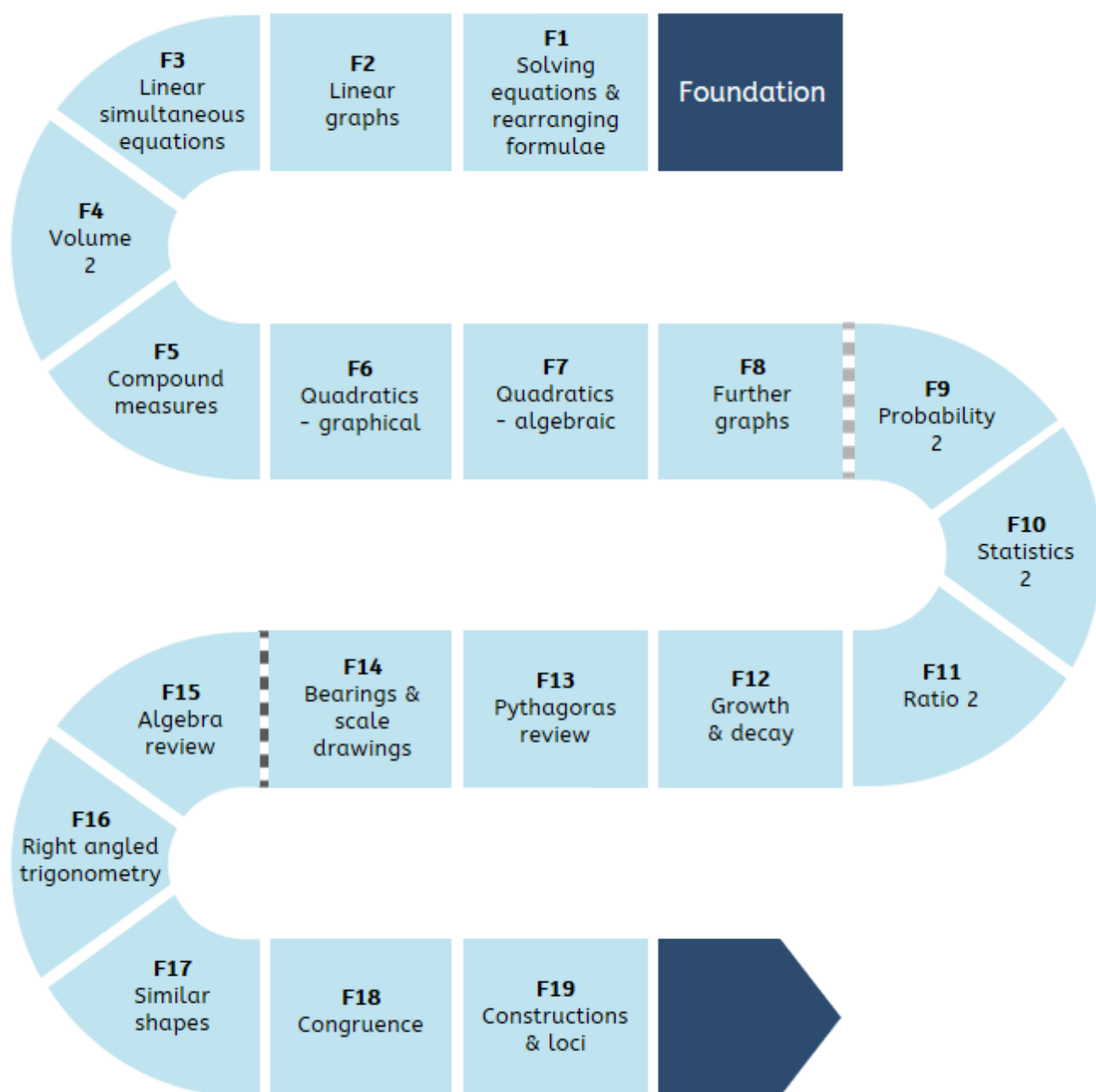


Holland Park School | *Maths Year 10 and 11 Foundation 2024/2025*



Overview	GCSE Mathematics Foundation Topics 2025/2026
Assessment	Edexcel Exam Board 3 Papers – Paper 1 Non-Calculator Paper 2 Calculator Paper 3 Calculator
Homework	Sparx Maths (set every Wednesday, due for following Wednesday) Y11 Only – Exam practice each week, in addition to Sparx weekly homework
Resources	Sparx Maths, Corbett Maths, Maths Genie, First Class Maths Y11 only – revision booklets supplied by school

