


<b>Year 1 Autumn 2</b>			
<b>Autumn</b>	<b>Number and Place Value</b>		
	<b>Learning Intention</b>	<b>Implementation</b>	<b>Impact</b>
	<b>To count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number.</b>	During mental maths sessions the children will continue to extend counting skills – counting in 1s forwards and backwards to at least 50. They will count using the abacus, number line and counting around the class. They will apply their knowledge to a sequence e.g. 14, 15, 16, _. What number comes next? What number is missing 12, 13, 15, 16?	All children will be able to count forwards and backwards to/from at least 50 by the end of the Autumn term and apply this knowledge in sequences.
	<b>To count in multiples of tens.</b>	During mental maths the children will count forwards and backwards in steps of 10 to/from 100. They will apply this to questions e.g. True or false? I start at 0 and count in tens. I will say the number 30.	All children will be able to count forwards and backwards to/from 100 in steps of 10 and apply this knowledge to problems.
	<b>To read and write numbers from 0 to 60 in numerals.</b>	During mental maths sessions flash cards for reading numbers in numerals and also using number fans to make a number to 60. Also the children will practise writing numerals to 60.	The children will be able to recognise numbers up to 60 and will know how to show them with the tens and ones arranged in the correct way. The children will know how to write numbers correctly in numerals to 60.
	<b>To read and write numbers from 1 to 20 in words.</b>	As part of mental maths session speed spelling on whiteboards of numbers in words (1 to ten as per phase 1). (Phase 2 eleven, twelve, fifteen, sixteen and eighteen). Also taken home as spellings.	The children will know how to read and write numbers in words for phase 1 and 2.
<b>To identify one more and one less than a number.</b>	During mental maths moving from a practical number track to using number fans/flash cards. Also part of minute maths (answering 15 1 more questions and moving onto 15 1 less questions). Also applying e.g. Tom thought of a number. One less than his number was 11. What was his number? Also applying to mastery problems e.g. Sam is finding one more and one less than a number. Here are	The children will understand that one more is the next number along when counting in ones and one less is the number before when counting in ones. They will be able to apply this to solve problems in different contexts.	

	<p><b>To be able to order numbers to 100.</b></p> <p><b>To understand what each digit represents in numbers to 20 and represent these numbers with structured resources.</b></p> <p><b>Begin to recognise the significance of ‘ten’ in the number system.</b></p>	<p>some he has found 17, 18, 19 and 10, 11, 12. He says no matter what number I pick the tens will stay the same. It is only the ones that change. Is he right? Explain.</p> <p>During mental maths session the children will practise ordering numbers within 100.</p> <p>The children will begin to partition numbers up to 20 into tens and ones. They will arrange 15 counters on a number line and then transfer 10 counters to their numicon tens frame and see how many are left over. E.g. <math>10 + 5 = 15</math>. Use arrow cards to aid understanding.</p> <p>The children will learn how to draw tens and ones as cups e.g <math>11 = \begin{matrix} T \\ \bigcirc \bigcirc \end{matrix}</math></p> <p><b>Mastery</b> – Bob has three numbers in his bag. He gave three clues about them. Work out what each number could be:</p> <ol style="list-style-type: none"> <li>1. One number was 7 less than 10.</li> <li>2. One number has no ones.</li> <li>3. One number has more ones than it has tens.</li> </ol> <p><b>Mastery</b> – Look at the numbers 12 and 21. What is the same about these numbers? What is different?</p>	<p>The children will be able to order 3 numbers within 100 from smallest to largest and vice versa.</p> <p>They will understand that our number system works in groups of tens. They will understand that where you cannot make a group of ten these are known as the ones left over. They will be able to apply their knowledge of partitioning to problem solving.</p>
<b>Addition &amp; Subtraction</b>			
<b>Learning intention</b>	<b>Implementation</b>	<b>Impact</b>	
<p><b>To be able to add and subtract one digit numbers.</b></p>	<p>The children will add and subtract one digit numbers where the answer is within 20 using cups. Moving onto applying this to number bonds in a mental capacity. They will apply this to adding money amounts up to 10p initially and then 20p from a toy shop.</p> <p>They will generate their own addition and subtraction sums using a dice.</p>	<p>The children can add and subtract one digit numbers practically, recorded and mentally. They will understand that sums can be written in different ways e.g. <math>7=3 + 4</math> , <math>3 + 4 = 7</math>. They will understand that addition can be done in any order (commutative) but subtraction cannot.</p>	

