Manor CE Infant School Progression in Maths

We follow the National Curriculum for Year 1 and 2 (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/335158/PRIMARY_national_curriculum_-_Mathematics_220714.pdf) and EYFS Development Matters in Year R (https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/1007446/6.7534_DfE_Development_Matters_Report_and_illustrations_web__2_.pdf).

We ensure learning follows the concrete, pictorial, abstract (CPA) approach and teach concepts through concrete apparatus, pictorial images and abstract representations (numbers and symbols). Each teacher responds to the needs of their class so some topics may be taught slightly earlier or later. Continuous assessment in maths enables teachers to know where children are at each stage of their learning to make sure they have mastered the concept before moving on.

	Autumn		**Spring**		**Summer**	
	Autumn 1	**Autumn 2**	**Spring 1**	**Spring 2**	**Summer 1**	**Summer 2**
EYFS	Opportunities/ Provision: ● Count objects, actions and sounds (up to 5 objects in games; counting a smaller number from a larger group) ● Say how many there are after counting – for example, "…2,3,4 and 5. There are 5 pens" – to help children appreciate that the last number of the count indicates the total number of the group. This is the cardinal counting principle. ● Say how many there might be before you count to give a purpose to counting: "I think there are about 5. Shall we count to see?" ● Count out a smaller number from a larger group: "Give me seven…" Knowing when to stop shows that children understand the cardinal principle. ● Develop the key skills of counting objects including saying the numbers in order and matching one number name to each item. ● Continue, copy and create repeating patterns. ● Talk about and explore 2D and 3D shapes (for example, circles, rectangles, triangles and cuboids) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. Ask questions like: "What is the same and what is different?" discuss shape properties using words like 'sharp corner', 'pointy' or 'curvy' and talk about shapes: "Do you think we need a piece with a straight or curved edge?		Opportunities/ Provision: ● To explore the composition of numbers to 10 ● To be able to automatically recall number bonds for numbers 0 - 10 ● To revisit prior learning: subitise ● To revisit prior learning: link the number symbol (numeral) with its cardinal number value ● Understand the 'one more than/one less than' relationship between consecutive numbers ● Automatically recall number bonds for numbers 0–5 and some to 10 ● To compare length, weight and capacity ● To be able to select, rotate and manipulate shapes in order to develop spatial reasoning skills; to compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can. ● Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally.		Opportunities/ Provision: ● To be able to count to and from 20 ● To explore the composition of numbers to 10 including evens, odds, double facts and how quantities can be distributed fairly ● To revisit prior learning: subitise ● To revisit prior learning: link the number symbol (numeral) with its cardinal number value ● To verbally count beyond 20, recognising the pattern of the counting system ● Understand the 'one more than/one less than' relationship between consecutive numbers ● Automatically recall number bonds for numbers 0–5 and some to 10 ● To compare length, weight and capacity ● To be able to select, rotate and manipulate shapes in order to develop spatial reasoning skills; to compose and decompose shapes so that children recognise a shape can have other shapes within it, just as numbers can ● Explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally	

