Maths
Year 9 foundation curriculum map

Denefield
Success for life

Year 9	T1	T2	T3	T4	T5	T6
Content / Topic for Term	Fractions Decimals Percentages Algebra	Constructions and loci Linear graphs Real life graphs Probability	Perimeter and Area Volume Circles Solving equations	Pythagoras Collecting and representing data Angle recap	Trigonometry Ratio and proportion	Sequences Expanding, factorising and solving
Key knowledge for acquisition, recall and application in assessment or exam	• How to work out a percentage of an amount (with or without a calculator) • How to work out 1% • Define simple and compound interest • Define improper and mixed fractions • Use of KFC for division of fractions • Basic algebraic manipulation • How to use a bracket to	• Define SSS/SAS/ ASA/RHS triangles • Steps needed to bisect a line • Steps needed to bisect an angle • The loci of a fixed point • How to plot in all four quadrants • Define the terms gradient and intercept • The general equation of a line • Draw and interpret a two-way table • Define the terms relative frequency and theoretical probability and	• Formulae for 2D shapes • Define a compound shape • Parts of a circle • Formulae for circumference and area of a circle • Define a prism • Formulae for volumes of 3D shapes • Steps to solve a one and two-step equation • Steps to solve a pair of simultaneous equations • Methods of elimination and	• Square and cube numbers up to 12x12 and 5x5x5 • Pythagoras' theorem and how to rearrange it • Label a triangle correctly • How to interpret and complete a tally chart • Steps to construct a bar chart/pie chart • Angle facts for parallel lines • How to calculate the sum of interior angles using triangles	• How to use Sin/Cos/Tan buttons on a calculator • How to use formula triangles for Sin/Cos/Tan • How to use inverse Trig ratio buttons on calculator • How to rearrange a formula • Define the term ratio • Know the difference between ratio and fractions	• Determine the term-term rule for a sequence • Generate a sequence from a pattern • Define a factor and multiple • Basic algebraic expressions

	represent a product	know the difference	substitution			
Key skills to apply in assessment or exam	• Calculate compound or simple interest using a formula • Divide any pair of fractions using KFC	• Use a pair of compasses/ protractor to construct types of triangle • Use a pair of compasses/ protractor to construct loci • Plot a line using gradient and intercept • Calculate the probability of an event	• Use formulae to find areas/volumes • Solve a linear multi-step equation • Solve a pair of simultaneous equations	• Find a missing side using Pythagoras • Calculate the sum of interior angles in a polygon	Calculate the missing side/angle in a right-angled triangle	Find the nth term of a sequence
Title of Knowledge Organiser	Fractions Calculating with percentages	Coordinates and linear graphs Basic probability Loci and constructions	Perimeter and area Circumference and area Volume	Pythagoras' Theorem Representing data	Right-angled trigonometry Ratio Proportion	Sequences Algebra