



Year 9 Curriculum Overview

****Note: Objectives in blue are additional higher content for extension****

Half Term 1	
Date	Curriculum Overview
WC 29/08	Number Sense <ul style="list-style-type: none"> - Round numbers to powers of 10 and 1 sig fig (starters) - Round numbers to a given number of decimal places - Estimate answers to questions - Understand and use error interval notation (H) - Calculate with Money - Convert metric units of length - Convert metric units of mass and capacity
WC 05/09	
WC 12/09	Angles in parallel lines and polygons <ul style="list-style-type: none"> - Investigate angles between parallel lines and the transversal - Identify and calculate with alternate and corresponding angles - Identify and calculate with co-interior, alternate and corresponding angles - Solve complex problems with parallel line angles - Investigate the properties of special quadrilaterals - Understand and use the sum of interior and exterior angles of any polygon - Calculate missing interior angles in regular polygons - Prove simple geometric facts (H) - Construct an Angle Bisector (H) - Construct a Perpendicular Bisector of a line segment (H)
WC 19/09	
WC 26/09	
WC 03/10	Angles of trapezia and circles <ul style="list-style-type: none"> - Calculate the area of a trapezium - Investigate the area of a circle - Calculate the area of a circle and parts of a circle without a calculator - Calculate the area of a circle and parts of a circle with a calculator
WC 10/10	
Half Term 2	
Date	Curriculum Overview
WC 31/10	Line symmetry and reflection <ul style="list-style-type: none"> - Recognise line symmetry - Reflect a shape in a horizontal or vertical line (shapes touching and not touching the line) - Reflect a shape in a horizontal or diagonal line (shapes touching and not touching the line)
WC 07/11	The data handling cycle <ul style="list-style-type: none"> - Collecting Data - Interpreting statistical diagrams - Dual bar charts - Constructing and interpreting pie charts
WC 14/11	
WC 21/11	
WC 21/11	Measures of location <ul style="list-style-type: none"> - Median and mean revisited, including finding the total - Mean for grouped data - The mode - Choosing the appropriate average - Revisit finding the range - Comparing distributions - Finding unknown data values given the mean or changes in the mean (H)
WC 28/11	Straight line graphs <ul style="list-style-type: none"> - Interpreting straight line graphs - Finding the equation of a straight line - Produce equations in the form $y=mx+c$ - Compare to linear sequences and find the rule for nth term - Solving simultaneous equations graphically (H) - Explore gradients of perpendicular lines (H)
WC 5/12	

W/C 12/12	
Half Term 3	
Date	Curriculum Overview
WC 02/01	Forming and solving equations <ul style="list-style-type: none"> - Revisit and extend to equations and inequalities with unknowns on both sides - Using different contexts e.g. angles, probability, area - Changing the subject of the formula - Changing the subject of the complex formula (H)
WC 09/01	
WC 16/01	Testing Conjectures <ul style="list-style-type: none"> - Test conjectures in a wide range of contexts e.g. - Sums and Products of odd and even numbers - Is a given number in a sequence? - Is this shape...? - Are these lines parallel? - What would happen if...?
WC 23/01	
WC 30/01	Three dimensional shapes <ul style="list-style-type: none"> - Faces, Edges and Vertices - Names of prisms and non-prisms - Identifying 2D shapes within 3D shapes - Volume and surface area of cuboids and cylinders - Volume of any prisms - Missing lengths given area and/or volume - Explore volumes of cones, spheres, and complex shapes (H) - Surface area of any prism (H)
WC 06/02	
Half Term 4	
Date	Curriculum Overview
WC 20/02	Constructions and Congruency <ul style="list-style-type: none"> - Nets - Scale drawings - Constructing perpendiculars and bisectors - Exploring congruency via construction - Locs (H)
WC 27/02	
WC 06/03	Numbers <ul style="list-style-type: none"> - Types of number – include rational and real numbers - HCF and LCM - Revisit fraction arithmetic - Revisit Standard Form
WC 13/03	
WC 20/03	Using Percentages <ul style="list-style-type: none"> - Percentage increase and decrease - Percentages over 100% - Finding percentage change - Using multipliers - Reverse percentages (H) - Repeated percentage change (H)
WC 27/03	
Half Term 5	
Date	Curriculum Overview
WC 17/04	Mathematics and Money <ul style="list-style-type: none"> - Explore financial mathematics including; - Bills and bank statements - Interest - Unit pricing (best buys)
WC 24/04	Deduction <ul style="list-style-type: none"> - Angles in parallel lines - Solving angle problems using chains of reasoning - Angle problems with algebra - Conjectures with angles and shapes - Linking constructions and geometrical reasoning (H)

WC 01/05	Rotation and Translation <ul style="list-style-type: none"> - Identifying the order of rotational symmetry - Rotating shapes - Translating points and shapes by a given vector - Combined transformations (H)
WC 08/05	Pythagoras' Theorem <ul style="list-style-type: none"> - Identifying the hypotenuse of a right-angled triangle - Determining whether a triangle is right angled - Calculating missing sides in a right-angled triangle - Exploring proofs of Pythagoras' theorem (H) - Using Pythagoras' theorem in 3D shapes (H)
WC 15/05	Enlargement and Similarity <ul style="list-style-type: none"> - Enlarge shapes by a positive scale factor, including from a given point - Calculate the lengths of missing sides in similar shapes - Enlarge shapes by negative scale factor (H) - Similar triangles
WC 22/05	
Half Term 6	
Date	Curriculum Overview
WC 05/06	Solving Ratio and Proportion <ul style="list-style-type: none"> - Direct proportion problems and graphs - Conversion graphs - Solving ratio problems given the whole or the part - Simple inverse proportion - Inverse proportion graphs (H)
WC 12/06	
WC 19/06	Rates <ul style="list-style-type: none"> - Speed, Distance, Time - Density - Working with compound units - Converting compound measures (H)
WC 26/06	
WC 03/07	Probability
WC 10/07	<ul style="list-style-type: none"> - Relative Frequency - Expected number of outcomes - Independent Events - Tree diagrams (H)
WC 17/07	Algebraic Representation <ul style="list-style-type: none"> - Drawing and reading from quadratics - Interpreting other graphs e.g. reciprocal - Representing inequalities - Graphical solution of simultaneous equations (H)