Milestones for when children are expected to attain declarative knowledge						
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences		
Nursery - Number/Place value						
<mark>I know that I can recognise</mark>	I know how to count to five objects	I know when counting forwards	Zero, ones, tens	• There are altogether.		
<mark>numerals 1 to 5.</mark>	by saying one number name for	each number is one more than the	number	• is one more than		
	each item.	number before.	one, two, three, four, five	• is one less than		
I know that counting can go			none	• I can subitise		
forward or backwards.	I know how to identify numbers 1	I know when counting backwards	how many?	• This set has objects in		
	- 5.	each number is one less than the	count, count (up) to, count on	• There are more/less objects in this		
<mark>I know that I can recognise</mark>		number before.	(from, to),	group.		
<mark>numbers 1 — 5.</mark>	I know how to recognise the		count back (from, to)	\cdot I know that the next number is		
	number of objects in a group	I know when comparing two small	count in ones, twos.			
I know that I can say numbers 1 –	(within 5) without counting.	groups how to identify how many	is the same as			
5.		are in each group.	more, less			
	I know how to identify the number		odd, even			
I know that I can recognise sets of	that comes before and after 1-3	I know when counting how to link	few, pattern, pair, ones, tens			
1, 2 and 3.		the number symbol with its	digit, the same number as,			
	I know how to use the language of	cardinal value.	more, larger, bigger, greater			
I know that dots can be arranged	'more' and 'fewer' to compare two		fewer, smaller, less			
in different ways to represent the	sets of objects.		fewest, smallest, least			
same number.			most, biggest, largest, greatest			
	I know how to say the number		one more, one less			
I know that one number can be	that is one more than a 1-3.		compare			
made from (composed from) two or			order			
more smaller numbers.	I know how to use objects and		size			
	pictorial representations to help		first, second, third, fourth, fifth			
	me.		last, last but one			
			before, after			
	I know how to compare two small		next			
	groups of up to five objects.		between			
	I know how to explore all the ways					
	that five can look.					

Milestones for when children are expected to a	ttain declarative knowledge			-
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences
Reception - Number/Place value				
<mark>I know that I can recognise</mark>	I know how to count up to ten	I know when counting forwards	zero	 This set of objects has been
numerals 1 to 10.	objects by saying one number	the numbers will get greater.	number	sorted by
	name for each item.		one, two, three to twenty and	• I could also sort the objects by
I know that counting can go		I know when counting backwards	beyond	•does belong in the set
forward or backwards.	I know how to use graphics to help	the numbers will get smaller.	teens numbers, eleven, twelve	because
	me identify what comes before and		twenty	• The last number I said was ,
I know that I can recognise and	after 1-10.	I know when splitting 10 into	none	so there areobjects in total.
can name 0.		different groups how to explain	how many?	• There areobjects left in the
	I know how to use the language of	their groupings.	count, count (up) to, count on	group.
<mark>I know that I can recognise</mark>	'more' and 'fewer' to compare two		(from, to), count back	• The numeral for is
<mark>numbers 1 to 10.</mark>	sets of objects.	I know when making predictions	(from, to)	• I can use a to represent
		how to use the relationship	count in ones, twos, fives, tens	each
I know that I can recognise sets of	I know how to split 10 into	between consecutive numbers to	is the same as	• There are carrots. I am
numbers to 5.	different groups.	help me.	more, less	using 1 counter to represent each
			odd, even	carrot I needcounters.
I know that numbers can be split	I know the 'one more than/ one		few	 The number that comes after
into different groups.	less than' relationship between		pattern	is
	consecutive numbers.		pair	• 1 more thanis
I know that numbers that come			ones	• 1 less than is
after each other are larger.			tens	Create stories -
			digit	• First there were
I know that numbers that come			the same number as, as many as	Then
before each other are smaller.			more, larger, bigger, greater	Now there are
			fewer, smaller, less	 The number that comes before
			fewest, smallest, least	is
			most, biggest, largest, greatest	
			one more, ten more	
			one less, ten less	
			compare	
			order	
			size	
			first, second, third twentieth	
			last, last but one	
			before, after	
			next	
			between	

