Primary Maths & Finance Teaching and Learning Framework

Intent

Our students will enjoy developing their numeracy skills and take satisfaction in problem solving. We place emphasis on the mathematical process rather than the final answer, placing value on learning from mistakes and building on prior learning. Pupils will leave us understanding that maths is in the world around us and does not solely take place in the classroom.

Our maths curriculum will ensure that pupils are able to apply their mathematical skills to the world around them , ensuring they are as fully prepared for adulthood as possible.

Rationale

Mathematics plays a crucial role in our everyday lives, providing us with the tools to understand and engage with the world around us. It nurtures the natural ability of students to think logically, solve puzzles, and apply these skills to real-life problems. Our goal is to foster creative thinking and establish connections between mathematical concepts by exploring patterns in numbers, shapes, measurements, and statistics. Through the principles of fluency, reasoning, and problem-solving, we aim for our students to not only explain their reasoning but also justify their answers. This development will equip them with the necessary skills, knowledge, and efficient calculation methods to succeed economically and solve daily challenges. Mastering mathematics will be instrumental in preparing our students to confidently and resiliently navigate their transition to college or the workforce.

To ensure comprehensive learning, we have designed a spiral curriculum that allows our students to revisit topics and areas multiple times throughout their academic journey. Running through the framework there will be a focus on students ability to solve problems mentally whenever possible. With each revisit, the complexity of the subject matter increases, while maintaining connections with prior learning and placing it in context. This approach offers numerous benefits as it reinforces and strengthens

information and learning each time a topic is revisited. It enables a logical progression from basic concepts to more advanced ones. Additionally, students are encouraged to apply their foundational knowledge to achieve later learning objectives.

Cycle One					
Autumn 1			**Autumn 2**		
Place Value & Four Operations			**Number and the Four Operations**		
Encountering	Developing	Enhancing	Encountering	Developing	Enhancing
• Pupils will be able to engage in number rhymes and songs. • Pupils will be able to begin to solve simple puzzles relating to shape and patterns. • Pupils will be able to make their own patterns using a range of materials eg paint, play dough, pebbles,	• Pupils will be able to count to 10 • Pupils will develop one to one correspondence when counting. • Pupils will understand the relationship between a numeral and an amount.	• Pupils will be able to read write and order numbers to 200 • Add two single-digit numbers (0-9) to find the sum. • Pupils will be able to add and subtract a single digit number from a two digit	• Pupils will be able to engage and join in number rhymes and songs. • Pupils will be able to begin to solve simple puzzles relating to shape and patterns. • Pupils will be	• Pupils will begin to count to 10. • Pupils will be able to count forwards and backwards from 10 • Pupils will be able to identify one more or one less than any number	• Pupils will be able to count to 1000 • Pupils will be able to find one more or less than any number to 1000 • Pupils will be able to compare and order numbers to 1000. • Pupils will be able to count in multiples of 4,8.50 and 100. • Pupils will be able to find 10 or 100 more or less than a

cubes. • Pupils will be able to explore and create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will be able to engage in sharing amounts between peers eg biscuits, counters, books. • Pupils will begin to understand the	• Pupils will begin to match simple shapes. • Pupils will begin to identify patterns in numbers • Pupils will be able to identify one more or one less than 10. • Pupils will begin to recognise mathematical statements involving +,- and = • Pupils will learn the number bonds to 10 • Pupils will	number using concrete objects, visual representations and mentally. • Pupils will understand that addition can be done in any order. • Pupils will understand that subtraction of numbers cannot be done in any order. • Pupils will be able to understand and use the inverse relationship between addition and subtraction.	able to make their own patterns using a range of materials eg paint, play dough, pebbles, cubes. • Pupils will be able to explore and create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to	to 100. • Pupils will be able to represent quantities to 100 using concrete objects, pictorial representations and numerals. • Pupils will understand the place value of a two digit number. • Pupils will be able to count in multiples of 2,5 and 10 • Pupils will be able to understand and use the divide and	given number. • Pupils will be able to recognise the place value of a three digit number • Pupils will be able to estimate numbers to 1000 • Pupils will be able to solve problems using numbers to 1000 • Pupils will be able to mentally add and subtract numbers mentally including a three digit number and ones, a three digit number and tens, a three digit number and hundreds. • Pupils will be able to use formal written methods of column addition and subtraction to add and subtract

