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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 7  Multiplication and Division Year 5  Fractions Year 5 and 6  Position and direction Years 4-6  Statistics Years 2-6  Statistics Years 2-6 | Sequences Year 7  Addition and Subtraction Years 2-6  Multiplication and Division Years 2-6  Solving Problems with Multiplication and Division Year 7  Place Value Year 6  Fraction, decimal and percentage equivalence Year 7  Percentages Year 6  Fractions Years 3-6  Decimals Years 4-6  Indices Year 8  Solving Problems with Multiplication and Division Year 7  Addition and Subtraction Years 2-6  Multiplication and Division Years 2-6  Place Value Year 5  Developing Number Sense Year 7 | | | Properties of shape Year 5 and 6  Position and Direction Year 6  Constructing, measuring and using geometric notation Year 7  Area Year 4  Perimeter and Area Year 5  Perimeter, Area and Volume Year 6  Properties of Shape Year 6  Properties of Shape Year 6  Position and Direction Year 5 and 6  Statistics Years 2-4  Statistics Year 6  Sets and probability Year 7 |
| **Key Learning Experience / Skills** | Ratio and scale  Multiplicative change  Multiply and divide fractions  Working in the cartesian plane  Representing data  Tables and probability | Sequences  Indices  Fractions and percentages  Standard index form  Number sense | | | Angles in parallel lines and polygons  Area of trapezia and circles  Line symmetry and reflection  The data handling cycle  Measures 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 trends  Solving complex word problems  Using mathematical language in explanations  Interpreting mathematical information in texts  Crafting logical arguments based on statistical evidence. | |
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