Year 1	**Number** ●We will consolidate our understanding of the value of numbers to 20, including 0. ●We will be learning how to order, compare and understand all numbers to 20 and work with them fluently and accurately. ●We will begin to understand the concept of number bonds and we will begin to learn to record work to solve problems. **Number Bonds** ●We will consolidate our understanding of how two numbers can be added to make a bigger number. We will explore different ways to make numbers up to 20 and create stories from what we have learnt. **Addition** ●We will find different ways of adding to 20. ●We will learn how to use the part-part-whole diagram and begin to lay the foundations of the inverse of addition. We learn to make our own addition equations in order to support the deeper understanding of the processes of addition. ●We will be counting and adding in a real-life context.	**Number** ●We will now look at numbers up to 30 and in particular focus on numbers between 20 and 30. ●We will be able to confidently count and write to numbers to 30, compare and order numbers and see patterns within 20. ●We will begin to count in 10s and continue counting in 1s ●Know our number bonds to 10 **Addition** ●We will learn different ways to add numbers within 30. ●We will begin to add on a structured number line ● We will be adding in a real-life context and solving word problems **Subtraction** ●We will learn different ways to subtract numbers within 30 ●We will begin to subtract on a structured number line ● We will be subtracting in a real-life context and solving word problems	**Number** ●We will be exploring numbers to 50 in a variety of ways. ●To start with, we will focus on counting to 50 in different ways and writing numbers to 50. ●Then we will compare numbers and look at number patterns. ●We will count in 10s, 2s and 1s ●Know our number bonds to 10 **Addition and Subtraction** ●We will be counting, adding and subtracting in a real-life context. ●We will use pictures and other representation to help us visualise problems. ●We will be applying our knowledge of number bonds and simple bar models to represent word problems. ●We will also be comparing - specifically looking at how many more or how many fewer/less. ●We will begin to use an unstructured number line **Multiplication** ●We will learn the foundations of equal groupings, repeated addition, arrays and doubling. **Division**	**Number** ●We will be exploring numbers to 75 in a variety of ways. ●To start with, we will focus on counting to 75 in different ways and writing numbers to 75. ●Then we will compare numbers and look at number patterns. ●We will count in 10s, 2s, 5s and 1s ●Know our number bonds to 20 **Addition and Subtraction** ●We will be counting, adding and subtracting in a real-life context to 75. ●We will be developing using different strategies to add and subtract, e.g. using a number line, dienes and drawings. ●We will become more confident using an unstructured number line **Multiplication** ●We will continue to learn the foundations of equal groupings, repeated addition, arrays and doubling. ●We will learn to apply this knowledge to solve word problems. ●We will be using images from our previous learning such as ten frames and number tracks.	**Number** ●We will be exploring numbers to 100 in a variety of ways. ●We will begin by reinforcing our previous learning by counting in 10s, 2s, 5s and 1s ●We will use our number bonds to partition numbers. ●Then will learn to compare numbers to 100 and find number patterns looking at one hundred charts. ●Know our number bonds to 20 **Addition and Subtraction** ●We will be counting, adding and subtracting in a real-life context to 100. ●We will be developing using different strategies to add and subtract, e.g. using a number line, dienes, and drawings. ● We begin to draw our own number line to solve problems. **Multiplication** ●We will demonstrate our understanding of equal groupings, repeated addition, arrays and doubling when solving problems.	**Number** ●We will revise our previous learning by ensuring we are fluent counting in 10s, 2s, 5s and in 1s to and from 100 ●We will use our number bonds to partition numbers. ●Then will learn to compare numbers to 100 and find number patterns looking at one hundred charts. ●Know our number bonds to 20 **Addition and Subtraction** ●We will be counting, adding and subtracting in a real-life context to 100. ●We will be confident in using learnt strategies to add and subtract, e.g. using a number line, dienes, and drawings. ● We draw our own number line to solve problems. **Multiplication** ●We will demonstrate our understanding of equal groupings, repeated addition, arrays and doubling when solving problems.

	Subtraction ●We will learn that subtraction equations can be done in three ways: by crossing out, by using number bonds and by counting back. ●We will continue to use concrete apparatus and pictorial representations to support our understanding and we will learn to use maths vocabulary appropriately ●We will be counting and subtracting in a real-life context.		●We will be learning how to share small numbers into a specific number of groups.	**Division** ●We will be learning how to share numbers into a specific number of groups. ●Then, we will have a number of items and will need to work out how many will go into each group by sharing equally.	●We will record our working **Division** ●We will share equally and record our working ●We will solve simple division problems	●We will record our working **Division** ●We will share equally and record our working ●We will solve simple division problems
	Length and Height ●We will begin to understand the concept of length. We will compare different lengths and describe whether something is taller, longer, shorter or higher. ●We will learn about how to measure two items fairly for comparison using items and body parts before moving onto measuring using a ruler. **Time** ●We will look at a timeline for an average day and then determine the order of events using specialised terminology. ●We will learn to tell the time to the hour, using	**Shapes and Patterns** ●We will find out about different types of 2D shapes and some basic 3D shapes. ●We will be able to talk about the properties of basic 2D shapes and some solid shapes. We will learn to group shapes according to different criteria. This will also lead to recognising, describing and continuing a pattern, as well as generalising patterns. **Time** ●We will learn to tell the time to the hour and half hour, using terms such as 'next,' 'before' and 'after,'	**Fractions** ●We will be learning about making halves and quarters before moving on to making the connection between fractions and division. **Time** ●We will learn to tell the time to the hour and half hour, using terms such as 'next,' 'before' and 'after,' estimating durations of time and, finally, comparing time. ●We will be exploring analogue clocks and telling time to the hour and half hour. ●We will look at a timeline for an average day and then determine the order of events using specialised terminology.	**Time** ●We will learn to tell the time to the hour and half hour, using terms such as 'next,' 'before' and 'after,' estimating durations of time and, finally, comparing time. ●We will be exploring analogue clocks and telling time to the hour and half hour. ●We will look at a timeline for an average day and then determine the order of events using specialised terminology. ●We will estimate lengths of time and then compare measures of time. **Mass** ●We will be comparing mass using terms such as 'heavy/heavier,' 'light/lighter.'	**Positions** We will deepen our understanding of positional language (first, second, third), as well as directional language for left and right. **Volume and Capacity** ●We will be learning to compare volume and capacity, using terms such as 'more than' and 'less than'. We will measure volume and capacity using non-standard units. **Mass** ●We will be comparing mass using terms such	**Time** ●We will be exploring analogue clocks and telling time to the hour and half hour. ●We will estimate lengths of time and then compare measures of time. **Money** ● We will be learning to recognise different coins and notes and using our number bonds to work out how much items cost. **Volume and Capacity** ●We will be learning to compare volume and capacity, using terms such as 'more than' and

