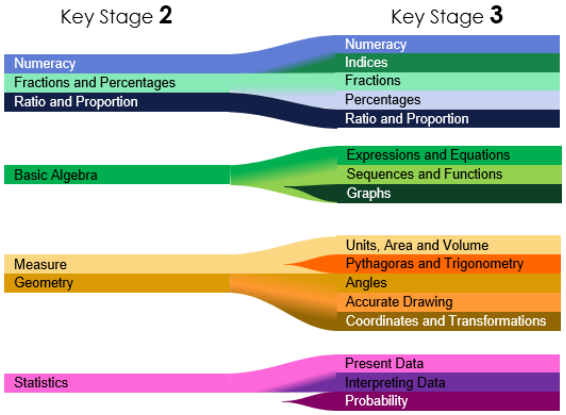
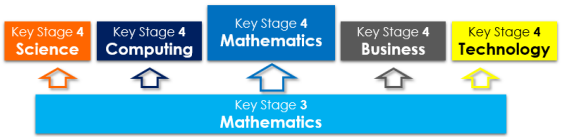
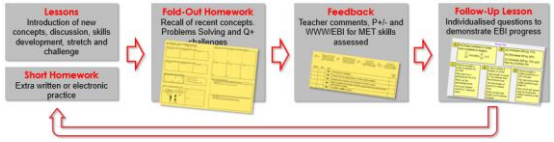
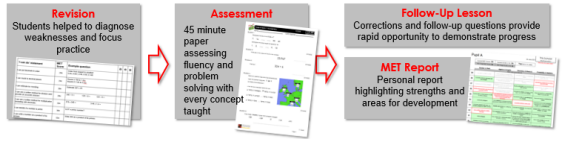
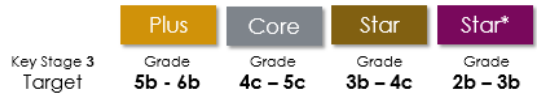
Key Stage 3 and Key Stage 4 **Mathematics** Curriculum

Midsomer Norton Schools Partnership Mathematics

Mathematics	Intent	Implementation	Impact
Key Stage **3** Curriculum	Our ***Key Stage 3*** curriculum intends to develop in students a deep appreciation of the **patterns and relationships between numbers** and to provide a firm foundation with the **tools of algebra, geometry and statistics** to enable students to **solve problems** in both abstract and real-world contexts. The curriculum builds on prior knowledge by consolidating concepts and standardising techniques learnt at ***Key Stage 2***, developing and enhancing understanding of all four areas of the secondary Mathematics curriculum and introducing new concepts such as Pythagoras and Trigonometry that provide essential foundations for ***Key Stage 4*** Mathematics.  The curriculum also recognises the role that strong Mathematical **understanding, problem solving and reasoning skills** play in supporting success in all **technical subjects at Key Stage 4.** 	The Long Term Plan for each year presents concepts in a logical sequence that enables students to develop the skills needed to access concepts later in the year and in subsequent years. For example Solving Equations is covered in year 7 term 3 before being utilised in the introduction to Pythagoras' Theorem in term 5. All areas of the curriculum are revisited each year to ensure consolidation and long-term recall. Within each topic this is followed by conceptual development and deeper exploration of problem solving. Progress is monitoring through 2/3 weekly cycle of homework, feedback and follow-up work.  Attainment is measured through termly cycle of revision, assessment and holistic feedback on progress through MET reports emailed to students and parents.  The curriculum is fully differentiated into four overlapping syllabi enabling students to spend more time on the concepts they need to secure to make the most progress. Frequent opportunities to transition between classes ensure rapid progress is recognised and sustained so that there is appropriate and continuous challenge for all.  Plus syllabus supports HAP students with topics studied at greater depth and key higher tier GCSE concepts introduced earlier. UKMT team and individual challenges help foster an enthusiasm for rich problem solving and further Mathematical study. Q^+ challenge questions are built into all syllabi and homework providing an ever-present opportunity to test understanding beyond the main objective. Star* syllabus supports students with weaker numerical skills including some SEND with a higher emphasis on core numeracy and life skills. Key Stage 3 Numeracy intervention programme identifies PP and SEND students with lower than expected progress and helps them with personalised programmes of support designed around weaknesses highlighted in MET reports.	

Midsomer Norton Schools Partnership

Mathematics	Intent	Implementation	Impact
Key Stage **4** Curriculum	• Prepare and refine skills for demanding GCSEs • Life skills and employability through Problem Solving and reasoning. Systematic, Deductive reasoning. Critical reasoning with statistics • Prepare for KS5 Maths / Core Maths • Prepare for KS5 Science, Psychology, Geography, Business, Computing etc •	• Carefully assembled modules of mutually reinforcing content. • Homework cycle • Tri-termly Assessment Cycle • Revision Strategies and Exam Preparation programme • Career slides • Differentiated curriculum (Plus+, Plus, Core, Star) linked to target outcomes. • Plus+/Plus Syllabus for HAP • Q+ Questions • UKMT Maths Challenges • Star syllabus supports SEND to access full range of Foundation syllabus.	