

Maths in Group 4 at International School Haarlem

At International School Haarlem we aim to provide children with consistent and secure mathematical language, representations, and methods as they move up through the groups. These progress alongside their mathematical understanding and in combination with a range of concrete resources.

This document shows the National Curriculum goals alongside the mathematical language (new vocabulary in blue), representations, and methods the children are expected to have covered by <u>the end</u> of Group 4. In addition, it shows the concrete materials the children will use to support their learning and comprehension.

Place Value

National Curriculum Goals	Key Vocabulary	Representations	Concrete Resources
Group 4	Group 4	Group 4	Group 4
• count from 0 in multiples of	Zero	Part-whole m <mark>od</mark> el	
4, 8, 50 and 100; find 10 or	Ones Tens	(265)	Bead strings
100 more or less than a	Hundreds		-99999000-00999999
given number	Partition	(164)	
 recognise the place value 	-teen number -ty number		Number lines (unlabelled)
of each digit in a three-digit	Place value	Bar model	
number (hundreds, tens,	Value		
ones)	Place holder		Base ten Place value counters
compare and order	Compare Equal to / the same as (=)	Place value chart	
numbers up to 1000	Smaller / fewer / less / is less than (<)		
identify, represent and	Smallest / fewest / least	Tens	80 10
estimate numbers using	More / bigger/ larger / greater / greater than (>)	O P	
different representations	Most / biggest / largest /greatest		Counting rack
• read and write numbers up	Order		1000
to 1000 in numerals and in	Ascending Descending		97000 97000 97000 97000
words	Before / 1 less / 10 less / 100 less		999 1994 1999 1999
solve number problems	After / 1 more / 10 more / 100 more		
and practical problems	Skip counting / counting by / counting		Snapcubes Counters
involving these ideas	in / times tables / multiples of		•••••
	Round to the nearest 10 / 100 Round up		
	Round down		Place value cards
	Number		800 90 0 3
	Number in words		
	Digit		100 20 190
	Symbol		
	How many?		

Addition & Subtraction

National Curriculum Goals	Key Vocabulary	Calculation Methods / Representations	Concrete Resources
Group 4	Group 4	Group 4	Group 4
add and subtract numbers	Add / Total / Plus / Together /	Part-whole model	
mentally, including:	Altogether / Addition / Sum /		Bead strings
 a three-digit number and 	More	265)	-99999000-00999999
ones		(?)	
 a three-digit number and 	Take away / <mark>Minu</mark> s / Less /	(164)	November to a femile to the th
tens	Subtract / Fewer / Differenc <mark>e</mark> / Left		Number lines (unlabelled)
 a three-digit number and 	over	Bar model	+ 2 + 21
hundreds	A P	?	
add and subtract numbers with	Is / Equal / Is equal to	265 164	38 40 61
up to three digits, using formal		164	
written methods of columnar	# more / counting on / how many	Number line	Base ten Counting rack
addition and subtraction	more?	. 2	00000
estimate the answer to a	# less / counting back / how many	+2 +21	0000019999
calculation and use inverse	less?	38 40 61	000000000
operations to check answers	Number sentence / Number	Unadred envers	
solve problems, including	problem / Equation	Hundred square	Cubes
missing number problems, using	problem / Equation	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20	Counters
number facts, place value, and	Digit	21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38) 39 40	•••••
more complex addition and	Digit.	41 42 (43) 44 45 46 47 48 49 50 51 52 53 54 55 56 57 88 59 60	
subtraction.	Fact fa <mark>mi</mark> ly	61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80	Place value counters
	Number bond	81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100	
	Number facts		6 3 0 5 3 0 % a 1 2 10
	Next multiple of ten	Column method	60 60 10 10 10 10 10
	Previous multiple of ten	Hundreds Tens Ones Hundreds Tens Ones	
		265 + 164	
	Missing number	429	
	Inverse		
	Crossing 10 / exchange / crossing		
	100		
	100		

Multiplication & Division

National Curriculum Goals	Key Vocabulary	Calculation Methods / Representations	Concrete Resources
Group 4	Group 4	Group 4	Group 4
 recall and use multiplication 		Bar model	Numicon
and division facts for the 3,	Doubling	?	
4 and 8 multiplication tables	Halving		
write and calculate	Same and and distant		
mathematical statements	Repeated addition Multiplication	Number li <mark>ne (u</mark> n <mark>la</mark> belled)	Counters
for multiplication and	Multiply	0 4 8 12 16 20 24 28 32 36 40 44 48	
division using the	Multiplied by / times / groups of	Hundred square	
multiplication tables that	Multiple	1 2 3 4 5 6 7 8 9 10	
	Array(s) – Row and Column	11 (1) 13 14 15 (16) 17 18 19 (2)	Place value counters
they know, including for		21 22 23 29 25 26 27 28 29 30	Tide value counters
two-digit numbers times	Division	31 32 33 34 35 36 37 38 39 40	6 2 2 0 % a 6 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2
one-digit numbers, using	Dividing / divide by / divide into	41 42 43 49 45 46 47 49 49 50	6 6 6 10 10 10 10 10 10 10 10 10 10 10 10 10
mental and progressing to	Grouping / equal groups of	Groups	
formal written methods	Sharing / share equally	\sim	Counting rack
solve problems, including	Left / left over / remainder		0000 1330 0000 1330 0000 1330
missing number problems,	Number sentence / Number		00000 11101- 00000 11101- 00000 11010-
involving multiplication and	problem / Equation	Arrays	9999
division, including positive	problem, Equation	5+5+5+5=20	
integer scaling problems	Fact family	$4 \times 5 = 20$	Base ten
and correspondence	Multiplication fact	5 × 4 = 20	
problems in which n objects	Division fact	374-20	
are connected to m objects.	Inverse	Expanded column method	
		Hirduck Tee Deas H T O	
	Number pattern	anna × 5	
		2 0 (5×4)	
		+ 1 5 0 (5×30)	
		$34 \times 5 = 170$	
		34 X 5 = 1/U	