

FS1 Maths Long Term Plan

Number rhymes are shared at the start of each Maths session. Frequent and varied opportunities to build and apply Mathematical understanding are set out in continuous provision ensuring children develop a secure base of knowledge and vocabulary from which mastery of mathematics is built.

Autumn 1 (Nursery Rhymes)

Number songs.	Colours of the rainbow.	Comparison - More Than, Fewer Than, Same.	Shape - Explore and build with shapes and objects.	Space - Explore position and space.	Counting - Hear and say number names.	Measure – Comparing capacity.
Children will recite numbers in order using a range of number songs. Children will begin to represent numbers on their finger while singing number rhymes, including rhymes that involve hiding and returning. Children will be introduced to numbers in the environment while exploring their new provision.	Children will be taught to recognise and name colours in a variety of contexts e.g. toys within the classroom, colours in nature, colours in the environment, colours on themselves such as hair, eyes, skin or clothes. Children will say when objects are and are not the same colour.	Children will collect objects to compare amounts. Children will make simple comparisons of amounts. Children will look for collections of large and small amounts. Children will compare and talk about large and small amounts. Children will make large and small collections. Children will make collections the same.	Children will explore, describe and play with shapes. Children will show interest in simple differences between shapes. Children will put shapes and blocks into position. Children will select shapes for a reason. Children will begin to explore and describe natural shapes and objects. Children will find and collect objects for a purpose. Children will recognise when 2 objects are the same shape. Children will begin to sort shapes and objects into simple categories.	Children will explore position and space. Children will arrange blocks in a chosen position and select shapes for a space. Children will respond to simple language of position. Children will begin to use and understand language of: -Position: 'in', 'on', 'under' -Direction: 'up', 'down', 'across'. -Relative to the viewpoint: 'in front of', 'behind', 'on top of'. Children will discuss position in real contexts and use spatial words in play. For example, while building walls for Humpty Dumpty.	Children will hear and say number names. Children will join in saying some number names, reciting them in sequence, initially to five, then ten. Children will practise saying number names in order by talking, singing, chanting, whispering, reciting, shouting and echoing number names. Children will begin using fingers when repeating number rhymes and exploring the rhythm of counting through making large physical movements, such as hopping or jumping. Children will join in stable order counting forwards and backward.	Children will hear specific capacity language: 'full', 'empty', 'half-full' and 'overflowing' while playing in provision. Children will experiment with filling and pouring water into a range of container shapes and sizes. Children will discuss capacity in real contexts and in play. For example, when pouring from one container to another to find which holds more, or find one that is the same.

Autumn 2 (Traditional Tales)					
Patterns - Join in with repeats. Explore own first patterns.	Counting - Begin to order number names.	Subitising - I see 1, 2, 3. Show me 1, 2, 3.	Counting - Move and label 1, 2, 3.	Comparison - Compare and sort collections.	Measure - Comparing size.
Children will join in with repeated actions in songs. Children will join in with repeats in songs and stories. Children will sing some refrains independently. Children will have a sense of daily routines. Children will say what happens next. Children will make arrangements in art. Children will explain simple pattern arrangements. Children will make roads and bridges with intent. Children will choose blocks to copy simple creations. Children will make simple line patterns with objects. Children will make simple pattern arrangements. Children will show an interest in patterns and shapes.	Children will hear 1, 2 and 3 in play. Children will copy the sequence of 1, 2 and 3. Children will copy fingers to represent 1, 2 and 3. Children will begin to count actions. Children will say number names in order. Children will begin to recognise that anything can be counted. Children will gain an understanding of 0. Children will know 0 means nothing. Children will represent 0 on fingers.	Children will notice images in books. Children will respond to "I see 1, 2, 3". Children will recognise "I see 1, 2, 3". Children will copy "I see 1, 2, 3". Children will point to 1, 2, 3. Children will 1, 2, 3 in well known tales. Children will copy fingers to show 1. Children will copy fingers to show 2. Children will copy fingers to show 3. Children will show 1 finger when seeing 1 item in stories. Children will 2 or 3 fingers when seeing 2 or 3 in stories. Children will show 1, 2, 3 on fingers when asked.	Children will make actions when saying counting words. Children will move fingers when saying counting words. Children will count out up to 3 objects from rhymes. Children will notice number symbols as labels. Children will label amounts as 1 and not 1. Children will label amounts as 1, 2 or 3.	Children will notice when two collections are the same. Children will make collections of small objects the same. Children will make collections of large objects the same. Children will recognise two collections are the same using large and small objects. Children will make collections the same using large and small objects. Children will sort and talk about their own collections.	Children will hear language of size: 'big', 'medium' and 'small' when describing a range of objects. Children will play freely with objects with marked differences in size. Children will see specific techniques to compare size, such as lining up the three bears from smallest to biggest. Children will discuss size in real contexts and in play. For example, when playing with object in the Three Bears Cottage.

