

Year 7	Year 8	Year 9	Year 10	Year 11
Overview of SOW (key topics/assessment pieces/knowledge)	Overview of SOW (key topics/assessment pieces/knowledge)	Overview of SOW (key topics/assessment pieces/knowledge)	Overview of SOW (key topics/assessment pieces/knowledge)	Overview of SOW (key topics/assessment pieces/knowledge)
<p>HT1</p> <p>Pre test 1 Toolkit baseline</p> <p>UNIT 1 Place value – Base ten table</p> <p>UNIT 2 AND 3 Addition and Subtraction to include perimeter</p> <p>UNIT 4 Working with Decimals (addition and subtractions)</p> <p>Post test HT1 Toolkit</p>	<p>HT1</p> <p>Pre test 1 Toolkit Baseline</p> <p>Unit 1 Factors, multiples and primes.</p> <p>Unit 2 Calculating with fractions</p> <p>Post test HT 1 Toolkit</p>	<p>HT1</p> <p>UNIT 1 Number, indices HCF, LCM</p> <p>UNIT 2 Areas of 2D shapes, Circles and Surface area and volume</p> <p>Assessment 1 on the key topics in HT1</p>	<p>HT1</p> <p>Teach 8 lessons to prep for test 4 and test 5. Assessment END OF YEAR 9 (TEST 4 AND 5) on the key topics in HT4</p> <p>UNIT 13 Ratio And proportion</p> <p>UNIT 14 Congruence and transformations</p> <p>UNIT 15 Indices and surds</p> <p>Assessment 7 on the key topics in HT1</p>	<p>HT1</p> <p>UNIT 25 Quadratic and cubic Graphs</p> <p>UNIT 26 Unit conversions, harder 3D problems</p> <p>UNIT 27 Percentage problems and interest</p> <p>UNIT 25 Simultaneous quadratics and graphs of functions</p> <p>UNIT 26 Converting units and harder areas</p> <p>Assessment END OF YEAR 10 (TEST 11 AND 12) on the key topics in HT5</p>
<p>HT2</p> <p>Pre test 2</p> <p>UNIT 5 AND 6 Multiplication and division to include area</p> <p>UNIT 7 AND 8 Working with decimals (multiplication and division)</p> <p>Post test HT1 and 2 Toolkit</p>	<p>HT2</p> <p>Pre test 2</p> <p>Unit 3 Positive and negative numbers.</p> <p>Unit 4 Sequences, expressions and equations</p> <p>Post test HT 1 and 2 Toolkit</p>	<p>HT2</p> <p>UNIT 3 Index Laws, Expanding and Factorising</p> <p>UNIT 4 Rounding and Estimation</p> <p>UNIT 5 Substitution and solving equations</p> <p>Assessment 2 on the key topics in HT2</p>	<p>HT2</p> <p>UNIT 16 Rearranging and substitution</p> <p>UNIT 17 Pythagoras</p> <p>UNIT 18 Estimation, bounds and value for money</p> <p>UNIT 17 Pythagoras and Trig</p> <p>UNIT 18 Algebraic fractions and recursive formulae</p> <p>Assessment 8 on the key topics in HT2</p>	<p>HT2</p> <p>Exam Essentials baseline</p> <p>Unit 28 Circles and cylinders</p> <p>Unit 29 Direct Proportion and Ratio</p> <p>Unit 30 Vectors</p> <p>Unit 31 Tree diagrams</p> <p>Unit 28 Cones and spheres</p> <p>Unit 29 Direct and inverse proportion</p> <p>Unit 30 Vectors</p> <p>Unit 31 Tree diagrams</p> <p>Assessment 13</p>
<p>HT3</p> <p>Pre test 3</p> <p>UNIT 9 Working with units</p> <p>UNIT 10 Angles and angle properties of straight lines</p> <p>UNIT 11 Properties of triangles</p> <p>UNIT 12 AND 13 Properties of quadrilaterals</p> <p>Post test HT1,2,3 Toolkit</p>	<p>HT3</p> <p>Pre test 3</p> <p>UNIT 5 Construction (removed) and angle properties.</p> <p>UNIT 6 Length and area</p> <p>Post test HT 1,2,3 Toolkit</p>	<p>HT3</p> <p>UNIT 6 Sampling and Averages</p> <p>UNIT 7 Fractions</p> <p>Assessment 3 on the key topics in HT3</p>	<p>HT3</p> <p>UNIT 19 Expanding and factorising</p> <p>UNIT 20 Bearings and constructions</p> <p>UNIT 21 Quadratics</p> <p>UNIT 19 Circle theorem</p> <p>Assessment 9 on the key topics in HT3</p>	<p>HT3</p> <p>Unit 32 Straight line graphs</p> <p>Unit 33 Surds</p> <p>Unit 34 Sequences</p> <p>Unit 32 Function notation</p> <p>Unit 33 Time series graphs</p> <p>Unit 34 Sequences</p> <p>Assessment 14</p> <p>Exam Essentials</p> <p>Cross Fell</p>
<p>HT4</p> <p>Pre test 4</p> <p>UNIT 14 Understand and use equivalent fractions</p> <p>UNIT 15 Fractions of amounts</p> <p>UNIT 16 Multiply and divide fractions</p> <p>Post test HT1,2,3,4 Toolkit</p>	<p>HT4</p> <p>Pre test 4</p> <p>UNIT 7 Percentage change</p> <p>UNIT 8 Ratio and rate</p> <p>Post test 1,2,3,4 Toolkit</p>	<p>HT4</p> <p>UNIT 8 Angle properties</p> <p>UNIT 9 SEQUENCES</p> <p>UNIT 10 Handling data</p> <p>Assessment END OF YEAR 9 (TEST 4 AND 5) on the key topics in HT4</p>	<p>HT4</p> <p>UNIT 11 Straight line graphs. Condense Unit 22 and teach before Unit 23</p> <p>UNIT 22 Data Handling</p> <p>UNIT 23 Solving inequalities</p> <p>UNIT 24 Standard form</p> <p>UNIT 24 Sine and cosine rule</p> <p>3D Trig Taught first</p> <p>Assessment 10 on the key topics in HT4</p>	<p>HT4</p> <p>Unit 35 Trig</p> <p>Unit 36 Sets and venn diagrams</p> <p>Unit 37 Simultaneous equations</p> <p>Unit 35 Trig graphs</p> <p>Unit 36 Sets</p> <p>Unit 37 Equations of circles</p> <p>Past papers/misconceptions and revision</p> <p>Exam Essentials</p> <p>Snowdon</p>

