

- All lessons must have a warm up which can be in isolation to the key learning objective of the lesson
 - Lessons should be no longer than 45 mins
- Practical carousel of learning activities in the first couple of weeks of the Autumn term to gain an understanding of children's knowledge. The tasks will be assessment based, rather than children completing lots of written tasks
- All objectives are NC objectives. The NC should be used when planning to clarify expectations for the teaching of the learning objective
 - Maths Through Stories can be used to start/finish a topic <https://www.mathsthroughstories.org/>

Autumn 1					
<u>Week</u>	<u>Domain</u>	<u>Year 2 objectives</u>	<u>NCETM Spine</u>	<u>Daily practice/warm up activities</u>	<u>Continuous learning</u>
Week 1 and Week 2	Number and place value	- Recognise place value in two digit numbers - Compare and order numbers from 0 up to 100; use <, > and = signs - Read and write numbers to at least 100 in numerals and words		- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number - Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens	- Solving problems - Representation of numbers - Statistics
Week 3	Number and place value	- Counting in steps of 10 - Counting in steps of 2, 3, 5		Read and write numbers from 1 – 20 in numerals and words	
Week 4	Number and place value	Solving problems (Use place value and number facts to solve problems)		Count in steps of 10 (Forwards and backwards)	
Week 5	Number and place value	Place value and number facts		Number lines – one more/one less, count in 2s	
Week 6	Number and place value	- Identify, represent and estimate numbers using different representations, including the number line - Problem solving		Thinking of a number (Guess the number using numerical clues)	
Week 7	Addition and subtraction	Add and subtract numbers including adding three one-digit numbers	Bridging 10 (Teaching point 1.11)	Reasoning: I know that...because... (I know that the answer to $6 + 7 = ?$ is greater than 10 and less than 20 because double 6 is 12 and 7 is one more than 6. The answer is 13)	

Autumn 2					
Week	Domain	Year 2 objectives	NCETM Spine	Daily practice/warm up activities	Continuous learning
Week 1	Addition and subtraction	- Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 - Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems		- Count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number - Count, read and write numbers to 100 in numerals; count in multiples of twos, fives and tens - Read and write numbers from 1 – 20 in numerals and words - Apply knowledge of number bonds to 20 to addition - Apply knowledge of number bonds to 20 to subtraction - Problem solving - One step problems - Problem solving - Missing number problems - If... (If $3 + 7 = 10$, what is $10 - 7 = ?$ $7 = 10 - ?$ Can you calculate: $30 + 70$? $100 - 70 = ?$ $70 = 100 - ?$ how did you solve it?) - Mental addition - Mental subtraction	- Solving problems - Representation of numbers - Statistics
Week 2	Subtraction	Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot	Subtraction as difference (1.12)		
Week 3	Addition and subtraction	Add and subtract numbers including a two digit number and ones	Addition and subtraction: two digit and single digit numbers (1.13)		
Week 4	Addition and subtraction	Add and subtract numbers including a two digit number and tens	Addition and subtraction: two digit numbers and multiples of 10 (1.14)		
Week 5	Addition and subtraction	- 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			
Week 6	Addition and subtraction	Add numbers including two two-digit numbers	Addition: two digit and two digit numbers (1.15)		
Week 7	Addition and subtraction	Subtract numbers including two two-digit numbers	Subtraction: two digit and two digit numbers (1.16))		

Spring 1					
Week	Domain	Year 2 objectives	NCETM Spine	Daily practice/warm up activities	Continuous learning
Week 1	Multiplication and division	Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication, division and equals signs	Structures: multiplication representing equal groups (2.2)	- Mental multiplication - Problem solving - Relationships between operations (+ and -) - My answer is...What is my question? (EG My answer is 20, what is my question?) - Division – my number is 10, how many ways can I divide it into smaller groups? Can I make groups of 3? Why? - One step problems (multiplication and division) - Representation of a problem (EG 2×10; how can this be shown?) - Counting in 2s, 3s, 5s, 10s	- Solving problems - Representation of numbers - Statistics
Week 2	Multiplication and division	Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot	Times tables: groups of 2 and commutativity (part 1) (2.3)		
Week 3 and Week 4	Multiplication and division	- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers - Solve problems involving multiplication and division	Times tables: groups of 10, 5 and factors of 0 and 1 (2.4)		
Week 5 and Week 6	Multiplication and division	- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers - Solve problems involving multiplication and division	- Commutativity (part 2): Doubling and halving (2.5) - Structures: quotitive and partitive division (2.6)		
Week 7	Statistics	- 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			

