Maths Curriculum Road Map
KS3

Careers – Accountant – Commodity Trader – Meteorologist – Investment Banker

Careers – Architect – Geologist – Engineer – Astronaut – Mathematician – Teacher - Software Developer – GCHQ Analyst

Careers – Game Designer – Actuary – Medical Scientist

Your journey continues at KS4

Year 9

Representations
- Solving problems using graphs, tables and algebra

Reasoning with Proportion
- Enlargement and similarity
- Solving ratio and proportion problems
- Rates

Reasoning with Geometry
- Deduction
- Rotation and Translation
- Pythagoras' Theorem

Reasoning with Number
- Numbers
- Using percentages
- Maths and money

Constructing in 2 and 3 Dimensions
- Three dimensional shapes
- Constructions and congruency

Reasoning with Algebra
- Straight line graphs
- Forming and solving equations
- Testing conjectures

Year 8

Reasoning with Data
- The data handling cycle
- Measures of location

Developing Geometry
- Angles in parallel lines and polygons
- Area of trapezia and circles
- Line symmetry and reflection

Developing Number
- Fractions and percentages
- Standard index form
- Number sense

Proportional Reasoning
- Ratio and scale
- Multiplicative change
- Multiplying and dividing fractions

Representations
- Working in the cartesian plane
- Representing Data
- Tables and Probability

Algebraic Techniques
- Brackets, equations and inequalities
- Sequences
- Indices

Year 7

Reasoning with Number
- Developing number sense
- Sets and probability
- Prime numbers and proof

Lines and Angles
- Constructing, measuring and using geometric notation

Fractional Thinking
- Addition and subtraction with fractions

Place Value and Proportion
- Place value
- Ordering integers and decimals
- Fraction, decimal and percentage equivalence

Application of Number
- Solving problems with addition and subtraction
- Multiplication and division
- Fractions and decimals of amounts

Directed Number
- Four operations with directed number

Algebraic Thinking
- Sequences
- Understand and use algebraic notation
- Equality and equivalence

Threshold Concepts

Algebraic manipulation
This concept involves recognising mathematical properties and relationships using symbolic representation

Number sense
This concept involves understanding the number system and how they are used in a wide variety of mathematical ways

Shape facts
This concept involves recognising the names and properties of geometry shapes and angles.

Multiplicative reasoning
This concept involves using ratio and proportion and understanding of reciprocals in real world applications

Representing and interpreting data
This concept involves interpreting, manipulating and presenting data in various ways.

Calculator skills
This concept involves fluent application of mathematical operations on a scientific calculator

Understanding and calculating risk
This concept involves knowing the rules of probability in the correct context

Maths Curriculum Road Map
KS4

Careers – Accountant – Commodity Trader – Meteorologist – Investment Banker – Architect – Geologist – Engineer – Actuary – Medical Scientist – Mathematician – Teacher - Software Developer – GCHQ Analyst – Game Designer –

Level 2/3 BTEC

Apprenticeships

KS5 Level 3 in …

GCSE Examinations

Tailored in-class revision and intervention

PPE 2

Tailored in-class revision, assessment and intervention

PPE 1

Tailored in-class revision, assessment and intervention

Year 11

Using Number
- Non-calculator methods
- Types of Number and Sequences
- Indices and Roots

Expressions
- Identities
- Algebraic fractions
- Algebraic arguments and proofs

Collecting and Representing Data
- Collecting data
- Representing data
- Interpreting data

Probability
- Use experimental data
- Work with dependant and impendent probabilities
- Represent probability using diagrams and tables

Proportional Change
- Ratios and Fractions
- Percentages & Interest

Developing Algebra
- Solutions of equations and inequalities
- Simultaneous Equations

Similarity
- Similar Shapes
- Congruent Triangles
- Scale Factor of Enlargement
- *Trigonometry*

Geometry
- Angles and bearings
- Working with circles
- Vectors

Year 10

Threshold Concepts

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