Milestones for when children are expected to attain declarative knowledge						
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences		
YEAR 1 - Number/Place value						
I know that I can recognise some numerals of personal significance.	I know how to identify the number that comes before and after 1-10.	I know when to reason about the location of numbers to 20 within the linear number system, including	Numbers to 100; place value; digit, integer; symbol; compare; equal to, more, less, greater than, fewer, less	 This set of objects has been sorted by I could also sort the objects by 		
 I know that I can recognise some numerals of personal significance. I know that counting can go forward or backwards in order. I know that I can recognise and can name 0 and its significance. I know that I can recognise counting patterns from 1 to 100. I know that I can say, read and write numbers to 100 in numerals correctly. I know that I can say, read and write number to 20 in numerals and words. I know that I can recognise the patterns of counting in 2s, 5s and 10s. 	 I know how to taehtijg the humber that comes before and after 1-10. I know how to use the language of 'more' and 'fewer' to compare two sets of objects. I know how to recognise patterns of counting in 2s, 5s, and 10s, I know how to compare numbers up to 20. I know how to say the number that is one more than a given number. I know how to count in multiples of 2s, 5s and 10s. I know how to use objects and pictorial representations to help me. 	I know when to reason about the location of numbers to 20 within the linear number system, including comparing using $\leq \geq$ and $=$. I know when counting forwards the numbers will get greater. I know when counting backwards the numbers will get smaller. I know when counting in multiples of 2 my answer will always end in 2,4,6,8 or 0. I know when counting in multiples of 5, my answer will always end in 5 or 0. I know when counting in multiples of 10, my answer will always end in 0.	Numbers to Too; place value; aigit, integer; symbol; compare; equal to, more, less, greater than, fewer, less than, greatest, smallest; first, second, thirdlast; ones, tens, partition, exchange; order, largest, smallest, number bonds, part, whole; plus; fact family, addition sentence, number sentence; how many more; number line; commutative; addition, more, make, sum, total, add together, altogether; calculation; Inverse equals, is the same as How many altogether? How many are there? groups, groups of, equal groups, unequal groups; row, column, array; number sentence; double, doubles; equal groups of 2, equal groups of 5, equal groups of 10; share, sharing, equally, odd, even, Whole, parts, equal parts, the same; split; groups; share; equally; quarter; four equal parts One half, two halves A quarter, two quarters	 This set of objects has been sorted by I could also sort the objects by does belong in the set because does not belong in the set because The last number I said was, so there areobjects in total. I need to count objects from the group. There areobjects left in the group. The numeral for is I can use a to represent each carrot I need counters. The number that comes after is I more than is I more than Create stories - First there were 		
I know that some small quantities do not need counting.				Then Now there are • The number that comes before is • When counting backwards from the numbers I will say are • 1 less than is • is 1 less than		

Milestones for when children ar	expected to attain	declarative knowledge
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Year 2 – Number/ Place Value					
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences	
I know that I can recognise the	I know how to compare and order	I know when I need to exchange.	units, ones	• There is 1 ten and ones. The	
properties of two-digit numbers.	numbers from 0 to 100, using		tens, hundreds	number is	
	greater than, less than and equals	I know when to use the skill of	digit	• The number after is	
<mark>I know that I can recognise</mark>	signs.	estimation to help me with an	one-, two- or three-digit number	•The number before is	
<mark>numbers up to 100.</mark>		equation.	'teens' number	• in words is	
	I know how to count in steps of 2,		place, place value	• in numerals is	
I know that I can read and write	3 and 5 from 0, and in tens from	I know when comparing numbers,	stands for, represents	•There are tens and	
to at least 100 in numerals and	any number forward and backward	to use my place value knowledge	exchange	ones. The number is	
words.		to help me.	the same number as, as many as	•There are groups of 10 and	
	I know how to recognise the place		equal to	more. There are in	
I know that counting can be done	value of each digit in a 2-digit	I know when to partition to help	Of two objects/amounts:	total.	
in varying step sizes.	number (tens and ones)	me solve a calculation.	greater, more, larger, bigger	• is made up of tens	
			less, fewer, smaller	and ones.	
I know that $<$ means less than, $>$	I know how to partition and	I know when to use place value	Of three or more objects/amounts:	• is a part and is a part.	
means greater than and $=$ means	rearrange numbers to help me	and number facts to solve	greatest, most, biggest, largest	The whole is	
equals to.	solve calculations.	problems.	least, fewest, smallest	•There are tens. In words	
			one more, ten more	this is	
I know that I can recall number	I know how to identify, represent	I know when solving problems with	one less, ten less	• can be partitioned into	
bonds to and within 20 and to	and estimate numbers using	place value how resources can help	compare	and	
<mark>100.</mark>	different representations.	me.	order	• is equal to plus	
			size	•The start point isand the end	
I know that I can describe the	I know that I can recall efficient		first, second, third tenth	point is There are intervals	
properties of two-digit numbers.	methods using number sense, place		twentieth	on the number line. Each interval is	
	value, briaging, near aoubles and		twenty-first, twenty-second	worth The number line is	
I know that I can represent	adjustment strategies.		last, last but one	counting up in	
numbers in different ways.			before, after		
			hetween helf way between		
I know that I can recall the			between, naij-way between		
properties of place value.			above, below		

