Topic	Knowledge
Into the Unknown	I can substitute values into an expression
	I can rearrange a formula
	I can solve a linear equation
	I can identify quadratic and geometric sequences
	I can find terms of a sequence
	I can generate a sequence from its nth term
	I can calculate the nth term of a sequence
	I can calculate the nth term of a quadratic sequence
	I can plot a linear equation
	I can calculate the equation of a line
Ratio	I can convert fractions to ratios and vice-versa.
	I can manipulate and simplify ratios
	I can use unitary method
	I can find increase and decrease by percentages using a multiplier.
	I can convert between metric units using ratio.
	I can find best buys
	I can use ratios in maps and scales (interpreting scale drawings)
	I can solve problems involving ratios, where the difference between the two parts is given
Probability	I can display outcomes systematically
	I can understand and use the probability scale
	I can understand and use the vocabulary of probability
	I can express a probability as a fraction, decimal or a percentage
	I understand that probabilities of mutually exclusive probabilities add up to 1
	I can calculate the probability of two events from a sample space diagram
	I can calculate the probability of independent events
	I can calculate the probability of mutually exclusive events
Probability	I can draw and label a tree diagram accurately
	I can find the probability of successive independent events from a tree diagram
	I can find the probability of mutually exclusive events from a tree diagram
	I understand the difference between theoretical and experimental probabilities
	I understand that repetition of an experiment is likely to lead to more accurate results
	I understand relative frequency as an estimate of probability
	I can use relative frequency to compare the outcomes of experiments
	I can use relative frequency to estimate the likely number of outcomes
	I can complete a two-way table and use it to find the probability of given outcome
	I can draw a Venn diagram and use it to find the probability of a given outcome
Geometry	I can construct lines and angles
	I can construct a triangle using a protractor and ruler
	I can recall and use properties of quadrilaterals
	I can use angles in parallel lines to calculate missing angles
	I can answer an exam question on angles in parallel lines
	I can use properties of triangles to calculate unknown angles

	I can calculate missing angles in quadrilaterals	
	I can calculate interior angles in polygons	
	I can calculate exterior angles of polygons	
	I can measure a bearing	
	I can draw a bearing from a description	
Transformation	I can enlargement on an axis (including negative and fractional SF) from a center of enlargement.	
	I can rotate a shape on an axis.	
	I can reflect a shape on an axis.	
	I can translate a shape on an axis by a vector	
	I can describe a transformation.	
	I can perform mixed transformations.	
Dimensions	I can find the areas of rectangles and triangles	
	I can find the areas of kites, parallelograms & trapezia	
	I can find the area of circles and sectors	
	I can solve problems with area and perimeter	
	I know the properties and names of 3 dimensional solids	
	I can find the volume of a cuboid	
	I can find the surface area of a cuboid	
	I can find the volume of prisms and pyramids	
	I can find the volume of cylinders and cones	
	I can find the volume of a sphere	
	I can solve problems with surface area and volume	
Units	I can convert Imperial Units	
	I can convert between metric and imperial units	
	I can convert units of weight and capacity	
	I can convert between different units of area/volume	
	I can convert between Speed Distance Time	
	I can convert Force Pressure and Area.	
Units	I can convert Mass Density and Volume.	
	I can find lower and upper bound.	
Congruence & Similarity	I can identify congruence (SSS, SAS, RHS, ASA).	
	I can label angles and sides in a triangle appropriately and prove congruence.	
	I can calculate lengths in similar triangles.	
	I can calculate lengths in similar shapes	
	I can use scale factors to calculate areas and volumes	
	I can express scale factors in ratio notation	
	I can problem solve with similarity and unknowns	