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| **Number** | **Geometry and Measure** | **Algebra** |
| **Statistics** | **Probability** | **Ratio and Proportion** |

**KEY STAGE 4 Year 10 CURRICULUM OVERVIEW 2024 – 2025**

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| **YR10** | **Autumn 1** | **Autumn 2** | **Spring 1** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Content** | NUMBER  Unit 1 Calculations 1  NUMBER  Unit 5 Fractions Percentages & decimal | NUMBER  Unit 13 Factors, Powers & Roots  STATISTICS  Unit 4 Handling Data 1 | RATIO AND PROPORTION  Unit 12 Ratio & Proportion  GEOMETRY  Unit 3 Angles & polygons | PROBABILITY  Unit 8 Probability  ALGEBRA  Unit 14 Graphs 1 | ALGEBRA  Unit 2 Expressions  ALGEBRA  Unit 10 Equalities & Inequalities | GEOMETRY  Unit 7 Working in 2D  Functional Skills preparation |
| **Key new knowledge** | **Calculations:**  Place value with decimals  Order positive and negative numbers and decimals  Rounding and significant figures.  Calculations with positive and negative numbers.  BIDMAS  **Fractions, Decimals and Percentages:**  Convert between Fractions and decimals.  Compare decimals and fractions  Find Fractions and decimals of an amount  Calculate simple fractions and mixed numbers  Covert between Fractions/ decimals and percentages. | **Factors, powers and roots**  Using mathematical language  Use Venn diagrams and factor trees to list prime factors.  Use prime factor decomposition  HCF/LCM Using product notion  Calculate integers powers and roots.  Recognise powers of 2,3,4,5  **Handling Data 1:**  Construct and interpret  Frequency tables  Two way tables  Pictograms  Bar line graphs  Bar charts  Pie Charts  Compare distributions using mean, median, mode and range. | **Ratio and Proportion:**  Use Fractions and percentages to describe a proportion  Write a ratio in its simplest form  Use scale factors/diagrams and maps  Sole problems involving % change  **Unit 3 Angles**  Describe properties of angles at a point  Sum of angles in triangles  Properties of specialist quadrilaterals.  Solve geometrical problems on quadratic axis  Congruency and similarity.  Interior and exterior angles | **Probability:**  Experimental data to estimate probability and frequencies  Compare Theoretical probability  Mutually exclusive events of probability  **Graphs 1**  Work with all 4 quadrants in a graph  Plot straight line graphs  Gradients and intercepts  Y= mx+c  Using gradients to find equations of lines.  Interpret gradients of straight graphs  Rate of change  Distance/Speed and Acceleration graphs. | **Expressions:**  Algebraic notation  Number and formula and expressions  Understand the language of Expressions/ equations/ forms and factors  Like terms and simplify equations  (surds/factors/roots/products)  Laws of indices  Common factors and expressions  **Equations and Inequalities**:  Simple linear equations  Quadratic equations  Linear equations and variable  Approximate solutions for equations | **Working in 2D:**  Line segments and angles  Standards units for lengths and areas.  Bearings  Interpret maps and scale drawings  Formula to calculate parallelogram, trapezium and triangle.  Construct reflections/ rotations/ translations and enlargements. |
| **Assessments** | End of topic review unit 1 & unit 5 | End of topic review unit 13 & unit 4 | End of topic review unit 12 & unit 3 | End of topic review unit 8 & unit 14 | End of topic review unit 2 & unit 10 | End of topic unit 7  Functional skills 1 revision & test |

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| YR11 | Autumn 1 | | Autumn 2 | | | Spring 1 | | Spring 2 | | Summer 1 | | Summer 2 |
|  | NUMBER  Unit 9 Measures & Accuracy  GEOMETRY  UniT 15 Working in 3D  GEOMETRY  Unit 19 Pythagoras | | GEOMETRY  Unit 11 Circles & ConStruction  STATISTICS  Unit 16 Handling Data 2  NUMBER  Calculations 2 | | | ALGEBRA  Unit 6 Formulae & functions  ALGEBRA  Unit 21 Sequences  PROBABILITY  Unit 20 Probability of combined eventS  REVISION  Retrieval topics  Unit 1 calculations  Unit 5 Fractions decimals & percentages  Unit 13 Factors powers and roots  Unit 4 Handling data | | REVISION Retrieval topics  Unit 12 Ratio & Proportion  Unit 3 Angles & Polygons  Unit 14 Graphs 1  Unit 7 – Working in 2d  Exam preparation/Revision | | Exam preparation/Revision | |  |
|  | | Measures and accuracy:  Rounding to an appropriate degree of accuracy  Use approximation to make estimates  Use standard units of length, mass, volume, capacity, time and area  Use inequality stating errors in intervals and accuracy.  Working in 3D:  Identifying vertices, faces and edges  3D Shapes  Volumes of cuboid, cylinders and other prisms  Calculating surface area and volume  Pythagoras:  Use the formulae of Pythagoras | | Circles & construction:  Apply circle definitions, properties and formulae  Construct triangles  Compass constructions  Handling data 2:  Construct tables, charts and graphs  Use mean, median and modal to compare distributions  Midpoint x frequency for estimated mean  Scatter graphs best fit  Line graphs for time series data  Calculations 2:  Calculate with roots, indices fractions and multiples of π | Formulae & functions:  Substitute numerical value into formulae  Rearrange formulae to change subject  Sequences:  Find terms of linear sequences using term to term  Probability of combined events:  Use Venn diagrams to calculate probabilities of events  Use tree diagrams to show frequencies  Retrieval on following topics:  Unit 1 Calculations  Unit 5 Fractions decimals & percentages  Unit 13 Factors powers and roots &  Unit 4 Handling data | | Retrieval on following topics:  Unit 12 Ratio & Proportion  Unit 3 Angles & Polygons  Unit 14 Graphs 1  Unit 7 Working in 2d  Exam preparation & Revision: | | Exam preparation & Revision | |  | |
| Assessment | End of topic review unit 9, unit 15 & unit 19 | | End of topic review unit 11, unit 16 & unit 17 | | | End of topic review & Maths genie exams on unit 6, unit 21 & unit 20 | | Past papers/Exams | | Past papers/Exams | |  |