

Madani Girls School – Mathematics (2024-2025) – Foundation Schedule

2024/ 2025	AUTUMN		SPRING		SUMMER		
	HT1	HT2	HT3	HT4	HT5	HT6	
Y7	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <p>Place Value / Order of Operations</p> <p>Whole Numbers (+/-/x/÷) / Worded Problems</p> <p>Decimal Calculations (+/-/x/÷)</p> <p>Negative Numbers (+/-/x/÷)</p> <p>Special Types of Numbers</p> <p>Primes / Multiples / Factors</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra / Graphs <p>Key concepts</p> <p>Substitution / Simplifying</p> <p>Expand (single) / Factorise (linear)</p> <p>Making Formulas from Words / Using Formulas</p> <p>Solving Equations (one-step / two-step)</p> <p>Number Patterns & Sequences</p> <p>Coordinates (x, y) first quadrant</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Fractions / Percentages / Ratio <p>Key concepts</p> <p>Fraction Basics (equivalent, simplify, convert)</p> <p>Fraction Calculations (+/-/x/÷)</p> <p>Fractions of Amounts (calc/no-calc)</p> <p>Percentages of Amounts (calc/no-calc)</p> <p>Ratio Calculations (simplify, share, recipes)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Shape <p>Key concepts</p> <p>Properties of 2D / 3D Shapes</p> <p>Perimeter & Area (square, rectangle, triangle)</p> <p>Compound Shapes / Plans & Elevations</p> <p>Surface Area & Volume (cube, cuboid)</p> <p>Measuring & Drawing Angles</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Shape / Angles / Probability <p>Key concepts</p> <p>Angle Basics (line, point, triangle)</p> <p>Triangle Constructions</p> <p>Introduction to Transformations</p> <p>Probability Basics / Listing Outcomes</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Data <p>Key concepts</p> <p>Types of Data (discrete / continuous)</p> <p>Mean, Mode, Median, Range</p> <p>Pictograms / Bar Charts</p> <p>Frequency Tables (calculate averages)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	
	Y8	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <p>Revision of Four Operations (whole / decimal)</p> <p>Rounding (nearest whole number / powers of 10)</p> <p>Rounding (decimals places / significant figures)</p> <p>Accuracy & Estimating</p> <p>Basic Power Rules / Square Root / Cube Root</p> <p>Prime Factor Trees / LCM / HCF</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra / Graphs <p>Key concepts</p> <p>Revision of Algebraic Notation (simplifying)</p> <p>Expanding Brackets (single / double)</p> <p>Rearranging Formulae (simple)</p> <p>Solving Equations (two-step / brackets)</p> <p>Sequences - Calculating the nth term (linear)</p> <p>Coordinates (four quadrants)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Fractions / Percentages / Ratio <p>Key concepts</p> <p>F/D/P Conversions / Worded Problems</p> <p>Revision of Calculating F/P of Amounts</p> <p>Percentages (inc/dec) - Multiplier- (calc/no-calc)</p> <p>Best Buy / Recipes / Reading Timetables</p> <p>Unit Conversions / Maps / Scale Drawings</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Shape <p>Key concepts</p> <p>Perimeter & Area (trapezium, parallelogram)</p> <p>Revision of Perimeter & Area / Compound Shapes</p> <p>Introduction to Circles</p> <p>Surface Area & Volume (triangular prism, cylinder)</p> <p>Parallel Lines</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Angles / Transformations / Probability <p>Key concepts</p> <p>Angles in Polygons</p> <p>Translation / Rotation / Reflection</p> <p>Enlargement of Shapes</p> <p>Experimental Probability / Frequency Trees</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Data <p>Key concepts</p> <p>Two-Way Tables</p> <p>Line Graphs / Pie Charts</p> <p>Scatter Graphs (correlation)</p> <p>Grouped Frequency Tables (calculate averages)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test
		Y9	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <p>Revision of Types of Numbers / BODMAS</p> <p>Whole Numbers (+/-/x/÷) / Worded Problems</p> <p>Decimal Calculations (+/-/x/÷)</p> <p>Negative Numbers (+/-/x/÷)</p> <p>Primes / Multiples / Factors</p> <p>Prime Factor Trees / LCM / HCF</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra <p>Key concepts</p> <p>Substitution / Simplifying</p> <p>Expanding Brackets (single / double)</p> <p>Factorising (linear expressions / D.O.T.S.)</p> <p>Factorise & Solve (quadratic equations)</p> <p>Solving Equations (one-step / two-step)</p> <p>Solving Equations (brackets / unknown both sides)</p> <p>Form & Solve Equations (worded / shapes)</p> <p>Rearranging Formulae (simple)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Constructions / Shape <p>Key concepts</p> <p>Constructions</p> <p>Loci (rules)</p> <p>Bearings / Scale Drawings</p> <p>Pythagoras' Theorem</p> <p>Trigonometry (sin, cos, tan)</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Data <p>Key concepts</p> <p>Frequency Tables (calculate averages)</p> <p>Grouped Frequency Tables (calculate averages)</p> <p>Time Series / Scatter Graphs</p> <p>Interpreting Data / Comparing Data</p> <p>Probability Basics / Experimental Probability</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Probability <p>Key concepts</p> <p>Listing Outcomes / Frequency Trees</p> <p>The AND / OR Rules (dependent / independent)</p> <p>Tree Diagrams (simple)</p> <p>Sets & Venn Diagrams</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test

