Key place value objectives: (Focus for starter activities. Objectives should underpin all mathematical skills.)

- Read, write, order and compare numbers up to 10 000 000 and determine the value of each digit
- Round any whole number to a required degree of accuracy
- Use negative numbers in context, and calculate intervals across zero
- Solve number and practical problems that involve all of the above.
- Identify the value of each digit in numbers given to three decimal places and multiply and divide numbers by 10, 100 and 1000 giving answers up to three decimal places.

Autumn	Spring	Summer
Wk1- Read, write, order and compare numbers	Wk1 - Identify the value of each digit in numbers	Wk1-Draw 2-D shapes using given dimensions and
up to 10 000 000 and determine the value of	given to three decimal places and multiply and	angles
each digit	divide numbers by 10, 100 and 1000 giving	Recognise, describe and build simple 3-D shapes,
	answers up to three decimal places	including making nets
Wk2 - Round any whole number to a required	Multiply one-digit numbers with up to two	
degree of accuracy	decimal places by whole numbers	Wk2 - Compare and classify geometric shapes
Use negative numbers in context		based on their properties and sizes and find
perform mental calculations, including with	Wk2 - Associate a fraction with division and	unknown angles in any triangles, quadrilaterals,
mixed operations and large numbers	calculate decimal fraction equivalents [for	and regular polygons
	example, 0.375] for a simple fraction [for	Illustrate and name parts of circles, including
Wk3 - Solve addition and subtraction multi-step	example, 8 3]	radius, diameter and circumference and know that
problems in contexts, deciding which		the diameter is twice the radius
operations and methods to use and why	Wk3 - Recall and use equivalences between	
Use estimation to check answers to calculations	simple fractions, decimals and percentages,	Wk3 -Recognise angles where they meet at a point,
and determine, in the context of a problem, an	including in different contexts.	are on a straight line, or are vertically opposite,
appropriate degree of accuracy		and find missing angles.
	Wk4 - Recall and use equivalences between	
Wk4 - Multiply multi-digit numbers up to 4 digits	simple fractions, decimals and percentages,	Wk4 -Interpret and construct pie charts and line
by a two-digit whole number using the formal	including in different contexts.	graphs and use these to solve problems
written method of long multiplication		Calculate and interpret the mean as an average
	Wk5 - Solve problems involving the calculation of	
Wk5 - Divide numbers up to 4 digits by a two-	percentages [for example, of measures, and such	
digit number using the formal written method		

of short division where appropriate, interpreting remainders according to the context Divide numbers up to 4 digits by a two-digit whole number using the formal written method of long division, and interpret remainders as whole number remainders, fractions, or by rounding, as appropriate for the context Use written division methods in cases where the answer has up to two decimal places Solve problems which require answers to be rounded to specified degrees of accuracy Wk6- Identify common factors, common multiples and prime numbers Perform mental calculations, including with mixed operations and large numbers Wk7- Use their knowledge of the order of operations to carry out calculations involving the four operations Solve problems involving addition, subtraction, multiplication and division	as 15% of 360] and the use of percentages for comparison Wk6- Solve problems involving the calculation and conversion of units of measure, using decimal notation up to three decimal places where appropriate Use, read, write and convert between standard units, converting measurements of length, mass, volume and time from a smaller unit of measure to a larger unit, and vice versa, using decimal notation to up to three decimal places Convert between miles and kilometres	
 Wk1- Use common factors to simplify fractions; use common multiples to express fractions in the same denomination Wk2- Compare and order fractions, including fractions > 1 	Wk1- Use simple formulae Generate and describe linear number sequences Express missing number problems algebraically Wk2- Find pairs of numbers that satisfy an equation with two unknowns Enumerate possibilities of combinations of two variables.	

Wk3- Add and subtract fractions with different denominators and mixed numbers, using the concept of equivalent fractions

Wk4- Multiply simple pairs of proper fractions, writing the answer in its simplest form [for example, $4.1 \times 2.1 = 8.1$]

Wk5-Divide proper fractions by whole numbers [for example, $3 \ 1 \div 2 = 6 \ 1$]

Wk6- Describe positions on the full coordinate grid (all four quadrants)

Draw and translate simple shapes on the coordinate plane, and reflect them in the axes

Wk3- Solve problems involving the relative sizes of two quantities where missing values can be found by using integer multiplication and division facts

Solve problems involving similar shapes where the scale factor is known or can be found Solve problems involving unequal sharing and grouping using knowledge of fractions and multiples.

Wk4- Recognise when it is possible to use formulae for area and volume of shapes Recognise that shapes with the same areas can have different perimeters and vice versa Calculate the area of parallelograms and triangles

Wk5- Calculate, estimate and compare volume of cubes and cuboids using standard units, including cubic centimetres (cm3) and cubic metres (m3), and extending to other units [for example, mm3 and km3].