

## Maths Curriculum Overview: 2022/2023



|     | Autumn 1   | Autumn 2  | Spring<br>1   | Spring<br>2  | Summer 1  | Summer 2   |
|-----|--|---|---|--|---|--|
| KS3 | Number  Place value Rounding and Estimation BIDMAS Prime numbers, factors and multiples Long and short multiplication and division Positive and negative numbers Standard Form   | Geometry & Measures      Angles     Shapes     Perimeter, Area & Volume     Working with time     Metric measurements     Imperial to metric conversion | Algebra     Algebraic notation     Formulae and substitution     Simplifying and factorising expressions     Rearranging formulae to make one term the subject  | Ratio, Proportion & Rates of Change  Ratio notation Solve problems involving ratios Fractions, decimals and percentages Percentage changes Direct and inverse proportion   | Statistics Collecting and representing data Averages Graphs and Charts  | Probability  Recording probability frequency  Probability tables and grids  Stem and leaf diagrams  Venn diagrams  |
|     | Edexcel Functional Skills Level 1 & 2  |   | Edexcel GCSE Mathematics  |  |   |  |
| KS4 | Order of operations (BIDMAS)     Addition, subtraction, multiplication and division methods without calculators     Place value, decimal places, rounding and negative numbers     Reverse calculations     Woking with fractions, decimals and percentages     Simple algebra and substitution in formulae  Shape, Space & Measure     Working with different units of measurement: time, temperature, money, length, weight and capacity     Imperial to metric conversion     Perimeter, area and volume     Accurate estimation of units     Working with 2D and 3D shapes  Data Handling     Extracting accurate information from tables, charts and graphs     Representing information in tables, charts and graphs     Calculating different averages and when to use them     Probability |   | <ul> <li>Algebra</li> <li>Algebraic notation</li> <li>Formulae and substitution</li> <li>Simplifying and factorising expressions</li> <li>Quadratic equations</li> <li>Algebraic arguments and proofs</li> <li>Rearranging formulae to make one term the subject</li> <li>Co-ordinates and line equations</li> <li>Simultaneous equations</li> <li>Solving equations</li> <li>Algebraic expressions for linear sequences</li> </ul> | Ratio, Proportion & Rates of Change  Metric units of Measurement Imperial/Metric equivalents and conversion Scale factors Compound units Ratio notation Solve problems involving ratios Fractions, decimals and percentages Percentage changes Simple and compound interest Direct and inverse proportion Line graph gradients as rate of change | Statistics  Sampling and sample sizes Interpret, analyse and compare data  Calculating quartiles and interquartile range  Construct and interpret tables, two-way tables and frequency tables  Construct and interpret all types of graphs and charts: line graphs, scatter graphs, bar charts, pie charts, histograms, pictograms  Recognise and interpret correlation | Year 10  Probability  Recording probability frequency  Understand randomness, fairness and equally likely events  Probability tables and grids  Stem and leaf diagrams  Venn diagrams  Mutually exclusive outcomes  Calculate and interpret probabilities for single and combined events |