	terms such as 'next,' 'before' and 'after,' estimating durations of time and, finally, comparing time. **Money** ●We will be learning to recognise different coins and notes	estimating durations of time and, finally, comparing time. ●We will be exploring analogue clocks and telling time to the hour and half hour. **Money** ●We will be learning to recognise different coins and notes	**Money** ● We will be learning to recognise different coins and notes and using our number bonds to work out how much items cost. **Volume and Capacity** ●We will be learning to compare volume and capacity, using terms such as 'more than' and 'less than'. ' **Mass** ●We will be comparing mass using terms such as 'heavy/heavier,' 'light/lighter.'	●We will then measure mass using non-standard units.	as 'heavy/heavier,' 'light/lighter.' ●We will then measure mass using standard units. **Position** ●We will be exploring the important elements of position, movement and turns. ●We will be learning to describe the position of one object relative to another, using terms such as: 'top,' 'middle' and 'bottom;' 'around,' 'close,' 'near' and 'far;' and 'on top of,' 'in front of' and 'above.' When looking at movement, we will explore the concepts of 'up and down,' 'forwards and backwards,' and 'inside and outside.' We will learn about turns: navigating whole turns, half turns, quarter turns and the notion of clockwise and anticlockwise.	'less than'. We will measure volume and capacity using standard units. ●We will be describing volume using the terms 'half' and 'quarter.'
Year 2	**Number** ●We will learn to count to 100, including counting up in 10s. We will compare numbers using what we know about place value knowledge. We will embed our number bonds and apply them. We will	**Number** ●We will learn to count in steps of 2, 3, and 5 from 0, and in 10s forwards ●recognise the place value of each digit in a two-digit number (10s, 1s) identify, represent and estimate	**Number** ●We will learn to count in steps of 2, 3, and 5 from 0, and in 10s forwards and backwards ●recognise the place value of each digit in a two-digit number (10s, 1s) identify, represent and estimate	**Number** ●We will learn to count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward ●recognise the place value of each digit in a two-digit number (10s, 1s) identify, represent and estimate	**Number** ●We will learn to count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward ●recognise the place value of each digit in a two-digit number (10s,	**Number** ●We will learn to count in steps of 2, 3, and 5 from 0, and in 10s from any number, forward and backward ●recognise the place value of each digit in a two-digit number (10s,

