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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** | NUMBERUnit 1 Calculations 1NUMBERUnit 5 Fractions Percentages & decimal | NUMBERUnit 13 Factors, Powers & RootsSTATISTICSUnit 4 Handling Data 1 | RATIO AND PROPORTIONUnit 12 Ratio & ProportionGEOMETRYUnit 3 Angles & polygons | PROBABILITYUnit 8 Probability ALGEBRAUnit 14 Graphs 1 | ALGEBRAUnit 2 Expressions ALGEBRAUnit 10 Equalities & Inequalities | GEOMETRYUnit 7 Working in 2DFunctional Skills preparation |
| **Key new knowledge** | **Calculations:**Place value with decimalsOrder positive and negative numbers and decimalsRounding and significant figures. Calculations with positive and negative numbers. BIDMAS**Fractions, Decimals and Percentages:** Convert between Fractions and decimals.Compare decimals and fractionsFind Fractions and decimals of an amountCalculate simple fractions and mixed numbersCovert between Fractions/ decimals and percentages. | **Factors, powers and roots**Using mathematical languageUse Venn diagrams and factor trees to list prime factors. Use prime factor decompositionHCF/LCM Using product notion Calculate integers powers and roots.Recognise powers of 2,3,4,5**Handling Data 1:** Construct and interpret Frequency tablesTwo way tablesPictogramsBar line graphs Bar charts Pie ChartsCompare distributions using mean, median, mode and range.  | **Ratio and Proportion:**Use Fractions and percentages to describe a proportionWrite a ratio in its simplest form Use scale factors/diagrams and mapsSole problems involving % change**Unit 3 Angles** Describe properties of angles at a pointSum of angles in trianglesProperties of specialist quadrilaterals. Solve geometrical problems on quadratic axisCongruency and similarity.Interior and exterior angles | **Probability:**Experimental data to estimate probability and frequenciesCompare Theoretical probability Mutually exclusive events of probability **Graphs 1**Work with all 4 quadrants in a graphPlot straight line graphsGradients and interceptsY= mx+cUsing gradients to find equations of lines. Interpret gradients of straight graphsRate of changeDistance/Speed and Acceleration graphs.  | **Expressions:**Algebraic notationNumber and formula and expressionsUnderstand the language of Expressions/ equations/ forms and factorsLike terms and simplify equations(surds/factors/roots/products)Laws of indicesCommon factors and expressions **Equations and Inequalities**: Simple linear equationsQuadratic equations Linear equations and variableApproximate solutions for equations  | **Working in 2D:** Line segments and anglesStandards units for lengths and areas.BearingsInterpret maps and scale drawingsFormula 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 7Functional skills 1 revision & test |

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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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| YR11 | Autumn 1 | Autumn 2 | Spring 1 | Spring 2 | Summer 1 | Summer 2 |
|  | NUMBERUnit 9 Measures & AccuracyGEOMETRYUniT 15 Working in 3DGEOMETRYUnit 19 Pythagoras | GEOMETRYUnit 11 Circles & ConStructionSTATISTICSUnit 16 Handling Data 2NUMBERCalculations 2 | ALGEBRAUnit 6 Formulae & functionsALGEBRAUnit 21 SequencesPROBABILITYUnit 20 Probability of combined eventSREVISIONRetrieval topicsUnit 1 calculationsUnit 5 Fractions decimals & percentagesUnit 13 Factors powers and rootsUnit 4 Handling data | REVISION Retrieval topicsUnit 12 Ratio & ProportionUnit 3 Angles & PolygonsUnit 14 Graphs 1Unit 7 – Working in 2dExam preparation/Revision | Exam preparation/Revision |  |
|  | Measures and accuracy:Rounding to an appropriate degree of accuracyUse approximation to make estimatesUse standard units of length, mass, volume, capacity, time and areaUse inequality stating errors in intervals and accuracy.Working in 3D:Identifying vertices, faces and edges3D ShapesVolumes of cuboid, cylinders and other prismsCalculating surface area and volumePythagoras: Use the formulae of Pythagoras $a^{2}+b^{2}=c^{2}$ | Circles & construction:Apply circle definitions, properties and formulaeConstruct trianglesCompass constructionsHandling data 2:Construct tables, charts and graphsUse mean, median and modal to compare distributionsMidpoint x frequency for estimated meanScatter graphs best fitLine graphs for time series dataCalculations 2:Calculate with roots, indices fractions and multiples of π | Formulae & functions:Substitute numerical value into formulaeRearrange formulae to change subjectSequences:Find terms of linear sequences using term to termProbability of combined events:Use Venn diagrams to calculate probabilities of eventsUse tree diagrams to show frequenciesRetrieval on following topics:Unit 1 Calculations Unit 5 Fractions decimals & percentagesUnit 13 Factors powers and roots &Unit 4 Handling data | Retrieval on following topics:Unit 12 Ratio & ProportionUnit 3 Angles & PolygonsUnit 14 Graphs 1Unit 7 Working in 2dExam 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 |  |