

CURRICULUM OVERVIEW FOR THE MATHEMATICS DEPARTMENT

HEAD OF DEPARTMENT: Mr Tudor

EXAM BOARD: AQA (8300)

KEY STAGE COORDINATOR(S): Mr Compton (KS3) and Mr Jones



| | AUTUMN 1 | AUTUMN 2 | SPRING 1 | SPRING 2 | SUMMER 1 | SUMMER 2 |
|----------------|--|--|--|---|--|--|
| | Attentive & Discerning | Faith-filled & hopeful | Intentional & prophetic | Compassionate & Loving | Learned & Wise | Curious & Active |
| Year 7 | Factors, multiples, primes, powers and roots Calculating, place value and BIDMAS Rounding and approximation Four operations of arithmetic | Negatives numbers Notation for 2D/3D shapes Symmetry/construction Angles Introducing algebra Exploring FDPs | Sequences Exploring FDPs Ratio & Proportion Conversions | Calculating FDPs Angle rules Solving equations | Solving equations Perimeter, area, surface area and volume Coordinates and transformations | Transformations Presentation of data Averages |
| Year 8 | Standard form Transformations and bearings Probability Factors, multiples, primes, powers & roots BIDMAS and 4 operation of arithmetic Rounding and negative numbers | Probability Algebraic methods Sequences Converting between FDPs Properties of 2D/3D shapes Construction and symmetry Angle rules Algebraic methods | Ratio and proportion Angles in parallel lines and polygons Calculating FDPs Sequences Exploring FDPs Ratio Conversions and compound units | Calculating FDPs Solving equations Area, perimeter and volume Calculating FDPs | Linear and quadratic graphs Solving equations Perimeter, area, surface area and volume | Probability Scatter graphs Averages Transformations Presentation of data Averages |
| Year 9 | Standard form Transformations and bearings Probability Upper and lower bounds Loci, constructions and elevations Algebraic methods | Probability Algebraic methods Sequences Converting between FDPs Sequences Direct and inverse proportion Compound measures | Ratio and proportion Angles in parallel lines and polygons Calculating FDPs Solving equations and inequalities Arcs, sectors and surface area Congruent triangles and geometric proof Graphs (linear and non-linear) | Calculating FDPs Solving equations Area, perimeter and volume Graphs (linear and non-linear) Simultaneous equations | Linear and quadratic graphs Pythagoras and trigonometry Converting between FDPs Percentage change | Probability Scatter graphs Averages Vectors Tree diagrams Time series and scatter graphs Cumulative frequency and boxplots |
| Year 10 | Expanding and factorising (H) Solving quadratics (H) Simultaneous equations (H) Factors, multiples, primes and rounding (F) Converting and calculating FDPs (F) Algebraic methods (F) | Pythagoras and trigonometry (H) Sine and cosine rule (H) Indices, standard form and bounds (H) Surds (H) Ratio (F) Angles (F) Law of indices, substitution and rearranging (F) | Algebraic fractions and rearranging formulae (H) Direct and inverse proportion (H) Averages (H) Standard form and upper and lower bounds (F) Sequences (F) Direct and inverse proportion and compound measures (F) | Area and perimeter (H) Complex volume and surface area (H) Calculating and converting FDPs (H) Solving equations and inequalities (F) Perimeter, area, surface area and volume (F) Averages (F) Graphs (linear) (F) | Parallel and perpendicular lines (H) Probability (H) Cumulative frequency and boxplots (H) Graphs (non-linear) (F) Probability (F) | Graphs (non-linear) Sequences (H) Transformations (H) Transformation (F) Presentation of data (F) Vectors (F) |
| Year 11 | Indices (H/F) Standard form (H/F) Fractions, decimals and percentages (H/F) | Ratio and Proportion (H/F) Area, volume and surface area (H/F) Representing data (H/F) | Pythagoras' Theorem (H/F) Trigonometry (H/F) The Sine/Cosine Rules (H) Vectors (H/F) Probability (including Venn diagrams) (H/F) Averages (F) | Angles (H/F) Circle Theorems (H) Ratio and Proportion (H/F) | | |