## Curriculum Content Map

|  | TERM 1 |  | TERM 2 |  | TERM 3 |  |
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| Unit title \& description | Decimals <br> Operations <br> Primes, Factors and <br> Multiple <br> Substitution <br> Expanding brackets1 | Expanding brackets2 Factorising into single brackets <br> Area and Perimeter <br> Fractions 1 | Fractions 2 <br> Percentages <br> Solving linear equations | Sequences <br> Linear graphs <br> Frequency polygons <br> Scatter graphs | Bar charts <br> Averages <br> Stem and leaf diagrams | Angles <br> Pie charts <br> Bearings <br> Probability |
| Sequencing - Why is this taught and now? | These topics are revisited (as a spiral curriculum) building on from the learning in the previous year. <br> After plotting linear graphs, the plotting skills |  |  |  | These topic build on the previous topics of representing data, with bar charts drawn and averages of data. Averages are used with stem and leaf diagrams. | Pie charts are taught after angles due to knowledge of angles in a circle being required. <br> Bearings is a different representation of angles. Probability is first taught here, due to students requiring an understanding of working with different types of numbers first and being able to reason confidently. |
| Knowledge | - To be able to add, subtract and multiply with decimal numbers. <br> - To be able to apply long division to decimals numbers. <br> - To be able to round numbers to decimal places and significant figures. <br> - To be able to approximate calculations using sensible estimates. <br> - To be able to convert decimals to fractions and percentages and vice versa. - To be able to order decimals, fractions and percentages. <br> - To be able to recognise and find the reciprocals of numbers. <br> - To be able to complete calculations using order of operations. | - To be able to expand multiple single brackets in an expression and collect like terms. <br> - To be able to expand double brackets. <br> - To be able to factorise out the highest numerical factor. <br> - To be able to factorise out algebraic factors. <br> - To be able to fully factorise into single brackets. <br> - To be able to form expressions with perimeter. - To be able to form expressions with the area of squares and rectangles. <br> - To be able to find the area of triangles. <br> - To be able to find the area of parallelograms and rhombi. <br> - To be able to find the area of trapezia. | - To be able to problem solve with fractions. <br> - To be able to work out percentages of amounts. <br> - To be able to work out percentage increases and decreases. <br> - To be able to find multipliers. <br> - To be able to work out simple interest. <br> - To be able to work out compound interest. <br> - To be able to work out the original amount. <br> - To be able to work out profit and loss. <br> - To be able to solve one and two step equations. <br> - To be able to solve three step equations. <br> - To be able to solve linear equations with an unknown on both sides. <br> - To be able to form linear equations to solve. | - To be able to recognise and continue a sequence of specific number sequences. <br> - To be able to find the nth term of a linear sequence. <br> - To be able to show if a number is or is not in a sequence. <br> - To be able to find a term in a quadratic sequence using the nth term rule. - To be able to find the midpoints of two coordinates. <br> - To be able to plot and recognise the graph $y=x$, $y=x, y=-x x=$ ? And $y=$ ? <br> - To be able to find $y$ values from a given equation. <br> - To be able to plot linear graphs from equations. | - To be able to draw bar charts. <br> - To be able to read and interpret composite and dual bar charts. <br> - To be able to find the mean, median, mode using raw data. <br> - To be able to find the range using raw data. <br> - To be able to solve problems involving averages and the range. <br> - To be able to find the mode and range using grouped and ungrouped frequency tables. <br> - To be able to find the mean using grouped and ungrouped frequency tables. <br> - To be able to find the median using grouped and ungrouped frequency tables. | - To be able to recognise the properties of angles in triangles and quadrilaterals. - To be able to name and know the properties of angles on parallel lines and vertically opposite angles. - To be able to find missing angles on parallel lines. - To be able to find the sum of the interior angles of a polygon. <br> - To be able to find an interior angle of regular and irregular polygons. <br> - To be able to find an exterior angle of regular and irregular polygons. - To be able to find the number of sides of a polygon from stated interior or exterior angles. <br> - To be able to solve complex multi step angle problems. |



| Enrichment learning | Students will be given Higher attainers to <br> opportunities in lesson to complete the parallel <br> develop soft skills such as challenges. <br> teamwork, independence,  <br> initiative and responsibility.  | UKMT maths challenge to be completed |  |
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| British values | British values are not taught in specific topics but in all lessons teacher expectations of students is that they show mutual respect, respect personal liberty, follow academy rules and therefore respect the rule of law and show respect towards each other and value each other's contributions. |  |  |
| Character | Students challenged to justify their answers and explain their reasoning. Students supported in developing the communication skills required. Students to be encouraged to learn from their mistakes through follow-up tasks. Students encouraged to take pride in their work. |  |  |
| Careers | Explicit reference will be made throughout the course to careers related to the combination of topics studied. Examples include: <br> - Medicine, <br> - Social sciences <br> - Pharmacy <br> - Engineering <br> - Logistics <br> - Finance |  |  |
| Assessment opportunities | AFL strategies embedded into each and every lesson via use of multiple choice questions and/or mini whiteboard work. | Unit tests to be completed at the end of teaching each individual topic highlighting depth of understanding and areas requiring further work. | Cumulative AP assessments completed and levelled for students to assess their progress. |
| Personalised challenge for all: SEND, HPA | Tasks suitable for students of different levels or prior attainment including challenge for higher attainers |  |  |

