




KS4 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

	<p>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.</p>
	<p>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.</p>
	<p>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.</p>
<p>Enrichment opportunities in this subject include:</p> <ul style="list-style-type: none"> • 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 4

At Blessed Robert Sutton, we deliver the OCR 9-1 Mathematics GCSE. There are two tiers of entry and all examinations take place at the end of year 11.

Year 10 Curriculum

	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 term	Similarity Congruence, similarity & enlargement VIEW		Similarity Trigonometry VIEW		Developing algebra Representing solutions of equations & inequalities VIEW			Developing algebra Simultaneous equations VIEW				
Spring term	Geometry Angles & bearings VIEW		Geometry Working with circles VIEW		Geometry Vectors VIEW		Proportions & proportional change Ratios & fractions VIEW		Proportions & proportional change Percentages & Interest VIEW		Proportions & proportional change Probability VIEW	
Summer term	Delving into data Collecting, representing & interpreting data VIEW				Using number Non-calculator methods VIEW		Using number Types of number & sequences VIEW		Using number Indices & roots VIEW		Expressions Manipulating expressions VIEW	

Year 11 Curriculum

	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 term	Graphs Gradients & lines VIEW	Graphs Non-linear graphs VIEW	Graphs Using graphs VIEW	Algebra Expanding & factorising VIEW	Algebra Changing the subject VIEW	Algebra Functions VIEW						
Spring term	Reasoning Multiplicative reasoning VIEW	Reasoning Geometric reasoning VIEW	Reasoning Algebraic reasoning VIEW	Revision & communication Transforming & Constructing VIEW	Revision & communication Listing & describing VIEW	Revision & communication Show that... VIEW						

Past papers and revision materials

<https://www.mathsgenie.co.uk/gcse.html>

<https://corbettmaths.com/2019/04/01/gcse-practice-papers/>

<https://corbettmaths.com/2017/09/14/legacy-gcse-a-g-practice-papers/>

Assessments

A small assessment will take place after each unit of work. Formal summative assessments will take place termly in line with the whole school assessment policy. The final exam consists of three papers, each being 1 hour 30 minutes.

Ways to help my child succeed- Useful websites

<https://www.drfrostmaths.com/index.php>

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

<https://mathsmadeeasy.co.uk/gcse-maths-revision/>

<https://mathsgenie.co.uk/gcse.html>