

Dereham Church of England Infant and Nursery Academy- Mathematics

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

Prior learning	Future learning
During maths meetings children will have had the opportunity to practise counting in multiples of 2, 5, 10 and most recently 3. 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	This multiplication and division knowledge shall be applied to solve further complex problems and within the fractions block

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

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	Answer questions about a given array Photo of physically moving & 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	
Key vocabulary		
Equal, unequal, altogether, groups, repeated addition, multiplication, lots of, rows, columns, array, division, divided by, double, halve,		
Common misconceptions	Books linking to this area	

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

DCINA Reasonable adjustments for pupils with SEND

Communication and Interaction 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	Cognition and Learning 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
Social, Emotional and Mental health 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	Sensory and Physical 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