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

**CURRICULUM OVERVIEW 2024 – 2025 YEAR 9**

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| **YR 9** | **Autumn 1** | **Autumn 2** | **Spring 1** |
| **Content** | **Unit 1: Number Calculations****Unit 2: Sequences and Equations** | **Unit 3: Statistics****Unit 4: Fractions, Decimals and Percentages** | **Unit 5: Geometry 2D and 3D****Unit 6: Algebraic and real life graphs** |
| **Key new knowledge** | **Number calculations** * Solve Problems using addition & subtraction
* Add and Subtrasct Decimals
* Multiplication including decimal numbers
* Multiplicative reasoning
* Divide by decimals numbers
* Multiply and divide with negative numbers
* Know sq numbers upto 162
* Find positive and negative square roots of square numbers
* Work with cubes and cube roots.
* Work out calculations involving sq &brackets.
* Prime factor decomposition
* Index notation and positive power laws
* Work out LCM and HCF for prime factor dec
* Using scientific calculators and estimate ans

**Sequences and Equations** * Write and simplify expressions
* Generate terms of a sequence using algebra
* Solve sequence problems
* Work out Nth term of linear sequences
* Solve complex equations
*

**Unit Test 1 and 2** | **Statistics*** Plan and collect data
* Interpret frequency tables
* Find Range and Mean
* Use median, mean and range to compare data sets.
* Two way tables
* Group discrete and continuous data.
* Construct pie charts
* Interpret and construct scatter graphs.
* STEM Graph and charts
* Report on survey results.

**Fractions, Decimals & Percentages** * Convert between fractions, decimals& %
* Complate fractions, decimals& %
* Write fractions as decimals
* Write recurring decimals as fractions.
* Add and subtract fractions
* Add and subtract mixed numbers
* Use strategies for multiplying fractions
* Divide fractions
* Calculator working out percentages
* Compare proportions
* Percentage increase and decrease

 **Unit Test 3 and 4** | **Geometry 2D and 3D*** Alternate and corresponding angles.
* Work with angles in polygons
* Use scales in maps and plans
* Draw scale diagrams
* Use ruler &compass to bisect line segments
* Use ruler &compass to bisect an angle
* Use 2D representations of 3D solids
* Volume of 3Dshapes made from cuboids
* Use Pythagoras Therom to calculate missing lengths

**Algebraic and real life graphs** |

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| **Year 7** | **Spring 2** | **Summer 1** | **Summer 2** |
| **Content** | **Unit 7: Multiplicative reasoning****Consolidation** | **Unit 8: Algebraic and geometric formulae****Unit 9: Probability** | **Unit 10: Polygons and Transformations****Consolidation** |
| **Key new knowledge** |  |  |  |