## Buckingham Park Cof E Primary School Maths Progression documents **Place Value**



Objectives	Y1	Y2	Y3	Y4	Y5	Y6
National curriculum objectives	-count to and across 100, forwards and backwards, beginning with 0 or 1, or from any given number -Count numbers to 100 in numerals; count in multiples of twos, fives and tens -identify and represent numbers using objects and pictorial representations -read and write numbers to 100 in numerals -read and write numbers from 1 to 20 in numerals and words -given a number, identify one more and one less	-count in steps of 2, 3, and 5 from 0, and in tens from any number, forward and backward -read and write numbers to at least 100 in numerals and in words -identify, represent and estimate numbers using different representations, including the number line -recognise the place value of each digit in a two-digit number (tens, ones) - compare and order numbers from 0 up to 100; use <, > and = signs -use place value and number facts to solve problems	-count from 0 in multiples of 4, 8, 50 and 100; find 10 or 100 more or less than a given number -identify, represent and estimate numbers using different representations - read and write numbers up to 1000 in numerals and in words -recognise the place value of each digit in a three-digit number (hundreds, tens, ones) -compare and order numbers up to 1000 -solve number problems and practical problems involving these ideas	-count in multiples of 6, 7, 9, 25 and 1000 -count backwards through zero to include negative numbers -identify, represent and estimate numbers using different representations -read Roman numerals to 100 (I to C) and know that over time, the numeral system changed to include the concept of zero and place value -find 1000 more or less than a given number -recognise the place value of each digit in a four-digit number (thousands, hundreds, tens, and ones) -order and compare numbers beyond 1000 -round any number to the nearest 10, 100 or 1000 -solve number and practical problems that involve all of the above	-count forwards or backwards in steps of powers of 10 for any given number up to 1 000 000 -count forwards and backwards with positive and negative whole numbers, including through zero -read, write, (order and compare) numbers to at least 1 000 000 and determine the value of each digit - read Roman numerals to 1000 (M) and recognise years written in Roman numerals -(read, write) order and compare numbers to at least 1 000 000 and determine the value of each digit -interpret negative numbers in context - round any number up to 1 000 000 to the nearest 10, 100, 1000, 10 000 and 100 000 - solve number problems and practical	-read, write, (order and compare) numbers up to 10 000 000 and determine the value of each digit -(read, write), order and compare numbers up to 10 000 000 and determine the value of each digit -round any whole number to a required degree of accuracy - use negative numbers in context, and calculate intervals across zero - solve number and practical problems that involve all of the above

