

Year 10 Higher Mathematics Learning Journey 2020-21

Unit 1–Number and Unit 2-Algebra were covered in the summer term of year 9.

Week	Date	Key Constructs	Topics	Assessment
1	07.09.20	Data: Analysing and representation	<ul style="list-style-type: none"> Statistical diagrams Time series Scatter graphs Line of best fit Averages and range 	Unit 3 - Interpreting and representing data
2	14.09.20			
3	21.09.20	Data: Collecting and organising		
4	28.09.20	Fractions	<ul style="list-style-type: none"> Fractions Ratios Ratio and proportion Percentages Fractions, decimals and percentages 	Unit 4 - Fractions, ratio and percentages
5	05.10.20	Ratio		
6	12.10.20	Proportional reasoning		
7	19.10.20	Place value and rounding Types of number		
HALF TERM				
8	02.11.20	Angles and geometric proof	<ul style="list-style-type: none"> Angle properties of triangles and quadrilaterals Interior angles of a polygon Exterior angles of a polygon Pythagoras' theorem Trigonometry 	Unit 5 - Angles and trigonometry
9	09.11.20			
10	16.11.20			
11	23.11.20	Polygons Pythagoras Trigonometry		Assessment (Unit 1 - 5)
12	30.11.20	Graphs	<ul style="list-style-type: none"> Linear graphs More linear graphs Graphing rates of change Real-life graphs Line segments Quadratic graphs Cubic and reciprocal graphs More graphs 	Unit 6 - Graphs
13	07.12.20			
14 (½ week)	14.12.20			
CHRISTMAS				
15	04.01.21	Perimeter, area and volume	<ul style="list-style-type: none"> Perimeter and area Units and accuracy Prisms Circles Sectors of circles Cylinders and spheres Pyramids and cones 	Unit 7 - Area and volume
16	11.01.21			
17	18.01.21	Polygons and polyhedra		
18	25.01.21	Coordinates and transformations	<ul style="list-style-type: none"> 3D solids Reflection and rotation Enlargement Transformations and combinations of transformations Bearings and scale drawings Constructions Loci 	Unit 8 - Transformations and constructions
19	01.02.21			
20	08.02.21	Angles Measures and construction		
HALF TERM				
21	22.02.21	Equations and inequalities	<ul style="list-style-type: none"> Solving quadratic equations Completing the square Solving simple simultaneous equations More simultaneous equations Solving linear and quadratic simultaneous equations Solving linear inequalities 	Unit 9 - Equations and inequalities
22	01.03.21			
23	08.03.21			

Week	Date	Key Constructs	Topics	Assessment
24	15.03.21	Probability	<ul style="list-style-type: none"> • Combined events • Mutually exclusive events • Experimental probability • Independent events and tree diagrams • Conditional probability • Venn diagrams and set notation 	Unit 10 - Probability
25	22.03.21			
26 (½ week)	29.03.21			
EASTER				
27	19.04.21		Revision for EOYE	
28	26.04.21			
29	04.05.21 (BH)		EOYE RAP	EOYE
30	10.05.21			
31	17.05.21	Proportional Reasoning	<ul style="list-style-type: none"> • Growth and decay • Compound measures • Ratio and proportion 	Unit 11 - Multiplicative reasoning
32	24.05.21	Ratio		
HALF TERM				
33	07.06.21	Geometric Proof	<ul style="list-style-type: none"> • Congruence • Geometric proof and congruence • Similarity • More similarity • Similarity in 3D solids 	Unit 12 - Similarity and congruence
34	14.06.21			
35	21.06.21	Perimeter, area and volume		
36	28.06.21	Graphs	<ul style="list-style-type: none"> • Accuracy • Graph of the sine function • Graph of the cosine function • The tangent function • Calculating areas and the sine rule • The cosine rule and 2D trigonometric problems • Solving problems in 3D • Transforming trigonometric graphs 	Unit 13 - More trigonometry
37	05.07.21			
38	12.07.21			
39	19.07.21	Trigonometry Place value and rounding		

Year 10 Higher Mathematics Progress Tracker

FLIGHT PATH STICKER	<u>Key Constructs</u> <ul style="list-style-type: none"> Number, ratio and proportion Algebra Shape Statistics and probability
----------------------------	--------------------------------------------------------------------------------------------------------------------------------------------------------------------------

Date	Assessment T = teacher assessed	Flight Path Grade	Action (s) to make progress
	Unit 3 - Interpreting and representing Data		
	Unit 4 - Fractions, ratio and percentages		
	Unit 1 - 5		
	Unit 6 - Graphs		
	Unit 7 - Area and volume		
	Unit 1 - 8		
	Unit 9 - Equations and inequalities		
	Unit 10 - Probability		
	EOYE		
	Unit 11 - Multiplicative reasoning		
	Unit 12 - Similarity and congruence		

	Unit 13 - More trigonometry		
--	----------------------------------------	--	--