### STRAND: NUMBER

General Outcome: Develop number sense.			Use Student Pages and Investigations Selectively
Grade 2 Prescribed Learning Outcomes	MMS 2 Meets	Exceeds	Additional Notes
<ul> <li>A1 Say the number sequence from 0 to 100 by:</li> <li>(a) 2s, 5s and 10s, forward AND BACKWARD, USING STARTING POINTS THAT ARE MULTIPLES OF 2, 5 AND 10 RESPECTIVELY</li> <li>(b) 10S USING STARTING POINTS FROM 1 TO 9</li> <li>(c) 2s starting from 1.</li> </ul>	Unit 2 Lesson 3 (to 50 only) Unit 3 Lesson 6 money amounts to 1 dollar	Unit 2: Lessons 9, 10 beyond 100; starting points that are not multiples of 5 and 10	
A2 Demonstrate if a number (up to 100) is even or odd.	Unit 2 Lesson 6 limited		Even and odd are referred to in the context of using doubles to find sums up to 18 only. Use student page 46 from Unit 2, Lesson 9 as well (the rest of the lesson exceeds outcomes).
A3 DESCRIBE ORDER OR RELATIVE POSITION USING ORDINAL NUMBERS (1 <sup>ST</sup> TO 10TH).			See MMS 1 Unit 3 Lesson 2.
A4 Represent and describe concretely, pictorially and symbolically numbers to 100.	Unit 2 Launch, Lessons 1, 2, 11 Unit 3 Lesson 6, 7 Unit 7 Launch, Lessons 2 to 5, 7		See MMS 1 Unit 3 Lessons 5 and 6 (money). Provide opportunities for students to <i>represent a number using expressions (e.g.</i> 24+6, 15+15, 40 – 10).
A5 Compare and order numbers up to 100.	Unit 2 Lessons 3, 8		Provide opportunities for students to identify errors in a given ordered sequence or hundred chart.

STRAND: NUMBER (continued) General Outcome: Develop number sense. Use Student Pages and Investigations Selectively			
Grade 2 Prescribed Learning Outcomes	MMS 2 Meets	Exceeds	Additional Notes
A6 Estimate quantities to 100 using referents.	<b>Unit 2</b> Lessons 2, 7, 11		See MMS 1 Unit 7 Lesson 3 and Unit 10 Lesson 3 for estimating quantities to 50. Provide opportunities for students to <i>select between 2 possible estimates for a given quantity and</i> <i>explain the choice</i> .
<b>A7</b> Illustrate, concretely and pictorially, the meaning of place value for numerals to 100.	Unit 7 Lesson 1 limited		See MMS 1 Unit 10.
<b>A8</b> DEMONSTRATE AND EXPLAIN THE EFFECT OF ADDING ZERO TO OR SUBTRACTING ZERO FROM ANY NUMBER.			
<ul> <li>A9 Demonstrate an understanding of addition (limited to 1 &amp; 2-digit numerals) with answers to 100 &amp; the corresponding subtraction by:         <ul> <li>(a) using personal strategies for adding and subtracting with and without the support of manipulatives</li> <li>(b) creating and solving problems in contexts that involve addition and subtraction</li> <li>(c) EXPLAINING THAT THE ORDER NUMBERS ARE ADDED DOES NOTAFFECT THE SUM</li> <li>(d) EXPLAINING THAT THE ORDER NUMBERS ARE SUBTRACTED MAY AFFECT THE DIFFERENCE.</li> </ul> </li> </ul>	Unit 4 Lessons 2 to 8 Unit 7 Lessons 2 to 7		Supplement with additional activities involving <i>missing addends and minuends</i> . Unit 4 and 7 should be taught in conjunction. Personal strategies include invented strategies as well as standard algorithms. Standard algorithms should be introduced as personal strategies and should not be assessed in isolation.
A10 Apply mental mathematics strategies, such as: (a) using doubles (b) making 10 (c) ONE MORE, ONE LESS (d) TWO MORE, TWO LESS (e) building on a known double (f) addition for subtraction to determine basic addition facts to 18 and related subtraction facts.	Unit 2 Lessons 4 to 6, 11 Unit 4 Launch, Lesson 1	Unit 10 multiplication, division and fractions	Prior knowledge for strategies c and d are assumed. No direct instruction is included.

