Primary maths whole school plan – Mathematics Mastery

Teaching for mastery in primary maths
www.tes.com/teachingformastery

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A whole school plan for primary maths from Mathematics Mastery

Introduction

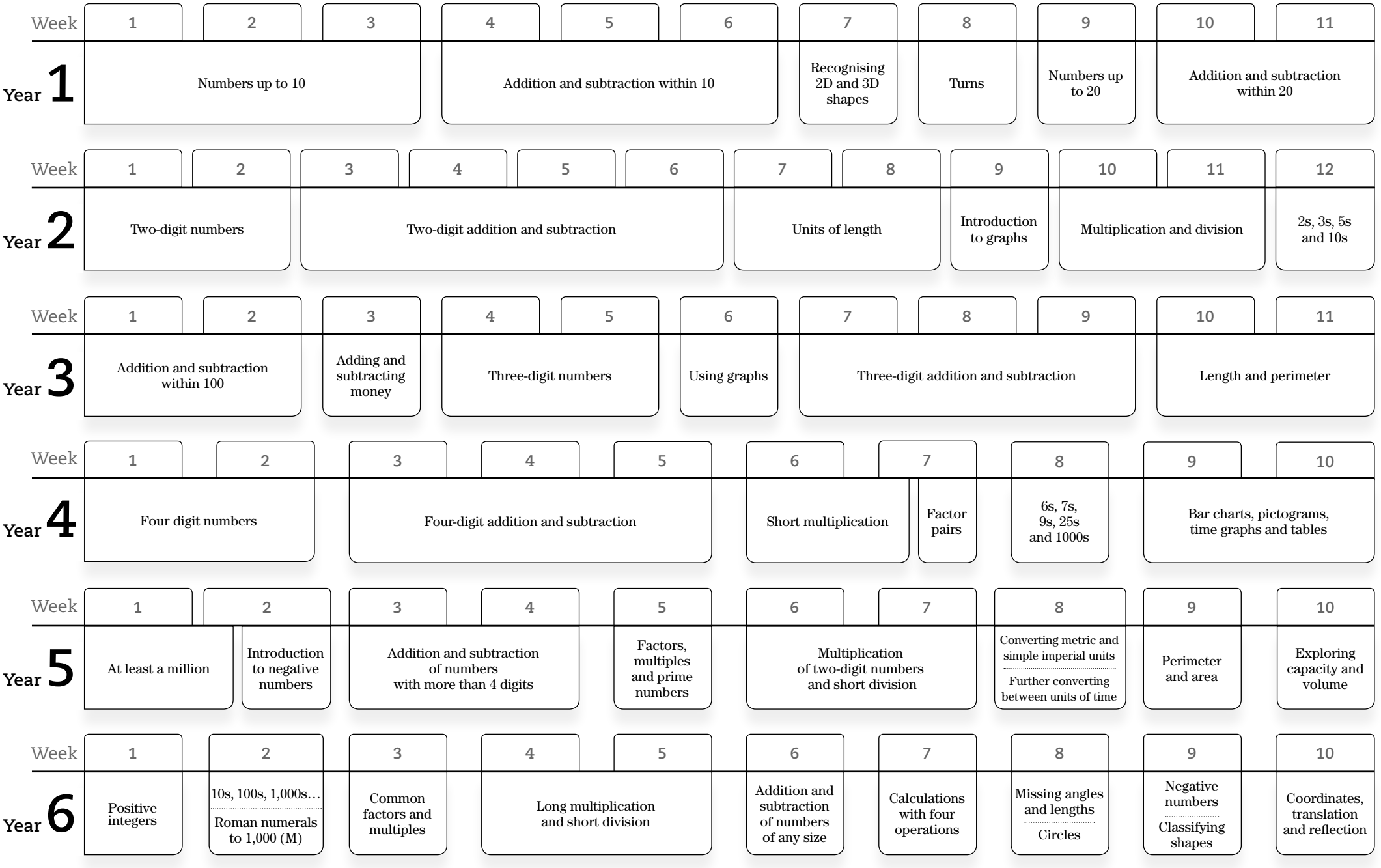
The Mathematics Mastery schemes of work provide recommended planning sequences for teaching maths from Year 1 to Year 6. They are published as part of a curriculum for primary maths on TES, which also includes quality-assured classroom resources mapped to the key mathematical concepts studied at primary school.

