St Joseph's College Subject Curriculum Map: MATHS

Curriculum Intent

Brief By the time our students leave school they should be fluent in the fundamentals of mathematics which will be achieved through varied and frequent practice of increasingly complex problems and concepts over time. Pupils will be able to recall and apply mathematics knowledge rapidly and accurately. All students will be able to apply mathematical reasoning and logic to solve a variety of routine and non-routine problems with increasing sophistication, including breaking down problems into a series of simpler steps, and be able to spot links between mathematical ideas. Students will be able to communicate, justify, argue and prove using mathematical vocabulary and will develop their confidence, resilience and independence so that they can thrive in the world when they leave education.

	Year Group	Autumn Term		Spring Term		Summer Term	
		Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Key Stage 3	7	U1: Place Value U2: Order of Operations U3: Powers & Roots	U4: Perimeter and Area U5: Angles and Shapes	U6: Fractions U7: Decimals & Percentages	U8: Algebra U9: Coordinates &Graphs	U10: Ratio & Proportion U11: Working with Data	U12: Transformations
	8	U1: Number Properties U2: Directed Numbers	U3: Rounding & Estimation U4: Length and Area U5: 3D Shapes	U6: Compound Measures U7: Coordinates & Graphs	U8: Fractions U9: Probability	U10: Algebra U11: Solving Equations U12: Angles	U13: Constructions, Loci & Bearings
	9	U1: Statistics	U2: Fractions, Decimals & Percentages U3: Percentages U4: Proportion	U5: 2d Shapes U6: 3D Shapes	U7: Algebraic Manipulation U8: Solving Equations	(y10) U1: Primes, Factors & Multiples (y10) U2: Algebraic Expressions (y10): U3 Quadratic equations	(y10) U4: Fractions & Percentages
Key Stage 4	10	U5: Sequences U6: Coordinates & Graphs	U7: Data & Statistics U8: Averages & Spread	U9: Angles & Trigonometry U10: Trigonometry	U11: Perimeter, Area & Volume U12: Transformations	U13: Probability U14: Ratio & Proportion	U15: Constructions & Loci
	11	U16: Equations & Inequalities U17: Graphs & Functions	U18: Multiplicative Reasoning U19: Vectors	Revision	Revision	Revision	
Key Stage 5	12	P1: Equations & Algebra P1: Straight Line Graphs P1U6: Circles SM1: Data Collection SM1: Location & Spread	P1: Logs & Exponentials P1/2 Trigonometry SM1: Representing Data SM2: Conditional Probability	P2: Trig Modelling P1/2Algebraic Methods SM1: Statistical Distributions SM17: Hypothesis Testing	P1/2: Differentiation SM2: Normal Distribution SM1: Correlation	P1/2: Integration SM2: Regression & Correlation	
	13	P1/2: Binomial Expansion P2: Sequence & Series P1/2 Proof SM1: Mechanics Modelling	P1/2 Vectors P2: Numerical Methods SM2: Projectiles	SM2: Moments SM2: Friction SM2: Statics & Dynamics	Revision	Revision	

		SM1: Constant Acceleration SM1: Variable Acceleration	SM2: Further Kinematics SM1: Forces & Motion				