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| *What will they be learning, why and in what order?* |
| **Maths Year 8** | **Term 1** | **Term 2** | **Term 3** |
| **Bridge/ Foundation knowledge required** | Solving Problems with Multiplication and Division Year 7Multiplication and Division Year 5Fractions Year 5 and 6Position and direction Years 4-6Statistics Years 2-6Statistics Years 2-6 | Sequences Year 7Addition and Subtraction Years 2-6Multiplication and Division Years 2-6Solving Problems with Multiplication and Division Year 7Place Value Year 6Fraction, decimal and percentage equivalence Year 7Percentages Year 6Fractions Years 3-6Decimals Years 4-6Indices Year 8Solving Problems with Multiplication and Division Year 7Addition and Subtraction Years 2-6Multiplication and Division Years 2-6Place Value Year 5Developing Number Sense Year 7 | Properties of shape Year 5 and 6Position and Direction Year 6Constructing, measuring and using geometric notation Year 7Area Year 4Perimeter and Area Year 5Perimeter, Area and Volume Year 6Properties of Shape Year 6Properties of Shape Year 6Position and Direction Year 5 and 6Statistics Years 2-4Statistics Year 6Sets and probability Year 7 |
| **Key Learning Experience / Skills** | Ratio and scaleMultiplicative changeMultiply and divide fractionsWorking in the cartesian planeRepresenting dataTables and probability | SequencesIndicesFractions and percentagesStandard index form Number sense | Angles in parallel lines and polygonsArea of trapezia and circlesLine symmetry and reflectionThe data handling cycleMeasures of location |
| **Assessment**How will you assess the impact of teaching? | Demonstrate, Consolidate and Extend Green tickets Book Inserts Low stakes assessment | Demonstrate, Consolidate and Extend Green tickets Book Inserts Low stakes assessment | Demonstrate, Consolidate and Extend Green tickets Book Inserts Low stakes assessment |
| **CIAG Links** | Ratio and Scale: Essential in fields like architecture, art, and design for creating proportional representations and models of real-world objects.Multiplicative Change: Important in finance and economics for understanding growth, interest rates, and pricing strategies, which impact business decisions.Multiply and Divide Fractions: Crucial in cooking, construction, and science for accurately measuring ingredients, materials, and quantities.Working in the Cartesian Plane: Key for careers in computer graphics, engineering, and physics, where plotting points and understanding coordinates are fundamental.Representing Data: Important in fields like marketing, research, and education for visualizing information and making data-driven decisions.Tables and Probability: Essential for roles in statistics, game design, and risk assessment where analysing outcomes and making predictions based on data are critical. | Sequences: Important in computer programming, finance, and science for recognizing patterns and predicting future outcomes in various scenarios.Indices: Essential in fields like engineering and computer science for simplifying calculations involving large numbers and understanding exponential growth.Fractions and Percentages: Crucial in everyday life for budgeting, shopping discounts, and financial planning, helping make informed decisions.Standard Index Form: Key in science and engineering for handling very large or very small numbers, such as in measurements and calculations involving the universe.Number Sense: Important for developing critical thinking and problem-solving skills in everyday situations, enhancing numerical fluency and confidence. | Angles in Parallel Lines and Polygons: Essential in fields like architecture, engineering, and graphic design for understanding spatial relationships and constructing accurate structures.Area of Trapezia and Circles: Important in landscaping, manufacturing, and design for calculating material needs and optimizing space in various projects.Line Symmetry and Reflection: Key in art, architecture, and design for creating aesthetically pleasing compositions and understanding balance in structures.The Data Handling Cycle: Crucial in business, research, and education for collecting, analysing, and interpreting data to inform decisions and strategies.Measures of Location: Important in statistics, economics, and social sciences for understanding central tendencies and making comparisons in data sets. |
| **British Values**  | Democracy: Students vote on which graph type to use for a data presentation.Respect: Students listen to and respect different methods for solving equations.Tolerance: Lessons include mathematical contributions from diverse cultures.Liberty: Students choose their preferred method for solving problems.Rule of Law: Clear rules, like angle laws, are followed in geometry proofs. |
| **Cross Curricular Link Numeracy** | Science: Analyse simple data sets.Geography: Start interpreting maps and data.History: Begin analysing historical events.Design and Technology: Develop measurement skills in projects.English: Apply numeracy in analysing literature.Art and Design: Use basic numeracy in creative projects.PE: Understand basic sports metrics. | **Cross Curricular Link Literacy** | analysing and writing about data trendsSolving complex word problemsUsing mathematical language in explanations Interpreting mathematical information in textsCrafting logical arguments based on statistical evidence.  |
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| ***The Hub Vision – A School that provides all students with exciting opportunities that build confidence, develop social skills and promote academic achievement*** |

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