### STRAND: STATISTICS & PROBABILITY (DATA ANALYSIS)

General Outcome: Collect, display and analyze data to solve problems. Use Student Pages and Investigations Selectively

Grade 2 Prescribed Learning Outcomes	MMS 2 Meets	Exceeds	Additional Notes
D1 GATHER AND RECORD DATA ABOUT SELF AND OTHERS TO ANSWER QUESTIONS.			See MMS 1 Unit 5 Launch, Lessons 3, 4, 6. Probability outcomes begin in grade 5.
<b>D2</b> CONSTRUCT AND INTERPRET CONCRETE GRAPHS AND PICTOGRAPHS TO SOLVE PROBLEMS.			See MMS 1 Unit 5 Lessons 1, 2, 6.

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STRAND: PATTERNS AND RELATIONS (PATTERNS) General Outcome: Use patterns to describe the world and solve problems.			
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B1 Demonstrate an understanding of repeating patterns (three	Unit 1 Launch, Lessons 2 to		The focus is on 2 to 4 elements. Provide additional activities with 5 elements.
to FIVE elements) by:	5		
(a) describing (b) extending (c) comparing (d) creating			
patterns using manipulatives, diagrams, sounds, and actions.			
B2 DEMONSTRATE UNDERSTANDING OF INCREASING PATTERNS BY:			Increasing patterns are limited to counting patterns in Unit 2.
(a) DESCRIBING (b) REPRODUCING			····· 51-···· 51-···· 51-····
(c) EXTENDING (d) CREATING			
PATTERNS USING MANIPULATIVES, DIAGRAMS, SOUNDS			
AND ACTIONS (NUMBERS TO 100).			
<b>STRAND: PATTERNS &amp; RELATIO</b>	<b>NS (VARIABLES 8</b>		IONS)
General Outcome: Represent algebr			
<b>B3</b> DEMONSTRATE AND EXPLAIN THE MEANING OF EQUALITY			
AND INEQUALITY BY USING MANIPULATIVES AND			
DIAGRAMS (0 TO 100).			
B4 RECORD EQUALITIES AND INEQUALITIES SYMBOLICALLY			
USING THE EQUAL SYMBOL OR THE NOT EQUAL SYMBOL.			

#### **STRAND: SHAPE AND SPACE (MEASUREMENT)**

#### General Outcome: Use direct or indirect measurement to solve problems. Use Student Pages and Investigations Selectively

Grade 2 Prescribed Learning Outcomes	MMS 2 Meets	Exceeds	Additional Notes	
<b>C1</b> Relate the number of days to a week and the number of months to a year in a problem-solving context.	Unit 3 Lesson 4 (limited)	Unit 3 Launch Lessons 1 to 3, 5, 8 telling time, money, temperature	Temperature can be integrated with science outcomes.	
<b>C2</b> Relate the size of a unit of measure to the number of units (limited to non-standard units) used to measure length and mass (weight).	Unit 8 Lesson 1 Unit 11 Lesson 5		See MMS 1 Unit 8 Lessons 4, 7 (Part 2).	
C3 Compare and order objects by length, height, distance around and mass (weight) using non-standard units, and make statements of comparison.	Unit 8 Lesson 1 Unit 11 Launch, Lessons 4, 5, 6 (part 2)	Unit 11 Lessons 1 to 3, 6 (part 1) capacity	See MMS 1 Unit 8 Lessons 2, 4, 5, 7 (part 2).	
<ul> <li>C4 Measure length to the nearest non-standard unit by:</li> <li>(a) using multiple copies of a unit</li> <li>(b) using a single copy of a unit (iteration process).</li> </ul>	Unit 8 Launch	Unit 8 Lessons 2 to 9 cm, m, area	See MMS 1 Unit 8 Lessons 2, 4.	
<b>C5</b> DEMONSTRATE THAT CHANGING THE ORIENTATION OF AN OBJECT DOES NOT ALTER MEASUREMENTS OF ITS ATTRIBUTES.				
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 Sort 2-D shapes & 3-D objects using two attributes, and explain the sorting rule.	<b>Unit 1</b> Launch, Lesson 1 limited	Unit 6 Unit 9 3-D and 2-D geometry;	Unit 6 and Unit 9 meet grade 3 outcomes.	
<ul> <li>C7 DESCRIBE, COMPARE, CONSTRUCT 3-D OBJECTS INCLUDING:</li> <li>(a) CUBES</li> <li>(b) SPHERES</li> <li>(c) CONES</li> <li>(d) CYLINDERS</li> <li>(e) PYRAMIDS.</li> </ul>		naming polygons; prisms; sorting according to		
C8       DESCRIBE, COMPARE, CONSTRUCT 2-D SHAPES         INCLUDING:       (a) TRIANGLES         (a) TRIANGLES       (b) SQUARES         (c) RECTANGLES       (d) CIRCLES.		faces, edges, vertices; symmetry		
C9 IDENTIFY 2-D SHAPES AS PARTS OF 3-D OBJECTS IN THE				

ENVIRONMENT.