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				and with increasingly	problems that involve	
				large positive numbers	all of the above	
Dfe ready	<b>1NPV-1</b> Count within	2NPV-1 Recognise the	<b>3NPV-1</b> Know that 10	<b>4NPV-1</b> Know that 10	<b>5NPV-1</b> Know that 10	6NPV-1 Understand the
to	100, forwards and	place value of each digit	tens are equivalent to 1	hundreds are equivalent	tenths are equivalent to	relationship betweer
progress	backwards, starting	in two-digit numbers,	hundred, and that 100 is	to 1 thousand, and that	1 one, and that 1 is 10	powers of 10 from 1
criteria	with any number.	and compose and	10 times the size of 10;	1,000 is 10 times the size	times the size of 0.1.	hundredth to 10 million
		decompose two-digit	apply this to identify and	of 100; apply this to	Know that 100	and use this to make a
	1NPV-2 Reason about	numbers using standard	work out how many 10s	identify and work out	hundredths are	given number 10, 100
	the location of numbers	and non-standard	there are in other three-	how many 100s there	equivalent to 1 one, and	1,000, 1 tenth, 1
	to 20 within the linear	partitioning.	digit multiples of 10	are in other four-digit	that 1 is 100 times the	hundredth or 1
	number system,		<b>3NPV-2</b> Recognise the	multiples of 100	size of 0.01. Know that	thousandth times the
	including	2NPV-2 Reason about	place value of each digit	<b>4NPV-2</b> Recognise the	10 hundredths are	size (multiply and divide
	comparing using < > and	the location of any two-	in three-digit numbers,	place value of each digit	equivalent to 1 tenth,	by 10, 100 and 1,000).
	=	digit number in the	and compose and	in four-digit numbers,	and that 0.1 is 10 times	6NPV-2 Recognise the
	-count in steps of 2, 3,	linear number system,	decompose three-digit	and compose and	the size of 0.01	place value of each digi
	and 5 from 0, and in	including	numbers using standard	decompose four-digit	<b>5NPV-2</b> Recognise the	in numbers up to 10
	tens from any number,	identifying the previous	and nonstandard	numbers using standard	place value of each digit	million, including
	forward and backward	and next multiple of 10	partitioning.	and non-standard	in numbers with up to 2	decimal fractions, and
	-read and write		<b>3NPV-3</b> Reason about	partitioning.	decimal places, and	compose and
	numbers to at least 100		the location of any	4NPV-3 Reason about	compose and	decompose numbers up
	in numerals and in		three-digit number in	the location of any four-	decompose numbers	to 10 million using
	words		the linear number	digit number in the	with up to 2 decimal	standard and non
	- identify, represent and		system, including	linear number system,	places using standard	standard partitioning
	estimate numbers using		identifying the previous	including identifying the	and non-standard	6NPV-3 Reason about
	different		and next multiple of	previous and next	partitioning.	the location of any
	representations,		100 and 10	multiple of 1,000 and	<b>5NPV-3</b> Reason about	number up to 10 million
	including the number		<b>3NPV-4</b> Divide 100 into	100, and rounding to the	the location of any	including decima
	line		2, 4, 5 and 10 equal	nearest of each.	number with up to 2	fractions, in the linea
			parts, and read	<b>4NPV-4</b> Divide 1,000	decimals places in the	number system, and
			scales/number lines	into 2, 4, 5 and 10 equal	linear number system,	round numbers, as
			marked in multiples of	parts, and read	including identifying the	appropriate, including ir
			100 with 2, 4, 5 and 10	scales/number lines	previous and next	contexts.
			equal parts.	marked in multiples of	multiple of 1 and 0.1 and	<b>6NPV-4</b> Divide powers
				1,000 with 2, 4, 5 and 10	rounding to the nearest	of 10, from 1 hundredth
				equal parts.	of each.	to 10 million, into 2, 4, 5
					<b>5NPV-4</b> Divide 1 into 2,	and 10 equal parts, and
					4, 5 and 10 equal parts,	read scales/number

