



- GEOMETRY**
- Perimeter, Area and Volume (Rectangles, Triangles, Trapezia, Cuboids – real life examples)
  - Angles at a point, on a straight line, in triangles, quadrilaterals and in parallel lines
  - 3D shapes
  - Symmetry

**PROPORTIONAL REASONING**

- Expressing quantities using ratios
- Share amounts in a ratio

**ALGEBRA**

- Algebraic notation
- Simplify by adding and multiplying terms
- Substitution
- Straight line graphs
- Simple linear equations
- Linear sequences (intro to nth term)

**NUMBER**

- Ordering integers and decimals
- Fraction, decimal and % equivalence
- BIDMAS
- Powers and roots
- Add, subtract fractions
- Simple %, % change
- Rounding

**Starter Pack Baseline Test**



**Junior Maths Challenge**

**NUMBER**

- LCM, HCF
- Laws of indices
- Intro to standard form
- Rounding-Significant fig
- Multiply, divide fractions
- Multipliers in %s

**ALGEBRA**

- Expand brackets
- Factorisation
- Sequences (nth term)
- Linear equations with x on both sides
- Intro to gradient
- Intro to quadratic graphs

**PROPORTIONAL REASONING**

- Relate ratios to fractions
- Apply ratios to lengths, areas and volumes, enlargement of shapes and map scales
- Direct and inverse proportion

**GEOMETRY**

- Circles, Complex compound shapes
- Triangular and other prisms
- Angles in polygons
- Congruent shapes, Translations, Rotations and Enlargements
- Compass and ruler constructions

**STATISTICS AND PROBABILITY**

- Simple statistical diagrams
- Averages and range
- Interpret and compare data

**ALGEBRA**

- Double brackets expansion and factorisation
- Rearrange formulae
- Equations in geometry
- Gradients (application)
- Quadratic graphs
- Linear inequalities
- Intro to simultaneous equations

**PROPORTIONAL REASONING**

- Best buy, currency conversion
- Compound units
- Reverse %s
- Intro to simple and compound interest

**NUMBER**

- Laws of Indices (extension)
- Standard form
- Application of rounding and estimation to solve problems
- Intro to Surds



**STATISTICS AND PROBABILITY**

- Discrete and continuous data
- Probability (Venn Diagrams, Combined events)
- Relative frequency
- Scatter graphs,

**COMBINED AND PROBABILITY**

- Frequency trees
- Probability trees
- Averages and range (frequency tables)



**Int Maths Challenge**

**NUMBER**

- Error intervals
- Problems on Bounds
- Surds
- Negative and fractional indices

**ALGEBRA**

- 3 brackets
- Further factorisation
- Rearrange complex formulae
- Simultaneous equations
- Parallel and perpendicular lines
- Quadratic sequences
- Non linear graphs



**PROPORTIONAL REASONING**

- Graphical and algebraic representation of direct/inverse proportion
- Simple and compound interest
- Gradients of non-linear graphs
- Area under graphs

**STATISTICS AND PROBABILITY**

- Histograms, Cumulative frequency graphs and Box Plots, Compare distributions
- Conditional Probability

**GEOMETRY**

- Area, perimeter, volume (complex problems)
- Surface area of cylinders
- Congruency (conditions)
- Plans and elevations
- Loci
- Similarity (complex shapes)
- Pythagoras and Trigonometry



**GEOMETRY**

- Proof of circle theorems
- Exact trig values

**PROPORTIONAL REASONING**

- Exponential growth and decay
- Iterations
- Equation of a tangent

**ALGEBRA**

- Algebraic fractions
- Functions
- Geometric progression
- Quadratic inequalities
- Trig graphs
- Transformations of graphs
- Roots, intercepts and turning points

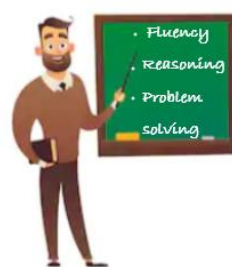
**NUMBER**

- Surds (rationalise Denominators)



**STATISTICS AND PROBABILITY**

- Conditional probability (complex problems)



**EDEXCEL Past exam papers followed by paper review**



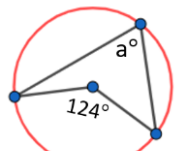
**Senior Maths Challenge**

- Further Maths
- A Level Maths
- Core Maths



**GEOMETRY**

- Trigonometry in non-right angled triangles
- Circle Theorems
- Sectors of circles
- Vectors
- Spheres, pyramids, cones
- Fractional and negative scale factors in enlargements



**Targeted revision Exam skills**

**Mock Exam 1**

**11**

**Mock Exam 2**

**Summer exams GCSE**

**KS3 and KS4 MATHEMATICS Learning Journey**

