Year 7

School Vision		Challenging al	l our studen	ts supportive	ely to become o	confident and	curious, enh	ancing lives now	and in the fu	iture
Faculty Intent	To engende	er a desire and	passion to I	earn and be	inspired in STE	M subjects o	utside the cla	ss – applying lea	rning in unfa	miliar situations
Subject Intent	Provides a	foundation fo		•	ld, the ability t a sense of enj		•	an appreciation	of the beauty	and powers of
	Term 1				Term 2	,		Term 3		
Topic Name	Number	Data	Algebra	Number	Geometry	Number	Algebra	Number	Geometry	Algebra
Key Content	Factors & multiples	Averages Range	Expressions Formula brackets	Fractions + - x Equivalence	Angles Triangles	Decimals + -	Equations	Metric conversation	Perimeter  Area volume	Sequences  Nth term Co-
	Primes Powers Roots	Displaying grouped data	Factorising	mixed numbers	Quadrilaterals Polygons	FDP Percentages		Ratio Proportion		ordinates Straight lines
Intent										
How does this link to your intent?			•	_	•			dge to build upon lighted where pos		
Sequencing										
Why this and why now?	Building on prior knowledge to establish key facts and establish good skills that will	Widen vocabulary and demonstrate purpose of statistics	Explore key facts in chapter 1 within algebra	Using number facts focusing in on the finer detail of the number line	Introduce key geometry skills building on prior experience	Building on fractions and integers, linking all to decimals and percentages	Using algebraic notation learned to solve equations	Linking number facts to explore multiplicative reasoning in a range of real- life context.	Number and algebra skills application within 2D and 3D geometry	Revisiting algebra to build upon previous substitution, co-ordinate geometry and explore patterns

National Curriculum Audit										
Number	х									
Algebra	Х		х				х			х
Ratio and proportion	х							Х		
Geometry	Х				х			х	х	
Probability		х								
Statistics	х	х								
Key concepts / Vocabulary										
	HCF LCM Powers	Mean Mode Median Range Discrete Grouped	Expressions Factorising	Equivalence mixed numbers	Polygons	Decimal multiplier	Equations Solutions	Metric conversion Ratio Proportion	Perimeter Area volume	Sequences  Nth term  Straight lines
Learning Outside the Classroom / Cultural Capital	Bath Fizzers	3			Engineering			Careers UK Maths Cha	llenge	
Opportunities										
Homework										

Description	Homework is feedback in k		once per weel	k. SD and CS pi	refer to use Mat	hswatch. JS and	d JG may use M	athswatch but reg	gularly use paper also with
Assessment	Summative	Summative	Summative	Summative	Summative	Summative	Summative	Summative	Summative End of Year
Why this style of assessment and why now?	teaching. Following ea	ch unit of work, assessment to re one in class and	we consolidateview curriculu	te, review lear and offer s	ning, apply thera tudents the opp	apy and assess ortunity to con	students on cui solidate learnin	rrent unit. g.	valuate learning as a result of h and Corbett maths to support

School Vision	Challenging all	our students s	upportively to '	become confide	nt and curious	enhancing lives	now and, in the	future, ع					
Faculty Intent	To eng	ender a desire	and passion to	learn and be ins	spired in STEM	subjects outside	the class – app	lying learning ir	ı unfamiliar sit	uations			
Subject Intent		undation for un f enjoyment and	•	•	•	mathematically, a	an appreciation	of the beauty a	and power of n	nathematics,			
	Term 1												
	Number	umber Algebra Geometry Number Geometry Number Geometry Statistics Geometry Algebra											
Topic Name	Prime decomp  Powers of 10	Expressions  Expanding	Plans and elevations	Proportion	Reflect and translate	Recurring decimals	Accurate drawings	Probability Mutually exclusive Est	Maps and scales	Draw straight lines Y=mx+c			
Key Content	Calc and	brackets			Rotation	Percentages	Construction	probability	Bearings				

