| YEAR | AUTUMN 1 | AUTUMN 2 | SPRING 1 | SPRING 2 | SUMMER 1 | SUMMER 2 |
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| 7 | Sequences <br> Understand and use algebraic notation Equality and equivalence | Place value, ordering integers and decimals Fraction, decimal and percentages equivalence | Solving problems with addition, subtraction, multiplication, division Fractions and percentages of amounts | Directed number <br> Addition and subtraction of fractions | Constructing, measuring and using geometric notation Developing geometric reasoning | Developing number sense <br> Sets and probability Prime numbers and proof |
| 8 | Ratio and scale <br> Multiplicative change Multiplying and dividing fractions | Working in the <br> Cartesian plane <br> Representing data <br> Tables and probability | Algebraic techniques brackets, equations, inequalities Sequences Indices | Fractions and percentages Standard index form Number sense | Angles in parallel lines and polygons <br> Area of trapezia and circles <br> Line symmetry and reflection | The data handling cycle Measures of location |
| 9 | NUMBER <br> 1.1 Calculations, number problems and reasoning <br> 1.2 Place value <br> 1.3 Decimal numbers <br> 1.4 Factors and multiples <br> 1.5 Squares, cubes and roots <br> 1.6 Prime factors, HCF \& LCM <br> 1.7 Zero, negative and fractional indices (H) <br> 1.8 Powers of 10 and standard form (H) <br> 1.9 Surds (H) | ALGEBRA <br> 2.1 Simplifying <br> expressions <br> 2.2 Algebraic indices <br> 2.3 Substitution <br> 2.4 Formulae <br> 2.5 Expanding and factorising <br> 2.6 Equations <br> 2.7 Linear sequences <br> 2.8 Introducing inequalities <br> 2.9 Non-linear sequences (H) <br> 2.10 More expanding and factorising ( H ) | INTERPRETING \& REPRESENTING DATA <br> 3.1 Frequency tables <br> 3.2 Two-way tables <br> 3.3 Representing data <br> 3.4 Stem and leaf diagrams <br> 3.5 Pie charts <br> 3.6 Scatter graphs <br> 3.7 Line of best fit <br> 3.8 Averages and range <br> (H) <br> FRACTIONS, RATIOS \& PERCENTAGES <br> 4.1 Working with fractions <br> 4.2 Multiplying fractions <br> 4.3 Dividing fractions <br> 4.4 Fractions, decimals <br> \& percentages <br> 4.5 Ratios <br> 4.6 Ratio and proportion <br> 4.7 Percentages | FRACTIONS, RATIOS \& PERCENTAGES <br> 4.1 Working with fractions <br> 4.2 Multiplying fractions <br> 4.3 Dividing fractions <br> 4.4 Fractions, decimals <br> \& percentages <br> 4.5 Ratios <br> 4.6 Ratio and proportion <br> 4.7 Percentages <br>  <br> TRIGONOMETRY <br> 5.1 Angle facts <br> 5.2 Angles in parallel <br> lines <br> 5.3 Interior angles of a polygon <br> 5.4 Exterior angles of a polygon <br> 5.5,6 Pythagoras' theorem <br> 5.7 Trigonometry 1 (H) | PERIMETER, AREA \& VOLUME <br> 6.1 Rectangles, parallelograms and triangles <br> 6.2 Trapezia and changing units 6.3 Area of compound shapes <br> 6.4 Surface area of 3D solids <br> 6.5 Volume of prisms <br> 6.6 Circles <br> 6.7 Sectors of circles (H) <br> 6.7 Cylinders and spheres (H) <br> 6.8 Pyramids and cones (H) <br> TRANSFORMATION \& CONSTRUCTION <br> 7.1 3D solids <br> 7.2 Reflection and rotation <br> 7.3 Enlargement (H) 7.4 Translations and combinations of transformations | TRANSFORMATION \& CONSTRUCTION <br> 7.1 3D solids <br> 7.2 Reflection and rotation <br> 7.3 Enlargement (H) <br> 7.4 Translations and combinations of transformations 7.5 Bearings and scale drawings (H) <br> 7.6 Constructions 1 <br> 7.7 Constructions 2 <br> 7.8 Loci (H) <br> JEPTEMBER TO SPLIT INTO FOUNDATION AND HIGHER CLASSES Unit 8F - Averages and Range Unit 8H - Graphs |

Maths Dept. Curriculum Map

|  |  |  |  |  | 7.5 Bearings and scale drawings (H) <br> 7.6 Constructions 1 <br> 7.7 Constructions 2 <br> 7.8 Loci (H) |  |
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| 10 (current) |  <br> Volume F <br> Graphs F <br>  <br> Constructions H <br>  <br> Inequalities H | Graphs F <br> Transformations F <br>  <br> Inequalities H <br> Probability H | Ratio \& Proportion F Right-Angled Triangles F <br> Multiplicative <br> Reasoning H <br> Similarity \& Congruency H | Right-Angled Triangles F Probability F <br> Similarity \& Congruency H <br> Trigonometry H | Multiplicative Reasoning F Constructions, Loci \& Bearing F <br> Statistics H Equations \& Graphs H | Constructions, Loci \& Bearing F Quadratic Equations \& Graphs F <br> Equations \& Graphs H Circle Theorems H |
| 11 (Current) |  <br> Volume F <br> Congruency, Similarity <br> \& Volume F <br> Algebra H <br> Vectors \& Geometric <br> Proof H | Congruency, Similarity \& Volume F Algebra F Re-cap/revision <br> Proportion \& Graphs H Re-cap/revision | EXAM REVISION | EXAM REVISION | FORMAL EXAMS | FORMAL EXAMS |
| 12 | Differentiation Integration Indices and surds Quadratic functions Triangle geometry | Introduction to kinematics <br> Polynomials <br> Coordinate geometry <br> Vectors <br> Working with data | Motion with constant acceleration <br> Using graphs Logarithms Binomial expansion Probability | Applications of differentiation Force and motion Exponential models Statistical hypothesis testing | Newton's third law Trigonometric functions and equations Proof and mathematical communication | Further proof Calculus of exponential and trigonometric functions Rational functions and partial fractions General binomial expansion |
| 13 | Further transformations of graphs <br> Further differentiation <br> Applications of vectors <br> Functions <br> Conditional probability <br> The normal distribution | Projectiles <br> Further integration <br> techniques <br> Radian measure <br> Further trigonometry <br> Further hypothesis <br> testing | Sequences and series Differential equations Forces in context Numerical integration Further applications of calculus | Moments Numerical solutions of equations <br> EXAM REVISION | FORMAL EXAMS | FORMAL EXAMS |

