

Y2 medium-term immersion plan - learning sequence 1

Week	1	2	3	4	5	6	7	8	9	10	11	12
Number and place value	<ul style="list-style-type: none"> count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward to 100 2N1 <ul style="list-style-type: none"> link to counting coins in denominations of 2p, 5p and 10p identify one more, one less and 10 more, 10 less than a given number read and write numbers to at least 100 in numerals and multiples of ten in words e.g. thirty, forty etc. 2N2a compare and order numbers from 0 up to 100; use <, > and = signs 2N2b recognise the place value of each digit in a two-digit number (tens, ones) including recognising 0 as a place holder 2N3 partition numbers in different ways (e.g. $23 = 20 + 3$ and $23 = 10 + 13$ or $10 + 10 + 3 = 23$) identify, represent and estimate numbers using different representations, including the number line 2N4 describe and extend simple sequences involving counting on or back in different steps use place value and number facts to solve problems 2N6 											
	Addition and subtraction	<ul style="list-style-type: none"> recall and use addition and subtraction facts to 20 fluently and derive and use related facts to 100 2C1a <ul style="list-style-type: none"> multiples of 10 with totals up to 100 ($50 + 20 = 70$ or $70 - 20 = 50$) what must be added to any two digit number to make the next multiple of 10 e.g. if $2 + 8 = 10$ then $52 + _ = 60$ doubles for multiples of 10 to 50 (if $4 + 4 = 8$ then $40 + 40 = 80$) add and subtract numbers within 100 using concrete objects, pictorial representations (including number line), and mentally including: <ul style="list-style-type: none"> a two-digit number and ones including partitioning the ones number when bridging through multiples of ten a two-digit number and tens (and relate to counting on and back in tens from any number) 2C1b recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems 2C3 show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot <ul style="list-style-type: none"> put the largest number first in order to count on add 3 numbers using strategies such as reordering or looking for pairs to make 10 2C9a 										
Measurement		<ul style="list-style-type: none"> recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value (no decimal notation) 2M3a find different combinations of coins that equal the same amounts of money 2M3b solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change 2M9 										
Multiplication and division	<ul style="list-style-type: none"> memorise and rehearse multiplication and division facts for the 2, 5 and 10 multiplication tables 2C6 recognise odd and even numbers 2C6 begin to explore the concept of commutativity when multiplying small numbers and relate to addition using concrete objects and pictorial representations 2C9b continue grouping and sharing within practical contexts using 2, 5 and 10 multiplication and division facts 											
Fractions	<ul style="list-style-type: none"> count in $\frac{1}{2}$s and $\frac{1}{4}$s up to 10 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 2F1a 											
Measurement	<ul style="list-style-type: none"> estimate, compare and order lengths, mass, volume/capacity and link to number and place value 2M1 <ul style="list-style-type: none"> include measures with a fractional value such as $1\frac{1}{2}$ kg choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature ($^{\circ}$C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels 2M2 begin to tell and write the time - quarter past/to the hour and draw the hands on a clock face to show these times and link to $\frac{1}{4}$, $\frac{1}{2}$ and $\frac{3}{4}$ turns 2M4a 											
Geometry	<ul style="list-style-type: none"> 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) 2P2 use concept and language of angle to describe turn by applying rotations, including in practical contexts and using ICT 											

