## The Discovery School Calculation Policy - Year 2 Multiplication

## National Curriculum Objectives

Recall and use multiplication and division facts for the 2,5 and 10 multiplication tables, including recognising odd and even numbers
Calculate mathematical statements for multiplication and division within the multiplication tables and write them using the multiplication ( x ), 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
Solve problems involving multiplication and division, using materials, arrays, repeated addition, mental methods, and multiplication and division facts, including problems in contexts.

| Objective | Concrete | Pictorial | Abstract |
| :---: | :---: | :---: | :---: |
| Counting in multiples of $2,5,10$ and 0 | Children to recap making equal groups to help them to count in $2 s, 5 s$ and 10 s. Draw their attention to the patterns. | Children to represent counting in multiples on number lines and bar models. Children to draw bar model alongside abstract when appropriate. | Children to start writing number sequences out to spot patterns. |
| Commutative multiplication with an array | Children to recap creating arrays using practical objects. <br> They need to be taught that arrays can represent different equations. This can be demonstrated by encouraging them to turn the image or their whiteboard around to see it in a different orientation. Although the orientation is different-the answer remains the same. This is because multiplication is commutative. | Present pictures of arrays to be interpreted. <br> and $\qquad$ <br> $\times$ $\qquad$ <br> Children should be able to represent multiplication in both ways as an array. <br> Encourage children to use different colours to show the orientations. | Showing it alongside the abstract will help to reinforce learning.m $4 \times 5=5 \times 4$ <br> 3 lots of $10=10$ lots of 3 |

