Subject: Mathematics
Faculty: Mathematics
Term: Summer

EXCELLING (-, =, +)			
	**All of the secure criteria plus:** -Incorporate algebra within area, volume and surface area. -Reverse volume including algebra and then to find surface area or vice versa.	**All of the secure criteria plus:** -Incorporating algebra within angle problems. -Estimating the mean average from grouped data in a frequency table	**All of the secure criteria plus:** -To enlarge shapes by negative and fractional scale factors. -Combining transformations.
SECURE			
	Year 7	**Year 8**	**Year 9**
	Assessment strategy:	**Assessment strategy:**	**Assessed strategy:**
Conditional/Composite	**Everything from Autumn and Spring terms plus:** -To convert between measures of area and volume.	**Everything from Autumn and Spring terms plus:** -Worded questions including reverse mean problems. -Combining regular polygons and finding missing angles. -Calculating probabilities from two way tables. -Calculating the mean, mode, median and range from a stem and leaf diagram.	**Everything from Autumn and Spring terms plus:** -To be able to reflect a shape through a line of reflection in the form y = mx + c. -To enlarge a shape from a given centre of enlargement.
Procedural	**Everything from Autumn and Spring terms plus:** -To be able to apply the formula for the area of rectangles to calculate the area of compound shapes. -To be able to work out the area of parallelograms, trapezia -To be able to work out the surface area of cuboids and prisms. -To be able to work out the volume of cuboids and prisms using volume = cross section x length –To calculate the mean, mode, median average from a list/table. -To be able to interpret a composite/dual bar chart	**Everything from Autumn and Spring terms plus:** -To understand and be able to find the averages from grouped frequency tables. -To find exterior and interior angles in polygons and to find the number of sides a polygon has. -interpret and draw two way tables, pie charts, scatter graphs, and stem and leaf diagrams -Calculating averages from ungrouped frequency tables	**Everything from Autumn and Spring terms plus:** -To be able to find the mean, mode, median from grouped frequency tables with discrete and continuous data. -To be able to compare data mean, mode, median and range from back to back stem and leaf. -To be able to enlarge shapes by a scale factor integer and fractional. -To be able to translate a shape by a column vector. -To be able to rotate a shape given the direction, degree and centre of rotation. -To be able to reflect shapes through a line of reflection given as: y=a, x=b, y=x, y=-x where a and b are integers.

Declarartive	**Everything from Autumn and Spring terms plus:** -To recall 2D shapes and the formula for area of rectangles, triangles -To name the quadrilaterals and their properties. –To name 3D shapes and their properties. -To define what the range is. -To understand what the median, mode and mean are. -To recognise what a composite bar chart is.	**Everything from Autumn and Spring terms plus:** -To recall common angle facts on a line, around a point, vertically opposite angles, -To be able to describe quadrilaterals referencing properties. -To recall angle facts within parallel lines - alternate and corresponding -To recall how to find exterior and interior angles in polygons. -To know the difference between types of data - discrete and continuous. -To be able to recognise the correlation of data on a scatter graph. -To identify the modal group from a grouped frequency table.	**Everything from Autumn and Spring terms plus:** -To recall how to find the mode and median from frequency tables both grouped and non grouped. -To recall how to find the median from a stem and leaf diagram. -To recognise the differences between rotation, reflection, translation and enlargement. -To be able to explain what a scale factor is. -To be able to identify the line of reflection y=a, x=b, y=x where a and b are integers
DEVELOPING (-, =, +)			
	Not yet secure with all of the criteria set out for the term.		