Pickering Community Infant and Nursery School Progress Document
Mathematics

(using EYFS framework, Development Matters, KS1 curriculum and White Rose Maths)

	Nursery	Reception	Year One	Year Two
Number Counting out loud	I can say the number names in order forwards from 0 to 5 I can say the number names in order backwards from 5 to 0 I know that the last number I say is the amount I have I know that even if you move objects/pictures/marks around, the amount stays the same.	I can say the number names in order forwards from 0 to 5/10/20 I can say the number names in order backwards from 20/10/5 to 0 I can count on from any number to 5/10/20 I can count back from any number from 20/10/5	I can count on from any number within 10 I can count backwards from any number within 10 I can count on from a given number to 20 I can count forwards to 20 I can use counting resources to support me I can count forwards and backwards between 20 and 50 I can use different representations to support with counting I can count from 50 to 100 I can use ordinal numbers	I can count in 2s, 5s and 10s I can count in 3s
Counting Place value	I can show different amounts on my fingers by looking at them and checking.	I know that numbers can be represented in a variety of ways (numeral, word,	I can count pictures/objects/things I cannot see	I can represent numbers to 20 in different ways I can count objects to 100 by

	I can count objects by saying number names in order I can say how many objects I have I can count object by touching each object once I can say that I can move objects or line them up to count accurately. I can put one object in one space I can represent a number in a variety of ways I know that numbers can be represented in a variety of ways	objects, a variety of objects, pictures, a variety of pictures, pictures in real life contexts, fingers, sounds, actions, money, tens frames, Numicon, variety of Numicon) I can use a tens frame to represent a number. I can use Numicon to represent a number	I can count objects from a larger group I can represent amounts using a tens frame and counters I can identify that 10 ones and 1 ten are the same I can identify different ways of 10 I can identify that 11,12 and 13 are more than 10 I can use resources to show that 11,12 and 13 are more than 10 I can identify the tens and ones in the numeral I can identify that 14,15 and 16 are more than 10 I can use resources to show that 14,15 and 16 are more than 10 I can identify the word and the numeral I can identify that 17,18 and 19 are more than 10 I can use resources to show that 17,18 and 19 are more than 10 I can identify the word, representation, and the numeral I can understand that 2 tens	making tens I can recognise tens and ones I can count tens and ones I can use and interpret a place value chart I can partition numbers to 100 in different ways I can write numbers to 100 in words I can flexibly partition number to 100 in different ways I can write numbers to 100 in expanded form I can write, use and interpret 10s on the number line to 100 I can write, use and interpret 10s and 1s on the number line to 100 I can estimate numbers on a number line I can compare objects I can compare numbers I can order objects and numbers I can count in 2s, 5s and 10s and represent these in different ways

			make 20 I can use resources to create 20 in different ways I can identify tens and ones I can discuss different representations to identify tens and ones (to 50) I can discuss how efficient methods of counting I can recognise that two digit numbers are made of tens (1st digit) and ones (2nd digit) to 50 I can describe a number by the number of tens and ones I can recall that representations of ten do not need counting individually (to 50) I can partition numbers to 50 I can recognise that the whole can be partitioned into tens and ones or ones and tens (to 50) I can partition numbers into tens to 100 I can partition numbers into tens and ones I can work out 1 more, 1 less I can compare numbers with	I can count in 3s and represent these in different ways

			the same number of tens I can compare any two numbers	
Numbers Abstract	I can say how many objects I have I can recognise numerals I know that numerals can be represented by words/objects/pictures/marks I can count things I cannot see I can experiment with my own symbols and marks as well as numerals.	I can count things I cannot see. I can represent a number in a variety of ways. I can form numbers correctly I can write number sentences	I can count pictures/objects/things I cannot see I can recognise numbers as words I can compare amounts using appropriate language and symbols I can order objects and numbers I can use and interpret a number line. I can use a number line to count in 1s I can use a number line to count forwards from a given point I can use a number line to count backwards from a given point I can understand that the next number along is one more I can understand that the number before is one less I can identify numbers between given numbers	

