

Gr 7 MATHS SYLLABUS

Term 1	Term 2	Term 3	Term 4
Module 1: Numbers, Relations & Calculations	Module 5: Percentages	Module 7: Rates and Ratio	Module 11: Geometry
<ol style="list-style-type: none"> 1. Place values: whole numbers & decimal nrs 2. Use of short cut methods to +, -, x, ÷ 3. Estimate & Rounding off (whole & decimal nrs) 4. x and ÷ with large whole numbers 5. Sum, Difference, Product and Quotient 6. Prime factorization 7. Greatest Common Factor 8. Least Common Multiple 9. Exponents e.g 2^4 and square roots 10. Interpret remainders 11. Find averages 12. x and ÷ by 10, 100, 1000 13. x and ÷ with exponents of 10 e.g 30×200 14. Order of operations 15. Short cut methods (solve problems x and ÷) 16. Word sums and Problem solving (+, -, x, ÷) 	<ol style="list-style-type: none"> 1. Conversions: % to fraction with denominator of 100 2. Conversions: % to decimal fractions 3. Conversions: fraction or decimal to % 4. Calculate and compare % test results 5. Compare: %, decimal nrs, fractions (= < >) 6. Word sums and Problem solving involving conversions and +, -, x, ÷ 7. Find % of a decimal number 8. Find % of a mixed fraction 9. Word sums and Problem solving involving conversions (decimals, fractions and %) 10. Write 1 quantity as % of another quantity 11. Increase and decrease by given % 12. Calculate VAT 13. Calculate discount prizes 14. Calculate % profit or loss 15. Calculate interest 16. Word sums and Problem solving 	<ol style="list-style-type: none"> 1. Write as a ratio 2. Equivalent ratios 3. Simplify ratios 4. Word sums and Problem solving, using ratios 	<ol style="list-style-type: none"> 1. Transformations: translations and reflections 2. Angles: co-interior, vertically opposite, corresponding, alternate 3. Find size of angle by using the above angles 4. Name and construct different angles and triangles 5. Measure angles with a protractor 6. Draw triangles, using protractor & compass 7. Bisect line segments & angles, using compass 8. Construct equivalent angles, using compass 9. Construct different kinds of triangles according to specifications 10. Use the Theorem of Pythagoras to find the unknown side of a right triangle 11. Determine the perimeter and area of a square and rectangle (formulas) 12. Determine the area of a triangle (formula) 13. Determine the perimeter and area of a circle (formulas) 14. Determine the volume of a rectangular prism and a triangular prism (formulas) 15. Conversions between km^2, m^2, cm^2, mm^2 16. Conversions between hectare, m^2 and km^2 17. Determine area / perimeter of multiple different 2D shapes 18. Determine volume of multiple rectangular shapes
Module 2: Probability	Module 6: Measurement	Module 9: Algebra	
<ol style="list-style-type: none"> 1. Determine and interpret probability 2. Draw tree diagrams and determine the number of combinations (outcomes) 	<ol style="list-style-type: none"> 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. Average speed 6. Word sums and Problem solving: + - x ÷ 	<ol style="list-style-type: none"> 1. Solve equations by inspection 2. Complete tables by solving the equation 3. Complete tables by solving the input nr 4. Shorthand method of the algebraic method 5. Difference between a^5 and $5a$ 6. +, -, x and ÷ calculations in an algebraic expression involving multiple terms 7. Simplify algebraic expressions 8. Calculations involving negative numbers 	
Module 3: Fractions	Module 7: Negative numbers	Module 10: Data and Graphs	
<ol style="list-style-type: none"> 1. Conversions: proper -, improper - and mixed fractions 2. Simplify and find equivalent fractions 3. Compare fractions (= < >) 4. + and - mixed fractions (order of operations) 5. Descending and ascending order 6. Multiply wholes or fractions with fractions 7. Multiply fractions with fractions ($\frac{1}{2}$ of $\frac{3}{4}$) 8. Multiply mixed fractions ($2\frac{1}{2}$ of $4\frac{3}{4}$) 9. ÷ whole numbers by common fractions 10. ÷ mixed fractions with mixed fractions 11. Cross cancelling 12. Order of operations (involving fractions) 13. Word sums and Problem solving (+, -, x, ÷) 	<ol style="list-style-type: none"> 1. Concept of negative numbers 2. Negative numbers in every day's life 3. Present negative numbers on a number line 4. + - x and ÷ calculations using negative and positive numbers 	<ol style="list-style-type: none"> 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 of whole nrs, decimal nrs and fractions 4. Word sums and Problem solving (+, -, x, ÷) 5. Word sums and Problem solving involving decimal nrs, fractions and % 	
Module 4: Decimal Fractions			
<ol style="list-style-type: none"> 1. Conversions: fractions & decimal fractions 2. Compare/order fractions and decimal nrs 3. Estimate and rounding off 4. ÷ and x by 10, 100, 1 000 5. Descending and ascending order 6. ÷ and x decimal fractions with wholes 7. ÷ and x decimal nrs with decimal nrs 8. Mixed operations with decimals & fractions 9. ÷ and x with exponents of 10 (eg. $4.5 \div 30$) 10. Word sums and Problem solving (+, -, x, ÷) 11. Word sums involving conversions 			