Mathematics Learning Journey

Prepares you for further study in:
Mathematics, Physics, Chemistry, Biology, Engineering, Psychology, Economics, Business

Prepares you for roles in:
Engineering, banking, insurance, accountancy, finance, business, statistics, data analysis,

YEAR 11

Revision
Changing the subject
Non-linear graphs
Gradients and lines
Indices and roots
Functions
Expanding and factorising
Using graphs
Manipulating expressions
Algebra
Graphs
Number

YEAR 10

Working with circles
Ratios and fractions
Probability
Non calculator methods
Angles and bearings
Geometry
Proportions and proportional change
Delving into data
Types of number and sequences
Vectors
Percentages and interest
Collecting, representing and interpreting data
Developing Algebra
Simultaneous equations
Trigonometry
Probability
Rates
Solving ratio and proportion problems
Pythagoras' Theorem
Similarity
Representations
Reasoning with Proportion
Representing equations and inequalities
Congruence, similarity and enlargement
Algebraic representation
Enlargement and similarity
Reasoning with Geometry

YEAR 9

Rotation and translation
Forming and solving equations
Constructions and Congruency
Numbers
Maths and money
Straight-line graphs
Reasoning with Algebra
Constructing in 2 and 3 dimensions
Reasoning with Number
Deduction
Testing conjectures
Three dimensional shapes
Using percentages
The data handling cycle
Line symmetry and reflection
Angles in parallel lines and polygons
Standard index form
Indices
Brackets, equations and inequalities
Tables and probability
Measures of location
Reasoning with Data
Developing Geometry
Developing Number
Algebraic techniques
Representations
Area of trapezia and circles
Number sense
Fractions and percentages
Sequences
Representing data
Constructing, measuring and using geometric notation
Prime numbers and proof
Addition and subtraction of fractions
Developing Number sense
Ratio and scale
Multiplying and dividing fractions
Working in the Cartesian plane

YEAR 8

Lines and Angles
Reasoning with Number
Proportional Reasoning
Developing geometric reasoning
Sets and probability
Multiplicative change
Fractional thinking
Directed Number
Solve problems with addition, subtraction multiplication and division
Place value and ordering integers and decimals
Understand and use algebraic notation

YEAR 7

Application of Number
Place Value and Proportion
Algebraic Thinking
Four operations with directed number
Fractions and percentages of amounts
Fraction, decimal and percentage equivalence
Equality and equivalence
Sequences

Welcome

What we learn and when we learn it!

Year	Unit 1	Unit 2	Unit 3	Unit 4	Unit 5	Unit 6
7	**Algebraic Thinking** · Sequences · Understand and use algebraic notation · Equality and equivalence	**Place value and proportion** · Place value and ordering integers and decimals · Fraction, decimal and percentage equivalence	**Applications of Number** · Solve problems with addition, subtraction multiplication and division · Fractions and percentages of amounts	**Directed number** · Four operations with directed number Fractional thinking · Addition and subtraction of fractions	**Lines and Angles** · Constructing, measuring and using geometric notation · Developing geometric reasoning	**Reasoning with Number** · Developing Number sense · Sets and probability · Prime numbers and proof
8	**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	**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
9	**Reasoning with Algebra** · Straight-line graphs · Forming and solving equations · Testing conjectures	**Constructing in 2 and 3 dimensions** · Three dimensional shapes · Constructions and Congruency	**Reasoning with Number** · Numbers · Using percentages · Maths and money	**Reasoning with Geometry** · Deduction · Rotation and translation · Pythagoras' Theorem	**Reasoning with Proportion** · Enlargement and similarity · Solving ratio and proportion problems · Rates	**Representations** · Probability · Algebraic representation · Revision Handling data, error intervals, sequences
10	**Similarity** · Congruence, similarity and enlargement · Trigonometry	**Developing Algebra** · Representing equations and inequalities · Simultaneous equations	**Geometry** · Angles and bearings · Working with circles · Vectors	**Proportions and proportional change** · Ratios and fractions · Percentages and interest · Probability	**Delving into data** · Collecting, representing and interpreting data · Non calculator methods	**Number** · Types of number and sequences · Indices and roots · Manipulating expressions
11	**Graphs** · Gradients and lines · Non-linear graphs ·Using graphs	**Algebra** · Expanding and factorising · Changing the subject · Functions	**Revision Reasoning** · Multiplicative · Geometric · Algebraic	**Revision Communicate** · Transforming and constructing ·Listing and describing · Show that	**Revision** · · ·	**Revision** · · ·