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					and read scales/number	lines with labelled
					lines marked in units of	intervals divided into 2,
					1 with 2, 4, 5 and 10	4, 5 and 10 equal parts.
					equal parts.	
					5NPV-5 Convert	
					between units of	
					measure, including	
					using common decimals	
					and fractions.	
Power	Textbook 1A	Textbook 2A	Textbook 3A	Textbook 4A	Textbook 5A	Textbook 6A
Maths	Taught in Autumn	Taught in Autumn	Taught in Autumn	Taught in Autumn	Taught in Autumn term	Taught in Autumn
unit/s and	Unit 1: Numbers to 10 –	Unit 1: Numbers to 100	Unit 1: Place value	Unit 1: Place value – 4	Unit 5: Fractions (1)–	Unit 1: Place value
when	lessons 2,6,7,8 (1NPV-1)	– lesson 3,4,6,7,8	within 1000 – lesson	digit numbers (1)	lessons 6 and 7 (5NPV-	within 10,000,000 –
taught in	Lessons 11, 12 and 13	(2NPV-1)	3,4,5 (3NPV-1)	lessons 2,3 and 8	4)	lessons 1,2,4 (6NPV-1)
school	(1NPV-2)	Lesson 13,14,15 (2NPV-	Lessons 4-,7 (3NPV-2)	(4NPV-1)		Lesson 5-7 (6NPV-3)
	Unit 6: Numbers to 20	2)	Lesson 8-12 (3NPV-3)	Lessons 5 and 6 (4NPV-	Textbook 5B	Lesson 5 and 8 (6NPV-4)
	- lesson 1 and 7 (1NPV-		Lessons 8 and 9 (3NPV-	2)	Taught in Spring	
	1)		4)	Lesson 7 – (4NPV-3)	Unit 9: Decimals &	Textbook 6B
	Lesson 9,11,12 (1NPV -			Lesson 2 – (4NPV-4)	Percentages – lessons	Taught in Spring
	2)		Textbook 3B		4,6,7 (5NPV-1)	Unit 9: Decimals –
			Taught in Spring	Unit 2: Place value – 4	Lessons 9-12 (5NPV-3)	lesson 4 and 5 (6NPV-1)
	Textbook 1B		Unit 6:Multiplication	digit numbers (2)		
	Taught in the Spring		and division (3) lesson 1	Lessons 1-6 and lesson	Textbook 5C	T 11 1 CO
	term		(3NPV-1)	8 (4NPV-4)	Taught in Summer	Textbook 6C
	Unit 8: Numbers to 50 –				Unit 14 – Decimals –	Taught in Summer
	lessons 1 and 2 (1NPV-				lesson 13 and 15 (5NPV-	Unity 12 – Statistics –
	1)				1)	lesson 1 and 2 (6NPV-4)
	Textbook 1C				Unit 16: Measure –	
					converting units Lessons 1-6 (5NPV-5)	
	Taught in the Summer				ressour 1-0 (2MAA-2)	
	term.					
	Unit 14: Numbers to					
	100 – lesson 1 (1NPV-1)					

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Other	-Daily Fluent in 5 tasks					
resources	-White Rose -Autumn 1,	-White Rose – Autumn 1	-White Rose: Autumn 1,	-White Rose: Autumn 1,	-White Rose: Autumn 1,	-White Rose: Autumn 1
to aid	Spring 1,Spring 3,Summer	-NCETM pages 9-11	Autumn 3	Autumn 4	Summer 4	-NCETM pages 9-11
teaching	4	https://www.ncetm.org.u	-NCETM pages 9-12	-NCETM pages 9-11	-NCETM pages 9-13	https://www.ncetm.org.u
teaching	-NCETM pages 9-12	k/media/dnobtk14/maste	https://www.ncetm.org.u	https://www.ncetm.org.u	https://www.ncetm.org.u	k/media/uitj1x5g/mastery
	https://www.ncetm.org.u	ry assessment yr2.pdf	k/media/oaqfcvjq/master	k/media/x45na0cs/master	k/media/lp0o2lgv/mastery	assessment y6.pdf
	k/media/qjpctp24/master		y assessment y3.pdf	y assessment y4.pdf	assessment y5.pdf	
	y_assessment_y1.pdf					

## Links to further activities to aid teaching:

White Rose materials link: <a href="https://whiterosemaths.com/resources?year=year-1-new">https://whiterosemaths.com/resources?year=year-1-new</a>

NCETM materials link: <a href="https://www.ncetm.org.uk/classroom-resources/exemplification-of-ready-to-progress-criteria/">https://www.ncetm.org.uk/classroom-resources/exemplification-of-ready-to-progress-criteria/</a>

NCETM activities link: https://www.ncetm.org.uk/classroom-resources/assessment-materials-primary/

NRICH - PRIMARY CURRICULUM MAP FOR ALL TOPICS

 $\underline{https://docs.google.com/spreadsheets/d/1bIrdv1M9pKzoKrHeyxT5rkHbJUIJJWjYug2k4Xe9\_es/edit\#gid=5}$ 

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## Key: Highlighted objectives above link to the topic of place value taught

Red = counting

Blue = Representing

Green = Use and compare

Orange = Problem solving/rounding