	<p><b>To be able to add and subtract two digit numbers.</b></p> <p><b>Alongside independent recording, pupils begin to use “+”, “-“and “=” symbols with understanding.</b></p> <p><b>To solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations.</b></p> <p><b>To be able to partition numbers to 10 in different ways.</b></p> <p><b>To be able to solve addition and subtraction missing number problems.</b></p> <p><b>To be able to represent and use number bonds and related subtraction facts within 20.</b></p>	<p><math>10 + 14 = 14</math> T T <math>19 - 13 = 6</math></p> <p>The children will complete mixed addition and subtraction sums carrying out the correct operation. They will apply this knowledge to completing the missing sign in given sums.</p> <p>The children will complete word problems for both addition and subtraction within 20 – independent recording. E.g. Anna has 2 bags of star gums. She has 14 in one bag and 6 in another. How many star gums does she have altogether? Can they think of their own word problem for their friend to solve?</p> <p>The children will use their number bonds to 10 to partition numbers to 10 e.g. <math>3 + 7 =</math>. They will move onto using 3 numbers e.g. <math>3 + 3 + 4 = 10</math>.</p> <p>The children will solve addition missing number problems where the number is missing in the first or second position. Extend to 3 number sums with one number missing, then 2 numbers missing and then 3 numbers missing.</p> <p>During mental maths sessions the children will learn number bonds to 10 (addition and subtraction). They will use flash cards, number dice, fact family house (given the numbers 3, 4 and 7 can they find the two addition and the two subtraction sums?) and throwing beanbags. As part of independent maths activity the children will add up the dots on different dominoes.</p>	<p>The children will be able to add 2 digit numbers together that do not cross tens and subtract two digit numbers from each other.</p> <p>The children will understand what operation to carry out by looking at the symbols. They will understand the relevance of the “=” sign where both sides of the sum must balance.</p> <p>The children will understand the vocabulary which tells us the operation to carry out in the word problem e.g. more means adding.</p> <p>The children will understand that 2 or more numbers can be added together to make 10. They will also understand the relationship between addition and subtraction number bonds e.g. If we know <math>3 + 7 = 10</math>. We also know <math>7 + 3 = 10</math> (commutative).</p> <p>The children will understand that the missing number is what they need to add to the other number on the same side of the equals sign to arrive at the answer e.g. <math>3 + ? = 10</math> NOT adding <math>3 + 10 = 13</math>.</p> <p>All children will know their addition and subtraction number bonds to 10. They will apply their knowledge of number bonds to problem solving.</p>
--	---	---	---

		<p>Daily they will complete 15 number bond questions in a minute depending on which number bond they are working on (minute maths).</p> <p>Mastery – If you have ten counters numbered 1 to 10, how many can you put into pairs that add to 10? Can you use them all?</p> <p>Now put the counters into pairs to make 12. Can you use them all? Say how you got your answer.</p>	
<b>Multiplication and Division</b>			
<b>Learning Intention</b>	<b>Implementation</b>	<b>Impact</b>	
<p><b>To solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations and arrays with support of the teacher.</b></p>	<p>The children will be introduced to multiplication problems e.g. There are three fields and each field has 2 sheep in it. How many sheep are there altogether? Model drawing the three fields and using cups to represent the sheep:-</p>  $2 + 2 + 2 = 6$ <p>Show repeated addition sum. The children will solve multiplication problems which will be organised on a sheet, where a model will be provided e.g. 3 fields represented by 3 rectangles already drawn. The children will solve multiplication problems involving multiples of 2s, 5s and 10s.</p> <p><b><u>Mastery</u></b>  I can see 10 wheels. How many bicycles?  Ali buys 3 bags of apples. Each bag has 4 apples in it. How many apples does he buy?</p>	<p>The children will know how to solve multiplication problems and use their knowledge of counting in 2s, 5s and 10s. They will be able to use repeated addition sums to solve these problems.</p>	
<b>Fractions</b>			
<b>Learning Intention</b>	<b>Implementation</b>	<b>Impact</b>	
<p><b>To recognise, find and name a half as one of two equal parts of an object, shape or quantity.</b></p>	<p>As part of mental maths the children will revise finding half a shape, quantity or object.</p>	<p>The children will know and understand that a shape, object or quantity is split in half when it is equally split into 2 pieces.</p>	

**To recognise, find and name a quarter as one of four equal parts of an object, shape or quantity.**

Introduce finding a quarter of a shape. Tell the children that when we split a shape into quarters, we split it into 4 equal parts. Each part of the shape is a  $\frac{1}{4}$ . To shade a quarter of the shape we have to colour one out of four quarters. They will have some shapes which have been split equally into quarters and some that are not. Can they put a cross in the ones that are not split equally into quarters?  
Mastery – Four children share a pizza equally. Draw a diagram to show how much pizza each child gets. What fraction of the pizza does each child get?

Using unifix to support the children will find a quarter of quantities up to 20.

Can they circle a quarter of a group of objects up to 20?

Apply quarters to word problems e.g. There were 20 birds on a branch. A quarter of them flew off. How many birds flew off?

The children will know and understand that a shape, object or quantity is split into quarters when it is equally split into 4 pieces. They can apply quarters to solve problems.