	estimate Calc and Estimate	Factorising Substitution	Surface area and volume circles Pythagoras	Distance time graphs rate of change Misleading graphs	enlargement  2D and 3D solids	Percentage change	Loci	Probability diagrams	Scales and ratio  Congruency	Parallel and perp Inverse and non-linear
Intent										
How does this link to your intent?	Links number and algebra	Building on year 7 Algebra	3D views incorporate Prior learning	Builds on multiplicative reasoning	More abstract view on 2D geometry	Number patterns in more depth	Incorporating multi reasoning And 2D goem	Intro to probability Exploring situations Opportunities	Multiplicative reason and its application	Understanding the role of graphical representation
Sequencing										
Why this and why now?	Reinforce Numerical Fluency at start of term	Preparing and consolidating in prep for st line	Regroups geometry and for new content	Preparing and consolidating in prep for next term and sequences	New material to prepare for GCSE	Understanding the role of mathematical notation and real-life application	Building connections between branches of maths	New vocabulary Incorp number	Applying skills from term 2 and building upon them	Crucial foundations for Yr9 and beyond algebra, linking algebra topics
National										
Curriculum Audit										
Number	х	х	Х	Х	Х	Х	Х	Х	Х	х
Algebra		х				х				х
Ratio and proportion					х		х		х	
Geometry			х		х		х		х	

ı				ı		1			T	1
Probability								X		
Statistics				х						
Key concepts / Vocabulary										
12 or less	Prime decomposition Indices	factorising Substitution	Plans and elevations Surface area Pythagoras	Misleading graphs	Reflect Translate Rotation Enlargement	Recurring decimals	Construction	Probability  Mutually exclusive	Bearings Scales Congruency	Parallel Perpendicular Inverse
Learning Outside the Classroom / Cultural Capital										
Opportunities			Bath Fizzers			Engineering		Careers UK Maths Challenge		
Homework										
Description	Homework is a r	ninimum of once	per week. SD and	CS prefer to use	Mathswatch. JS a	and JG may use M	athswatch but re	gularly use paper	also with feedba	ack in books.
Assessment	Summative	Summative	Summative	Summative	Summative	Summative	Summative	Summative	Summative End of Year	
Why this style of assessment and why now?	Following each u End of year asse	unit of work, we constitute of work, we constitute of work, we constitute of the con	consolidate, review curriculum and c	w learning, apply offer students the	therapy and asse opportunity to co	e of AfL strategies ss students on cu onsolidate learnin ng checklist and li	rrent unit. g.			_

Why this	Assess	Consolidate								
style of	understanding	learning								
assessment	and inform	check on								
and why	strengths and	retention of								
now?	next steps	knowledge								
HOW!	formally	and offer								
									parental	
									involvement	

School Vision	Challenging all	our students sup	portively to beco	ome confident ar	nd curious enha	incing lives now a	nd in the future			
Faculty Intent	To engender a	desire and passion	on to learn and b	e inspired in STE	M subjects out	side the class – ap	plying learning in	unfamiliar situa	tions	
Subject Intent		undation for unde and a sense of en	•	•		ematically, an app	reciation of the b	eauty and powe	r of	
	Term 1				Term 2			Term 3		
	Number A	algebra Algeb	ra Statistic	s	Geometry	Algebra Nu	mber	Algebra	Geometry	Numl
Topic Name	Reciprocals	Quadratic	Inequalities	Data	Proportion	Graphs of	Rates of	Simultaneous	Trigonometry	/ Ex

Key Content	Indicies Standard form Surds	sequence  Expanding factorising Solving quadratics	Equations change subject Algebraic fractions	Box plots Cumulative frequency Histograms	Arcs sectors	quadratics  Solving quadratics Graphs of cubic  Graphs of reciprocals	change  Density and pressure  Upper and lower  Bounds	equ Graph sim equations Inequalities	Trig graphs	ju: m Pr
Intent						Teerprocess	50445			
How does this link to your intent?	Links number with science & computing	Lay foundations prior to sketching parabolas	Inspiring a wider understanding of algebra	Statistical analysis possibly into depending on Y7 timeline	Multiplicative reasoning within geometry	Application and real-life context of chapter 2	Looking at margins of error and maths within other subjects	Intro top probability Exploring situations opportunities	Multiplicative reason and its application	Ui th gr re
Sequencing										
Why this and why now?	Reinforce numerical fluency at start of term	Building on yr8 algebra	Building on yr7 & yr8 algebra	Preparing and consolidating in prep for nth term and sequences	New material to prepare for GCSE	Understanding the role of mathematical notation and real-life application	Building connections between branches of maths	New vocabulary incorp number	Applying skills from term 2 and building upon them	Cr fo fo be al <sub>i</sub> lir to
National Curriculum Audit										
Number	Х	Х	Х	Х	Х	Х	Х	Х	Х	х
Algebra	х	х	Х			Х		х		
Ratio and proportion					х		х		х	

