas of trapezoids, rhombuses, kites, and composite polygons by decomposing them into shapes with known areas	Unit 9, Lesson 4, pages 352-354	The areas of trapezoids, kites, and composite polygons are not addressed. See *Math Makes Sense 7* Student Text, Unit 6, Lessons 6.3 and 6.4 for the areas of trapezoids and composite polygons.
E2.5 create and use nets to demonstrate the relationship between the faces of prisms and pyramids and their surface areas	Unit 3, Lesson 5, pages 98-101 Unit 6, Lesson 5, pages 220-223	
E2.6 determine the surface areas of prisms and pyramids by calculating the areas of their two-dimensional faces and adding them together	Unit 6, Lesson 5, pages 220-223	The surface areas of triangular prisms and pyramids are not addressed. See *Math Makes Sense 8* Student Text, Unit 3, Lesson 3.3 for the surface area of a triangular prism.
F. Financial Literacy		
F1. Money and Finances		
Money Concepts		
F1.1 describe the advantages and disadvantages of various methods of payment that can be used to purchase goods and services		Financial literacy is not addressed.
Financial Management		
F1.2 identify different types of financial goals, including earning and saving goals, and outline some key steps in achieving them		Financial literacy is not addressed.
F1.3 identify and describe various factors that may help or interfere with reaching financial goals		Financial literacy is not addressed.

Consumer and Civic Awareness		
F1.4 explain the concept of interest rates, and identify types of interest rates and fees associated with different accounts and loans offered by various banks and other financial institutions		Financial literacy is not addressed.
F1.5 describe trading, lending, borrowing, and donating as different ways to distribute financial and other resources among individuals and organizations		Financial literacy is not addressed.