‘Learning Pathway’
Goals in stages for Maths- Number skills

Stages 1 and 2 pathway goals				
Number & place value	Co-actively explore 1 thing	Co-actively explore groups of things	Fix attention on an object	Fix attention on a stimulus
	Listen to or watch items related to number songs, counting to 3	Move 1 out of a group of items with support	Respond when a second item is presented to them	Tolerate feeling items co-actively one at a time with adult
Stage 3 pathway goals				
Number & place value	Actively explore 2 things	Shift attention from adult to object with verbal or physical prompts	Shift attention to each object as it is highlighted	Shift attention to each object in counting song as adult identifies it
	Experience listening to number names in song and rhyme	Explore sets of items that are the same	Maintain a hold on two items simultaneously	
Addition & subtraction	Anticipate vanished item will reappear e.g. Jack in box	Shift attention from 1 item to another, moving head	Look from 1 item to another moving head	Use ‘gone’, ‘all gone’
Fractions	Explore cutting or tearing with variety materials with support			
Stage 4 pathway goals				
Number & place value	Actively take part in counting activities and rhymes	Allow an adult to count their fingers or toes in counting game	Anticipate the end of a familiar sequence	Show awareness that gone or none means they are all gone in a counting song
Addition & subtraction	Notice when a quantity alters significantly	Respond to the word ‘and’ in adult led practical activities		
Fractions	With practical support cut up an item and shares it with a friend			
Stage 5 pathway goals, STANDARD 1 PKS1, descriptor goals shaded				
Number & place value	Indicate understanding of number names 1 and 2	Consistently count objects to 3	Distinguish between 1 and lots when shown one item and a group	Identify 1 item
	Indicate 2 items	Indicate a set of 1 item from 3 sets of differing numbers of items	Indicate a set of 2 items from 3+ sets of differing numbers of items	Indicate a set of lots/many
	Join in saying number name in number rhyme or song	Know each item receives only one number in a count	Know lots or many is more than 2	Know when to join in with an action in a song
	Make up sets of items to 3	Understand 1-1 correspondence pairing items to objects in a range of contexts		
Fractions	Demonstrate understanding of word “share” with one other person			

Stage 6 pathway goals, STANDARD 2 PKS1, descriptor goals shaded				
Number & place value	Join in rote count to 5, saying number names in correct order	Makes up sets of items to 5, demonstrating an understanding of the concept of numbers to 5		
Addition & subtraction	Understand and use "more" in relation to quantity	Understand when there is 'more' or 'less' in 2 sets		
Fractions	Divide an item to share between a small group			
Number line	Indicate the next number in a counting song (numbers to 3)			
Create & compare sets & numbers	Know numbers can be used to describe any kind of set of items			
Numerals	Match numerals 1, 2 and 3 to set of size	Recognise numerals 1, 2 and 3		
Stage 7 pathway goals, STANDARD 2 PKS1				
Number & place value	Count objects to 5 reliably	Join in rote count to 10	Know items can be counted in any order and it comes to the same amount	
Addition & subtraction	Take one away from a set	Know how to add one item to a set when asked		
Fractions	Find 2 halves of an item from a group			
Numerals	Recognise numerals to 5	Understand the consistency of numbers in relation to set size		
Stage 8 pathway goals, STANDARD 3 PKS1, descriptor goals shaded				
Number & place value	Continue count up to 10, from small number given	Count up to 10 items in a group	Join in rote count beyond 10	Know last number in the count represents the total number of the count
Addition & subtraction	Add or take away one to or from a set and counts number in group using objects	Find total number in 2 groups by counting all of them	Reliably count forwards or backwards in a game using numbers to 6	
Fractions	Divide a large set of items equally between a small group			
Create & compare sets & numbers	Make simple estimate of number in set of 0 to 10 and then counts to check	Recognise groups of items to 5 on sight or feel		
Numerals	Match numerals to 5 to sets of that number			
Number bonds	Rote count number bonds to 5 using song or rhyme			
Ordinal numbers	Use ordinal numbers in practical situations			
Vocabulary	Use more, less or fewer to describe difference in 2 sets			

Stage 9 pathway goals, STANDARD 3 PKS1				
Number & place value	Compare two numbers to 15 identifying greater or lesser one, with apparatus	Count on from a given number within 15	Count sets of up to 15 items	Create sets and names them from 11-15
Addition & subtraction	Add items to a set to make a total of 5	Complete number bonds to 10 when given part of the sum	Count forwards and backwards 0-10 and 10-0.	
Number line	Identify missing number in number line to 5.	Know the number that is one more than a number up to 10		
Numerals	Order numerals to 5	Recognise numerals 0-5	Write, type or copy the numerals 0-5	
Number bonds	Make and use representations of number bonds to 5			
Vocabulary	Understand the words more, more than and add	Understand the words less, less than and take away		
Stage 10 pathway goals, STANDARD 4 PKS1, descriptor goals shaded				
Number & place value	Count on from a given number within 20	Rote counts to 20 confidently & independently	Count forwards and back 0-20	Count sets of up to 20 items
	Create sets and names them from 15-20.	Identify and represent numbers to at least 20 using resources	Write out simple sums and reads them back	
Addition & subtraction	Add 3 or 4 numbers together where the sum is less than or equal to 10	Add within 10 using items to support counting	Identify how many more are needed when making a total of 10, using items	Know the number that is one less than a number (to 20)
	Know the number that is one more than a number (to 20)	Show an understanding of inverse relationship in addition and subtraction eg if 3+2=5 then 5-2=3	Show that they understand the total has changed when objects are taken away	Understand changing order within sum does not change total (commutative law)
	Understand that the total number of objects changes when objects are added or taken away	Understand that the total number stays the same when the items are rearranged and nothing taken away		
Number line	Count in 2s to 10	Use number lines to 10 to support addition		
Numerals	Identify greater and lesser number when given 2 numerals to 10,	Match numerals 0-9 to sets of that size	Order numerals 0 to 9	Read numerals 0-9
	Write or type numbers in numerals 0-9			
Number bonds	Makes and uses representations of number bonds to 10	Demonstrate an understanding of the composition of numbers to 5 eg 3+1 =4 and 2+2=4	Recall some of number bonds to and within 5	
Problem solving	Solve a number problem involving subtraction of single digit numbers to 10	Solve a number problem involving addition of single digit numbers to 10	Solve contextual problems involving the numbers up to 10 e.g. shop play	Identify addition + and subtraction – sums, when given page with both and solves simple sums
Ordinal numbers	Give instructions using ordinal numbers 1st 2nd 3rd			
Vocabulary & mathematical symbols	Understand the mathematical symbol for add +	Understand the mathematical symbol for equal to =	Understand the mathematical symbol for subtract -	Use and understand the language 'equal to'
	Use and understand the language 'most'	Use and understand 'take away' and 'subtract'	Use and understand the words 'add' and 'plus'	