			I can estimate where the halfway point is I can discuss my reasonings for this I can order sets of numbers I can apply the taught vocabulary I can apply my knowledge of tens and ones when ordering numbers I can explore the similarities and differences between a number track and number line I can recall my knowledge of counting to label number lines (to 50) I can use and talk about the number line to 100	
Subitising	I can say that subitising is knowing how many I can see without counting each one. I can subitise in a variety of ways (dice/lines/tens frames/ etc) Up to 3 I can subitise in a variety of	I can say that subitising is knowing how many I can see without counting each one. I can subitise in a variety of ways (dice/lines/tens frames/ etc)		

	ways (5 frame)			
Number bonds		I can say some number bonds to 5	I can talk about number bonds within 10 I can represent number bonds within 10 in different ways I can work out number bonds systematically I can talk about number bonds to 10 I can work out number bonds to 10 using objects and pictures I can recall number bonds to 10 I can recognise similarities between number bonds to 10 and 20 I can use my number bond knowledge to 10 to find number bonds to 20 I can use different representations to show number bonds to 20	I know my number bonds to 10 I can use my knowledge of number bonds to 10 to complete calculations I know number bonds within 20 I know number bonds to 100 (tens)
Addition		I can say some addition facts (within 5) I can say that adding means grouping things together.	I can say what is one more than any number within 10 I can represent one more in different ways	I can use my knowledge of number bonds to 10 to complete calculations I can write fact families for

		I know and use language such as more/greater/add/altogether/ Total/sum/makes/equals. I know that that grouping things together makes the total greater I know to count all objects/pictures/marks to find the total. I can count on from the first group/amount/set to find the total. I can make my own marks to add amounts together.	I can talk about fact families I can record fact families in different ways I can add amounts together in different ways (tens frame, part/whole model, objects, pictures) I can work out calculations by adding more I can use my knowledge of addition to work out number problems I can find a part of a total in different ways (tens frame, part/whole model, objects, pictures) I can record all facts in the fact family I can add or subtract 1 or 2 in different ways. I can identify different resources to support counting on I can identify that it is more efficient to start from the greater number I can recall knowledge on doubles I can use my knowledge on doubles to support with counting on I can identify how addition	numbers up to 20 I can use related facts to work out calculations I can add … 1s I can add by making 10 I can add three 1 digit numbers I can add to the next 10 I can add across 10 I can work out 10 more …from numbers within 100 I can add … 10s I can add two 2-digit numbers (not across a 10) I can add two 2-digit numbers (across a 10) I can complete addition and subtraction calculations within 100 I can use the language and symbols of greater than, less than and equal to to compare calculations I can solve missing number problems using my number knowledge

			and subtraction relate I can discuss that addition can occur in any order I can identify missing numbers in a problem I can recognise the idea of inverse operations I can identify one more than a given number I can use resources to support me finding one more and one less I can find one more than a given number to 50 I can use representations to support me finding one more and one less	
Subtraction		I can say some subtraction facts (within 5) I can say that subtraction means removing an amount from a group. I know and use language such as subtract, take away, minus, fewer, less, how many are left? To can say that when you take away from an	I can say what is one less than any number within 10 I can represent one less in different ways I can find a part and use this to work out a subtraction calculation I can record all facts in the fact family I can cross out to find out how many are left	I can use my knowledge of number bonds to 10 to complete calculations I can write fact families for numbers up to 20 I can use related facts to work out calculations I can … subtract 1s I can subtract across 10 I can subtract from a 10

