


Dereham Church Infant and Nursery School- Mathematics

	Year group: 2	Area/topic: Mathematics- place value
	<p>Read and write numbers from 1 to 20 in numerals and words (Y1)</p> <p>Read and write numbers to at least 100 in numerals and in words</p> <p>Identify, represent and estimate numbers using different representations, including the number line</p> <p>Count in steps of 2, 3 and 5 from 0, and in 10s from any number, forward and backward</p> <p>Recognise the place value of each digit in a 2-digit number (tens, ones)</p> <p>Compare and order numbers from 0 up to 100; use $<$, $>$ and $=$ signs</p>	

Prior learning	Future learning
<p>Children will have developed a number sense throughout the EYFS. They will then have studied place value within 10, within 20 and within 50 when in Year one.</p>	<p>This learning and skills will be used and applied throughout all future mathematical areas.</p>

What pupils need to know or do to be secure	
Key knowledge and skills	Possible evidence
<p>Consolidate knowledge of numbers to 20</p> <p>Count objects to 100 by making groups of 10.</p> <p>Recognise and identify 10s and ones</p> <p>To use a place value chart</p> <p>Partition numbers to 100</p>	<p>Completed number tracks</p> <p>Use of tens frames/bundles of straws</p> <p>Solve a range of problems</p> <p>Correctly matching place value charts to dienes</p>

<p>Write numbers to 100 in words Flexibly partition numbers to 100 Write numbers to 100 in the expanded form Using 10s on a numberline to 100 To estimate numbers on a numberline Compare objects to 100 Compare numbers Order objects and numbers Count in 2s, 5s and 10s Count in 3s</p>	<p>Complete part whole models Complete part whole models in 4 different ways for the same number Complete number lines successfully Correctly label a range of numberlines Identify if statements are true or false Use the symbols $<$ $>$ $=$ to complete accurate statements Accurately reason why statements are correct/incorrect</p>
<p>Key vocabulary</p>	
<p>Numeral, represent, digit, partition, interval, value, equal to, greater than, less than</p>	
<p>Common misconceptions</p>	<p>Books linking to this area</p>
<p>Numbers such as 11, 12, 13 and 15 can often be sticking points for children as the word does not make specific reference to the number of ones as it does later in the number system.</p> <ul style="list-style-type: none"> • Children may write, for example, 12 as "ten-two" in words rather than "twelve". • Children may mix up the tens and ones digits when writing 2-digit numbers. 	<p>A mathematician like me by Dr Shini Somara</p> <p>Bean thirteen by Matthew McElligott</p> <p>One is a snail and ten is a crab by April Sayre</p>

Children may try to count only in ones rather than making bundles of 1, which is less efficient and is more likely to result in basic counting errors.

- Children may find it harder to make numbers that have been said out loud, for example being told thirty five rather than seeing 35 written.

Children may partition a number into its digits rather than considering the value of each digit, for example stating that 32 is made up of 3 and 2

When counting in 10s starting from a number such as 13, children may jump to the next multiple of 10 and then keep counting in 10s.

- Children may confuse the multiples they are counting in, for example starting to count in 5s, then changing to count in 10s once they reach a multiple of 10

Memorable first hand experiences

Using a range of manipulatives

Opportunities for communication

Ask key questions and discuss

Use possible sentence stems provided by white Rose

DCINS Reasonable adjustments for pupils with SEND

<p><i>Communication and Interaction</i></p> <p>Use a range of visual aids Give clear instructions one at a time Repetition Provide simple instructions Pre teach vocabulary Use working wall where modelling is displayed Give children thinking time Model task</p>	<p><i>Cognition and Learning</i></p> <p>Check understanding regularly Allow rest breaks Give thinking time Colour code signs that could be confusing Work checklists Break down tasks into small steps Give opportunities for over-learning</p>
<p><i>Social, Emotional and Mental health</i></p> <p>Allow access to a quiet and calm space Give child a special role to increase self esteem Provide a visual support- what to do if you are stuck Provide a movement break Seat pupil by more confident peer Now and next board Sand timers Movement breaks Break down tasks into small steps</p>	<p><i>Sensory and Physical</i></p> <p>Consider carpet space position Reduce background noise Provide a range of manipulatives- dienes may be too small Appropriate seating Wobble boards Writing slope Enlarge text Variety of writing tools available</p>