Spring 2					
Week	Domain	Year 2 objectives	NCETM Spine	Daily practice/warm up activities	Continuous learning
Week 1	Fractions	- Write simple fractions ($\frac{1}{2}$ of 6 = 3) - Recognise, find, name and write fractions $\frac{1}{4}$, $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity	Guidance on the teaching of fractions Key Stage 1 (3.0)	- Beebots for position and direction - Counting in 2s, 3s, 5s, 10s (forwards and backwards) - Odd and even numbers - Shade half of a shape in different ways - Positional language - What's the time Mr Wolf? (Half past, Quarter past, Quarter to) - If... - Addition and subtraction rapid recall (mental fluency) - Problem solving - Missing number problems (using known facts to solve) - Problem solving - Relationships between operations (multiplication and division)	- Solving problems - Representation of numbers - Statistics
Week 2	Fractions	- Recognise the equivalence of two quarters = one half - Recognise, find, name and write the fraction $\frac{1}{3}$ of a length, shape, set of objects or quantity	Guidance on the teaching of fractions Key Stage 1 (3.0)		
Week 3	Geometry	- Identify and describe the properties of 2D shapes, including the number of sides and line symmetry in a vertical line - Identify and describe the properties of 3D shapes, including the number of edges, vertices and faces - Identify 2D shapes on the surface of 3D shapes - Compare and sort common 2D and 3D shapes and everyday objects			
Week 4	Geometry	- 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)			
Week 5	Measurement	- 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			
Week 6	Addition and subtraction	Addition and subtraction – bridging 10	Bridging 10 (Teaching point 1.11)		

<u>Summer 1</u>					
<u>Week</u>	<u>Domain</u>	<u>Year 2 objectives</u>	<u>NCETM Spine</u>	<u>Daily practice/warm up activities</u>	<u>Continuous learning</u>
Week 1	Measurement	- Choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm) to the nearest appropriate unit using rulers - Choose and use appropriate standard units to estimate and measure temperature (Celsius) to the nearest appropriate unit using thermometers - Compare and order lengths and record the results using $>$, $<$ and $=$		- Bridging 10 to solve problems - Comparing and ordering values using $<$, $>$, $=$ (Include fractions) - Positional language (quarter, half three quarter turn; clock and anti-clockwise) - Patterns and sequences using objects - Patterns and sequences of numbers - Shape feely bag - Rapid recall of number facts (mental maths) - Problem solving – explaining how a problem was solved - Problem solving – multiplication and division - Counting forwards and backwards from any number (1s, 2s, 5s, 10s)	- Solving problems - Representation of numbers - Statistics
Week 2	Measurement	- Choose and use appropriate standard units to estimate and measure mass (kg/g) to the nearest appropriate unit using scales - Choose and use appropriate standard units to estimate and measure capacity (litres/ml) to the nearest appropriate unit using measuring vessels - Compare and order mass, volume/capacity and record the results using $>$, $<$ and $=$			
Week 3	Measurement	Recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value			
Week 4	Measurement	- Find different combinations of coins that equal the same amounts of money - Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change			
Week 5	Statistics	- 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			

Summer 2					
Focus on securing fluency in addition and subtraction facts this half term					
Week	Domain	Year 2 objectives	NCETM Spine	Daily practice/warm up activities	Continuous learning
Week 1	Place value	Use place value and number facts to solve problems	Bridging 10 (Teaching point 1.11)	- Addition and subtraction of values of coins - Find different combinations of coins to make a given value - Problem solving - combining amounts of money to make a given value (toy shop; what can I buy with 50p?) - Multiplication and division problems - Inverse relationship to check calculations (addition and subtraction) - If... - I know that...because... - Missing number problems (all operations) - Compare data and answer questions - Subtraction - Rapid recall of number facts to solve mystery number sentences (Missing number) - Application of number knowledge to solve problems (mental fluency)	- Solving problems - Representation of numbers - Statistics
Week 2	Addition and subtraction	Add and subtract numbers including two two-digit numbers	Subtraction: Two digit and two digit numbers (1.16)		
Week 3 and Week 4	Multiplication and division	- Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers - Solve problems involving multiplication and division, including problems in contexts			
Week 5	Measurement	Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change			
Week 6	Number	- Problem solving - Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems			
Week 7	Plan the curriculum for the week based on the outcomes of ongoing assessment - address children’s needs.				