



| Subject: Maths            |   |   |  |
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| Exam Board: Edexcel Maths |   |   |  |
| Year Group                | Unit 1  | Unit 2  | Unit 3   |
| 7                         | <ul style="list-style-type: none"> <li>Understand place value and their use in written and mental methods</li> <li>Apply effective mental and written methods of multiplication and division</li> <li>Perform calculations with negative numbers and understand the uses of negative numbers in context</li> <li>Recognise and use relationships between operations, such as factors, multiples, primes, and inverses</li> <li>Identify and find prime numbers, prime decomposition, LCM and HCF</li> <li>Calculate percentages of amounts</li> </ul> | <ul style="list-style-type: none"> <li>Understand equivalent fractions and perform calculations involving fractions</li> <li>Find equivalent fractions, decimals and percentages, and use them to compare proportional values</li> <li>Use algebraic notation correctly to set up and derive equations and formulae. Recognise equations, identities and formulae.</li> <li>Use and interpret the collection of like terms, multiplication rules and expanding brackets to simplify algebraic expressions</li> <li>Use inverse operations to rearrange or solve equations</li> <li>Recognise terms, expressions and sequences, and substitute values including decimals, fractions and negatives</li> </ul> | <ul style="list-style-type: none"> <li>Calculate the perimeter of a range of shapes</li> <li>Calculate the area of a range of shapes</li> <li>Accurately draw, measure and name the 3 types of angles</li> <li>Use geometric reasoning to find missing angles in 2D shapes</li> <li>Interpret statistical data through calculating the mean, median, mode and range</li> <li>Understand how to collect and organise data</li> <li>Construct and interpret a range of graphs</li> <li>Find and contextualise statistical measures using graphs</li> </ul> |





|   | <ul style="list-style-type: none"> <li>Ratio &amp; Proportion</li> </ul>   |   |  |
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| 8 | <ul style="list-style-type: none"> <li>Understand and execute the order of operations</li> <li>Negative Numbers</li> <li>Apply rounding to estimate the answer to a calculation</li> <li>Identify and find powers and roots</li> <li>Identify and find prime numbers, prime decomposition, LCM and HCF</li> <li>Understand equivalent fractions and perform calculations involving fractions</li> <li>Recognise and use relationships between units of measurement and compound measures</li> <li>Calculate the area of a range of shapes</li> </ul> | <ul style="list-style-type: none"> <li>Understand the use of pi and apply it to calculate the area and circumference of circles</li> <li>Use and determine the nth term of a linear sequence</li> <li>Simplify algebraic expressions by collecting like terms, expanding and factorising</li> <li>Use algebraic manipulation to solve multi-step equations including unknowns on both sides and change the subject of a formulae</li> <li>Apply algebraic skills to plot linear and quadratic graphs</li> <li>Understand and solve linear inequalities</li> <li>Find percentages of amounts and percentage increase/decrease using multipliers</li> </ul> | <ul style="list-style-type: none"> <li>Understand and use the relationship between ratio and proportion and proportional reasoning</li> <li>Find unknown angles in parallel lines</li> <li>Use protractor and compasses to accurately construct triangles and quadrilaterals</li> <li>Use a straightedge and compass to form constructions</li> <li>Understand how to identify congruent and similar shapes</li> <li>Represent and use 3D shapes in 2D form to calculate surface area</li> <li>Calculate the volume of prisms</li> <li>Interpret statistical data through calculating the mean, median, mode and range</li> <li>Find and contextualise statistical measures</li> <li>Use probability rules to describe chance</li> </ul> |