Milestones for when children are	expected to attain	declarative knowledge
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Year 3 – Number/ Place Value					
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences	
I know that I understand the	I know how to count from 0 in	I know when comparing numbers,	ones, tens, hundreds	•There is tens and ones.	
properties of three-digit numbers.	multiples of 4, 8, 50 and 100; find	how to use place value to help me	digit	•The number is	
	10 or 100 more or less than a	problem solve.	one-, two- or three-digit number	•The represents groups of	
I know that zero can be a place	given number		'teens' number	ten. The represents	
holder in three-digit numbers and		I know when to partition numbers	place, place value	extra ones.	
understand its importance.	I know how to recognise the place	to help me solve calculations.	stands for, represents	•There are tens in 100 and	
	value of each digit in a 3-digit		exchange	hundreds in This	
I know that I can describe the	number (H, T, U)	I know when solving number	the same number as, as many as	means there are tens in	
standard form for writing numbers		problems and practical problems	equal to	• tens and ones is the	
up to 1000.	I know how to compare and order	involving place value, which	Of two objects/amounts:	same as tens and ones.	
	numbers up to 1,000	strategies to use and why.	greater, more, larger, bigger	•There are hundreds, tens	
<mark>I know that I can read and write</mark>			less, fewer, smaller	and ones. The number is	
numbers up to 1,000 in numerals	I know how to identify, represent,	I know when solving number	Of three or more objects/amounts:	·	
<mark>and in words.</mark>	and estimate numbers using	problems which resources will help	greatest, most, biggest, largest	• is made up of hundreds,	
	different representations	me and why.	least, fewest, smallest	tens and ones.	
			one more, ten more, one hundred	• is more/ less than	
I know that one hundred is			more	• can be partitioned into,	
equivalent to ten lots of ten.			one less, ten less, one hundred less	and	
			compare	•When comparing numbers, I start	
I know that ten is equivalent to ten			order	with the place value column.	
lots of ones.			size	• The start point is and the end	
			estimate	point is There are	
I know that I can write numbers in			first, second, third tenth	interval on the number line. Each	
words.			twentieth	interval is worth	
			twenty-first, twenty-second		
I know that I can explain the			last, last but one		
relative position of numbers.			bejore, ajter		
			next		
hands to 20 and 100			between, naij-way between		
bonas to 20 and 100.			above, below		
			ascenaing, descending		

