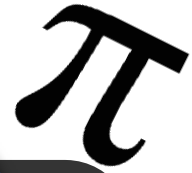




Mathematics



LEARNING JOURNEY

Year 8



Representations
Working in the Cartesian plane / using $y=mx+c$ / representing data – scatter graphs, lines of best fit, two way tables / Probability

Developing number
Percentages – increase, decrease, multipliers, percentage change, original amounts / Standard index form

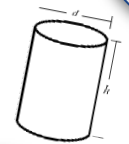
Reasoning with data
The data handling cycle / Averages (Mean (from a table), mode, median, range)

goodbye.

Proportional reasoning
Ratio and scale / using multiplicative change – exchange rates / Multiplying and dividing fractions

Algebraic techniques
Brackets, equations and inequalities / Sequences – 'nth term' / Indices

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



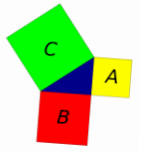
Fractional thinking
Addition and subtraction of fractions and related problems

Applications of number
Solving problems with addition, subtraction, multiplication and division / calculating fractions and percentages of amounts

Algebraic thinking
Sequences / using algebraic notation / solving equations

Year 7

Properties of shapes
Angles in a triangle / quadrilateral / on a straight line / polygons / around a point / nets / shape construction



Reasoning with number
Developing number sense / probability / Prime numbers

Lines and angles
Constructing, measuring and using geometric notation / Developing geometric reasoning

Directed Number (negatives)
Operations and equations with directed number

Place value and Proportion
Place value / ordering integers and decimals / FDP equivalence



Four Rules
Place value / addition, subtraction, multiplication (4 by 2 digit), division (3 by 2) digit / Fractions

Decimals and Percentages
Place value / multiply, divide by 10, 100, 1000 and by integers / Percentages of amounts / FDP conversions

Measurements
Converting units (Mass / Length / Capacity) / Perimeter / Area (Triangles / parallelograms) Volume

Statistics
Line graphs / pie charts / averages (mean) / circle properties



Year 6



Shape
Properties of shapes / angles / transformations (reflection / symmetry / translations) / volume / converting units

Position and Direction
Reflections / Symmetry / Translations / using co ordinates

Algebra
Expressions / substitution / Formulae

Ratio
Language / Fractional link / calculating / proportional reasoning / enlargement

welcome

Perimeter and Area
Rectangles / rectilinear shapes / problem solving / calculate unknown lengths

Fractions
Add / subtract / multiply / fractions of amounts / equivalence / simplifying

Addition / Subtraction
Using up to 5 digits / inverse calculations / multi-step problems

Statistics
Bar charts / line graphs / pictograms / tally charts

Decimals and percentages
Conversions / equivalence / percentages of amounts (multiples of 5 & 10) / adding & subtracting with decimals

Multiplication and Division
X up to 3 by 2 digit / ÷ up to 4 by 1 digit / x & ÷ by 10, 100, 1000 Problem solving / Factors / Multiples / Primes / Squares / cubes

Place Value
Reading / Writing / ordering / Negatives (ordering / adding / subtracting)

Year 5

