

Year 7-9 Curriculum skeleton - Maths

		Year 7	Year 8	Year 9	
Autumn 1	Focus	<b>Place Value Properties of Number</b>	<b>Estimation and Rounding Sequences Graphical Representations</b>	<b>Geometrical properties - similarity and Pythagoras</b>	
	Skills	Understand the value of digits in decimals, measure and integers Understand multiples, integer exponents, roots and use the unique prime factorisation of a number	Round numbers to a required number of decimal places and significant figures Estimate calculations by rounding Understand the features of a sequence and recognise and describe arithmetic sequences Explore linear relationships	Understand and use similarity and congruence Understand and use Pythagoras' theorem	
	Assessment	End of unit	End of unit	End of unit	
Autumn 2	Focus	<b>Arithmetic Procedures Expressions and Equations</b>	<b>Multiplicative Relationships</b>	<b>Probability</b>	
	Skills	Understand and use the structures that underpin addition, subtraction, multiplication and division strategies Understand and use the conventions and vocabulary of algebra, including forming and interpreting algebraic expressions and equations Simplify algebraic expressions by collecting like terms to maintain equivalence Manipulate algebraic expressions by expanding brackets and factorising	Understand that multiplicative relationships can be represented in a number of ways and connect and move between those different representations Understand that percentages are an example of a multiplicative relationship and apply this understanding to a range of contexts Understand proportionality	Systematically record outcomes to find theoretical probabilities Calculate and use probabilities of single and combined events	
	Assessment	End of unit	End of unit	End of unit	
Spring 1	Focus	<b>Plotting Coordinates Perimeter and Area</b>	<b>Solving Linear Equations</b>	<b>Non-linear relationships Expressions and Formulae</b>	
	Skills	Connect coordinates, equations and graphs Understand the concept of perimeter and area then use it in a range of problem-solving situations	Understand what is meant by finding a solution to a linear equation with one unknown Solve a linear equation with a single unknown on one side where obtaining the solution requires one step Solve a linear equation with a single unknown where obtaining the solution requires two or more steps (including brackets)	Recognise and describe other types of sequences (non-arithmetic) Find products of binomials Rearrange formulae to change the subject	
	Assessment	End of unit	End of unit	End of unit	
Spring 2	Focus	<b>Arithmetic Procedures (Including Fractions)</b>	<b>Statistical representations, measures and analysis</b>	<b>Standard Form</b>	
	Skills	Work interchangeably with terminating decimals and their corresponding fractions Compare and order positive and negative integers, decimals and fractions Know, understand and use fluently a range of calculation strategies for addition, subtraction, multiplication and division of fractions	Understand and calculate accurately measures of central tendency and spread Construct accurately and interpret statistical representations Choose appropriately statistical measures and representations	Interpret and compare numbers in standard form $A \times 10^n$ , $1 \leq A < 10$	
	Assessment	End of unit	End of unit	End of unit	
				<b>KS3 Assessment</b>	
				<b>Foundation</b>	<b>Higher</b>
Summer 1	Focus	<b>Multiplicative Relationships</b>	<b>Perimeter, Area (inc. circles) and Volume Geometrical Properties</b>	<b>Unit 1 Number Unit 2 Algebra Unit 3 Graphs, Tables and Charts</b>	<b>Trigonometry</b>
	Skills	Understand the concept of multiplicative relationships and that they can be represented in a number of ways Understand that fractions and ratios are an example of a multiplicative relationship and apply this understanding to a range of contexts	Understand the concept of perimeter, area and volume and use it in a range of problem-solving situations Understand and use angle properties		Understand the trigonometric functions Use trigonometry to solve problems in a range of contexts
	Assessment	End of unit	End of unit	End of units 1- 3	End of unit
Summer 2	Focus	<b>Transformations Probability</b>	<b>Constructions</b>	<b>Unit 4 Fractions and Percentages Unit 5 Equations, inequalities and sequences Unit 6 Angles</b>	<b>Unit 1 Number Unit 2 Algebra Unit 3 Interpreting and representing data</b>
	Skills	Understand and use translations, reflections, rotations and enlargements Explore, describe and analyse the frequency of outcomes in a range of situations	Use the properties of a circle and a rhombus in constructions		
	Assessment	End of unit	End of unit	End of Units 4 - 6	End of units 1 - 3