Stage 11 pathway goals, STANDARD 5: Working towards the KS1 expected standard, goals shaded				
Number & place value	Count in 2s ,5s and 10s	Count forwards 0-50	Identify and use the terms "ten/teen/unit"	Identify the ten and the ones in a two digit number
	Know which number is bigger when comparing 'teens'	Partition a 2 digit number into tens and ones, using resources to support them	Use maths resources to indicate a "one" as compared to a "ten" in a 2 digit number.	Use maths resources to indicate a "ten" as compared to a "one" in a 2 digit number
Addition & subtraction	Add 2-digit numbers and tens where no regrouping required and explain method	Add 2 digit numbers with ones where no regrouping is required and explain method	Add one and two digit numbers	Explain method of adding 2 digit numbers and units or tens using pictures, symbols or words
	Subtract one and two digit numbers	Subtract tens from 2 digit numbers and explains method	Subtract units from 2 digit numbers and explains method	
Fractions	Solve problems for double and half	Recognise and find a half as 1 of 2 equal parts of an object or shape		
Number line	Identify and represent numbers to at least 20 using number line to 20			
Numerals	Match numerals 11-20 to a set of that size	Order numerals for multiples of 10 from 0-100; e.g. 10, 20, 30	Read numerals to 100	Write or type numbers in numerals to 100
Number bonds	Know there is an association in number bond facts for 10 eg if 4+6=10 then 6+4=10	Recall at least 4 of 6 number bonds for 10		
Multiplication & division	Count in 10s from 0-100 and uses to solve problems	Count in 2s from 0 to 100 and uses to solve problems	Count in 5s, from 0-100 and uses to solve problems	Identify that an odd number cannot be shared equally between 2
	Share items equally into set of either 2 or 5 using up to 20 items			
Problem solving	Solve 1 step word problems	Solve a 'missing number' problem, involving 3 numbers using addition and subtraction using 1 digit numbers.	Solve a 'missing number' problem, involving 3 numbers using addition only e.g. 2+?+1=6, using 1 digit numbers	Solve a 'missing number' problem, involving 3 numbers using subtraction only e.g. 6-2-?=2 using 1 digit numbers
Ordinal numbers	Organise and describe people or items using ordinal numbers			
Vocabulary	Understand the terms 'odd' and 'even'			

Stage 12 pathway goals, STANDARD 6: Working at the KS1 expected standard, goals shaded				
Number & place value	Explain thinking behind partitioning of 2 digit numbers into 10s and 1s	Partition 2 digit numbers into different combinations of tens and ones	Identify if a number is odd or even based on the digit in the 1s place	
Addition & subtraction	Add any 2, 2 digit numbers and explains their method	Subtract any 2, 2 digit numbers and explains their method	Subtract 2, 2 digit numbers using a mental strategy	Understand that when subtracting a number (up to 10) the order of numbers does affect the outcome e.g. 3-2=1 does not equal 2-3
Fractions	Identify one half of a number or shape	Identify one quarter of a number or shape	Identify one third of a number or shape	Identify three quarters of a number or shape
	Know equal fractions are equal parts of the whole			
Number line	Identify the scale of different number lines,	Read scales, in divisions of 10s	Read scales in divisions of 5s	Read scales in divisions of 2s
Number bonds	Know all the number bonds to and within 10	Use number bond knowledge to and within 10 to calculate bonds to and within 20		
Multiplication & division	Find out how many 2s or 5's in a set that involves no remainder	Identify a number that is in the 2x table	Identify a number that is in the 10x table	Identify a number that is in the 5x table
	Recall division facts for 2, 5 and 10	Recall multiplication facts for 2, 5 and 10	Share equally between 2, 3, 4 and 5 where no remainders are involved	Use division facts for 2, 5 and 10 to solve problems
	Use multiplication facts for 2, 5 and 10 to solve problems			
Problem solving	Round up a number in a calculation involving 2, 2 digit numbers	Regroup a number in a calculation involving 2, 2 digit numbers	Solve word problems that involve more than 1 step	Solve a 'missing number' problem, involving 3 numbers using addition and subtraction using 2 digit numbers.
	Solve a 'missing number' problem, involving 3 numbers using addition only e.g. 12+? +11=36, using 2 digit numbers	Solve a 'missing number' problem, involving 3 numbers using subtraction only e.g. 36-12-? =12 using 2 digit numbers,		

