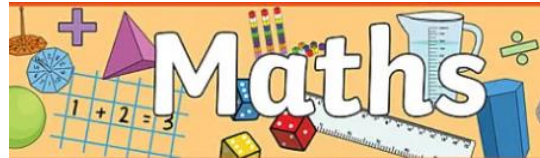




	Baseline	Autumn	Spring	Summer
Nursery Checkpoints (3 and 4 years old)	They show an interest in numbers and can rote count to 5 but does not yet count objects using one to one correspondence. They can match things that are the same and sort objects by colour. They enjoy exploring shapes when building, recognises patterns and can copy over the top but does not yet work left to right.	They can rote count to 7 and can compare and sort objects by size talking about what he is doing. They can recognise groups of 1 and 2 without counting and counts sets up to 5 using 1 to 1 correspondence. They recognises the numerals 1 and 2 but can not yet read these. They are beginning to talk about the shapes of everyday objects and can now copy over a pattern working left to right.	They count groups of objects accurately to 5 and knows the last number counted is the total. He can recognise when there are more and less when comparing amounts and can subitise up to 3. They recognise numerals to 5 and can read the numerals 0 to 3. They notice and talks about pattern and can continue a repeating pattern that has been started. They are able to identify some shapes by name.	They have a good understanding of numbers to 5 and knows that the amount stays the same however objects are arranged. They can rote count to 10 and subitise to 3 with both objects and representations and can compare amounts using the language of more. They can read numerals to 5 and can match these to an amount. They are starting to use mathematical language to talk about and compare size and shape. They recognises a repeated pattern and is beginning to create their own
Reception Checkpoints	They have a good understanding of numbers to 5 and knows that the amount stays the same however objects are arranged. They can rote count to 10 and subitise to 3 with both objects and representations and can compare amounts using the language of more. They can read numerals to 5 and can match these to an amount. They are starting to use everyday language to talk about and compare size and shape. She recognises a repeated pattern and is beginning to create their own.	They can count objects accurately to 10 using one to one correspondence and can identify when sets of objects have the same, less than and more than. They can subitise to 5 and is beginning to talk about the different ways that amounts to 5 can be made. They can recognise numbers to 10 and put them in order. They use some shape names appropriately and has some understanding of simple prepositional language. They are able to create a repeated pattern with colours and shapes.	They are developing her understanding of numbers beyond 5 and can subitise to 6. They can confidently talk about the different ways that numbers can be made to 5 and is now applying this to bigger numbers. They can count beyond 10 and are starting to recognise the pattern of the counting system to help them count beyond 20. They have a good understanding of pattern and is starting to recognise patterns within numbers. They use mathematical language to compare and talk about size and shape.	<p>Numerical patterns Children verbally count beyond 20, recognising the pattern of the counting system. Children compare quantities up to 10 in different contexts, recognising when one quantity is greater than, less than or the same as the other quantity. Children explore and represent patterns within numbers up to 10, including evens and odds, double facts and how quantities can be distributed equally</p> <p>Number Children have a deep understanding of number to 10, including the composition of each number. Children subitise (recognise quantities without counting) up to 5. Children automatically recall (without reference to rhymes, counting or other aides) number bonds to 5 (including subtraction facts) and some number bonds to 10, including double facts.</p>



Nursery – Topic 1

The children will enjoy singing counting and nursery rhymes up to 5. These include ‘5 little speckled frogs’, ‘5 little men in a flying saucer’, ‘5 currant buns’, ‘5 little ducks’, ‘5 fat sausages’ and ‘1,2,3,4,5 once I caught a fish alive’. The children will enjoy lots of opportunities for sorting according to their colour, size or shape. Through the story of ‘The Very Hungry Caterpillar’, singing the days of the week and discussions of the daily timetable the children will begin to describe a sequence of events

Vocabulary

First, then, sort, colour, size, shape

Nursery- Topic 2

The children will practise lots of counting opportunities including forwards and backwards counting through number books. The children will take part in shape sorting and matching activities. They will talk about and explore 2D shapes.

Vocabulary

Circle, rectangles, triangles, round, straight

Nursery- Topic 3

The children will talk about and explore 3D shapes flat and round. They will complete shape sorting and matching activities. Show ‘finger numbers’ up to 5 and recite number to 5.

