Beckfoot Thornton enjoy learn succeed
Beckfoot Trust REMARKABLE LEARNING ENVIRONMENTS

Week	36	37	38	39	
W/C Date	25-Jun	2-Jul	9-Jul	16-Jul	
Topic	Year 10 Exams week	Understanding Risk	Analysing Statistics	Analysing Statistics	
Key Objectives	Review of exam papers; follow up on key issues with teacher-led interventions.	Use a Venn diagram to sort information & calculate theoretical probabilities. Calculate and interpret conditional probabilities.	Construct and interpret cumulative frequency graphs Construct and interpret box plots.	Analyse and compare distributions of data sets using central tendency & spread.	
Assessment				10M13 BAM	
Homework					

Mathematics Year 11 grades 6-8 long term plan

🟩	Assessment weeks
🟧	Moderation week
🟦	Data Capture
🟨	STAR marking
🟪	Exit Poll

Key Skills to be Covered

Number: Simplify surds, including rationalising the denominator of a surd expression

Algebra: use the quadratic formula to solve equations; manipulate quadratic expressions by completing the square; deduce roots & turning points of quadratic functions; understand the concept of an instantaneous rate of change; composite & inverse functions: sketch translations and reflections of given functions; solve quadratic inequalities in one variable; transformations of graphs

Shape and Space: Use the sine and cosine rules to solve problems; area of any triangle; vector geometry; enlargement with a negative scale factor.

Data and Probability: Cumulative frequency & box plots; conditional probability.

Week	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18
W/C Date	03-Sep	10-Sep	17-Sep	24-Sep	01-Oct	08-Oct	15-Oct		29-Oct	05-Nov	12-Nov	19-Nov	26-Nov	03-Dec	10-Dec	17-Dec		
	Algebraic Proficiency	Algebraic Proficiency	Mathematical Movement 2	Properties of shapes	Properties of shapes	Properties of shapes	Calculating with surds		Solving Equations & Inequalities	Solving Equations & Inequalities	Mock exams	Mock exams and feedback	Consolidation	Algebraic Proficiency: Functions	Proportional Reasoning	Movement 1: Enlargement negative SF		
	Use the form $y = mx + c$ to identify perpendicular lines. Know that perpendicular lines have gradients with a product of -1	Recognise & use the equation of a circle with centre at the origin. Extension - Find the equation of a tangent to circle at a given point.	Understand the concept of a vector Add (subtract) vectors & multiply a vector by a scalar, Solve simple geometrical problems involving vectors.	Use Pythagoras' theorem and apply it to find lengths in three dimensional figures. Apply trigonometry in three dimensions.	Know and apply the sine rule to find a missing side, or angle, in a non-right angled triangle. Know and apply the cosine rule to find a missing side, or angle, in a non-right angled triangle.	Solve problems involving bearings. Know and apply area = ½ab sinC to calculate the area, side or angle of any triangle.	Know and use $\sqrt{a \times b} = \sqrt{a} \times \sqrt{b}$ Multiply two binomials involving surds Rationalise the denominator of a surd expression		Know and apply the formula for solving a quadratic eqn. of the form $ax^2 + bx + c = 0$ Solve quadratic equations by completing the square.	Deduce the turning point of a quadratic function by completing the square. Solve equations by factorisation involving fractions that can be rearranged into the form $ax^2 + bx + c = 0$	Full GCSE mock higher papers	Full GCSE mock higher papers. Tailored feedback to group based on findings from marking.	and teacher led interventions in connection with strengths and weaknesses from mock exam papers. Opportunity to consolidate work on quadratics. Solve problems involving quadratic equations.	Interpret the succession of two functions as a 'composite function' interpret the reverse process as the 'inverse function'	Construct and use more complex equations describing direct and inverse proportion. Solve problems involving direct and inverse proportion	Use the centre and scale factor to carry out an enlargement with a negative scale factor. Find the scale factor and centre of an enlargement with negative scale factor		
Assessment				GCSE Qs		11M7 BAM	11M1 BAM		11M2 BAM	11M3 BAM	🟩	🟩	🟧	🟦				
Homework							Practice Papers Set 2											

Week	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
W/C Date	07-Jan	14-Jan	21-Jan	28-Jan	04-Feb	11-Feb		25-Feb	04-Mar	11-Mar	18-Mar	25-Mar	01-Apr	08-Apr		
	Patterns	Solving Equations	Solving Equations	Algebraic Proficiency: Visualising	Algebraic Proficiency: Visualising	Analysing statistics		Mock Exams	Mock Exams	Feedback and consolidation	Visualising II	Movement II	Revision Week 1 Number	Revision Week 2 Algebra		
	Recognise and use simple geometric progressions. Recognise and use non-standard sequences. Revise –	Solve quadratic inequalities in one variable. Revise- Solving simultaneous equations	Solve simultaneous equations in two variables where one is a quadratic equation using substitution Make connections	Recognise, sketch and interpret graphs of key functions: reciprocal, quadratic, cubic, Exponential. Plot & use the trigonometric	Know the effects of transforming the graph $y = f(x)$: $f(ax)$, $af(x)$, $f(x) + a$, $f(x + a)$, $y = f(-x)$ & $y = -f(x)$ Solve problems involving the	Construct and interpret histograms with equal and unequal class intervals. Solve problems involving histograms.		Revision Full GCSE mock higher papers	Revisions and consolidation. Full GCSE mock higher papers.	Tailored feedback and teacher-led interventions from analysis of strengths and weaknesses from mock exam papers.	Solve problems involving graphs of quadratic functions. Explore rates of change. Interpret the gradient at a point on a curve as the	Use vectors to construct geometric arguments and proofs. Work with and make deductions about situations involving vectors that are multiples of other	Pixi revision books.	Pixi revision books.		

			between simultaneous eqns and graphs.	functions:y = sinx, y = cosx, y = tanx for angles of any size.	transformation of graphs.						instantaneous rate of change	vectors, or with parallel lines or where vectors are expressed using ratios.			
	Quadratic sequences.														
Assessment			11M6 BAM		11M5 BAM										
Homework						Practice Papers Set 3								Practice Papers Set 4	

Week	35	36	37	38	39	40	41	42	43	44	45	46	
W/C Date	29-Apr	06-May	13-May	20-May		03-Jun	10-Jun	17-Jun	24-Jun	01-Jul	08-Jul	15-Jul	
Topic	Revision Week 3 Shape & Space	Revision Week 4 Data and Probability	Revision Week 5 Countdown to Paper 1	GCSEs		GCSEs	GCSEs						
Key Objectives	Pixi revision books.	Pixi revision books.	Problem solving practice papers. Non-calculator questions and techniques.	Past Papers and practice questions		Past Papers and practice questions	Past Papers and practice questions						
Assessment													
	Problem solving Paper 1												