Milestones for when children are expected to attain declarative knowledge	,

Year 4 – Number/ Place Value				
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences
I know that Roman numerals only	I know how to count in multiples	I know when partitioning a	units, ones	•There are hundreds, tens
have three of the same symbols in	of 6,7,9,25 and 1000 and how	number, I can explore efficient	tens, hundreds, thousands	and ones. The number is
them and they are always next to	this can help me solve calculations.	methods to partition in different	ten thousand, hundred thousand,	
each other.		ways through creating friendly	million	•When a number has no, then
	I know how to find 1000 more or	numbers.	digit, one-, two-, three- or four-	we use as a placeholder.
I know that because of the rule of	less than a given number.		digit number	•There are tens in 100 and
order of Roman numerals, when		I know when rounding I need to	numeral	hundred in This means
the symbol is in front it is added to	I know how to compare and order	look at the decider (the digit to the	'teens' number	there are tens in
the amount, however when it is	numbers beyond 1000.	right) to determine if I need to	place, place value	• thousands is equal to
less than the symbol in front of it		round up or round down.	stands for, represents	hundreds.
is subtracted.	I know how to count backwards		exchange	• rounded to the nearest 10/
	through 0 using negative numbers.	I know when comparing numbers, I	the same number as, as many as	100 / 1,000 is
I know that I can recall symbols		need to use my place value	equal to	•The letter represents the
for Roman numerals up to C=100	I know how to recognise the place	knowledge to help me.	Of two objects/amounts:	number
	value of each digit in a four-digit		greater than, more than, larger	• more/ less than is
I know that zero is important in	number (Th, H, T, U).	I know when solving number and	than, bigger than, less than, fewer	•When comparing numbers, I know
the concept of place value as it		practical problems which strategy	than, smaller than	that I need to look at the digits in
acts as a place holder.	I know how to recognise the place	to use and why.	Of three or more objects/amounts:	the column.
	value of each digit to 2 decimal		greatest, most, largest, biggest	•When comparing numbers, if the
I know that there are ten 100s in a	places.	I know when solving number	least, fewest, smallest	digits in the column are the
<mark>thousand.</mark>		problems which resources will help	one ten one hundred one	same, then I need to look in the
	I know how to identify, represent,	me and why.	thousand more/less	column.
I know that 1,000 is ten times	and estimate numbers using		compare, order, size	•The difference between the start
bigger than 100, 100 is ten times	different representations		first tenth twentieth	point and the end point of the line
bigger than 10 and 10 is ten times			last, last but one	is There are intervals
bigger than 1.			before, after, next, between, half-	on the number line. Each interval
	I know how to compare and order		way between, guess how many,	is worth
I know that I can explain the place	decimal numbers with up to two		estimate, nearly, roughly, close to,	
value of numbers beyond 1,000,	decimal places		about the same as, approximate,	
including counting in tens and			approximately, just over, just under	
hundreds.			exact, exactly, too many, too few,	
			enough, not enough	
			round (up or down), nearest	
I know that I understand the rules			round to the nearest ten	
of rounding.			round to the nearest hundred	
			integer, positive, negative	
			above/below zero	
			Koman numerals	

Year 5– Number/ Place Value				
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences
I know that zero is important in	I know how to recognise and use	I know when and why rounding	units, ones	•The value of the in is
the concept of place value as it	thousandths and relate them to	any number up to 1,000,000 to	tens, hundreds, thousands	worth
acts as a place holder.	tenths, hundredths and decimal	the nearest 10, 100, 1,000,	ten thousand, hundred thousand,	•When a number has no then
	equivalents	10,000 and 100,000 can help me	million	we use as a placeholder.
<mark>I know that there are ten 1,000s in</mark>		solve calculations.	digit, one-, two-, three- or four-	•The column before/ after the
<mark>ten thousand.</mark>	I know how to round decimals		digit number	column is the column.
	using my place value knowledge	I know when solving problems	numeral, 'teens' number	•Ten can be exchanged for
<mark>I know that 10,000 is ten times</mark>	and understanding of the high five	involving numbers up to three d.p,	place, place value	
bigger than 1,000, 1,000 is ten	rule to two decimal places to the	which strategy to use and why.	stands for, represents	• rounded to the nearest
<mark>times bigger than 100, 100 is ten</mark>	nearest whole number and to one		exchange, the same number as, as	10/100/1,000 is
<mark>times bigger than 10 and 10 is ten</mark>	decimal place.	I know when comparing numbers, I	many as equal to, greater than,	•The letter represents the
<mark>times bigger than 1.</mark>		need to use my place value	more than, larger than, bigger	number
	I know how to read, write, order	knowledge.	than q, less than, fewer than,	• more/ less than is
I know that I can read and write	and compare numbers to at least		smaller than \geq , greater than or	•The difference between the
numbers with up to 7 digits using	1,000,000 and determine the	I know when solving number and	equal to \leq , less than or equal to,	starting point and the end point of
the comma separator.	value of each digit	practical problems which strategy	greatest, most, largest, biggest,	the line is There are
		to use and why.	least, fewest, smallest	intervals on the number line. Each
I know that I can describe linear	I know how to count forwards or		one ten one hundred one	interval is worth
number sequences.	backwards in steps of powers of		thousand more/less, compare,	•If the digits in the column are
	10 for any given number up to		order, size, ascending/descending	the same. I know I need to look in
I know that I can interpret	1,000,000		order, first tenth twentieth	the column when comparing.
negative numbers in context, count			last, last but one, before, after,	
forwards and backwards with	I know how to read Roman		next, between, half-way between	
positive and negative whole	numerals to 1,000 (M) and		guess how many, estimate	
numbers through 0.	recognise years written in Roman		nearly, roughly, close to, about the	
	numerals		same as, approximate,	
I know how to recall Roman			approximately, is approximately	
numerals up to $M = 1,000$. I	I know how to read, write, order		equal to, just over, just under	
know I understand the rules of	and compare numbers with up to 3		exact, exactly, too many, too few,	
reading Roman numerals including	decimal places using my place		enough, not enough, round (up or	
years.	value knowledge.		down), nearest, round to the	
	The second second second second		nearest ten/nunarea	
	I know now to read and interpret		round to the nearest thousand	
	negative numbers and find		integer, positive, negative	
	ayjerences between negative and		(town on the second sec	
	positive numbers.		(temperature)	

