

	Year 9 Mathematics					
	Autumn Term 1	Autumn Term 2	Spring Term 1	Spring Term 2	Summer Term 2	Summer Term 2
BIG Question Curriculum content Please log into SPARX Maths to support your child.	How can algebra, help us represent relationships, and solve real-world problems? • Graphs and coordinates. • Equations and inequalities • 2D and 3D shapes • Area, surface area • Volume	How we solve practical problems accurately and confidently? • Number properties— • Indices and surds. • Constructions and loci. • Scale drawings. • Financial maths.	How can scale factors, similarity, and Pythagoras' theorem help compare shapes? • Enlargement. • Similarity & congruence. • Square numbers & roots. • Pythagoras' theorem. • Using Pythagoras in context.	How can real-life formulas help us solve practical problems? • Right-angle trigonometry • Links between trig ratios. • Direct & inverse proportion. • Speed, distance & time. • Ratio & density	How can probability, and statistical diagrams help us communicate information clearly? • Probability & events. • Rounding & estimation. • Averages & comparing data. • Pie charts & data interpretation. • Standard form & index laws.	How can we use algebraic rules and equations to solve problems logically? • Simplifying expressions. • Expanding & factorising. • Solving equations. • Equations from geometry. • Algebraic reasoning.
10 key words	1. Gradient 2. Intercept 3. Linear graph 4. Quadratic 5. Inequality 6. Rearrange 7. Net 8. Elevation 9. Surface area 10. Volume	1. Factor 2. Multiple 3. HCF 4. LCM 5. Surd 6. Index 7. Locus 8. Perpendicular bisector 9. Simple interest 10. Compound interest	1. Scale factor 2. Enlargement 3. Centre of enlargement 4. Congruent 5. Similar 6. Hypotenuse 7. Pythagoras' theorem 8. Square number 9. Square root 10. Right-angled triangle	1. Opposite 2. Adjacent 3. Sine 4. Cosine 5. Tangent 6. Direct proportion 7. Inverse proportion 8. Speed 9. Density 10. Ratio	1. Relative frequency 2. Expected outcome 3. Independent events 4. Two-way table 5. Venn diagram 6. Significant figures 7. Mean 8. Median 9. Pie chart 10. Index laws	1. Like terms 2. Expand 3. Factorise 4. Equation 5. Unknown 6. Coefficient 7. Perimeter 8. Area 9. Justify 10. Balance method
Catholic social teaching Link	Truth and clarity	Stewardship	Truth and clarity	Stewardship	Community	Fairness and logic
Careers Link	Technical and design careers.	Construction and engineering	Construction and design	Engineering and construction	Data and research careers	STEM and technical careers

Ways to enrich the year 9 curriculum at home...

- Look at a variety of cups and glasses. Predict which one will hold the most water and explore.
- Investigate how maths is used in a career that you are interested in.
- Explore the different proofs of Pythagoras theorem. Which one makes sense to you?