Y2 medium-term immersion plan - learning sequence 2

Week	1	2	3	4	5	6	7	8	9	10	11	12
Number and place value	<ul style="list-style-type: none"> count in multiples of 2, 3, 5, from 0 and in tens from any number forwards and backwards to 100 <i>including</i> 2N1 counts in intervals of 5 minutes around the clock, tallies in tally charts, counting with 2p, 5p and 10p coins understand the connection between the x 10 multiplication table and place value identify one more, one less and 10 more, 10 less than a given number read and write numbers to at least 100 in numerals and in words 2N2a use <, > and = signs to compare numbers from 0 - 100 2N2b recognise the place value of each digit in a two-digit number (tens, ones) 2N3 recognise 0 as a place holder partition numbers in different ways (e.g. $23 = 20 + 3$ and $23 = 10 + 13$ or $10 + 10 + 3 = 23$) identify, represent and estimate numbers from 0 up to 100; using different representations, including structured environment such as number tracks and number lines 2N4 describe and extend simple sequences involving counting on or back in different steps use place value and number facts to solve problems (e.g. $60 - \square = 20$) 2N6 											
	<p>Continue to rehearse mental and written calculation strategies from learning sequence 1</p> <ul style="list-style-type: none"> recall and use addition and subtraction facts to 20 fluently and derive and use related facts to 100 2C1a add and subtract numbers within 100 using concrete objects, pictorial representations (<i>including number lines</i>), and mentally including: 2C1b <ul style="list-style-type: none"> identify and derive complements to 100 add 2 two-digit numbers using concrete objects and pictorial representations 2C2 <ul style="list-style-type: none"> partition and count on in tens and then ones to find the total partition to combine tens, then ones and then totals of tens and ones e.g. $32 + 24 = 30 + 20 + 2 + 4 = 50 + 6 = 56$ subtract 2 two-digit numbers using concrete objects and pictorial representations 2C2 <ul style="list-style-type: none"> partition and count on in tens and ones to find the difference partition and count back in tens and ones to take away recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems 2C3 solve simple 2-step problems with addition and subtraction using concrete objects and pictorial representations, including those involving numbers, quantities and measures and applying their increasing knowledge of mental and written methods 2C4 show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot 2C9a 											
Addition and subtraction	<ul style="list-style-type: none"> rehearse and begin to recall multiplication and division facts for the 2, 5 and 10 multiplication tables 2C6 calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (x), division (÷) and equals (=) signs 2C7 show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot using concrete objects and pictorial representations 2C9b solve problems involving multiplication and division, using materials, arrays, repeated addition, grouping and sharing, mental methods, and multiplication and division facts, including problems in practical contexts 2C8 											
	<ul style="list-style-type: none"> count in $\frac{1}{2}$s and $\frac{1}{4}$s up to 10 and order fractions with the same denominator 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 2F1a understand that $\frac{3}{4}$ is a non-unit fraction as its numerator is more than 1 write simple fractions for example, $\frac{1}{2}$ of 6 = 3 2F1b and recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ in practical contexts and using concrete materials 2F2 											
Multiplication and division	<ul style="list-style-type: none"> compare and order lengths, mass, volume/capacity and record the results using >, < and = 2M1 choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels 2M2 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 2M4a compare and sequence intervals of time 2M4b know the number of minutes in an hour and the number of hours in a day 2M4c 											
Fractions	<ul style="list-style-type: none"> sort and compare sets of common 2D and 3D shapes and everyday objects 2G1a,b using given criterion and devising their own identify and describe the properties of 2-D shapes, including the number of sides and line symmetry in a vertical line 2G2a identify and describe the properties of 3-D shapes, including the number of edges, vertices and faces 2G2b identify 2-D shapes on the surface of 3-D shapes [e.g. a circle on a cylinder and a triangle on a pyramid] 2G3 order and arrange combinations of mathematical objects in patterns and sequences 2P1 											
Measurement	<ul style="list-style-type: none"> use simple scales (e.g. with intervals of 1, 2, 5 and 10), interpret and construct simple pictograms (where symbols show 1:1 correspondence and then 2:1), tally charts, block diagrams and tables 2S1 ask and answer simple questions by counting the number of objects in each category and sorting the categories by quantity 2S2a ask and answer questions about totalling and comparing categorical data 2S2b 											
Geometry												
Statistics												

