

Long Term Plan: Year 10 Mathematics (Foundation – Grades 3-5)

T e r m 1	W.C 04.09.23	W.C 11.09.23	W.C 18.09.23	W.C 25.09.23	W.C 02.10.23	W.C 09.10.23	W.C 30.10.23	W.C 06.11.23	W.C 13.11.23	W.C 20.11.23	W.C 27.11.23	W.C 04.12.23	W.C 11.12.23	W.C 18.12.23
	Equations and Inequalities			Simultaneous Equations			Similarity and Congruence			Right-Angled Trigonometry		Non-Calculator Methods		
	<ul style="list-style-type: none"> One and two-step equations/inequalities Form and solve equations/inequalities Represent inequalities on a number line Draw straight line graphs and solve Equations with unknowns on both sides Inequalities with unknowns on both sides Solve quadratic by factorising ($x^2 + bx + c$) 			<ul style="list-style-type: none"> Solve simultaneous graphically solve simultaneous equations algebraically (adjusting one) Solve simultaneous equations algebraically (adjusting both) Form and solve simultaneous equations in context 			<ul style="list-style-type: none"> Enlarge a shape by a positive scale factor including fractional Missing sides and angles in pairs of similar shapes Establish similarity particularly using angles in parallel lines Understand congruency 			<ul style="list-style-type: none"> Side lengths using Pythagoras' <ul style="list-style-type: none"> Multi-step Pythagoras problems to find missing side lengths Use sine/cosine/tangent ratios to find missing angles Recall key trig values (non-calc) 		<ul style="list-style-type: none"> Written methods of four operations with integers and decimals Related calculations with place value Four operations with fractions Calculate with mixed numbers Estimate calculations using rounding Error intervals Multi-step mixed non-calc problems 		
T e r m 2	W.C 01.01.24	W.C 08.01.24	W.C 15.01.24	W.C 22.01.24	W.C 29.01.24	W.C 05.02.24	W.C 19.02.24	W.C 26.02.24	W.C 04.03.24	W.C 11.03.24	W.C 18.03.24	W.C 25.03.24		
	Ratios and Fractions			Percentages and Interest			Working with circles			Types of Numbers and Sequences				
	<ul style="list-style-type: none"> Write/express/simplify ratio statements Link ratios and fractions Ratio problems involving sharing Problems with ratios and scales Problems with currency conversion Solve best value for money problems Combine sets of ratios 			<ul style="list-style-type: none"> FDP Conversions and order/compare Percentage of amounts inc. multipliers Percentage increase/decrease problems Express percentages and find change Reverse percentage calculations Simple and compound interest Multi-step FDP problem solving reverse fraction problems 			<ul style="list-style-type: none"> Parts of a circle and recap area/circumference Area/perimeter of semi and quarter-circles Multi-step area/circumference problem solving Sector area and arc length Volume and surface area of a cylinder Volume and surface area of spheres and cones 			<ul style="list-style-type: none"> Mult/fact/prime and HCF/LCM Prime factorisation inc HCF/LCM Describe/continue arithmetic and geometric sequences Recognise/use other sequences including triangular & Fibonacci Find and use the nth term rule for linear sequences 				
T e r m 3	W.C 15.04.24	W.C 22.04.24	W.C 29.04.24	W.C 06.05.24	W.C 13.05.24	W.C 20.05.24	W.C 03.06.24	W.C 10.06.24	W.C 17.06.24	W.C 24.06.24	W.C 01.07.24	W.C 08.07.24	W.C 15.07.24	W.C 22.07.24
	Data Handling			Probability			Indices and Roots			Y10 PPEs		Vectors		
	<ul style="list-style-type: none"> Frequency tables and frequency polygons Draw/interpret bar charts and pie charts Averages from lists and problem solving Averages from frequency tables Construct and interpret stem and leaf diagrams Compare data sets using averages Scatter graphs 			<ul style="list-style-type: none"> Write probabilities and use the fact that probabilities sum to 1 Relative frequency and estimating number of outcomes Probability from two-way tables, venn diagrams, frequency trees Use tree diagrams with indep' and dependent events 			<ul style="list-style-type: none"> Evaluate squares, cubes, and roots Use a calculator with powers and roots Use the first three laws of indices Algebraic expressions with indices Understand zero and negative powers Write numbers in standard form Calculate with numbers in standard form 					<ul style="list-style-type: none"> Understand and represent vectors Translate shapes by a given vector Vectors multiplied by a scalar Understand addition and subtraction of column vectors 		