Year 2   Autumn Term

Mathematical aspect	Mathematical themes	National Curriculum statement
Weeks 1-2	**Number and place value** Comparing and ordering Understanding of relative position of numbers Partitioning and recombining of 2-digit numbers Rearrangement of 2-digit numbers To read, write and say numbers 0-100 (cross the hundred boundary) Counting	To count in steps of 2, 3, and 5 from 0, and count in tens from any number, forward or backward. To recognise the place value of each digit in a two-digit number (tens, ones). To identify, represent and estimate numbers using different representations, including the number line. To compare and order numbers from 0 up to 100; use <, > and = signs. To read and write numbers to at least 100 in numerals and in words. To use place value and number facts to solve problems.
Weeks 3-5	**Calculation: Addition and subtraction** Strategy development for addition and subtraction Reordering calculation Bridging ten Partitioning strategies : Concrete, visual and number facts Inverse relationships Commutativity for addition and non-community for subtraction	To solve problems with addition and subtraction: ● Using concrete objects and pictorial representations, including those involving numbers, quantities and measures ● Applying their increasing knowledge of mental and written methods. ● To recall and use addition and subtraction facts to 20 fluently, ● To add and subtract 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. ● To show that addition can be done in any order (commutative) and subtraction cannot. ● To recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems.

Weeks 6-7	**Multiplication 2's, 5's and 10's (these must be practiced daily throughout the year)** Investigates the multiplication of 10, 5 and 2, 5. Understand what multiplication means and what it looks like. Patterns in multiplication and commutative law. Understand that multiplication is the same as repeated addition of equal groups. Use repeated addition as a strategy. Use concrete materials to show equal groups. Use drawings or pictures to show equal groups. Know that multiplication is a more efficient way of addition Complete number sentences using the correct multiplication facts or number sentences.	Calculate mathematical statements for multiplication within the multiplication tables and write them using the multiplication (×) and equals (=) signs. Recall and use multiplication facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers. Show that multiplication of two numbers can be done in any order (commutative). Solve problems involving multiplication using materials, arrays, repeated addition, mental methods and multiplication facts, including problems in contexts.
Week 8: Opportunities for richer and deeper learning. Closing the gap.		
Week 9-10	**Multiplication and division:** Concept of repeated addition and the model of the array Concept of sharing and grouping model of the dividend Equals groups of Inverse relationships Concept of multiplication is communicative but division is non-communicative To read and write the symbols of ÷× Odd and even multiples	To recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers. To calculate mathematical statements for multiplication and division within the multiplication tables and write them using multiplication, division and equals signs. To recognise and use the inverse relationship between multiplication and division in calculations. To show that multiplication of two numbers can be done in any order (commutative) and division for one number by another cannot. To solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods and multiplication and division facts, including problems in contexts.

Weeks 11-12	**Measurement: length** Standard units To be able to choose the right measuring equipment to measure a length of height The skills to reading the marked division with accuracy Understanding the marked division in any measuring context. Read scales in division of ones, two's fives and tens (EXP) Reading a scale where not all the divisions are marked (GP) Understanding that there are 100cm in 1 metre Knowing the mass is measurement in kg and grams Knowing the capacity is measurement in ml and litres	To choose and use appropriate standard units to estimate and measure length/ height in any direction (m/cm/mm); mass (kg/g); temperature (°C); volume and capacity (litres/ml) to the nearest appropriate unit using rulers, scales, thermometers and measuring vessels. To compare and order lengths, mass, volume/capacity and record the results using >, < and =.