<b>Measurement</b>		
<b>Learning Intention</b>	<b>Implementation</b>	<b>Impact</b>
<p><b>To compare, describe and solve practical problems for: Lengths and heights (e.g. long/short, longer.</b></p> <p><b>To measure and begin to record the following: Lengths and heights.</b></p> <p><b>To tell the time to the hour and half past the hour.</b></p> <p><b>I can draw the hands on the clock for o'clock times.</b></p> <p><b>Time: earlier, later.</b></p> <p><b>Time: quicker, slower</b></p> <p><b>To recognise and know the value of different denominations of coins and notes.</b></p>	<p>The children will tick which line is longer – the wiggly or the straight line.</p> <p>The children will learn that we measure from 0 on a ruler and they will measure the heights of different trees. They will put them in order from shortest to tallest.</p> <p>As part of mental maths session children set clocks to o'clock and half past times and also read o'clock and half past times. As main activity record the times underneath the clocks.</p> <p>Using plastic clocks the children will practise setting the o'clock times. Talk about the minute hand being longer and always pointing to the twelve for o'clock and the hour hand being shorter. The children will draw the hands on the clock on blank clocks for o'clock times.</p> <p>The children will practise setting plastic clocks to one hour later and one hour later for o'clock times. They will then record times on an activity sheet. They will complete word problems in relation to this.</p> <p>The children will have word problems e.g. Tom took 10 minutes to walk to school and Bob took 15 minutes. Who was quickest/slowest? As part of mental maths session the children will identify 1p, 2p, 5p, 10p, 20p, 50p, £1, £2. Also questions such as how many 1ps make..? Also add up different amounts of coins using knowledge of counting in 2s, 5s and 10s.</p>	<p>They will understand the vocabulary longer and shorter.</p> <p>The children will understand how to measure different heights in centimetres and where to start their ruler when measuring and that it must run parallel to the line being measured.</p> <p>All children can tell the time to o'clock and half past.</p> <p>The children will know that the longer hand points to the 12 for o'clock times and that the hour hand is shorter. They will understand that both hands should be drawn from the middle of the clock.</p> <p>The children will know how to tell the time for one hour later applying the principle of one more and one hour earlier applying the principle one less. They will be able to do this for o'clock times. They will be able to apply this to word problems.</p> <p>They will understand that the least amount of time is the quickest time and the longest amount of time is the slowest time.</p> <p>The children can identify different coins and add up different amounts of money.</p> <p>The children will understand what the different terms mean e.g. before, after etc.. and also apply these to different contexts – e.g. what number comes before/after?</p>

	<p><b>To sequence events in chronological order using language such as: before, after, next, first, today, yesterday, tomorrow, morning, afternoon and evening.</b></p> <p><b>To recognise and use language relating to dates, including days of the week, weeks, months and years.</b></p>	<p>During mental maths sessions children asked questions e.g. What day comes before, after. What day is it today, tomorrow, yesterday? When do we do phonics e.g. morning? Also say good morning and afternoon for register.</p> <p>During mental maths session the children recite days of the week and months of the year. Including questions such as how many days in a week, months in a year? Cut out and ordered days of the week in main maths session.</p>	<p>The children will know the order of the days of the week and months of the year. They will also know how many days are in a week and how many months are in a year.</p>
--	---	---	--

<b>Geometry – properties of shapes</b>			
<b>Learning Intention</b>	<b>Implementation</b>	<b>Impact</b>	
<p><b>To recognise and name common 2D shapes (rectangles, squares, circles, triangles, hexagons and pentagons) and 3D shapes (cuboids, cubes, pyramids and spheres, cones, square based pyramid and triangular based pyramids).</b></p>	<p>During mental maths sessions children work in talk partners and name shapes and describe properties to each other. Also play shape shop.</p>	<p>The children will be able to name all 2D and 3D shapes and their properties.</p>	

<b>Mastering number</b>	<b>Subitising</b>	<b>Cardinality, ordinality and counting</b>	<b>Composition</b>	<b>Comparison</b>	<b>Addition and subtraction/ Number facts</b>
	<ul style="list-style-type: none"> <li>continue to practise conceptually subitising numbers they have already explored the composition of.</li> </ul>		<ul style="list-style-type: none"> <li>continue to explore the composition of the numbers 7–9 in-depth, linking this to their understanding of odd and even numbers</li> <li>explore the composition of 10, developing a systematic approach to finding pairs that sum to 10.</li> </ul>	<ul style="list-style-type: none"> <li>revisit what is meant by ‘comparing’ and see that quantities can be compared according to different attributes, including numerosity.</li> </ul>	<p>Although children will not be looking at number bonds expressed as equations, their work on the composition of numbers within 10 will be developing their knowledge of number bonds.</p>

**Independence   Resilience   Respect   Team-work   Creativity   Aspirational.**