

Year 1

Solve one-step problems involving multiplication and division, by calculating the answer using concrete objects, pictorial representations, and arrays with the support of the teacher

Through grouping and sharing small quantities, pupils begin to understand multiplication and division; doubling numbers and quantities; and finding simple fractions of objects, numbers, and quantities.

They make connections between arrays, number patterns, and counting in 2s, 5s and 10s.

Autumn		Spring		Summer	
Revise	New facts	Revise	New facts	Revise	New facts
Number bonds to 10	Number bonds to 20	Number bonds to 10	Count in 2, 5 and 10	Count in 2, 5 and 10 and	Arrays
		and 20		doubles of all numbers	
				to 10 and corresponding	
				halves	

Year 2

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 (÷) and equals (=) signs

show that multiplication of 2 numbers can be done in any order (commutative) and division of 1 number by another cannot

Pupils are introduced to the multiplication tables. They practise to become fluent in the 2, 5 and 10 multiplication tables and connect them to each other. They connect the 10 multiplication table to place value, and the 5 multiplication table to the divisions on the clock face.

Autumn		Spring		Summer	
Revise	New facts	Revise	New facts	Revise	New facts
Count in 2, 5 and 10 and	All multiplication facts of 2-	1x10, 2x10, 3x10,	1x5, 2x5, 3x5, 4x5, 5x5, 6x5,	1x10, 2x10, 3x10,	1x2, 2x2, 3x2, 4x2, 6x2, 7x2,
doubles of all numbers	, 5- and 10-times tables	4x10, 5x10, 6x10,	7x5, 8x5, 9x5, 11x5, 12x5	4x10, 5x10, 6x10,	8x2, 9x2, 11x2, 12x2
to 10 and corresponding		7x10, 8x10, 9x10,		7x10, 8x10, 9x10,	
halves	1x10, 2x10, 3x10, 4x10,	10x10, 11x10, 12x10	(10x5 learnt due to	10x10, 11x10, 12x10	(5x2, 10x2 learnt due to
	5x10, 6x10, 7x10, 8x10,		commutativity)	1x5, 2x5, 3x5, 4x5,	commutativity)
	9x10, 10x10, 11x10, 12x10			5x5, 6x5, 7x5, 8x5,	
				9x5, 11x5, 12x5	

Year 3

Recall and use multiplication and division facts for the 3, 4 and 8 multiplication tables.

Pupils continue to practise their mental recall of multiplication tables when they are calculating mathematical statements in order to improve fluency. Through doubling, they connect the 2, 4 and 8 multiplication tables.

Autumn		Spring		Summer	
Revise	New facts	Revise	New facts	Revise	New facts
All facts of 2,5 and 10	4x4, 6x4, 7x4, 8x4, 9x4 11x4, 12x4 (3x4, 5x4, 10x4 learnt due to commutativity) 1x8, 6x8, 7x8, 9x8, 11x8, 12x8 (2x8, 3x8, 4x8, 5x8, 10x8 learnt due to commutativity)	All facts of 2, 4, 5, 8 and 10	No new facts	All facts of 2, 3, 4, 5, 8 and 10	3x3, 4x3, 6x3, 7x3, 8x3 11x3, 12x3 (2x5, 3x5 and 3x10 learnt due to commutativity)

Year 4

Recall multiplication and division facts for multiplication tables up to 12×12

Pupils continue to practise recalling and using multiplication tables and related division facts to aid fluency.

Pupils write statements about the equality of expressions (for example, use the distributive law $39 \times 7 = 30 \times 7 + 9 \times 7$ and associative law $(2 \times 3) \times 4 = 2 \times (3 \times 4)$).

Autumn		Spring		Summer	
Revise	New facts	Revise	New facts	Revise	New facts
All facts of 2, 3, 4, 5, 8	6, 9	All facts of 2,3,4,5,6,8,9 &	7, 11,12	All facts of	No new facts
and 10		10		2,3,4,5,6,7.8,9,10, 11 &12	
	<u>6 times table</u>		7 times table		
	6x6, 7x6, 9x6, 11x6, 12x6		7x7, 9x7, 11x7, 12x7		
	(2x6, 3x6, 4x6, 5x6, 8x6,		(2x7, 3x7, 4x7, 5x7, 6x7,		
	10x6 learnt due to		8x7, 10x7 learnt due to		
	commutativity)		commutativity)		
	9 times table		11 times table		
	9x9		11x11, 12x11		
			(2x11, 3x11, 4x11, 5x11,		
			6x11, 7x11, 8x11, 9x11,		

(2	2x9, 3x9, 4x9, 5x9,	10x11 learnt to	
6	5x9,7x9, 8x9, 10x9, 11x9,	commutativity)	
1	2x9		
le	earnt due to	12 times table	
C	commutativity)	12x12	
		(2x12, 3x12, 4x12, 5x12,	
		6x12, 7x12, 8x12, 9x12,	
		10x12, 11x12 learnt to	
		commutativity)	

Year 5 & 6

Identify multiples and factors, including finding all factor pairs of a number, and common factors of 2 numbers

Multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers Multiply and divide numbers mentally, drawing upon known facts

Divide numbers up to 4 digits by a one-digit number using the formal written method of short division and interpret remainders appropriately for the context

Autumn		Spring		Summer	
Revise	New facts	Revise	New facts	Revise	New facts
Consolidate all facts with long multiplication					