		amount/set/ group the amount will become less/fewer (at this stage in their learning) I can count all objects/pictures/marks left in the amounts/groups/sets to find the answer I can make my own marks to work out a subtraction calculation I can count back from the amount of the first group/amount/set to find the answer	I can take away to find out how many are left I can use a number line to work out a subtraction calculation I can add or subtract 1 or 2 in different ways. I can recall the symbol '-' I can subtract one from within 20 I can use different resources to support subtracting I can use number lines to support with counting back I can identify differences between two amounts I can identify how addition and subtraction relate I can discuss that addition can occur in any order I can discuss that subtraction cannot occur in any order I can identify missing numbers in a problem I can recognise the idea of inverse operations I can identify one less than a given number I can use resources to support me finding one more and one less I can find one less than a	I can subtract a 1 digit number from a 2 digit number (across a 10) I can work out … 10 less from numbers within 100 I can … subtract 10s I can subtract two 2-digit numbers (not across a 10) I can subtract two 2-digit numbers (across a 10) I can complete addition and subtraction calculations within 100 I can use the language and symbols of greater than, less than and equal to to compare calculations I can solve missing number problems using my number knowledge

			given number to 50 I can use representations to support me finding one more and one less	
Patterns	I can talk about patterns I can see around me I can continue a repeating pattern I can create a repeating pattern I can notice and correct an error in a repeating pattern			
Matching	I can match two of the same thing.		I can compare groups by matching	
Sorting	I can choose objects by a given criteria I can sort objects by one given (then chosen) and the not criteria I can sort by multiple given and chosen criteria		I can sort using different criteria I can talk about how objects are sorted	
Size	I can use language related to size to talk about the size of objects. I can say which is biggest and which is smallest when given			

	two objects.			
2D shape	I can say that a 2D shape is a shape that you cannot pick up. I can name common 2D shapes. Circle, square, triangle, rectangle/oblong.	I can say that a 2D shape is a shape that you cannot pick up. I can name common 2D shapes. Circle, square, triangle, rectangle/oblong. I can use language vertices and sides to describe a 2D shape.	I can recognise and name 2-D shapes I can sort 2-D shapes I can sort 2D shapes using their properties I can make and talk about patterns with 2-D and 3-D shapes	I can name 2D and 3D shapes I can count sides on 2-D shapes I can count vertices on 2-D shapes I can accurately draw 2-D shapes I can identify lines of symmetry on shapes I can use lines of symmetry to complete shapes I can sort 2-D shapes I can make patterns with 2-D and 3-D shapes
Understanding number	I can say when an amount is greater or fewer	I can say when an amount is greater or fewer I can say that equal means the same amount. I can say that equal means the same amount. I can recognise the equal symbol and know what they mean. I can show that I understand the equals symbol by showing the same amount on both sides using objects/pictures/marks in	I can compare amounts using language fewer, more, same I can compare amounts using language less than, greater than, equal I can use and interpret the less, greater and equals symbol I can compare amounts using appropriate language and symbols I can compare pairs of numbers up to 20	

		different representations.	I can use representations to show pairs greater and less than I can understand the inequality symbols I can recall what is meant by estimate I can estimate the position of a given number on a number line (to 50)	
Length and height	I can use language long and short describe the length of an object. I can use language such as longer, shorter, longest, shortest, longer than and shorter than to describe the length of objects.	I can use language tall and short describe the height of an object. I can use language long and short describe the length of an object. I can use language such as taller, shorter, tallest, shortest, taller than and shorter than to describe the height of objects. I can use language such as longer, shorter, longest, shortest, longer than and shorter than to describe the length of objects.	I can compare lengths of objects I can compare heights of objects I can use the language 'longer than' and 'shorter than' I can discuss that height is a type of length, but the language changes I can measure objects using non-standard units of measure I can choose one unit of measure to consistently measure objects I can compare measurements taken I can measure objects using a ruler	I can measure in centimetres I can measure in metres I can compare lengths and heights I can order lengths and heights I can complete calculations

