KAA Curriculum Overview

Maths SoW 22/23- Year 7-11

Year 10

Rationale

Maths in year 10 is focussed on giving all students a chance to develop the fundamental knowledge and skills required at GCSE. There is less number work in year 10; students will use their numeracy skills to become proficient at algebraic manipulation, geometrical reasoning, interpreting and representing data and applying their knowledge to solve problems. Where students have demonstrated a stronger level of numeracy and proportional reasoning in year 9, they will build on these skills and learn some of the Higher only content For example where students have demonstrated a strong understanding of fractions, they will next learn to manipulate algebraic fractions.

EOY Exam

Students will sit 2 x 1 hour 30 GCSE papers (1 x non calc and 1 x calc).
Students will be allocated to either Higher or Foundation tier depending on performance throughout the year.

Past papers
https://www.mathsgenie.co.uk/papers.html

Term	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Link to MTP Overview	10F AUT1 MTP 22/23 10H AUT1 MTP 22/23	10F AUT2 MTP 22/23 10H AUT2 MTP 22/23	10F SPR1 MTP 22/23 10H SPR1 MTP 22/23	10F SPR2 MTP 22/23 10H SPR2 MTP 22/23	10F SUM1 MTP 22/23 10H SUM1 MTP 22/23	10F SUM2 MTP 22/23 10H SUM2 MTP 22/23
Topic studied Higher	• Ratio and Proportion • Rearranging Formulae • Trigonometry in right angled triangles	• Expanding, factorising, solving and sketching quadratics • Surds • Angles and geometric reasoning	• Linear graphs • Algebraic Fractions and recurring decimals to fractions • Percentages and Interest	• Probability • Handling Data	• Trigonometry in non-right angled triangles • Arcs and Sectors • Similarity and Congruence • Volume and Surface Area	• Mathematical Drawings
Foundation	• Ratio and Proportion • Rounding • Area, Perimeter and Pythagoras	• Expanding and Factorising including quadratics • Solving Linear equations • Angles and geometric reasoning	• Linear graphs • Fraction arithmetic • Percentages and Interest	• Probability • Handling Data	• Areas of circles • Transformations • Volume and Surface Area	• Mathematics Drawings • Assessments
Adjustments following last assessments / evaluation.	Rearranging formulae moved as pre-requisite for trigonometry	Surds moved earlier in the course to provide interleaving opportunities late on.	No changes	More time required on handling data	Arcs and sectors moved before Volume and Surface Area as required for S.A. of cone	No changes
Key knowledge and skills students need to have gained by the end of the unit **Higher**	Ratio and Proportion Rearranging Formulae Trigonometry in right angles triangles	Solving quadratic equations Surds Angles and Geometric Reasoning	Linear Graphs Algebraic Fractions Percentages and Interest Recurring decimals	Experimental probability and independent events Venn Diagrams and Conditional Probability Representing Data	Further Trigonometry Arcs and Sectors Similarity and Congruence Further Voume	Similarity and Congruence
Foundation	Ratio and Proportion (F) Rounding Area, Perimeter and Pythagoras	Expanding and Factorising Solving Equations Angles and Geometric Reasoning	Linear Graphs Fractions and Percentages	Probability Handling Data	Circles Transformations Volume and Surface Area	Mathematical Drawings
How is understanding assessed at the end of the unit?	In class assessments at the end of Autumn 1 on all Autumn 1 content. 1 x non calculator 1 x calculator paper	No assessments this half term	In class assessments at end of Spring 1 on Autumn 2 and Spring 1 content 1 x non calculator 1 x calculator paper	No assessments this half term	No assessments this half term	2 x 1 hour 30 minute papers on all content covered in year 10. 1 x non calculator paper 1 x calculator paper