Geometry					х					
Probability										х
Statistics				х						х
Key concepts / Vocabulary										
12 or less	Reciprocals	Quadratic	Inequalities	Box plots	Arcs	Cubic graphs Graphs of	Rates of Change	Simultaneous	Trigonometry	ju
	Standard form			Cumulative frequency	sectors	reciprocals	Density and Pressure			m Pr
	Surds			Histograms			Upper and lower limits			
Learning							lower littles			
Outside the										
Classroom /										
Cultural										
Capital										
Opportunities			Bath Fizzers			Engineering		Careers UK Maths Challenge		
Homework										
Description	MW- Monday	MW- Monday	MW- Monday	MW- Monday	MW- Monday	MW- Monday	MW- Monday	MW- Monday	MW- Monday	M
Assessment										
Туре	Chapter test	Chapter test	Chapter test	Chapter test	Chapter test	Chapter test	Chapter test	Chapter test	EOY Assessment	Cł
Why this	Assess	Assess	Assess	Assess	Assess	Assess	Assess	Assess	Consolidate	As

style of	understanding	understanding	understanding	understanding	understanding	understanding	understanding	understanding	learning	pro
assessment	and inform	and inform	and inform	and inform	and inform	and inform	and inform	and inform	check on	
and why	strengths and	strengths and	strengths and	strengths and	strengths and	strengths and	strengths and	strengths and	retention of	
now?	next steps	next steps	next steps	next steps	next steps	next steps	next steps	next steps	knowledge	
	formally	formally	formally	formally	formally	formally	formally	formally	and offer	
									parental	
									involvement	
	Following each ur End of year assess	nit of work, we con sment to review cu	solidate, review lea Irriculum and offer	arning, apply thera students the oppo	py and assess stud rtunity to consolid	strategies are adopents on current uni ate learning. klist and links to M	t.	_	-	า.

School Vision	Challenging	g all our stude	nts supportiv	ely to become	confident and	d curious enha	ncing lives no	ow and in the	future			
Faculty Intent	To engende situations	er a desire and	passion to le	arn and be in	spired in STEN	I subjects out	side the class	– applying lea	arning in unfa	miliar		
Subject Intent		rovides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of athematics, and a sense of enjoyment and curiosity about the subject."										
	Term 1				Term 2			Term 3				
Branch of	Number	Algebra	Statistics	Number	Geometry	Algebra	Geometry	Geometry	Algebra	Geometry		
Maths												
Topic Name	HCF/LCM	Sequences	Averages & Range	Fractions	Polygons	Graphs of;	Bounds	Transforma tions	Equations	Probability		
	Surds	Rearranging		Percentage	Pythagoras	Straight line	Volume		Inequalities	Venn diagrams		
Key Content		Equations	Statistical			_		Bearings				
Key Content	Indices		Diagrams	Decimals	Trigonometr	Quadratics	Surface		Quadratics	Conditional		
					У		Area	Loci		probability		

	Estimation			Ratio		Cubics and reciprocals		Constructio	Simultaneo us	Tree diagrams		
						recipiocais		n	equations	Tree diagrams		
Intent												
How does this link to your intent?	Courses based on this specification in mathematics should enable students to: develop fluent knowledge, skills and understanding of mathematical methods and concepts. acquire, select and apply mathematical techniques to solve problems. reason mathematically, make deductions and inferences and draw conclusions											
Sequencing												
Why this and why now?		GCSE units combine various elements of maths together with a particular emphasis on algebra and geometry. This aspect of the curriculum shows a clear progression from skills and procedure to multiple applications, building on KS3 knowledge but not reliant upon.										
National Curriculum Audit												
Number	X	X	X	X	X	X	X	X	X	х		
Algebra		х				х			х			
Ratio and proportion				х	х							
Geometry					х		х	х				
Probability										х		
Statistics			х									
Key concepts / Vocabulary												

