Year 9 Topic Lists

Autumn Term	Spring Term	Summer Term
Frequency tables, bar charts, pie charts and pictograms	Function machines	Units of measurement, length, area, volume/capacity, mass and time
Interpret multiple and composite bar charts.	Changing the subject of a formula	Calculate the perimeter of rectilinear shapes.
Calculate the mean, mode, median and range for ungrouped data.	Term to term sequences	Know and apply the formula for the area of rectangles, triangles and parallelogram
Find the modal class, and calculate estimates of the range, mean and median for grouped data, and	Nth term of sequences	Area of a trapezium.
Use statistics to make simple comparisons or describe population characteristics.	Special sequences-fibonacci, square, triangle numbers	The area of composite shapes
Recognise graphical misrepresentation through incorrect scales, labels, etc.	Coordinates in 4 quadrants	Volume of cuboids and prisms
Plot and interpret scatter diagrams for bivariate data. Recognise correlation. Identify an outlier in simple cases.	Using a table of values to plot linear graphs	Surface area of cuboids and prisms
Index notation	Using a table of values to plot quadratic graphs	Find missing dimensions
Calculations with index notation	Rounding using decimal places and significant fgures	Direct proportion
Four rules for whole numbers, positive and negative	Estimation using significant figures	Inverse proportion
Inverse operations	Solve simultaneous equations graphically	Real life graphs e.g. conversion
Standard Index form	Approximate solutions to equations using graphs	Congruent shapes and triangles
Calculations with standard form	Recognise and sketch linear and quadratic graphs	Similar shapes and missing lengths on triangles
Prime numbers and prime decomposition	Approximate solutions to equations using trial and improvement	Similar shapes -area and volume
HCF and LCM	Use of y=mx+c for straight line graphs	Compound units e.g speed, density,
Order of operations	Equivalent ratios	SUVAT formulae
Algebraic substitution	Writing a ratio in the form 1:n	Distance time graphs
Collecting like terms	Share in a given ratio	Pythagoras Theorem
Simplifying products and quotients	Word problems with ratio and proportion	Trigonometry to find lengths and angles
Multiplying out single brackets brackets	Relationship between ratio and fractions	Area and circumference of circles
Factorising using common factors	Reflections	Volume and surface area of cylinders
Multiplying out double brackets	Rotations	Use the scale of a map, and work with bearings.
Solving linear equations including those with brackets or unknown on both sides	Translations	Use a ruler to construct and measure straight lines. Construct congruent triangles using SSS. Use compasses
Inequailities-use of symbols and number line	Enlargements	Use a ruler to construct and measure straight lines. Use a protractor to construct and measure angles. Construct
Solving linear inequalities	Percentage of amounts	Construct the perpendicular bisector and midpoint of a line segment.
Equivalent fractions	Percentage change	Construct the bisector of an angle formed from two lines.
Calculations with fractions	Uisng percentage multipliers	2D and 3D representations of shapes including use of isometric paper
Fractions of amounts problem solving	Simple interest	Plans and elevations
Converting between fractions, decimals and percentages	Angles in triangles and quadrilaterals	
Decimals, four rules non-calc	Angles rules including parallel lines	
Probability-equally likely outcomes	Properties of triangle, quadrilaterals including symmetry	
Relative frequency	Angles in polygons	
Listing outcomes and sample space		
Venn diagrams		

Assesments:

September - baseline test
December - topic assesments
March - topic assesments
June - topic assesments