WNCP B.C. KINDERGARTEN, GRADE 1 & 2 MATHEMATICS AT A GLANCE

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

STRAND: NUMBER

General Outcome: Develop number sense.

K Prescribed Learning Outcomes	Grade 1 Prescribed Learning Outcomes	Grade 2 Prescribed Learning Outcomes
A1 Say the number sequence by 1s starting anywhere from 1 to 10 and from 10 to 1.	**A1** Say the number sequence, 0 to 100, by: **(a)** 1s forward and backward between any two given numbers **(b)** 2s to 20, forward starting at 0 **(c)** 5s and 10s to 100, forward starting at 0.	**A1** Say the number sequence from 0 to 100 by: **(a)** 2s, 5s and 10s, forward & backward, using starting points that are multiples of 2, 5 & 10 **(b)** 10s using starting points from 1 to 9 **(c)** 2s starting from 1.
A2 Recognize, at a glance, and name familiar arrangements of 1 to 5 objects or dots.	**A2** Recognize at a glance, and name familiar arrangements of 1 to 10 objects or dots.	**A2** Demonstrate if a number (up to 100) is even or odd.
A3 Relate a numeral, 1 to 10, to its respective quantity.	**A3** Demonstrate an understanding of counting by: **(a)** indicating the last number said identifies "how many" **(b)** showing that any set has only one count **(c)** using the counting on strategy **(d)** using parts or equal groups to count sets.	**A3** Describe order or relative position using ordinal numbers (1st to 10th).
A4 Represent and describe numbers 2 to 10, concretely and pictorially.	**A4** Represent and describe numbers to 20 concretely, pictorially and symbolically.	**A4** Represent and describe numbers to 100, concretely, pictorially and symbolically.
A5 Compare quantities, 1 to 10, using one-to-one correspondence.	**A5** Compare sets containing up to 20 elements to solve problems using: **(a)** referents **(b)** one-to-one correspondence.	**A5** Compare and order numbers up to 100.
May be explored informally but do not assess	**A6** Estimate quantities to 20 by using referents.	**A6** Estimate quantities to 100 using referents.
	A7 Demonstrate, concretely and pictorially, how a given number can be represented by a variety of equal groups with and without singles.	**A7** Illustrate, concretely and pictorially, the meaning of place value for numerals to 100.
	A8 Identify the number, up to 20, that is one more, two more, one less and two less than a given number.	**A8** Demonstrate and explain the effect of adding zero to or subtracting zero from any number.
	A9 Demonstrate an understanding of addition of numbers with answers to 20 and their corresponding subtraction facts, concretely, pictorially & symbolically, by: **(a)** using familiar and mathematical language to describe additive and subtractive actions from their experience **(b)** creating and solving problems in context that involve addition and subtraction **(c)** modelling addition and subtraction using a variety of concrete and visual representations, and recording the process symbolically.	**A9** Demonstrate an understanding of addition (limited to 1 and 2-digit numerals) with answers to 100 and the corresponding subtraction by: **(a)** using personal strategies for adding and subtracting with and without the support of manipulatives **(b)** creating and solving problems that involve addition and subtraction **(c)** explaining the order in which numbers are added does not affect the sum **(d)** explaining the order in which numbers are subtracted may affect the difference.
	A10 Communicate and use mental mathematics strategies (memorization not intended), such as: **(a)** counting on & counting back **(b)** making 10 **(c)** doubles **(d)** using addition to subtract to determine the basic addition facts to 18 and related subtraction facts.	**A10** Apply mental mathematics strategies, such as: **(a)** using doubles **(b)** making 10 **(c)** 1 more, 1 less **(d)** 2 more, 2 less **(e)** building on a known double **(f)** addition for subtraction to determine basic addition facts to 18 and related subtraction facts.

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STRAND: STATISTICS & PROBABILITY (DATA ANALYSIS)

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

K Prescribed Learning Outcomes	Grade 1 Prescribed Learning Outcomes	Grade 2 Prescribed Learning Outcomes
	May be explored informally but do not assess	**D1** Gather and record data about self and others to answer questions.
		D2 Construct and interpret concrete graphs and pictographs to solve problems.

STRAND: PATTERNS AND RELATIONS (PATTERNS)

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

B1 Demonstrate an understanding of repeating patterns (two or three elements) by: **(a)** identifying **(b)** reproducing **(c)** extending **(d)** creating patterns, using manipulatives, diagrams, sounds and actions.	**B1** Demonstrate an understanding of repeating patterns (two to four elements) by: **(a)** describing **(b)** reproducing **(c)** extending **(d)** creating patterns using manipulatives, diagrams, sounds & actions.	**B1** Demonstrate an understanding of repeating patterns (three to five elements) by: **(a)** describing **(b)** extending **(c)** comparing **(d)** creating using manipulatives, diagrams, sounds and actions.
May be explored informally but do not assess	**B2** Translate repeating patterns from one representation to another.	**B2** Demonstrate understanding of increasing patterns by: **(a)** describing **(b)** reproducing **(c)** extending **(d)** creating patterns using manipulatives, diagrams, sounds and actions (numbers to 100).

STRAND: PATTERNS & RELATIONS (VARIABLES & EQUATIONS)

General Outcome: Represent algebraic expressions in multiple ways.

May be explored informally but do not assess	**B3** Describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20).	**B3** Demonstrate and explain the meaning of equality and inequality by using manipulatives and diagrams (0 to 100).
	B4 Record equalities using the equal symbol *(concretely, pictorially and symbolically).*	**B4** Record equalities and inequalities symbolically using the equal symbol or the not equal symbol.

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STRAND: SHAPE AND SPACE (MEASUREMENT)

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

K Prescribed Learning Outcomes	Grade 1 Prescribed Learning Outcomes	Grade 2 Prescribed Learning Outcomes
	May be explored informally but do not assess	**C1** Relate the number of days to a week and the number of months to a year in a problem-solving context.
C1 Use direct comparison to compare two objects based on a single attribute, such as length (height), mass (weight), and volume (capacity).	**C1** Demonstrate an understanding of measurement as a process of comparing by: **(a)** identifying attributes that can be compared **(b)** ordering objects **(c)** making statements of comparison **(d)** filling, covering or matching.	**C2** 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). **C3** Compare and order objects by length, height, distance around and mass (weight) using non-standard units, and make statements of comparison. **C4** Measure length to the nearest non-standard unit by: **(a)** using multiple copies of a unit **(b)** using a single copy of a unit (iteration process). **C5** 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.

C2 Sort 3-D objects using a single attribute.	**C2** Sort 3-D objects and 2-D shapes using one attribute, and explain the sorting rule.	**C6** Sort 2-D shapes and 3-D objects using two attributes, and explain the sorting rule.
C3 Build and describe 3-D objects.	**C3** Replicate composite 2-D shapes and 3-D objects.	**C7** Describe, compare, construct 3-D objects including: **(a)** cubes **(b)** spheres **(c)** cones **(d)** cylinders **(e)** pyramids. **C8** Describe, compare, construct 2-D shapes including: **(a)** triangles **(b)** squares **(c)** rectangles **(d)** circles.
May be explored informally but do not assess	**C4** Compare 2-D shapes to parts of 3-D objects in the environment.	**C9** Identify 2-D shapes as parts of 3-D objects in the environment.