

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 (×), division (÷) 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		Abst				
Counting in multiples of 2, 5, 10 and 0	Children to recap making equal groups to help them to count in 2s, 5s and 10s. 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 seq					
			2	4	6	8	10	
	2 4 6 8 10	$\begin{array}{c} 1 \\ 0 \\ 2 \\ 2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 5 \\ 10 \\ 5 \\ 10 \\ 15 \\ 20 \\ 5 \\ 10 \\ 5 \\ 10 \\ 15 \\ 20 \\ 5 \\ 10 \\ 15 \\ 20 \\ 5 \\ 10 \\ 15 \\ 20 \\ 5 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10 \\ 10$	10	20	30	40	20	
Commutative multiplication with an array	Children to recap creating arrays using practical objects.	Present pictures of arrays to be interpreted.	Showing it alongside the abstract w					
	They need to be taught that arrays can represent different equa- tions. 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.	<u> </u>	00	0 0		5 + 5 2 × 5	= 1 0	
		Children should be able to represent multiplication in both ways as an				0 =	= 10 = 2 × 5	
		array.				0 =	5×2	
		$ \begin{array}{c} \bullet & 3 \times 2 = 6 \\ \hline \bullet & 3 \text{ groups of } 2 \times 6 \\ \hline \bullet & \end{array} $	$4 \times 5 = 5 \times 4$ 3 lots of 10 = 10 lots of 3					
		Encourage children to use different						
		colours to show the orientations.						

ract

quences out to spot patterns.

ill help to reinforce learning.m