



Year 9 –Based on Edexcel Higher Textbook.

Scaffold for Core & Support -enables teaching to the top.

| Learning | Loving | Living |
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| Key Knowledge Link apply and adapt Build knowledge and skills Self-regulated, reflective independent Know what they are good at and what to improve Stretched, challenged supported Wider ideas culture and the world Use technology flexibly and responsibly | Well informed global citizens Believe they can make a difference Shape community and school Care about the environment and each other Responsible for their own behaviour Grow spiritually Respect and tolerance Charity, volunteering and fundraising | Wider learning Leadership, teamwork, collaboration Success for all abilities Value creative subjects Interactions with the world of work Safety, mental and physical health Equipped for their unique future Apply to the world beyond |
| Curriculum Intent | | |
| <p>This programme of study is designed to support planning of teaching and to be used alongside the scheme of work for KS3 Maths. The POS for Year KS 3 provides the foundations needed to create confident and numerate students ready to progress to KS4 Maths, its intent is; This course will support students to</p> <ul style="list-style-type: none"> • develop fluent knowledge, skills and understanding of mathematical methods and concepts • acquire, select and apply mathematical techniques to solve problems – this thread should weave through the course in each topic • reason mathematically, make deductions and inferences, and draw conclusions • comprehend, interpret and communicate mathematical information in a variety of forms appropriate to the information and context. • Recap and revision to include preparation for tests and exams as well as regular lessons where topics from previous concepts across the key stage. <p><i>Provide pupils with the knowledge and skills they need in order to take advantage of opportunities, responsibilities and experiences of later life.</i></p> <ul style="list-style-type: none"> • Our Year 9 Maths curriculum extends pupils’ knowledge and skills from Year 8, develops fluency, reason mathematically, and solve problems through varied and increasing complex problems. • Students will build on Number skills, which consolidates and extends learning at the end of Year 9. • Students will have opportunities for enrichment activities which enables engagement and also makes the subject enjoyable. • Students will have access to materials that enables them to make connections within the subject and other subject areas. • The Maths department respects and supports the ability of the professional teacher to deliver topics in a flexible and creative style | | |



- This POS is a guide to delivery but individual teachers may modify the exact content and assessment to reflect the needs and abilities of their students. The order may be adapted and topics revisited within the broad timeframe provided.

Clearly state the end points that pupils are building towards and the knowledge and skills required to reach them.

- Assessments allow students to select different skills and apply mathematical techniques to solve problems. End of topic tests are differentiated as this is how students will be assessed at GCSE. The tests will provide support/scaffolding to less-able students as well as allow more-able students to be challenged through application of a combination of different mathematical techniques. Students record their 'progress' in each topic on their KS3 tracking sheets.
- Students also complete EoT.

Is planned and sequenced so that new knowledge and skills build on what has been taught and builds towards clearly defined end points.

- Students develop fluency of Number Skills by consolidating their numerical and mathematical capability from key stage 2 and extend their understanding of the number system and place value to include decimals, fractions, powers and roots,
- Extend their understanding of the number system; make connections between number relationships, and their algebraic and graphical representations.
- Begin to reason deductively in geometry, number and algebra, including using geometrical constructions

has high ambition for all pupils

- Students and their families has access to an overview of the maths curriculum at the start of the year. The letter also includes our high expectations for behaviour and organisation. Our, assessment and behaviour policy are all updated annually and staff use the behaviour policy well to deal with incidents as they arise. There is also a focus on 'rewarding' students e.g. regular phone calls/emails home, house points, – students can record all of their achievements on their KS3 tracking sheets.
- Students are provided with 'revision sheets' for each topic (on SMHW) which allow students to RAG rate their understanding of the content of each topic and a focus on learning key concept within each topic.
- *Each sub unit offer students the opportunity to explore and apply their skills to real life problems.*
- *Students are encouraged to show respect and tolerance in lessons. Students are responsible for their own behaviour and teachers implement BR BfL policies consistently.*
- Time has been built into each topic to allow students to explore enrich activities, complete FF on their assessments and RAG rate their progress.

