THE BULWELL ACADEMY

Key Stage 3 Curriculum Information

KS3 MATHS LEAD:
hannah.lindahl2@bulwellacademy.org.uk

MATHS

Year 7 Maths Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Integer number structures, introducing algebra and measurements**		**Numerical representations and Formulae and Sequences**		**Area and transformation and introducing ratio**	
Knowledge Covered	**Integer number structures** • Four rules • Multiples, factors, roots, powers and primes • Order of operations • Directed numbers • Rounding and estimation	**Introducing algebra** • Algebraic notation • Simplifying expressions • Solving simple equations **Measurements** • Properties of 2D and 3D shape (including symmetry) • Time • Metric conversions • Properties of angles • Angle reasoning • Construction of basic 2D shapes	**Numerical representation** • Decimals • Fractions • FDP • Percentages • Powers and roots • Prime factor decomposition • HCF and LCM	**Formulae and sequences** • Substitution and formulae • Functions • Sequences	**Area and transformation** • Area of 2D shapes • Tessellation • Transformation of 2D shapes	**Introducing ratio** • Ratio notation • Relationship between fraction and ratio • Sharing into ratio
Online Resources	Sparx Maths BBC bitesize					

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Year 8 Maths Curriculum

	Autumn 1	Autumn 2	Spring Term 1	Spring Term 2	Summer 1	Summer 2
Topic	**Equations, inequalities and graphs**	**Estimating**	**Rates of change**	**Statistics**	**Angles and 3D shapes**	
Knowledge Covered	• Forming and solving equations • Representing and solving inequalities • Linear graphs and parallel lines	• Rounding • Estimation • Bounds	• Scales and maps • Rates of change • Ratio notation • Relationship between fraction and ratio • Direct and Inverse proportion (including with algebra and graphs)	• Construct and interpret graphs • Mean, Mode and median and range including outliners • Scatter graphs (including best fit and interpolation/ extrapolation)	• Exterior and interior angles in polygons • Angles in parallel lines • Reasoning with angles • Area and volume (including circles, composites, prisms) • 3D nets and surface area (including prisms)	
Online Resources	Sparx Maths BBC bitesize					

MATHS

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MATHS

Year 9 Maths Curriculum

	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
Topic	**Quadratics and Probability**	**Constructions, Congruence and Pythagoras**	**Ratio and Proportion**	**Simultaneous Equations and Powers**	**Similarity and Trigonometry Numbers in context**	
Knowledge Covered	**Quadratics** • Expanding quadratic expressions including those with more than two binomials • Plotting quadratics **Probability** • Theoretical and experimental probability • Single and combined events • Venn diagrams • Sample spaces and two-way tables • Tree diagrams	• Construction • Congruence • Loci • Pythagoras' theorem	• Percentage change problems • Simple interest • Problem-solving with ratio and proportion	• Linear simultaneous equations (graphical and algebraic) • Index notion	**Similarity and trigonometry** • Similar shapes • Area and volume of similar shapes • Right-angled trigonometry **Numbers in context** • Standard form • Problem-solving with number	
Online Resources	Sparx Maths BBC bitesize					

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