

# Year 6 Mathematics Overview

Autumn Term 1			Autumn Term 2			Assessments
Number			Number			
Place Value Number Talks	Four Operations		Fractions A	Fractions B		
Spring Term 1			Spring Term 2			Assessments
Number			Geometry			
Ratio	Decimals	Fractions, Decimals and Percentages	Shape	Area, Perimeter and Volume	Position and Direction	
Summer Term 1			Summer Term 2			
Statistics		SATs	Number			
Statistics			Algebra			

Number & Place Value

Calculation

Geometry

Statistics

Algebra

F.D.P

Others

## Year 6 Mathematics Overview

# Place Value Number Talks



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

# Four Operations

-  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

## Year 6 Mathematics Overview

# 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

## 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



Understand percentages



Fractions to percentages



Equivalent FDP



Order FDP



Percentage of an amount



Percentages - missing values

Fractions,  
Decimals and  
Percentages



## 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

## Year 6 Mathematics Overview

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

## Year 6 Mathematics Overview

# Position and Direction



The first quadrant



Four quadrants



Translations



Reflections

## Year 6 Mathematics Overview

# 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