

WNCP B.C. MATHEMATICS AT A GLANCE OVERVIEW – GRADE 2

Mathematical Processes

C = Communication

PS = Problem Solving

V = Visualization

R = Reasoning

CN = Connections

T = Technology

ME = Mental Mathematics and Estimation

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

| STRAND: NUMBER | | Mathematical Processes |
|--|---|-------------------------------|
| General Outcome: Develop number sense | | |
| <i>It is expected that students will:</i> | | |
| A1 | Say the number sequence from 0 to 100 by: (a) 2s, 5s and 10s, forward and backward, using starting points that are multiples of 2, 5 and 10 respectively (b) 10s using starting points from 1 to 9 (c) 2s starting from 1. | C CN ME R |
| A2 | Demonstrate if a number (up to 100) is even or odd (<i>concretely, pictorially & symbolically</i>). | C CN PS R |
| A3 | Describe order or relative position using ordinal numbers (1st to 10th). | C CN R |
| A4 | Represent and describe numbers to 100, concretely, pictorially & symbolically. | C CN V |
| A5 | Compare and order numbers up to 100. | C CN RV |
| A6 | Estimate quantities to 100 using referents. | C ME PS R |
| A7 | Illustrate, concretely & pictorially, the meaning of place value for numerals to 100. | C CN RV |
| A8 | Demonstrate and explain the effect of adding zero to or subtracting zero from any number. | C R |
| 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 that the order in which numbers are added does not affect the sum (d) explaining that the order in which numbers are subtracted may affect the difference. | C CN ME PS RV |
| 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. | C CN ME RV |

| STRAND: STATISTICS & PROBABILITY (DATA ANALYSIS) | | Mathematical Processes |
|--|--|-------------------------------|
| General Outcome: Collect, display and analyze data to solve problems. | | |
| D1 | Gather and record data about self and others to answer questions. | C CN PS V |
| D2 | Construct and interpret concrete graphs and pictographs to solve problems. | C CN PS RV |

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| STRAND: PATTERNS AND RELATIONS (PATTERNS) General Outcome: Use patterns to describe the world and solve problems. | | Mathematical Processes |
|---|---|------------------------|
| B1 | Demonstrate an understanding of repeating patterns (3 to 5 elements) by: (a) describing (b) extending (c) comparing (d) creating patterns using manipulatives, diagrams, sounds and actions. | C CN PS RV |
| B2 | Demonstrate an understanding of increasing patterns by: (a) describing (b) reproducing (c) extending (d) creating patterns using manipulatives, diagrams, sounds and actions (numbers to 100). | C CN PS RV |
| STRAND: PATTERNS & RELATIONS (VARIABLES & EQUATIONS) General Outcome: Represent algebraic expressions in multiple ways. | | Mathematical Processes |
| B3 | Demonstrate and explain the meaning of equality and inequality by using manipulatives and diagrams (0 to 100). | C CN RV |
| B4 | Record equalities and inequalities symbolically using the equal symbol or the not equal symbol (<i>with concrete representations</i>). | C CN RV |

| STRAND: SHAPE AND SPACE (MEASUREMENT) General Outcome: Use direct or indirect measurement to solve problems. | | Mathematical Processes |
|---|--|------------------------|
| C1 | Relate the number of days to a week and the number of months to a year in a problem-solving context. | C CN PS R |
| 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). | C CN ME RV |
| C3 | Compare and order objects by length, height, distance around and mass (weight) using non-standard units, and make statements of comparison. | C CN ME RV |
| 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). | C ME RV |
| C5 | Demonstrate that changing the orientation of an object does not alter the measurements of its attributes. | C RV |
| 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. | | Mathematical Processes |
| C6 | Sort 2-D shapes & 3-D objects using two attributes, and explain the sorting rule. | C CN RV |
| C7 | Describe, compare, construct 3-D objects including: (a) cubes (b) spheres (c) cones (d) cylinders (e) pyramids. | C CN RV |
| C8 | Describe, compare, construct 2-D shapes including: (a) triangles (b) squares (c) rectangles (d) circles. | C CN RV |
| C9 | Identify 2-D shapes as parts of 3-D objects in the environment. | C CN RV |