

# Fluent in Five

## Progression in Objectives Document

Year 3

# Progression in Objectives

This shows the objectives for Year 3 that can be tested in the arithmetic paper. These are shown alongside Year 2 objectives, which by the start of Year 3 it is assumed all children will be secure in. The Fluent in Five daily challenges are based on children progressing to Year 3 objectives throughout the first term, with the majority of calculations objectives secure by the start of spring term.

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## Number and place value

	Content domain references	End of Year 2	End of Year 3
<b>Number and place value</b>	<b>N1</b> Counting in multiples (NB: Can be used for multiplication questions in arithmetic papers).	Count in steps of 2, 3 and 5, from 0, and in tens from any number, forward or backward.	Count from 0 in multiples of 4, 8, 50 and 100.
	<b>N2</b> Reading and writing numbers.	Read and write numbers to at least 100 in numerals and in words.	Read and write numbers to 1,000 in numerals and in words.
	<b>N3</b> Compare and order numbers.	Compare and order numbers from 0 up to 100, use $<$ , $>$ and $=$ signs.	Compare and order numbers from 0 up to 999, use $<$ , $>$ and $=$ signs.
	<b>N4</b> Finding 10 and 100 more or less (mentally).		Find 10 or 100 more or less than a given number.
	<b>N5</b> Place value in numbers.	Recognise the place value of each digit in a two-digit number (tens and ones).	Recognise the place value of each digit in a three-digit number (hundreds, tens and ones).

# The four operations

	Content domain references	End of Year 2	End of Year 3
<b>The four operations</b>	<b>C KS1 1</b> Number bonds and known facts (addition).	Recall and use addition facts to 20 fluently, and derive and use related facts up to 100.	
	<b>C KS1 2</b> Number bonds and known facts (subtraction).	Recall and use subtraction facts to 20 fluently, and derive and use related facts up to 100.	
	<b>C1</b> Mental addition and subtraction.	a) Add and subtract a two-digit number and ones.	a) Add and subtract numbers with up to three digits and ones.
		b) Add and subtract a two-digit number and tens.	b) Add and subtract numbers with up to a three digits and tens.
			c) Add and subtract numbers with up to a three digits and hundreds.
		d) Add and subtract two two-digit numbers (no crossing of tens boundary).	d) Add and subtract two two-digit numbers (no crossing of tens boundary).
e) Add three one-digit numbers.	e) Add three one-digit numbers.		

	Content domain references	End of Year 2	End of Year 3
<b>The four operations</b> (continued)	<b>C2</b> Written addition and subtraction.	Add and subtract numbers using concrete objects and pictorial representations, including: <ul style="list-style-type: none"> <li>• a two-digit number and ones.</li> <li>• a two-digit number and tens.</li> <li>• two two-digit numbers.</li> <li>• adding three one-digit numbers.</li> </ul>	Add and subtract numbers with up to three digits, using formal written methods of columnar addition and subtraction.
	<b>C3</b> Known multiplication and division facts.	a) Recall and use multiplication and division facts for the 2 times multiplication table, including recognising odd and even numbers.	a) Recall and use multiplication and division facts for the 4 times table.
		b) Recall and use multiplication and division facts for the 5 times multiplication table.	b) Recall and use multiplication and division facts for the 8 times multiplication table.
c) Recall and use multiplication and division facts for the 10 times multiplication table.		c) Recall and use multiplication and division facts for the 3 times multiplication table.	

	Content domain references	End of Year 2	End of Year 3
<b>The four operations</b> (continued)			d) Recall and use multiplication and division facts for the 2, 5 and 10 times multiplication table.
	<b>C4</b> Known multiplication and division facts		a) Use place value, known and derived facts to multiply by 0.
			b) Use place value, known and derived facts to multiply and divide by 1.
	<b>C8</b> Multiplication and Division (informal methods).	a) Calculate mathematical statements for multiplication within the known multiplication tables and write them using the multiplication ( $\times$ ) and equals (=) signs.	a) Calculate mathematical statements for multiplication within the known multiplication tables and write them using the multiplication ( $\times$ ) and equals (=) signs.
b) Calculate mathematical statements for division within the known multiplication tables and write them using the division ( $\div$ ) and equals (=) signs.		b) Calculate mathematical statements for division within the known multiplication tables and write them using the division ( $\div$ ) and equals (=) signs.	

# Fractions

	Content domain references	End of Year 2	End of Year 3
<b>Fractions</b>	F1 Fractions of numbers.	Recognise, find, name and write fractions $\frac{1}{2}$ , $\frac{1}{4}$ , $\frac{2}{4}$ and $\frac{3}{4}$ of a length, shape, set of objects or quantity.	Recognise, find and write fractions of a discrete set of objects: unit fractions and non-unit fractions with small denominators (minimum denominators of 2, 3, 4, 5, 6, 7, 8, 9, 10).
	F3 Types of fractions.	Write simple fractions [e.g. $\frac{1}{2}$ of 6 = 3].	Recognise and use fractions as numbers: unit fractions and non-unit fractions with small denominators.
	F4 Equivalent fractions.	Recognise the equivalence of $\frac{1}{2}$ and $\frac{2}{4}$	Recognise and show, using diagrams, equivalent fractions with small denominators.
	F5 Calculations with fractions.		Add and subtract fractions with the same denominator within one whole [e.g. $\frac{5}{7} + \frac{1}{7} = \frac{6}{7}$ ].