|  |
| --- |
| KS3 Maths Long Term Plan  |

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | AUTUMN 1 | AUTUMN 2  | Assessment  | SPRING 3 | SPRING 4 | Assessment | SUMMER 5 | SUMMER 6  | Assessment  |
| YEAR 7 | **Number Theory**Place valueRounding 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 TheoryRounding 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 HandlingCoordinates 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 numbersMultiplication 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) FDPFractions of amounts  | FDP reviewFDP 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 theoryPerimeter and area of polygons Area of quadrilaterals Metric conversions 3-Dimensional Shapes, Faces, Edges, Vertices, Nets, Plans and ElevationsSurface 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, revisionSolving 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 = -xTypes 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  |