<p>HT5 Pre test 5 UNIT 17 Order of operations UNIT 18 Introduction to algebra (simplify, expand and factorise) UNIT 19 Calendar investigation (optional) Post test HT 1,2,3,4,5 Toolkit</p>	<p>HT5 Pre test 5 UNIT 9 Rounding. UNIT 10 Circles UNIT 11 3D shapes and nets UNIT 12 Surface area and volume Post test HT 1,2,3,4,5 Toolkit</p>	<p>HT5 Problem solving See SOL</p>	<p>HT5 UNIT 25 Quadratic and cubic Graphs UNIT 26 Unit conversions, harder 3D problems UNIT 27 Percentage problems and interest UNIT 25 Simultaneous quadratics and graphs of functions UNIT 26 Converting units and harder areas Assessment END OF YEAR 10 (TEST 11 AND 12) on the key topics in HT5</p>	<p>HT5 Exam Essentials Past papers/misconceptions and revision</p>
<p>HT6 Pre test 6 Unit 20 Percentages Unit 21 Working with data Post test HT 1,2,3,4,5,6 END OF YR 7 Toolkit</p>	<p>HT6 Pre test 6 UNIT 13 Statistics UNIT 14 Financial capability Post test Ht 1,2,3,4,5,6 END OF YEAR 8 Toolkit</p>	<p>HT6 UNIT 11 Straight line graphs UNIT 12 Probability Assessment 6</p>	<p>HT6 Exam Essentials baseline Unit 28 Circles and cylinders Unit 29 Direct Proportion and Ratio Unit 30 Vectors Unit 31 Tree diagrams Unit 28 Cones and spheres Unit 29 Direct and inverse proportion Unit 30 Vectors Unit 31 Tree diagrams Assessment 13</p>	<p>HT6 Exam Essentials Past papers/misconceptions and revision</p>
<p>Key topics: Number, Algebra and Data</p>	<p>Key topics: Number, Algebra and Data</p>	<p>Key topics: Number, Algebra and Data</p>	<p>Key topics: Ratio and proportion, Data handling, algebra and number</p>	<p>Key topics: Algebra Revision Exam technique</p>

SHARE MAT Mathematics Curriculum

Intent

The aim of the SHARE MAT mathematics department is to provide the best opportunities for students to discover, develop and progress their understanding of maths. There is a focus on helping students to be ready for their own next steps in numeracy, regardless of ability and background, to prepare them for a happy and successful life in modern Britain.

