

Correlation of *Math Makes Sense 3* to the new Ontario Curriculum

Ontario Grade 3 Curriculum	<i>Math Makes Sense 3</i> Student Text	Comments
B. Number		
B1. Number Sense		
Whole Numbers		
B1.1 read, represent, compose, and decompose whole numbers up to and including 1000, using a variety of tools and strategies, and describe various ways they are used in everyday life	Unit 1, Lesson 6, pages 21-24; Lesson 8, pages 28-30; Lesson 11, pages 39-41; Lesson 12, pages 42, 43; Lesson 13, pages 44-46; Unit Problem, pages 52, 53	
B1.2 compare and order whole numbers up to and including 1000, in various contexts	Unit 1, Lesson 4, pages 15-17; Lesson 10, pages 35-38	
B1.3 round whole numbers to the nearest ten or hundred, in various contexts	Unit 1, Lesson 14, pages 47-49	
B1.4 count to 1000, including by 50s, 100s, and 200s, using a variety of tools and strategies	Unit 1, Lesson 2, pages 9-11; Lesson 3, pages 12-14; Lesson 5, pages 18-20; Lesson 9, pages 31-34	Counting by 50s and 200s is not addressed.
B1.5 use place value when describing and representing multi-digit numbers in a variety of ways, including with base ten materials	Unit 1, Lesson 6, pages 21-24; Lesson 8, pages 28-30	
Fractions		
B1.6 use drawings to represent, solve, and compare the results of fair-share problems that involve sharing up to 20 items among 2, 3, 4, 5, 6, 8, and 10 sharers, including problems that result in whole numbers, mixed numbers, and fractional amounts	Unit 8, Lesson 1, pages 307-307; Lesson 2, pages 308-311; Lesson 3, pages 312-314; Lesson 4, pages 315-317; Lesson 5, pages 318-321; Lesson 6, pages 324-326; Lesson 7, pages 324-326; Unit Problem, pages 328, 329	

<p>B1.7 represent and solve fair-share problems that focus on determining and using equivalent fractions, including problems that involve halves, fourths, and eighths; thirds and sixths; and fifths and tenths</p>		<p>Equivalent fractions are not addressed. See <i>Math Makes Sense 4</i> Student Text, Unit 8, Lesson 5 for equivalent fractions.</p>
<p>B2. Operations</p>		
<p>Properties and Relationships</p>		
<p>B2.1 use the properties of operations, and the relationships between multiplication and division, to solve problems and check calculations</p>	<p>Unit 4, Lesson 1, pages 146-148; Lesson 2, pages 149-151; Lesson 3, pages 152-155; Lesson 4, pages 156-158; Lesson 5, pages 159-161; Lesson 6, pages 162-166; Lesson 8, pages 168-170; Lesson 9, pages 171-173; Lesson 10, pages 174-177; Lesson 11, pages 178-180</p>	
<p>Math Facts</p>		
<p>B2.2 recall and demonstrate multiplication facts of 2, 5, and 10, and related division facts</p>	<p>Unit 4, Lesson 3, pages 152-155; Lesson 4, pages 156-158; Lesson 10, pages 174-177; Lesson 11, pages 178-180</p>	
<p>Mental Math</p>		
<p>B2.3 use mental math strategies, including estimation, to add and subtract whole numbers that add up to no more than 1000, and explain the strategies used</p>	<p>Unit 2, Lesson 7, pages 74, 75; Lesson 8, pages 76, 77; Lesson 10, pages 80-82</p>	

Addition and Subtraction		
B2.4 demonstrate an understanding of algorithms for adding and subtracting whole numbers by making connections to and describing the way other tools and strategies are used to add and subtract	Unit 2, Lesson 1, pages 56-58; Lesson 2, pages 59-61; Lesson 3, pages 62-64; Lesson 4, pages 65-67; Lesson 5, pages 68, 69; Lesson 6, pages 70-73; Lesson 9, pages 78, 79; Lesson 11, pages 83-85; Lesson 12, pages 86-89; Lesson 13, pages 90-93; Lesson 14, pages 94-97	
B2.5 represent and solve problems involving the addition and subtraction of whole numbers that add up to no more than 1000, using various tools and algorithms	Unit 2, Lessons 1-14, pages 56-97	
Multiplication and Division		
B2.6 represent multiplication of numbers up to 10×10 and division up to $100 \div 10$, using a variety of tools and drawings, including arrays	Unit 4, Lesson 1, pages 146-148; Lesson 2, pages 149-151; Lesson 3, pages 152-155; Lesson 4, pages 156-158; Lesson 5, pages 159-161; Lesson 6, pages 162-165; Lesson 8, pages 168-170; Lesson 9, pages 171-173; Lesson 10, pages 174-177; Lesson 11, pages 178-180	
B2.7 represent and solve problems involving multiplication and division, including problems that involve groups of one half, one fourth, and one third, using tools and drawings	Unit 4, Lessons 1-6, 8-11, pages 146-165, 168-180 Unit 8, Lesson 3, pages 312-314; Lesson 4, pages 315-317 Lesson 6, pages 322, 323	