Vocabulary

3d shape, flat, round, straight

Nursery- Topic 4

The children will complete activities developing the skill of subitising (Fast recognition up to 5). They will continue to practise 1-1 counting and the value of numbers up to 5. The children will use objects such as Numicon to support this.

Using the stories ‘Goldilocks and the Three Bears’ and ‘Dear Zoo’ the children will make comparisons between objects relating to size, length, weight, and capacity.

Vocabulary

Big, small, long, short, tall, heavy, light, full, empty.

Nursery- Topic 5

The children will take part in lots of counting activities saying one number name for each item. They will explore a variety of objects to count and will match numerals to objects up to 5. The children will enjoy a trip to a shop in our local area and describe a familiar route using directional and positional language. Through technology the children will explore directions using Beebots and the story of ‘Rosie’s Walk’.

Vocabulary

Behind, in front of, past, next to

Nursery- Topic 6

The children will be provided with many counting opportunities reinforcing the final number reached is the total. This will be completed through using a dice and playing games such as dominoes. They will explore with mark making in maths experimenting with their own symbols, marks and numerals. The number formation rhymes will be introduced.

Vocabulary

Tally, marks, total

Nursery- Topic 7

The children will be solving real world mathematical problems with numbers up to 5. They will enjoy using natural resources to continue this learning outdoors.

They will be completing construction challenges exploring with 2D and 3D shapes. The children will be creating shape models e.g flat surfaces for building, a triangular prism for a roof, combining shapes to make new ones an arch, a bigger triangle.

Vocabulary

Flat, 2D, 3D, pointy, round,

Nursery- Topic 8

Patterns pattern’s everywhere! The children will explore the indoor and outdoor environment talking about and identifying the patterns around them e.g stripes on clothes, designs on rugs and wall paper. The children will enjoy the story of ‘My Mum and Dad Make Me Laugh’ to discuss patterns and vocabulary. Using various media and materials the children will create their own patterns.

The children will compare quantities using language such as ‘more’ and ‘fewer’.

Vocabulary

More, fewer, spotty, stripy, pattern,

Nursery- Topic 9

Through the story ‘Beep Beep Vroom Vroom’ the children will continue their work on sorting and patterns. They will practise the skill of noticing and correcting an error on a repeating pattern. Children will be encouraged to extend and create their own ABAB patterns in our woodland area e.g stick, leaf, stick, leaf

Vocabulary

Sort, pattern, repeat, same, different

Mastering Number: Overview of content of NCETM maths– Reception

Strand/ Half-term	Subitising	Cardinality, ordinality and counting	Composition	Comparison
1 Children will:	<ul style="list-style-type: none"> perceptually subitise within 3 identify sub-groups in larger arrangements create their own patterns for numbers within 4 practise using their fingers to represent quantities which they can subitise experience subitising in a range of contexts, including temporal patterns made by sounds. 	<ul style="list-style-type: none"> relate the counting sequence to cardinality, seeing that the last number spoken gives the number in the entire set have a wide range of opportunities to develop their knowledge of the counting sequence, including through rhyme and song have a wide range of opportunities to develop 1:1 correspondence, including by coordinating movement and counting have opportunities to develop an understanding that anything can be counted, including actions and sounds explore a range of strategies which support accurate counting. 	<ul style="list-style-type: none"> see that all numbers can be made of 1s compose their own collections within 4. 	<ul style="list-style-type: none"> understand that sets can be compared according to a range of attributes, including by their numerosity use the language of comparison, including 'more than' and 'fewer than' compare sets 'just by looking'.
2 Children will:	<ul style="list-style-type: none"> continue from first half-term subitise within 5, perceptually and conceptually, depending on the arrangements. 	<ul style="list-style-type: none"> continue to develop their counting skills explore the cardinality of 5, linking this to dice patterns and 5 fingers on 1 hand begin to count beyond 5 begin to recognise numerals, relating these to quantities they can subitise and count. 	<ul style="list-style-type: none"> explore the concept of 'wholes' and 'parts' by looking at a range of objects that are composed of parts, some of which can be taken apart and some of which cannot explore the composition of numbers within 5. 	<ul style="list-style-type: none"> compare sets using a variety of strategies, including 'just by looking', by subitising and by matching compare sets by matching, seeing that when every object in a set can be matched to one in the other set, they contain the same number and are equal amounts.
3 Children will:	<ul style="list-style-type: none"> increase confidence in subitising by continuing to explore patterns within 5, including structured and random arrangements explore a range of patterns made by some numbers greater than 5, including structured patterns in which 5 is a clear part 	<ul style="list-style-type: none"> continue to develop verbal counting to 20 and beyond continue to develop object counting skills, using a range of strategies to develop accuracy continue to link counting to cardinality, including using their fingers to represent quantities between 5 and 10 	<ul style="list-style-type: none"> continue to explore the composition of 5 and practise recalling 'missing' or 'hidden' parts for 5 explore the composition of 6, linking this to familiar patterns, including symmetrical patterns 	<ul style="list-style-type: none"> continue to compare sets using the language of comparison, and play games which involve comparing sets continue to compare sets by matching, identifying when sets are equal