12 or less	HCF/LCM Surds	Sequences	Averages & Range	Fractions	Polygons	Graphs of;	Bounds	Transforma tions	Equations	Probability
		Rearranging		Percentage	Pythagoras	Straight line	Volume		Inequalities	Venn diagrams
	Indices	Equations	Statistical Diagrams	Decimals	Trigonometr	Quadratics	Surface	Bearings	Quadratics	Conditional
	Estimation		Diagrams	Decimais	у	Quadratics	Area	Loci	Quadratics	probability
				Ratio		Cubics and			Simultaneo	
						reciprocals		Constructio n	us equations	Tree diagrams
Learning									equations	
Outside the										
Classroom /										
Cultural										
Capital Opportunitie						Engineerin			Careers	
s						g			Careers	
						ь				
Homework										
Description	MW at	MW at	MW at	MW at	MW at least	MW at	MW at	MW at	MW at	MW at least
	least 1	least 1	least 1	least 1	1 weekly	least 1	least 1	least 1	least 1	1 weekly
	weekly	weekly	weekly	weekly		weekly	weekly	weekly	weekly	
Assessment										
Туре			•		and to also high	-	•			
					are retrieval bas					
	_				ent for Learning					ently needed to
		are crucial in ch		•	che for Learning	teeriniques are	. asca circuive	iy to illioilli tee	icimig and ican	
Why this									Mock	
style of									Exam	
assessment										

and why					
now?					

School Vision	Challenging all our students supportively to become confident and curious enhancing lives now and in the future											
Faculty Intent	To engender a desire and passion to learn and be inspired in STEM subjects outside the class – applying learning in unfamiliar situations											
Subject Intent	"Provides a foundation for understanding the world, the ability to reason mathematically, an appreciation of the beauty and power of mathematics, and a sense of enjoyment and curiosity about the subject."											
	Term 1				Term 2	Term 2			Term 3			
Branch of	Number	Geometry	Geometry	Statistics	Algebra	Geometry	Algebra	Geometry	Algebra			
Maths												
Topic Name	Compound measures	Congruence Similarity	Sine rule	Box plots	Quadratic sketching	Circle;	Algebraic fractions	Vectors	Proportion			
			Cosine rule	Cumulative		Properties			Area under			
<b>Key Content</b>	Direct			frequency	Quadratic		Functions		graphs			
ne, content	proportion		Trig graphs		inequalities	Theorems						
				Histogram			Rearranging		Velocity			
	Indirect proportion				Iteration	Proofs	formula					
	' '				Simultaneou							
					s graphs							

			1		1	1		1	1	1	
Intent											
How does this link to your intent?		concepts. acqu			enable students itical techniques	•			_		
Sequencing											
Why this and why now?	GCSE units combine various elements of maths together with a particular emphasis on algebra and geometry. This aspect of the curriculum shows a clear progression from skills and procedure to multiple applications, building on KS3 learning but not reliant upon.										
National											
Curriculum Audit											
Number	Х	Х	Х	Х	Х	Х	Х	Х	Х	х	
Algebra	х	х	х	х	х	х	х	х			
Ratio and proportion	х	х				х		х			
Geometry			х			Х		Х		х	
Probability									х		
Statistics				x							
Key concepts / Vocabulary											
12 or less	Compound measures	Congruence Similarity	Sine rule	Box plots	Quadratic sketching	Circle;	Algebraic fractions	Vectors	Proportion		

	Direct proportion Indirect proportion		Cosine rule Trig graphs	Cumulative frequency Histogram	Quadratic inequalities Iteration Simultaneou	Properties Theorems Proofs	Functions Rearranging formula		Area under graphs  Velocity		
					s graphs						
Learning Outside the Classroom / Cultural Capital											
Opportunitie s						Engineerin g			Careers		
Homework											
Description	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	MW at least 1 weekly	
Assessment											
Туре	Students are assessed after every unit to monitor progress and to also highlight misconceptions. These assessments are summative but feedback to teachers, students and parents of next steps. Starter tasks are retrieval based; this means pupils can demonstrate progression after the content has been taught. These retrieval activities also ensure that every pupil is fluent and confident in the facts and methods that are most frequently needed to make progress and be successful in further study. Assessment for Learning techniques are used effectively to inform teaching and learning, mini whiteboards are crucial in checking for understanding.										
Careers	paths in bus	Career opportunities are unlimited for mathematics majors. They may pursue graduate education, career paths in business, science or technical fields or disciplines such as social services, education, and government. Some of the occupations that mathematics graduates enter include:									

- accountant
- actuary
- computer programmer
- doctor
- engineer
- investment management
- theoretical

mathematician

- mathematician
- numerical analyst
- statistician
- teacher
- market researcher
- systems analyst
- banking
- government
- space/aircraft industry
- lawyer