Key Terminology	Estimate, standard form, ratio, reciprocal, percentage, square and cube numbers, square and cube roots, sequences, error interval, truncation, significant figure, indices, prime factor decomposition, expand, factorise, gradient, intercept, expression, equation, term, identity, formula, coefficient, exponential, quadratic, inequality, trigonometry, parallel, corresponding, alternate, co-interior, volume, surface area, isosceles, equilateral, scalene, parallelogram, rhombus, trapezium, kite, interior, exterior, transformation, translation, reflection, rotation, enlargement, congruent, radius, diameter, circumference, chord, sector, segment, arc, prism, bearing, average, mean, median, mode, range, frequency, outcome, probability,
Key Contacts	Co-Head of Mathematics: Ms Bailey – elena.bailey@hollandparkschool.co.uk Ms Neary – charlotte.neary@hollandparkschool.co.uk

Topics	Key content	Sparx Clips
F1 Solving equations and rearranging formulae	Solve linear equations up to and including those with the unknown on both sides of the equation. Changing the subjects of formulae.	U755, U325, U870, U505, U556, U221, U373
F2 Linear Graphs	Recognise, plot and interpret straight-line graphs. Find approximate solutions from graphs including real life graphs. Identify and interpret gradients and y intercepts including from the form $y=mx+c$.	U789, U741, U933, U889, U638, U669, U315, U377, U477, U848, U862
F3 Linear Simultaneous Equations	Solve two simultaneous equations algebraically and graphically. Derive two simultaneous equations from a situation in context.	U760, U757, U836, U137
F4 Volume 2	Find and problem solve with volume of cubes, cuboids, prisms, cylinders, spheres, pyramids, cone and composite solids.	U786, U174, U915, U484, U116, U617, U426, U350, U543
F5 Compound Measures	Interpret distance-time graphs. Change between standard units of measure and compound units of measure.	U914, U462, U896, U902, U388, U248, U468, U151, U256, U403, U914, U462, U966, U910, U527
F6 Quadratics - graphical	Recognise, sketch and interpret graphs of quadratic functions. Find approximate solutions from graphs.	U989, U667, U601, U178, U963
F7 Quadratics - algebraic	Factorise quadratic expressions and solve quadratic equations by factorising where the coefficient of x^2 is 1.	U228
F8 Further graphs	Recognise and be able to sketch cubic, reciprocal, inverse, and direct proportion graphs.	U980, U593, U238
F9 Probability 2	Work with experimental and theoretical probability, knowing that probability sums to 1. Use probability tree diagrams for	U803, U408, U510, U280, U166, U683, U580, U476, U748,

	independent and dependent events. Find probabilities from Venn diagrams.	U104, U558, U729, U296, U369
F10 Statistics 2	Understand and draw types of charts, including bar charts, pictograms, stem and leaf diagrams and pie charts. Calculate and problem solve with averages and range. Plot, read and use scatter graphs.	U981, U363, U557, U508, U172, U653, U506, U200, U909, U291, U260, U456, U526, U569, U854, U877, U717, U322, U162, U590, U193, U199, U277, U128
F11 Ratio 2	Convert between ratio, fractions, and percentages. Write, simplify, and combine ratios. Share amounts given a ratio. Problem solve with ratio.	U687, U577, U753, U176
F12 Growth & Decay	Set up, solve and interpret the answer of growth and decay problems including compound interest. Compare simple and compound interest.	U332, U988
F13 Pythagoras Review	Calculate a missing side length from a right-angled triangle. Use three side lengths of a triangle to determine if it is right angled.	U851, U385
F14 Bearings & Scale Drawings	Measure and draw bearings. Draw and interpret scale diagrams. Calculate bearings using angles rules.	U257, U525, U107
F15 Algebra Review	Manipulate algebra by collecting like terms, multiplying out single and double brackets, factorising into single and double brackets, find the difference of two squares. Simplify expressions using index laws. Solve linear equations up to and including those with the unknown on both sides of the equation. Find approximate solutions using linear and quadratic graphs. Changing the subjects of formulae, including finding r or d when given a sector area or arc length. Substitute values into formulae. Construct and solve linear simultaneous equations using elimination and substitution.	
F16 Right angled Trigonometry	Use trigonometry to find missing angles and lengths including within multi-step problems and in context. Understand how to find angles of elevation and depression. Know the exact trig values.	U605, U283, U545, U627
F17 Similar shapes	Use similarity to find scale factors and length. Understand the effect enlargement has on angle size and perimeter of similar shapes.	U551, U578
F18 Congruence	Identify congruent shapes and know the definition and link to transformations. Know the congruence criteria for triangles (SSS, SAS, ASA, RHS). Solve angle problems involving congruence.	U790, U866
F19 Constructions & Loci	Use constructions to draw angles, lines and triangles. Understand language of bisection. Use constructions to find the loci of points satisfying specific conditions.	U678, U447, U787, U245, U979, U820