# Year 9 Maths

What will be studied?					
School Term	Delta groups	Theta Groups	Assessments		
Autumn I	Powers and Roots:	Indices and Standard	End of unit		
	Indices, reciprocals,	Form:	assessments		
	standard form, surds	Mental maths, order of			
		operation, indices,			
	Quadratics:	standard form			
	Sequences, expanding,				
	factorising, solving	Expressions and			
		formulae			
		Simplify algebra,			
		substitution, solve,			
		rearrange formulae,			
		factorise, expand			
Autumn 2	Inequalities:	Sequences,	End of term		
	Equations, inequalities,	Inequalities,	assessment		
	indices, algebraic fractions,	Equations and			
	rearranging formulae	Proportion:			
		Number and pattern			
		sequences, nth term,			
		types of sequences,			
	Collecting and	solve equations and			
	Analysing Data:	inequalities, solve			
	Presenting and comparing	simultaneous equations			
	data, averages, box plots,				
	cumulative frequency,	Dealing with data:			
	histograms	Displaying and			
		interpreting data,			
		correlation			
Spring I	Multiplicative Reasoning:	Probability:	End of unit		
	Direct and inverse proportion,	Outcomes, experimental,	assessment		
	arc and sectors of circles	displaying data and calculating			
		probabilities			
	Non-linear Graphs:				
	Graphs of quadratic, cubic,	Graphs:			
	reciprocal functions	Plotting graphs, parallel lines,			

		solving simultaneous equations graphically	
Spring 2	Accuracy and measures: Rates of change, compound measures, bounds	Multiplicative Reasoning: Enlarging shapes, reverse percentages, compound measures	End of term assessment
Summer I	Graphical Solutions: Simultaneous equations, straight line graphs, graphing inequalities  Trigonometry: Trigonometric ratios, graphs of trigonometric functions	Circles, Pythagoras and Prisms: Circumference and area, Pythagoras' Theorem, volume and surface area, bounds  Constructions and Loci: Scaling, maps, bisectors, nets, triangles, loci	End of unit assessments
Summer 2	Mathematical Reasoning: Explain, justify, show, prove	Comparing Shapes: Similarity, congruence	End of year assessment

## **End of Year Examination**

### How will I be assessed at the end of the year?

Students are given one hour of calculator and one hour of non-calculator assessment comprising of all the topics covered in year 8.

These assessments cover the skills that students have learnt, students should apply their knowledge and solve problems in context.

#### How can I help my child?

#### **Guidance and advice**

Students will be given overviews at the beginning of every term outlining the topics which will be covered.

Two pieces of home learning tasks will be set by the teacher. This could be a range of activities from online or worksheets.

- https://www.mymaths.co.uk/ school subscription
- https://hegartymaths.com/login/learner
- https://corbettmaths.com/5-a-day
- http://studymaths.co.uk
- https://www.pearsonactivelearn.com/