



Mathematics Year 10 Long term plan 2020/2021

Autumn Term 1 st Half		Autumn Term 2 nd Half	
Unit 1: Number 1.1 Calculations 1.2 Decimal numbers 1.3 Place value 1.4 Factors and multiples 1.5 Squares, cubes and roots 1.6 Index notation 1.7 Prime factors	Unit 2: Algebra 2.1 Algebraic expressions 2.2 Simplifying expressions 2.3 Substitution 2.4 Formulae 2.5 Expanding brackets 2.6 Factorising 2.7 Using expressions and formulae	Unit3: Graphs, tables and charts 3.1 Frequency Tables 3.2 Two-way tables 3.3 Representing data 3.4 Time series 3.5 Stem and leaf diagrams 3.6 Pie charts 3.7 Scatter graphs 3.8 Line of best fit	Unit4: Fractions and percentages 4.1 Working with fractions 4.2 Operations with fractions 4.3 Multiplying fractions 4.4 Dividing fractions 4.5 Fractions and decimals 4.6 Fractions and percentages 4.7 & 4.8 Calculating percentages
Spring Term 1 st Half		Spring Term 2 nd Half	
Unit 5: Equations, Inequalities and sequences 5.1 & 5.2 Solving equations 5.3 Solving equations with brackets 5.4 Introducing inequalities 5.5 More inequalities 5.6 Using formulae 5.7 Generating sequences 5.8 Using the nth term of a sequence	Unit 6: Angles 6.1 Properties of shapes 6.2 Angles in parallel lines 6.3 Angles in triangles 6.4 & 6.5 Exterior and interior angles 6.6 Geometrical problems	Unit 7: Averages and range 7.1 Mean and range 7.2 Mode, median and range 7.3 Types of average 7.4 Estimating the mean 7.5 Sampling	Unit 8: Perimeter, Area and Volume 1 8.1 Rectangles, parallelograms and triangles 8.2 Trapezia and changing units 8.3 Area of compound shapes 8.4 Surface area of 3D solids 8.5 Volume of prisms 8.6 More volume and surface area

Summer Term 1 st Half		Summer Term 2 nd Half	
Unit 9: Graphs 9.1 Coordinates 9.2 Linear graphs 9.3 Gradient 9.4 $y = mx + c$ 9.5 Real-life graphs 9.6 Distance-time graphs 9.7 More real-life graphs	Unit 10: Transformations 10.1 Translation 10.2 Reflection 10.3 Rotation 10.4 Enlargement 10.5 Describing enlargements 10.6 Combining transformations	Unit 11: Ratio and Proportion 11.1 Writing ratios 11.2 Using ratios 11.3 Ratios and measures 11.4 Using ratios 2 11.5 Comparing using ratios 11.6 Using proportion 11.7 proportion and graphs 11.8 proportion problems	Unit12: Right-angled triangles 12.1 & 12.2 Pythagoras' theorem 12.3 & 12.4 The sine ratio 12.5 The cosine ratio 12.6 The tangent ratio 12.7 Finding lengths and angles using trigonometry

Subject to COVID-19 restrictions and guidelines