**Numeration**

**Say the number sequence forward and backward from 0 to 1000 by:**

* 5s, 10s, or 100s, using any starting point
* 3s using starting points that are multiples of 3
* •4s using starting points that are multiples of 4
* 25s, using starting points that are multiples of 25.

**Represent and describe numbers to 1000, concretely, pictorially and symbolically.**

* Compare and order numbers to 1000.
* Estimate quantities less than 1000 using referents.
* Illustrate, concretely and pictorially, the meaning of place value for numerals to 1000.

**Describe and apply mental mathematics strategies for adding two 2-digit numerals, such as:**

* + adding from left to right
  + taking one addend to the nearest multiple of ten and then compensating
  + using doubles.

**Describe and apply mental mathematics strategies for subtracting two 2-digit numerals, such as:**

* + taking the subtrahend to the nearest multiple of ten and then compensating
  + thinking of addition
  + using doubles.

**Apply estimation strategies to predict sums and differences of two 2-digit numerals in a problem solving context.**

**Demonstrate an understanding of addition and subtraction of numbers with answers to 1000 (limited to 1, 2 and 3-digit numerals) by:**

* + using personal strategies for adding and subtracting with and without the support manipulatives;
  + creating and solving problems that involve addition and subtraction concretely, pictorially and symbolically.

**Apply mental mathematics strategies and number properties, such as:**

* + using doubles; making 10;
  + using the commutative property;
  + using the property of zero;
  + thinking addition for subtraction to determine answers for basic addition facts to 18 and related subtraction facts.

**Demonstrate an understanding of multiplication to 5 × 5 by:**

* + representing and explaining multiplication using equal grouping and arrays
  + creating and solving problems in context that involve multiplication
  + modelling multiplication using concrete and visual representations, and recording the process symbolically
  + relating multiplication to repeated addition
  + relating multiplication to division.

**Demonstrate an understanding of division by:**

* + representing and explaining division using equal sharing and equal grouping
  + creating and solving problems in context that involve equal sharing and equal grouping
  + modelling equal sharing and equal grouping using concrete and visual representations, and recording the process symbolically
  + relating division to repeated subtraction
  + relating division to multiplication.(limited to division related to multiplication facts up to 5 × 5),

**Demonstrate an understanding of fractions by:**

* + explaining that a fraction represents a part of a whole;
  + describing situations in which fractions are used;
  + comparing fractions of the same whole with like denominators.

**Patterns and Relations**

**Demonstrate an understanding of increasing patterns; and**

**Demonstrate an understanding of decreasing patterns by:**

* + describing;
  + extending;
  + comparing;
  + creating…patterns using manipulatives, diagrams, sounds and actions (numbers to 1000).

**Solve one-step addition and subtraction equations involving symbols representing an unknown number.**

**Shape and Space**

**Relate the passage of time to common activities using non-standard and standard units (minutes, hours, days, weeks, months, years).**

**Relate the number of seconds to a minute, the number of minutes to an hour and the number of days to a month in a problem solving context.**

**Demonstrate an understanding of measuring length (cm, m) by:**

* + selecting and justifying referents for the units cm and m
  + modelling and describing the relationship between the units cm and m
  + estimating length using referents
  + measuring and recording length, width and height

**Demonstrate an understanding of measuring mass (g, kg) by:**

* + selecting and justifying referents for the units g and kg
  + modelling and describing the relationship between the units g and kg
  + estimating mass using referents
  + measuring and recording mass.

**Demonstrate an understanding of perimeter of regular and irregular shapes by:**

* + estimating perimeter, using referents for cm or m;
  + measuring and recording perimeter (cm, m);
  + constructing different shapes for a given perimeter (cm, m); to demonstrate that many shapes are possible for a perimeter.

**Describe 3-D objects according to the shape of the faces, and the number of edges and vertices.**

**Sort regular and irregular polygons, including:**

* + triangles
  + quadrilaterals
  + pentagons
  + hexagons
  + octagons,,,according to the number of sides.

**Statistics and Probability**

**Collect first-hand data and organize it using:**

* + tally marks
  + line plots
  + charts
  + lists…to answer questions.

**Construct, label and interpret bar graphs to solve problems.**