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| 9                  | <ul style="list-style-type: none"> <li>● Apply rounding to estimate the answer to a calculation</li> <li>● Identify and find prime numbers, prime decomposition, LCM and HCF</li> <li>● Using Index Laws and Standard Form</li> <li>● Understand equivalent fractions and perform calculations involving fractions</li> <li>● Convert between fractions, decimals and percentages</li> <li>● Calculating percentage increase, decrease, reverse, simple interest and compound interest</li> <li>● Ratio and proportion</li> <li>● Representing data</li> </ul> | <ul style="list-style-type: none"> <li>● Probability</li> <li>● Simplify algebraic expressions by collecting like terms, expanding and factorising</li> <li>● Use algebraic manipulation to solve multi-step equations including unknowns on both sides and change the subject of a formulae</li> <li>● Understand and solve linear inequalities</li> <li>● Substitution, further algebraic manipulation &amp; solving simultaneous equations</li> <li>● Use and determine the nth term of a linear sequence</li> <li>● Apply algebraic skills to plot linear graphs</li> <li>● Apply algebraic skills to plot quadratic, cubic and reciprocal graphs and circles</li> </ul> | <ul style="list-style-type: none"> <li>● Calculate area and perimeter of shapes including triangles, quadrilaterals and circles</li> <li>● Represent and use 3D shapes in 2D form to calculate surface area and volume of prisms</li> <li>● Identify and calculate angles in polygons &amp; unknown angles in parallel lines</li> <li>● Using Pythagoras Theorem</li> <li>● Understanding and using trigonometric ratios</li> <li>● Transformations</li> </ul> |
| 10<br>(Foundation) | <ul style="list-style-type: none"> <li>● Integers and place value</li> <li>● Decimals</li> <li>● Indices, powers and roots</li> <li>● Algebra 'basics'</li> <li>● Expressions and substitution into formulae</li> <li>● Fractions and Percentages</li> </ul>   | <ul style="list-style-type: none"> <li>● Equations and Inequalities</li> <li>● Sequences</li> <li>● Properties of shapes, parallel lines and angle facts.</li> <li>● Interior and exterior angles of polygons.</li> <li>● Perimeter, Area and Volume</li> <li>● Real Life Graphs</li> </ul>  | <ul style="list-style-type: none"> <li>● Statistics, sampling and the averages</li> <li>● Ratio</li> <li>● Proportion</li> <li>● Pythagoras and Trigonometry</li> <li>● Probability</li> <li>● Plans and Elevations</li> </ul>   |





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|                        | <ul style="list-style-type: none"> <li>• Graphs, Tables and charts</li> </ul>   | <ul style="list-style-type: none"> <li>• Straight Line Graphs</li> </ul>  | <ul style="list-style-type: none"> <li>• Constructions, loci and bearings</li> </ul>   |
| <b>10 (Higher)</b>     | <ul style="list-style-type: none"> <li>• Product rule for counting</li> <li>• Calculations with bounds</li> <li>• Standard form</li> <li>• Surds</li> <li>• Recurring decimals to fractions</li> <li>• Repeated percentage change</li> <li>• Growth and Decay</li> <li>• Midpoint, Gradient, Distance.</li> <li>• Equation of a straight line</li> <li>• Parallel and perpendicular lines</li> <li>• Factorising, forming and solving quadratics</li> <li>• Completing the square</li> <li>• Sequences</li> </ul> | <ul style="list-style-type: none"> <li>• Algebraic fractions</li> <li>• Sketching quadratics</li> <li>• Plotting cubic and reciprocal graphs</li> <li>• Equation of a circle</li> <li>• Simultaneous linear equations</li> <li>• Simultaneous nonlinear equations</li> <li>• Linear and Quadratic inequalities</li> <li>• Compound measures</li> <li>• Real life graphs &amp; rates of change</li> <li>• Pythagoras</li> <li>• Right angled trig.</li> <li>• Exact values</li> <li>• Non-right angle trig</li> <li>• Geometric reasoning</li> </ul> | <ul style="list-style-type: none"> <li>• Compound Area and Perimeter</li> <li>• Area of circles, sectors, segments &amp; arc lengths</li> <li>• Surface area and volume (3D)</li> <li>• Similarity</li> <li>• Changing ratios</li> <li>• Algebraic ratio</li> <li>• Direct and inverse proportion</li> <li>• Algebraic direct and inverse proportion</li> <li>• Averages from grouped data</li> <li>• Histograms</li> <li>• Box plots</li> <li>• Cumulative frequency graphs</li> <li>• Probability</li> <li>• Set Notation and Venn diagrams</li> </ul> |
| <b>11 (Foundation)</b> | <ul style="list-style-type: none"> <li>• Multiplicative Reasoning</li> <li>• Quadratic Equations, expanding and factorising.</li> <li>• Quadratic equations: graphs</li> <li>• Circles, cylinders, cones and spheres</li> <li>• Fractions and reciprocals</li> </ul>  | <ul style="list-style-type: none"> <li>• Review and Revision in advance of exams</li> </ul>   | <ul style="list-style-type: none"> <li>• Review and Revision in advance of exams</li> </ul>  |





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|                    | <ul style="list-style-type: none"> <li>• Indices and standard form</li> <li>• Transformations</li> <li>• Similarity and Congruence in 2D</li> <li>• Vectors</li> <li>• Rearranging equations, graphs of cubic and reciprocal functions and simultaneous equations.</li> </ul>                              |   |   |
| <b>11 (Higher)</b> | <ul style="list-style-type: none"> <li>• Changing the subject of more complex formulae, solving equations from algebraic fractions, rationalising surds, proof</li> <li>• Further Statistics</li> <li>• Circle Theorems</li> <li>• Vectors and Geometric Proof</li> <li>• Proportion and Graphs</li> </ul> | <ul style="list-style-type: none"> <li>• Review and Revision in advance of exams</li> </ul> | <ul style="list-style-type: none"> <li>• Review and Revision in advance of exams</li> </ul> |

