

## Reception Maths Overview 2017-18

<b>Autumn Term 1</b>		
<b>Wk</b>	<b>Strands</b>	<b>Weekly Summary</b>
1	Number and place value (NPV)	This week is all about counting – chanting numbers in order up to 10 and then 20, counting items into a set, counting items taken from a larger set, matching a number of items to a numeral, matching written and spoken numerals and being able to count accurately using one-to-one correspondence. Children should also understand conservation of number and be able to count along a number track 1–6.
2	Problem solving, reasoning and algebra (PRA)	This week's learning is all about patterns. Children will copy, continue, describe and create patterns using colours, shapes, objects, sounds and actions.
3	Number and place value (NPV)	This is another week about counting; chanting numbers in order up to 20, counting 10 items into a set, counting up to 10 items taken from a larger set, matching how many to a numeral and matching written and spoken numerals. Children will learn to count accurately using one-to-one correspondence and come to understand conservation of number. They will subitise numbers to 6 and count along a 1–10 number track.
4	Geometry: position and direction (GPD); Measurement (MEA)	This week children are learning about the days of the week, reciting the names and beginning to order them. They will use language related to time such as 'yesterday', 'today', 'tomorrow', 'morning', 'afternoon', 'evening' and 'night'. They will see o'clock times in the context of their daily routine. Children will also be introduced to the language of position, playing hide and seek with a teddy bear using key vocabulary such as 'in', 'on', 'over', 'under', 'beside', 'left' and 'right'.
5	Number and place value (NPV); Mental addition and subtraction (MAS)	This week is all about introducing children to addition and subtraction. Children start the week by practising subitising numbers up to 6 using fingers and dots on a dice. They move on to find number pairs to 5 and then to 6, and are shown the addition number sentence that goes with each pair. They are introduced to simple subtractions using their number pairs, and learn to recognise that adding and subtracting are inverse operations.

<b>Autumn Term 2</b>		
<b>Wk</b>	<b>Strands</b>	<b>Weekly Summary</b>
6	Measurement (MEA)	This week, children are exploring length and height, using the language associated with comparing and measuring. Children also begin to explore capacity using the terminology 'empty', 'half full' and 'full'. They compare the capacities of different containers and explore capacities through play.
7	Number and place value (NPV)	This week is another week about counting. Children are chanting numbers to 20 and beginning to chant numbers to 100. They count ten items into a set, and are beginning to count up to 20 items into a set. Children reinforce matching spoken numbers and written numerals to appropriate quantities. They count accurately using one-to-one correspondence and understand conservation of number. They learn to write numbers to 10 and begin to compare and order numbers to 10.
8	Geometry: properties of shapes (GPS); Measurement (MEA)	This week children will learn about 2D shapes, beginning to identify circles, triangles and rectangles including squares. They will begin to use appropriate language to describe simple 2D shapes. Children will also revise the days of the week and begin to learn the months of the year and the seasons, including key months when festivals and their birthdays occur.
9	Number and place value (NPV); Measurement (MEA)	This week is all about money. Children begin to recognise that different coins have different values (they will buy more or less, are worth more or less). They then begin to match real coins to amounts of money, e.g. 10p is ten 1p coins, 20p is twenty 1p coins. They then start to use money in small amounts to buy things, starting to realise that they can pay a given amount using different combinations of coins.
10	Number and place value (NPV); Mental addition and subtraction (MAS)	This week reinforces children's knowledge of spoken numbers and matching written numerals up to 10. They order numbers, count on and back from a given number and write numerals 1 to 10. They can also say one more and one less than a given number and understand the corresponding addition and subtraction number sentences.

<b>Spring Term 1</b>		
<b>Wk</b>	<b>Strands</b>	<b>Weekly Summary</b>
11	Number and place value (NPV)	This week the children return to counting. They count to 100 and compare and order numbers to 20. It's an opportunity to check that children can subitise numbers to 6 and that everyone understands conservation of number. Children estimate numbers of objects and images and begin to understand that teen numbers are 10 plus some more.
12	Problem solving, reasoning and algebra (PRA)	Children play with, explore and identify patterns, including line symmetry in images and simple shapes. They create and extend repeating patterns involving two, three and four items, including images and objects. They identify simple linear patterns. Children recognise and identify odd and even numbers and count in 2s from an even number.
13	Number and place value (NPV); Mental addition and subtraction (MAS); Mental multiplication and division (MMD)	Children will begin to partition sets of ten objects and learn the number pairs to 10. They will use dinosaurs to count and match objects to number sentences, beginning to use the language 'add', 'more than', 'equals'. Children will also use practical activities and objects to double; they will read doubling stories. Children will be introduced to halving and have a teddy bears' picnic where everything is shared in half!
14	Geometry: properties of shapes (GPS); Measurement (MEA)	Children learn how we can time events, and the fact that some events take longer than others. Gradually they improve their understanding of how time is measured, and recognise units of time: seconds, minutes, hours, days, months and years. They recognise and identify common 3D shapes learning to name cubes, spheres, cuboids, cones, pyramids and cylinders. They start to describe the properties of these 3D shapes, including the 2D shapes of their flat faces.
15	Measurement (MEA)	Children explore lengths, heights and weights, learning to compare each of these, using direct comparison. Children lay lengths alongside each other, understanding the need for a baseline, and do the same with three items of different heights. They then learn to measure a length or height using a non-standard uniform unit, such as a crayon or footprint. Children compare items of the same size but different weight using balances and then measure these using uniform non-standard units such as conkers or pebbles.

