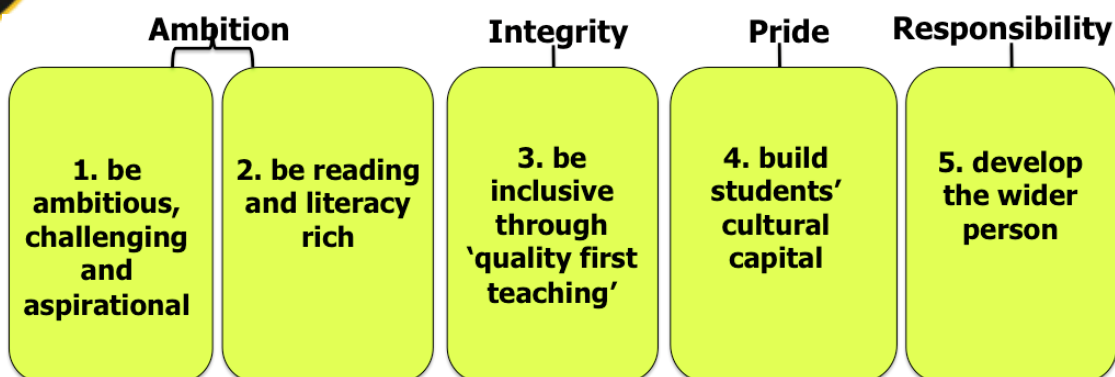




Maths Department Curriculum Intent **Campsmount Academy's curriculum aims to:**



What are the aims of our Maths curriculum at Campsmount? How does it incorporate the educational principles evident in the whole school intent?

The mathematics department develops our students to reach their maximum potential through an engaging curriculum that is both supportive and challenging. We do this by fostering a curriculum that embeds a student's ability to communicate mathematically as well as self-motivation and willingness to work both independently and collaboratively. In

doing this we believe that our students will develop a positive attitude towards mathematics including confidence, enjoyment and resilience. With more emphasis now being placed upon reasoning and mastery, it is important that students can apply their knowledge and skills to solve a wide range of problems effectively and efficiently that will best prepare them for the real world. In every lesson we highlight the importance of literacy with a section of the lesson designated to tier 3 vocabulary alongside the use of scholarly articles at the beginning of each block of learning in KS3. Again, this is to support all learners to be vocabulary rich both during and beyond the curriculum.

Numeracy is highlighted across the curriculum by way of GIN (Get into number) days led by the department. We also take part in national competitions such as entering students into the UK Maths trust challenge. Students also have an opportunity to participate in a visit to Pontefract racecourse where students learn about Mathematics in the real world, more precisely in the world of sport.

How do we ensure our curriculum meets and exceeds the requirements of the National Curriculum?

The curriculum is designed to support pupils to complete simpler tasks as a foundation to apply the same skills to more complex questions. The schemes of learning are arranged in blocks that then concentrate on small steps which again are sequenced in order of difficulty. Within the curriculum blocks are review steps that also cover pre-taught work in KS2 and Y7 so the teacher can review where the class are and how lessons should develop thereafter. All blocks of learning have both support sections and extensions in the mid-term plans to allow staff to pitch the lessons at the correct level. Within each lesson there is then an opportunity to complete Campsmount Zones as well as all three sections of work (fluency, reasoning and problem solving) allowing students to access all elements of the content. The mathematics curriculum follows two routes with one following GCSE Foundation and the other GCSE Higher. Students are still taught the same topics at the same time just depending on the route depends on which of the smaller steps the students will follow.

The department adapts the White Rose Maths schemes of learning to meet the needs of our students and all the links to the national curriculum are clearly visible with the department medium term plans.

What specifications do we follow at KS4 and 5 and why?

As a department we follow the AQA syllabus for both KS4 and KS5 (both A-Level and Core Level 3 Mathematics) to ensure consistency for the students in as far as the structure of the exam papers and the style of the questions. At GCSE AQA are the only exam board to have 10% multiple choice question. Most are at the start of the exam paper allowing students to settle into the exam quickly. The questions are designed to have a logical flow and allow students to progress through the paper smoothly. There are fewer words allowing the students to focus on maths. Foundation papers have also been recently revised by AQA to ensure that low demand questions are accessible to all students. For example, the multiple-choice questions have been refined by adjusting the demand of the question to give a confident start to a paper. This alongside simplified wording, simplified numbers and a reduction in steps for the multi-step questions will better support our foundation students. AQA also has an excellent resources site – all about maths that supports staff in both planning and understanding the requirements of the course.

