

All Saints' Academy Mathematics KS3 Curriculum

Cycle	7			8			9		
	Knowledge & Skills	Enrichment	Cross-Curricular	Knowledge & Skills	Enrichment	Cross-Curricular	Knowledge & Skills	Enrichment	Cross-Curricular
1	Number Positive and Negative Integers; Place Value Algebra Simplifying and collecting terms; Simple equations <i>End of Module Assessment</i>	Fortnightly Number Challenge	Physics: Finding Potential Difference, Current and Resistance by rearranging $V=IR$	Number Factors & Multiples; Rounding & Estimation; Error Intervals; Percentage increase/decrease. Ratio Dividing ratio into parts; Scale factors & scale diagrams; Speed – distance – time. <i>End of Module Assessment</i>	Smoothies Project	LIFE Programme: Estimate the cost of a typical weekly shop by rounding to nearest pound Physics: Share the potential difference across two resistors in a series circuit	Algebra Factorising; Expanding double brackets; Rearranging formulae; Linear, quadratic, reciprocal and exponential graphs; Graphical solution of straight line equations; Geometric Sequences. <i>End of Module Assessment</i>	Frogs Project	PE: Look at the flight of a ball as a quadratic parabolic shape Art: Look at Art which can be generated by various number sequences
Careers	Accountancy Jobs			Architecture			Data Scientist		
2	Number Equivalence of fractions; Four operations on fractions; Percentages and FDP, simple percentage increase. Statistics Line and bar charts; Averages. <i>End of Module Test Assessment</i>	Showersave Project	Geography: Use examples of populations and demographic to consider bar charts	Algebra Substitution into formulae and expressions; Multiplying over a single bracket; Solving linear equations; Plotting and sketching linear functions; $y = mx + c$; Sequences and nth term. <i>End of Module Test Assessment</i>	Algebra Challenge	Physics: Look at the straight-line graph for Hook's Law	Geometry Line segments; Constructions; Volume and surface area of prisms, cylinders and composite solids Transformations; Similar & Congruent triangles; Pythagoras' Theorem; Euler's Formula and Solid shapes. <i>End of Module Test Assessment</i>	UKMT Intermediate Maths Challenge	DT: Look at the strength of triangles. Technical drawing aspects of mathematical constructions
Careers	Financial Advisors Job			Research Scientist			Carpentry		

3	Geometry Types of angle, angles in parallel lines & triangles; Transformations - translation, reflection, rotation; Symmetry & Congruence; Perimeter & Area. <i>End of Module Test Assessment</i>	UKMT Junior Maths Challenge	Business Studies: Look at use of farming space and profit and expenditure	Geometry Quadrilaterals; Polygons and angles; Area and perimeter of quadrilaterals; Circumference & Area of Circles Statistics Pie charts; Scatter graphs. <i>End of Module Test Assessment</i>	UKMT Junior Maths Challenge	Geography/ Physics: Circumference and radius of Earth and other planets Business Studies/ Geography: Look at % spend of GDP by Government	Probability Simple probability and experiments; Sum of outcomes; Sample space diagrams; Venn diagrams. Statistics Discrete, continuous and grouped data; Measures of Central Tendency. <i>End of Module Test Assessment</i>	LIFE Programme: Look at simple probabilities of gambling English: Text Analysis comparison of similar texts
Careers	Computer Games Designer			Animator			Actuary	