Spaced Memory retrieval for each topic

- Teacher formative assessment allow students to recall and reinforce learning.
- Students are given unit overview at the start of each topic, with a checklist of learning objectives they use during lesson and also to use as revision checklist for end of unit tests.
- Students are given time before each test to revisit content from the topic.
- After each test, students analyse their test papers and complete a feedforward document, using metacognitive questions to identify their strengths and weaknesses from each topic and think about strategies they can use in future tests to make improvements.



| Term | All topics to include Spaced memory retrieval. Set 1 and 2 should tackle these topics in depth. Sets 3 and 4 should balance a lighter touch on these topics with consolidation. | No. of Lessons | Assessment |
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| Autumn 1 | <p>Unit 1 Number</p> <p>1.1 Number problems and reasoning 1.2 Place value and estimating 1.3 HCF and LCM 1.4 Calculating with powers (indices) 1.5 Zero, negative and fractional indices 1.6 Powers of 10 and standard form 1.7 Surds</p> <p>Unit 2 Algebra</p> <p>2.1 Algebraic indices 2.2 Expanding and factorising 2.3 Equations 2.4 Formulae</p> | Total 21 lessons. | RAG – Formative assessment Starters Practice questions Check ups Low stakes assessments End of unit assessment H/W, |
| Autumn 2 | <p>2.5 Linear sequences 2.6 Non-linear sequences 2.7 More expanding and factorising</p> <p>Unit 3 Interpreting and representing data</p> <p>3.1 Statistical diagrams 1 3.2 Time series 3.3 Scatter graphs 3.4 Line of best fit 3.5 Averages and range 3.6 Statistical diagrams 2</p> | Total 21 lessons. | RAG – Formative assessment Starters Practice questions Check ups Low stakes assessments End of unit assessment H/W, |



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| | <p>Unit 4 Fractions, ratio and percentages</p> <p>4.1 Fractions 4.2 Ratios 4.3 Ratio and proportion</p> | | |
| Spring 1 | <p>4.4 Percentages 4.5 Fractions, decimals and percentages</p> <p>Unit 5 Angles and trigonometry</p> <p>5.1 Angle properties of triangles and quadrilaterals 5.2 Interior angles of a polygon 5.3 Exterior angles of a polygon 5.4 Pythagoras' theorem 1 5.4 Pythagoras' theorem 1 5.6 Trigonometry 1 5.7 Trigonometry 2</p> | Total 18 lessons. | <p>RAG – Formative assessment Starters Practice questions Check ups Low stakes assessments End of unit assessment H/W,</p> |
| Spring 2 | <p>Unit 6 Graphs</p> <p>6.1 Linear graphs 6.2 More linear graphs 6.3 Graphing rates of change 6.4 Real-life graphs 6.5 Line segments 6.6 Quadratic graphs 6.7 Cubic and reciprocal graphs 6.8 More graphs</p> | Total 18 lessons | <p>RAG – Formative assessment Starters Practice questions Check ups Low stakes assessments End of unit assessment H/W,</p> |
| Summer 1 | <p>Unit 7 Area and volume</p> <p>7.1 Perimeter and area 7.2 Units and accuracy 7.3 Prisms</p> | Total 18 lessons | <p>RAG – Formative assessment Starters Practice questions Check ups</p> |



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| | 7.4 Circles 7.5 Sectors of circles 7.6 Cylinders and spheres 7.7 Pyramids and cones | | Low stakes assessments End of unit assessment H/W, |
| Summer 2 | Unit 8 Transformations and constructions 8.1 3D solids 8.2 Reflection and rotation 8.3 Enlargement 8.4 Transformations and combinations of transformations 8.5 Bearings and scale drawings 8.6 Constructions 1 8.7 Constructions 2 8.8 Loci | Total 21 lessons | RAG –Formative assessment Starters Practice questions Check ups End of unit assessment Revision EoY exams Feedforward H/W, |