## The Lawns Nursery School and Children's Centre Mathematics Audit/Policy

**Developed by: J Coles, Area Coordinator** 

The overall objective of the Early Years Foundation Stage (EYFS) in all seven areas of Learning is that by the time children reach the end of the EYFS (last term of the Reception/YR R) they will have achieved the 17 Early Learning goals (first column in red). At The Lawns we aim to work towards these goals by encouraging children to engage with people and their environment, to play and explore, be active learners and to create and think critically, all Characteristics of Effective Learning. The second column shows how we address this.

Objectives	Who What when	Evaluation
We aim to achieve		
Early Learning Goal-	Children are encouraged to apply mathematical concepts in real	
Number- Children count reliably with	everyday situations eg children in group, pieces of apples etc  Staff recognise that Mathematical thinking can happen in all	Observations/monitoring
numbers 1-20, place them in order and say a number is one more or	activities.	Learning walks by staff and governors.
one less than a given number.	Children have the opportunity to organise and categorise objects eg colour coded plates/cups in role play.	Feedback from parents
Using quantities and objects, they add and subtract two single-digit	Staff use songs during personal routines 'this is the way we wash	Photographs and video
numbers and count on or back to find an answer. They solve	our face' 'two little eye'	planning
problems, including doubling, halving and sharing.	In key groups children are supported by key workers to use number language in day to day activities eg How many apples do we need? How many boys? Are there more boys than girls?	
Children are encouraged to be		
focused and not easily distracted	Numbers are used all around the nursery in many different formats/ styles to eg number lines, signs indicating how many can, bike area	
Children will be proud, to show satisfaction about their work	etc.	
Children are able to count and use numbers.	Staff provide a wide range of both commercially produced and homemade resources that are clearly labelled and available to the	
	children as and when required.	
Children have opportunity to engage in new experiences and open ended activities.		

Objectives	Who What When	Evaluation
We aim to achieve:		
Early Learning Goal-Number-Children count reliably with numbers 1-20, place them in order and say a number is one more or one less than a given number.  Using quantities and objects, they add and subtract two single-digit numbers and count on or back to find an answer. They solve problems, including doubling, halving and sharing.	In Nursery there is a specific maths/Numicon area which staff change and develop weekly to reflect on planning, children's interests etc  The children are able to use interactive displays relating to numbers.  Number lines are displayed or available in all areas at child height both indoors and out.  Staff teach the children number songs and use props such as numerals to support them.  In rhyme sessions staff use and encourage children to use mathematical language such as adding, subtraction.	Children share their Learning Journey with adults and peers and reflect on what they have achieved  Parents and children bring in objects for us to use.
	Staff read stories that involve numbers.	
Children stant to initiate their sum	Children are encouraged to use creative thinking skills to solve	Observations/monitoring
Children start to initiate their own ideas when working with numbers.	problems, eg 'how many more blocks do I need to make them the same?'	Learning walks by staff and governors.
Children begin to maintain focus and persist for longer periods as	We provide a wide range of natural materials that can be used for counting.	Feedback from parents
they develop.  Children show levels of energy and fascination for mathematical experiences.	Children have the opportunity to use numbers with real resources and have real experiences eg cooking, pumpkins, using telephone in home corner and woodwork.  Children can access games such as snap, dominoes.	Photographs and video planning
Children start to pay attention to details.	We recognise children's different learning styles, schemas and provide maths resources that they are attracted by eg dinosaurs for counting, number songs on CD player, number tiles to line up and jump along.	Children demonstrating their number skills
Children demonstrate being proud of their accomplishments.	We provide collections of 'things' eg frogs, counters, boxes that children can sort and count.	
Children use their own ideas. To test their ideas.	Children can display their own attempts at writing numbers on the notice board in the writing area.	Children share their Learning Journey with adults and peers and reflect on what they have achieved
		Children accessing number activities.

Objectives	Who What When	Evaluation
We aim to achieve:		
Early Learning Goal		
Number- continued Children count reliably with	We provide open ended activities to allow children to return to an activity again and again.	Popularity of different activities
numbers 1-20, place them in order and say a number is one more or one less than a given number.	Planning is flexible to allow children to return to an activity and to develop their own ideas.	
•	Staff use open ended questions to encourage children to solve their own problems.	Observations/monitoring
Using quantities and objects, they add and subtract two single-digit numbers and count on or back to	Number puzzles/games are available and changed regularly.	Learning walks by staff and governors.
find an answer. They solve problems, including doubling, halving and sharing.	A wide range of books both fictional and non fictional relating to numbers is available in the book area and are used in other areas to reinforce learning.	Feedback from parents
Children engage in activities using	Numbers are used outdoors to indicate numbers of bikes, brushes etc.	Photographs and video
numbers	Staff set up active number games outside eg number hunts, aiming	planning
Children use senses to explore mathematical resources.	games, darts and encourage children use simple scoring systems.	Children share their Learning Journey
	We provide number cards, numerals in sand, water, tactile activities etc	with adults and peers and reflect on what they have achieved.
Children to show interest in mathematical activities.	Children use numbers in roleplay both spontaneous and planned eg home corner, shops, fire station.	
Children are willing to 'have a go'.	Children access Numicon in key group/focus activities led by an adult.	Popularity of different activities.
Children engage in new	Numicon supports children to develop their understanding of numbers	Children's emerging writing on the walls.
experiences.	by learning by doing, learning by seeing and developing a strong sense of pattern.	Wallot
Children initiate ideas.	Children have access to numbers on the computer or through using	
Children maintain focus and persist	other forms of technology eg phones, programmable toys etc.	
Children show levels of energy and fascination.		