term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to ~~learn~~ the difference in weight of objects	begin to count with coins 10 10p and match the quantity to the coin. • Pupils will understand which coins to 10p are worth more and less. • Pupils will learn that we exchange a coin for an item in a shop.	• Pupils will be able to recall and use the multiplication facts for 2,5 and 10 • Pupis will be able to recognise odd and even numbers • Pupils will be able to show the multiplication can be done in any order (commutative) but division cannot. • Pupils will be able to solve problems using the four number operations. • Pupils will be able to	understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will be able to begin to engage in a sharing activity between peers eg biscuits, counters, books. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers	multiply symbols. • Pupils will understand multiplicatio n as repeated addition and arrays. • Pupils will understand the concept of division as sharing equally. • Pupils will be able to find and name a half of a shape and quantity. • Pupils will be able to recognise, find and name a quarter of a	numbers with up to three digits • Pupils will be able to use the inverse operation to check their answers. • Pupils will be able to solve problems, including missing number problems using number facts, place value and more complex addition and subtraction. • Pupils will be able to recall the multiplication and division facts for the 3,4 and 8 times tables. • Pupils will be able to write and calculate mathematical statements for multiplication and division using the

		recognise all the coins to £2.00 • Pupils will be able to use coins to make totals of up to £2.00 • Pupils will be able to read the price of an item and state whether it is more or less than another item. .	• Pupils will begin to learn the difference in weight of objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two feet, 5 fingers.	shape, object or quantity. • Pupils will be able to solve one step problem that involve each of the four operations using concrete objects or pictorial representations • Pupils will learn their number bonds to 20 and begin to recognise the patterns in number bonds.	multiplication tables that they know. • Pupils will be able to write and calculate mathematical statements for multiplication and division using including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods • Pupils will be able to double and halve numbers to 20. • Pupils will be able to use and understand the term tenth. • Pupils will be able to recognise, write and find fractions

					of objects, including where the numerator is greater than one (non- unit fraction). • Pupils will add and subtract fractions with the same denominator within one whole. • Pupils will compare and order unit fractions (where one is the numerator) and where the denominator is the same.

Spring 1			**Spring 2**		
Geometry & Measure			**Number 2**		
Encountering	Developing	Enhancing	Encountering	Developing	Enhancing
• Pupils will explore and begin to understand the difference between long and short • Pupils will investigate different lengths using non-standard measurements. • Pupils will be able to begin to solve simple puzzles including matching shapes. • Pupils will engage	• Pupils will understand the passage of time in their own movements eg walking fast, walking slow. • Pupils will be able to sequence events in chronological order eg now next, today,	• Pupils will be able to accurately measure, compare, add and subtract lengths, weights and volumes. • Pupils will be able to find the perimeter of a 2 d shape • Pupils will be able to tell the time using a digital clock in	• Pupils will be able to join in and engage in number rhymes and songs. • Pupils will be able to begin to solve simple puzzles relating to shape and patterns. • Pupils will be able to explore and investigate patterns	• Pupils will begin to count to 10 • Pupils will be able to count forwards and backwards from 10 and beyond. • Pupils will be able to identify one more or one less than any number to 200..	• Pupils will be able to count to 1000 and beyond • Pupils will be able to find one more or less than any number to 1000 • Pupils will be able to find 1000 more or less than a given number. • Pupils will be able to compare and order numbers to 1000 and beyond.. • Pupils will be able to count in multiples