	explore numbers to see patterns within 100. **Addition and Subtraction** ●We will learn to add and subtract mentally by applying our number bonds diagrams as well as using the standard column method. Money ●We will learn to write and count money and we will learn to represent money using £ and p.	numbers using different representations ●read and write numbers to at least 100 in numerals and in words **Addition and Subtraction** ●solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures ●applying their increasing knowledge of mental and written methods **Multiplication** ●We will learn about multiplication of 2, 5 and 10. **Fractions** ●We will embed our understanding that fractions are equal parts and will focus on halves, quarters. ●We will understand how many quarters and halves make a whole. **Money** ●We will learn to write and count money and we will learn to represent money using £ and p. ●We will be reinforcing previous counting methods using 5s and 10s	numbers using different representations, including the number line ●compare and order numbers from 0 up to 100; use <, > and = signs ●read and write numbers to at least 100 in numerals and in words **Addition and Subtraction** ●recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 ●add and subtract numbers using concrete objects, pictorial representations, and mentally **Temperature** ●We will learn to measure temperature. ●We will learn about celsius, how to read thermometers and we will look at what kinds of temperatures we can measure. Picture Graphs ●We will learn how to read picture graphs with confidence. **Word Problems** ●We will be learning to use addition and subtraction to help solve word problems. ●We will learn to make the decision to use addition and subtraction.	numbers using different representations, including the number line ●compare and order numbers from 0 up to 100; use <, > and = signs ●read and write numbers to at least 100 in numerals and in words ●use place value and number facts to solve problems **Addition and Subtraction** ●show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot ●recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems **Fractions** ●We will embed our understanding that fractions are equal parts and will focus on halves, quarters and thirds. ●We will learn to name fractions of the same denominations. ●We will understand how many quarters, halves and thirds make a whole. **Picture Graphs** ●We will learn how to read and interpret picture graphs with confidence.	1s) identify, represent and estimate numbers using different representations, including the number line ●compare and order numbers from 0 up to 100; use <, > and = signs ●read and write numbers to at least 100 in numerals and in words ●use place value and number facts to solve problems **Addition and Subtraction** ●solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures ●applying their increasing knowledge of mental and written methods ●recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 ●add and subtract numbers using concrete objects, pictorial	1s) identify, represent and estimate numbers using different representations, including the number line ●compare and order numbers from 0 up to 100; use <, > and = signs ●read and write numbers to at least 100 in numerals and in words ●use place value and number facts to solve problems **Addition and Subtraction** ●solve problems with addition and subtraction: using concrete objects and pictorial representations, including those involving numbers, quantities and measures ●applying their increasing knowledge of mental and written methods ●recall and use addition and subtraction facts to 20 fluently, and derive and use related facts up to 100 ●add and subtract numbers using concrete objects, pictorial

		to count quickly and efficiently.	●We will use the bar models to think about what is the same and what is the difference. **Fractions** ●We will embed our understanding that fractions are equal parts and will focus on halves, quarters and thirds. ●We will understand how many quarters, halves and thirds make a whole. **Money** ●We will learn to write and count money and we will learn to represent money using £ and p. ●We will be reinforcing previous counting methods using 5s and 10s to count quickly and efficiently. ●We will learn to show equal amounts of money and to exchange money. **Multiplication and Division** ●We will learn about both the multiplication and division of 2, 5 and 10.	**Money** ●We will learn to write and count money and we will learn to represent money using £ and p. ●We will be reinforcing previous counting methods using 5s and 10s to count quickly and efficiently. ●We will learn to show equal amounts of money and to exchange money. **Multiplication and Division** ●We will learn about both the multiplication and division of 2, 5 and 10. ●We will look at different ways of sharing, including sharing and grouping before learning about division by 2, 5 and 10.	representations, and mentally, including: a two-digit number and 1s a two-digit number and 10s 2 two-digit numbers adding 3 one-digit numbers ●show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot ●recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems **Fractions** ●We will embed our understanding that fractions are equal parts and will focus on halves, quarters and thirds. ●We will learn to name fractions of the same denominations. ●We will understand how many quarters, halves and thirds make a whole. ●We will explore how to order and compare fractions. **Picture Graphs**	representations, and mentally, including: a two-digit number and 1s a two-digit number and 10s 2 two-digit numbers adding 3 one-digit numbers ●show that addition of 2 numbers can be done in any order (commutative) and subtraction of 1 number from another cannot ●recognise and use the inverse relationship between addition and subtraction and use this to check calculations and solve missing number problems **Fractions** ●We will embed our understanding that fractions are equal parts and will focus on halves, quarters and thirds. ●We will learn to name fractions of the same denominations. ●We will understand how many quarters, halves and thirds make a whole. ●We will explore how to order and compare fractions. ●We will count in fractions and begin to learn how to find