<b>Spring Term 2</b>		
<b>Wk</b>	<b>Strands</b>	<b>Weekly Summary</b>
16	Number and place value (NPV)	This week children compare and order numbers to 20. We check that children can match a numeral to 20 with the same number of objects in a set. Children estimate numbers of objects and images and begin to understand that teen numbers are ten plus some more.
17	Measurement (MEA)	This week the children will familiarise themselves with coins and our money. They will begin to learn the value of coins and to compare and order them according to value. They will learn their names and begin to play with money in a shop / bank / post office context.
18	Number and place value (NPV); Mental addition and subtraction (MAS)	This week children will rehearse comparing numbers to 10 and 20 and identifying the largest and smallest set. They will relate this to the numerals. They will also rehearse ordering numbers to 10 and 20 using the pegged number line. They will identify the larger and the smaller of two numbers using position on the line as a guide. Then they move onto using a 1-20 number track to say the next number and the number before any number. They will relate this to one more and one less. They begin to write addition and subtraction sentences to match one more/less.
19	Geometry: position and direction (GPD); Measurement (MEA)	This week children are revisiting the days of the week, reciting the names and ordering them and will use language related to time such as 'yesterday', 'today' and 'tomorrow'. They will begin to recognise o'clock times on analogue and digital clocks and match these to key events in their daily routine and in stories. Children will also use the language of position and direction, including 'left' and 'right' in the context of games.
20	Mental addition and subtraction (MAS)	This week is all about partitioning numbers and finding pairs of numbers that total the number. The children begin to learn their bonds to 5, 6, 7, 8 and 10. They also start matching sets of objects to addition sentences and begin to see that addition is commutative, i.e. $5 + 3$ is the same as $3 + 5$ . Children are also introduced to the subtraction sign, using knowledge of bonds (if appropriate for your class).

<b>Summer Term 1</b>		
<b>Wk</b>	<b>Strands</b>	<b>Weekly Summary</b>
21	Number and place value (NPV)	Children count to 100 as a whole class and begin to count further independently. They write numbers to make the longest counting snake ever! Children rehearse the fact that teen numbers are made of 10 and some more and write addition sentences to show this. They also blast off to space to explore planets and rehearse counting back from 20, reinforcing the order of numbers to 20.
22	Geometry: properties of shapes (GPS)	This week will focus on common 2D and 3D shapes. Children distinguish between solid (3D) shapes and flat (2D) shapes. They explore the properties of 2D shapes, looking at their sides (straight or curved), the number of corners and whether they are symmetrical. They then explore the properties of 3D shapes, looking at whether they slide or roll or can do both. Children look at the faces and vertices of the shapes and at whether they can stack or not. The week summarises and concludes all the work on shape in Reception.
23	Number and place value (NPV); Mental multiplication and division (MMD); Problem solving, reasoning and algebra (PRA)	Children double numbers to 5 and halve even numbers to 10, using objects, the image of twins and balancing scales. They share objects between two children, begin to see this as halving, and then share objects between four children.
24	Number and place value (NPV); Problem solving, reasoning and algebra (PRA)	In this week, children begin to learn to count in 2s, 5s and 10s. They count sets of objects, including fingers, using 'clever counting' instead of counting in 1s. They learn the pattern of counting 2s, 5s and 10s, recognising that 10s numbers, for example, all end in 0. They sort numbers into odd and even numbers, and revisit doubles and halves.
25	Measurement (MEA)	This week children revisit the days of the week, making sure that they know these and can put them in order. They also talk about how we measure time in different ways, and come to understand units: months, days, weeks, hours, minutes and seconds. They learn to recognise o'clock times on analogue and digital clocks and match these to key events in their daily routine and in stories.

<b>Summer Term 2</b>		
<b>Wk</b>	<b>Strands</b>	<b>Weekly Summary</b>
26	Number and place value (NPV)	This week is all about counting, ensuring all children can count on and back to/from any number to 20. Children also rehearse counting to 100 and begin to cement in the patterns of numbers in the count and the special 'tens' numbers. They are introduced to counting in 10s to 100.
27	Mental addition and subtraction (MAS); Problem solving, reasoning and algebra (PRA)	Children find one more and one less than numbers up to 20, linking this to adding and subtracting 1. They count on 2, 3 or 4 from a hidden quantity (e.g. cars in a car park, pennies in a tin, bears in a cave) so that they cannot recount the first quantity but must add by counting on. They count back where the remaining quantity is hidden in order to encourage counting back. They read and match number sentences to practical problems. A number track is used to support counting on to give totals up to 20 and counting back from numbers up to 20.
28	Mental addition and subtraction (MAS); Measurement (MEA)	The first three days this week are about money. Children revise and learn all the coins from 1p to £2. They name, describe and begin to order the coins according to value. They move on to making small amounts and making the value of a coin using other coins. The final two sessions teach children to subtract by counting back. They subtract small amounts (1-3) by counting back on their fingers. They begin to recognise and write subtraction sentences.
29	Measurement (MEA)	Children explore measures: lengths, weights and capacities, learning to compare each of these using direct comparison. In each case they then progress to using uniform non-standard units to measure a length, height, capacity or weight. They are encouraged to move on to compare more than two lengths using uniform non-standard units.
30	Mental addition and subtraction (MAS)	Children partition five, six and ten objects into two groups in order to find all the pairs of numbers with totals of 5, 6 and 10. The matching additions are recorded and read. Children count on 1, 2, 3 or 4 from any number to give totals up to 20, and begin to count back 1, 2 or 3 from numbers up to 20.