			I can measure objects using standard units of measure (cm) I can discuss that standard units of measure can be used around the world	
Sequencing/ Time	I can sequence events I have taken part in. I can sequence events from stories. I can use language such as first and next.	Covered in other areas of the curriculum.	I can use time language to talk about events I can talk about days of the week I can sequence days of the week I can talk about months of the year I can talk about hours, minutes and seconds I can tell the time to the hour I can tell the time to the half hour	I can tell the time to o'clock and half past I can tell the time to quarter past and quarter to I can tell the time past the hour I can tell the time to the hour I can tell the time to 5 minutes I can use my knowledge of how many minutes in an hour to solve problems I can use my knowledge of how many hours in a day to solve problems
Positional and directional language	I can use language of on top of, next to, behind, under correctly. I can describe a familiar route I can describe the route in a simple story.	I can use language of on top of, next to, behind, under correctly. I can use language forwards, backwards, turn correctly.	I can describe turns I can describe position I can use and follow positional language	I can respond to positional language I can use positional language I can give directions using correct language I can follow directions I can describe turns

				I can follow directions using language of clockwise and anticlockwise turns. I can describe movements and turns using language of clockwise and anticlockwise. I can describe shape patterns with turns
Weight	I can use language heavy and light to describe the weight of an object. I can use language such as heavier and lighter, heaviest, lightest, heavier than and lighter than to describe the weight of objects.	I can use language heavy and light to describe the weight of an object. I can use language such as heavier and lighter, heaviest, lightest, heavier than and lighter than to describe the weight of objects.	I can compare the weight of objects using scales I can use the language 'heavier' and 'lighter' I can discuss that the size of an object does not reflect the mass	I can compare mass I can use the correct language to compare mass I can measure in grams I can read a scale I can measure in kilograms I can read a scale I can calculate with mass
Mass			I can measure the mass of an object using non-standard measurements I can understand that when scales are balanced, the mass is the same I can choose one unit of measurement to consistently weigh objects I can compare the mass of two objects, using non-standard unit of measure	I can compare mass I can use the correct language to compare mass I can measure in grams I can read a scale I can measure in kilograms I can read a scale I can calculate with mass

			I can recall the language 'heavier' and 'lighter' when comparing objects	
Capacity	I can use language full and empty to describe the capacity of an object.	I can use language full and empty to describe the capacity of an object. I can say that capacity means that amount something holds. I can use language such as overflowing, half full to describe the capacity of an object	I can explore that capacity is the amount that something can hold I can compare containers and discuss the capacity I can explore that volume is the amount of something within a container, using "empty, nearly empty, nearly full and full" I can compare volumes using the language "more than" and "less than" I can measure the capacity of a container using non-standard unit of measure I can choose one unit of measure to consistently measure capacity I can discuss the accuracy of different non-standard units of measure I can compare the capacity of different containers, using non-standard units of measure I can choose one unit of measure to consistently	I can compare volume and capacity I can measure in millilitres I can read a scale I can measure in litres I can read a scale I can calculate with volume and capacity

			compare capacity I can recall that to measure capacity, the container needs to be filled to the top	
3D shape	I can say that a 3D shape is a shape you can pick up. I can name common 3D shapes. Cube, cuboid, sphere, cylinder, pyramid, cone.	I can say that a 3D shape is a shape that you can pick up. I can name common 3D shapes. Cube, cuboid, sphere, cylinder, pyramid, cone. I can use language, apex, vertices and faces, surface, curved to describe a 3D shape. I can talk about properties of a 3D shape using language such as roll and stack.	I can recognise and name 3-D shapes I can sort 3-D shapes I can sort 3D shapes using their properties I can make and talk about patterns with 2-D and 3-D shapes	I can name 2D and 3D shapes I can count faces on 3-D shapes I can count edges on 3-D shapes I can count vertices on 3-D shapes I can sort 3-D shapes I can make patterns with 2-D and 3-D shapes
Reasoning	I can talk about my ideas.	I can use a range of mathematical vocabulary I can talk about my ideas.		
Multiplication and Division Division		I can say that double means the same amount added again. I can work out doubles practically in a relevant context I can work out doubles using resources. I can work out doubles to 5	I can identify that adding two equal quantities makes a double I can count forwards in 2s I can count backwards in 2s I can represent 2s with objects. I can count forwards in 10s I can count backwards in 10s	I can recognise equal groups I can make equal groups I can add equal groups I understand the multiplication symbol I can complete multiplication sentences I can use arrays to work out calculations

