

Time Period	Autumn Term		Spring Term		Summer Term	
Content	<ul style="list-style-type: none"> Area and circumference of circles Ratio and proportion Angles and polygons Pythagoras's theorem Algebraic manipulation 	<ul style="list-style-type: none"> Collect/represent data Decimal numbers Equations and formulae 	<ul style="list-style-type: none"> Surface area and volume of 3D shapes Distance, speed and time Coordinates and linear graphs Laws of Indices Standard Form 	<ul style="list-style-type: none"> Percentages Sequences Scatter graph Compass and ruler constructions 	<ul style="list-style-type: none"> Quadratic graphs Transformations Fractions Averages - statistical measures 	<ul style="list-style-type: none"> Similar triangles Revision of key topics
Skills	<p>Number solve problems using estimation and rounding (to d.p. and sf), work with positive and negative powers of ten</p> <p>Ratio, proportion and rates of change simplify ratios, share an amount in a ratio, solve problems with real life context e.g. recipe questions, best buy and currency exchange, use the unitary method to solve problems</p> <p>Algebra collect like terms, form expressions, expand brackets, simple factorisation, substitute into expressions and formulae, solve simple linear equations and complex equations involving brackets and unknown on both sides</p> <p>Geometry calculate area and circumference of circles, use basic angle facts and angle facts in parallel lines and polygons to solve problems, using Pythagoras's theorem in right-angled triangles</p> <p>Probability and statistics solve problems on simple probability, use two way tables to solve problems/collect data, use Venn diagrams to calculate probability, work out and compare data using averages and range</p>		<p>Number laws of indices excluding fractional and negative powers, work with standard form (positive and negative powers of ten), multiply and divide numbers in standard form using a calculator</p> <p>Ratio, proportion and rates of change distance, speed and time calculations, use multipliers to solve percentage increase/decrease problems, calculating simple interest</p> <p>Algebra generate sequences from nth term and find the nth term of linear sequences, recognise and plot equations of vertical/horizontal/diagonal lines, calculate the gradient from a graph, identify the gradient and y-intercept from an equation, work out the equation of a line from the graph, work out the midpoint of a line segment</p> <p>Geometry calculate the surface area and volume of prisms, including a cylinder, perform compass and ruler constructions (e.g. line and angle bisectors)</p>		<p>Number add, subtract, multiply, divide fractions and mixed numbers</p> <p>Ratio, proportion and rates of change solve real life problems involving ratios, fractions and percentages</p> <p>Geometry Plotting of quadratic graphs and recognising turning points and roots, translate, reflect, rotate, enlarge 2D shapes on a pair of coordinate axes, recognise and work with scale factors in similar triangles</p> <p>Probability and statistics draw and interpret scatter graphs, work out averages from grouped data</p>	
Assessment week and content	<p>wb 13th November 2023</p> <p>Area and circumference of circles, Ratio and proportion, Angles and polygons, Algebraic manipulation, Pythagoras's theorem, Using data, Decimal Numbers</p> <p>(students will also be give a topic list with reference to MathsWatch clips to support them with revision)</p>		<p>wb 5th February 2024</p> <p>Equations and formulae, Surface area and volume of 3D shapes, Distance, speed and time, Laws of Indices, Standard Form, Compass and ruler constructions, Sequences, Coordinates and linear graphs</p> <p>(students will also be give a topic list with reference to MathsWatch clips to support them with revision)</p>		<p>wb 15th April 2024</p> <p>All the content covered over the year</p> <p>(students will also be give a topic list with reference to MathsWatch clips to support them with revision)</p>	