Using the plans

This is not a scheme but it is more than a medium term plan

The programme of study has been split into four domains:

- **Number**
- **Measurement**
- **Geometry**
- **Statistics**

As a starting point, we have taken these domains and allocated them into five half terms:

These allocations serve only as a guide for the organisation of the teaching. Other factors such as term length, organisation of the daily maths lesson, prior knowledge and cross-curricular links may determine the way in which mathematics is prioritised, taught and delivered in your school.

Year 4	
Autumn 1	**Number**
	- number and place value
	- addition and subtraction
Autumn 2	**Number**
	- multiplication and division
	- fractions
Spring 1	**Measurement**
Spring 2	**Geometry**
	- properties of shapes
	- position and direction
Summer 1	**Statistics**

YEAR 4 PROGRAMME OF STUDY			
DOMAIN 1 – NUMBER			
NEW OBJECTIVES – AUTUMN 1			
NUMBER AND PLACE VALUE			
Objectives (statutory requirements)	**What does this mean?**	**Example questions**	**Notes and guidance (non-statutory)**
Count in multiples of 6, 7, 9, 25 and 1000	Count out loud forwards and backwards from different starting points and in steps of different sizes	Tell me all the multiples of 6 between 28 and 60 If I count in steps of 9 from zero, how many numbers will I have said by the time I get to 56? Tell me which multiples of 25 are between 386 and 471 How many multiples of 1000 are there between 2500 and 9600?	Using a variety of representations, including measures, pupils become fluent in the order and place value of numbers beyond 1000, including counting in tens and hundreds, and maintaining fluency in other multiples through varied and frequent practice. They begin to extend their knowledge of the number system to include the decimal numbers and fractions that they have met so far. They connect estimation and rounding numbers to the use of measuring instruments. Roman numerals should be put in their historical context so pupils understand that there have been different ways to write whole numbers and that the important concepts of zero and place value were introduced over a period of time.
Find 1000 more or less than a given number	When presented with numbers up to four digits, children can say the number that is 1000 more or less	Give four digit cards (e.g. 3, 8, 0, 2) can they make number 1000 more or less?	
Count backwards through zero to include negative numbers	Build on the counting skills identified previously to include bridging zero into negative numbers Using different starting points, count backwards beginning with steps of one and progressing to increased step sizes bridging zero	8, 6, 4 … 1, -3, -7…	

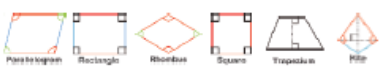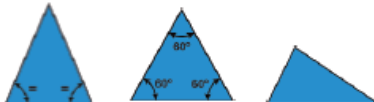|			
Solve number and practical problems that involve all of the above and with increasingly large positive numbers number and place value	Be able to use known facts in order to explore others, commutativity and inverse but also the relationship between numbers: • 14 x 4 is also 7 x 8 because one side of the multiplication is halved, the other side is doubled Starting with 8 x 5 = 40: • 5 x 8 = 40 (and 40 = 5 x 8, 40 = 8 x 5) • Understanding the inverse relationship between multiplication and division leads to equivalent statements, such as 8 = 40 ÷ 5 and 40 ÷ 8 = 5 • Knowing division is not commutative, so 8 ≠ 5 ÷ 40 Be able to answer word, logic and reasoning problems linked to place value	Are all these statements true? • If 14 x 7 = 98 then 98 ÷ 7 = 14 • If 14 x 7 = 98 then 98 ÷ 14 = 7 • If 14 x 7 = 98 then 7 ÷ 98 = 14 • If 14 x 7 = 98 then 140 x 70 = 980 Convince me that the number half way between 12 and 40 is 26 Fill in the missing numbers: 6 x ☐ = 600 ☐ ÷ 100 = 6 0.6 x ☐ = 60 Find the numbers that could fit the following clues: • Less than 100 • Not a multiple of 5 • Not odd • Tens digit is double the units digit	

Objectives (statutory requirements)	What does this mean?	Example questions	Notes and guidance (non-statutory)
Compare and classify geometric shapes, including quadrilaterals and triangles, based on their properties and sizes	A quadrilateral is any four sided shape with straight sides that is two dimensional Examples of regular quadrilaterals include: parallelogram, rhombus, trapezium, rectangle, square and kite A triangle is a two dimensional shape with three straight sides and three angles Examples of triangles include: equilateral, isosceles, scalene and right angled Building on understanding of the terms parallel, perpendicular, symmetrical etc., children use this to compare and classify shapes in different ways	 Parallelogram, Rectangle, Rhombus, Square, Trapezium, Kite Irregular quadrilaterals Isoceles — **Two** equal sides, **Two** equal angles Equilateral — **Three** equal sides, **Three** equal angles, always 60° Scalene — **No** equal sides, **No** equal angles	Pupils continue to classify shapes using geometrical properties, extending to classifying different triangles (for example, isosceles, equilateral, scalene) and quadrilaterals (for example, parallelogram, rhombus, trapezium). Pupils compare and order angles in preparation for using a protractor and compare lengths and angles to decide if a polygon is regular or irregular. Pupils draw symmetric patterns using a variety of media to become familiar with different orientations of lines of symmetry; and recognise line symmetry in a variety of diagrams, including where the line of symmetry does not dissect the original shape.