Objectives	Who What When	Evaluation
We aim to achieve:		
Early Learning Goal-		
Shape Space and measures- Children use everyday language to talk about size,	In key group times staff model and use language relating to about size, weight, capacity, position, distance, time and	Photos/videos
weight, capacity, position, distance, time and money to compare quantities and	money.	Observations
objects and to solve problems.	Staff take every opportunity to model and use mathematical language throughout the day and in real, meaningful situations.	planning
Children recognise, create and describe patterns.	Children have access to a wide range of resources that relate to shape, space and measure eg scales, blocks, measuring tapes	enthusiasm of children's response
They explore the characteristics of everyday objects and shapes and use	that can be used both indoors and out.	Feed back from parents
mathematical language to describe them.	Children explore different artifacts in key group times.	Sample of work
The children use their own ideas.  Children test their ideas.	Resources are clearly labeled with both or either words and pictures.	Displays
Children pay attention to details.	Children are provided with real objects/resources and real experiences eg scales, real money in role play shops, real fruit, cooking etc	Learning walks by staff and governors.
Children are encouraged to be proud of their accomplishments.	Blocks are highly valued and children are encouraged to access them to develop their own ideas and solve their own	Popularity of different activities Photos/videos
Children are able to problem solve.	problems	
	Resources to develop shape, space and measure are used in all areas and in the maths area.	Observations
Children explore and find new ways to use resources, materials etc	Children use a range of timers to time themselves at activities or to police time keeping, turn taking.	planning enthusiasm of children's response
Children develop an understanding of order, pattern, sequence	Routines give young children a sense of time and structure to	Feed back from parents
	their day.  The daily routine allows children to recognise what comes next	Sample of work
	in the session-music is used to indicate a transition time.	Displays
	Older children use a calendar and learn about names of day, cardinal numbers, months.	Learning walks by staff and governors.

Objectives We aim to achieve:	Who What When	Evaluation
Early Learning Goal- Shape Space and measures- Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.  They recognise, create and describe	Children learn about simple cycles eg days of the week, seasons what happens when we get to the end of the list-back to the start.  We provide water play, sand, tactile materials, natural resources on a daily basis where children can explore capacity, size, weight, position.	Photos/videos Observations planning
patterns.	We provide puzzles, games, books that support and reinforce learning.	enthusiasm of children's response
They explore the characteristics of everyday objects and shapes and use mathematical language to describe them.	Children have access to interactive displays often with every day objects that are planned around shape, space and measure.	Feed back from parents  Sample of work
There is an opportunity to play and explore at their own pace and in their own way.	Children access role play activities that will relate to shape, space and measure eg shops, Goldilocks and the 3 Bears,	Displays
Children can engage in open ended activities that they can return to again and again.	Children use trucks/wheel barrow to transport loads around the garden eg can you pull that many children? How far can you pull it? Who's in front? Which way will you take it?  Children use the building site in the outdoor sand.  Staff set up aiming games indoor and outdoors.	Popularity of different activities
Children's interests are sparked.	Children sing songs relating to shape, space and measure eg when Goldilocks went to the house of the bears, in and out, up the hill etc	
They can use their own experiences.	Staff read stories and will relating to mathematical concepts when appropriate.	

Objectives	Who What When	Evaluation
We aim to achieve:  Early Learning Goal- Shape Space and measures- Children use everyday language to talk about size, weight, capacity, position, distance, time and money to compare quantities and objects and to solve problems.  They recognise, create and describe patterns.	Children access daily creative activities such as box modelling, printing, large joint pictures.  Staff provide resources to make patterns eg natural resources, peg boards, Numicon  Children use a range of different measuring resources eg rulers, scales, thermometers, timers.	Learning walks by staff and governors  Photos/videos  Observations  planning  enthusiasm of children's response
They explore the characteristics of everyday objects and shapes and use mathematical language to describe them.	Children use photo cards to look for patterns or characteristics of objects in the environment.  In forest school we look for patterns in the natural world	Feed back from parents Sample of work
Children can use mathematical concepts when acting out their experiences.  Children initiate their own ideas. And seek challenge	Children use IT resources to explore patterns.  Through dance, ring games and movement children learn about space, shape, timing, position, distance	Displays  Popularity of different activities
Children develop a 'can do' attitude.  Children play cooperatively as part of a group when exploring mathematical concepts.	In gardening children find out about size, weight, capacity, position and timing.  There is daily access to a wide range of commercial construction resources eg lego, Duplo  Children use guttering and ramps to explore forces, speed etc	