

<b>Year 9 Foundation Stream Topics</b>
4 ops and BIDMAS
Factors, multiples, primes
Powers and roots
Perimeter
Equivalent fractions (ext ordering)
Fraction operations
Decimal operations
Ordering decimals
FDP
Ordering directed numbers
Adding and subtracting directed numbers
Multiplying and dividing directed numbers
Area - squares, rectangles, parallelograms, triangles
Circle nomenclature
Understanding of Pi - rational & irrational - powers and roots
Calculate simple interest
Rounding 100, 10 integer practice
Rounding dp practice
Calculator skills
Area - compound shapes
Deriving expressions and equations
Expanding and factorising linear in context
Solve linear equations
Rearranging formulae
Plotting $y=mx+c$ (ext quadratic graphs)
Calculate gradient
Fibonacci & geometric sequences
nth term
Bar charts
Pictograms
Proportion graphs
Speed distance time
Real life graphs
Volume of prisms
Congruence
Angle facts
Angles in parallel lines
Intro to Pythagoras
Intro to Trig
Pie charts
Scatter graphs
Exterior angles of polygons
Plans and elevations
Probability
Frequency trees
Two way tables

<b>Year 9 Intermediate Stream Topics</b>
Area of compound shapes
Area of a trapezium
Volume and surface area
Circle nomenclature
Understanding of Pi - rational & irrational - powers and roots
Area of a circle
Circumference
Volume of cylinder
Standard form conversions
Standard form calculations
Congruence and similarity
Transformations
Angles in parallel lines
Angles in polygons
Bearings
Constructions
Reverse percentages
Calculate simple interest
Proportion graphs
Direct proportion (k)
Substitution and vector operations
Expanding and factorising linear in context
Deriving expressions and equations
Solve linear equations
Rearranging formulae
Expanding quadratics
Solving quadratics in the form $(x + a)(x + b) = 0$
Plotting $y = mx + c$
Calculate gradient
Find equation of line from graph
Speed distance time
Density mass volume
Pressure force area
Real life graphs
Time-series
Pythagoras' theorem
Trigonometry right angle ratios
Probability trees (independent)
Mutually exclusive and exhaustive events
Simple algebraic fractions

<b>Year 9 Higher Stream Topics</b>
Pythagoras' theorem
Trigonometry right angle ratios
Simplifying surds
Adding surds
Multiplying surds
Area of a trapezium
Area of a circle
Area of compound shapes
Circumference calculations
Arcs and sectors
Standard form conversions
Standard form calculations
Basic index laws
Product of prime factors
Calculate simple interest
Rounding to significant figures
Substitution and vector operations
Expanding quadratics
Factorising quadratics where $a = 1$
Solving quadratics in the form $(x + a)(x + b) = 0$
Rearranging formulae
Solve linear equations
Solve simultaneous linear equations via elimination
Rearrange $ax + by = c$ to plot a linear graph
Calculate gradient
Find equation of line from graph
$n$ th term
Fibonacci & geometric sequences
Reverse percentages
Proportion graphs
Direct proportion ( $k$ )
Speed distance time
Density mass volume
Pressure force area
Real life graphs
Time-series
Volume of prisms
Angle facts
Angles in parallel lines
Surface area
Simple algebraic fractions
Exterior angles of polygons
Interior angles of polygons
Histograms
Comparative pie charts
Random response
Relative risk
Standard deviation intro
Probability trees