Y 10

Y 11

<p>Area of study</p> <ul style="list-style-type: none"> ➤ Number <p>Key concepts</p> <p>Fraction Calculations (+/-/x/÷)</p> <p>Fractions of Amounts / Worded Problems</p> <p>Rounding (decimals places / significant figures)</p> <p>Estimation / Rounding Errors</p> <p>Revision of Powers & Roots (rules)</p> <p>Standard Form Calculations</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Algebra / Shape <p>Key concepts</p> <p>Sequences (linear)</p> <p>Linear Inequalities (number lines / solving)</p> <p>Simultaneous Equations (linear)</p> <p>Proof / Mixed Algebra Revision</p> <p>Properties of 2D Shapes</p> <p>Perimeter & Area</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Graphs <p>Key concepts</p> <p>Coordinates / Midpoints</p> <p>Straight Line Graphs (gradient / intercept)</p> <p>Parallel Lines / Equation of Line</p> <p>Plotting Graphs (linear / quadratic)</p> <p>Harder Graphs / Distance Time Graphs</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Ratio / Percentages <p>Key concepts</p> <p>Conversion Graphs / Real Life Graphs</p> <p>Ratio Calculations (mixed / worded)</p> <p>Percentages (increase / decrease)</p> <p>Percentages (original value / percentage change)</p> <p>Simple / Compound Interest</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Proportion <p>Key concepts</p> <p>Revision for Mock Exams</p> <p>Revision of F/D/P (mixed / worded)</p> <p>Direct / Inverse Proportion</p> <p>Unit Conversions / Speed, Density, Pressure</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Transformations <p>Key concepts</p> <p>Translation / Rotation / Reflection</p> <p>Enlargement of Shapes</p> <p>Work Experience</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test
<p>Area of study</p> <ul style="list-style-type: none"> ➤ Shape <p>Key concepts</p> <p>Congruent / Similar Shapes</p> <p>Revision of Pythagoras' Theorem</p> <p>Revision of Trigonometry (sin, cos, tan)</p> <p>Trigonometry (exact trig values)</p> <p>Pythagoras / Trigonometry (worded problems)</p> <p>Vectors</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ End of Topic Test 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Revision 1 <p>Key concepts</p> <p>Topic Revision: Number</p> <p>Topic Revision: Number & Assessment</p> <p>Topic Revision: Algebra</p> <p>Topic Revision: Algebra & Assessment</p> <p>Topic Revision: Graphs / Ratio</p> <p>Topic Revision: Graphs / Ratio & Assessment</p> <p>Mock Past Paper Practice: Set 1</p> <p>Mock Past Paper Practice: Set 2</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ Past Papers 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Revision 2 <p>Key concepts</p> <p>Topic Revision: Data / Probability</p> <p>Topic Revision: Data / Probability & Assessment</p> <p>Topic Revision: Geometry</p> <p>Topic Revision: Geometry & Assessment</p> <p>Mock Past Paper Practice: Set 3</p> <p>Mock Past Paper Practice: Set 4</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ Past Papers 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Past Papers 1 <p>Key concepts</p> <p>Past paper practice 2016</p> <p>Past paper practice 2017</p> <p>Mock Past Paper Practice: Specimen</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ Past Papers 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Past Papers 2 <p>Key concepts</p> <p>Past paper practice 2018</p> <p>Past paper practice 2019</p> <p>Mock Assessment Exams</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ Past Papers 	<p>Area of study</p> <ul style="list-style-type: none"> ➤ Examinations <p>Key concepts</p> <p>Exam Revision</p> <p>Assessment method</p> <ul style="list-style-type: none"> ➤ Past Papers

NOTES	AREAS OF STUDY	KEY CONCEPTS	ASSESSMENT METHOD