

## Yr. 11 Maths GCSE (STEM Subject) – Curriculum Map

Advent 1 Number and Algebra	Advent 2 Number and Algebra	<u>Disciplinary Skills</u> Number Algebra Geometry and Measures Ratio and Proportion Probability Handling Data (Statistics)  <u>Advent 1 – Assessment</u> Testing knowledge & skills of key content.  <u>Advent 2 – Assessment</u> Testing knowledge & skills of key content  <u>Careers (jobs which use algebra and geometry)</u> Air Traffic Controller, Nutritionist, Carpenter, Surveyor, Jeweller, Market Research Analyst	Lent 1 Number and Algebra	Lent 2 Geometry and Measures	Learning is revisited and retrieved through low states quizzes, Do it Now activities, formal testing.  <u>Lent 1</u> Testing knowledge & skills of key content.  <u>Lent 2</u> Testing knowledge & skills of key content.  <u>Careers</u> <a href="https://www.mathscareers.org.uk/">https://www.mathscareers.org.uk/</a>	<u>Pentecost 1</u> Number Handling Data <u>Intent</u>  Understand links between different shapes of graphs and their equations (adapted to include equations of circles, Equations of trig functions and their respective graphs, exponential equations, transformations of graphs)  <u>Careers</u> Epidemiologist  <u>Intent:</u>  Interpret information from real-life graphs such as Velocity time graphs (adapted to include rate of change, estimate of area underneath the curve)  <u>Careers</u> Data Analyst Market Analyst	<u>Books</u> - <a href="https://simonsingh.net/books/">https://simonsingh.net/books/</a>  <a href="https://www.watersones.com/category/science-technology-medicine/mathematics-and-science/mathematics">https://www.watersones.com/category/science-technology-medicine/mathematics-and-science/mathematics</a>  <u>Maths Clubs</u> <a href="https://parallel.org.uk/">https://parallel.org.uk/</a>  <u>Pentecost 1</u> Testing knowledge & skills of key content.  <u>Pentecost 2</u> Testing knowledge & skills of key content.
<u>Intent:</u>  Know exact trig ratios for angles between 0 degrees and 360 degrees  Solving quadratic equations (adapted to include completing the square and using the quadratic formula)  <u>Careers</u> Surveyor	<u>Intent:</u>  Multiply out two brackets (adapted to 3 brackets)  Simultaneous linear equations (adapted to include quadratic simultaneous equations)  <u>Careers</u> Auditor, Accountant Budget Analyst		<u>Intent</u>  Solve inequalities (adapted to include quadratic inequalities and representing on a graph)  Substitution into algebraic expressions (adapted to include functions, composite functions and iteration)  <u>Careers</u> Maths Professor, Statistician, Chemist, Economist, Astronomy	<u>Intent:</u>  Angles in polygons (adapted to include circle theorems and proof)  Vector geometry  <u>Careers</u> Interior Designer, CAD Engineer, Mathematics Teacher, Plumber		<u>READING 3-2-1</u>  The importance of literacy for mathematics based on maths in the news.	

## CATHOLIC SOCIAL TEACHING

## To consider:

- Solidarity when interpreting data on poverty and equality.
- Stewardship when studying data on environmental issues and in your own daily life.
- The Common Good in every lesson and interaction.