B2.8 represent the connection between the numerator of a fraction and the repeated addition of the unit fraction with the same denominator using various tools and drawings, and standard fractional notation	Unit 8, Lesson 5, pages 318-321	The connection between the numerator and repeated addition is not addressed.
B2.9 use the ratios of 1 to 2, 1 to 5, and 1 to 10 to scale up numbers and to solve problems		Ratios are not addressed. See <i>Math Makes Sense 6</i> Student Text, Unit 8, Lesson 9 for ratios.
C. Algebra		
C1. Patterns and Relationships		
Patterns		
C1.1 identify and describe repeating elements and operations in a variety of patterns, including patterns found in real-life contexts	Unit 4, Lesson 12, pages 181-183 Unit 10, Lesson 1, pages 372-374; Lesson 2, pages 375-377; Lesson 3, pages 378-381; Lesson 4, pages 382, 383; Lesson 5, pages 384-387; Lesson 6, pages 388-390; Lesson 7, pages 391-394	
C1.2 create and translate patterns that have repeating elements, movements, or operations using various representations, including shapes, numbers, and tables of values	Unit 4, Lesson 12, pages 181-183 Unit 10, Lesson 1, pages 372-374; Lesson 2, pages 375-377; Lesson 3, pages 378-381; Lesson 4, pages 382, 383; Lesson 5, pages 384-387; Lesson 6, pages 388-390; Unit Problem, pages 400, 401	

<p>C1.3 determine pattern rules and use them to extend patterns, make and justify predictions, and identify missing elements in patterns that have repeating elements, movements, or operations</p>	<p>Unit 10, Lesson 1, pages 372-374; Lesson 2, pages 375-377; Lesson 3, pages 378-381; Lesson 4, pages 382, 383; Lesson 5, pages 384-387; Lesson 6, pages 388-390</p>	
<p>C1.4 create and describe patterns to illustrate relationships among whole numbers up to 1000</p>	<p>Unit 1, Lesson 1, pages 6-8; Unit 2, Lesson 1, pages 56-58; Lesson 4, pages 65-67 Unit 4, Lesson 3, pages 152-155; Lesson 4, pages 156-158; Lesson 5, pages 159-161; Lesson 6, pages 162-165; Lesson 12, pages 181-184 Unit 10, Lesson 1, pages 372-374; Lesson 2, pages 375-377</p>	
<p>C2. Equations and Inequalities</p>		
<p>Variables</p>		
<p>C2.1 describe how variables are used, and use them in various contexts as appropriate</p>	<p>Unit 2, Lessons 1, 2, 3, 4, 5, pages 56-69 Unit 4, Lesson 2, pages 149-151; Lesson 5, pages 159-161; Lesson 9, pages 171-173; Lesson 10, pages 174-177; Lesson 11, pages 178-180</p>	<p>Symbols are used, not variables.</p>

Equalities and Inequalities		
C2.2 determine whether given sets of addition, subtraction, multiplication, and division expressions are equivalent or not		Identifying equivalent expressions is not addressed.
C2.3 identify and use equivalent relationships for whole numbers up to 1000, in various contexts	Unit 2, Lesson 1, pages 56-58; Lesson 3, pages 62-64	Using equivalent relationships for 2- and 3-digit numbers is not addressed.
C3. Coding		
Coding Skills		
C3.1 solve problems and create computational representations of mathematical situations by writing and executing code, including code that involves sequential, concurrent, and repeating events		Coding is not addressed.
C3.2 read and alter existing code, including code that involves sequential, concurrent, and repeating events, and describe how changes to the code affect the outcomes		Coding is not addressed.
D. Data		
D1. Data Literacy		
Data Collection and Organization		
D1.1 sort sets of data about people or things according to two or three attributes, using tables and logic diagrams, including Venn, Carroll, and tree diagrams, as appropriate	Unit 3, Lesson 4, pages 113-115 Unit 5, Lesson 1, pages 192-195; Lesson 2, pages 196-199	Sorting sets of data about people is not addressed. Tree diagrams and Carroll diagrams are not addressed.
D1.2 collect data through observations, experiments, and interviews to answer questions of interest that focus on qualitative and quantitative data, and organize the data using frequency tables	Unit 5, Lesson 8, pages 218-220; Lesson 9, pages 221-223; Unit Problem, pages 226, 227	