in number rhymes and songs. • Pupils will be able to join in rhymes and songs relating to height and size. • Pupils will explore using measuring equipment • Pupils will investigate shapes.	tomorrow, first then, after. • Pupils will be able to recognise and name a rectangle, square, circle, triangle. • Pupils will begin to choose and use appropriate units of measure (meters, centimetres, kg, grams, degrees celsius, litres and millilitres). • Pupils will be able to use the	both 12 and 24 hour. • Pupils will learn the Roman numerals from 1 to X11 • Pupils will know the number of seconds in a minutes and days in a month.	using a range of materials eg paint, play dough, pebbles, cubes. • Pupils will be able to explore and create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to understand the concept of larger and	• Pupils will be able to represent quantities to 100 using concrete objects, pictorial representations and numerals. • Pupils will understand the place value of a two digit number. • Pupils will be able to count in multiples of 2,5 and 10 • Pupils will be able to understand and use the divide and multiply	of 3,4,8.50 and 100. • Pupils will be able to count in multiples of 6,7,9,25 and 1000. • Pupils will be able to recognise the place value of any number up to 4 digits. • Pupils will be able to order and compare numbers to 1000. • Pupils will be able to solve problems using numbers to 1000 • Pupils will be able to mentally add and subtract numbers mentally including a three digit number and ones, a three digit number and tens, a three digit number and hundreds. • Pupils will be able

	greater than and less than symbols. • Pupils will learn how many minutes are in one hour and how many hours in one day.		smaller eg comparing heights, footprints, handprints • Pupils will engage in a sharing activity. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn the difference in weight of objects • Pupils will begin to understand that numerals	symbols. • Pupils will understand multiplicatio n as repeated addition and arrays. • Pupils will understand the concept of division as sharing equally. • Pupils will be able to find and name a half of a shape and quantity. • Pupils will be able to recognise, find and name a quarter of a shape,	to use formal written methods of column addition and subtraction to add and subtract numbers with up to four digits • Pupils will be able to use the inverse operation to check their answers. • Pupils will be able to solve problems, including missing number problems using number facts, place value and more complex addition and subtraction. • . Pupils will count backwards through zero to include negative numbers • Pupils will be able to write and calculate mathematical

			represent amounts eg 1 hand, two hands, two feet, 5 fingers. • Pupils will be able to explore and anticipate numbers to 5.	object or quantity. • Pupils will be able to solve one step problems that involve each of the four operations using concrete objects or pictorial representations • Pupils will learn their number bonds to 20 and begin to recognise the patterns in number bonds.	statements for multiplication and division using the multiplication tables that they know. • Pupils will be able to write and calculate mathematical statements for multiplication and division using including for two-digit numbers times one-digit numbers, using mental and progressing to formal written methods • Pupils will be able to double and halve numbers to 20. • Pupils will be able to use and understand the term tenth.

					• Pupils will be able to recognise, write and find fractions of objects, including where the numerator is greater than one (non- unit fraction). • Pupils will add and subtract fractions with the same denominator within one whole. • Pupils will compare and order unit fractions (where one is the numerator) and where the denominator is the same. • Pupils will be able to read Roman numerals to 100. • Pupils will be able to recall multiplication facts to 12x12

Summer 1			**Summer 2**		
Number			**Statistics**		
Encountering	Developing	Enhancing	Encountering	Developing	Enhancing
• Pupils will be able to join and engage in number rhymes and songs. • Pupils will be able to begin to explore simple puzzles relating to shape and patterns. • Pupils will be able to explore patterns using a range of materials eg paint, play dough, pebbles, cubes. • Pupils will be able to create larger and smaller amounts eg towers, filling	• Pupils will be able to count forwards and backwards from 100 and beyond. • Pupils will be able to represent quantities to 100 using concrete objects, pictorial representations and numerals. • Pupils will	• Pupils will be able to read, write, order and compare numbers to at least 1,000,000 • Pupils will be able to interpret negative numbers in context eg the temperature of a thermometer • Pupils will be able to count forwards and backwards	• Pupils will experience collecting concrete objects in a real life context eg wellies, shoes, socks, • Pupils will be able to sort objects into groups. • Pupils will be able to match an object to a picture. • Pupils will understand	• Pupils will be able to use pictures to represent objects and count totals. • Pupils will be able to create simple tallies. • Pupils will be able to read block graphs to a familiar number. • Pupils will be able to answer	• Pupils will be able to interpret and present data using bar charts, pictograms and tables. • Pupils will be able to solve one and two step questions eg how many more, how many fewer?' using information presented in scaled bar charts, pictograms and tables. • Pupils will be able to solve comparison, sum and difference

