

Maths KS3 Subject Learning Journey



Working with integers

The four operations with whole numbers
Negative numbers
Indices
Prime numbers

Factor Multiples & Fractional Thinking

Prime factors
LCM and HCF
Equivalent fractions
Comparing fractions

Operations with fractions

Improper fractions
Add & multiply fractions

Decimals & Percentages

Converting between decimals, fractions, percentages
Adding, multiplying decimals
Finding percentages

Year
7

Algebraic Reasoning

Writing expressions
Simplifying algebra
Substitution

Geometric reasoning 1

Angle facts and reasoning part 1
Areas and perimeters

Ratio 1

Writing and simplifying ratios
Dividing in a ratio
Percentage increase & decrease
Currency exchange
Best value problems

Algebra 2

Expanding & Factorising
Solving linear equations
Sequences
Rearranging simple expressions

Year
8

Geometric Reasoning 3

Area of 2D shapes
Circles
Geometry with algebra

Fractions & decimals 2

Dividing fractions and decimals

Geometric Reasoning 4

3D shapes
Surface Area
Rotation, reflection and translation

Geometric Reasoning 2

Interior and exterior angles
Angles in parallel lines
Pythagoras Theorem

Year
9

Ratio 2

Further Ratio and proportion
Ratio and algebra
Compound units

Geometry 4

Angles in polygons
Construction and loci
Volume
Trigonometry

Number Sense

Numeracy recap
Rounding and estimating
Surds

GCSE
Ready!

Algebraic Methods 1

Expanding double brackets
Factorising quadratics
Inequalities
Coordinates and mid points

Algebraic Methods 2

Equations of straight lines
Quadratic graphs
Quadratic equations

Statistics and Probability

Graphs and charts
Scatter graphs
Averages
Calculating probabilities
Tree diagrams
Venn diagrams