Mathematics Specific Learning Outcomes **GRADE 2**

[C]	Communication	
[CN]	Connections	
[ME]	Mental Mathematics and Estimation	
[PS]	Problem Solving	
[R]	Reasoning Estimation	
[T]	Technology	
[V]	Visualization	

NUMBER

General Outcome
Develop number sense.

2.N.1. Say the number sequence from 0 to 100 by
- 2s, 5s, and 10s, forward and backward, using starting points that are multiples of 2, 5, and 10 respectively
- 10s using starting points from 1 to 9
- 2s starting from 1

[C, CN, ME, R]

2.N.2. Demonstrate if a number (up to 100) is even or odd.
[C, CN, PS, R]

2.N.3. Describe order or relative position using ordinal numbers.
[C, CN, R]

2.N.4. Represent and describe numbers to 100, concretely, pictorially, and symbolically.
[C, CN, V]

2.N.5. Compare and order numbers up to 100.
[C, CN, R, V]

2.N.6. Estimate quantities to 100 using referents.
[C, ME, PS, R]

2.N.7. Illustrate, concretely and pictorially, the meaning of place value for numbers to 100.
[C, CN, R, V]

2.N.8. Demonstrate and explain the effect of adding zero to or subtracting zero from any number.
[C, R]

2.N.9. Demonstrate an understanding of addition (limited to 1- and 2-digit numerals) with answers to 100 and the corresponding subtraction by
- using personal strategies for adding and subtracting with and without the support of manipulatives
- creating and solving problems that involve addition and subtraction
- explaining that the order in which numbers are added does not affect the sum
- explaining that the order in which numbers are subtracted may affect the difference

[C, CN, ME, PS, R, V]

2.N.10. Apply mental mathematics strategies, including
- using doubles
- making 10
- using one more, one less
- using two more, two less
- building on a known double
- using addition for subtraction

to develop recall of basic addition facts to 18 and related subtraction facts.
[C, CN, ME, R, V]

> Recall of facts to 10, doubles to 9 + 9, and related subtraction facts is expected by the end of Grade 2.

PATTERNS AND RELATIONS

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

2.RR.1. Predict an element in a repeating pattern using a variety of strategies.
[C, CN, PS, R, V]

2.PR.2. Demonstrate an understanding of increasing patterns by
- describing
- reproducing
- extending
- creating

patterns using manipulatives, diagrams, sounds, and actions (numbers to 100).
[C, CN, PS, R, V]

General Outcome
Represent algebraic expressions in multiple ways.

2.PR.3. Demonstrate and explain the meaning of equality and inequality by using manipulatives and diagrams (0 to 100).
[C, CN, R, V]

2.PR.4. Record equalities and inequalities symbolically using the equal symbol or the not-equal symbol.
[C, CN, R, V]

SHAPE AND SPACE

General Outcome
Use direct or indirect measurement to solve problems.

2.SS.1. 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]

2.SS.2. 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, R, V]

2.SS.3. Compare and order objects by length, height, distance around, and mass (weight) using non-standard units, and make statements of comparison.
[C, CN, ME, R, V]

2.SS.4. Measure length to the nearest non-standard unit by
- using multiple copies of a unit
- using a single copy of a unit (iteration process)

[C, ME, R, V]

2.SS.5. Demonstrate that changing the orientation of an object does not alter the measurements of its attributes.
[C, R, V]

General Outcome
Describe the characteristics of 3-D objects and 2-D shapes, and analyze the relationships among them.

2.SS.6. Sort 2-D shapes and 3-D objects using two attributes, and explain the sorting rule.
[C, CN, R, V]

2.SS.7. Describe, compare, and construct 3-D objects, including
- cubes
- spheres
- cones
- cylinders
- prisms
- pyramids

[C, CN, R, V]

2.SS.8. Describe, compare, and construct 2-D shapes including
- triangles
- squares
- rectangles
- cirlces

[C, CN, R, V]

2.SS.9. Identify 2-D shapes as parts of 3-D objects in the environment.
[C, CN, R, V]

STATISTICS AND PROBABILITY

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

2.SP.1. Gather and record data about self and others to answer questions.
[C, CN, PS, V]

2.SP.2. Construct and interpret concrete graphs and pictographs to solve problems.
[C, CN, PS, R, V]