Spring 1 (Space / Animals)

Counting - Take and give 1, 2, 3.	Subitising - Talk about dots.	Digging Deeper - Mastery activities with 1, 2, 3.	Space/Shape - Explore position and routes.	Space/Shape - Match, talk, push and pull.	Measure - Comparing weight.
Children will choose a group to count. Children will take out 2 from a group. Children will take out 3 from a group. Children will give others 2 items. Children will give others 3 items. Children will count objects with one-to-one correspondence.	Children will become familiar with dot patterns. Children will say when there is 1 dot. Children will say when there are 2 dots. Children will recognise 1 and 2 in different arrangements. Children will say when there are 3 dots. Children will recognise 1, 2 and 3 in different arrangements.	Children will identify and begin to form representations of 1, 2 and 3 using fingers, marks, numeral, actions, Numicon, Numberblock, dice, on five frames and the position on a number line. Children will access activities in which they are challenged through questioning, encouraging, and scaffolding metacognitive talk to gain an improved understanding of 1, 2, 3.	Children will hear the names a selection of 2D shapes including: circle, square, rectangle, oval, semi-circle. Children will explore shape resources. Children will explore more complex inset jigsaws. Children will talk about simple positions. Children will move into simple positions. Children will move through positions. Children will follow simple small-world routes.	Children hear descriptions of shapes and block in the environment such as 'sides', 'corners'; 'straight', 'flat', 'round'. Children will match simple shapes. Children will push some shapes and blocks together. Children will make simple arrangements. Children will talk about arrangements. Children will follow simple routes outside. Children will follow toys around a simple route.	Children will play with heavy and light resources to experience weight. Children will see specific techniques to compare weight. For example, holding items to estimate which feels heaviest or lightest and then using balance scales to check. Children will be encouraged to use the specific language of 'heavy' or 'light'. Children will find an item 'heavier' or 'lighter' than a given item. Children will discuss height in real contexts and in play. For example, while weighing food or space rocks. Children will be shown that bigger items are not always heavier by playing with some small heavy items and some big light items.

Spring 2 (Growing)

Counting - Show me 5	Subitising - Make games and actions.	Counting - Stop at 1, 2, 3, 4, 5.	Pattern - Sequencing events.	Measure – Comparing height.
Children will sing rhymes to 5 and join in with movements. Children will move props to 5. Children will move props back from 5. Children will show fingers to 5. Children will begin to count 5 objects with one-to-one correspondence. Children will match numerals to quantities when acting out songs.	Children will match dot patterns. Children will be introduced to subitising games. Children will play subitising games. Children will copy sets of sounds. Children will listen to and represent sounds with fingers. Children will listen to and represent sounds with resources.	Children will count out up to 5 objects from a larger group. Children will explore counting to 5 in different ways. Children will verbally count to a given number. Children will label objects with numerals. Children will independently show fingers to 5. Children will begin to make marks to represent quantities to 5.	Children will talk about patterns of events. Children will hear language such as 'first', 'then', 'next', 'after' and 'finally'. For example, when planting a seed Children will hear and use language to describe when things happen e.g. 'morning', 'afternoon', 'evening' and 'night-time', 'earlier', 'later', 'too late', 'too soon', 'in a minute'. Children will talk about and sequence daily routines. For example, getting ready for school or bed, brushing teeth or washing hands.	Children will hear language to describe height: 'The tree is tall.' or 'Jacob is shorter than me'. Children will see specific techniques to compare height. For example, placing objects side by side. Children will say something is 'bigger' or 'smaller' than something else is. Children will be encouraged to use the specific language of 'taller' or 'shorter'. Children will find an item 'taller' or 'shorter' than a given item. Children will discuss height in real contexts and in play. For example, when comparing the height of beanstalks, people or towers.

