#### **Overview of Y8 Course**

#### **Unit 1 Number**

- 1.1 Calculations
- 1.2 Division and Divisibility
- 1.3 Calculation with negative numbers
- 1.4 Powers and Roots
- 1.5 Powers, Roots and Brackets
- 1.6 Multiples and factors

#### Unit 2 Area and Volume

- 2.1 Area of Triangles
- 2.2 Area of parallelogram and trapezium
- 2.3 Volume of cubes and cuboids
- 2.4 2D representations of 3D solids
- 2.5 Surface area of cubes and cuboids
- 2.6 Measures

### **Unit 3 Statistics Graphs and charts**

- 3.1 Pie Charts
- 3.2 Using Tables
- 3.3 Stem and Leaf diagrams
- 3.4 Comparing Data
- 3.5 Scatter Graphs
- 3.6 Misleading Graphs

# **Unit 4 Expressions and Equations**

- 4.1 Algebraic Powers
- 4.2 Expressions and Brackets
- 4.3 Factorising Expressions
- 4.4. 1 step equations
- 4.5 2 step equations
- 4.6 The balancing method

# **Unit 5 Real-Life Graphs**

- 5.1 Conversion Graphs
- 5.2 Distance-Time Graphs
- 5.3 Line Graphs
- 5.4 More Line Graphs
- 5.5. Real Life Graphs
- 5.6 Curved Graphs

#### Unit 6 Decimals and Ratio

- 6.1 Ordering decimals and rounding
- 6.2 Place value calculations
- 6.3 Calculations with decimals
- 6.4 Ratio and proportion with decimals

### **Unit 7 Lines and Angles**

- 7.1 Quadrilaterals
- 7.2 Alternate angles and proof
- 7.3 Angles in parallel lines
- 7.4 Exterior and Interior Angles
- 7.5 Solving Geometric problems

# **Unit 8 Calculating with Fractions**

- 8.1 Ordering Fractions
- 8.2 Adding and Subtracting Fractions
- 8.3 Multiplying Fractions
- 8.4 Dividing Fractions
- 8.5 Calculating with mixed numbers

# **Unit 9 Straight Line Graphs**

- 9.1 Direct Proportion Graphs
- 9.2 Gradients
- 9.3 Equations of straight lines

#### Unit 10 Percentages, Decimals and Fractions

- 10.1 Fractions and Decimals
- 10.2 Equivalent proportions
- 10.3 Writing Percentages
- 10.4 Percentages of amounts