KS3 Curriculum Intent for Mathematics at Blessed Robert Sutton Catholic Voluntary Academy

	Overall Aim of Mathematics
	The mathematics department is committed to ensure that our young learners are not only successful at Blessed Robert Sutton Catholic voluntary academy, but also thoroughly equipped to prosper in future academic opportunities and employment. Our curriculum is designed to promote: • Confidence, resilience and fluency in mathematical knowledge • Develop mathematical skills to solve contextual problems • Develop reason and understanding to tackle problems in a methodological manner • Opportunities to work independently and in collaboration with others • An enthusiasm for mathematics and related careers
	Mathematics will teach **spiritual development** by supporting students to make sense of the world around them and explore connections between their numeracy skills and every-day life.
	Mathematics will teach **social excellence** through a range of teaching strategies that allow pupils to work effectively as a community. Class discussions and opportunities to explore different approaches to a problem will develop pupils' abilities to work effectively as a team- communicating, respecting, listening and developing each other's ideas.
	Mathematics will teach **academic excellence** by developing the ability to think creatively, act independently, and with the resilience required to solve problems. Teaching is aimed at developing a strong conceptual understanding of the underpinning principles of mathematics. These principles are built upon through the consolidation of key topics, with constant extension to challenge all learners. We aim to build confidence and enjoyment of the subject for future learning, whilst providing constant challenge that will stretch even the sharpest minds. To ensure students are able to link their studies to the real world, topics are connected with additional material designed to broaden interest and demonstrate applied mathematics in real life.

Enrichment opportunities in this subject include:
- UKMT-KS3 and KS4
- The study of 'Further Mathematics' at KS4 for selected students
- Developing an appreciation of some aspect of budgeting and finance
- Code breaking

Key Stage 3 Course description

Year 7

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	**Algebraic Thinking**						**Place Value and Proportion**					
	Sequences		Understand and use algebraic notation		Equality and equivalence		Place value and ordering integers and decimals			Fraction, decimal and percentage equivalence		
Spring	**Applications of Number**						**Directed Number**			**Fractional Thinking**		
	Solving problems with addition & subtraction		Solving problems with multiplication and division			Fractions & percentages of amounts	Four operations with directed number			Addition and subtraction of fractions		
Summer	**Lines and Angles**						**Reasoning with Number**					
	Constructing, measuring and using geometric notation		Developing geometric reasoning				Developing number sense		Sets and probability		Prime numbers and proof	

Year 8

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Proportional Reasoning						Representations					
	Ratio and scale		Multiplicative change		Multiplying and dividing fractions		Working in the Cartesian plane			Representing data		Tables & Probability
Spring	Algebraic techniques						Developing Number					
	Brackets, equations and inequalities				Sequences	Indices	Fractions and percentages		Standard index form		Number sense	
Summer	Developing Geometry						Reasoning with Data					
	Angles in parallel lines and polygons		Area of trapezia and circles		Line symmetry and reflection		The data handling cycle				Measures of location	

Year 9

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Autumn	Reasoning with Algebra						Constructing in 2 and 3 Dimensions					
	Straight line graphs		Forming and solving equations		Testing conjectures		Three dimensional shapes			Constructions and Congruency		
Spring	Reasoning with Number						Reasoning with Geometry					
	Numbers		Using percentages		Maths and money		Deduction			Rotation and translation		Pythagoras' Theorem
Summer	Reasoning with Proportion						Representations					
	Enlargement and similarity		Solving ratio and proportion problems		Rates		Solving problems using graphs, tables and algebra					

Assessments

Students will be assessed regularly using exit tickets. At the end of each unit, there will be a short test to check understanding. Formal assessments will take place three times each year in line with the whole school assessment policy.

Ways to help my child succeed- Useful websites

https://vle.mathswatch.co.uk/vle/

https://www.drfrostmaths.com/dashboard.php