Summer 1 (Minibeasts)				
Pattern - Lead on own repeats. Making patterns together.	Space/Shape - Starting to puzzle.	Comparison - Match, sort, compare.	Digging Deeper - Mastery activities with 1, 2, 3, 4, 5.	Measure - Comparing length.
Children will join in fully with sequences and song. Children will sing rhymes independently. Children will clap in time to a beat. Children will make and talk about movement patterns. Children will read on in familiar repeating stories. Children will copy art-based simple patterns. Children will explore own line and repeating patterns in art. Children will talk about objects in patterns and arrangements. Children will copy AB patterns with support. Children will continue AB patterns with support.	Children will complete shape-match puzzles. Children will complete simple jigsaws. Children will match objects to pictures. Children will match objects to shadows. Children will explore objects and small world from different positions. Children will make simple routes in small world with lines and curves.	Children will compare up to 5 different objects. Children will compare by matching. Children will make the same set by matching. Children will match by type. Children will recognise attributes of objects. Children will begin to sort some object to a type.	Children will identify and begin to form representations of 1, 2, 3, 4 and 5 using fingers, marks, numeral, actions, Numicon, Numberblock, dice, on five frames and the position on a number line. Children will access activities in which they are challenged through questioning, encouraging, and scaffolding metacognitive talk to gain an improved understanding of 1, 2, 3, 4 and 5.	Children will hear language to describe length: 'The string is long.' or 'His pencil is shorter than mine'. Children will see specific techniques to compare length. For example, placing objects side by side. Children will say something is 'bigger' or 'smaller' than something else is. Children will be encouraged to use the specific language of 'longer' or 'shorter'. Children will find an item 'longer' or 'shorter' than a given item. Children will discuss length in real contexts and in play. For example, when comparing the length of worms. Children will be shown that when comparing lengths, we must line up ends of lengths and straighten items like string.

Summer 2 (Seaside)				
Pattern - My own pattern.	Shape - Identifying 2D and 3D shapes.	Measure - Consolidating capacity, weight, height, length.	Counting - Problem solving.	Counting - Consolidating 0, 1, 2, 3, 4, 5.
Children will continue AB patterns. Children will create their own AB patterns. Children will notice an error in a pattern. Children will build constructions with simple enclosure. Children will copy simple repeated constructions. Children will begin to sequence some events.	Children will build on their knowledge of 2D and 3D shape. Children will be able to: - Talk about and explore 2D and 3D shapes (circle, rectangle, square, triangle, semi-circle, cube, pyramid, cone, sphere, cylinder) using informal and mathematical language: 'sides', 'corners'; 'straight', 'flat', 'round'. - Select shapes appropriately: flat surfaces for building, a triangular prism for a roof, etc. - Combine shapes to make new ones - an arch, a bigger triangle, etc.	Children will build on their understanding of capacity, weight, height and length. Children will be able to: - Make direct comparison of full, half-full and empty using the same container. - Make direct comparison of heavy and light using balance scales. - Make direct comparison of short and long by placing objects side by side. - Make direct comparisons of tall and short by placing objects side by side. - Make direct comparisons of big and small by placing objects side by side. - Experience changes in size. For example, 'Can you make a puddle bigger?', 'What happens when you pour water a big container to a small container?', 'Why can I fit in this box but you can?', 'Why is my side of the see-saw down and yours is up?' or 'What happens when you stretch or squeeze the dough?'.	Children will begin to explain fair and unfair sharing. For example, 'You have 1 and I have 1 so we have the same.' or 'That's not fair. You have more sweets!'. Children will solve problems to add one more or take one away. For example, 'The label on the pot says 4 and we have 5 – what do we need to do?' A child may say, 'We need to take one out because we have one too many.'. Children will begin to use mathematical talk to explain reasons. For example, 'There are 4 frogs on the log, 1 frog jumps off. How many will be left? How do you know?' or 'This box has 5 sweets in and the other has 3 sweets in. Which box would you like to keep and why?' A child may say, 'The 5 box because 5. I want more.'.	Children will continue to support and deepen learning focused on numbers 0, 1, 2, 3, 4 and 5. Children will be able to: - Recognise up to 3 objects, without having to count them individually ('subitising'). - Recite numbers past 5. - Say one number for each item in order. - Know that the last number reached when counting a small set of objects tells you how many there are in total ('cardinal principle'). - Show 'finger numbers' up to 5. - Link numerals and amounts: for example, showing the right number of objects to match the numeral, up to 5. - Experiment with their own symbols and marks as well as numerals. - Solve real world mathematical problems with numbers up to 5. - Compare quantities using language: 'more than', 'fewer than'.