

Springwood High School Maths Curriculum Plan

Our Vision:

For all students to have a positive experience of maths, to enjoy discovering and understanding new concepts and to ensure that the understanding is deep and concrete, allowing pupils to apply these in a variety of different situations. To enable pupil to achieve their full potential and get the maths qualifications they need in order to further their studies or to succeed in their chosen careers. For all students to have the confidence to problem solve and try different techniques in order to do so.

Exam boards: GCSE - AQA. A-level - Edexcel.

Brief overview of topics, themes, skills or key questions for each term:

Year	Autumn 1	Autumn 2	Spring 1	Spring 2	Summer 1	Summer 2
7	Number - place value, addition and subtraction	Number - Multiplication and Division, Factors & Multiples	Introduction to Geometry Number - Fractions	Algebra - Algebraic expressions Number - Percentages	Number - Primes and Indices, Order of Operations, Rounding	Algebra - Algebraic expressions
8	Algebra - Linear Equations	Geometry - Angles, Area and Perimeter	Number - Percentages, Ratio and Proportion	Number - Fractions Geometry - 3D Geometry	Statistics - Charts and Averages, Probability	Algebra - Graphs, Sequences Number - proportion

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9	<p>Calculations with integers. Place value. Rounding. Estimation. Calculations with decimals. Indices and roots.</p>	<p><u>Foundation</u> Factors, multiples and primes. Fractions Percentages.</p> <p><u>Higher</u> Factors, multiples and primes. Fractions Percentages. Ratio . Proportion.</p>	<p><u>Foundation</u> Algebraic expressions. Linear equations</p> <p><u>Higher</u> Algebraic expressions. Linear equations Inequalities</p>	<p><u>Foundation</u> Inequalities Ratio Proportion</p> <p><u>Higher</u> Standard form Straight line graphs. Real life graphs</p>	<p><u>Foundation</u> Standard form Straight line graphs. Real life graphs Sequences</p> <p><u>Higher</u> Straight line graphs and coordinate geometry. Surds</p>	<p><u>Foundation</u> Transformations Plans and elevations</p> <p><u>Higher</u> Quadratics. Proportion. Sequences. Transformations</p>
10	<p><u>Foundation</u> Sampling. Averages. Charts and Graphs</p> <p><u>Higher</u> Sampling. Averages. Charts and Graphs Pie charts</p>	<p><u>Foundation</u> Pie charts. Scatter graphs. Properties of shapes, parallel lines and angle facts. Interior and exterior angles of polygons</p> <p><u>Higher</u></p>	<p><u>Foundation</u> Quadratic equations: expanding and factorising and graphs Pythagoras' Theorem. Perimeter and area</p> <p><u>Higher</u></p>	<p><u>Foundation</u> Surface area and volume. Probability Compound measures.</p> <p><u>Higher</u> Constructions, loci and bearings. Probability</p>	<p><u>Foundation</u> Constructions and loci Perimeter, area and volume.</p> <p><u>Higher</u> Compound measures. Similarity and congruency. Cumulative frequency and boxplots. Further trigonometry</p>	<p><u>Foundation</u> Similarity and congruency</p> <p><u>Higher</u> Further trigonometry Vectors Quadratic inequalities Quadratic sequences</p>

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		<p>Scatter graphs. Properties of shapes, parallel lines and angle facts. Interior and exterior angles of polygons Pythagoras' Theorem and trigonometry in right angled triangles. Perimeter and area.</p>	<p>Perimeter and area. Surface area and volume. Accuracy and bounds</p>			
11	<p><u>Foundation</u> Similarity and congruency. Vectors Simultaneous equations. Proof</p> <p><u>Higher</u> Further trigonometry. Circle Theorems.</p>	<p><u>Foundation</u> Revision</p> <p><u>Higher</u> Transformations of graphs. Algebraic fractions. Changing the subject where the subject occurs more than once. Proof Functions. Vectors Gradient and area</p>	Revision	Revision	Revision	

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		under a curve.				
12	Algebra and functions, Coordinate geometry,	Trigonometry, Vectors (2D), Proof, Further Algebra, Sampling	Differentiation, Data presentation,	Integration, Exponentials, Hypothesis Testing,	Mechanics	More Mechanics
13	Algebraic and partial fractions, Functions and modelling, Trigonometry, Differentiation	Series and sequences, The binomial theorem, Integration,	Integration, Numerical methods, Parametric equations, Vectors (3D), Statistics	Statistics, Mechanics	Revision	

Enrichment Activities:

Super Learning Days: Year 7 - Smoothie making. Year 8 - Bridge building.

Competitions: Senior Maths challenge (November), Intermediate maths challenge, Junior Maths challenge. Team Maths challenges. The Michaelmas Symposium (Year 12 in November). Trust maths competitions. Year 6 maths competition (July)

Trips: Disneyland Paris

Clubs & Support: After school revision on Tuesdays, Wednesdays and Thursdays in B3. Stem club at lunchtimes. Mymaths, Corbett Maths, Pixl maths app