



Scheme of Learning	Maths Y9 Autumn Term Algebra, Number, Data, Sequences			
Learning outcomes	By the end of the term, you should have knowledge and understanding of solving linear equations and Inequalities, Levels of accuracy, representation of data, sequences and Venn diagrams			
Knowledge	Key concepts and skills Solving more complex linear equations Solving more complex linear inequalities Solving proportion algebraically Understanding bounds and error intervals Representation of data using stem and leaf, CF diagrams and box plots Recurrence notation Venn diagrams Continue from KS3 overview Contents	Key terminology Solve Algebraic fractions Regions Direct proportion Inverse proportion Truncation Bounds Error Interval Stem and leaf diagrams Box plots Recurrence notation Venn diagrams Set notation		
Ongoing Assessment	In Maths, the most important assessment takes place in every lesson where teachers observe and support whilst they are practicing applying knowledge and new skills. This assessment enables teachers to tailor their lessons to their class. At a point when teachers know that students are ready, a class will have a skills check in a lesson. These checks are low stakes and help to inform both teachers and students of each individuals next steps. Students are not given warning of these skills checks so that teachers can determine how regularly students are engaging in maths, rather than measure how much work a student has been able to do to prepare for a test. Support for revision: On SharePoint in the 'Topic Information' folder are overview sheets for each topic. Students can download these sheets from here Good ways to revise for the end of unit include: • Review their notes, • Use / Review materials from SharePoint • Boost, Target and Independent learning tasks from SparxMaths.			



Key Assessment	At the end of the autumn term students will have a large, announced assessment which covers the key concepts outlined above. The aim of this assessment is for student to develop revision skills.	
	The most valuable part of this assessment is the feedback that students get. The question analysis sheets direct students to additional support using Sparx Codes that link to specific topics and content. Students will identify these areas for support through the feedback lesson set aside for assessment feedback	
Clear sequencing of content	Algebra	Solve linear equations with variables on both sides, with brackets, fractions in context. Simplifying algebraic fractions Solve linear inequalities Identify regions graphically satisfied by up to 3 inequalities Solve direct and inverse proportion problems algebraically
	Number	Round and truncation to given levels of accuracy Bounds and error intervals
	Data	Stem and leaf diagrams Cumulative frequency diagrams Comparision of Box plots Calculating mean of grouped data
	Sequences	Term-to-term and position-to-term rules review Linear and quadratic sequences Recurrence notation
	Number	Venn Diagrams and set notation
Links to Careers	The overarching skills achieved within Mathematics are integral to numeracy in any career. If students choose to progress from GCSE into A-Level maths, they will begin to see how different types of mathematical application may feed into careers, for example, statistical analysis of data, mechanics and engineering.	
Diversity and Inclusion	Year 9 students are introduced to female mathematicians via their assessments and can learn about their achievements.	
Support	SharePoint pages (text based, images and videos) Weekly lunchtime support sessions, by invitation only. Key Terminology Sheet	
Challenge	Sparx – independent learning challenge sections guide to ‘codes’.	