different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will engage in sharing amounts between peers eg biscuits, counters, books. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn the	understand the place value of a two digit number. • Pupils will be able to understand and use the divide and multiply symbols. • Pupils will understand multiplicatio n as repeated addition and arrays. • Pupils will understand the concept of division as sharing equally. • Pupils will be able to find and	with positive and negative numbers including through zero. • Pupils will be able to round any number to 1,000,000 to the nearest 10,100,10,000 and 100,000 • Pupils will be able to solve number problems involving all four number operations. • Pupils will be able to add and subtract numbers mentally • Pupils will be able to identify multiples and	the term lots of . • Pupils will be able to understand the difference between big and small in both objects and quantities.	simple questions about a block graph or tally chart. • Pupils will be able to count forwards and backwards from 100 and beyond • Pupils will be able to identify one more or one less than any number to 200. • Pupils will be able to count in multiples of 2,5 and 10 • Pupils will begin to	problems using information presented in a bar chart. • Pupils will be able to read and interpret a line graph. • Pupils will be able to complete an, read and interpret tables including timetables.

difference in weight of objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two feet, 5 fingers. • Pupils will be able to explore and begin to count to numbers to 10	name a half of a quantity. • Pupils will be able to recognise and find a quarter of a shape, object or quantity. • Pupils will be able to solve one step problems that involve each of the four operations using concrete objects or pictorial representations • Pupils will learn their	factors of numbers.		count in multiples of 3.	

	number bonds to 20 and begin to recognise the patterns in number bonds. • Pupils will be able to identify coins to 20p. • Pupils will make totals of 20 p with different coins.				

Cycle Two					
Autumn 1			**Autumn 2**		
Number 1			**Geometry & Measure**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**

• Pupils will be able to join and engage in number rhymes and songs. • Pupils will be able to begin to solve and investigate simple puzzles relating to shape and patterns. • Pupils will be able to explore patterns using a range of materials eg paint, play dough, pebbles, cubes. • Pupils will be able to create larger and smaller amounts eg towers, filling	• Pupils will be able to count forwards and backwards up to 100 and beyond. • Pupils will be able to represent quantities up to 100 using concrete objects, pictorial representations and numerals. • Pupils will understand the place value of a two digit number. • Pupils will be able to understand and use the addition and subtraction symbols. • Pupils will learn their number bonds to 20 and begin to recognise the	• Pupils will be able to identify multiples and factors of numbers. • Pupils will be able to identify common factors of two numbers. • Pupils will know and use the vocabulary of prime numbers. • Pupils will be able to establish whether a number to 100 is prime and prime numbers up to 19 • Pupils will be	• .Pupils will understand the difference between long and short • Pupils will explore different lengths using non- standard measurements. • Pupils will be able to explore and solve puzzles including matching shapes. • Pupils will join and engage in number rhymes and songs. • Pupils will be able to join in rhymes and songs relating to height and size.	• Pupils will begin to name common 3d shapes eg cube, cuboid, sphere, cylinder, pyramid • Pupils will begin to use coordinates on a simple graph • Pupils will be able to recognise and name a rectangle, square, circle, triangle. • Pupils will begin to	• Pupils will be able to identify 3d shapes, including cubes and cuboids, from 2d representations • Pupils will know angles are measured in degrees and be able to draw and measure angles. • Pupils will be able to identify and describe the position of a shape following reflection or translation and know that the shape hasn't changed. • Pupils will learn the Roman numerals from 1 to X11 • Pupils will know the number of seconds in a minutes and days in a month.

different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will begin to engage in sharing amounts between peers eg biscuits, counters, books.	patterns in number bonds. • Pupils will be able to identify coins to 20p. • Pupils will make totals of 20 p with different coins.	able to multiply numbers up to 4 digits by a one- or two-digit number using a formal written method, including long multiplication for two-digit numbers • multiply and divide numbers mentally drawing upon known facts • divide numbers up to 4 digits by a one-digit number using the formal written method of	• Pupils will explore using measuring equipment	choose and use appropriate units of measure (meters, centimetres, kg, grams, degrees celsius, litres and millilitres). • Pupils will be able to use the greater than and less than symbols. • Pupils will learn how many minutes are in one hour and how many hours in	• Pupils will be able to solve problems involving the calculation and conversion of units of measure, using decimal notation.

• Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn the difference in weight of objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two feet, 5 fingers. • Pupils will begin to count to 10. • Pupils will begin to match		short division and interpret remainders appropriately for the context		one day. • Pupils will begin to be able to read the time using a digital clock.	

numerals to their quantities using a range of objects. Eg numicon, toys, teddies, biscuits.					
Spring 1			**Spring 2**		
Number 2			**Geometry and Measure**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
• Pupils will be able to join and engage in number rhymes and songs. • Pupils will be able to explore simple puzzles relating to	• Pupils will be able to count forwards and backwards up to 100 and beyond. • Pupils will be able to represent quantities up to 100 using concrete objects,	• Pupils will be able to count forwards and backwards to up to 1000 and beyond. • Pupils will be able to represent quantities to	• .Pupils will understand the difference between long and short • Pupils will explore different lengths using non- standard	• Pupils will begin to measure accurately using meters • Pupils will be able to measure lengths	• Pupils will be able to measure the perimeter of simple 2d shapes. • Pupils will be able to tell the time using the 24 hour clock. • Pupils will know how many seconds

shape and patterns. • Pupils will be able to make their own patterns using a range of materials eg paint, play dough, pebbles, cubes. • Pupils will be able to create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to	pictorial representations and numerals. • Pupils will understand the place value of a number up to three digits. • Pupils will be able to double numbers up to 20 • Pupils will be able to use and read the multiplication and division symbol • Pupils will be able to divide a number by two • Pupils will learn to count in multiples of 2 • Pupils will be able to identify coins to 50p • Pupils will make totals of 50 p with different coins.	1000 and beyond using correct understandin g of place value and the correct numerals. • Pupils will understand the place value of larger numbers beyond 1000 • Pupils will be able to find, name and write fractions of a shape, length and set of objects. • Pupils will be able to write fractions of numbers • Pupils will be	measurements. • Pupils will be able to explore and solve puzzles including matching shapes. • Pupils will join and engage in number rhymes and songs. • Pupils will be able to join and engage in rhymes and songs relating to height and size. • Pupils will explore using measuring equipment • Pupils will begin to count and explore non-standard units of	using centimeter s.. • Pupils will be able to add and subtract l simple lengths • Pupils will begin to choose and use appropriat e units of measure (meters, centimetre s, kg, grams, degrees celsius, litres and millilitres). • Pupils will be able to use the greater	in a minute and days in each month. • Pupils will be able to add and subtract lengths and mass using the appropriate units. • Pupils will know that there are 100cm=1m and 1000 kg=1g • Pupils will be able to solve problems involving measure using the appropriate units and conversions.

understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will begin to engage in sharing amounts between peers eg biscuits, counters, books. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn	• Pupils will understand multiplication as repeated arrays and divide as sharing equally. • Pupils will be able to read and solve mathematical statements with the multiply and divide symbols using concrete objects or drawings to support if needed	able to count in multiples of 4,8,50,100 • Pupils will be able to find 10/ 100 more or less than a number. • Pupils will be able to recall multiplication facts and division facts for all tables.	measure for measuring lengths eg cubes, hands, feet	than and less than symbols. • Pupils will learn how many minutes are in one hour and how many hours in one day. • Pupils will continue to read the time using a digital clock. .	

the difference in weight of objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two feet, 5 fingers. • Pupils will begin to count to 10 and beyond.. • Pupils will begin to match numerals to their quantities using a range of objects. Eg numicon, toys, teddies, biscuits.					