		in my head. I can share a group of objects I can use the strategy of 'one for you, one for you, one for you' to share. I can use known number facts to support me with sharing a group of objects.	I can represent 10s with objects. I can count forwards in 5s I can count backwards in 5s I can represent 5s with objects. I can explain how a group is equal I can use pictures and concrete objects to create stories I can add equal groups to find a total I can use my knowledge of 2s, 5s and 10s to add equal groups I can identify the matching number sentence I can arrange objects into an array I can explain what an array is I can write a repeated addition to represent an array I can explain that two equal groups is double I can use real objects to show doubles I can make equal groups from a given total I can use the word division	I can make equal groups by grouping I can make equal groups by sharing I can use the 2 times-table to solve calculations I can divide by 2 I can talk about doubling and halving I can use doubling and halving to solve calculations I know and can work out odd and even numbers I can use the 10 times-table to solve calculations I can divide by 10 I can use the 5 times-table to solve calculations I can divide by 5 I can use my knowledge of the 5 and 10 times-tables to solve calculations

			I can share concrete objects I can see that each group has the same amount I can describe the difference between sharing and grouping I can describe the similarities between sharing and grouping	
Money		I can recognise 1p and 2 p coins I can say what is a note and coin I know that one object can represent a different value	I recognise that one item can have a value greater than one. I can recognise coins I can recognise notes I can count in coins	I can count money and find the total value (pence) I can count money – pounds (notes and coins) I can count money – pounds and pence I can choose notes and coins to make a specific amount I can make the same amount using notes and coins I can compare amounts of money I can calculate with money I can make a pound in different ways I can find change I can solve two-step problems
Odd and Even		I can say when a number is even I can say when a number is		I know and can work out odd and even numbers

		odd		
Part/whole		I can use the language of part/whole when looking at real objects I can use the language of part/whole when talking about pictures I can use the language of part/whole when talking about numbers.	I can talk about parts and whole I can identify the part and a whole I can say that there can be more than 2 parts I can use the part/whole model	
Fractions			I can recognise half/two halves of an object I can recognise half/two halves of a shape I can find half of an object I can find half of a shape I understand that half means "one of two equal parts" I understand that half of a quantity is the total split into 2 equal groups I can use concrete objects to support this I can find half of a quantity I share the total into 2 equal groups I can recognise a quarter of an object I can recognise a quarter of a	I can recognise the parts and whole when represented in different ways. I can talk about the parts and whole I can say what equal and unequal means I can talk about equal and unequal parts of a representation. I can recognise half of pictures and amounts I can find half of an amount I can recognise a quarter of pictures and amounts I can find a quarter of an amount I can recognise a third of pictures and amounts

			shape I can find a quarter of an object I can find a quarter of a shape I understand that a quarter is four equal parts I understand that a quarter of a quantity is the total split into 4 equal groups I can use concrete objects to support this I can find a quarter of a quantity I share the total into 4 equal groups	I can find a third of an amount I can find the whole when given a fraction of an amount I can use unit fractions accurately I can say that a unit fraction is always one equal part of a whole I can use non-unit fractions accurately I can say that a non-unit fraction is a fraction where the numerator is greater than 1 I can compare unit and non-unit fractions by using diagrams or contexts I can use the word equivalent correctly I can recognise the equivalence of a half and two quarters I can recognise three quarters of a shape or an amount I can find three-quarters of a set of objects or a number. I can count in fractions up to a whole using pictoral aids

Statistics				I can draw tally charts correctly I can interpret tally charts I can complete tables I can interpret tables I can talk about when it is better to use a tally chart or table I can interpret block diagrams I can draw a block diagram I can draw pictograms I can interpret pictograms I can interpret pictograms I can draw a pictogram when one picture does not represent one item I know that one picture can represent more than one item I can interpret a pictogram when one picture does not represent one item