Throughout the maths curriculum the focus on developing knowledge is constant, with all students given the tools and support to attain their potential. The Programme of Study is designed and tailored to ensure all students have access to the full rich curriculum regardless of their starting position.

The main aims of the curriculum are to:

- Develop fluent knowledge, skills and understanding of mathematical methods
- Acquire, select and apply mathematical techniques to solve problems
- Reason mathematically, make deductions and inferences and draw conclusions
- Comprehend, interpret and communicate mathematical information in a variety of forms appropriate to information and context
- Provide a strong foundation for further academic and vocational study and for employment.

Implementation & principles

Students are setted on entry based on KS2 data to increase the effectiveness of bespoke teaching and to develop deeper knowledge, supporting students to succeed and progress.

COVID RESPONSE: Pupils are being taught in mixed ability classes. Transition data, progress tests on entry and SEND observations/drop ins are in place to give support as quickly as efficiently as possible. THE MATHS TOOLKIT has been introduced to support pupils in recalling the basics (10 key skills). See toolkit rationale for details. This setting is then regularly re-evaluated to ensure no student is left behind or their potential capped.

Key stage 3

The curriculum at KS3 follow the NC and is designed to support and develop maths key knowledge delivered at KS2 and broaden these skills further by adding greater depth and breadth to student understanding. The PoS is clear and allows for flexible teaching to maintain the very best progress and development. Students are assessed regularly to maintain an awareness of progress, allowing teachers to adapt their teaching to match students' needs.

Key stage 4

The curriculum at KS4 follows a similar spiral format as KS3 allowing for further development of the skills and knowledge required. Students follow a tiered pathway of Higher, Foundation or Access to further support and deepen progress. The tiers are aligned to allow movement between each pathway so as not to limit attainment, with student pathways being reassessed throughout maintaining fluid setting. The Access tier is designed to help students to access the foundation GCSE with a clear focus on building key knowledge and skills but without limiting the curriculum's breadth.

Further details

The curriculum across the Key stages is broken up into half term windows to maintain a deep and sustained level of knowledge throughout.

- Staff build upon what has been taught before to add new knowledge. **COVID RESPONSE - Hegarty Maths incorporates the use of building blocks linked to all skills. Royds hall are using this to increase student engagement. Mathswatch, which was previously used during lockdown had less impact than expected giving a clear rationale to move to Hegarty.**
- Teachers clearly model key concepts and information. **COVID RESPONSE – Royds hall staff are expected to stream videos for pupils who are in a bubble has been shut down due to too many infections. Some staff are voluntarily streaming videos for pupils with SEND needs. For Year 9-11 students isolating, teachers are delivering live lessons via MS Teams.**
- Teachers identify and check pupils understanding lesson by lesson and respond as required. **COVID RESPONSE : - KS3 classrooms have mini whiteboards, pens and wipes so that staff can respond to all individual answers. RAG cards in planners are sometimes used to get whole class feedback.**
- Homeworks are used to help embed key ideas and follow up tasks are set as a direct result to fill gaps in confidence and knowledge. **COVID RESPONSE – The only change here is that periods or quarantine of the paper homework has to be in place to stop cross contamination. Hegarty Maths is a possible source of homework setting for those self isolating**
- TFI (Time For Improvement) questions are used to further cement this knowledge into longer term understanding and to develop problem solving skills. **COVID RESPONSE – This continues in face to face lessons. Hegarty Maths is a possible source of homework setting for those self isolating**
- Assessments are then used to review understanding and knowledge to date and teachers use an intervention week to identify key conceptions that have not been

transferred to long term memory. This is then used to influence future planning. **COVID RESPONSE – This continues in face to face lessons. Hegarty Maths is a possible source of homework setting for those self isolating.**

- Students work to a clear yearly end point which further checks for this knowledge and understanding. **COVID RESPONSE – This continues in face to face lessons. Hegarty Maths is a possible source of homework setting for those self isolating**
- The curriculum is formed into a spiral to allow the revisiting of topics to further build and support underlying ideas.
- Department CPD is a key part of sharing good practice and pedagogy across the department regularly challenging the quality of teaching.

REMOTE LEARNING/BLENDED LEARNING

- **Students who are isolating due to Covid guidelines and will need remote learning work sent via Class Charts will have a 'X' for their lessons on SIMs.**
- **Students in Year 7 and 8 have work set on Class Charts. All Year 9-11 students isolating are invited to live lessons via MS Teams.**