The Cornerstone Academy

Mathematics Curriculum

Reviewed 15th July 2025

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United Learning
The best in everyone™

Maths Curriculum for Years 7-11

The United Learning Maths curriculum from which we base our own, is a non-limiting curriculum for state academies and independent schools in the Group and is adapted and implemented to cater for all students at the academy in Key stage 3.

At Key Stage 4 students study the AQA GCSE specification, either higher or foundation tier.

1. Intent of the Mathematics curriculum in years 7, 8 and 9

The Cornerstone Academy Curriculum for Mathematics in KS3 is based on the content knowledge and skills required for GCSE Mathematics as well as a methodology which promotes "maths mastery". The content is based on the national curriculum and is a minimum entitlement for learners within United Learning schools. This approach involves a dominantly teacher-led method, it enables students the opportunity to master important techniques and topic relevant understanding in preparation for their GCSE years. The ambition is for all students to achieve the expectations which are outlined in the curriculum. That is, that all pupils are taught the full content of the curriculum and that all pupils are taught to achieve the key performance indicators by the end of key stage 3. Mastery means that pupils should be able to recall and apply what they have learnt at another point in the future rather than just at the time they first meet an idea or technique. Achievements through the year contribute to evidence of mastery by the end of the year. Re-visiting a key performance indicator can provide opportunities to:

- demonstrate mastery
- address any gaps in learning
- widen and deepen learning as pupils apply their knowledge in a different context or tackle more complex maths.

The curriculum is content- and skills-based and is broken up into units which are assessed cumulatively throughout the year.

At KS4 students study the content for AQA Foundation and/or Higher GCSE in the 9-1 format.

2. Implementation of the Mathematics curriculum

In Years 7-9 students have a minimum of 5 x 50 minute Maths lessons per week. This consists of singles and double lessons. At KS4 students have 6 x 50 minute Maths lessons, one of which is committed to a knowledge test consisting of a summary of knowledge including the previous terms learning.

The maths curriculum at the Cornerstone Academy is implemented according to the teaching and learning policy of the school. Rosenshine and Teach like a champion techniques are the basis of the school teaching and learning practice.

Staff follow dedicated schemes of work to ensure all students cover the content of the national curriculum in full. All lessons at each key stage should use starter mat quizzes to promote recall, retention, application and mastery of content. The low stakes assessment for learning should be used by staff to inform planning and class intervention. The Sparx homework platform is also used throughout KS3 and 4 to promote independent learning and reinforcement

of current topics. Modelling should be used frequently, with the aid of visualisers to guide student practice and improve the quality of student response.

Assessment in KS3 uses combined unit assessments. These assessments range from specific unit assessments completed independently as well as periodic cumulative assessments (Mid- Year and End of Year Assessments). The unit assessments are used to inform planning and intervention by the class teacher to address gaps in knowledge and to ensure students master the units, leaving them well prepared for the next stage of their education. Teacher marked feedback opportunities are built into the order of teaching twice per term to ensure gaps in knowledge are addressed as well as group feedback given at the end of each unit test.

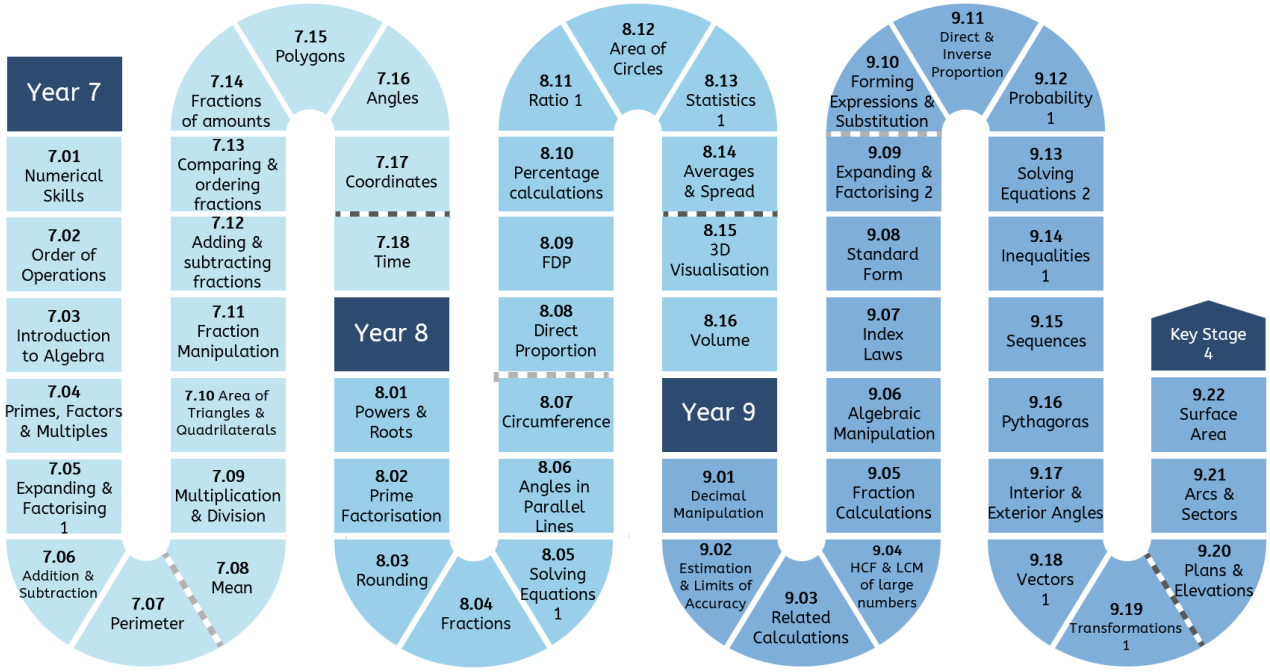
3. Impact of the maths curriculum

By the end of KS3: Students should have developed their mathematical understanding from KS2 by using a carefully chosen sequence of examples and appropriate teacher interventions, we then generalise and develop a more formal understanding of the scope and depth of question types in KS4. Students will become good at problem solving and confident in applying their mathematical knowledge to different contexts. All of this is supported by a carefully selected and sequenced set of practice exercises to further deepen their understanding of each unit. The Maths curriculum is designed as a mastery curriculum at KS3, allowing them to practice and perfect the fundamental concepts that underpin their methods needed in KS4

By the end of KS4: Students will continue learning specific content to widen their knowledge of higher-grade concepts in preparation for the GCSE exams. The second half of students final year is designed to assess and highlight key areas of weakness for Higher tier and Foundation students. The gaps are re-enforced through a tailored revision programme making use of current resources designed to address the gaps and assure students of their core skills. The KS3 and 4 strategy combined produces students who are well equipped, informed and confident on their abilities to practice good mathematical technique and recall the key information related to the national curriculum.

Appendix

The topic coverage for years 7, 8 and 9 is laid out in the road map below.



The topic coverage for year 10 and 11 is laid out in the road maps below.