

Maths Overview Thomas Hall School 2023-2024

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| Early Years and Key Stage 1 |
| Key Stage 2 |
| Key Stage 3 |
| Key Stage 4 |

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| **Year**  | **Autumn 1**  | **Autumn 2**  | **Spring 1**  | **Spring 2**  | **Summer 1**  | **Summer 2**  |
| **Reception** | Count objects, actions and sounds. Subitise.Link the number symbol (numeral) with its cardinal number value. | Link the number symbol (numeral) with its cardinal number value.Continue, copy and create repeating patterns. **Subitise (recognise quantities without counting) up to 5.** | Count beyond ten.Compare numbers.Understand the ‘one more than/one less than’ relationship between consecutive numbers.Explore the composition of numbers to 10.Select, rotate and manipulate shapes to develop spatial reasoning skills.**Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity.** | Automatically recall number bonds for numbers 0-5 and some to 10.Compose and decompose shapes so that children recognise a shape can have other shapes *within it*, just as numbers can. **Have a deep understanding of number to 10, including the composition of each number.****Automatically recall (without reference to rhymes, counting or other aids) number bonds up to 5 (including subtraction facts) and some number bonds to 10, including double facts.** | Compare length, weight and capacity.**Verbally count beyond 20, recognising the pattern of the counting system.****Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.** | **Comparing quantities and objects related to size, weight, capacity, position, distance, time and money.****Addition, subtraction, sharing.** |
| **Year 1** | Place Value to 10Addition & Subtraction to 10 | Addition & Subtraction to 10Geometry | Place Value to 20Addition & Subtraction within 20 | Place Value to 50Length & HeightMass & Volume | Multiplication and DivisionFractions | GeometryPlace Value to 100MoneyTime |
| **Year 2** | Place ValueAddition & Subtraction | Addition & SubtractionShape | MoneyMultiplication & Division | Multiplication & DivisionLength & HeightMass, Capacity & Temperature | FractionsTime | TimeStatisticsPosition & Direction |
| **Year 3** | Place ValueAddition & Subtraction | Addition & SubtractionMultiplication & Division | Multiplication & DivisionLength & Perimeter | FractionsMass & Capacity | Mass & CapacityRevisit FractionsMoneyTIme | TimeShape Statistics |
| **Year 4** | Place ValueAddition & Subtraction | Addition & Subtraction Measurement – AreaMultiplication & Division | Multiplication & DivisionLength & PerimeterFractions | FractionsDecimals | DecimalsMoneyRevisit Multiplication | TimeShapeStatisticsPosition & Direction |
| **Year 5** | Place ValueAddition & Subtraction Multiplication & Division | Multiplication & DivisionFractions | Multiplication & DivisionFractionsDecimals & Percentages | Decimals & PercentagesPerimeter & AreaStatistics | GeometryPosition & Direction | DecimalsNegative NumbersMeasures – Converting UnitsMeasures - Volume |
| **Year 6** | Place ValueAddition, Subtraction, Multiplication & Division | Addition, Subtraction, Multiplication & DivisionFractionMeasures – Converting Units | RatioAlgebraDecimals | Decimals & PercentagesArea, Perimeter & VolumeStatistics | ShapePosition & DirectionRevision of Content | Themed Projects, Consolidation Problem Solving |
| **Year 7**  | Algebraic ThinkingSequencesUnderstand and use algebraic notationEquality and equivalence | Place Value and ProportionPlace value, ordering integers and decimals Fraction, decimal and percentage equivalence | ApplicationsSolving Problems with Addition/SubtractionSolving Problems with Multiplication/Division8. Fractions & percentages of amounts | Directed NumberFractional ThinkingOperations and equations with directed number.Addition and subtraction of fractions | Lines and anglesConstructing, measuring and using geometric notation.Developing geometric reasoning | Reasoning with NumberDeveloping number sense Sets and probabilityPrime numbers and proof |
| **Year 8** | Proportional Reasoning   Ratio and Scale Multiplicative Change Multiplying and dividing fractions  | Representations   Cartesian plane Representing Data Tables and probability  | Algebraic Techniques  Brackets, equations and inequalities Sequences Indices  | Developing Number Fractions and Percentages Standard Index Form Number Sense  | Developing Geometry  Angles in parallel lines and polygons  Area of trapezia and circles  Line symmetry and reflection  | Reasoning with Data  The Data Handling Cycle Measures of Location  |
| **Year 9** | Number, powers, decimals, HCF and LCM, roots and roundingNumber - factors, multiples, indices, standard form and surd | Expressions, substitution into simple formulae, expanding and factorising Algebra, expanding, factorising, equations, formulae and sequence | Graphs, tables and charts Fractions and percentagesInterpreting and representing data Fractions, ratio and percentages  | Solving equations with bracketsAngles and trigonometry  | Properties of shape and angles  Statistics, sampling and averages Graphs  Area and volume  | Perimeter, area and volume 1 Transformations and constructions   |
| **Year 10** | Number, powers, decimals, HCF and LCM, roots and rounding  Expressions, substitution into simple formulae, expanding and factorising  Graphs, tables and chartNumber - factors, multiples, indices, standard form and surds  Algebra, expanding, factorising, equations, formulae and sequences  Interpreting and representing data   | Fractions and percentages  Equations, inequalities and sequences  Fractions, ratio and percentages  Angles and trigonometry | Properties of shape and angles   Statistics, sampling and averages   Perimeter, area and volume 1Graphs  Area and volume  Transformations and constructions | Graphs, linear and real life   Transformations  Equations and inequalities  Probability | Ratio and proportion  Trigonometry   ProbabilityMultiplicative reasoning, compound measures  Similarity and congruence  More trigonometry | Multipliative reasoning, compound measures, direct and inverse proportion  Construction, loci and bearings  Further statistics  Equations and graphs |
| **Year 11** | Quadratic equations and graphsPerimeter, area and volumeFractions, indices and Standard form | Congruence Similarity and vectorsFurther advanced algebraMock exam 1 | Feedback and review from Mock exam 1 | Problem solving and individualised exam preparation.Mock exam 2 | Consolidation, past papers and exam practice | Exam period |