Y2 medium-term immersion plan - learning sequence 3

Week	1	2	3	4	5	6	7	8	9	10	11	12		
Geometry	<ul style="list-style-type: none"> identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line <i>using given criterion and devising their own using increasing understanding of properties and mathematical language</i> 2G2ab compare and sort common 2-D and 3-D shapes and everyday objects 2G1ab 					<ul style="list-style-type: none"> 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) 2P2 <i>use concept and language of angle to describe turn by applying rotations, including in practical contexts and using ICT</i> 								
Number and place value	<ul style="list-style-type: none"> count in steps of 2, 3, 4 and 5 from 0, and in tens from any number, forward and backward to 100 2N1 <ul style="list-style-type: none"> <i>identify one more, one less and 10 more, 10 less than a given number</i> use place value in whole numbers up to 100 to compare and order numbers, sometimes using <, > and = signs correctly 2N2b/3 <ul style="list-style-type: none"> <i>including recognising 0 as a place holder</i> <i>partition numbers in different ways (e.g. 23 = 20 + 3 and 23 = 10 + 13 or 10 + 10 + 3 = 23)</i> identify, represent and estimate numbers using different representations, including the number line 2N4 use place value and number facts to solve problems 2N6 													
Addition and subtraction	<p>Continue to rehearse mental and written calculation strategies from phases 1 and 2</p> <ul style="list-style-type: none"> recall and use addition and subtraction facts to 20 fluently and derive and use related facts to 100 2C1a including: <ul style="list-style-type: none"> <i>identify complements to 100</i> <i>solve missing number problems</i> add and subtract numbers (<i>to include bridging through 100 for addition</i>) using concrete objects, pictorial representations (including number line), and mentally including: <ul style="list-style-type: none"> <i>add 2 two-digit numbers using concrete objects and pictorial representations</i> <i>partition and count on in tens and then ones to find the total or</i> <i>partition to combine tens, then ones and then totals of tens and ones e.g. 32 + 24 = 30 + 20 + 2 + 4 = 50 + 6 = 56</i> <i>subtract 2 two-digit numbers using concrete objects and pictorial representations</i> <i>count on in tens and ones to find the difference</i> <i>count back in tens and ones to take away</i> 2C1b/2C2 recognise and use the inverse relationship between addition and subtraction and use this to check calculations and missing number problems 2C3 solve <i>simple two step</i> problems with addition and subtraction: <ul style="list-style-type: none"> <i>use concrete objects and pictorial representations, including those involving numbers, quantities and measures e.g. use money of the same unit (24p + 40p or £2 + £5) and give change</i> apply increasing knowledge of mental and written methods 2C4 show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another cannot 2C9a 													
Measurement	<ul style="list-style-type: none"> recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value (no decimal notation) 2M3a find different combinations of coins that equal the same amounts of money 2M3b solve simple problems in a practical context involving addition and subtraction of money of the same unit, including giving change 2M9 					<ul style="list-style-type: none"> compare and order lengths, mass, volume/capacity and record the results using >, < and = 2M1 choose and use appropriate standard units to estimate and measure length/height in any direction (m/cm); mass (kg/g); temperature (°C); capacity (litres/ml) to the nearest appropriate unit, using rulers, scales, thermometers and measuring vessels 2M2 tell and write the time to 5 minutes, including quarter past/to the hour and draw the hands on a clock face to show these times 2M4a compare and sequence intervals of time 2M4b know the number of minutes in an hour and the number of hours in a day 2M4c 								
Multiplication and division	<ul style="list-style-type: none"> recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers 2C6 recognise and derive factor pairs of multiples in known tables calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (×), division (÷) and equals (=) signs 2C7 solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts 2C8 show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot 2C9b 													
Fractions	<ul style="list-style-type: none"> <i>count in ½ s and ¼ s up to 10 and order fractions with the same denominator</i> 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 2F1a <i>understand that $\frac{3}{4}$ is a non-unit fraction as its numerator is more than 1</i> write simple fractions for example, $\frac{1}{2}$ of 6 = 3 2F1b recognise the equivalence of $\frac{2}{4}$ and $\frac{1}{2}$ in practical contexts and using concrete materials 2F2 													