Sackville School Maths Curriculum - Year 7

TERM	WHAT? (Is delivered?)	WHY? (Is this important?)	WHY NOW? (Why is this taught now?)	IMPACT? (What is the impact at the end of this half term?)	ASSESSMENT
Aut 1	Place value, rounding, four operations and bounds	• The topics that are addressed in Numerical Skills are fundamental as they underpin all future topics, so it is vital that time is spent assessing and developing students' levels of fluency. • A secure understanding of these numerical skills is important for students to be able to access the numeracy demands of all future topics, and when encountering numbers outside of school.	• Students will have a foundation of knowledge and skills from their work in primary school on all these topics. This term builds fluency of these crucial skills because they underpin a high proportion of topics which would be otherwise inaccessible, such as ratio, percentages and algebra.	Students will be able to: • Develop a firm understanding of the number topics taught. • Use and apply their understanding of numbers in real life • Use the content covered within future units of work.	RAG of work, self/peer assessment, teacher marking, regular reviews of content covered to date
Aut 2	Powers/indices, collecting like terms, substitution, factorising and expanding Time, timetables and angles	• By manipulating algebraic expressions, students begin to explore how algebra can be used to represent numerical situations where values are unknown. • All students need to be able to tell the time using analogue and digital clocks in their everyday lives • To learn how to read bus and train timetables. • The topic of angles gives students the opportunity to apply their numeracy skills to contextual problems. • Angles form the foundation of many topics within maths as well as shapes in the world around us. Many practical jobs will require use of the basic angle facts students learn in this topic.	• Students can build on their knowledge of numbers to apply to indices and understand that algebra is a letter representation of a number. • Students will have a foundation of knowledge on angles from their work in primary school. This topic builds fluency of these crucial skills. • A secure knowledge of angle facts will support students with the subsequent geometry topics this term.	Students will be able to: • Have a greater understanding of what algebra is. • Understand how number and algebra are interlinked. • Have a firm understanding of time and timetables. • Have a greater understanding of angles and how they can be applied in a range of contexts.	Summative assessment on all content covered to date, RAG of work, self/peer assessment, teacher marking, regular reviews of content covered to date
Spr 1	Fractions, decimals and percentages	• Students need to understand that not all numbers are whole numbers and how to use and apply this knowledge to real life	• Building on the initial work on numbers to further enhance students' knowledge of number skills.	Students will be able to: • Understand how to use decimals, fractions and percentages and convert	RAG of work, self/peer assessment, teacher marking, regular

		situations.	• The skills developed here can be applied to topics later in the curriculum, for example in perimeter and area.	between them. • Know that numbers can be written in a range of ways, and these can be applied to different contexts.	reviews of content covered to date
Spr 2	Different types of statistical graphs Sequences and straight-line graphs	• This topic will give students an awareness of misleading data they may encounter in other contexts. • It provides opportunities to strengthen students' critical reasoning and reflection as they encounter statistics in everyday life. • By interpreting the charts and graphs they study, students are encouraged to consider facts, evidence and motive when statistical diagrams are created. • Sequences and straight line graphs show relationships between variables and are useful for future topics, e.g. non-linear graphs	• Students have already worked on using protractors and using axes in previously learnt content. • To further develop the link between number and algebra.	Students will be able to: • Draw and interpret frequency tables. • Draw and interpret a range of different statistics charts. • Understand that these pattern spotting skills can be used within straight line graphs.	Summative assessment on all content covered to date, RAG of work, self/peer assessment, teacher marking, regular reviews of content covered to date
Sum 1	Units, perimeters, areas, volumes	• The topic of area allows students to apply their knowledge of multiplication and division in context. • Students will develop a deeper understanding of why these skills are important and will also explore why finding the area of shapes can be useful, for example in DIY questions.	• Area is taught after multiplication and division as fluency in these skills is vital to access the topic.	Students will be able to: • Understand how to calculate problems to 1D, 2D and 3 D problems, including context.	RAG of work, self/peer assessment, teacher marking, regular reviews of content covered to date
Sum 2	Revision Based on outcomes from assessments, each class teacher will write schemes of learning to cover topics students found most	• Needed to help and support students for the end of year assessments.	• End-of-year assessments will be taking place during this time of the year.	Students will be able to: • Be able to solve problems involving currency and splitting amounts. • Understand that very large/small numbers can be written in a more time effective way. • Know how to use and apply standard form.	Summative assessment on all content covered to date, RAG of work, self/peer assessment, teacher marking, regular reviews of content covered to date

	difficult. Ratio/proportion (simplifying ratios, splitting ratios, currencies and best buys	• This topic is widely used throughout GCSE mathematics, so it is important that students are introduced to this and develop their understanding of how to compare quantities using ratios. • Students will develop a deeper understanding of real-life application, e.g., mixing quantities of paint. • Students will explore the multiplicative relationship between two quantities. It is important that students can use and understand proportional relationships, as they will need to apply this in daily life e.g., determining which item is best value for money, scaling up a recipe whilst cooking, or calculating their wages.	• Students will apply their prior knowledge of multiplication and division, including identifying when to use each operation when using ratio and proportion. • Allows for the teaching of more complex based ratio topics at Key Stage 4		
	Standard form (converting, adding and subtracting and multiplying/dividing	• Standard form is used to describe very large/small numbers which will be used again in Maths and later within science.	• Standard form further builds on the work already completed around number • Standard form is taught further within Key Stage 4 and within other subjects, such as Science		

Links to L4L Curriculum and Gatsby Benchmarks:

- Mathematics constantly applied to where it can be used within real-life situations and careers