Summer 1			**Summer 2**		
Number (Multiplication and Division)			**Statistics**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
• Pupils will be able to join and engage in number rhymes and songs. • Pupils will be able to solve and explore simple puzzles relating to shape and patterns. • Pupils will be able to explore patterns using a range of materials eg paint, play dough, pebbles, cubes.	• Pupils will be able to count forwards and backwards up to 100 and beyond. • Pupils will be able to find a half and quarter of a shape. • Pupils will be able to find, name and write fractions one third and 3 quarters of a length, shape and set of objects. • Pupils will be able to use and read the multiplication and division symbol	• Pupils will be able to recognise one more or less than any number up to 10,000. • Pupils will be able to add and subtract fractions with the same denominator • Pupils will be able to count up and down in tenths	• Pupils will experience collecting concrete objects in a real life context eg wellies, shoes, socks, • Pupils will be able to sort objects into groups. • Pupils will be able to match an object to a picture. • Pupils will understand the term lots of . • Pupils will be able to	• Pupils will be able to use pictures to represent objects and count totals. • Pupils will be able to create simple tallies. • Pupils will be able to read block graphs to a familiar number. • Pupils will be able to	• Pupils will be able to interpret and present data using bar charts, pictograms and tables. • Pupils will be able to solve one and two step questions eg how many more, how many fewer?' using information presented in scaled bar charts, pictograms and tables. • Pupils will be able to solve comparison, sum and difference

• Pupils will be able to create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will begin to engage in	• Pupils will be able to divide a number by more than two groups. • Pupils will learn to count in multiples of 2 and 5 • Pupils will be able to identify coins to 50p • Pupils will make totals of 50 p with different coins. • Pupils will be able to solve problems using multiplication and division, using concrete objects or drawings if needed.	• Pupils will be able to recognise and show equivalent fractions. • Pupils will be able to compare and order fractions with the same denominators . • Pupils will be able to solve problems involving fractions. • Pupils will be able to total amounts of money using	understand the difference between big and small in both objects and quantities.	answer simple questions about a block graph or tally chart. • Pupils will be able to count forwards and backwards from 100 and beyond • Pupils will be able to identify one more or one less than any number to 200. • Pupils will be able to count in multiples	problems using information presented in a bar chart. • Pupils will be able to read and interpret a line graph. • Pupils will be able to complete and, read and interpret tables including timetables.

sharing amounts between peers eg biscuits, counters, books. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn the difference in weight of objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two		pounds and pennies. • Pupils will be able to find change from larger amounts of money.		of 2,5 and 10 • Pupils will begin to count in multiples of 3.	

feet, 5 fingers. • Pupils will begin to count to 10. • Pupils will begin to match numerals to their quantities using a range of objects. Eg numicon, toys, teddies, biscuits. • Pupils will understand that adding more to an amount provides a larger quantity. • Pupils will be able to use and understand the term 'more'					

Cycle Three					
Autumn 1			**Autumn 2**		
Number (Addition and Subtraction)			**Geometry & Measure**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
• Pupils will be able to join and engage in number rhymes and songs. • Pupils will be able to explore and solve simple puzzles relating to shape and patterns. • Pupils will be able to make and explore their own patterns using a range of materials eg	• Pupils will be able to count forwards and backwards up to 100 and beyond. • Pupils will be able to find one more or less than a number up to and beyond 100. • Pupils will be able to read and write numbers up to at least 100.	• Pupils will be able to write, order and compare numbers to at least 1,000,000 and determine the value of	• .Pupils will understand the difference between long and short • Pupils will explore different lengths using non-standard measurements. • Pupils will be able to solve and explore	• Pupils will begin to measure accurately using meters • Pupils will be able to measure lengths using centimeters. • Pupils will be able to add and subtract simple lengths • Pupils will begin to choose and use appropriate units of measure (meters, centimetres, kg, grams, degrees	• Pupils will be able to measure height, weight, length and capacity using mixed units. • Pupils will be able to solve multi step word problems involving measure. • Pupils will be able to make increasingly accurate estimations of measure choosing the appropriate unit. • Pupils will be able to name, identify and describe 2d and 3 d shapes using the correct vocabulary.

paint, play dough, pebbles, cubes. • Pupils will be able to create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will begin to engage in	• Pupils will learn addition and related subtraction facts to 20. • Pupils will be able to use the symbols +,- and = • Pupils will be able to solve problems that involve addition and subtraction, including finding the missing number. • Pupils will be able to count in steps of 2,3,5 and 10 from any number forwards and backwards. • Pupils will be	each digit. • Pupils will be able to interpret negative numbers in context, count forwards and backwards with positive and negative whole numbers, including through zero	puzzles including matching shapes. • Pupils will join and engage in number rhymes and songs. • Pupils will be able to join and engage in rhymes and songs relating to height and size. • Pupils will explore using measuring equipment • Pupils will begin to explore and count	celsius, litres and millilitres). • Pupils will learn the number of minutes in one hour and how many hours in one day. • Pupils will continue to read the time using a digital clock. • Pupils will be able to identify and name 2 shapes. • Pupils will be able to identify and name 3 d shapes. • Pupils will begin to learn words for describing shapes (sides, edges, faces, vertices) • Pupils will know what a line of	• Pupils will be able to recognise 3d shapes in different orientations. • Pupils will recognise angles as a property of a shape or a description of a turn. • Pupils will be able to identify right angles, obtuse angles and acute angles.