Data Visualization		
D1.3 display sets of data, using many-to-one correspondence, in pictographs and bar graphs with proper sources, titles, and labels, and appropriate scales	Unit 5, Lesson 5, pages 208-211; Lesson 6, pages 212-215; Lesson 8, pages 218-220; Lesson 9, pages 221-223; Unit Problem, pages 226, 227	
Data Analysis		
D1.5 determine the mean and identify the mode(s), if any, for various data sets involving whole numbers, and explain what each of these measures indicates about the data		The mean and mode are not addressed. See <i>Math Makes Sense 5</i> Student Text, Unit 5, Lesson 2 for mean and mode.
D1.5 analyse different sets of data presented in various ways, including in frequency tables and in graphs with different scales, by asking and answering questions about the data and drawing conclusions, then make convincing arguments and informed decisions	Unit 5, Lesson 3, pages 200-203; Lesson 4, pages 204-207; Lesson 5, pages 208-211; Lesson 6, pages 212-215; Lesson 8, pages 218-220; Lesson 9, pages 221-223; Unit Problem, pages 226, 227	
D2. Probability		
Probability		
D2.1 use mathematical language, including the terms “impossible”, “unlikely”, “equally likely”, “likely”, and “certain”, to describe the likelihood of events happening, and use that likelihood to make predictions and informed decisions	Unit 11, Lesson 1, pages 404, 405; Lesson 2, pages 406-409; Lesson 3, pages 410-413; Lesson 4, pages 414, 415	
D2.2 make and test predictions about the likelihood that the mean and the mode(s) of a data set will be the same for data collected from different populations		Making and testing predictions about the mean and modes is not addressed.

E. Spatial Sense		
E1. Geometric and Spatial Reasoning		
Geometric Reasoning		
E1.1 sort, construct, and identify cubes, prisms, pyramids, cylinders, and cones by comparing their faces, edges, vertices, and angles	Unit 3, Lesson 2, pages 107-109; Lesson 3, pages 110-112; Lesson 8, pages 124-127; Lesson 9, pages 128-131; Lesson 10, pages 132-134	
E1.2 compose and decompose various structures, and identify the two-dimensional shapes and three-dimensional objects that these structures contain	Lesson 11, pages 135-137; Unit Problem, pages 140, 141	
E1.3 identify congruent lengths, angles, and faces of three-dimensional objects by mentally and physically matching them, and determine if the objects are congruent	Unit 3, Lesson 5, pages 116-118; Lesson 10, pages 132-134; Lesson 11, pages 135-137	
Location and Movement		
E1.4 give and follow multi-step instructions involving movement from one location to another, including distances, and half- and quarter-turns	Unit 7, Lesson 1, pages 276-279; Lesson 4, pages 286-289	
E2. Measurement		
Length, Mass, and Capacity		
E2.1 use appropriate units of length to estimate, measure, and compare the perimeters of polygons and curved shapes, and construct polygons with a given perimeter	Unit 9, Lesson 4, pages 345-347; Lesson 5, pages 348-350; Lesson 9, pages 361-363	Perimeters of curved shapes are not addressed. See <i>Math Makes Sense 5</i> Student Text, Unit 9, Lesson 4 for the perimeter of a curved shape.
E2.2 explain the relationships between millimetres, centimetres, metres, and kilometres as metric units of length, and use benchmarks for these units to estimate lengths	Unit 9, Lesson 1, pages 334-337; Lesson 2, pages 338-341; Lesson 3, pages 342-344	Millimetres are not addressed. See <i>Math Makes Sense 4</i> Student Text, Unit 9, Lesson 2 for measuring in millimetres.

E2.3 use non-standard units appropriately to estimate, measure, and compare capacity, and explain the effect that overfilling or underfilling, and gaps between units, have on accuracy		Measuring capacity in non-standard units is not addressed. See <i>Math Makes Sense 2</i> Teacher Guide, Lessons 1, 2, and 3 for measuring capacity in non-standard units.
E2.4 compare, estimate, and measure the mass of various objects, using a pan balance and non-standard units		Measuring mass in non-standard units is not addressed. See <i>Math Makes Sense 2</i> Teacher Guide, Lessons 4 and 5 for measuring mass in non-standard units.
E2.5 use various units of different sizes to measure the same attribute of a given item, and demonstrate that even though using different-sized units produces a different count, the size of the attribute remains the same	Unit 9, Lesson 7, pages 355-357	
Time		
E2.6 use analog and digital clocks and timers to tell time in hours, minutes, and seconds	Unit 6, Lesson 2, pages 233-236;	Using timers to tell times is not addressed.
Area		
E2.7 compare the areas of two-dimensional shapes by matching, covering, or decomposing and recomposing the shapes, and demonstrate that different shapes can have the same area	Unit 9, Lesson 7, pages 355-357; Lesson 8, pages 358-360; Lesson 9, pages 361-363	
E2.8 use appropriate non-standard units to measure area, and explain the effect that gaps and overlaps have on accuracy	Unit 9, Lesson 7, pages 355-357; Lesson 8, pages 358-360; Lesson 9, pages 361-363	
E2.9 use square centimetres (cm ²) and square metres (m ²) to estimate, measure, and compare the areas of various two-dimensional shapes, including those with curved sides		Measuring area in metric units is not addressed. See <i>Math Makes Sense 4</i> Student Text, Unit 9, Lessons 9, 10, and 11 for estimating and measuring area in square centimetres and square metres.

F. Financial Literacy		
F1. Money and Finances		
Money Concepts		
F1.1 estimate and calculate the change required for various simple cash transactions involving whole-dollar amounts and amounts less than one dollar	Unit 6, Lesson 5, pages 244-246; Lesson 6, pages 247-249; Lesson 7, pages 250, 251; Lesson 8, pages 252, 253; Lesson 9, pages 254-257	