					●We will learn how to read, interpret and analyse our own picture graphs with confidence. **Money** ●We will learn to write and count money and we will learn to represent money using £ and p. ●We will be reinforcing previous counting methods using 5s and 10s to count quickly and efficiently. ●We will learn to show equal amounts of money and to exchange money. ●We will solve problems involving money using bar modelling **Multiplication and Division** ●We will learn about both the multiplication and division of 2, 5 and 10. ●We will look at different ways of sharing, including sharing and grouping before learning about division by 2, 5 and 10.	fractions of a set of objects or part of a quantity. **Picture Graphs** ●We will learn how to read, interpret, analyse and construct our own picture graphs with confidence. **Money** ●We will learn to write and count money and we will learn to represent money using £ and p. ●We will be reinforcing previous counting methods using 5s and 10s to count quickly and efficiently. ●We will learn to show equal amounts of money and to exchange money. ●We will solve problems involving money using bar modelling **Multiplication and Division** ●We will learn about both the multiplication and division of 2, 5 and 10. ●We will look at different ways of sharing, including sharing and grouping

						before learning about division by 2, 5 and 10. ●We will also investigate links between multiplication and division and odd and even numbers.
	Time ●We revise telling the time to the hour and half past the hour. We will begin to tell the time quarter to and past the hour. **Two Dimensional Shapes** ●We will be learning about 2-D shapes and their different properties. **Length** ●We will deepen our understanding of how to measure length. ●We will begin by understanding what a metre is and what centimetres are and then progress to using them in real-life contexts.	**Time** ●We will develop telling the time quarter to/past the hour analogue clocks. **Mass** ●We will be learning about mass in the context of kilograms and grams. **Two Dimensional Shapes** ●We will be learning about 2-D shapes and their different properties. **Three Dimensional Shapes** ●Following on from our learning about 2D shapes, we will be learning to recognise, describe and group 3-D shapes.	**Volume** ●We will learn to compare volumes of containers and measure in l and ml. **Time** ●We will learn to tell the time to the nearest 5 minutes on analogue clocks. **Two Dimensional Shapes** ●We will be learning about 2-D shapes and their different properties. ●We will explore how to draw shapes, make patterns with shapes and turn shapes using familiar language. **Three Dimensional Shapes** ●Following on from our learning about 2D shapes, we will be learning to recognise, describe and group 3-D shapes. We will learn the different properties of 3-D shapes.	**Time** ●We will learn to tell the time to the nearest 5 minutes on analogue clocks. ●We will learn how to find the duration of time. **Two Dimensional Shapes** ●We will be learning about 2-D shapes and their different properties. ●We will explore how to draw shapes, make patterns with shapes and turn shapes using familiar language. ●We will be identifying sides of shapes and their vertices before moving on to lines of symmetry. **Three Dimensional Shapes** ●Following on from our learning about 2D shapes, we will be learning to recognise, describe and group 3-D shapes, forming structures with them and making patterns using 3-D shapes. **Height** ●We will deepen our understanding of how to measure height.	**Mass** ●We will be learning about mass in the context of kilograms and grams. We will learn how to read scales, to compare the weight of different objects and to solve word problems in the context of mass. **Time** ●We will learn to tell the time to the nearest 5 minutes on analogue clocks. ●We will learn how to find the duration of time, the end of a length of time. **Two Dimensional Shapes** ●We will be learning about 2-D shapes and their different properties. ●We will explore how to draw shapes, make patterns with shapes and turn shapes using familiar language.	**Time** ●We will learn to tell the time to the nearest 5 minutes on analogue clocks. ●We will learn how to find the duration of time, the end of a length of time, the beginning of a length of time and, finally, compare lengths of time. **Two Dimensional Shapes** ●We will be learning about 2-D shapes and their different properties. ●We will explore how to draw shapes, make patterns with shapes and turn shapes using familiar language. ●We will be identifying sides of shapes and their vertices before moving on to lines of symmetry. ●We will recreate shapes using blocks and sorting the basic shapes before we learn to draw

					●We will be identifying sides of shapes and their vertices before moving on to lines of symmetry. ●We will recreate shapes using blocks and sorting the basic shapes before we learn to draw shapes using square grids and dot grids. **Three Dimensional Shapes** ●Following on from our learning about 2D shapes, we will be learning to recognise, describe and group 3-D shapes, forming structures with them and making patterns using 3-D shapes.	shapes using square grids and dot grids. **Volume** ●We will learn to compare volumes of containers, measuring in l and ml and solving word problems associated with volume.