Key of Text Colours

EYFS Development Matters (DM) Objectives & NC Objectives

Key concepts that create solid foundations in EYFS to build upon for the NC Objectives

NC Objective appears elsewhere within the same topic progression document

NC Objective also appears in another topic progression document

## Rothersthorpe Primary School

## Number: Multiplication & Division - Progression Document

Reception	Year 1	Year 2	Year 3	Year 4	Year 5	Year 6
40-60+						
mths						
ELG: They	Count in	Count in steps	Count from 0 in	Count in multiples of 6,	Count forwards or backwards	
solve	multiples of	of 2, 3, and 5	multiples of 4, 8, 50	7, 9, 25 and 1000.	In steps of powers of 10 for	
problems, including	twos, nves and	tons from any	dilu 100.	(Number: Place value		
doubling	(Number: Place	number		NC Objective).	(Number: Place Value NC	
halving and	Value NC	forward or	Objective)		Objective)	
sharing	Objective)	backward.	objectivej.		objective).	
Sharing.	0.5,000,000,000	(Number:				
		Place Value				
		NC Objective).				
		Recall and use	Recall and use	Recall multiplication		
		multiplication	multiplication and	and division facts for		
		and division	division facts for	multiplication tables up		
		facts for the 2,	the 3, 4 and 8	to 12 × 12		
		5 and 10	multiplication			
		multiplication	tables.			
		tables,				
		including				
		recognising				
		oud and even				
FIG: They	Solve one-sten	numbers.	Write and calculate	Use place value known	Multinly and divide numbers	Perform mental calculations
solve	problems		mathematical	and derived facts to	mentally drawing upon	including with mixed
problems.	involving		statements for	multiply and divide	known facts.	operations and large
including	multiplication		multiplication and	mentally, including:		numbers.
doubling,	and division,		division using the	multiplying by 0 and 1;		
halving and	calculating the		multiplication	dividing by 1;		
<mark>sharing.</mark>	answer using		tables that they	multiplying together		
	concrete		know, including for	three numbers.		

	objects,		two-digit numbers			
	pictorial		times one-digit			
	representations		numbers, using			
	and arrays with		mental and			
	the support of		progressing to			
	the teacher.		formal written			
	(Objective also		methods.			
	shown in		(Objective also			
	Problem		shown in Written			
	Solving).		Methods).			
		Show that		Recognise and use	Multiply and divide whole	Associate a fraction with
		multiplication		factor pairs and	numbers and those involving	division and calculate
		of two		commutativity in	decimals by 10, 100 and 1000	decimal fraction equivalents
		numbers can		mental calculations.		(e.g. 0.375) for a simple
		be done in any		(Objective also shown		fraction (e.g. $^{3}/_{8}$ )
		order,		in in Properties of		(Fractions NC Objective).
		(commutative)		Numbers).		
		and division of				
		one number				
		by another				
		cannot.				
In practical		Calculate	Write and calculate	Multiply two-digit and	Multiply numbers up to 4	Multiply multi-digit numbers
activities		mathematical	mathematical	three-digit numbers by	digits by a one- or two-digit	up to 4 digits by a two-digit
and		statements for	statements for	a one-digit number	number using a formal	whole number using the
discussion,		multiplication	multiplication and	using formal written	written method, including	formal written method of
beginning to		and division	division using the	layout.	long multiplication for two-	long multiplication.
use the		within the	multiplication		digit numbers.	
vocabulary		multiplication	tables that they			
involved in		tables and	know, incl for two-			
adding and		write them	digit numbers times			
subtracting.		using the	one-digit numbers,			
		multiplication	using mental and			
Records,		(×), division	progressing to			
using marks		(÷) and equals	formal written			
that they		(=) signs	methods.			
can			(Objective also			
interpret			shown in Mental			
and explain.			Methods).			

		Divide numbers up to 3	Divide numbers up to 4 digits	Divide numbers up to 4-
		digits by a one-digit	by a one-digit number using	digits by a two-digit whole
		number using the	the formal written method of	number using the formal
		formal written method	short division and interpret	written method of short
		of short division	remainders appropriately for	division where appropriate
		including those with a	the context.	for the context divide
		remainder written as 'r'		numbers up to 4 digits by a
		(This is not statutory		two-digit whole number
		until Year 5 but as a		using the formal written
		school we have decided		method of long division and
		this step to be		interpret remainders as
		necessary in this year		whole number remainders
		aroun to sunnort		fractions or by rounding as
		progression in this grea		appropriate for the context
		through VE and VE		
		<mark>through 15 tht 10</mark> 7.		Use written division
				methods in cases where the
				answer has up to two
				desimal places (Fractions:
				using docimals NC
				Objective)
		December and use		
		Recognise and use	factors including finding all	identity common factors,
		factor pairs and	factors, including finding all	common multiples and
		commutativity in	ractor pairs of a number, and	prime numbers.
		mental calculations.	common factors of two	lies commence fronte as to
		(Objective also shown	numbers.	Use common factors to
		In Mental Calculation).	Know and use the vocabulary	simplify fractions; use
			of prime numbers, prime	common multiples to
			factors and composite (non-	express fractions in the
			prime) numbers.	same denomination.
			Establish whether a number	(Fractions NC Objective).
			up to 100 is prime and recall	
			prime numbers up to 19.	
			Recognise and use square	Calculate, estimate and
			numbers and cube numbers,	compare volume of cubes
			and the notation for squared.	and cuboids using standard
			(໌) and cubed (ႆ)	units, including cm cubed
				(cm <sup>3</sup> ) and cubic metres (m <sup>3</sup> ),

			and extending to other units such as mm <sup>3</sup> and km <sup>3</sup> (Measures NC Objective).
			Use their knowledge of the order of operations to carry out calculations involving the four operations.
	Estimate the answer to a calculation and use inverse operations to check answers. (Addition & Subtraction NC Objective).	Estimate and use inverse operations to check answers to a calculation. (Addition & Subtraction NC Objective).	Use estimation to check answers to calculations and determine, in the context of a problem, levels of accuracy.