Milestones for when children are expected to attain declarative knowledge	,

Year 6 – Number/ Place Value				
Declarative knowledge	Procedural knowledge	Conditional knowledge	Vocabulary	Stem sentences
I know that I can read and write	I know how to read, write, order	I know when rounding to look at	units, ones	•The value of the in is
numbers with up to 8 digits using	and compare numbers up to	the digit to the right as my decider	tens, hundreds, thousands	worth
the comma separator.	10,000,000 and determine the	and use my place value knowledge	ten thousand, hundred thousand,	•When a number has no, then
	value of each digit	to help me solve problems.	million, digit, one-, two-, three- or	we use as a placeholder.
I know that I can use the whole			four-digit number, numeral, 'teens'	•The column before/ after the
number system, including saying,	I know how to round any whole	I know when multiplying numbers	number, place, place value	column is the column.
reading and writing numbers	number to a required degree of	by power of 10, I can use my	stands for, represents	•The column one space to the
accurately.	accuracy	place value knowledge to calculate	exchange, the same number as, as	left/right is time bigger/
-	_	the answer.	many as, equal to, greater than,	smaller
<mark>I know that there are ten</mark>	I can know how to use negative		more than, larger than, bigger	•Ten can be exchanged for
100,000s in a million.	numbers in context, and calculate	I know when solving number and	than q, less than, fewer than,	
	intervals across 0	practical problems which strategies	smaller than, \geq , greater than or	• rounded to the nearest
I know that 1 million is ten times		to use and why.	equal to, ≤, less than or equal to,	10/100/ 1,000 is
bigger that 100,000, 100,000 is	I know how to calculate with	_	greatest, most, largest, biggest	•The letter represents the
ten times bigger than 10,000,	negative and positive numbers.		least, fewest, smallest,	number
10,000 is ten times bigger than			one ten one hundred one	• more/ less than is
1,000, 1,000 is ten times bigger	I know how to use efficient		thousand more/less	• is away from zero
than 100, 100 is ten times bigger	methods of applying my		compare, order, size	•If the digits in the column
than 10 and 10 is ten times bigger	knowledge of properties of		ascending/descending order	are the same, I need to look in the
than 1.	numbers to help me solve		first tenth twentieth	column.
	calculations.		last, last but one	
			before, after	
			next, between, half-way between	
			guess how many, estimate	
			nearly, roughly, close to, about the	
			same as, approximate,	
			approximately, is approximately	
			equal to, just over, just under	
			exact, exactly, too many, too few,	
			enough, not enough, round (up or	
			down), nearest, round to the	
			nearest ten/hundred/thousand	
			integer, positive, negative	
			above/below zero, minus	
			(temperature)	