

Immersion plan - learning sequence 1

2	3	4	5	6	7	8	9	10
<p>Count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward to 100 2N1</p> <p>Link to counting coins in denominations of 2p, 5p and 10p</p> <p>Identify one more, one less and 10 more, 10 less than a given number</p> <p>Read and write numbers to at least 100 in numerals and multiples of ten in words e.g. thirty, forty etc. 2N2a</p> <p>Compare and order numbers from 0 up to 100; use <, > and = signs 2N2b</p> <p>Recognise the place value of each digit in a two-digit number (tens, ones) including recognising 0 as a place holder 2N3</p> <p>Partition numbers in different ways (e.g. $23 = 20 + 3$ and $23 = 10 + 13$ or $10 + 10 + 3 = 23$)</p> <p>Identify, represent and estimate numbers using different representations, including the number line 2N4</p> <p>Describe and extend simple sequences involving counting on or back in different steps</p> <p>Use place value and number facts to solve problems 2N6</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 2C <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 $52 +$ 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 lines) including: <ul style="list-style-type: none"> a two-digit number and ones including partitioning the ones number when bridging through multiples of 10 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 calculation number problems 2C3 show that addition of two numbers can be done in any order (commutative) and subtraction of one number from another can be done in any order <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 								
<ul style="list-style-type: none"> recognise and use symbols for pounds (£) and pence (p); combine amounts to make a particular value 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 and change 2M9 								
<ul style="list-style-type: none"> memorise and rehearse multiplication and division facts for the 2, 5 and 10 2C6 recognise odd and even numbers 2C6 begin to explore the concept of commutativity when multiplying small numbers and addition using concrete objects and pictorial representations 2C9b continue grouping and sharing within practical contexts using 2, 5 and 10 multiplication facts 								
<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 								
<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 								

Immersion plan - learning sequence 2

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Count in multiples of 2, 3, 5, from 0 and in tens from any number forwards and backwards to 100 *including* **2N1**

Count 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 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**

Prepare to rehearse mental and written calculation strategies from learning sequence 1

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 (*including number lines*), and mentally including **identify and derive complements to 100**

Add 2 two-digit numbers using concrete objects and pictorial representations **2C2**

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**

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 simple 2-step problems with addition and subtraction using concrete objects and pictorial representations, including those in practical contexts 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

- rehearse and begin to recall multiplication and division facts for the 2, 5 and 10 multiplication tables **2C7**
- calculate mathematical statements for multiplication and division within the multiplication tables and write using multiplication (\times), division (\div) and equals ($=$) signs **2C7**
- show that multiplication of two numbers can be done in any order (commutative) and division of one number by another using concrete objects and pictorial representations **2C9b**
- solve problems involving multiplication and division, using materials, arrays, repeated addition, **grouping** methods, and multiplication and division facts, including problems in **practical contexts 2C8**

- 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**

- 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 ($^{\circ}$ 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**

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Identify and describe the properties of 2-D shapes, including the number of sides and symmetry in a vertical line *using given criterion and devising their own using increasing understanding of properties and mathematical language* **2G2ab**

Compare and sort common 2-D and 3-D shapes and everyday objects **2G1ab**

- 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*

Count in steps of 2, 3, 4 and 5 from 0, and in tens from any number, forward and backward *to 100* **2N1**

Identify one more, one less and 10 more, 10 less than a given number

Use place value in whole numbers up to 100 to compare and order numbers, sometimes using <, > and = signs correctly **2N2b/3**

including recognising 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 using different representations, including the number line **2N4**

Use place value and number facts to solve problems **2N6**

Continue to rehearse mental and written calculation strategies from phases 1 and 2

- recall and use addition and subtraction facts to 20 fluently and derive and use related facts to 100 **2C1a**
including:
 - identify complements to 100
 - solve missing number problems
- add and subtract numbers (*to include bridging through 100 for addition*) using concrete objects, pictorial representation (line), and mentally including:
 - add 2 two-digit numbers *using concrete objects and pictorial representations*
 - *partition and count on in tens and then ones to find the total or*
 - *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*
 - count on in tens and ones to find the difference
 - count back in tens and ones to take away **2C1b/2C2**
- recognise and use the inverse relationship between addition and subtraction and use this to check calculations and problems **2C3**
- solve *simple two step* problems with addition and subtraction:
 - use concrete objects and pictorial representations, including those involving numbers, quantities and measures *same unit (24p + 40p or £2 + £5) and give change*
- 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

- 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**

- compare and order lengths, mass, volume and capacity, and record the results using >, < and =
- choose and use appropriate standard units to measure length/height in any direct measurement, temperature ($^{\circ}\text{C}$); capacity (litres/ml) in any appropriate unit, using rulers, scales and measuring vessels **2M2**
- tell and write the time to 5 minutes, the hour and draw the hands on a clock face **2M4a**
- compare and sequence intervals of time
- know the number of minutes in an hour and the number of hours in a day **2M4c**

- recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including multiplication and division of even numbers **2C6**
- recognise and derive factor pairs of multiples in known tables
- calculate mathematical statements for multiplication and division within the multiplication tables, using the multiplication (\times), division (\div) and equals (=) signs **2C7**
- solve problems involving multiplication and division, using materials, arrays, repeated addition, mental 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