



DRAYTON MANOR HIGH SCHOOL

Faculty Curriculum Map

Faculty: Mathematics

| | Autumn | Spring | Summer |
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| 7 | <p>DATA:</p> <ul style="list-style-type: none">• Representing and interpreting data <p>NUMBER:</p> <ul style="list-style-type: none">• Place value• Four operations• Rounding and estimation• Factors, multiples and primes• Fraction operations <p>GEOMETRY:</p> <ul style="list-style-type: none">• Area and perimeter• Metric units | <p>ALGEBRA:</p> <ul style="list-style-type: none">• Formulae• Equations• Coordinates <p>NUMBER:</p> <ul style="list-style-type: none">• Fractions and percentages of amounts• Directed numbers• Order of operations | <p>ALGEBRA:</p> <ul style="list-style-type: none">• Functions• Equations, formulae and expressions• Simplifying• Quadratic expressions <p>GEOMETRY</p> <ul style="list-style-type: none">• Angles in polygons• Angle facts• Ratio and proportion |
| 8 | <p>NUMBER:</p> <ul style="list-style-type: none">• Place value• Decimals• Four operations• Rounding and estimation <p>GEOMETRY:</p> <ul style="list-style-type: none">• Units• Area and perimeter | <p>NUMBER:</p> <ul style="list-style-type: none">• Calculations with fractions• Order of operations• Powers and roots• Negative numbers <p>DATA:</p> <ul style="list-style-type: none">• Probability | <p>ALGEBRA:</p> <ul style="list-style-type: none">• Sequences• Simplifying expressions• Equations• Simultaneous equations <p>GEOMETRY:</p> <ul style="list-style-type: none">• Quadrilaterals and polygons |

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| | <ul style="list-style-type: none"> Fractions and percentages | <p>ALGEBRA:</p> <ul style="list-style-type: none"> Coordinates and graphs Straight line graphs Quadratic functions | <ul style="list-style-type: none"> Angles in parallel lines |
| 9 | <p>NUMBER:</p> <ul style="list-style-type: none"> Fractions – operations Surds Ratio and proportion <p>ALGEBRA:</p> <ul style="list-style-type: none"> Solving equations <p>GEOMETRY:</p> <ul style="list-style-type: none"> Transformations <p>DATA:</p> <ul style="list-style-type: none"> Representing and interpreting data Averages | <p>GEOMETRY:</p> <ul style="list-style-type: none"> Perimeter, area and volume Circles Pythagoras Trigonometry Pyramids, cones and spheres 3D shapes <p>DATA:</p> <ul style="list-style-type: none"> Representing data <p>ALGEBRA:</p> <ul style="list-style-type: none"> Graphs Inequalities | <p>NUMBER:</p> <ul style="list-style-type: none"> Decimals and negatives Estimation and rounding Order of operations <p>ALGEBRA:</p> <ul style="list-style-type: none"> Expressions Simplifying Factorising Equations Inequalities |
| 10 | <p>GEOMETRY:</p> <ul style="list-style-type: none"> Angle facts Bearings Congruence and similarity Angles in polygons <p>NUMBER:</p> <ul style="list-style-type: none"> Fractions, decimals and percentages | <p>ALGEBRA:</p> <ul style="list-style-type: none"> Equations Quadratics Simultaneous equations Graphical methods Inequalities Iteration <p>GEOMETRY:</p> | <p>NUMBER:</p> <ul style="list-style-type: none"> Ratio Proportion Compound interest and decay Factors and multiples Powers and roots <p>ALGEBRA:</p> <ul style="list-style-type: none"> Straight line graphs |

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| | <p>ALGEBRA:</p> <ul style="list-style-type: none"> • Formulae and functions • Equations <p>DATA:</p> <ul style="list-style-type: none"> • Collecting data • Representing and interpreting data • Averages • Comparing distributions | <ul style="list-style-type: none"> • Area and perimeter • Transformations • Loci • Circle Theorem • Construction <p>DATA:</p> <ul style="list-style-type: none"> • Probability • Relative frequency • Estimation and approximation • Compound measures • Bounds | <ul style="list-style-type: none"> • Distance time graphs <p>GEOMETRY:</p> <ul style="list-style-type: none"> • 3D shapes • Pyramids, cones and spheres |
| 11 | <p>DATA:</p> <ul style="list-style-type: none"> • Grouped frequency distributions • Representing and interpreting data • Powers, roots and surds • Standard form <p>ALGEBRA:</p> <ul style="list-style-type: none"> • Drawing graphs • Quadratic, cubic and reciprocal graphs • Real life graphs • Equations – graphical methods <p>GEOMETRY:</p> <ul style="list-style-type: none"> • Pythagoras • Trigonometry | <p>GEOMETRY:</p> <ul style="list-style-type: none"> • 3D Trigonometry • Vectors <p>DATA:</p> <ul style="list-style-type: none"> • Probability of combined events <p>ALGEBRA:</p> <ul style="list-style-type: none"> • Sequences <p>NUMBER:</p> <ul style="list-style-type: none"> • Direct and inverse proportion • Speed, density and pressure | TAILORED REVISION |
| 12 | <ul style="list-style-type: none"> • Algebraic Expressions & Quadratics | <ul style="list-style-type: none"> • Binomial Expansion | <ul style="list-style-type: none"> • Integration |

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| | <ul style="list-style-type: none"> • Equations and inequalities • Straight line graphs • Circles • Graphs and transformations • Algebraic methods • Data collection • Measures of location and spread • Representation of data • Modelling in Mechanics • Constant Acceleration • Forces & Motion | <ul style="list-style-type: none"> • Trigonometric Ratios • Trigonometric Identities • Vectors • Differentiation • Probability • Conditional Probability • Statistical Distribution • Forces & Friction • Applications of Forces | <ul style="list-style-type: none"> • Exponentials & Logarithms • Algebraic methods-Year 2 • Radian Measure-Year 2 • Sequence and Series-Year 2 • Hypothesis testing • Correlation • Variable Acceleration |
| 13 | <ul style="list-style-type: none"> • Algebraic methods (Covered in Y12) • Functions & Graphs • Numerical methods • Sequences & Series(Covered in Y12) • Trigonometric equations and functions(Radians covered In Y12) • Trigonometry and modelling • Parametric Equations • Binomial Expansion • Regression, Correlation & Hypothesis Testing • Normal Distribution & Hypothesis Testing • Projectiles • Moments | <ul style="list-style-type: none"> • Differentiation • Integration • Vectors • Further Kinematics | <ul style="list-style-type: none"> • Revision lessons |