



Long Range Grade 2 Mathematics Plan

Term 3

Number Sense and Numeration

Understanding Number:

- Represent and explain halves, thirds, and quarters as part of a whole and part of a set using concrete materials and drawings (e.g., colour 2 out of 4 circles);
- Compare two proper fractions using concrete materials (e.g., use pattern blocks to show that the relationship of 3 triangles to 6 triangles is the same as that of 1 trapezoid to 2 trapezoids because both represent half of a hexagon);

Computations:

- Represent multiplication as repeated addition using concrete materials (e.g., 3 groups of 2 is the same as $2+2+2$);
- Demonstrate division as sharing (e.g., sharing 12 carrot sticks among 4 friends means each person gets 3);
- Recall addition and subtraction facts to 18;
- Explain a variety of strategies to find sums and differences of 2 two-digit numbers;
- Use one fact to find another (e.g., use fact families or adding on);
- Mentally add and subtract one-digit numbers;
- Add and subtract two-digit numbers with and without regrouping, with sums less than 101, using concrete materials;

Applications:

- Pose and solve number problems with at least one operation (e.g., if there are 24 students in our class and 8 wore boots, how many students did not wear boots?);
- Select and use appropriate strategies (e.g., pencil and paper, calculator, estimation, concrete materials) to solve number problems involving addition and subtraction.
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Measurement

Perimeter and Area:

- Estimate, measure, and record the linear dimensions of objects using non-standard and standard units (centimeter, metre), and compare and order objects by their linear dimensions;
- Measure and record the distance around objects using non-standard units, and compare the distances;
- Estimate and measure specified areas using uniform non-standard units and record the measures (e.g., the area of the page is four pencil cases);

Capacity, Volume and Mass:

- Estimate, measure and record the capacity of containers using non-standard units, compare the measures and order a collection of containers by capacity;
- Estimate, measure and record the mass of objects using non-standard units, compare the measures and order a collection of objects by mass.

Patterning and Algebra

- explore multiples in a hundred chart;
- use a calculator and a computer application to explore patterns;
- relate growing and shrinking patterns to addition and subtraction; explain a pattern rule;
- Given a rule expressed in informal language, extend a pattern;
- Transfer patterns from one medium to another (e.g., actions, words, symbols, pictures, objects, calculator).

Geometry and Spatial Sense

Three- and Two-Dimensional Geometry

- Compare and sort two-dimensional shapes according to number of sides and vertices;
- Describe the attributes of regular polygons using geometric language (e.g., sides, vertices);
- Compare and contrast two-dimensional shapes;

Transformational Geometry

- Demonstrate an understanding of a line of symmetry in a two-dimensional shape by using paper folding and reflections (e.g., using paint-blot pictures, Mira);
- Determine a line of symmetry of a two-dimensional shape by using paper folding and reflections (e.g., in a transparent mirror);
- Demonstrate transformations, such as flips, slides and turns (reflections, translations and rotations (, using concrete materials;
- Make a pattern using two-dimensional shapes (e.g., patter blocks, tangrams);
- Identify and perform translations of simple figures using concrete materials (e.g., to the left, to the right, up and down);

Grids and Coordinate Geometry

- Describe the specific location of objects on a grid or map (e.g., beside, to the right of).

Data Management and Probability

Probability

- Explore through simple games and experiments the likelihood that an event may occur;
- Investigate simple probability situations (e.g., flipping a coin, tossing dice);
- Use mathematical language (e.g., likely, unlikely, probably) in informal discussion to describe probability).