Year 2

Number – place value	Addition and subtraction
• **Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward** • Continue to count sets of objects by grouping in tens • **Read and write numbers to at least 100 in numerals and in words** • **Recognise the place value of each digit in a two-digit number (tens, ones)** begin to understand zero as a place holder • **Identify, represent and estimate numbers using different representations, including the number line** • Partition numbers in different ways (e.g. 23 = 20 + 3 and 23 = 10 + 13) • Recall multiplication and division facts for the 10x multiplication table • **Compare and order numbers from 0 up to 100; use <, > and = signs** • Find 1 or 10 more or less than a given number including 2 digit • Round numbers to at least 100 to the nearest 10 • Understand the connection between the 10 multiplication table and place value • Describe and extend simple sequences involving counting on or back in different steps • **Use place value and number facts to solve problems** • Estimate numbers	• Choose an appropriate strategy to solve a calculation based upon the numbers involved (recall a known fact, calculate mentally, use a jotting) • Understand the vocabulary related to addition and subtraction • Understand subtraction as: -taking away -comparison -partitioning a set • Continue to understand addition as: -combining 2 or more quantities -increasing 1 quantity • Select a mental strategy appropriate for the numbers involved in the calculation • **Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot** • Recognise the inverse relationship between addition and subtraction • Understand subtraction as take away and difference (how many more, how many less/fewer) • **Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100** • Know the complements to the next multiple of 10 (52 + ? = 60) • Know pairs of multiples of 10 with a total of 100 and derive related subtraction facts • Recall and use number bonds for multiples of 5 totalling 60 (to support telling time to nearest 5 minutes) • **Add and subtract numbers using concrete objects, pictorial representations, and mentally, including:** **- a two-digit number and ones** **- a two-digit number and tens** **- two two-digit numbers** **- adding three one-digit numbers** • **Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems**

	• **Solve problems with addition and subtraction including with missing numbers:** **- using concrete objects and pictorial representations, including those involving numbers, quantities and measures** **- applying their increasing knowledge of mental and written methods**
	VOCABULARY: Understand related to addition: add, altogether, total,… more than…, plus, the sum of Understand vocabulary related to subtraction: Take away, subtract, how many are left, how many more to make, how many more, how many fewer, …less than…., leave, how many have gone, minus, the difference between, how much more is…than, how much less is….than
Multiplication and division	**Fractions**
• Understand multiplication as - repeated addition - describing an array - scaling (to compare 2 items) e.g. twice as high • Understand and use the vocabulary involved in multiplying: multiple, multiply, table, times, once, twice, three, ten …times as big, repeated addition. • Begin to relate division and fractions • Understand and use the vocabulary involved in dividing: divide, left over • Understand division as sharing equally and grouping and that a division calculation can have a remainder • Recognise the inverse relationship between multiplication and division • Count in steps of 2, 3 and 5 from 0 • **Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot** • **Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers** • Derive and use doubles of simple two-digit numbers (numbers in which the ones total less than 10) • Recall doubles of all numbers to 15 and doubles of multiples of 5 to 50 • Recall and use multiplication facts for the 2, 5 and 10 multiplication tables	• Understand and use the terms numerator and denominator • Understand that a fraction can describe part of a set • Understand that the larger the denominator is, the more pieces it is split into and therefore the smaller each part will be • **Recognise, find, name and write fractions $\frac{1}{3}$, $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity** • **Write simple fractions for example, $\frac{1}{2}$ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$** • Count on and back in steps of $\frac{1}{2}$ and $\frac{1}{4}$

• Derive and use halves of simple two-digit even numbers (numbers in which the tens are even) • Recall corresponding halves of doubles of all numbers to 15 • **Calculate mathematical statements for multiplication using repeated addition) and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs** • Use doubling to connect 2, 4 and 8 multiplication tables. • **Solve problems involving multiplication and division (including those with remainders), using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in context**	
VOCABULARY Begin to use the vocabulary involved in multiplying: Double, pattern, array, row, column, groups of, lots of New for Year 2: **multiple, multiply, times, table, once, twice, three, ten …times as big, repeated addition** Begin to use the vocabulary involved in dividing: Share, halve, array, row, column, equal groups of New for Year 2: **divide, left over**	VOCABULARY Begin to use and understand the vocabulary involved in fractions: Half, quarter New for Year 2: **third, three quarters**
Measurement	**Statistics**
• **Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity and volume (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels** • **Compare and order lengths, mass, volume/capacity and record the results using >, < and =** • **Recognise and use symbols for pounds (£) and pence (p)** • **Combine amounts to make a particular value** • **Find different combinations of coins that equal the same amounts of money** • **Compare and sequence intervals of time** • **Tell and write the time to five minutes, including quarter past/to the hour and draw the hands on a clock face to show these times** • **Know the number of minutes in an hour and the number of hours in a day**	• Compare and sort objects, numbers and common 2-D and 3-D shapes and everyday objects • **Interpret and construct simple pictograms, tally charts, block diagrams and simple tables** • **Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity** • **Ask and answer questions about totalling and comparing categorical data** Science Use simple features to compare objects, materials and living things and, with help, decide how to sort and group them. (Venn/Carroll)

• **Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change** *and measures (including time)*	
Geometry – properties of shape	**Geometry – position and direction**
• **Identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line** • **Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces** • **Identify 2-D shapes on the surface of 3-D shapes, [for example, a circle on a cylinder and a triangle on a pyramid]** • **Compare and sort common 2D and 3D shapes and everyday objects**	• **Order and arrange combinations of mathematical objects in patterns and sequences** • **Use mathematical vocabulary to describe position, direction and movement, including movement in a straight line and distinguishing between rotation as a turn and in terms of right angles for quarter, half and three-quarter turns (clockwise and anti-clockwise)**

Bold black = National Curriculum objectives
Black = Additional objectives added by LgfL
Red = Additional objectives added by maths development group