Mathematics Specific Learning Outcomes **GRADE 1**

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

NUMBER

General Outcome
Develop number sense.

1.N.1. Say the number sequence by
- 1s forward and backward between any two given numbers (0 to 100)
- 2s to 30, forward starting at 0
- 5s and 10s to 100, forward starting at 0

[C, CN, ME, V]

1.N.2. Subitize and name familiar arrangements of 1 to 10 dots (or objects).
[C, CN, ME, V]

1.N.3. Demonstrate an understanding of counting by
- using the counting-on strategy
- using parts or equal groups to count sets

[C, CN, ME, R, V]

1.N.4. Represent and describe numbers to 20, concretely, pictorially, and symbolically.
[C, CN, V]

1.N.5. Compare and order sets containing up to 20 elements to solve problems using
- referents
- one-to-one correspondence

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

1.N.6. Estimate quantities to 20 by using referents.
[C, ME, PS, R, V]

1.N.7. Demonstrate, concretely and pictorially, how a number, up to 30, can be represented by a variety of equal groups with and without singles.
[C, R, V]

1.N.8. Identify the number, up to 20, that is one more, two more, one less, and two less than a given number
[C, CN, ME, R, V]

1.N.9. Demonstrate an understanding of addition of numbers with answers to 20 and their corresponding subtraction facts, concretely, pictorially, and symbolically, by
- using familiar and mathematical language to describe additive and subtractive actions from their experience
- creating and solving problems in context that involve addition and subtraction
- modelling addition and subtraction using a variety of concrete and visual representations, and recording the process symbolically

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

1.N.10. Describe and use mental mathematics strategies, including
- counting on, counting back
- using one more, one less
- making 10
- starting from known doubles
- using addition to subtract

to determine the basic addition and related subtraction facts to 18.
[C, CN, ME, PS, R, V]

Recall of one more and one less, complementary (compatible) numbers that add up to 5 and 10, doubles (up to 5 + 5), and related subtraction facts is expected by the end of Grade 1.

PATTERNS AND RELATIONS

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

1.PR.1. Demonstrate an understanding of repeating patterns (two to four elements) by
- describing
- reproducing
- extending
- creating

patterns using manipulatives, diagrams, sounds, and actions.
[C, PS, R, V]

1.PR.2. Translate repeating patterns from one representation to another.
[C, R, V]

General Outcome
Represent algebraic expressions in multiple ways.

1.PR.3. Describe equality as a balance and inequality as an imbalance, concretely and pictorially (0 to 20).
[C, CN, R, V]

1.PR.4. Record equalities using the equal symbol (0 to 20).
[C, CN, PS, V]

SHAPE AND SPACE

General Outcome
Use direct or indirect measurement to solve problems.

1.SS.1. Demonstrate an understanding of measurement as a process of comparing by
- identifying attributes that can be compared
- ordering objects
- making statements of comparison
- filling, covering, or matching

[C, CN, PS, R, V]

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

1.SS.2. Sort 3-D objects and 2-D shapes using one attribute, and explain the sorting rule.
[C, CN, R, V]

1.SS.3. Replicate composite 2-D shapes and 3-D objects.
[CN, PS, V]

1.SS.4. Compare 2-D shapes to parts of 3-D objects in the environment.
[C, CN, V]

STATISTICS AND PROBABILITY