sharing amounts between peers eg biscuits, counters, books. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn the difference in weight of objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two feet, 5 fingers. • Pupils will begin to count to 10 and beyond. • Pupils will begin	able to use the symbols for greater than and less than • Pupils will be able to identify coins to £1.00 • Pupils will make totals of £1.00 with different coins. • Pupils will know that 100p=£1.00 • Pupils will understand the place value of the numbers with which they are working.	• Pupils will be able to round numbers to the nearest 10, 100 and 1000. • Pupils will be able to solve number problems . • Pupils will be able to use Roman numerals	non-standard units of measure for measuring lengths eg cubes, hands, feet	symmetry is and be able to draw it on a simple shape. .	

to match numerals to their quantities using a range of objects. Eg numicon, toys, teddies, biscuits. • Pupils will understand that adding more to an amount provides a larger quantity. • Pupils will be able to use and understand the term 'more' -		to 1000 (M). • Pupils will be able to add and subtract whole numbers with more than 4 digits, including using formal written methods (columnar addition and subtraction)			

		• Pupils will be able to add and subtract numbers mentally with increasingly large numbers			
Spring 1			**Spring 2**		
Number (Multiplication and Division)			**Geometry and Measure**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
• Pupils will be able to join and engage in number rhymes	• Pupils will be able to count forwards and backwards up	• Pupils will be able to	• Pupils will understand the difference	• Pupils will be able to measure, compare, add and subtract	• Pupils will be able to measure height, weight, length and

and songs. • Pupils will be able to explore and solve simple puzzles relating to shape and patterns. • Pupils will be able to explore and make their own patterns using a range of materials eg paint, play dough, pebbles, cubes. • Pupils will be able to create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it	to 100 and beyond. • Pupils will be able to find and identify a half and quarter of a shape. • Pupils will be able to find a half and quarter of a quantity. • Pupils will be able to find, name and write fractions one third and 3 quarters of a length, shape and set of objects. • Pupils will be able to use and read the multiplication and division	recognise one more or less than any number up to 10,000,000 • Pupils will be able to add and subtract fractions with the same denominator • Pupils will be able to count up and	between long and short • Pupils will explore different lengths using non-standard measurements. • Pupils will be able to explore and solve puzzles including matching shapes. • Pupils will join and engage in number rhymes and songs. • Pupils will be able to join and	lengths using meters and centimetres. • Pupils will know what a millimeter is and know that 10mm= 1cm • Pupils will be able to measure, compare, add and subtract mass using kg and grams. • Pupils will be able to measure, compare, add and subtract volume/ capacity using litres and millilitres • Pupils will be able to measure the perimeter of simple shapes. • Pupils will begin to be able to	capacity using mixed units. • Pupils will be able to solve multi step word problems involving measure. • Pupils will be able to name, identify and describe 2d and 3 d shapes using the correct vocabulary. • Pupils will be able to recognise 3d shapes in different orientations. • Pupils will recognise angles as a property of a shape or a description of a turn. • Pupils will be able to identify right angles, obtuse angles and acute angles.

smaller • Pupils will be able to understand the concept of larger and smaller eg comparing heights, footprints, handprints • Pupils will begin to engage in sharing amounts between peers eg biscuits, counters, books. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn the difference in weight of	symbol • Pupils will be able to divide a number by more than two groups. • Pupils will learn to count in multiples of 2, 5, 10 and 3. • Pupils will be able to identify coins to £2.00 • Pupils will make totals of £2.00 with different coins. • Pupils will begin to find the change. • Pupils will be able to solve problems using multiplication and division,	down in tenths • Pupils will be able to recognise and show equivalent fractions. • Pupils will be able to compare and order fractions with the same denominators. • Pupils will be	engage in rhymes and songs relating to height and size. • Pupils will explore using measuring equipment • Pupils will be able to engage in a counting activity using non-standard units of measure for measuring lengths eg cubes, hands, feet	describe 2d and 3d shapes • Pupils will understand an angle as a property of a shape or a turn. • Pupils will begin to be able to recognise right angles. .	

objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two feet, 5 fingers. • Pupils will begin to explore and count to 10 and beyond.. • Pupils will begin to match numerals to their quantities using a range of objects. Eg numicon, toys, teddies, biscuits. • Pupils will understand that adding more to an amount provides a larger quantity. • Pupils will be	using concrete objects or drawings if required.	able to solve problems involving fractions. • Pupils will be able to total amounts of money using pounds and pennies. • Pupils will be able to find change from larger amounts			

able to use and understand the term 'more'		of money.			
Summer 1			**Summer 2**		
Number (Fractions)			**Statistics**		
Encountering	**Developing**	**Enhancing**	**Encountering**	**Developing**	**Enhancing**
• Pupils will be able to join and engage in number rhymes and songs. • Pupils will be able to explore and solve simple puzzles relating to shape and patterns. • Pupils will be able to explore and make their	• Pupils will be able to identify simple fractions of shapes. • Pupils will begin to find non-unit fractions of shapes and	• Pupils will be able to compare and order fractions whose denominators are all multiples	• Pupils will experience collecting concrete objects in a real life context eg wellies, shoes, socks, • Pupils will be able to sort objects into groups.	• Pupils will be able to use pictures to represent objects and count totals. • Pupils will be able to create simple tallies. • Pupils will be able to read block graphs to a familiar number.	• Pupils will be able to interpret and present data using bar charts, pictograms and tables. • Pupils will be able to solve one and two step questions eg how many more, how many fewer?' using information presented in scaled bar charts,

own patterns using a range of materials eg paint, play dough, pebbles, cubes. • Pupils will be able to create larger and smaller amounts eg towers, filling different sized containers • Pupils will understand that taking things away from an amount makes it smaller • Pupils will be able to understand the concept of larger and smaller eg comparing heights, footprints,	numbers (eg ⅔,¾,⅖) • Pupils will be able to identify simple equivalent fractions. • Pupils will be able to add and subtract fractions with the same denominator. • Pupils will be able to solve problems involving fractions. • Pupils will know multiplication facts for the	of the same number. • Pupils will be able to understa nd what a decimal number is and the place value of each digit to two decimal places. • Pupils will be able to match decimal	• Pupils will be able to match an object to a picture. • Pupils will understand the term lots of . • Pupils will be able to understand the difference between big and small in both objects and quantities.	• Pupils will be able to answer simple questions about a block graph or tally chart. • Pupils will be able to count forwards and backwards from 100 and beyond • Pupils will be able to identify one more or one less than any number to 200. • Pupils will be able to count in multiples of 2,5 and 10 • Pupils will begin to count in multiples of 3.	pictograms and tables. • Pupils will be able to solve comparison, sum and difference problems using information presented in a bar chart. • Pupils will be able to read and interpret a line graph. • Pupils will be able to complete and read and interpret tables including timetables.

handprints • Pupils will begin to engage in sharing amounts between peers eg biscuits, counters, books. • Pupils will begin to understand the term' lots of' when making observations eg wellies, children, birds, conkers • Pupils will begin to learn the difference in weight of objects • Pupils will begin to understand that numerals represent amounts eg 1 hand, two hands, two feet, 5 fingers. • Pupils will begin	2,35 and 10 times table.	numbers to their fraction equivalents. • Pupils will be able to find, name and write equivalent fractions. • Pupils will be able to recognise mixed numbers and improper fractions			

to count to 10 and beyond.. • Pupils will begin to match numerals to their quantities using a range of objects. Eg numicon, toys, teddies, biscuits. • Pupils will understand that adding more to an amount provides a larger quantity. • Pupils will be able to use and understand the term 'more'		and convert from one to the other. • Pupils will be able to round decimals with two decimal places to the nearest whole number.			