Sets of resources by maths topic can be found here: www.tes.com/mathematicsmastery

A detailed explanation of subject knowledge for primary maths is presented for teachers here: www.tes.com/teachingformastery

Mathematics Mastery is a professional development programme for teachers. We work in partnership with schools to embed a mastery approach to mathematics teaching, aiming to improve pupils' understanding, enjoyment and attainment in mathematics. Our approach is based on research and internationally recognised practice, inspired by Singapore and Shanghai. Our key principles underpin all that we do. We have high expectations for every child. We teach fewer topics in greater depth. We emphasise problem-solving and conceptual understanding.

AUTUMN term — A whole school plan for primary maths from Mathematics Mastery



SPRING term — A whole school plan for primary maths from Mathematics Mastery

	Week 1	2	3	4	5	6	7	8	9	10
Year 1	Introduction to time		Addition and subtraction within 20	Numbers up to 40 or 50		Addition and subtraction within 40 or 50		Introduction to halves and quarters	Introduction to length	Introduction to weight (or mass)

	Week 1	2	3	4	5	6	7	8	9	10	11	12	13
Year 2	Telling the time		Two-digit addition and subtraction		Understanding pounds and pence		Shapes and patterns		Rotation	Introduction to fractions		Three-digit addition and subtraction	

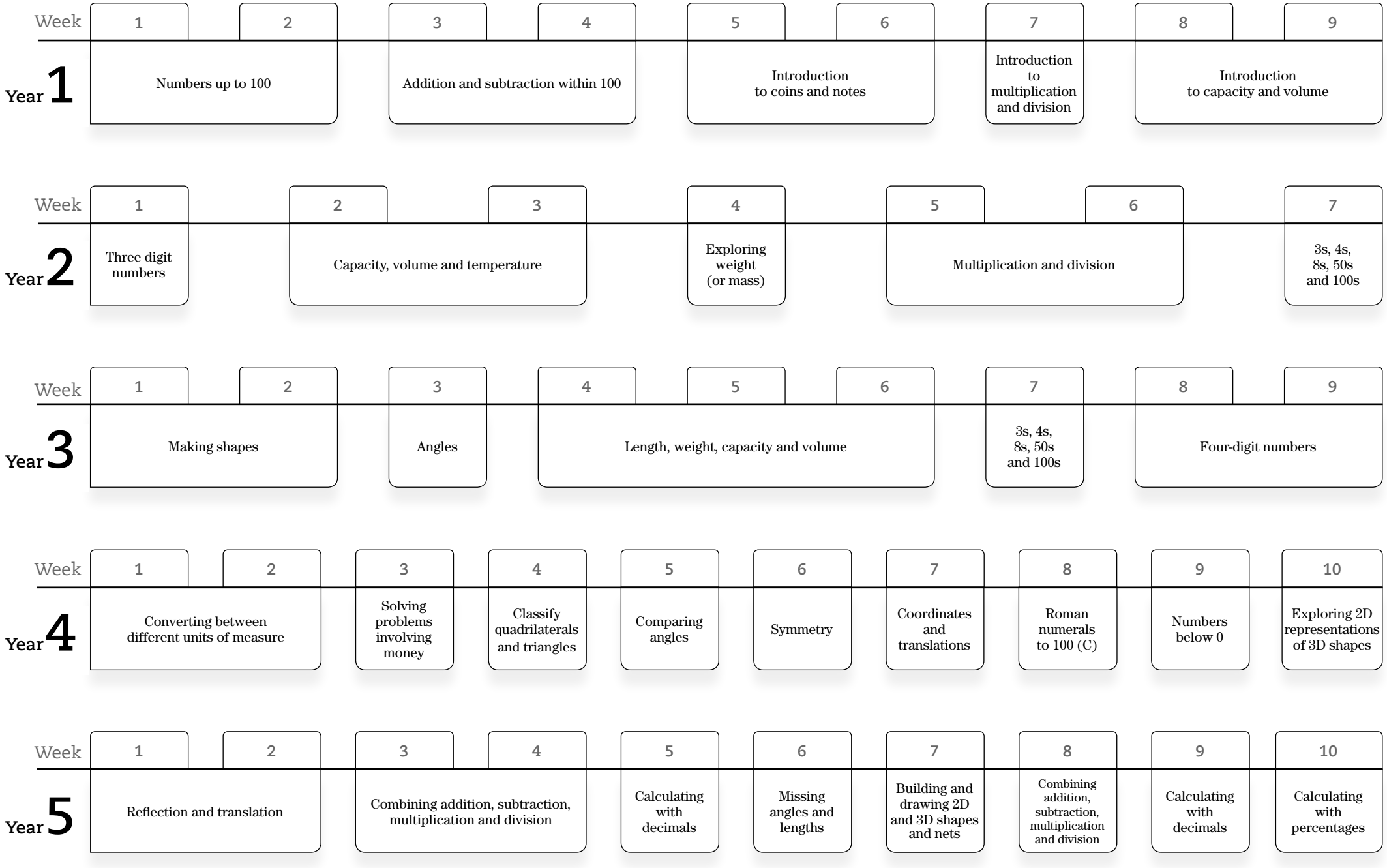
	Week 1	2	3	4	5	6	7	8	9	10
Year 3	3s, 4, 8s, 50s and 100s		Exploring multiplication and division			Analogue and digital time	Roman numerals on the clock	Introduction to comparing, ordering and equivalent fractions	Introduction to adding and subtracting fractions	Introduction to finding fractions of an amount

