Year 6 Mathematics Overview

Autumn Term 1	Autumn Term 2	
Number	**Number**	**Geometry**
Crystal Maze · Calculating using Knowledge of Structures · Written Methods	Fractions A · Fractions B	Position and Direction

Spring Term 1	Spring Term 2	
Number	**Geometry**	
Ratio · Decimals · Fractions, Decimals and Percentages	Shape	Area, Perimeter and Volume

Summer Term 1	Summer Term 2	
Converting Units · Statistics	SATs	**Number** · Algebra

Assessments (Autumn, Spring)

Legend

Colour	Category
Number & Place Value	Calculation	Geometry	Statistics	Algebra	F.D.P	Others

Crystal Maze

Calculating using Knowledge of Structures

- Explore how different parts can be equivalent to the same whole.
- Identify missing parts using knowledge of part whole models
- Calculate the value of a missing part
- Represent an equation using a part-whole model
- Explore the same difference rule
- Explain how increasing or decreasing the minuend affects the difference
- Solve subtraction calculations mentally using known facts
- Explore strategies to support with mental calculations
- Explain how increasing or decreasing the subtrahend affects the difference
- Calculate the difference using their knowledge of an adjusted subtrahend

Year 6 Mathematics Overview

Written Methods

- Add and subtract integers
- Multiply up to a 4-digit number by a 2-digit number
- Short division
- Division using factors
- Long division
- Common factors
- Common multiples
- Primes to 100
- Squares and cubes
- Order of operations
- Mental calculations and estimation
- Reasoning from known facts

Year 6 Mathematics Overview

Fractions

- Simplify fractions.
- Fractions on a number line
- Compare and order fractions
- Add and subtract fractions
- Add mixed numbers
- Subtract mixed numbers
- Mixed addition and subtraction
- Problem solving with fractions

Fractions

Multiply fractions by integers

Multiply fractions by fractions

Divide fractions by integers

Four rules with fractions

Fraction of an amount

Fraction of an amount - find the whole

Position and Direction

The first quadrant

Four quadrants

Translations

Reflections

Year 6 Mathematics Overview

Ratio

- Use ratio language
- Ratio and fractions
- Introducing the ratio symbol
- Calculating ratio
- Using scale factors
- Calculating scale factors
- Ratio and proportion problems

Year 6 Mathematics Overview

Decimals

- Three decimal places
- Multiply by 10, 100 and 1,000
- Divide by 10, 100 and 1,000
- Multiply decimals by integers
- Divide decimals by integers
- Division to solve problems
- Decimals as fractions
- Fractions to decimals

Year 6 Mathematics Overview

Fractions, Decimals and Percentages

Understand percentages

Fractions to percentages

Equivalent FDP

Order FDP

Percentage of an amount

Percentages - missing values

Year 6 Mathematics Overview

Shape

Compare and classify geometric shapes based on their properties and size

Calculate angles

Vertically opposite angles

Angles in a triangle

Angles in special quadrilaterals

Angles in regular polygons

Draw shapes accurately using given dimensions and angles

Perimeter, Area and Volume

- Shapes - same area
- Area and perimeter
- Area of a triangle
- Area of a parallelogram
- Volume - counting cubes
- Volume of a cuboid

Converting Units

Metric measures

Convert metric measures

Calculate with metric measures

Miles and kilometres

Imperial measures

Year 6 Mathematics Overview

Statistics

- Read and interpret line graphs
- Draw line graphs
- Use line graphs to solve problems
- Circles
- Read and interpret pie charts
- Pie charts with percentages
- Draw pie charts
- The mean

Year 6 Mathematics Overview

Algebra

- Find a rule - one step
- Find a rule - two step
- Forming expressions
- Substitution
- Formulae
- Forming equations
- Solve simple one-step equations
- Solve two-step equations
- Find pairs of values