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| KS3 Maths Long Term Plan |

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|  | AUTUMN 1 | AUTUMN 2 | | Assessment | SPRING 3 | SPRING 4 | | Assessment | SUMMER 5 | SUMMER 6 | Assessment |
| YEAR 7 | **Number Theory**  Place value  Rounding  Multiplication and division by powers of 10  Decimal places to 2d.p  Multiples  LCM, Factors, HCF, Primes  Linear sequences | | **Number theory**  Equivalent fractions and simplification  Dividing fractions  Add and subtract fractions (same denominator)  FDP | Year 7 baseline assessment | **Number theory**  Properties and strategies of addition and subtraction  Solving money problems  Metric conversions of length  Metric conversions of weight and volume  Formal methods to multiply  **Shape space and measure**  Area of 2d shapes | **Data Handling**  Single event probability  **Number theory**  Calculation with fractions and percentages  Add and subtract directed numbers  Multiplication and division of directed number  **Algebra**  Collecting like terms  1 step equations | | Topics assessment | **Shape, Space, and Measure**  Geometric conventions and labelling  Calculating angle  Types of triangles  Angles in quadrilaterals  Geometric reasoning  **Data handling**  Mode, median, mean and range | **Data Handling**  Pictograms, bar charts.  Comparative and composite bar charts  Representing data in pie charts  **Number theory**  Revision on covered number theory. | Year 7 baseline assessment |
|  | Autumn 1 | | Autumn 2 | Assessment | Spring 3 | | Spring 4 | Assessment | Summer 5 | Summer 6 |  |
| YEAR 8 | Number Theory  Rounding up to 1 x 109.  Rounding to 3 d.p.  Rounding to significant figures (s.f)  Multiplying and dividing two fractions  Investigating the relationship between fractions and ratio  Find the value of ratio  Addition and subtraction with directed numbers  The rule of signs  Multiplication and division of directed numbers | | Data Handling  Coordinates across all 4 quadrants  Explore and plot graphs  Lines of the form y = mx + c in the (x, y) Plane  Draw and interpret scatter graphs  The probability number Line  Two-way tables and data  Probability Using Two-Way Tables | Topics assessment | Algebra  Using letters to represent Numbers in Variables, Terms and Expressions  Collecting like terms  Multiplication and division with Algebra  Multiplication of single brackets  Factorising  Solving linear equations by inverse operations | Algebra  Substitution  Working with increasing/Decreasing Numerical Sequences  Calculating with powers/indices with extension to algebra  Rule of indices  Developing Number (FDP): Fractions, Decimals, Percentages | | Topics assessment | Shape space and measure  Basic Notation  Properties of Equilateral and Isosceles Triangles  Properties of Quadrilaterals  Perimeter and Area of Polygons  The area of Quadrilaterals  Parts of a circle  Using Circle Formulae for Circumference and Area  Metric conversions | Shape space and measure  The Four Main Transformations  Rotation  Collecting and interpreting data  Mode, median, mean and range  Stem and leaf diagram  Calculating mode, median, mean and range from a Frequency Table  Rounding to significant figures including estimation | Topics assessment |
|  | Autumn 1 | | Autumn 2 | Assessment | Spring 1 | | Spring 2 | Assessment | Summer 1 | Summer 2 | Assessment |
| Year 9 | **Number theory**  Powers  Directed numbers  Multiplication method  Short and long division by bus stop method  Multiples, factors, primes and prime factors  Calculating LCM and HCF  +, -, x and ÷ fractions (including improper and mixed number fractions)  FDP  Fractions of amounts | | FDP review  FDP in single event probability  Working with percentages  Ratio and proportion  Direct proportion (unitary method)  Entry level revision | Entry level 1/2/3 exam practice | Circle theory  Perimeter and area of polygons    Area of quadrilaterals  Metric conversions  3-Dimensional Shapes, Faces, Edges, Vertices, Nets, Plans and Elevations  Surface Area  Volume of Cubes and Cuboids, and the volume of cubes, cuboids, and prisms.  Round to any s.f.  Mathematical estimation | | **Algebra**  Letter representation  Multiplying and dividing in algebra  Working with Variables, Terms, Expressions, Formulae, and Equations  Algebra and the Laws of Indices  Consolidation, revision  Solving equations by inverse operations | Topics assessment | **Geometry**  Angle theory and application to 2D shapes  Properties of shapes  4 transformations    Plotting and reading (x, y) coordinates in all 4 quadrants  (x, y) coordinates and drawing straight lines of the family of y = x and y = -x  Types of graphs | **Data handling**  Collecting and interpreting data  Mode, median, mean and range of a simple data set.  Defining mode, median, mean and range.  Representing Data in varying forms.  Consolidation of summer term topics | Entry level official exam |