


## Dereham Church Infant and Nursery School- Mathematics

	Year group: 2	Area/topic: Mathematics- multiplication and division
	<p>Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication (<math>\times</math>), division (<math>\div</math>) and equals (=) signs</p> <p>Show that multiplication of two numbers can be done in any order (commutative) and division of one number by another cannot</p> <p>Recall and use multiplication and division facts for the 2, 5 and 10 multiplication tables, including recognising odd and even numbers</p>	

Prior learning	Future learning
<p>During maths meetings children will have had the opportunity to practise counting in multiples of 2, 5, 10 and most recently 3.</p> <p>Whilst in year one children completed a block on multiplication and division where they worked practically to solve problems with the support of their teacher</p>	<p>This multiplication and division knowledge shall be applied to solve further complex problems and within the fractions block</p>

What pupils need to know or do to be secure	
Key knowledge and skills	Possible evidence
<p>Recognise equal groups</p> <p>Make equal groups</p> <p>Add equal groups</p> <p>Introduce the multiplication symbol</p> <p>Multiplication sentences</p>	<p>Identify from a selection of pictures</p> <p>Successfully arrange counters</p> <p>Write a number sentence that matches a picture and solve it</p> <p>Write a number sentence to the corresponding picture</p>

<p>Use arrays          Make equal groups- grouping          Make equal groups- sharing          The 2 times-table          Divide by 2          Doubling and halving          Odd and even numbers          The 10 times-table          Divide by 10          The 5 times-table          Divide by 5          The 5 and 10 times-tables</p>	<p>Answer questions about a given array          Photo of physically moving &amp; grouping counters          Opportunity to physically share using cubes          Complete number tracks successfully          Solve word problem          Correctly identify a picture demonstrating doubling          Label numicon pieces as odd and even          Completed numberlines          Word problems          Completed bar models          Use arrays successfully          Identify on a 100 square</p>
<p>Key vocabulary</p>	
<p>Equal, unequal, altogether, groups, repeated addition, multiplication, lots of, rows, columns, array, division, divided by, double, halve,</p>	
<p>Common misconceptions</p>	<p>Books linking to this area</p>
<p>Children may not be able to spot equal and unequal groups.          Children may try to find the total instead of finding the amount in each group.          Children may not realise that two groups are equal if they do not look the same.          When given a picture of incomplete groups, children may find it difficult to complete it to show a set number of equal groups.          Children may represent a set of equal groups incorrectly, for example 2 groups of 4 instead of 4 groups of 2</p>	<p>The digits- odd vs evens by Tony Bradman           The Digits-double the fun by Tony Bradman</p>

<p>Children may not make the link between repeated addition and multiplication</p> <p>Children may make mistakes when drawing arrays. For example, children may leave a hole in their array, and so not represent the multiplication correctly</p> <p>Children may think that as multiplication is commutative, division must be too</p> <p>Children may not make the connection between doubling and halving and the 2 times-table</p>	
<p><i>Memorable first hand experiences</i></p>	<p><i>Opportunities for communication</i></p>
<p>Opportunities to explore with manipulatives and resources</p>	<p>Completing sentence stems provided by White Rose</p> <p>Reasoning their ideas and thinking</p>

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>