Year 2 PoS, Number - number and place value					
Count forwards and backwards in steps of 2 from 0 to 20	Show numbers to 20 using place value cards , Numicon and base ten	Estimate how many objects or pictures in groups up to 20	Introduce more comparative language including greater and fewer	Read and write number names in words and numerals to 20 (spellings in line with child's literacy)	Use mathematical ideas to solve practical problems involving addition and subtraction
Count forwards and backwards in steps of 10 from 0 to 100	Show numbers to 100 using place value cards , Numicon and base ten	Represent a number to 20 using objects and Numicon and show that number on a number line and hundred square including blank ones	Order numbers and images (including a selection of) up to 100 forwards and backwards	Read and write number names in words and numerals to 30 (spellings in line with child's literacy) with a focus on the teen and the ty sounds.	Develop and recognise patterns using number facts
Count forwards and backwards in steps of 10 from any number	Know and explain what each digit represents (tens and units/ones) in 2 digit numbers	Estimate how many objects or pictures in groups up to 50	Relate the = sign to equal to, the same as, equivalent to using equipment such as balance scales.	Match number words, Numicon representations and numerals together to 50	Solve problems involving doubling and halving
Count forwards and backwards in steps of 2 from 0 to 100	Recognise 0 as a place holder in 2 digit multiples of 10	Represent numbers to 50 with structured apparatus and show the number on number lines and hundred squares including blanks	Identify > as bigger than, more than, greater than etc.	Write number names in words to 50 (accept spellings in line with child's literacy)	Solve problems involving multiplication and division using known number facts to help
Count forwards and backwards in steps of 5 from 0 to 100	Be able to say what the tens digit is worth/the value of that digit	Estimate how many objects or pictures in groups up to 100	Identify < as smaller than, less than, fewer than etc.	Match number words, Numicon representations and numerals together to 80 then 100	Solve problems in different contexts
Count forwards and backwards in steps of 3 from 0 to 100	Partition and recombine 2 digit numbers into tens and units/ones	Represent a number up to 100 using objects and Numicon and show that number on a number line and hundred square including blanks	Use symbols and language to compare groups of objects and numbers	Write number names in words to 80 then 100 (accept spellings in line with child's literacy)	Solve problems that involve ordering and an understanding of place value
Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward	**Recognise the place value of each digit in a two-digit number (tens, ones)**	**Identify, represent and estimate numbers using different representations, including the number line**	**Compare and order numbers from 0 up to 100; use < , > and = signs**	**Read and write numbers to at least 100 in numerals and in words**	**Use place value and number facts to solve problems**

<table>
<tr><th colspan="5">Year 2 PoS, Number – addition and subtraction</th></tr>
<tr><td>Choose appropriate resources (including concrete objects) to help solve a problem</td><td>Recall pairs of numbers that make 5</td><td>Add three 1 digit numbers using concrete objects, pictorial representations and mental strategies</td><td>Explore addition – what happens if you add in a different order? Why?</td><td>Clear understanding of addition and subtraction</td></tr>
<tr><td>Use pictorial representations to show how they work problems out</td><td>Recall pairs of numbers that make 10</td><td>Add a two digit number and ones using concrete objects, pictorial representations and mental strategies</td><td>Know you can add in any order and explain why</td><td>Explain why when you add two objects to a set and then take two objects from it, the number of the objects in the set is unchanged</td></tr>
<tr><td>Talk about answer and workings out and explain to others the method</td><td>Find all related subtraction facts in bonds to 5 and 10</td><td>Subtract ones from a two digit number using concrete objects, pictorial representations and mental strategies</td><td>Count on from the larger number and understand why it helps</td><td>Explore patterns and relationships between + and - number sentences</td></tr>
<tr><td rowspan="2">Work systematically through a problem to find the answer - read, underline important information, calculate, answer and check</td><td>Derive and recall addition and subtraction facts for 20</td><td>Add tens to a two-digit number using concrete objects, pictorial representations, and mental strategies</td><td rowspan="2">Explore subtraction – what happens if you subtract in a different order? Why?</td><td>Identify the inverse operation when looking at a number sentence</td></tr>
<tr><td>Derive and recall addition and subtraction facts for all the numbers up to 20</td><td>Subtract tens from a two-digit number using concrete objects, pictorial representations and mental strategies</td><td>Use structured apparatus to explain inverses</td></tr>
<tr><td>Check the answer is correct by using the inverse</td><td>Work out examples such as: if 3+7=10; 10-7=3 and 7=10-3 then 30+70=100; 100-70=30 and 70=100-30</td><td>Add two two-digit numbers using concrete objects, pictorial representations and mental strategies</td><td rowspan="2">Know that subtraction cannot be done in any order</td><td>Check answers in own work are correct using the inverse operation</td></tr>
<tr><td rowspan="2">Solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures and by applying their increasing knowledge of their mental and written methods</td><td>Derive and use addition and subtraction facts to 100</td><td>Subtract two two-digit numbers using concrete objects, pictorial representations and mental strategies</td><td>Solve missing number problems using the inverse operation</td></tr>
<tr><td>Recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100</td><td>Add and subtract numbers using concrete objects, pictorial representations, and mentally, including: as detailed above</td><td>Show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot</td><td>Recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems</td></tr>
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Year 2 PoS, Number – multiplication and division			
Count confidently in steps of 2 starting from 0 or 1, explore the patterns created by counting in 2's, know which numbers are odd and which are even and understand the difference	Use objects, arrays and jumps on a number line to explore repeated addition and grouping in 2's	Explore multiplication – what happens if we multiply in a different order? Why?	Choose the correct maths for the problem
Re-call double numbers up to double 10	Recognise x as the symbol that means multiply by, times, lots of, groups of		
Link multiplication facts to 2x10 with doubling	Explore sharing and grouping in 2's and link to the language of division	Use arrays and structured apparatus to show that multiplication can be done in any order	Choose appropriate resources to help solve the problem, including concrete objects.