How do we ensure that we meet the needs of all learners and in particular those who are Pupil Premium or SEND?

Priority groups in Mathematics are pupil premium and SEND. Historically these groups have had negative progress scores although the gaps are closing year on year. High quality teaching and learning is a priority with collaboration around planning to ensure consistency across the department and that each of our learners has the same access to high quality teaching and learning. To support these groups of students further there is a key focus on memory and metacognition with every lesson having a flash back 4 settling activity upon entry to the room alongside an 'activate' slide where skills needed for the lesson ahead are practiced. We also have focused home learning that covers 30 fluency questions to ensure previously taught content is kept familiar. To further support home learning the department has timetabled lessons each half term in a computer room to allow students to access Sparx Maths, supporting learners who may not have IT access at home. Our curriculum is designed to keep searching for gaps in knowledge, by way of PLCs at the end of each block of learning with dedicated independent reflection time at the end. The Y11 curriculum is bespoke supporting our learners in a key year as we use PPEs to inform teaching again based around gaps in knowledge. As per department policy pupil premium students are allocated places first on seating plans to priorities their needs. The Maths department also has two dedicated LSA's working with our most vulnerable students. They ensure we are up to date with any SEND information and take dedicated target groups during Aspire time and after school to support intervention.

Why do we teach the topics/schemes in the order we teach them?

Mathematics follows a 5-year course. Blocks of learning are taught in such a way that students learn how to perform simple tasks before moving onto more complex tasks. The maths department follows a spiral curriculum where topic areas are returned to each year. In Year 7 students always begin with Algebra as overall it is one of the areas of Maths that isn't covered in Year 6. Other blocks in the Year 7 curriculum are a review of Y6 learning to ensure consistency in student learning coming from different feeder schools. From Y8 to Y10 students access a curriculum covering the main strands of Maths (Algebra, number, ratio and proportion, statistics, geometry and probability) As we progress through the Year groups there are often recap lessons to ensure knowledge is secure before introducing new concepts. As students approach Year 11 there is a focus on reasoning style questions and exam literacy.

How do we develop our subject knowledge effectively? What impact does this have on curriculum planning?

Mathematics staff have all completed a knowledge audit to identify any gaps that require further personal CPD sessions. Lessons are all collaboratively planned and shared with discussions around best practice for delivery of lessons with topics reviewed regularly. Most staff have the opportunity to teach at post 16 whether it be the A-Level teaching or the Level 3 core Maths course, included in this is ECT's. Within the GCSE course, again all teachers have an opportunity to deliver higher level Maths either at KS3 or KS4. Staff have access to topic specific training as part of their CPD via White Rose Maths who hold regular web-based training before the teaching of topics.

Statement of assessment intent:

Students are assessed regularly throughout lessons and blocks of learning. At the end of each lesson students self-assess their work with an 'i can' statement this then informs the teachers starting point for the next lesson.

At the end of each block of learning students complete a formative assessment. Pink progress lessons follow all the lessons on formative assessment for all year groups with students selecting a 'growth' statement to work on independently. This is visible in all students' assessment books across KS3/4/5.

All years are assessed more formally with a written exam termly, their summative assessment. These are marked and moderated by the department. For KS3 this is using an adapted version of the White Rose Maths assessments and for KS4 it is full past AQA GCSE exam papers. All results are tracked on the Cohort spreadsheet against student end of year target grades.

Marking reviews ensure that class assessment is consistent across the department with 'i can' statements and PLCs/pink progress work highlighted as good practice.

Curriculum sequencing:

	Half Term 1	Half Term 2	Half Term 3	Half Term 4	Half Term 5	Half Term 6
Year 7	Algebra Thinking	Place Value and Proportion	Application of Number and Directed Number	Fractional Thinking and Lines and Angles	Geometric Reasoning	Reasoning with number
Year 8	Proportional Reasoning	Representations	Algebraic Technique	Developing number	Developing Geometry	Reasoning with Data
Year 9	Reasoning with algebra	Constructing in 2 and 3 dimension	Reasoning with number	Reason with geometry	Reason with proportion	Representations
Year 10	Similarity	Developing Algebra	Geometry	Proportion and proportional change	Delving into Data	Using Number
Year 11	Graphs	Algebra	Reasoning and Communication	Personalised curriculum	Exams	
Year 12	Algebra and proof Geometry	Calculus Trigonometry	Geometry Proofs	Exponentials and logarithms	Statistics	Mechanics
Year 13	Sequences and series Trigonometry Algebra	Further calculus Geometry	Mechanics	Statistics	Exam	