Childer Thornton Primary School
Maths progress model for knowledge and skills

	Expectations for Nursery			Expectations for Reception			ELG	Links to KS1
Numerical Patterns Counting	Says number names in an random order	Count beyond 3	Count beyond 5	Counts forwards beyond 10	Counts forwards and backwards beyond 10	Count on from any number up to 20	Verbally count beyond 20, recognising the pattern of the counting system	Given a number, identify 1 more and 1 less.
		Can give you 1 more or take one away than a group of objects up to 3	Can give you 1 more or take one away than a group of objects up to 5	Can give you 1 more and take 1 away than a group of objects up to 10	Using a numberline can find 1 more or one less to numbers beyond 10.	Recite numbers to 20 and back from20. Count on from a given number to 20 and back from a given number 0-10.		Identify and represent numbers using objects and pictorial representations including the number line, and use the language of: equal to, more than, less than (fewer), most, least
	Says some number names but not for each object	Counts objects and actions to 3 saying a name for each one.	Count objects and actions to 5+ (understanding the last number tells you how many you have)		Counts objects and actions to 10+			
Counting vocab	Number Count More Less Same/equal							Read and write numbers from 1 to 20 in numerals and words
Numerical Patterns	Recognise some numbers special to them	Recognise numbers to 3	Recognise numbers to 5	Recognise and write numbers to 5	Recognise and write numbers to 10			
			Can order up to 5		Can order up to 10			

		Can order up to 3					
Number recognition vocab	Order Number name Numbers						
Number Number Composition	Know what 1 or 2 objects are and can give you 1 or 2	Understand what 3 is and can make with different objects	Understands what 4 and 5 looks like and can make with different objects	Understands what numbers 5-10 look like and are able to make using different objects	Able to represent the composition of number through drawings.	Have a deep understanding of numbers to 10 including the composition of number	represent and use number bonds and related subtraction facts within 20
			Able to recall the number bonds to make 3 and 4 (including subtractions facts)	Knows and can recall number bonds to 5 (including subtraction facts)	Knows and can recall number bonds to 6, 7, 8 (including subtraction facts)	Subitise (recognise quantities without counting) up to 5. Automatically recall number bonds up to 5 (including subtraction facts) and some number facts to 10 including doubles.	add and subtract one-digit and two-digit numbers to 20, including 0 solve one-step problems that involve addition and subtraction, using concrete objects and pictorial representations, and missing number problems such as 7 = ? – 9
	Can subitise (to 1)	Can subitise (to 2)	Can subitise (to 3)	Can subitise (up to 4)			
	Can combine groups of objects up to 3 to see how many altogether.		Can combine groups of objects up to 5 and then 10 and say how many they have altogether.	Can add 2 single digit numbers up to 10 representing through drawings			
	Takes some away and knows that they have 'less'		Can solve simple subtraction problems up to 5 then 10 using objects	Subtracts a single digit number from a number up to 10 using drawings			

Number composition vocab	Subitise Combine More Altogether Add Less subtract						
Numerical Patterns **Fractions / Comparison**	Can say which group has more or less up to 3	Can identify when they have the same	Can recognise which group has more, less or the same and use the correct language up to 5.		Can recognise which group has more, less or the same by counting and use the correct language up to 10	Can compare groups of objects up to 10 + understanding the difference between size and quantity	Compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Explore and represent patterns within numbers to 10, including odd and evens, double facts and how quantities can be distributed equally.
	Can share out objects sometimes equally		Can halve/share objects out equally in practical situations		Can halve and share objects out using the part part whole model up to 10		
					Knows that even numbers can be shared and that odd numbers can't		
	Recognise when they have the same as their friend		Recognise when they have the same as their friend and can count to see how many altogether	Can double numbers up to 5 using objects	Can double numbers up to 10 using objects	Can recall double facts up to 10	
Fractions/ comparison vocab	More Less Same Double Compare Half Equal groups						recognise, find and name a half as 1 of 2 equal parts of an object, shape or quantity recognise, find and name a quarter as 1 of 4 equal parts of an object, shape or quantity

Category							
Shape	Has an interest in shapes in the environment	Begins to recognise and name basic 2d shapes with support	Can name basic 2d shapes – circle, square, rectangle, triangle		Can name oval, pentagon, octagon, hexagon		Recognise and name common 2-D shapes, including rectangles (including squares), circles and triangles Recognise and name common 3-D shapes, including cuboids (including cubes), pyramids and spheres
	Uses shapes to make pictures	Selects shapes appropriately e.g. triangle for a roof	Talks about and explores 2D shapes using some mathematical language e.g. corners, sides	Explores how many corners and sides basic 2d shapes have	Explores how many corners and sides other 2d shapes have		
	Has an interest in shapes in the environment	Can correctly match some 3d shapes	Can correctly recognise and name some 3d shapes e.g. cones and spheres		Can correctly recognise and name sphere, cone, cylinder, cuboid and cube	Is beginning to explore other shapes such as pyramids and triangular prisms	
Shape Vocab	2D shape 3Dshapes Shape names Side Corner Vertices Face edge						
Space	Copies and continues repeated patterns with 2 colours		Creates repeated patterns with 2 colours Notices and corrects errors	Continues, copies and recreates repeated patterns ABB, AAB	Continues, copies and recreates repeated patterns AABB, ABBC	Continues, copies and recreates repeated patterns AABBB, ABBCA	Describe position, direction and movement, including whole, half, quarter and three-quarter turns.
	Talks about pattern in the environment (spotty, stripy…)	Can sort items by their colour or pattern	Creates repeated patterns with 2 shapes Notices and corrects errors				

	Copies and continues repeated patterns with 2 numbers		Creates repeated patterns with 2 numbers Notices and corrects errors				
	Uses gestures to understand positional language	Can understand position through words alone	Begins to describe locations using words such as 'in front of' and 'behind'	Can follow instructions using positional language	Uses vocabulary such as 'over', 'above', 'beneath', 'beside'		
Space vocab	Patterns Repeating patterns Shapes colours						
Measurement	Uses 'big' and 'small', 'short' and 'tall to compare size		Uses 'big' and 'small', 'short' and 'tall to compare size	Can order three items by length/height using non-standard measures Uses 'biggest', 'smallest', 'shortest' and 'tallest'		Uses standard measures whilst measuring size	Compare, describe and solve practical problems for lengths and heights
	Uses 'heavy' and 'light'		Make simple comparisons using 'heavier' and 'lighter'	Can order three items by weight using non-standard measures Uses 'heaviest', 'lightest'		Uses standard measures whilst measuring weight	Compare, describe and solve practical problems for mass/weight
	Uses 'full' and 'empty' to compare capacity		Make simple comparisons using 'more' and 'less'	Can order three items by capacity using non-standard measures Uses 'full', 'empty', 'half empty'		Uses standard measures whilst measuring capacity	Compare, describe and solve practical problems for capacity and volume
	Knows day and night	Knows and talks about the events in a day	Can sequence events in the day	Knows days of the week	Begins to use language before, after, yesterday, today, tomorrow		Recognise and use language relating to dates, including days of the week, weeks, months and years
	Understands that we need to pay for items in a shop and can talk about what they would like to buy		Talks about the different ways	Recognises that there are different coins	Can pay for items using 1p coins		Recognise and know the value of different

		we can pay for things				denominations of coins and notes
Measurement vocab	Sequence Tallest Shortest Big Small Weight Heaviest Lightest Longest Length Days of the week Money Coins					