Learn division facts to 20÷2	Recognise ÷ as the symbol that means divide by, share equally into, group		
Learn multiplication facts to 10x10	Use objects, arrays and jumps on a number line to explore repeated addition and grouping in 10's	Explore division – what happens if we divide in a different order? Why?	Use pictorial representations and arrays to show how they worked it out
Learn division facts to 100÷10 (90÷9 etc)	Explore sharing and grouping in 10's		Talk about answer and workings out and explain to others the method.
Learn multiplication facts to 10x5 (link to divisions on a clock face)	Use objects, arrays and jumps on a number line to explore repeated addition and grouping in 5's	Know and understand that division cannot be done in any order	Work systematically through a problem to find the answer - read, underline important information, calculate, answer and check
Learn division facts to 50÷10 (45÷9 etc)	Explore sharing and grouping in 5's		Use knowledge of multiplication and division facts to help solve a problem
Explore connections between 5 and 10 times table	Record own sentences using symbols x, ÷ and =		Use mental methods to solve a problem and explain how it was done
Recall and use multiplication and division facts for the 2,5, 10 multiplication tables, including recognising odd and even numbers.	**Calculate mathematical statements for multiplication and division within the multiplication tables and write them using multiplication (x), division (÷) and equals (=) signs**	**Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot**	**Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts**

Year 2 PoS, Number – fractions	
Recognise ¼ and know it means spilt the length, shape, set of objects or quantity into four equal parts	Understand that fractions are made up of equivalent parts – 1 whole is the same as 2 x ½ or 4 x 1/4.
Be able to find a quarter of a length, shape, set of objects or quantity	Understand the relationship between halves and quarters starting first with objects and then amounts, know that a whole has 4 equal parts and understand the relationships between them i.e. $^2/_4$ = **½, ¾** is 3 parts of a whole
Recognise 1/3 and know it means spilt the length, shape, set of objects or quantity into three equal parts	Recognise the terms denominator and numerator and what they represent in a written fraction through practical activities
Be able to find a third of a length, shape, set of objects or quantity	To know that the denominator shows how many to divide the group by and that the numerator represents how many groups of that number you want – for example – ¾ of 12 = 12 divided into 4 groups and then counting 3 of the 4 groups to get the answer.
Recognise that fractions are linked to multiplication and division	
Write the fraction that corresponds to 1/3, ¼, 2/4 and ¾ of a length, shape, set of objects or quantity.	Calculate and record simple fraction statements
Solve practical problems using fractions with money, measures and numbers	Use a number line to count in fractions up to 10, starting from any number e.g. 1, 1¼, 1½, 1¾ , 2 and so on
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, ½ of 6 = 3 and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$**

<table>
<tr><td colspan="6">Year 2 PoS, Geometry – properties of shape, position and direction</td></tr>
<tr><td>Handle and name common 2-D shapes</td><td>Handle and name common 3-D shapes</td><td rowspan="3">Find 2D shapes in the environment</td><td rowspan="2">Sort everyday objects in own way</td><td>Explore patterns of shapes</td><td rowspan="2">Describe turns using rotations(including the children turning themselves)</td></tr>
<tr><td>Include quadrilaterals and polygons in shape recognition</td><td>Include cuboids, prisms and cones in shape recognition</td><td rowspan="2">Explore patterns of shapes with different orientations</td></tr>
<tr><td>Identify properties such as number of sides and recognise right angles</td><td>Identify properties such as number of faces, vertices and edges</td><td>Sort common shapes according to their properties</td><td>Recognise right angles in turns.</td></tr>
<tr><td>Use simple mathematical words to describe shapes including circular, triangular and rectangular</td><td rowspan="3">Use simple mathematical vocabulary to describe shapes</td><td rowspan="2">Recognise shapes such as a circle on a cylinder and a triangle on a pyramid</td><td>Explain why you have sorted shapes using own language</td><td rowspan="2">Draw simple shapes to use in own patterns</td><td rowspan="2">Use programming robots using instructions given in right angles</td></tr>
<tr><td>Find symmetrical shapes by folding</td><td>Explain sorting in simple mathematical terms.</td></tr>
<tr><td>Further understand symmetry by finding all the 2D shapes with vertical lines of symmetry</td><td rowspan="2">Identify a wider range of 2D shapes within a range of 3D shapes</td><td rowspan="2">Use precise vocabulary such as sides, edges, vertices and faces when comparing and sorting</td><td rowspan="2">Draw lines and shapes using a straight line where appropriate</td><td rowspan="2">Use clockwise and anti-clockwise</td></tr>