	Week 1	2	3	4	5	6	7	8	9	10	11
Year 4	6s, 7s, 9s, 25s and 1,000s	Common equivalent fractions	Add and subtract fractions with the same denominator	Fractions of an amount	Compare, order and simplify fractions	Converting between units of time	Introduction to decimals			Area by counting shapes	Perimeter of simple shapes

	Week 1	2	3	4	5	6	7	8	9
Year 5	Compare, order, and find equivalent fractions	Four operations with decimals	Drawing, measuring, comparing and finding angles		Introduction to adding and subtracting fractions with different denominators	Multiply proper fractions and mixed numbers by whole numbers Rates and scaling by fractions	Introduction to percentages	Line graphs and tables	

	Week 1	2	3	4	5	6	7	8	9	10	Taught through other units
Year 6	Adding and subtracting fractions with different denominators		Multiply and divide fractions	Solving problems involving ratio and proportion		Calculating with decimals	Solving problems involving converting between units of time	Area and volume	Calculating with percentages	Pie charts, line graphs and the mean average	Understanding algebra

SUMMER term — A whole school plan for primary maths from Mathematics Mastery



Year 1 Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
Number and place value			Addition and subtraction			Geometry		Number and place	Addition and subtraction	
Numbers up to 10			Addition and subtraction within 10			Recognising 2D and 3D shapes	Turns	Numbers up to 20	Addition and subtraction within 20	

Year 1 SPRING

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Time		Addition and subtraction	Number and place value		Addition and subtraction		Fractions	Length, weight, area and volume	
Introduction to time		Addition and subtraction within 20	Numbers up to 40 or 50		Addition and subtraction within 40 or 50		Introduction to halves and quarters	Introduction to length	Introduction to weight (or mass)

Year 1 SUMMER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Number and place value		Addition and subtraction		Money		Multiplication and division	Length, weight, area and volume	
Numbers up to 100		Addition and subtraction within 100		Introction to coins and notes		Introduction to multiplication and division	Introduction to capacity and volume	

Year 2 Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12
Number and place value		Addition and subtraction				Length, weight, area and volume		Statistics	Multiplication and division		Times tables and skip counting
Two-digit numbers		Two-digit addition and subtraction				Units of length		Introduction to graphs	Multiplication and division		2s, 3s, 5s and 10s

Year 2 SPRING

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11	Week 12	Week 13
Time		Addition and subtraction		Money		Geometry			Fractions		Addition and subtraction	
Telling the time		Two-digit addition and subtraction		Understanding pounds and pence		Shapes and patterns		Rotation	Introduction to fractions		Three-digit addition and subtraction	

Year 2 SUMMER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7
Number and place value	Length, weight, area and volume			Multiplication and division		Times tables and skip counting
Three digit numbers	Capacity, volume and temperature		Exploring weight (or mass)	Multiplication and division		3s, 4s, 8s, 50s and 100s