	<ul style="list-style-type: none"> experience patterns which show a small group and '1 more' continue to match arrangements to finger patterns. 	<ul style="list-style-type: none"> order numbers, linking cardinal and ordinal representations of number. 	<ul style="list-style-type: none"> begin to see that numbers within 10 can be composed of '5 and a bit'. 	<ul style="list-style-type: none"> explore ways of making unequal sets equal.
4 Children will:	<ul style="list-style-type: none"> explore symmetrical patterns, in which each side is a familiar pattern, linking this to 'doubles'. 	<ul style="list-style-type: none"> continue to consolidate their understanding of cardinality, working with larger numbers within 10 become more familiar with the counting pattern beyond 20. 	<ul style="list-style-type: none"> explore the composition of odd and even numbers, looking at the 'shape' of these numbers begin to link even numbers to doubles begin to explore the composition of numbers within 10. 	<ul style="list-style-type: none"> compare numbers, reasoning about which is more, using both an understanding of the 'howmanyness' of a number, and its position in the number system.
5 Children will:	<ul style="list-style-type: none"> continue to practise increasingly familiar subitising arrangements, including those which expose '1 more' or 'doubles' patterns use subitising skills to enable them to identify when patterns show the same number but in a different arrangement, or when patterns are similar but have a different number subitise structured and unstructured patterns, including those which show numbers within 10, in relation to 5 and 10 be encouraged to identify when it is appropriate to count and when groups can be subitised. 	<ul style="list-style-type: none"> continue to develop verbal counting to 20 and beyond, including counting from different starting numbers continue to develop confidence and accuracy in both verbal and object counting. 	<ul style="list-style-type: none"> explore the composition of 10. 	<ul style="list-style-type: none"> order sets of objects, linking this to their understanding of the ordinal number system.
6	In this half-term, the children will consolidate their understanding of concepts previously taught through working in a variety of contexts and with different numbers.			



The children will experience playful opportunities that allow them to develop their conceptual understanding of number and patterns where they will be recognising and producing patterns using natural resources. They will be finding shapes through practical indoor and outdoor play experiences. Children will participate in singing songs and rhymes. They will take a self-directed and active role in their learning through our continuous provision. Children will explore the characteristics of shape; use language to describe and compare them; talk about positions and solve problems. These play opportunities will form the foundations for the introduction of pictorial mathematical experiences.

Children will take a self-directed and active role in their learning through our 'Water and Sand' area and 'Mud Kitchen', as they will be able to experiment with capacity using different heuristic resources such as rice, pasta and cereals. Our seasonal 'Christmas Grotto' will allow the children to investigate length and height.

Vocabulary

Circle, triangle, square, rectangle, positional language (behind, in front, next to, on top of), height, length, weight, pattern, 2D

Our Mathematics journey this term incorporates using our learning environment to continue to explore 2D shapes and introduce 3D shapes through hunts and feely bags; creating shapes using malleable resources; build on positional language through the exploration of different shape patterns. Our 'Snack Shop' will allow the children to investigate and use money to 'pay' for their snack using the price list available. The children will continue to sing songs and rhymes.

Vocabulary

2D, 3D, total, curved, round, straight, corners, points

Our Mathematics journey continues where the children consolidate their learning on shape, space and measures. They will continue their 'Snack Shop' and through daily routines consolidate ordinal language e.g first and last and positional language.

Vocabulary

First, last, on top, behind, next to.