<tr><td>Read and write names (as appropriate to reading and spelling level)</td><td>Read and write names (as appropriate to reading and spelling level)</td></tr>
<tr><td>Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line</td><td>Identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces</td><td>Identify 2-D shapes on the surface of 3-D shapes</td><td>Compare and sort common 2-D and 3-D shapes and everyday objects</td><td>Order and arrange combinations of mathematical objects in patterns and sequencing</td><td>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</td></tr>
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Year 2 PoS, Measurement							
Estimate and measure length/height in any direction in m/cm using rulers	Compare 2 or more lengths, capacities or masses. E.g. Half as high, twice as wide, more than, less than, longer than, heavier than	Know all the coin values and recognise the coins	Recognise that ten 1p's, five 2p's and two 5p's are all the same value as one 10p	Add 1p's together, add 10p's together, add 5 p's together	Know and sequence the months of the year, days of the week	Read and record an analogue clock to the hour and half hour	Know the number of minutes in an hour and recognise the minute markings on a clock face
Estimate and measure mass in kg/g using scales	Compare using standard units	Use the £ sign/ p notation	Recognise a range of different coins can make the same value	Add different values together practically	Understand the different measurements of time e.g. a week is 7 days	Read and record an analogue clock to quarter past/ quarter to	Solve problems using the relationship of hours and minutes
Estimate and measure temperature in °c using thermometers	Order items by length, mass or capacity	Add two or more amounts together and record using the symbols	Use the least amount of coins to make a value	Subtract an amount under £1 (include counting on as a strategy to calculate this)	Make comparisons between periods of time e.g. weeks in a month, months in a seasons/ year	Read and record an analogue clock to 5 minutes	Know the number of hours in a day
Estimate and measure capacity in litres/ml using measuring vessels	Know how measures compare to each other. (e.g. km's and metres, kg's and grams)		Find different ways to pay / make a total	Add and subtract whole pounds		Represent time using analogue and digital time	Solve problems using the relationship of hours and days
Choose and use appropriate standard units to estimate and measure to the nearest appropriate unit	**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**	**Solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change**	**Compare and sequence intervals of time**	**Tell and write the time to five minutes, including quarter past/to the hour and draw 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**

<table>
<tr><td colspan="3">Year 2 PoS, Statistics</td></tr>
<tr><td>Understand a pictogram and explain what it means</td><td rowspan="3">Sort items by a given criteria (start with two sets and then build up further) and say which set an item belongs to</td><td rowspan="5">Understand and use the language of more than and less than and equal to/the same as to compare information in a graph or sorting diagram</td></tr>
<tr><td>Construct a pictogram using ICT equipment (e.g. 2 Simple)</td></tr>
<tr><td>Understand a block diagram and explain what it means</td></tr>
<tr><td>Make own block diagrams for a variety of purposes</td><td rowspan="2">Talk about why items belong to a particular set</td></tr>
<tr><td>Understand a tally chart and explain what it means</td></tr>
<tr><td>Make own tally charts for a variety of purposes (e.g. in science, for registers or class votes)</td><td rowspan="2">Sort items in a variety of situations sometimes using own criteria</td></tr>
<tr><td>Understand simple tables around the classroom e.g. sticker charts, visual timetables etc</td><td rowspan="5">Understand and use number applications such as addition and subtraction (including finding the difference)</td></tr>
<tr><td>Make a variety of simple tables related to real life experiences</td><td rowspan="2">Understand why it is important to count the number of objects in each group accurately</td></tr>
<tr><td>Using a variety of sources such as ICT show how to change one type of chart into another</td></tr>
<tr><td>Decide how to present the data they have collected or been given</td><td rowspan="2">Understand and use the language of more than and less than and equal to/the same as and not equal to (e.g. Carroll diagram – brown hair/not brown hair)</td></tr>
<tr><td>Begin to understand how to read different scales in steps of 1, 2, 5 and 10.</td></tr>
<tr><td>Interpret and construct simple pictograms, tally charts, block diagrams and simple tables.</td><td>Ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity.</td><td>Ask and answer questions about totalling and comparing categorical data.</td></tr>
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