Mathematics Mastery
Curriculum Map: Year 5

Autumn

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
	Reasoning with large whole integers		**Integer addition and subtraction**		**Line graphs and timetables**		**Multiplication and division**			**Perimeter and area**

Reasoning with large whole integers
- Read, write, order and compare numbers up to one million
- Round numbers within one million to the nearest multiple of powers of ten
- Read Roman numerals up to M

Integer addition and subtraction
- Use rounding to estimate
- Use a range of mental calculation strategies to add and subtract integers
- Illustrate and explain the written method of column addition and subtraction
- Select efficient calculation strategies

Line graphs and timetables
- Complete, read and interpret data presented in line graphs
- Read and interpret timetables including calculating intervals

Multiplication and division
- Identify multiples and factors
- Investigate prime numbers
- Multiply and divide by 10, 100 and 1000 (integers)
- Multiply and divide using derived facts
- Use written methods to multiply and divide
- Use a range of mental calculation strategies

Perimeter and area
- Investigate area and perimeter of rectilinear shapes
- Estimate area of non-rectilinear shapes

Spring

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
	Fractions and decimals			**Angles**		**Fractions and percentages**			**Transformations**	

Fractions and decimals
- Read, write, order and compare decimals
- Round decimals to the nearest whole number
- Represent, identify, name, write, order and compare fractions (including improper and mixed numbers)
- Calculate fractions of amounts

Angles
- Classify, compare and order angles
- Measure a draw angles with a protractor
- Understand and use angle facts to calculate missing angles

Fractions and percentages
- Add, subtract fractions with denominators that are multiples of the same number
- Multiply fractions (and mixed numbers) by a whole number
- Explore percentage, decimal, fractions equivalence

Transformations
- Coordinates in all four quadrants
- Translation and reflection
- Calculate intervals across zero as a context for negative numbers

Summer

	Week 1	Week 2	Week 3	Week 4	Week 5	Week 6	Week 7	Week 8	Week 9	Week 10
	Converting units of measure		**Calculating with whole numbers and decimals**			**2-D and 3-D shape**		**Volume**	**Problem solving**	

Converting units of measure
- Convert between metric units of length, mass and capacity and units of time
- Know and use approximate conversion between imperial and metric

Calculating with whole numbers and decimals
- Mental strategies to add and subtract involving decimals
- Formal written strategies to add, subtract and multiply involving decimals
- Multiply and divide decimal numbers by ten, 100 and 1,000
- Derive addition, subtraction and multiplication facts involving decimals

2-D and 3-D shape
- Classify 2-D shapes and reason about regular and irregular polygons
- Properties of diagonals of quadrilaterals
- Classify 3-D shapes
- 2-D representations of 3-D shapes.

Volume
- Use cube numbers and notation
- Estimate volume
- Convert units of volume

Problem solving
- Negative numbers and calculating intervals across zero
- Calculating the mean
- Interpret remainders
- Investigate numbers: consecutive, palindromic, multiples

The Dimensions of Depth - Conceptual Understanding, Language and Communication and Mathematical Thinking - underpin all aspects of the curriculum; problem solving is at the heart and is embedded in all units.