Gr 6 MATHS SYLLABUS

Term 1

Module 1: Place Value, Addition, Subtraction

1. Place values: wholes & decimal numbers
2. Round off to wholes & decimal place values
3. Compare & order wholes and decimal nrs
4. Complete sequences/patterns.
5. Double and halve whole nrs
6. Add and subtract large numbers
7. Estimate by rounding off
8. Add by making groups of 10's
9. Sum of & Diifference
10. Word sums and Problem solving

Module 2: Multiplication and Division

1. Multiply and divide with large numbers
2. Prime factorization
3. Greatest Common Factor
4. Least Common Multiple
5. Exponents e.g 2^4
6. Square roots
7. Interpret remainders
8. Find averages
9. x and ÷ by 10, 100, 1000
10. x and ÷ with exponents of 10 e.g 30 x 200
11. Order of operations
12. Short cut methods (solve problems x and ÷)
13. Word sums and Problem solving

Module 3: Fractions

1. Conversions:
proper -, improper - and mixed fractions
2. Simplify and find equivalent fractions
3. Compare fractions (= < >)
4. Add and subtract mixed fractions with unlike denominators (using order of operations)
5. Find fraction of a whole (¼ of 24)
6. Descending and ascending order
7. Multiply wholes with fractions
8. Multiply fractions with fractions (½ of ¾)
9. Word sums and problem solving (+, -, x)

Term 2

Module 4: Time

1. Read and write time
2. Convert to different unites (w, d, h, min, sec)
3. Time concepts: century, decade, millennium
4. Convert international and standard time
5. Measure time (time passes)
6. Word sums and Problem solving (+, -, x, ÷)

Module 5: Decimal Fractions

1. Decimal place values
2. Convertions: fractions & decimal fractions
3. Compare and order common fractions and decimal fractions
4. Estimate and rounding off
5. ÷ and x by 10, 100, 1 000
6. Descending and ascending order
7. Understand money
8. ÷ and x decimal fractions with wholes
9. ÷ and x decimal nrs with decimal nrs
10. Mixed operations with decimals & fractions
11. ÷ and x with exponents of 10 (eg.4,5 ÷ 30)
12. Word sums and Problem solving (+, -, x, ÷)
13. Word sums and Problem solving involving conversions (decimals and fractions)

Module 6: Percentages

1. Conversions: % to fraction with denominator of 100
2. Conversions: % to decimal fractions
3. Conversions: fraction or decimal to %
4. Compare: %, decimal nrs, fractions (= < >)
5. Find % of a whole
6. Calculate and compare % test results
7. Write 1 quantity as % of another quantity
8. Word sums and Problem solving involving conversions and +, -, x, ÷
9. Word sums and Problem solving involving conversions (decimals, fractions and %)

Term 3

Module 7: Rates and Ratio

1. Write as a ratio
2. Equivalent ratios
3. Simplify ratios
4. Word sums and Problem solving, using ratios

Module 8: Measurement

1. Conversions of units MASS: g, kg, ton
2. Conversions of units CAPACITY: ml, liter, kl
3. Conversions of units LENGTH: mm, cm, m, km
4. Compare different units (= < >)
5. Word sums and Problem solving: + - x ÷

Module 9: Equations

1. Solve equations by inspection
2. Write equations
3. Complete tables by solving the equation
4. Complete tables by solving the input nr

Module 10: Data and Graphs

1. Present data on a bar graph, pie graph, pictograph and tally
2. Interpret data, draw conclusions and make predictions
3. Mean, median, range and mode (whole nrs)
4. Word sums and Problem solving (+, -, x, ÷)
5. Word sums and Problem solving involving decimal nrs, fractions and %

Term 4

Module 11: Probability

1. Determine and interpret probability
2. Draw tree diagrams and determine the number of combinations (outcomes)

Module 12: Geometry

1. Recognize and name 2D- and 3D-shapes
2. Use a protractor construct angles
3. Use protractor to measure size of an angle
4. Draw lines of symmetry
5. Transformations: translations and reflections
6. Use a protractor and compass to construct congruent angles
7. Bisect line segments using compass
8. Bisect angles, using compass
9. Plot and read coordinates on grid paper
10. Classify triangle according to sides & angles
11. Construct & name lines, line segments, rays, parallel lines and perpendicular lines
12. Edges, vertices and surfaces on a 3D-shape
13. Perimeter of rectangles and squares
14. Area of rectangles/squares (also combination of shapes) - using formula
15. Volume of rectangle/square - using formula
16. Word sums and Problem solving (+, -, x, ÷)

Module 13: Problem solving

1. Use different strategies to solve problems