

# Year 5 Mathematics Overview

Autumn Term 1			Autumn Term 2			Assessments
Number			Number			
Crystal Maze	Place Value	Addition and Subtraction	Multiplication and Division	Fractions		
Spring Term 1			Spring Term 2			Assessments
Number			Number	Measurement		
Multiplication and Division	Fractions	Decimals and Percentages	Perimeter and Area	Statistics		
Summer Term 1			Summer Term 2			Assessments
Geometry		Number	Number	Measurement		
Shape	Position and Direction	Negative Numbers	Decimals	Converting Units		

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

# Year 5 Mathematics Overview



Crystal Maze

# Year 5 Mathematics Overview

## Place Value



Numbers to 10,000



Rounding to 10, 100 and 1,000



Numbers to 100,000



Compare and order numbers to 100,000



Round numbers within 100,000



Numbers to a million



Counting in 10s, 100s, 1,000s, 10,000s and 100,000s



Compare and order numbers to one million



Round numbers to one million



Negative numbers



Roman numerals

## Year 5 Mathematics Overview

# Addition and Subtraction



Mental strategies



Add whole numbers with more than 4 digits  
(column method)



Subtract whole numbers with more than 4 digits  
(column method)



Round to estimate and approximate



Inverse operations (addition and subtraction)



Multi-step addition and subtraction



Compare calculations



Find missing numbers

## Year 5 Mathematics Overview

# Multiplication and Division



Multiples



Factors



Common factors



Prime numbers



Square numbers



Cube numbers



Multiply by 10, 100 and 1,000



Divide by 10, 100 and 1,000



Multiples of 10, 100 and 1,000

# Year 5 Mathematics Overview

## Fractions

- Equivalent fractions
- Improper fractions to mixed numbers
- Mixed numbers to improper fractions
- Number sequences
- Compare and order fractions less than 1
- Compare and order fractions greater than 1
- Add and subtract fractions
- Add fractions within 1
- Add 3 or more fractions
- Add fractions
- Add mixed numbers
- Subtract fractions
- Subtract mixed numbers
- Subtraction - breaking the whole
- Subtract 2 mixed numbers

## Year 5 Mathematics Overview

# Multiplication and Division



Mental multiplication and division



Multiply 4-digits by 1-digit



Multiply 2-digits (area model)



Multiply 2-digits by 2-digits



Multiply 3-digits by 2-digits



Multiply 4-digits by 2-digits



Divide 4-digits by 1-digit



Divide with remainders



Problem solving involving a combination of the four operations

## Year 5 Mathematics Overview

# Fractions



Multiply unit fractions by an integer



Multiply non-unit fractions by an integer



Multiply mixed numbers by integers



Fractions of a quantity



Fraction of an amount



Using fractions as operators



Compare and order fractions greater than 1



Fraction problem solving



## Year 5 Mathematics Overview

# Decimals and Percentages



Decimals up to 2 d.p.



Decimals as fractions



Understand thousandths



Thousandths as decimals



Rounding decimals



Order and compare decimals



Understand percentages



Percentages as fractions and decimals



Equivalent F.D.P

# Year 5 Mathematics Overview

## Perimeter and Area



Measure perimeter



Calculate perimeter



Area of rectangles



Area of compound shapes



Area of irregular shapes

# Year 5 Mathematics Overview

## Statistics



Read and interpret line graphs



Draw line graphs



Use line graphs to solve problems



Read and interpret tables



Two-way tables



Timetables

# Year 5 Mathematics Overview

## Shape



Identify 2D and 3D shapes



Know angles are measured in degrees: estimate and compare acute, obtuse and reflex angles



Measuring angles in degrees



Measuring with a protractor



Drawing lines and angles accurately



Calculating angles on a straight line



Calculating angles around a point



Calculating lengths and angles in shapes



Regular and irregular polygons



Reasoning about 3-D shapes

## Year 5 Mathematics Overview

# Position and Direction



Position in the first quadrant



Translation



Translation with coordinates



Reflection



Reflection with coordinates

## Year 5 Mathematics Overview

# Negative Numbers



Interpret negative numbers in context



Count forwards and backwards with positive and negative whole numbers including through zero



Compare and order negative numbers



Find the difference between two negative numbers

# Year 5 Mathematics Overview

## Decimals



Adding decimals within 1



Subtracting decimals within 1



Complements to 1



Adding decimals - crossing the whole



Adding and subtracting decimals with the same number of decimal places problem solving



Adding and subtracting decimals with a different number of decimal places problem solving



Adding and subtracting wholes and decimals



Decimal sequences



Multiplying decimals by 10, 100 and 1,000



Dividing decimals by 10, 100 and 1,000

# Year 5 Mathematics Overview

## Converting Units



Kilograms and kilometres



Millimetres and millilitres



Metric units



Imperial units



Converting units of time



Timetables