Mathematics Curriculum

Intent

To enable pupils to develop confidence in their Mathematical ability and logical thinking skills.

25F Quadratic graphs
Recognise draw and sketch quadratic graphs, interpreting roots and solutions

24 Graphing simultaneous equations and quadratics
Recognise draw and sketch simultaneous and quadratic equations (H: equations of circles, radius and tangents)

22 2D representations of 3D shapes
Understanding and drawing 3D shapes and their views, including scale drawing, constructions and bearings

20H Direct and Inverse Proportion
Apply knowledge of ratio to direct and inverse proportion

20F Circles
Applying knowledge of area and perimeter to circles, sectors and arcs

19 Probability
Apply prior knowledge of probability to the outcomes of multiple events (H: Conditional probability and capture, recapture)

18 Pythagoras and Trigonometry
Apply Pythagoras' theorem and trigonometry to right angles triangles (H: apply to any triangle)

17 Data Handling
Interpret, represent and analyse data (H: Histograms, box plots and cumulative frequency)

16 Volume and Surface area
Applying knowledge of area and perimeter to prisms (H: any 3D shape)

14 Percentages
Extend knowledge of percentages to simple and compound interest (H: Relate to ratio and functions)

13H Simultaneous equations and quadratic formula
Apply knowledge of quadratics and equations

13F Inequalities
Apply knowledge of place value and equations to inequalities

12 Angles
Apply earlier work on angles to polygons and parallel lines (H: Circle theorems)

11 Sequences
Secure work on linear sequences (H: Extend into quadratic)

10 Transformations
Draw and describe graph transformations

9 Linear Graphs
Draw and interpret linear graphs

8 Area and Perimeter
Applying knowledge of area and perimeter formula in different contexts

7 Equations
Forming and solving equations. Changing the subject of a formula

5 Formulae
Using common formulae for compound measures

4 Processing data
Securing analysing data, including grouped.

6 Fractions
Secure knowledge of fractions and relate to recurring decimals

3 Number
Manipulation of indices (H: Surds)

2 Expressions
Building on algebraic notation and relating it to quadratics and algebraic fractions

1 Number
Place value, operations, powers and roots, types of number (H: Bounds)

16 Probability
Understanding set notation and relating to probability

15 Fractions, Decimals and Percentages
Understand how to find percentages of amounts and linking FD&P

14 Area and Perimeter
Understand and calculate area, perimeter and surface area.

13 Ratio and Proportion
Use and work with ratio notation. Use proportionally reasoning.

12 Types of number
Recalling the different types of number and using them, as well as powers

11 Equations and formulae
Solving equations and writing formulae

10 Sequences and graphs
Relating sequences and algebraic expressions with graphs

9 Algebraic Thinking
Building on manipulating expressions

7 2D representations of 3D shapes
Understanding and drawing 3D shapes and their views

8 Fractions
Understand fractions and apply the four operations

5 Expressions
Understanding algebraic notation and manipulation

6 Angles
Recalling angle sums and using these in a variety of contexts

3 Graphing
Understand cartesian coordinates and an introduction to graphing

4 Number
Multiplication and division of integers, decimals and negatives

1 Data Handling
Interpret and represent data from various formats

2 Place Value
Understanding base 10 number systems and completing operations

25H Vectors
Represent vectors and resultant vector problems

23 Congruence and similarity
Recognise similar and congruent shapes and calculate unknowns using proportional reasoning (H: extend to are and volume)

21F Volume and Surface area
Applying knowledge of area and perimeter to any 3D shapes

21H Functions and proofs
Apply knowledge equations to function notation and proof

15H Pythagoras and Trigonometry
Apply Pythagoras' theorem and trigonometry to right angles triangles

15F Ratio and Proportion
Apply knowledge of ratio to direct and inverse proportion

Exams

UKMT Intermediate

Subject revision day

11

Bletchley Park

UKMT Intermediate

10

Sphero

9

UKMT Junior

Pi day Celebrations

8

Castle building

UKMT Junior

Number in other cultures

7