Year 3 Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
Addition and subtraction		Money	Number and place value		Statistics	Addition and subtraction			Length, weight, area and volume	
Addition and subtraction within 100		Adding and subtracting money	Three-digit numbers		Using graphs	Three-digit addition and subtraction			Length and perimeter	

Year 3 SPRING

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Times tables and skip counting		Multiplication and division			Time	Roman numerals	Fractions		
3s, 4, 8s, 50s and 100s		Exploring multiplication and division			Analogue and digital time	Roman numerals on the clock	Introduction to comparing, ordering and equivalent fractions	Introduction to adding and subtracting fractions	Introduction to finding fractions of an amount

Year 3 SUMMER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Geometry			Length, weight, area and volume			Times tables and skip counting	Number and place value	
Making shapes		Angles	Length, weight, capacity and volume			3s, 4s, 8s, 50s and 100s	Four-digit numbers	

Year 4 Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Number and place value		Addition and subtraction			Multiplication and division	Factors, multiples and primes	Times tables and skip counting	Statistics	
Four digit numbers		Four-digit addition and subtraction			Short multiplication	Factor pairs	6s, 7s, 9s, 25s and 1000s	Bar charts, pictograms, time graphs and tables	

Year 4 SPRING

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Week 11
Times tables and skip counting	Fractions				Time	Decimals			Length, weight, area and volume	
6s, 7s, 9s, 25s and 1,000s	Common equivalent fractions	Add and subtract fractions with the same denominator	Fractions of an amount	Compare, order and simplify fractions	Converting between units of time	Introduction to decimals			Area by counting shapes	Perimeter of simple shapes

Year 4 SUMMER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Length, weight, area and volume		Money	Geometry				Roman numerals	Negative numbers	Geometry
Converting between different units of measure		Solving problems involving money	Classify quadrilaterals and triangles	Comparing angles	Symmetry	Coordinates and translations	Roman numerals to 100 (C)	Numbers below 0	Exploring 2D representations of 3D shapes

Year 5 Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Number and place value	Negative numbers	Addition and subtraction		Factors, multiples and primes	Multiplication and division		Length, weight, area and volume		
At least a million	Introduction to negative numbers	Addition and subtraction of numbers with more than 4 digits		Factors, multiples and prime numbers	Multiplication of two-digit numbers and short division		Converting metric and simple imperial units Time Further converting between units of time	Perimeter and area	Exploring capacity and volume

Year 5 SPRING

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9
Fractions	Decimals	Geometry		Fractions		Percentages	Statistics	
Compare, order, and find equivalent fractions	Four operations with decimals	Drawing, measuring, comparing and finding angles		Introduction to adding and subtracting fractions with different denominators	Multiply proper fractions and mixed numbers by whole numbers Ratio and proportion Rates and scaling by fractions	Introduction to percentages	Line graphs and tables	

Year 5 SUMMER

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Geometry		Calculations with four operations		Decimals	Geometry		Calculations with four operations	Decimals	Percentages
Reflection and translation		Combining addition, subtraction, multiplication and division		Calculating with decimals	Missing angles and lengths	Building and drawing 2D and 3D shapes and nets	Combining addition, subtraction, multiplication and division	Calculating with decimals	Calculating with percentages

Year 6 Autumn

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
Number and place value	Times tables and skip counting	Factors, multiples and primes	Multiplication and division		Addition and subtraction	Calculations with four operations	Geometry	Negative numbers	Geometry
Positive integers	10s, 100s, 1,000s…	Common factors and multiples	Long multiplication and short division		Addition and subtraction of numbers of any size	Calculations with four operations	Missing angles and lengths	Negative numbers	Coordinates, translation and reflection
	Roman numerals						Circles	Geometry	
	Roman numerals to 1,000 (M)							Classifying shapes	

Year 6 SPRING

Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10	Taught through other units
Fractions			Ratio and proportion		Decimals	Time	Length, weight, area and volume	Persentages	Statistics	Algebra
Adding and subtracting fractions with different denominators	Multiply and divide fractions		Solving problems involving ratio and proportion		Calculating with decimals	Solving problems involving converting between units of time	Area and volume	Calculating with percentages	Pie charts, line graphs and the mean average	Understand-ing algebra