Year 10 Mathematics Summer Term Overview

Group-Teacher	Overview	New content	Date
1A – Mrs Loveridge 1B – Mr Storey-Scott	• Complete work on Direct and Inverse Proportion	**Direct and Inverse Proportion** Formulate equations and solve problems involving a quantity in • direct proportion to a power or root of another quantity • indirect proportion to a power or root of another quantity	Current block
	• Sequences	**Sequences** Use subscript notation for position to term and term to term rules Eg. $X_n = n + 2$ $X_{n+1} = 2x_n - 3$ Find a formula for the nth term of a quadratic sequence Eg. 0, 3, 10, 21 $U_n = 2n^2 - 3n + 1$ Generate the nth terms of other sequences Eg. 1, $\sqrt{2}$, 2, $2\sqrt{2}$,.. $\frac{1}{2}, \frac{2}{3}, \frac{3}{4}, \ldots$	w/c 27th April
	• Review Blocks 1 – 10	**Blocks 1 -10** • Interpret and construct diagrams for grouped data • Express exponential growth and decay as a formula • Indices (including fractional powers), parallel and perpendicular lines • Surds and Upper and Lower bounds • Transformations and similar shapes • Pythagoras and Trigonometry in 3D and area of a triangle using area = $\frac{1}{2}$absinC • Circle Theorems • Simplify and manipulate algebraic fractions • Sine Rule and Cosine Rule • Further quadratics – completing the square, sketching and interpreting	w/c 11th May
	• **Assessment week**	**A full set of Foundation exam papers**	w/c 29th June
	Personal reflection work	A chance to work on areas that were flagged as difficult in the exams	w/c 13th July

Group-Teacher	Overview	New content	Date
2A – Mrs Joseph 2B – Mr Ahluwalia	• Review Blocks 1-10	**Blocks 1 -10** • Standard Form and Indices • Straight line graphs • Trigonometry • Kinematics • Circles -arc length and sector area • Geometric sequences, nth term • Probability, Venn diagrams and Tree diagrams • Bearings, Construction and Loci • Quadratics – solving algebraically and graphically • Fractions and Percentages	Current work
	• Direct and indirect proportion	**Direct and Indirect proportion** • Currency, speed/time • Recognise graphs of proportion • Use fraction notation • Recognise y is proportional to x and y is inversely proportional to x and using constant of proportionality	w/c 18th May
	• Formulate and rearrange equations	**Formulate and rearrange equations** • Formulate equations to solve • Use more complex formulae • Rearrange more complex formulae	
	• **Assessment week** Personal reflection work	**A full set of Foundation exam papers** A chance to work on areas that were flagged as difficult in the exams	w/c 29th June w/c 13th July
3 – Mr McClusky	• Review Blocks 1-10	**Blocks 1 -10** • Equations • Pythagoras • Prime Factors HCF, LCM • Area, Perimeter, Surface area and Volume • Mean from grouped Frequency tables and Frequency polygons • Expanding, Simplifying and Factorising	Current work

Group-Teacher	Overview	New content	Date
		• Mixed numbers and Ratio • Construction • Probability • Enlargements and similar shapes	
	• Compound Interest and repeated percentages	**Compound Interest and Repeated Percentage** • Solve percentage change problems using multipliers • Solve compound interest problems • Solve problems involving repeated percentage problems • Calculate percentage change	w/c 11th May
	• Index Laws	**Index Laws** • Multiplication and Division using indices • Power raised to a power • Negative Indices • Fractional Indices • Combination of laws	w/c 1st June
	• Graphs	**Graphs** • Draw straight line graphs using y = mx + c • Identify graphs using y = mx + c • Draw graphs of quadratics using coordinate tables	w/c 15th June
	• **Assessment week** Personal reflection work	**A full set of Foundation exam papers** A chance to work on areas that were flagged as difficult in the exams	w/c 29th June w/c 13th July
Acc – Mr Bullock	• Review Blocks 1-11	**Blocks 1-11** • Numeracy • Rounding and approximation • Fractions • Area • Probability • Brackets and Factorising	Current work

Group-Teacher	Overview	New content	Date
		• Percentages • Transformations • Representing Data • Linear Graphs • Compound Measure	
	• **Assessment week**	An set of assessments to see how much you can do	w/c 29th June